## CALSIM II Model Results Utilized in the Fish Analysis

Appendix 11C contains CALSIM II model results that are used for various analyses throughout Chapter 11. The appendix is organized by alternative. Within each alternative, CALSIM outputs are presented for various flow-related and reservoir parameters at locations throughout the Central Valley. For each parameter, results are first presented as mean monthly values by water year type for NEPA and CEQA baselines and alternative. Second, differences and percent differences between the alternative and NEPA and CEQA baselines are presented. Differences in values between alternatives and baselines were used to assist in determining flow-related effects of an alternative at specific locations.

The acronyms and abbreviations found in this appendix are defined below.

```
WYT }\mp@subsup{}{}{1}=\mathrm{ Water Year Type.
    W = Wet.
    AN = Above Normal.
    BN = Below Normal.
    D = Dry.
    C = Critical.
    All = All water year types combined.
    NAA = No Action Alternative.
A1A_LLT = Alternative 1A Late Long-Term.
A2A_LLT = Alternative 2A Late Long-Term.
A3_LLT = Alternative 3 Late Long-Term.
A4_LLT = Alternative 4 Late Long-Term (CALSIM Modeling results for Alternative 4 are
                further described below in Section 11C.4.3).
    H1 = Scenario H1 - Does not include enhanced spring outflow or Fall X2 requirements.
    H2 = Scenario H2 - Includes enhanced spring outflow, but not Fall X2 requirements.
        This scenario lies within the range of the other scenarios.
    H3 = Scenario H3 - Does not include enhanced spring outflow, but includes Fall X2
        requirements (similar to Alternative 2A). This scenario lies within the range of the
        other scenarios.
    H4 = Scenario H4 - Includes both enhanced spring outflow requirements, and Fall X2
        requirements.
    A5_LLT = Alternative 5 Late Long-Term.
    A6A_LLT = Alternative 6A Late Long-Term.
    A7_LLT = Alternative 7 Late Long-Term.
    A8_LLT = Alternative 8 Late Long-Term.
    A9_LLT = Alternative 9 Late Long-Term.
    ELT = Early Long-Term.
```

${ }^{1}$ Unless otherwise noted, water year type was determined using the Sacramento River Valley Index.

## 11C. 1 Alternative 1A

## 11C.1.1 Upstream

## 11C.1.1.1 Sacramento River at Keswick

Table 1. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 1A: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 16,526 | 18,233 | 18,615 |
|  | AN | 8,318 | 8,205 | 7,987 |
|  | BN | 4,502 | 4,184 | 5,666 |
|  | D | 3,996 | 4,096 | 4,371 |
|  | C | 3,490 | 4,238 | 3,452 |
|  | All | 8,614 | 9,215 | 9,503 |
| FEB | W | 18,577 | 20,853 | 20,844 |
|  | AN | 14,409 | 15,297 | 16,741 |
|  | BN | 5,981 | 5,544 | 6,245 |
|  | D | 3,684 | 3,410 | 3,609 |
|  | C | 3,599 | 3,372 | 3,586 |
|  | All | 10,355 | 11,039 | 11,442 |
| MAR | W | 16,200 | 17,065 | 17,202 |
|  | AN | 9,131 | 8,818 | 8,558 |
|  | BN | 5,200 | 4,318 | 4,873 |
|  | D | 3,903 | 3,814 | 3,732 |
|  | C | 3,487 | 3,583 | 3,867 |
|  | All | 8,728 | 8,800 | 8,924 |
| APR | W | 9,418 | 9,131 | 9,088 |
|  | AN | 6,182 | 5,536 | 6,137 |
|  | BN | 5,426 | 5,009 | 5,722 |
|  | D | 5,803 | 5,533 | 6,308 |
|  | C | 6,472 | 6,550 | 6,733 |
|  | All | 7,038 | 6,733 | 7,127 |
| MAY | W | 9,508 | 7,149 | 7,871 |
|  | AN | 7,709 | 7,783 | 8,868 |
|  | BN | 7,193 | 6,272 | 7,346 |
|  | D | 7,349 | 7,681 | 8,957 |
|  | C | 6,715 | 7,316 | 7,586 |
|  | All | 7,967 | 7,233 | 8,124 |
| JUN | W | 10,375 | 10,274 | 11,776 |
|  | AN | 11,147 | 12,032 | 13,789 |
|  | BN | 10,758 | 10,947 | 11,599 |
|  | D | 11,224 | 11,898 | 12,498 |
|  | C | 10,392 | 11,350 | 11,750 |
|  | All | 10,742 | 11,160 | 12,195 |


| Alternative 1A: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JUL | W | 12,779 | 14,098 | 14,172 |
|  | AN | 14,056 | 15,098 | 14,686 |
|  | BN | 12,965 | 13,177 | 12,134 |
|  | D | 13,302 | 13,727 | 12,593 |
|  | C | 12,849 | 11,935 | 11,451 |
|  | All | 13,123 | 13,689 | 13,155 |
| AUG | W | 11,029 | 10,491 | 10,302 |
|  | AN | 10,449 | 11,641 | 10,580 |
|  | BN | 10,139 | 10,261 | 9,462 |
|  | D | 10,627 | 10,986 | 8,874 |
|  | C | 9,473 | 7,348 | 7,004 |
|  | All | 10,476 | 10,269 | 9,403 |
| SEP | W | 9,385 | 12,833 | 6,998 |
|  | AN | 5,862 | 9,898 | 6,253 |
|  | BN | 5,492 | 5,601 | 5,284 |
|  | D | 5,985 | 4,469 | 4,722 |
|  | C | 5,563 | 4,368 | 4,927 |
|  | All | 6,899 | 8,094 | 5,794 |
| OCT | W | 6,886 | 7,034 | 8,025 |
|  | AN | 7,145 | 7,152 | 8,462 |
|  | BN | 6,396 | 7,072 | 8,950 |
|  | D | 6,128 | 6,494 | 8,106 |
|  | C | 5,902 | 5,752 | 7,875 |
|  | All | 6,530 | 6,752 | 8,242 |
| NOV | W | 6,672 | 7,539 | 6,401 |
|  | AN | 6,224 | 7,134 | 4,457 |
|  | BN | 5,088 | 5,936 | 4,241 |
|  | D | 5,669 | 5,406 | 4,319 |
|  | C | 4,822 | 4,710 | 4,196 |
|  | All | 5,845 | 6,324 | 4,968 |
| DEC | W | 12,766 | 11,022 | 11,953 |
|  | AN | 5,531 | 5,377 | 5,376 |
|  | BN | 5,413 | 5,195 | 5,412 |
|  | D | 4,215 | 3,936 | 4,206 |
|  | C | 3,828 | 3,582 | 3,645 |
|  | All | 7,267 | 6,557 | 6,958 |

Table 2. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 1A: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 2,089 (12.6\%) | 382 (2.1\%) |
|  | AN | -330 (-4\%) | -217 (-2.6\%) |
|  | BN | 1,164 (25.9\%) | 1,483 (35.4\%) |
|  | D | 376 (9.4\%) | 275 (6.7\%) |
|  | C | -38 (-1.1\%) | -786 (-18.5\%) |
|  | All | 890 (10.3\%) | 288 (3.1\%) |
| FEB | W | 2,267 (12.2\%) | -9 (0\%) |
|  | AN | 2,332 (16.2\%) | 1,444 (9.4\%) |
|  | BN | 263 (4.4\%) | 700 (12.6\%) |
|  | D | -74 (-2\%) | 199 (5.8\%) |
|  | C | -12 (-0.3\%) | 214 (6.4\%) |
|  | All | 1,087 (10.5\%) | 403 (3.7\%) |
| MAR | W | 1,002 (6.2\%) | 137 (0.8\%) |
|  | AN | -573 (-6.3\%) | -260 (-2.9\%) |
|  | BN | -327 (-6.3\%) | 555 (12.9\%) |
|  | D | -171 (-4.4\%) | -82 (-2.1\%) |
|  | C | 380 (10.9\%) | 283 (7.9\%) |
|  | All | 196 (2.2\%) | 124 (1.4\%) |
| APR | W | -330 (-3.5\%) | -43 (-0.5\%) |
|  | AN | -45 (-0.7\%) | 601 (10.9\%) |
|  | BN | 296 (5.5\%) | 714 (14.2\%) |
|  | D | 505 (8.7\%) | 775 (14\%) |
|  | C | 261 (4\%) | 183 (2.8\%) |
|  | All | 88 (1.3\%) | 393 (5.8\%) |
| MAY | W | -1,637 (-17.2\%) | 722 (10.1\%) |
|  | AN | 1,159 (15\%) | 1,085 (13.9\%) |
|  | BN | 153 (2.1\%) | 1,074 (17.1\%) |
|  | D | 1,608 (21.9\%) | 1,275 (16.6\%) |
|  | C | 871 (13\%) | 270 (3.7\%) |
|  | All | 157 (2\%) | 890 (12.3\%) |
| JUN | W | 1,401 (13.5\%) | 1,502 (14.6\%) |
|  | AN | 2,642 (23.7\%) | 1,758 (14.6\%) |
|  | BN | 840 (7.8\%) | 651 (6\%) |
|  | D | 1,274 (11.4\%) | 600 (5\%) |
|  | C | 1,358 (13.1\%) | 400 (3.5\%) |
|  | All | 1,453 (13.5\%) | 1,035 (9.3\%) |
| JUL | W | 1,393 (10.9\%) | 75 (0.5\%) |
|  | AN | 629 (4.5\%) | -412 (-2.7\%) |
|  | BN | -831 (-6.4\%) | -1,043 (-7.9\%) |
|  | D | -709 (-5.3\%) | -1,133 (-8.3\%) |
|  | C | -1,399 (-10.9\%) | -484 (-4.1\%) |
|  | All | 32 (0.2\%) | -534 (-3.9\%) |


| Alternative 1A: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | -727 (-6.6\%) | -189 (-1.8\%) |
|  | AN | 131 (1.3\%) | -1,061 (-9.1\%) |
|  | BN | -677 (-6.7\%) | -798 (-7.8\%) |
|  | D | -1,754 (-16.5\%) | -2,112 (-19.2\%) |
|  | C | -2,469 (-26.1\%) | -344 (-4.7\%) |
|  | All | -1,073 (-10.2\%) | -865 (-8.4\%) |
| SEP | W | -2,387 (-25.4\%) | -5,835 (-45.5\%) |
|  | AN | 390 (6.7\%) | -3,645 (-36.8\%) |
|  | BN | -209 (-3.8\%) | -317 (-5.7\%) |
|  | D | -1,263 (-21.1\%) | 254 (5.7\%) |
|  | C | -635 (-11.4\%) | 559 (12.8\%) |
|  | All | -1,106 (-16\%) | -2,300 (-28.4\%) |
| OCT | W | 1,139 (16.5\%) | 990 (14.1\%) |
|  | AN | 1,317 (18.4\%) | 1,310 (18.3\%) |
|  | BN | 2,553 (39.9\%) | 1,877 (26.5\%) |
|  | D | 1,977 (32.3\%) | 1,611 (24.8\%) |
|  | C | 1,973 (33.4\%) | 2,124 (36.9\%) |
|  | All | 1,713 (26.2\%) | 1,491 (22.1\%) |
| NOV | W | -271 (-4.1\%) | -1,138 (-15.1\%) |
|  | AN | -1,767 (-28.4\%) | -2,677 (-37.5\%) |
|  | BN | -846 (-16.6\%) | -1,695 (-28.5\%) |
|  | D | -1,350 (-23.8\%) | -1,087 (-20.1\%) |
|  | C | -627 (-13\%) | -514 (-10.9\%) |
|  | All | -877 (-15\%) | -1,356 (-21.4\%) |
| DEC | W | -812 (-6.4\%) | 931 (8.4\%) |
|  | AN | -155 (-2.8\%) | -1 (0\%) |
|  | BN | -1 (0\%) | 217 (4.2\%) |
|  | D | -8 (-0.2\%) | 270 (6.9\%) |
|  | C | -183 (-4.8\%) | 63 (1.8\%) |
|  | All | -309 (-4.3\%) | 401 (6.1\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.1.1.2 Sacramento River Upstream of Red Bluff

Table 3. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 1A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 28,036 | 30,390 | 30,761 |
|  | AN | 16,725 | 16,885 | 16,662 |
|  | BN | 9,381 | 9,146 | 10,623 |
|  | D | 7,098 | 7,262 | 7,532 |
|  | C | 6,143 | 6,942 | 6,160 |
|  | All | 15,396 | 16,278 | 16,560 |
| FEB | W | 30,255 | 33,472 | 33,458 |
|  | AN | 23,492 | 24,828 | 26,269 |
|  | BN | 12,005 | 11,614 | 12,301 |
|  | D | 8,947 | 8,790 | 8,985 |
|  | C | 6,599 | 6,378 | 6,595 |
|  | All | 18,010 | 19,092 | 19,490 |
| MAR | W | 25,004 | 26,210 | 26,347 |
|  | AN | 16,599 | 16,428 | 16,160 |
|  | BN | 9,333 | 8,474 | 9,018 |
|  | D | 8,385 | 8,300 | 8,216 |
|  | C | 5,999 | 6,101 | 6,377 |
|  | All | 14,669 | 14,876 | 14,995 |
| APR | W | 15,172 | 14,842 | 14,796 |
|  | AN | 10,477 | 9,761 | 10,362 |
|  | BN | 8,711 | 8,282 | 8,990 |
|  | D | 7,948 | 7,661 | 8,433 |
|  | C | 7,742 | 7,829 | 8,003 |
|  | All | 10,709 | 10,376 | 10,765 |
| MAY | W | 12,541 | 10,073 | 10,790 |
|  | AN | 10,012 | 10,047 | 11,122 |
|  | BN | 8,781 | 7,875 | 8,939 |
|  | D | 8,677 | 9,012 | 10,277 |
|  | C | 7,746 | 8,348 | 8,615 |
|  | All | 9,979 | 9,208 | 10,092 |
| JUN | W | 11,905 | 11,720 | 13,210 |
|  | AN | 12,001 | 12,789 | 14,534 |
|  | BN | 11,464 | 11,651 | 12,287 |
|  | D | 11,777 | 12,441 | 13,028 |
|  | C | 10,885 | 11,881 | 12,227 |
|  | All | 11,666 | 12,046 | 13,062 |
| JUL | W | 13,255 | 14,525 | 14,586 |
|  | AN | 14,129 | 15,142 | 14,716 |
|  | BN | 13,011 | 13,258 | 12,205 |
|  | D | 13,368 | 13,826 | 12,687 |
|  | C | 13,005 | 12,149 | 11,749 |
|  | All | 13,329 | 13,898 | 13,367 |


| Alternative 1A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 11,284 | 10,735 | 10,543 |
|  | AN | 10,580 | 11,775 | 10,714 |
|  | BN | 10,202 | 10,364 | 9,565 |
|  | D | 10,747 | 11,143 | 9,034 |
|  | C | 9,590 | 7,665 | 7,330 |
|  | All | 10,630 | 10,464 | 9,600 |
| SEP | W | 9,856 | 13,312 | 7,476 |
|  | AN | 6,279 | 10,320 | 6,680 |
|  | BN | 5,821 | 5,963 | 5,649 |
|  | D | 6,391 | 4,911 | 5,178 |
|  | C | 5,887 | 4,838 | 5,393 |
|  | All | 7,302 | 8,535 | 6,238 |
| OCT | W | 8,020 | 8,188 | 9,200 |
|  | AN | 8,112 | 8,162 | 9,484 |
|  | BN | 7,094 | 7,778 | 9,678 |
|  | D | 6,903 | 7,287 | 8,902 |
|  | C | 6,670 | 6,537 | 8,691 |
|  | All | 7,432 | 7,675 | 9,183 |
| NOV | W | 9,876 | 10,821 | 9,671 |
|  | AN | 8,144 | 9,098 | 6,407 |
|  | BN | 6,791 | 7,682 | 5,971 |
|  | D | 7,548 | 7,347 | 6,249 |
|  | C | 5,811 | 5,703 | 5,186 |
|  | All | 7,990 | 8,521 | 7,154 |
| DEC | W | 21,015 | 19,613 | 20,551 |
|  | AN | 10,019 | 10,053 | 10,073 |
|  | BN | 8,408 | 8,228 | 8,460 |
|  | D | 7,292 | 7,091 | 7,372 |
|  | C | 5,628 | 5,433 | 5,498 |
|  | All | 11,989 | 11,446 | 11,857 |

Table 4. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 1A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 2,725 (9.7\%) | 371 (1.2\%) |
|  | AN | -63 (-0.4\%) | -224 (-1.3\%) |
|  | BN | 1,241 (13.2\%) | 1,476 (16.1\%) |
|  | D | 435 (6.1\%) | 271 (3.7\%) |
|  | C | 17 (0.3\%) | -782 (-11.3\%) |
|  | All | 1,164 (7.6\%) | 282 (1.7\%) |
| FEB | W | 3,203 (10.6\%) | -13 (0\%) |
|  | AN | 2,777 (11.8\%) | 1,441 (5.8\%) |
|  | BN | 297 (2.5\%) | 687 (5.9\%) |
|  | D | 37 (0.4\%) | 195 (2.2\%) |
|  | C | -4 (-0.1\%) | 216 (3.4\%) |
|  | All | 1,480 (8.2\%) | 398 (2.1\%) |
| MAR | W | 1,343 (5.4\%) | 136 (0.5\%) |
|  | AN | -439 (-2.6\%) | -268 (-1.6\%) |
|  | BN | -314 (-3.4\%) | 545 (6.4\%) |
|  | D | -168 (-2\%) | -83 (-1\%) |
|  | C | 378 (6.3\%) | 275 (4.5\%) |
|  | All | 326 (2.2\%) | 119 (0.8\%) |
| APR | W | -376 (-2.5\%) | -46 (-0.3\%) |
|  | AN | -115 (-1.1\%) | 601 (6.2\%) |
|  | BN | 279 (3.2\%) | 707 (8.5\%) |
|  | D | 485 (6.1\%) | 772 (10.1\%) |
|  | C | 261 (3.4\%) | 173 (2.2\%) |
|  | All | 56 (0.5\%) | 389 (3.7\%) |
| MAY | W | -1,751 (-14\%) | 717 (7.1\%) |
|  | AN | 1,110 (11.1\%) | 1,076 (10.7\%) |
|  | BN | 158 (1.8\%) | 1,064 (13.5\%) |
|  | D | 1,600 (18.4\%) | 1,265 (14\%) |
|  | C | 869 (11.2\%) | 267 (3.2\%) |
|  | All | 113 (1.1\%) | 883 (9.6\%) |
| JUN | W | 1,305 (11\%) | 1,490 (12.7\%) |
|  | AN | 2,533 (21.1\%) | 1,744 (13.6\%) |
|  | BN | 823 (7.2\%) | 636 (5.5\%) |
|  | D | 1,250 (10.6\%) | 587 (4.7\%) |
|  | C | 1,342 (12.3\%) | 346 (2.9\%) |
|  | All | 1,396 (12\%) | 1,016 (8.4\%) |
| JUL | W | 1,332 (10\%) | 61 (0.4\%) |
|  | AN | 586 (4.2\%) | -426 (-2.8\%) |
|  | BN | -806 (-6.2\%) | -1,053 (-7.9\%) |
|  | D | -681 (-5.1\%) | -1,139 (-8.2\%) |
|  | C | -1,256 (-9.7\%) | -400 (-3.3\%) |
|  | All | 37 (0.3\%) | -531 (-3.8\%) |


| Alternative 1A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | -741 (-6.6\%) | -192 (-1.8\%) |
|  | AN | 134 (1.3\%) | -1,061 (-9\%) |
|  | BN | -637 (-6.2\%) | -799 (-7.7\%) |
|  | D | -1,713 (-15.9\%) | -2,109 (-18.9\%) |
|  | C | -2,260 (-23.6\%) | -335 (-4.4\%) |
|  | All | -1,031 (-9.7\%) | -865 (-8.3\%) |
| SEP | W | -2,380 (-24.2\%) | -5,837 (-43.8\%) |
|  | AN | 401 (6.4\%) | -3,640 (-35.3\%) |
|  | BN | -172 (-2.9\%) | -314 (-5.3\%) |
|  | D | -1,213 (-19\%) | 267 (5.4\%) |
|  | C | -494 (-8.4\%) | 555 (11.5\%) |
|  | All | -1,064 (-14.6\%) | -2,297 (-26.9\%) |
| OCT | W | 1,180 (14.7\%) | 1,012 (12.4\%) |
|  | AN | 1,373 (16.9\%) | 1,323 (16.2\%) |
|  | BN | 2,583 (36.4\%) | 1,899 (24.4\%) |
|  | D | 1,999 (29\%) | 1,615 (22.2\%) |
|  | C | 2,020 (30.3\%) | 2,154 (32.9\%) |
|  | All | 1,751 (23.6\%) | 1,508 (19.7\%) |
| NOV | W | -205 (-2.1\%) | -1,150 (-10.6\%) |
|  | AN | -1,736 (-21.3\%) | -2,691 (-29.6\%) |
|  | BN | -820 (-12.1\%) | -1,711 (-22.3\%) |
|  | D | -1,299 (-17.2\%) | -1,097 (-14.9\%) |
|  | C | -626 (-10.8\%) | -518 (-9.1\%) |
|  | All | -836 (-10.5\%) | -1,367 (-16\%) |
| DEC | W | -464 (-2.2\%) | 938 (4.8\%) |
|  | AN | 53 (0.5\%) | 20 (0.2\%) |
|  | BN | 51 (0.6\%) | 231 (2.8\%) |
|  | D | 80 (1.1\%) | 280 (4\%) |
|  | C | -130 (-2.3\%) | 65 (1.2\%) |
|  | All | -132 (-1.1\%) | 411 (3.6\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.1.1.3 Sacramento River at Wilkins Slough

Table 5. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 1A: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 19,145 | 19,320 | 19,341 |
|  | AN | 17,084 | 16,593 | 17,356 |
|  | BN | 12,521 | 12,143 | 13,377 |
|  | D | 8,896 | 9,189 | 9,518 |
|  | C | 7,858 | 8,586 | 7,802 |
|  | All | 13,811 | 13,901 | 14,187 |
| FEB | W | 19,887 | 20,044 | 20,067 |
|  | AN | 19,139 | 19,095 | 19,148 |
|  | BN | 14,528 | 14,328 | 14,610 |
|  | D | 11,520 | 11,473 | 11,630 |
|  | C | 8,499 | 8,158 | 8,420 |
|  | All | 15,359 | 15,309 | 15,445 |
| MAR | W | 18,223 | 18,323 | 18,384 |
|  | AN | 17,696 | 17,537 | 17,642 |
|  | BN | 12,208 | 11,534 | 12,052 |
|  | D | 11,364 | 11,191 | 11,394 |
|  | C | 8,101 | 8,166 | 8,415 |
|  | All | 14,132 | 13,997 | 14,201 |
| APR | W | 13,392 | 13,119 | 13,151 |
|  | AN | 10,264 | 9,783 | 10,391 |
|  | BN | 7,152 | 6,858 | 7,554 |
|  | D | 5,319 | 5,112 | 5,875 |
|  | C | 4,164 | 4,331 | 4,479 |
|  | All | 8,746 | 8,518 | 8,926 |
| MAY | W | 10,467 | 8,435 | 9,114 |
|  | AN | 7,318 | 7,500 | 8,521 |
|  | BN | 5,638 | 4,871 | 5,826 |
|  | D | 4,669 | 5,088 | 6,277 |
|  | C | 3,998 | 4,528 | 4,780 |
|  | All | 6,962 | 6,383 | 7,209 |
| JUN | W | 6,503 | 6,435 | 7,833 |
|  | AN | 5,781 | 6,530 | 8,184 |
|  | BN | 5,243 | 5,628 | 6,152 |
|  | D | 5,245 | 6,075 | 6,573 |
|  | C | 5,140 | 6,253 | 6,397 |
|  | All | 5,707 | 6,205 | 7,111 |
| JUL | W | 6,685 | 7,771 | 7,721 |
|  | AN | 6,971 | 7,892 | 7,335 |
|  | BN | 6,122 | 6,560 | 5,417 |
|  | D | 6,788 | 7,474 | 6,246 |
|  | C | 7,162 | 6,649 | 6,340 |
|  | All | 6,723 | 7,353 | 6,745 |


| Alternative 1A: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 6,287 | 5,537 | 5,334 |
|  | AN | 5,498 | 6,610 | 5,567 |
|  | BN | 5,138 | 5,462 | 4,623 |
|  | D | 5,833 | 6,356 | 4,239 |
|  | C | 5,551 | 4,719 | 4,445 |
|  | All | 5,768 | 5,741 | 4,876 |
| SEP | W | 9,338 | 12,737 | 6,918 |
|  | AN | 5,631 | 9,546 | 5,969 |
|  | BN | 5,128 | 5,216 | 4,926 |
|  | D | 5,636 | 4,114 | 4,471 |
|  | C | 5,200 | 4,354 | 4,999 |
|  | All | 6,658 | 7,866 | 5,621 |
| OCT | W | 7,347 | 7,382 | 8,502 |
|  | AN | 6,799 | 6,927 | 8,251 |
|  | BN | 5,987 | 6,570 | 8,549 |
|  | D | 5,688 | 6,040 | 7,704 |
|  | C | 5,642 | 5,572 | 7,756 |
|  | All | 6,421 | 6,617 | 8,189 |
| NOV | W | 9,644 | 10,889 | 9,580 |
|  | AN | 8,210 | 9,141 | 6,331 |
|  | BN | 6,793 | 7,588 | 5,757 |
|  | D | 7,407 | 7,227 | 6,066 |
|  | C | 5,118 | 4,986 | 4,407 |
|  | All | 7,794 | 8,402 | 6,923 |
| DEC | W | 17,881 | 17,257 | 17,806 |
|  | AN | 10,809 | 10,755 | 11,332 |
|  | BN | 8,505 | 8,258 | 8,592 |
|  | D | 8,950 | 8,725 | 9,013 |
|  | C | 6,229 | 5,981 | 6,081 |
|  | All | 11,580 | 11,246 | 11,639 |

Table 6. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 1A: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 197 (1\%) | 21 (0.1\%) |
|  | AN | 272 (1.6\%) | 763 (4.6\%) |
|  | BN | 856 (6.8\%) | 1,234 (10.2\%) |
|  | D | 622 (7\%) | 329 (3.6\%) |
|  | C | -56 (-0.7\%) | -784 (-9.1\%) |
|  | All | 377 (2.7\%) | 286 (2.1\%) |
| FEB | W | 180 (0.9\%) | 23 (0.1\%) |
|  | AN | 10 (0\%) | 53 (0.3\%) |
|  | BN | 82 (0.6\%) | 282 (2\%) |
|  | D | 111 (1\%) | 157 (1.4\%) |
|  | C | -78 (-0.9\%) | 262 (3.2\%) |
|  | All | 85 (0.6\%) | 136 (0.9\%) |
| MAR | W | 162 (0.9\%) | 62 (0.3\%) |
|  | AN | -54 (-0.3\%) | 105 (0.6\%) |
|  | BN | -156 (-1.3\%) | 518 (4.5\%) |
|  | D | 30 (0.3\%) | 203 (1.8\%) |
|  | C | 314 (3.9\%) | 249 (3.1\%) |
|  | All | 69 (0.5\%) | 204 (1.5\%) |
| APR | W | -241 (-1.8\%) | 32 (0.2\%) |
|  | AN | 128 (1.2\%) | 608 (6.2\%) |
|  | BN | 402 (5.6\%) | 696 (10.2\%) |
|  | D | 556 (10.5\%) | 763 (14.9\%) |
|  | C | 315 (7.6\%) | 148 (3.4\%) |
|  | All | 179 (2\%) | 407 (4.8\%) |
| MAY | W | -1,353 (-12.9\%) | 679 (8\%) |
|  | AN | 1,203 (16.4\%) | 1,021 (13.6\%) |
|  | BN | 188 (3.3\%) | 955 (19.6\%) |
|  | D | 1,607 (34.4\%) | 1,189 (23.4\%) |
|  | C | 782 (19.5\%) | 252 (5.6\%) |
|  | All | 247 (3.5\%) | 826 (12.9\%) |
| JUN | W | 1,329 (20.4\%) | 1,397 (21.7\%) |
|  | AN | 2,403 (41.6\%) | 1,654 (25.3\%) |
|  | BN | 910 (17.3\%) | 524 (9.3\%) |
|  | D | 1,328 (25.3\%) | 499 (8.2\%) |
|  | C | 1,256 (24.4\%) | 144 (2.3\%) |
|  | All | 1,404 (24.6\%) | 905 (14.6\%) |
| JUL | W | 1,037 (15.5\%) | -49 (-0.6\%) |
|  | AN | 364 (5.2\%) | -557 (-7.1\%) |
|  | BN | -705 (-11.5\%) | -1,143 (-17.4\%) |
|  | D | -542 (-8\%) | -1,228 (-16.4\%) |
|  | C | -822 (-11.5\%) | -309 (-4.7\%) |
|  | All | 23 (0.3\%) | -607 (-8.3\%) |


| Alternative 1A: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | -953 (-15.2\%) | -203 (-3.7\%) |
|  | AN | 69 (1.3\%) | -1,043 (-15.8\%) |
|  | BN | -515 (-10\%) | -840 (-15.4\%) |
|  | D | -1,594 (-27.3\%) | -2,117 (-33.3\%) |
|  | C | -1,107 (-19.9\%) | -275 (-5.8\%) |
|  | All | -892 (-15.5\%) | -865 (-15.1\%) |
| SEP | W | -2,419 (-25.9\%) | -5,819 (-45.7\%) |
|  | AN | 338 (6\%) | -3,576 (-37.5\%) |
|  | BN | -201 (-3.9\%) | -289 (-5.5\%) |
|  | D | -1,165 (-20.7\%) | 357 (8.7\%) |
|  | C | -201 (-3.9\%) | 645 (14.8\%) |
|  | All | -1,037 (-15.6\%) | -2,245 (-28.5\%) |
| OCT | W | 1,155 (15.7\%) | 1,120 (15.2\%) |
|  | AN | 1,452 (21.4\%) | 1,324 (19.1\%) |
|  | BN | 2,562 (42.8\%) | 1,979 (30.1\%) |
|  | D | 2,016 (35.4\%) | 1,664 (27.5\%) |
|  | C | 2,115 (37.5\%) | 2,184 (39.2\%) |
|  | All | 1,768 (27.5\%) | 1,572 (23.8\%) |
| NOV | W | -64 (-0.7\%) | -1,310 (-12\%) |
|  | AN | -1,878 (-22.9\%) | -2,809 (-30.7\%) |
|  | BN | -1,035 (-15.2\%) | -1,830 (-24.1\%) |
|  | D | -1,341 (-18.1\%) | -1,161 (-16.1\%) |
|  | C | -711 (-13.9\%) | -579 (-11.6\%) |
|  | All | -870 (-11.2\%) | -1,478 (-17.6\%) |
| DEC | W | -76 (-0.4\%) | 549 (3.2\%) |
|  | AN | 524 (4.8\%) | 578 (5.4\%) |
|  | BN | 87 (1\%) | 334 (4\%) |
|  | D | 63 (0.7\%) | 288 (3.3\%) |
|  | C | -147 (-2.4\%) | 100 (1.7\%) |
|  | All | 60 (0.5\%) | 393 (3.5\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.1.1.4 Sacramento River at Verona

Table 7. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 1A: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 44,589 | 45,567 | 45,067 |
|  | AN | 34,120 | 33,671 | 32,916 |
|  | BN | 20,175 | 19,121 | 18,786 |
|  | D | 14,756 | 14,782 | 15,085 |
|  | C | 12,085 | 13,051 | 11,627 |
|  | All | 27,583 | 27,795 | 27,327 |
| FEB | W | 49,892 | 51,326 | 50,352 |
|  | AN | 39,162 | 39,749 | 39,417 |
|  | BN | 26,429 | 25,341 | 24,541 |
|  | D | 18,402 | 18,090 | 17,520 |
|  | C | 12,822 | 12,325 | 12,509 |
|  | All | 31,979 | 32,192 | 31,600 |
| MAR | W | 43,455 | 44,624 | 42,706 |
|  | AN | 39,477 | 39,687 | 38,335 |
|  | BN | 21,484 | 19,448 | 18,812 |
|  | D | 17,868 | 17,649 | 16,892 |
|  | C | 11,903 | 11,789 | 11,725 |
|  | All | 28,888 | 28,877 | 27,786 |
| APR | W | 32,219 | 31,636 | 29,537 |
|  | AN | 22,250 | 21,313 | 20,833 |
|  | BN | 14,459 | 13,857 | 14,968 |
|  | D | 11,113 | 10,903 | 12,659 |
|  | C | 9,420 | 9,489 | 10,042 |
|  | All | 19,759 | 19,298 | 19,218 |
| MAY | W | 26,193 | 20,229 | 21,507 |
|  | AN | 17,079 | 16,002 | 18,195 |
|  | BN | 11,451 | 10,534 | 13,324 |
|  | D | 9,283 | 9,841 | 11,262 |
|  | C | 7,125 | 7,611 | 7,725 |
|  | All | 15,840 | 13,828 | 15,359 |
| JUN | W | 18,367 | 15,304 | 17,666 |
|  | AN | 13,590 | 13,574 | 17,364 |
|  | BN | 11,062 | 11,320 | 13,654 |
|  | D | 10,429 | 10,780 | 11,395 |
|  | C | 8,911 | 9,827 | 9,623 |
|  | All | 13,295 | 12,576 | 14,383 |
| JUL | W | 16,253 | 17,965 | 15,434 |
|  | AN | 17,488 | 18,338 | 15,534 |
|  | BN | 16,698 | 16,598 | 12,649 |
|  | D | 16,352 | 16,465 | 11,470 |
|  | C | 14,476 | 12,457 | 9,976 |
|  | All | 16,271 | 16,651 | 13,304 |


| Alternative 1A: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 12,464 | 14,016 | 11,675 |
|  | AN | 13,691 | 15,828 | 12,848 |
|  | BN | 13,389 | 14,074 | 10,373 |
|  | D | 14,688 | 13,018 | 9,604 |
|  | C | 9,207 | 8,085 | 7,564 |
|  | All | 12,813 | 13,204 | 10,568 |
| SEP | W | 14,279 | 23,592 | 10,567 |
|  | AN | 10,537 | 19,044 | 10,363 |
|  | BN | 9,961 | 10,576 | 8,608 |
|  | D | 10,542 | 7,664 | 8,432 |
|  | C | 7,764 | 6,832 | 7,794 |
|  | All | 11,220 | 14,755 | 9,328 |
| OCT | W | 11,503 | 11,232 | 12,506 |
|  | AN | 9,381 | 9,890 | 11,699 |
|  | BN | 9,867 | 10,146 | 12,239 |
|  | D | 8,681 | 8,989 | 11,158 |
|  | C | 8,543 | 8,104 | 11,622 |
|  | All | 9,861 | 9,900 | 11,917 |
| NOV | W | 15,307 | 15,754 | 14,508 |
|  | AN | 11,792 | 12,817 | 9,715 |
|  | BN | 9,852 | 10,437 | 8,454 |
|  | D | 10,157 | 9,731 | 8,622 |
|  | C | 7,341 | 7,223 | 6,668 |
|  | All | 11,565 | 11,846 | 10,334 |
| DEC | W | 33,840 | 31,254 | 31,026 |
|  | AN | 17,572 | 18,481 | 19,160 |
|  | BN | 13,099 | 13,028 | 13,674 |
|  | D | 12,685 | 12,532 | 12,890 |
|  | C | 9,770 | 8,627 | 9,804 |
|  | All | 19,752 | 18,852 | 19,240 |

Table 8. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 1A: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 478 (1.1\%) | -500 (-1.1\%) |
|  | AN | -1,205 (-3.5\%) | -755 (-2.2\%) |
|  | BN | -1,390 (-6.9\%) | -335 (-1.8\%) |
|  | D | 329 (2.2\%) | 303 (2.1\%) |
|  | C | -458 (-3.8\%) | -1,424 (-10.9\%) |
|  | All | -257 (-0.9\%) | -468 (-1.7\%) |
| FEB | W | 460 (0.9\%) | -973 (-1.9\%) |
|  | AN | 255 (0.7\%) | -332 (-0.8\%) |
|  | BN | -1,888 (-7.1\%) | -800 (-3.2\%) |
|  | D | -883 (-4.8\%) | -571 (-3.2\%) |
|  | C | -313 (-2.4\%) | 183 (1.5\%) |
|  | All | -379 (-1.2\%) | -592 (-1.8\%) |
| MAR | W | -749 (-1.7\%) | -1,918 (-4.3\%) |
|  | AN | -1,142 (-2.9\%) | -1,352 (-3.4\%) |
|  | BN | -2,672 (-12.4\%) | -636 (-3.3\%) |
|  | D | -977 (-5.5\%) | -758 (-4.3\%) |
|  | C | -179 (-1.5\%) | -65 (-0.5\%) |
|  | All | -1,101 (-3.8\%) | -1,090 (-3.8\%) |
| APR | W | -2,682 (-8.3\%) | -2,099 (-6.6\%) |
|  | AN | -1,418 (-6.4\%) | -480 (-2.3\%) |
|  | BN | 509 (3.5\%) | 1,111 (8\%) |
|  | D | 1,545 (13.9\%) | 1,756 (16.1\%) |
|  | C | 622 (6.6\%) | 553 (5.8\%) |
|  | All | -541 (-2.7\%) | -80 (-0.4\%) |
| MAY | W | -4,687 (-17.9\%) | 1,278 (6.3\%) |
|  | AN | 1,116 (6.5\%) | 2,194 (13.7\%) |
|  | BN | 1,872 (16.3\%) | 2,789 (26.5\%) |
|  | D | 1,979 (21.3\%) | 1,421 (14.4\%) |
|  | C | 600 (8.4\%) | 114 (1.5\%) |
|  | All | -481 (-3\%) | 1,531 (11.1\%) |
| JUN | W | -701 (-3.8\%) | 2,362 (15.4\%) |
|  | AN | 3,774 (27.8\%) | 3,790 (27.9\%) |
|  | BN | 2,592 (23.4\%) | 2,334 (20.6\%) |
|  | D | 966 (9.3\%) | 615 (5.7\%) |
|  | C | 712 (8\%) | -204 (-2.1\%) |
|  | All | 1,089 (8.2\%) | 1,807 (14.4\%) |
| JUL | W | -819 (-5\%) | -2,531 (-14.1\%) |
|  | AN | -1,954 (-11.2\%) | -2,804 (-15.3\%) |
|  | BN | -4,048 (-24.2\%) | -3,949 (-23.8\%) |
|  | D | -4,882 (-29.9\%) | -4,995 (-30.3\%) |
|  | C | -4,499 (-31.1\%) | -2,481 (-19.9\%) |
|  | All | -2,967 (-18.2\%) | -3,347 (-20.1\%) |


| Alternative 1A: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | -789 (-6.3\%) | -2,342 (-16.7\%) |
|  | AN | -844 (-6.2\%) | -2,981 (-18.8\%) |
|  | BN | -3,016 (-22.5\%) | -3,701 (-26.3\%) |
|  | D | -5,084 (-34.6\%) | -3,414 (-26.2\%) |
|  | C | -1,643 (-17.8\%) | -521 (-6.4\%) |
|  | All | -2,245 (-17.5\%) | -2,636 (-20\%) |
| SEP | W | -3,712 (-26\%) | -13,025 (-55.2\%) |
|  | AN | -173 (-1.6\%) | -8,680 (-45.6\%) |
|  | BN | -1,353 (-13.6\%) | -1,968 (-18.6\%) |
|  | D | -2,110 (-20\%) | 768 (10\%) |
|  | C | 30 (0.4\%) | 963 (14.1\%) |
|  | All | -1,892 (-16.9\%) | -5,427 (-36.8\%) |
| OCT | W | 1,003 (8.7\%) | 1,274 (11.3\%) |
|  | AN | 2,318 (24.7\%) | 1,809 (18.3\%) |
|  | BN | 2,372 (24\%) | 2,093 (20.6\%) |
|  | D | 2,477 (28.5\%) | 2,169 (24.1\%) |
|  | C | 3,078 (36\%) | 3,518 (43.4\%) |
|  | All | 2,056 (20.9\%) | 2,017 (20.4\%) |
| NOV | W | -799 (-5.2\%) | -1,246 (-7.9\%) |
|  | AN | -2,077 (-17.6\%) | -3,102 (-24.2\%) |
|  | BN | -1,398 (-14.2\%) | -1,983 (-19\%) |
|  | D | -1,534 (-15.1\%) | -1,109 (-11.4\%) |
|  | C | -673 (-9.2\%) | -555 (-7.7\%) |
|  | All | -1,231 (-10.6\%) | -1,512 (-12.8\%) |
| DEC | W | -2,814 (-8.3\%) | -229 (-0.7\%) |
|  | AN | 1,588 (9\%) | 679 (3.7\%) |
|  | BN | 575 (4.4\%) | 646 (5\%) |
|  | D | 205 (1.6\%) | 358 (2.9\%) |
|  | C | 34 (0.3\%) | 1,177 (13.6\%) |
|  | All | -512 (-2.6\%) | 388 (2.1\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.1.1.5 Trinity River below Lewiston

Table 9. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 1A: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 1,440 | 1,518 | 1,457 |
|  | AN | 300 | 300 | 483 |
|  | BN | 358 | 300 | 464 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 287 | 278 |
|  | All | 671 | 684 | 718 |
| FEB | W | 1,056 | 1,495 | 1,400 |
|  | AN | 689 | 784 | 1,043 |
|  | BN | 517 | 568 | 641 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 634 | 795 | 816 |
| MAR | W | 1,209 | 1,385 | 1,347 |
|  | AN | 436 | 519 | 519 |
|  | BN | 319 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 611 | 676 | 664 |
| APR | W | 721 | 844 | 844 |
|  | AN | 469 | 513 | 458 |
|  | BN | 507 | 504 | 504 |
|  | D | 529 | 529 | 529 |
|  | C | 575 | 580 | 580 |
|  | All | 584 | 630 | 622 |
| MAY | W | 4,636 | 4,620 | 4,620 |
|  | AN | 4,462 | 4,416 | 4,416 |
|  | BN | 3,774 | 3,865 | 3,865 |
|  | D | 3,216 | 3,216 | 3,216 |
|  | C | 2,092 | 1,973 | 1,973 |
|  | All | 3,779 | 3,766 | 3,766 |
| JUN | W | 3,371 | 3,560 | 3,560 |
|  | AN | 2,488 | 3,188 | 3,188 |
|  | BN | 1,672 | 1,767 | 1,767 |
|  | D | 1,251 | 1,251 | 1,251 |
|  | C | 783 | 783 | 783 |
|  | All | 2,108 | 2,286 | 2,286 |
| JUL | W | 1,289 | 1,103 | 1,103 |
|  | AN | 1,048 | 1,048 | 1,048 |
|  | BN | 869 | 916 | 916 |
|  | D | 667 | 667 | 667 |
|  | C | 450 | 413 | 413 |
|  | All | 923 | 866 | 866 |


| Alternative 1A: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 338 | 337 |
|  | All | 450 | 434 | 434 |
| SEP | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 265 | 259 |
|  | All | 450 | 423 | 422 |
| OCT | W | 373 | 373 | 373 |
|  | AN | 373 | 311 | 323 |
|  | BN | 346 | 346 | 346 |
|  | D | 373 | 346 | 352 |
|  | C | 373 | 311 | 290 |
|  | All | 368 | 344 | 344 |
| NOV | W | 489 | 414 | 385 |
|  | AN | 300 | 275 | 275 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 283 | 283 |
|  | C | 300 | 225 | 225 |
|  | All | 360 | 318 | 309 |
| DEC | W | 1,072 | 837 | 1,011 |
|  | AN | 300 | 300 | 300 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 300 | 283 |
|  | C | 300 | 275 | 250 |
|  | All | 545 | 466 | 514 |

Table 10. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 1A: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 17 (1.2\%) | -62 (-4.1\%) |
|  | AN | 183 (60.9\%) | 183 (60.9\%) |
|  | BN | 105 (29.4\%) | 164 (54.6\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -22 (-7.2\%) | -9 (-3.1\%) |
|  | All | 47 (7\%) | 34 (5\%) |
| FEB | W | 344 (32.5\%) | -95 (-6.4\%) |
|  | AN | 354 (51.4\%) | 260 (33.1\%) |
|  | BN | 125 (24.2\%) | 73 (12.9\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 182 (28.7\%) | 20 (2.6\%) |
| MAR | W | 138 (11.4\%) | -38 (-2.8\%) |
|  | AN | 83 (19.1\%) | 0 (0\%) |
|  | BN | -19 (-5.8\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 53 (8.6\%) | -12 (-1.8\%) |
| APR | W | 122 (17\%) | 0 (0\%) |
|  | AN | -11 (-2.3\%) | -54 (-10.6\%) |
|  | BN | -3 (-0.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 5 (0.9\%) | 0 (0\%) |
|  | All | 37 (6.4\%) | -8 (-1.3\%) |
| MAY | W | -16 (-0.3\%) | 0 (0\%) |
|  | AN | -46 (-1\%) | 0 (0\%) |
|  | BN | 90 (2.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -119 (-5.7\%) | 0 (0\%) |
|  | All | -14 (-0.4\%) | 0 (0\%) |
| JUN | W | 189 (5.6\%) | 0 (0\%) |
|  | AN | 700 (28.1\%) | 0 (0\%) |
|  | BN | 96 (5.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 179 (8.5\%) | 0 (0\%) |
| JUL | W | -185 (-14.4\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 47 (5.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -38 (-8.3\%) | 0 (0\%) |
|  | All | -56 (-6.1\%) | 0 (0\%) |


| Alternative 1A: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A LLT | NAA vs. A1A_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -113 (-25\%) | 0 (0\%) |
|  | All | -16 (-3.7\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -191 (-42.4\%) | -6 (-2.3\%) |
|  | All | -28 (-6.2\%) | -1 (-0.2\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | -50 (-13.4\%) | 12 (3.9\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -21 (-5.6\%) | 6 (1.9\%) |
|  | C | -83 (-22.3\%) | -21 (-6.8\%) |
|  | All | -24 (-6.5\%) | 0 (0\%) |
| NOV | W | -104 (-21.3\%) | -29 (-7.1\%) |
|  | AN | -25 (-8.3\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -17 (-5.6\%) | 0 (0\%) |
|  | C | -75 (-25\%) | 0 (0\%) |
|  | All | -51 (-14.2\%) | -9 (-2.9\%) |
| DEC | W | -61 (-5.7\%) | 174 (20.8\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -17 (-5.5\%) | -17 (-5.5\%) |
|  | C | -50 (-16.7\%) | -25 (-9\%) |
|  | All | -30 (-5.6\%) | 48 (10.3\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.1.1.6 Clear Creek below Whiskeytown

Table 11. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

Alternative 1A: Upstream-Clear Creek below Whiskeytown

| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| :---: | :---: | :---: | :---: | :---: |
| JAN | W | 220 | 339 | 339 |
|  | AN | 192 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 159 | 163 |
|  | All | 193 | 233 | 234 |
| FEB | W | 220 | 257 | 257 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 168 | 163 |
|  | All | 194 | 209 | 208 |
| MAR | W | 200 | 259 | 258 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 202 | 196 |
|  | D | 186 | 192 | 192 |
|  | C | 155 | 168 | 163 |
|  | All | 188 | 212 | 210 |
| APR | W | 200 | 200 | 200 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 188 | 192 | 192 |
|  | C | 155 | 168 | 163 |
|  | All | 189 | 191 | 190 |
| MAY | W | 277 | 277 | 277 |
|  | AN | 277 | 277 | 277 |
|  | BN | 263 | 269 | 269 |
|  | D | 264 | 264 | 264 |
|  | C | 211 | 224 | 224 |
|  | All | 262 | 265 | 265 |
| JUN | W | 200 | 200 | 200 |
|  | AN | 200 | 200 | 200 |
|  | BN | 181 | 186 | 186 |
|  | D | 180 | 180 | 180 |
|  | C | 115 | 131 | 120 |
|  | All | 180 | 183 | 181 |
| JUL | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 85 | 85 | 98 |
|  | All | 85 | 85 | 87 |


| Alternative 1A: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 94 | 71 | 78 |
|  | All | 86 | 83 | 84 |
| SEP | W | 150 | 150 | 150 |
|  | AN | 150 | 150 | 150 |
|  | BN | 150 | 150 | 150 |
|  | D | 144 | 150 | 150 |
|  | C | 133 | 96 | 83 |
|  | All | 146 | 142 | 140 |
| OCT | W | 198 | 198 | 198 |
|  | AN | 183 | 183 | 183 |
|  | BN | 189 | 182 | 189 |
|  | D | 175 | 183 | 178 |
|  | C | 150 | 142 | 154 |
|  | All | 182 | 182 | 184 |
| NOV | W | 198 | 198 | 198 |
|  | AN | 185 | 182 | 182 |
|  | BN | 184 | 189 | 189 |
|  | D | 177 | 177 | 180 |
|  | C | 155 | 145 | 158 |
|  | All | 183 | 182 | 184 |
| DEC | W | 198 | 198 | 198 |
|  | AN | 185 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 177 | 189 | 189 |
|  | C | 155 | 156 | 150 |
|  | All | 184 | 187 | 187 |

Table 12. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 1A: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 118 (53.6\%) | 0 (-0.1\%) |
|  | AN | 0 (-0.1\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 8 (5\%) | 4 (2.3\%) |
|  | All | 40 (20.8\%) | 0 (0.2\%) |
| FEB | W | 38 (17.1\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 8 (5\%) | -5 (-3.2\%) |
|  | All | 15 (7.5\%) | -1 (-0.4\%) |
| MAR | W | 58 (29.2\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 6 (3.3\%) | -6 (-3\%) |
|  | D | 6 (3.2\%) | 0 (0\%) |
|  | C | 8 (5\%) | -5 (-3.2\%) |
|  | All | 22 (11.7\%) | -2 (-0.9\%) |
| APR | W | 0 (0\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 3 (1.7\%) | 0 (0\%) |
|  | C | 8 (5\%) | -5 (-3.2\%) |
|  | All | 2 (0.9\%) | -1 (-0.4\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 6 (2.2\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 13 (6.2\%) | 0 (0\%) |
|  | All | 3 (1.1\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 5 (2.6\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 5 (4.7\%) | -11 (-8.2\%) |
|  | All | 2 (0.9\%) | -2 (-0.9\%) |
| JUL | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 13 (15.5\%) | 13 (15.5\%) |
|  | All | 2 (2.3\%) | 2 (2.3\%) |


| Alternative 1A: Upstream—Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -16 (-17.4\%) | 7 (10\%) |
|  | All | -2 (-2.8\%) | 1 (1.3\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 6 (3.8\%) | 0 (0\%) |
|  | C | -50 (-37.5\%) | -13 (-13\%) |
|  | All | -6 (-4.2\%) | -2 (-1.3\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 7 (4.1\%) |
|  | D | 3 (1.7\%) | -5 (-3\%) |
|  | C | 4 (2.8\%) | 13 (8.8\%) |
|  | All | 1 (0.7\%) | 2 (1.1\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | -3 (-1.8\%) | 0 (0\%) |
|  | BN | 6 (3.1\%) | 0 (0\%) |
|  | D | 2 (1.4\%) | 3 (1.8\%) |
|  | C | 3 (1.9\%) | 13 (8.6\%) |
|  | All | 1 (0.8\%) | 3 (1.4\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 7 (3.6\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 12 (6.6\%) | 0 (0\%) |
|  | C | -5 (-3.1\%) | -6 (-3.6\%) |
|  | All | 3 (1.5\%) | -1 (-0.4\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.1.1.7 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

Table 13. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 1A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| FEB | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| MAR | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| APR | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| MAY | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUN | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |


| Alternative 1A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JUL | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| AUG | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| SEP | W | 773 | 773 | 773 |
|  | AN | 773 | 773 | 773 |
|  | BN | 773 | 773 | 773 |
|  | D | 773 | 773 | 773 |
|  | C | 773 | 773 | 773 |
|  | All | 773 | 773 | 773 |
| OCT | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| NOV | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| DEC | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |

Table 14. Differences (Percent Differences) between Pairs of Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 1A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| FEB | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| MAR | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| APR | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| JUL | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |


| Alternative 1A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |

## 11C.1.1.8 Feather River High-Flow Channel (at Thermalito Afterbay)

Table 15. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 1A: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 11,257 | 11,896 | 14,399 |
|  | AN | 4,434 | 2,838 | 4,107 |
|  | BN | 2,640 | 1,441 | 1,584 |
|  | D | 1,798 | 1,459 | 2,168 |
|  | C | 1,459 | 1,648 | 1,403 |
|  | All | 5,277 | 4,995 | 6,118 |
| FEB | W | 12,466 | 14,787 | 16,622 |
|  | AN | 7,411 | 5,809 | 8,138 |
|  | BN | 3,916 | 1,897 | 3,281 |
|  | D | 1,817 | 1,659 | 1,866 |
|  | C | 1,610 | 1,482 | 1,829 |
|  | All | 6,340 | 6,444 | 7,699 |
| MAR | W | 12,895 | 14,772 | 14,988 |
|  | AN | 7,733 | 8,568 | 10,417 |
|  | BN | 3,373 | 1,985 | 2,333 |
|  | D | 2,017 | 1,762 | 2,172 |
|  | C | 1,697 | 1,634 | 1,667 |
|  | All | 6,487 | 6,902 | 7,396 |
| APR | W | 6,472 | 6,408 | 6,389 |
|  | AN | 2,251 | 2,170 | 2,504 |
|  | BN | 1,205 | 1,203 | 2,152 |
|  | D | 1,286 | 1,470 | 2,681 |
|  | C | 1,389 | 1,407 | 1,903 |
|  | All | 3,073 | 3,084 | 3,627 |
| MAY | W | 7,528 | 4,740 | 5,415 |
|  | AN | 3,340 | 3,101 | 4,350 |
|  | BN | 1,205 | 1,749 | 3,667 |
|  | D | 1,591 | 2,223 | 2,552 |
|  | C | 1,574 | 1,790 | 1,762 |
|  | All | 3,661 | 3,005 | 3,798 |
| JUN | W | 5,062 | 4,211 | 5,281 |
|  | AN | 3,301 | 3,930 | 6,278 |
|  | BN | 2,707 | 3,552 | 5,456 |
|  | D | 3,134 | 3,284 | 3,496 |
|  | C | 2,695 | 2,666 | 2,563 |
|  | All | 3,632 | 3,628 | 4,667 |
| JUL | W | 6,490 | 8,577 | 6,392 |
|  | AN | 8,757 | 9,488 | 7,576 |
|  | BN | 8,981 | 8,833 | 6,216 |
|  | D | 8,294 | 8,099 | 4,420 |
|  | C | 6,703 | 5,217 | 2,936 |
|  | All | 7,674 | 8,157 | 5,597 |


| Alternative 1A: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 3,308 | 6,228 | 4,584 |
|  | AN | 6,042 | 7,346 | 5,708 |
|  | BN | 6,295 | 6,868 | 4,251 |
|  | D | 7,036 | 4,990 | 3,859 |
|  | C | 2,613 | 2,163 | 2,034 |
|  | All | 4,935 | 5,634 | 4,159 |
| SEP | W | 2,280 | 8,327 | 1,172 |
|  | AN | 2,253 | 6,899 | 1,902 |
|  | BN | 2,466 | 3,068 | 1,455 |
|  | D | 2,366 | 1,052 | 1,658 |
|  | C | 1,421 | 1,345 | 1,744 |
|  | All | 2,201 | 4,601 | 1,518 |
| OCT | W | 3,456 | 3,051 | 3,260 |
|  | AN | 2,386 | 2,741 | 3,303 |
|  | BN | 3,183 | 2,862 | 3,043 |
|  | D | 2,688 | 2,652 | 3,220 |
|  | C | 2,472 | 2,102 | 3,506 |
|  | All | 2,940 | 2,747 | 3,256 |
| NOV | W | 3,292 | 2,470 | 2,747 |
|  | AN | 1,824 | 2,119 | 1,915 |
|  | BN | 2,101 | 1,900 | 1,854 |
|  | D | 1,859 | 1,664 | 1,811 |
|  | C | 1,854 | 1,876 | 2,016 |
|  | All | 2,349 | 2,058 | 2,160 |
| DEC | W | 7,157 | 3,948 | 5,927 |
|  | AN | 2,951 | 3,344 | 4,443 |
|  | BN | 2,176 | 2,102 | 2,748 |
|  | D | 2,364 | 2,229 | 2,690 |
|  | C | 2,609 | 1,694 | 2,889 |
|  | All | 3,973 | 2,837 | 4,012 |

Table 16. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 1A: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 3,141 (27.9\%) | 2,503 (21\%) |
|  | AN | -327 (-7.4\%) | 1,269 (44.7\%) |
|  | BN | -1,056 (-40\%) | 143 (9.9\%) |
|  | D | 370 (20.6\%) | 709 (48.6\%) |
|  | C | -57 (-3.9\%) | -245 (-14.9\%) |
|  | All | 841 (15.9\%) | 1,124 (22.5\%) |
| FEB | W | 4,156 (33.3\%) | 1,835 (12.4\%) |
|  | AN | 727 (9.8\%) | 2,329 (40.1\%) |
|  | BN | -635 (-16.2\%) | 1,384 (73\%) |
|  | D | 49 (2.7\%) | 206 (12.4\%) |
|  | C | 219 (13.6\%) | 347 (23.4\%) |
|  | All | 1,358 (21.4\%) | 1,255 (19.5\%) |
| MAR | W | 2,093 (16.2\%) | 216 (1.5\%) |
|  | AN | 2,684 (34.7\%) | 1,849 (21.6\%) |
|  | BN | -1,040 (-30.8\%) | 348 (17.6\%) |
|  | D | 156 (7.7\%) | 410 (23.3\%) |
|  | C | -30 (-1.7\%) | 34 (2.1\%) |
|  | All | 908 (14\%) | 493 (7.1\%) |
| APR | W | -84 (-1.3\%) | -19 (-0.3\%) |
|  | AN | 252 (11.2\%) | 333 (15.4\%) |
|  | BN | 948 (78.7\%) | 949 (78.9\%) |
|  | D | 1,395 (108.5\%) | 1,211 (82.3\%) |
|  | C | 514 (37\%) | 495 (35.2\%) |
|  | All | 554 (18\%) | 543 (17.6\%) |
| MAY | W | -2,113 (-28.1\%) | 675 (14.2\%) |
|  | AN | 1,010 (30.2\%) | 1,249 (40.3\%) |
|  | BN | 2,462 (204.3\%) | 1,919 (109.7\%) |
|  | D | 960 (60.3\%) | 328 (14.8\%) |
|  | C | 188 (11.9\%) | -28 (-1.5\%) |
|  | All | 137 (3.7\%) | 793 (26.4\%) |
| JUN | W | 219 (4.3\%) | 1,070 (25.4\%) |
|  | AN | 2,977 (90.2\%) | 2,349 (59.8\%) |
|  | BN | 2,749 (101.6\%) | 1,904 (53.6\%) |
|  | D | 363 (11.6\%) | 212 (6.5\%) |
|  | C | -131 (-4.9\%) | -103 (-3.8\%) |
|  | All | 1,035 (28.5\%) | 1,040 (28.7\%) |
| JUL | W | -98 (-1.5\%) | -2,185 (-25.5\%) |
|  | AN | -1,181 (-13.5\%) | -1,912 (-20.2\%) |
|  | BN | -2,764 (-30.8\%) | -2,616 (-29.6\%) |
|  | D | -3,874 (-46.7\%) | -3,678 (-45.4\%) |
|  | C | -3,767 (-56.2\%) | -2,281 (-43.7\%) |
|  | All | -2,078 (-27.1\%) | -2,561 (-31.4\%) |


| Alternative 1A: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | 1,276 (38.6\%) | -1,644 (-26.4\%) |
|  | AN | -334 (-5.5\%) | -1,637 (-22.3\%) |
|  | BN | -2,044 (-32.5\%) | -2,617 (-38.1\%) |
|  | D | -3,177 (-45.2\%) | -1,131 (-22.7\%) |
|  | C | -579 (-22.2\%) | -129 (-6\%) |
|  | All | -776 (-15.7\%) | -1,475 (-26.2\%) |
| SEP | W | -1,108 (-48.6\%) | -7,155 (-85.9\%) |
|  | AN | -351 (-15.6\%) | -4,997 (-72.4\%) |
|  | BN | -1,011 (-41\%) | -1,613 (-52.6\%) |
|  | D | -707 (-29.9\%) | 606 (57.6\%) |
|  | C | 323 (22.8\%) | 399 (29.7\%) |
|  | All | -683 (-31\%) | -3,084 (-67\%) |
| OCT | W | -196 (-5.7\%) | 209 (6.8\%) |
|  | AN | 917 (38.4\%) | 562 (20.5\%) |
|  | BN | -140 (-4.4\%) | 181 (6.3\%) |
|  | D | 532 (19.8\%) | 568 (21.4\%) |
|  | C | 1,035 (41.9\%) | 1,404 (66.8\%) |
|  | All | 316 (10.7\%) | 509 (18.5\%) |
| NOV | W | -545 (-16.6\%) | 277 (11.2\%) |
|  | AN | 91 (5\%) | -204 (-9.6\%) |
|  | BN | -248 (-11.8\%) | -47 (-2.5\%) |
|  | D | -48 (-2.6\%) | 147 (8.8\%) |
|  | C | 162 (8.7\%) | 140 (7.5\%) |
|  | All | -189 (-8\%) | 103 (5\%) |
| DEC | W | -1,230 (-17.2\%) | 1,979 (50.1\%) |
|  | AN | 1,492 (50.6\%) | 1,099 (32.9\%) |
|  | BN | 573 (26.3\%) | 646 (30.8\%) |
|  | D | 327 (13.8\%) | 461 (20.7\%) |
|  | C | 280 (10.7\%) | 1,195 (70.5\%) |
|  | All | 39 (1\%) | 1,175 (41.4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.1.1.9 Feather River at Confluence with Sacramento River

Table 17. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

Alternative 1A: Upstream-Feather River at Confluence with Sacramento River

| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| :---: | :---: | :---: | :---: | :---: |
| JAN | W | 23,533 | 26,106 | 28,604 |
|  | AN | 12,430 | 11,953 | 13,232 |
|  | BN | 6,499 | 5,575 | 5,715 |
|  | D | 4,621 | 4,412 | 5,143 |
|  | C | 3,646 | 3,837 | 3,587 |
|  | All | 11,938 | 12,509 | 13,636 |
| FEB | W | 27,039 | 31,065 | 32,896 |
|  | AN | 14,818 | 14,599 | 16,932 |
|  | BN | 9,153 | 7,892 | 9,278 |
|  | D | 4,402 | 4,436 | 4,645 |
|  | C | 3,237 | 3,096 | 3,452 |
|  | All | 13,744 | 14,761 | 16,017 |
| MAR | W | 24,172 | 26,784 | 27,009 |
|  | AN | 19,990 | 21,490 | 23,340 |
|  | BN | 8,136 | 6,882 | 7,254 |
|  | D | 5,073 | 4,940 | 5,336 |
|  | C | 2,933 | 2,756 | 2,844 |
|  | All | 13,521 | 14,300 | 14,806 |
| APR | W | 15,897 | 15,852 | 15,845 |
|  | AN | 9,832 | 9,585 | 9,924 |
|  | BN | 5,401 | 5,189 | 6,147 |
|  | D | 4,152 | 4,137 | 5,354 |
|  | C | 3,298 | 3,185 | 3,692 |
|  | All | 8,796 | 8,689 | 9,242 |
| MAY | W | 14,387 | 10,385 | 11,072 |
|  | AN | 8,068 | 6,884 | 8,143 |
|  | BN | 4,704 | 4,509 | 6,432 |
|  | D | 3,652 | 3,767 | 4,094 |
|  | C | 2,389 | 2,321 | 2,284 |
|  | All | 7,697 | 6,237 | 7,034 |
| JUN | W | 10,222 | 7,199 | 8,247 |
|  | AN | 6,391 | 5,598 | 7,792 |
|  | BN | 4,495 | 4,342 | 6,243 |
|  | D | 3,853 | 3,367 | 3,582 |
|  | C | 2,782 | 2,522 | 2,316 |
|  | All | 6,197 | 4,951 | 5,946 |
| JUL | W | 8,177 | 8,734 | 6,307 |
|  | AN | 9,322 | 9,223 | 7,031 |
|  | BN | 9,380 | 8,725 | 5,998 |
|  | D | 8,290 | 7,674 | 3,932 |
|  | C | 6,450 | 4,891 | 2,564 |
|  | All | 8,322 | 8,009 | 5,291 |


| Alternative 1A: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 4,923 | 7,222 | 5,092 |
|  | AN | 7,080 | 8,089 | 6,149 |
|  | BN | 7,236 | 7,570 | 4,700 |
|  | D | 7,711 | 5,487 | 4,216 |
|  | C | 2,841 | 2,340 | 2,130 |
|  | All | 5,941 | 6,313 | 4,554 |
| SEP | W | 4,351 | 10,329 | 3,162 |
|  | AN | 4,194 | 8,773 | 3,772 |
|  | BN | 4,252 | 4,786 | 3,190 |
|  | D | 4,179 | 2,848 | 3,344 |
|  | C | 2,054 | 1,964 | 2,316 |
|  | All | 3,937 | 6,289 | 3,172 |
| OCT | W | 4,176 | 3,746 | 3,987 |
|  | AN | 2,630 | 2,988 | 3,557 |
|  | BN | 3,754 | 3,437 | 3,625 |
|  | D | 3,033 | 2,987 | 3,572 |
|  | C | 2,938 | 2,566 | 3,977 |
|  | All | 3,446 | 3,243 | 3,770 |
| NOV | W | 4,697 | 3,825 | 4,078 |
|  | AN | 3,065 | 3,186 | 2,958 |
|  | BN | 2,687 | 2,455 | 2,400 |
|  | D | 2,342 | 2,125 | 2,268 |
|  | C | 2,084 | 2,107 | 2,216 |
|  | All | 3,216 | 2,873 | 2,958 |
| DEC | W | 12,409 | 10,246 | 12,227 |
|  | AN | 5,193 | 6,000 | 7,105 |
|  | BN | 3,079 | 3,249 | 3,899 |
|  | D | 2,838 | 2,811 | 3,273 |
|  | C | 2,975 | 2,054 | 3,256 |
|  | All | 6,279 | 5,599 | 6,777 |

Table 18. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 1A: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 5,071 (21.6\%) | 2,499 (9.6\%) |
|  | AN | 803 (6.5\%) | 1,279 (10.7\%) |
|  | BN | -784 (-12.1\%) | 140 (2.5\%) |
|  | D | 522 (11.3\%) | 731 (16.6\%) |
|  | C | -60 (-1.6\%) | -250 (-6.5\%) |
|  | All | 1,697 (14.2\%) | 1,127 (9\%) |
| FEB | W | 5,857 (21.7\%) | 1,831 (5.9\%) |
|  | AN | 2,113 (14.3\%) | 2,332 (16\%) |
|  | BN | 125 (1.4\%) | 1,386 (17.6\%) |
|  | D | 243 (5.5\%) | 209 (4.7\%) |
|  | C | 215 (6.6\%) | 356 (11.5\%) |
|  | All | 2,273 (16.5\%) | 1,256 (8.5\%) |
| MAR | W | 2,838 (11.7\%) | 226 (0.8\%) |
|  | AN | 3,350 (16.8\%) | 1,850 (8.6\%) |
|  | BN | -882 (-10.8\%) | 372 (5.4\%) |
|  | D | 264 (5.2\%) | 397 (8\%) |
|  | C | -89 (-3\%) | 87 (3.2\%) |
|  | All | 1,284 (9.5\%) | 506 (3.5\%) |
| APR | W | -52 (-0.3\%) | -7 (0\%) |
|  | AN | 92 (0.9\%) | 339 (3.5\%) |
|  | BN | 747 (13.8\%) | 959 (18.5\%) |
|  | D | 1,203 (29\%) | 1,218 (29.4\%) |
|  | C | 394 (11.9\%) | 507 (15.9\%) |
|  | All | 446 (5.1\%) | 553 (6.4\%) |
| MAY | W | -3,314 (-23\%) | 687 (6.6\%) |
|  | AN | 75 (0.9\%) | 1,259 (18.3\%) |
|  | BN | 1,728 (36.7\%) | 1,924 (42.7\%) |
|  | D | 442 (12.1\%) | 327 (8.7\%) |
|  | C | -104 (-4.4\%) | -36 (-1.6\%) |
|  | All | -663 (-8.6\%) | 797 (12.8\%) |
| JUN | W | -1,975 (-19.3\%) | 1,048 (14.6\%) |
|  | AN | 1,401 (21.9\%) | 2,195 (39.2\%) |
|  | BN | 1,748 (38.9\%) | 1,901 (43.8\%) |
|  | D | -271 (-7\%) | 215 (6.4\%) |
|  | C | -467 (-16.8\%) | -206 (-8.2\%) |
|  | All | -250 (-4\%) | 995 (20.1\%) |
| JUL | W | -1,870 (-22.9\%) | -2,427 (-27.8\%) |
|  | AN | -2,291 (-24.6\%) | -2,191 (-23.8\%) |
|  | BN | -3,382 (-36.1\%) | -2,727 (-31.3\%) |
|  | D | -4,357 (-52.6\%) | -3,742 (-48.8\%) |
|  | C | -3,887 (-60.3\%) | -2,328 (-47.6\%) |
|  | All | -3,031 (-36.4\%) | -2,718 (-33.9\%) |


| Alternative 1A: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | 169 (3.4\%) | -2,130 (-29.5\%) |
|  | AN | -931 (-13.2\%) | -1,940 (-24\%) |
|  | BN | -2,535 (-35\%) | -2,869 (-37.9\%) |
|  | D | -3,496 (-45.3\%) | -1,272 (-23.2\%) |
|  | C | -711 (-25\%) | -210 (-9\%) |
|  | All | -1,387 (-23.3\%) | -1,759 (-27.9\%) |
| SEP | W | -1,190 (-27.3\%) | -7,168 (-69.4\%) |
|  | AN | -423 (-10.1\%) | -5,002 (-57\%) |
|  | BN | -1,062 (-25\%) | -1,596 (-33.3\%) |
|  | D | -835 (-20\%) | 496 (17.4\%) |
|  | C | 262 (12.7\%) | 352 (17.9\%) |
|  | All | -765 (-19.4\%) | -3,117 (-49.6\%) |
| OCT | W | -189 (-4.5\%) | 241 (6.4\%) |
|  | AN | 927 (35.2\%) | 569 (19\%) |
|  | BN | -129 (-3.4\%) | 187 (5.4\%) |
|  | D | 540 (17.8\%) | 585 (19.6\%) |
|  | C | 1,039 (35.4\%) | 1,412 (55\%) |
|  | All | 324 (9.4\%) | 527 (16.2\%) |
| NOV | W | -618 (-13.2\%) | 253 (6.6\%) |
|  | AN | -107 (-3.5\%) | -229 (-7.2\%) |
|  | BN | -287 (-10.7\%) | -55 (-2.2\%) |
|  | D | -74 (-3.2\%) | 144 (6.8\%) |
|  | C | 132 (6.3\%) | 109 (5.2\%) |
|  | All | -258 (-8\%) | 85 (3\%) |
| DEC | W | -182 (-1.5\%) | 1,982 (19.3\%) |
|  | AN | 1,912 (36.8\%) | 1,105 (18.4\%) |
|  | BN | 819 (26.6\%) | 650 (20\%) |
|  | D | 435 (15.3\%) | 461 (16.4\%) |
|  | C | 281 (9.5\%) | 1,202 (58.5\%) |
|  | All | 499 (7.9\%) | 1,178 (21\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.1.1.10 American River at Nimbus Dam

Table 19. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 1A: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 8,806 | 11,036 | 11,011 |
|  | AN | 4,833 | 5,805 | 5,803 |
|  | BN | 2,392 | 2,073 | 2,149 |
|  | D | 1,723 | 1,506 | 1,535 |
|  | C | 1,474 | 1,095 | 1,109 |
|  | All | 4,502 | 5,194 | 5,207 |
| FEB | W | 9,294 | 11,102 | 11,122 |
|  | AN | 6,469 | 8,153 | 8,361 |
|  | BN | 4,360 | 4,961 | 5,174 |
|  | D | 1,852 | 1,844 | 1,923 |
|  | C | 1,185 | 1,007 | 1,055 |
|  | All | 5,218 | 6,112 | 6,210 |
| MAR | W | 6,089 | 6,992 | 6,987 |
|  | AN | 5,454 | 5,790 | 5,870 |
|  | BN | 2,429 | 2,794 | 2,688 |
|  | D | 2,191 | 2,314 | 2,113 |
|  | C | 939 | 938 | 862 |
|  | All | 3,762 | 4,187 | 4,123 |
| APR | W | 5,300 | 5,508 | 5,519 |
|  | AN | 3,546 | 3,298 | 3,337 |
|  | BN | 3,126 | 2,970 | 3,156 |
|  | D | 1,837 | 1,888 | 2,012 |
|  | C | 1,156 | 1,255 | 1,289 |
|  | All | 3,305 | 3,334 | 3,407 |
| MAY | W | 6,157 | 4,592 | 4,718 |
|  | AN | 3,885 | 2,521 | 2,944 |
|  | BN | 2,930 | 1,969 | 2,517 |
|  | D | 1,790 | 1,686 | 2,134 |
|  | C | 1,182 | 992 | 1,009 |
|  | All | 3,587 | 2,676 | 2,973 |
| JUN | W | 6,003 | 3,694 | 4,568 |
|  | AN | 3,346 | 3,022 | 3,857 |
|  | BN | 2,863 | 2,883 | 3,768 |
|  | D | 2,506 | 2,596 | 2,552 |
|  | C | 1,824 | 1,025 | 1,258 |
|  | All | 3,699 | 2,825 | 3,400 |
| JUL | W | 4,108 | 3,860 | 3,530 |
|  | AN | 4,638 | 4,927 | 4,253 |
|  | BN | 4,744 | 4,328 | 3,660 |
|  | D | 3,577 | 3,143 | 2,494 |
|  | C | 1,784 | 2,022 | 1,895 |
|  | All | 3,838 | 3,670 | 3,191 |


| Alternative 1A: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 3,520 | 2,132 | 2,159 |
|  | AN | 2,542 | 1,944 | 1,810 |
|  | BN | 2,495 | 2,324 | 1,633 |
|  | D | 2,613 | 1,620 | 1,328 |
|  | C | 1,500 | 1,100 | 940 |
|  | All | 2,707 | 1,874 | 1,657 |
| SEP | W | 4,025 | 3,622 | 1,906 |
|  | AN | 2,764 | 2,044 | 1,500 |
|  | BN | 2,370 | 1,605 | 1,363 |
|  | D | 1,856 | 1,182 | 1,141 |
|  | C | 1,164 | 594 | 588 |
|  | All | 2,663 | 2,068 | 1,393 |
| OCT | W | 1,723 | 1,634 | 1,823 |
|  | AN | 1,706 | 1,732 | 1,976 |
|  | BN | 1,602 | 1,767 | 2,177 |
|  | D | 1,468 | 1,258 | 1,717 |
|  | C | 1,461 | 1,655 | 2,080 |
|  | All | 1,605 | 1,592 | 1,920 |
| NOV | W | 3,527 | 2,612 | 2,578 |
|  | AN | 3,181 | 2,554 | 2,120 |
|  | BN | 2,067 | 1,716 | 1,647 |
|  | D | 2,176 | 1,424 | 1,394 |
|  | C | 1,994 | 1,608 | 1,655 |
|  | All | 2,706 | 2,043 | 1,957 |
| DEC | W | 6,302 | 6,171 | 6,435 |
|  | AN | 3,137 | 2,933 | 2,966 |
|  | BN | 2,676 | 2,527 | 2,704 |
|  | D | 1,741 | 1,351 | 1,349 |
|  | C | 1,524 | 1,251 | 1,239 |
|  | All | 3,519 | 3,297 | 3,413 |

Table 20. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 1A: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 2,205 (25\%) | -25 (-0.2\%) |
|  | AN | 970 (20.1\%) | -2 (0\%) |
|  | BN | -243 (-10.2\%) | 76 (3.7\%) |
|  | D | -188 (-10.9\%) | 29 (1.9\%) |
|  | C | -365 (-24.8\%) | 14 (1.3\%) |
|  | All | 705 (15.7\%) | 13 (0.3\%) |
| FEB | W | 1,828 (19.7\%) | 20 (0.2\%) |
|  | AN | 1,892 (29.2\%) | 208 (2.5\%) |
|  | BN | 814 (18.7\%) | 213 (4.3\%) |
|  | D | 70 (3.8\%) | 79 (4.3\%) |
|  | C | -130 (-11\%) | 48 (4.8\%) |
|  | All | 992 (19\%) | 97 (1.6\%) |
| MAR | W | 899 (14.8\%) | -5 (-0.1\%) |
|  | AN | 416 (7.6\%) | 79 (1.4\%) |
|  | BN | 259 (10.7\%) | -106 (-3.8\%) |
|  | D | -79 (-3.6\%) | -202 (-8.7\%) |
|  | C | -77 (-8.2\%) | -76 (-8.1\%) |
|  | All | 361 (9.6\%) | -63 (-1.5\%) |
| APR | W | 219 (4.1\%) | 11 (0.2\%) |
|  | AN | -209 (-5.9\%) | 38 (1.2\%) |
|  | BN | 31 (1\%) | 187 (6.3\%) |
|  | D | 175 (9.5\%) | 124 (6.6\%) |
|  | C | 133 (11.5\%) | 34 (2.7\%) |
|  | All | 102 (3.1\%) | 73 (2.2\%) |
| MAY | W | -1,438 (-23.4\%) | 127 (2.8\%) |
|  | AN | -941 (-24.2\%) | 423 (16.8\%) |
|  | BN | -413 (-14.1\%) | 548 (27.8\%) |
|  | D | 344 (19.2\%) | 448 (26.6\%) |
|  | C | -173 (-14.6\%) | 17 (1.7\%) |
|  | All | -614 (-17.1\%) | 296 (11.1\%) |
| JUN | W | -1,435 (-23.9\%) | 874 (23.7\%) |
|  | AN | 511 (15.3\%) | 834 (27.6\%) |
|  | BN | 904 (31.6\%) | 885 (30.7\%) |
|  | D | 47 (1.9\%) | -44 (-1.7\%) |
|  | C | -566 (-31\%) | 234 (22.8\%) |
|  | All | -299 (-8.1\%) | 575 (20.3\%) |
| JUL | W | -578 (-14.1\%) | -330 (-8.5\%) |
|  | AN | -385 (-8.3\%) | -674 (-13.7\%) |
|  | BN | -1,084 (-22.8\%) | -668 (-15.4\%) |
|  | D | -1,084 (-30.3\%) | -650 (-20.7\%) |
|  | C | 111 (6.2\%) | -127 (-6.3\%) |
|  | All | -646 (-16.8\%) | -479 (-13\%) |


| Alternative 1A: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | -1,362 (-38.7\%) | 27 (1.2\%) |
|  | AN | -732 (-28.8\%) | -135 (-6.9\%) |
|  | BN | -862 (-34.6\%) | -692 (-29.8\%) |
|  | D | -1,285 (-49.2\%) | -292 (-18\%) |
|  | C | -560 (-37.3\%) | -160 (-14.5\%) |
|  | All | -1,050 (-38.8\%) | -217 (-11.6\%) |
| SEP | W | -2,118 (-52.6\%) | -1,716 (-47.4\%) |
|  | AN | -1,264 (-45.7\%) | -543 (-26.6\%) |
|  | BN | -1,008 (-42.5\%) | -242 (-15.1\%) |
|  | D | -715 (-38.5\%) | -41 (-3.5\%) |
|  | C | -577 (-49.5\%) | -6 (-1\%) |
|  | All | -1,270 (-47.7\%) | -675 (-32.6\%) |
| OCT | W | 100 (5.8\%) | 188 (11.5\%) |
|  | AN | 270 (15.8\%) | 244 (14.1\%) |
|  | BN | 575 (35.9\%) | 410 (23.2\%) |
|  | D | 249 (17\%) | 459 (36.5\%) |
|  | C | 620 (42.4\%) | 426 (25.7\%) |
|  | All | 315 (19.6\%) | 329 (20.7\%) |
| NOV | W | -949 (-26.9\%) | -34 (-1.3\%) |
|  | AN | -1,061 (-33.3\%) | -434 (-17\%) |
|  | BN | -421 (-20.3\%) | -70 (-4.1\%) |
|  | D | -783 (-36\%) | -31 (-2.1\%) |
|  | C | -339 (-17\%) | 48 (3\%) |
|  | All | -749 (-27.7\%) | -86 (-4.2\%) |
| DEC | W | 134 (2.1\%) | 264 (4.3\%) |
|  | AN | -171 (-5.5\%) | 33 (1.1\%) |
|  | BN | 28 (1\%) | 177 (7\%) |
|  | D | -392 (-22.5\%) | -3 (-0.2\%) |
|  | C | -285 (-18.7\%) | -12 (-1\%) |
|  | All | -106 (-3\%) | 116 (3.5\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.1.1.11 American River at Confluence with Sacramento River

Table 21. Mean Monthly Flows (cfs) for Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 1A: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 8,748 | 10,960 | 10,932 |
|  | AN | 4,806 | 5,760 | 5,764 |
|  | BN | 2,326 | 1,988 | 2,063 |
|  | D | 1,654 | 1,424 | 1,458 |
|  | C | 1,403 | 1,008 | 1,027 |
|  | All | 4,443 | 5,118 | 5,132 |
| FEB | W | 9,183 | 10,947 | 10,967 |
|  | AN | 6,422 | 8,073 | 8,280 |
|  | BN | 4,309 | 4,888 | 5,100 |
|  | D | 1,781 | 1,756 | 1,835 |
|  | C | 1,119 | 921 | 970 |
|  | All | 5,142 | 6,007 | 6,104 |
| MAR | W | 5,979 | 6,837 | 6,832 |
|  | AN | 5,364 | 5,661 | 5,739 |
|  | BN | 2,340 | 2,672 | 2,565 |
|  | D | 2,121 | 2,224 | 2,022 |
|  | C | 864 | 836 | 759 |
|  | All | 3,672 | 4,063 | 3,999 |
| APR | W | 5,156 | 5,300 | 5,310 |
|  | AN | 3,383 | 3,079 | 3,117 |
|  | BN | 2,984 | 2,778 | 2,966 |
|  | D | 1,672 | 1,677 | 1,802 |
|  | C | 996 | 1,059 | 1,094 |
|  | All | 3,152 | 3,128 | 3,202 |
| MAY | W | 5,959 | 4,332 | 4,459 |
|  | AN | 3,700 | 2,285 | 2,708 |
|  | BN | 2,733 | 1,726 | 2,273 |
|  | D | 1,605 | 1,454 | 1,901 |
|  | C | 1,014 | 790 | 806 |
|  | All | 3,398 | 2,438 | 2,733 |
| JUN | W | 5,743 | 3,388 | 4,261 |
|  | AN | 3,103 | 2,736 | 3,566 |
|  | BN | 2,631 | 2,603 | 3,483 |
|  | D | 2,282 | 2,320 | 2,272 |
|  | C | 1,621 | 793 | 1,026 |
|  | All | 3,462 | 2,545 | 3,117 |
| JUL | W | 3,844 | 3,560 | 3,223 |
|  | AN | 4,399 | 4,635 | 3,954 |
|  | BN | 4,509 | 4,038 | 3,363 |
|  | D | 3,347 | 2,858 | 2,209 |
|  | C | 1,568 | 1,784 | 1,651 |
|  | All | 3,597 | 3,385 | 2,901 |


| Alternative 1A: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 3,295 | 1,858 | 1,887 |
|  | AN | 2,313 | 1,663 | 1,534 |
|  | BN | 2,265 | 2,048 | 1,362 |
|  | D | 2,395 | 1,357 | 1,071 |
|  | C | 1,314 | 899 | 744 |
|  | All | 2,488 | 1,612 | 1,400 |
| SEP | W | 3,846 | 3,415 | 1,699 |
|  | AN | 2,594 | 1,838 | 1,296 |
|  | BN | 2,205 | 1,402 | 1,166 |
|  | D | 1,691 | 987 | 949 |
|  | C | 1,011 | 427 | 421 |
|  | All | 2,495 | 1,870 | 1,197 |
| OCT | W | 1,607 | 1,499 | 1,695 |
|  | AN | 1,597 | 1,613 | 1,855 |
|  | BN | 1,472 | 1,617 | 2,042 |
|  | D | 1,344 | 1,114 | 1,579 |
|  | C | 1,342 | 1,517 | 1,945 |
|  | All | 1,486 | 1,454 | 1,789 |
| NOV | W | 3,472 | 2,540 | 2,504 |
|  | AN | 3,100 | 2,455 | 2,019 |
|  | BN | 1,990 | 1,618 | 1,544 |
|  | D | 2,094 | 1,326 | 1,291 |
|  | C | 1,897 | 1,489 | 1,540 |
|  | All | 2,632 | 1,950 | 1,862 |
| DEC | W | 6,255 | 6,115 | 6,379 |
|  | AN | 3,072 | 2,856 | 2,899 |
|  | BN | 2,609 | 2,445 | 2,628 |
|  | D | 1,675 | 1,275 | 1,273 |
|  | C | 1,443 | 1,158 | 1,156 |
|  | All | 3,457 | 3,224 | 3,344 |

Table 22. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 1A: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 2,185 (25\%) | -28 (-0.3\%) |
|  | AN | 958 (19.9\%) | 4 (0.1\%) |
|  | BN | -264 (-11.3\%) | 75 (3.7\%) |
|  | D | -197 (-11.9\%) | 33 (2.3\%) |
|  | C | -376 (-26.8\%) | 20 (2\%) |
|  | All | 690 (15.5\%) | 15 (0.3\%) |
| FEB | W | 1,784 (19.4\%) | 20 (0.2\%) |
|  | AN | 1,858 (28.9\%) | 208 (2.6\%) |
|  | BN | 792 (18.4\%) | 212 (4.3\%) |
|  | D | 54 (3\%) | 79 (4.5\%) |
|  | C | -149 (-13.3\%) | 49 (5.3\%) |
|  | All | 963 (18.7\%) | 97 (1.6\%) |
| MAR | W | 852 (14.3\%) | -5 (-0.1\%) |
|  | AN | 374 (7\%) | 77 (1.4\%) |
|  | BN | 225 (9.6\%) | -108 (-4\%) |
|  | D | -99 (-4.7\%) | -202 (-9.1\%) |
|  | C | -105 (-12.2\%) | -77 (-9.2\%) |
|  | All | 326 (8.9\%) | -64 (-1.6\%) |
| APR | W | 155 (3\%) | 11 (0.2\%) |
|  | AN | -266 (-7.9\%) | 38 (1.2\%) |
|  | BN | -18 (-0.6\%) | 188 (6.8\%) |
|  | D | 130 (7.8\%) | 126 (7.5\%) |
|  | C | 98 (9.9\%) | 35 (3.3\%) |
|  | All | 50 (1.6\%) | 74 (2.4\%) |
| MAY | W | -1,500 (-25.2\%) | 126 (2.9\%) |
|  | AN | -991 (-26.8\%) | 423 (18.5\%) |
|  | BN | -461 (-16.9\%) | 546 (31.6\%) |
|  | D | 296 (18.5\%) | 447 (30.7\%) |
|  | C | -208 (-20.5\%) | 16 (2\%) |
|  | All | -665 (-19.6\%) | 296 (12.1\%) |
| JUN | W | -1,481 (-25.8\%) | 873 (25.8\%) |
|  | AN | 463 (14.9\%) | 831 (30.4\%) |
|  | BN | 852 (32.4\%) | 880 (33.8\%) |
|  | D | -10 (-0.4\%) | -48 (-2.1\%) |
|  | C | -595 (-36.7\%) | 233 (29.4\%) |
|  | All | -346 (-10\%) | 572 (22.5\%) |
| JUL | W | -621 (-16.2\%) | -338 (-9.5\%) |
|  | AN | -445 (-10.1\%) | -682 (-14.7\%) |
|  | BN | -1,147 (-25.4\%) | -676 (-16.7\%) |
|  | D | -1,138 (-34\%) | -649 (-22.7\%) |
|  | C | 83 (5.3\%) | -132 (-7.4\%) |
|  | All | -695 (-19.3\%) | -484 (-14.3\%) |


| Alternative 1A: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | -1,407 (-42.7\%) | 30 (1.6\%) |
|  | AN | -779 (-33.7\%) | -129 (-7.8\%) |
|  | BN | -902 (-39.8\%) | -686 (-33.5\%) |
|  | D | -1,324 (-55.3\%) | -285 (-21\%) |
|  | C | -570 (-43.4\%) | -156 (-17.3\%) |
|  | All | -1,088 (-43.7\%) | -212 (-13.2\%) |
| SEP | W | -2,147 (-55.8\%) | -1,716 (-50.3\%) |
|  | AN | -1,298 (-50.1\%) | -542 (-29.5\%) |
|  | BN | -1,040 (-47.1\%) | -236 (-16.8\%) |
|  | D | -742 (-43.9\%) | -38 (-3.9\%) |
|  | C | -590 (-58.3\%) | -6 (-1.3\%) |
|  | All | -1,297 (-52\%) | -673 (-36\%) |
| OCT | W | 87 (5.4\%) | 196 (13.1\%) |
|  | AN | 258 (16.1\%) | 242 (15\%) |
|  | BN | 570 (38.7\%) | 426 (26.3\%) |
|  | D | 236 (17.5\%) | 465 (41.8\%) |
|  | C | 603 (44.9\%) | 428 (28.2\%) |
|  | All | 303 (20.4\%) | 335 (23\%) |
| NOV | W | -968 (-27.9\%) | -35 (-1.4\%) |
|  | AN | -1,081 (-34.9\%) | -436 (-17.8\%) |
|  | BN | -445 (-22.4\%) | -74 (-4.6\%) |
|  | D | -803 (-38.3\%) | -35 (-2.6\%) |
|  | C | -357 (-18.8\%) | 50 (3.4\%) |
|  | All | -770 (-29.3\%) | -88 (-4.5\%) |
| DEC | W | 124 (2\%) | 264 (4.3\%) |
|  | AN | -173 (-5.6\%) | 43 (1.5\%) |
|  | BN | 19 (0.7\%) | 183 (7.5\%) |
|  | D | -402 (-24\%) | -2 (-0.2\%) |
|  | C | -287 (-19.9\%) | -2 (-0.2\%) |
|  | All | -113 (-3.3\%) | 120 (3.7\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.1.1.12 Stanislaus River at the Confluence with the San Joaquin River

Table 23. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 1A: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 956 | 885 | 885 |
|  | AN | 843 | 963 | 963 |
|  | BN | 416 | 369 | 369 |
|  | D | 403 | 366 | 366 |
|  | C | 314 | 265 | 265 |
|  | All | 635 | 615 | 615 |
| FEB | W | 1,285 | 1,236 | 1,238 |
|  | AN | 917 | 858 | 858 |
|  | BN | 551 | 438 | 438 |
|  | D | 562 | 359 | 359 |
|  | C | 490 | 348 | 348 |
|  | All | 827 | 723 | 724 |
| MAR | W | 2,063 | 2,217 | 2,216 |
|  | AN | 1,295 | 956 | 956 |
|  | BN | 732 | 548 | 547 |
|  | D | 559 | 390 | 390 |
|  | C | 541 | 444 | 444 |
|  | All | 1,167 | 1,071 | 1,071 |
| APR | W | 2,054 | 1,965 | 1,965 |
|  | AN | 1,719 | 1,535 | 1,534 |
|  | BN | 1,494 | 1,211 | 1,210 |
|  | D | 1,438 | 1,199 | 1,198 |
|  | C | 823 | 670 | 670 |
|  | All | 1,562 | 1,387 | 1,387 |
| MAY | W | 1,653 | 1,613 | 1,614 |
|  | AN | 1,389 | 1,243 | 1,243 |
|  | BN | 1,238 | 898 | 898 |
|  | D | 1,140 | 916 | 916 |
|  | C | 715 | 627 | 627 |
|  | All | 1,271 | 1,125 | 1,125 |
| JUN | W | 1,608 | 1,763 | 1,761 |
|  | AN | 1,134 | 985 | 984 |
|  | BN | 663 | 568 | 566 |
|  | D | 447 | 364 | 365 |
|  | C | 332 | 296 | 294 |
|  | All | 932 | 914 | 912 |
| JUL | W | 1,064 | 1,080 | 1,080 |
|  | AN | 489 | 454 | 454 |
|  | BN | 450 | 425 | 425 |
|  | D | 398 | 359 | 360 |
|  | C | 337 | 310 | 312 |
|  | All | 607 | 590 | 590 |


| Alternative 1A: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 930 | 717 | 717 |
|  | AN | 476 | 454 | 454 |
|  | BN | 423 | 418 | 418 |
|  | D | 387 | 382 | 382 |
|  | C | 341 | 338 | 338 |
|  | All | 560 | 491 | 491 |
| SEP | W | 1,040 | 863 | 863 |
|  | AN | 502 | 474 | 474 |
|  | BN | 417 | 407 | 407 |
|  | D | 395 | 390 | 390 |
|  | C | 324 | 317 | 327 |
|  | All | 595 | 533 | 535 |
| OCT | W | 897 | 845 | 846 |
|  | AN | 873 | 822 | 825 |
|  | BN | 903 | 844 | 844 |
|  | D | 984 | 925 | 925 |
|  | C | 689 | 612 | 612 |
|  | All | 867 | 808 | 808 |
| NOV | W | 426 | 408 | 408 |
|  | AN | 580 | 524 | 524 |
|  | BN | 341 | 334 | 334 |
|  | D | 345 | 321 | 321 |
|  | C | 325 | 308 | 309 |
|  | All | 410 | 386 | 386 |
| DEC | W | 512 | 429 | 418 |
|  | AN | 722 | 697 | 697 |
|  | BN | 331 | 353 | 353 |
|  | D | 317 | 294 | 294 |
|  | C | 289 | 272 | 272 |
|  | All | 450 | 417 | 414 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 24. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 1A: Upstream-Stanislaus River at Confluence with San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | -71 (-7.4\%) | 0 (0\%) |
|  | AN | 120 (14.3\%) | 0 (0\%) |
|  | BN | -47 (-11.3\%) | 0 (0\%) |
|  | D | -37 (-9.1\%) | 0 (0\%) |
|  | C | -49 (-15.5\%) | 0 (0\%) |
|  | All | -20 (-3.2\%) | 0 (0\%) |
| FEB | W | -46 (-3.6\%) | 2 (0.2\%) |
|  | AN | -59 (-6.4\%) | 0 (0\%) |
|  | BN | -113 (-20.5\%) | 0 (0\%) |
|  | D | -203 (-36.2\%) | 0 (0\%) |
|  | C | -142 (-29\%) | 0 (0\%) |
|  | All | -103 (-12.5\%) | 1 (0.1\%) |
| MAR | W | 153 (7.4\%) | 0 (0\%) |
|  | AN | -339 (-26.2\%) | 0 (0\%) |
|  | BN | -185 (-25.2\%) | 0 (-0.1\%) |
|  | D | -169 (-30.2\%) | 0 (-0.1\%) |
|  | C | -97 (-17.9\%) | 0 (0\%) |
|  | All | -96 (-8.2\%) | 0 (0\%) |
| APR | W | -89 (-4.3\%) | 0 (0\%) |
|  | AN | -185 (-10.8\%) | 0 (0\%) |
|  | BN | -283 (-19\%) | -1 (0\%) |
|  | D | -240 (-16.7\%) | 0 (0\%) |
|  | C | -153 (-18.6\%) | 0 (0.1\%) |
|  | All | -175 (-11.2\%) | 0 (0\%) |
| MAY | W | -39 (-2.4\%) | 1 (0\%) |
|  | AN | -146 (-10.5\%) | 0 (0\%) |
|  | BN | -340 (-27.5\%) | 0 (-0.1\%) |
|  | D | -224 (-19.7\%) | 0 (0\%) |
|  | C | -88 (-12.3\%) | 0 (0.1\%) |
|  | All | -146 (-11.5\%) | 0 (0\%) |
| JUN | W | 154 (9.6\%) | -2 (-0.1\%) |
|  | AN | -150 (-13.2\%) | -1 (-0.1\%) |
|  | BN | -97 (-14.6\%) | -2 (-0.4\%) |
|  | D | -82 (-18.4\%) | 0 (0\%) |
|  | C | -37 (-11.3\%) | -1 (-0.4\%) |
|  | All | -20 (-2.1\%) | -1 (-0.1\%) |
| JUL | W | 16 (1.6\%) | 0 (0\%) |
|  | AN | -35 (-7.2\%) | 0 (0\%) |
|  | BN | -25 (-5.5\%) | 0 (0\%) |
|  | D | -38 (-9.4\%) | 1 (0.3\%) |
|  | C | -25 (-7.3\%) | 2 (0.6\%) |
|  | All | -17 (-2.8\%) | 1 (0.1\%) |


| Alternative 1A: Upstream-Stanislaus River at Confluence with San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | $\mathbf{W Y T}^{\text {b }}$ | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | -212 (-22.8\%) | 0 (0\%) |
|  | AN | -22 (-4.6\%) | 0 (0\%) |
|  | BN | -4 (-1\%) | 0 (0\%) |
|  | D | -5 (-1.2\%) | 0 (0\%) |
|  | C | -3 (-0.9\%) | 0 (0.1\%) |
|  | All | -68 (-12.2\%) | 0 (0\%) |
| SEP | W | -177 (-17\%) | 0 (0\%) |
|  | AN | -28 (-5.6\%) | 0 (0\%) |
|  | BN | -10 (-2.4\%) | 0 (0\%) |
|  | D | -5 (-1.3\%) | 0 (0\%) |
|  | C | 3 (0.8\%) | 10 (3.2\%) |
|  | All | -59 (-10\%) | 2 (0.4\%) |
| OCT | W | -52 (-5.8\%) | 0 (0.1\%) |
|  | AN | -48 (-5.5\%) | 2 (0.3\%) |
|  | BN | -59 (-6.5\%) | 0 (0\%) |
|  | D | -59 (-6\%) | 0 (0\%) |
|  | C | -77 (-11.1\%) | 0 (0\%) |
|  | All | -58 (-6.7\%) | 1 (0.1\%) |
| NOV | W | -18 (-4.3\%) | 0 (0\%) |
|  | AN | -56 (-9.7\%) | 0 (0\%) |
|  | BN | -8 (-2.3\%) | 0 (0\%) |
|  | D | -23 (-6.7\%) | 0 (0\%) |
|  | C | -16 (-4.9\%) | 0 (0.1\%) |
|  | All | -24 (-5.9\%) | 0 (0\%) |
| DEC | W | -94 (-18.4\%) | -11 (-2.6\%) |
|  | AN | -25 (-3.5\%) | 0 (0\%) |
|  | BN | 23 (6.8\%) | 0 (0\%) |
|  | D | -23 (-7.3\%) | 0 (0\%) |
|  | C | -16 (-5.7\%) | 0 (0\%) |
|  | All | -36 (-8\%) | -3 (-0.8\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.1.2 In Delta

## 11C.1.2.1 Sacramento River Downstream of North Delta Diversion Facility

Table 25. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 1A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 50,961 | 52,878 | 42,014 |
|  | AN | 39,863 | 40,484 | 32,151 |
|  | BN | 23,781 | 22,653 | 18,962 |
|  | D | 17,444 | 17,451 | 16,372 |
|  | C | 14,281 | 15,073 | 12,576 |
|  | All | 31,971 | 32,595 | 26,698 |
| FEB | W | 57,314 | 59,847 | 48,632 |
|  | AN | 45,676 | 47,786 | 37,562 |
|  | BN | 31,934 | 31,592 | 24,113 |
|  | D | 21,202 | 21,107 | 17,556 |
|  | C | 14,708 | 14,291 | 13,618 |
|  | All | 37,116 | 38,087 | 30,880 |
| MAR | W | 49,416 | 50,993 | 40,210 |
|  | AN | 44,495 | 45,088 | 33,116 |
|  | BN | 24,489 | 22,915 | 16,602 |
|  | D | 20,656 | 20,650 | 16,014 |
|  | C | 13,245 | 13,137 | 11,863 |
|  | All | 32,834 | 33,134 | 25,682 |
| APR | W | 37,809 | 37,543 | 27,818 |
|  | AN | 25,979 | 24,931 | 17,618 |
|  | BN | 17,752 | 17,128 | 14,856 |
|  | D | 12,990 | 12,904 | 12,911 |
|  | C | 10,229 | 10,365 | 10,315 |
|  | All | 23,169 | 22,826 | 18,279 |
| MAY | W | 31,948 | 24,500 | 17,764 |
|  | AN | 21,021 | 18,657 | 14,932 |
|  | BN | 14,227 | 12,394 | 12,411 |
|  | D | 10,959 | 11,427 | 11,868 |
|  | C | 7,749 | 8,011 | 7,660 |
|  | All | 19,175 | 16,295 | 13,663 |
| JUN | W | 23,900 | 18,603 | 14,397 |
|  | AN | 16,309 | 16,051 | 14,276 |
|  | BN | 13,576 | 13,898 | 13,069 |
|  | D | 12,222 | 12,656 | 11,844 |
|  | C | 9,884 | 10,123 | 9,306 |
|  | All | 16,412 | 14,880 | 12,847 |


| Alternative 1A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JUL | W | 19,876 | 21,425 | 15,809 |
|  | AN | 21,574 | 22,727 | 15,970 |
|  | BN | 20,953 | 20,513 | 14,056 |
|  | D | 19,272 | 18,957 | 12,278 |
|  | C | 15,397 | 13,767 | 10,579 |
|  | All | 19,520 | 19,797 | 13,993 |
| AUG | W | 15,816 | 16,064 | 9,210 |
|  | AN | 15,877 | 17,491 | 11,175 |
|  | BN | 15,643 | 16,232 | 9,744 |
|  | D | 16,965 | 14,351 | 10,152 |
|  | C | 10,095 | 8,996 | 8,047 |
|  | All | 15,210 | 14,891 | 9,625 |
| SEP | W | 18,254 | 27,212 | 7,963 |
|  | AN | 13,198 | 21,006 | 8,249 |
|  | BN | 12,427 | 12,306 | 7,900 |
|  | D | 12,155 | 8,620 | 8,330 |
|  | C | 8,485 | 7,292 | 8,298 |
|  | All | 13,751 | 16,763 | 8,123 |
| OCT | W | 13,505 | 13,277 | 13,281 |
|  | AN | 11,118 | 11,864 | 13,607 |
|  | BN | 11,557 | 12,124 | 14,504 |
|  | D | 10,279 | 10,487 | 12,687 |
|  | C | 10,073 | 9,964 | 13,918 |
|  | All | 11,613 | 11,776 | 13,500 |
| NOV | W | 19,447 | 19,285 | 13,258 |
|  | AN | 15,309 | 15,925 | 9,667 |
|  | BN | 12,574 | 13,037 | 8,487 |
|  | D | 12,868 | 11,914 | 8,551 |
|  | C | 9,633 | 9,295 | 8,074 |
|  | All | 14,788 | 14,647 | 10,126 |
| DEC | W | 39,708 | 37,022 | 31,205 |
|  | AN | 21,663 | 22,629 | 21,404 |
|  | BN | 16,678 | 16,692 | 15,751 |
|  | D | 15,442 | 15,159 | 14,448 |
|  | C | 11,816 | 10,632 | 11,195 |
|  | All | 23,727 | 22,784 | 20,525 |

Table 26. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 1A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | -8,947 (-17.6\%) | -10,864 (-20.5\%) |
|  | AN | -7,712 (-19.3\%) | -8,333 (-20.6\%) |
|  | BN | -4,819 (-20.3\%) | -3,691 (-16.3\%) |
|  | D | -1,072 (-6.1\%) | -1,079 (-6.2\%) |
|  | C | -1,705 (-11.9\%) | -2,497 (-16.6\%) |
|  | All | -5,273 (-16.5\%) | -5,897 (-18.1\%) |
| FEB | W | -8,682 (-15.1\%) | -11,214 (-18.7\%) |
|  | AN | -8,114 (-17.8\%) | -10,224 (-21.4\%) |
|  | BN | -7,820 (-24.5\%) | -7,479 (-23.7\%) |
|  | D | -3,646 (-17.2\%) | -3,551 (-16.8\%) |
|  | C | -1,090 (-7.4\%) | -673 (-4.7\%) |
|  | All | -6,235 (-16.8\%) | -7,207 (-18.9\%) |
| MAR | W | -9,206 (-18.6\%) | -10,783 (-21.1\%) |
|  | AN | -11,379 (-25.6\%) | -11,972 (-26.6\%) |
|  | BN | -7,886 (-32.2\%) | -6,312 (-27.5\%) |
|  | D | -4,642 (-22.5\%) | -4,636 (-22.4\%) |
|  | C | -1,382 (-10.4\%) | -1,274 (-9.7\%) |
|  | All | -7,152 (-21.8\%) | $-7,453(-22.5 \%)$ |
| APR | W | -9,990 (-26.4\%) | -9,725 (-25.9\%) |
|  | AN | -8,360 (-32.2\%) | -7,313 (-29.3\%) |
|  | BN | -2,895 (-16.3\%) | -2,272 (-13.3\%) |
|  | D | -79 (-0.6\%) | 7 (0.1\%) |
|  | C | 86 (0.8\%) | -50 (-0.5\%) |
|  | All | -4,890 (-21.1\%) | -4,548 (-19.9\%) |
| MAY | W | -14,184 (-44.4\%) | -6,736 (-27.5\%) |
|  | AN | -6,089 (-29\%) | -3,724 (-20\%) |
|  | BN | -1,816 (-12.8\%) | 16 (0.1\%) |
|  | D | 909 (8.3\%) | 442 (3.9\%) |
|  | C | -89 (-1.1\%) | -351 (-4.4\%) |
|  | All | -5,512 (-28.7\%) | -2,632 (-16.2\%) |
| JUN | W | -9,502 (-39.8\%) | -4,206 (-22.6\%) |
|  | AN | -2,032 (-12.5\%) | -1,775 (-11.1\%) |
|  | BN | -506 (-3.7\%) | -828 (-6\%) |
|  | D | -379 (-3.1\%) | -812 (-6.4\%) |
|  | C | -578 (-5.8\%) | -816 (-8.1\%) |
|  | All | -3,564 (-21.7\%) | -2,032 (-13.7\%) |
| JUL | W | -4,067 (-20.5\%) | -5,616 (-26.2\%) |
|  | AN | -5,603 (-26\%) | -6,757 (-29.7\%) |
|  | BN | -6,897 (-32.9\%) | -6,457 (-31.5\%) |
|  | D | -6,994 (-36.3\%) | -6,679 (-35.2\%) |
|  | C | -4,818 (-31.3\%) | -3,188 (-23.2\%) |
|  | All | -5,527 (-28.3\%) | -5,804 (-29.3\%) |


| Alternative 1A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | -6,605 (-41.8\%) | -6,853 (-42.7\%) |
|  | AN | -4,702 (-29.6\%) | -6,316 (-36.1\%) |
|  | BN | -5,899 (-37.7\%) | -6,488 (-40\%) |
|  | D | -6,813 (-40.2\%) | -4,199 (-29.3\%) |
|  | C | -2,048 (-20.3\%) | -950 (-10.6\%) |
|  | All | -5,585 (-36.7\%) | -5,266 (-35.4\%) |
| SEP | W | -10,291 (-56.4\%) | -19,250 (-70.7\%) |
|  | AN | -4,950 (-37.5\%) | -12,757 (-60.7\%) |
|  | BN | -4,527 (-36.4\%) | -4,406 (-35.8\%) |
|  | D | -3,825 (-31.5\%) | -291 (-3.4\%) |
|  | C | -187 (-2.2\%) | 1,005 (13.8\%) |
|  | All | -5,627 (-40.9\%) | -8,639 (-51.5\%) |
| OCT | W | -223 (-1.7\%) | 4 (0\%) |
|  | AN | 2,489 (22.4\%) | 1,743 (14.7\%) |
|  | BN | 2,947 (25.5\%) | 2,381 (19.6\%) |
|  | D | 2,407 (23.4\%) | 2,200 (21\%) |
|  | C | 3,845 (38.2\%) | 3,954 (39.7\%) |
|  | All | 1,888 (16.3\%) | 1,724 (14.6\%) |
| NOV | W | -6,189 (-31.8\%) | -6,027 (-31.3\%) |
|  | AN | -5,641 (-36.8\%) | -6,258 (-39.3\%) |
|  | BN | -4,087 (-32.5\%) | -4,549 (-34.9\%) |
|  | D | -4,318 (-33.6\%) | -3,363 (-28.2\%) |
|  | C | -1,559 (-16.2\%) | -1,222 (-13.1\%) |
|  | All | -4,662 (-31.5\%) | -4,521 (-30.9\%) |
| DEC | W | -8,503 (-21.4\%) | -5,817 (-15.7\%) |
|  | AN | -259 (-1.2\%) | -1,225 (-5.4\%) |
|  | BN | -927 (-5.6\%) | -941 (-5.6\%) |
|  | D | -994 (-6.4\%) | -711 (-4.7\%) |
|  | C | -621 (-5.3\%) | 562 (5.3\%) |
|  | All | -3,201 (-13.5\%) | -2,258 (-9.9\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.1.2.2 Sacramento River at Rio Vista

Table 27. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 1A: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 71,111 | 78,551 | 72,415 |
|  | AN | 41,963 | 42,919 | 37,439 |
|  | BN | 20,943 | 19,991 | 18,693 |
|  | D | 14,895 | 14,927 | 14,703 |
|  | C | 11,853 | 12,601 | 10,822 |
|  | All | 37,268 | 39,721 | 36,443 |
| FEB | W | 80,958 | 89,989 | 83,061 |
|  | AN | 52,542 | 55,363 | 50,658 |
|  | BN | 30,159 | 29,442 | 25,747 |
|  | D | 19,320 | 19,422 | 17,247 |
|  | C | 12,247 | 11,956 | 11,812 |
|  | All | 44,541 | 47,675 | 43,660 |
| MAR | W | 63,763 | 68,663 | 61,586 |
|  | AN | 46,750 | 48,513 | 41,050 |
|  | BN | 20,980 | 19,562 | 15,626 |
|  | D | 17,656 | 17,679 | 14,726 |
|  | C | 10,710 | 10,684 | 9,981 |
|  | All | 36,084 | 37,655 | 32,895 |
| APR | W | 38,214 | 38,422 | 32,024 |
|  | AN | 22,726 | 21,855 | 16,986 |
|  | BN | 14,652 | 14,207 | 12,777 |
|  | D | 10,331 | 10,299 | 10,550 |
|  | C | 7,665 | 7,816 | 7,883 |
|  | All | 21,333 | 21,211 | 18,291 |
| MAY | W | 26,933 | 20,046 | 14,306 |
|  | AN | 17,008 | 14,948 | 11,801 |
|  | BN | 10,924 | 9,355 | 9,443 |
|  | D | 8,135 | 8,564 | 9,032 |
|  | C | 5,305 | 5,554 | 5,350 |
|  | All | 15,456 | 12,833 | 10,641 |
| JUN | W | 16,557 | 11,418 | 8,002 |
|  | AN | 9,887 | 9,220 | 7,583 |
|  | BN | 7,001 | 7,241 | 6,703 |
|  | D | 6,020 | 6,335 | 5,820 |
|  | C | 4,333 | 4,513 | 4,020 |
|  | All | 9,847 | 8,257 | 6,657 |
| JUL | W | 11,125 | 12,181 | 7,996 |
|  | AN | 12,128 | 12,927 | 8,132 |
|  | BN | 11,686 | 11,357 | 6,831 |
|  | D | 10,523 | 10,307 | 5,916 |
|  | C | 7,736 | 6,596 | 4,453 |
|  | All | 10,739 | 10,921 | 6,842 |


| Alternative 1A: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 8,507 | 8,650 | 3,826 |
|  | AN | 8,538 | 9,648 | 5,174 |
|  | BN | 8,371 | 8,753 | 4,224 |
|  | D | 9,264 | 7,417 | 4,505 |
|  | C | 4,390 | 3,615 | 3,157 |
|  | All | 8,052 | 7,806 | 4,142 |
| SEP | W | 10,767 | 21,199 | 3,165 |
|  | AN | 6,788 | 12,832 | 3,359 |
|  | BN | 6,283 | 6,197 | 3,158 |
|  | D | 6,116 | 3,644 | 3,477 |
|  | C | 3,588 | 2,996 | 3,630 |
|  | All | 7,348 | 10,896 | 3,329 |
| OCT | W | 8,718 | 8,287 | 8,615 |
|  | AN | 6,183 | 7,207 | 8,846 |
|  | BN | 6,258 | 6,976 | 9,224 |
|  | D | 5,312 | 5,727 | 7,496 |
|  | C | 5,215 | 4,969 | 9,015 |
|  | All | 6,667 | 6,858 | 8,566 |
| NOV | W | 15,829 | 15,879 | 10,636 |
|  | AN | 11,333 | 12,156 | 6,298 |
|  | BN | 8,184 | 9,071 | 4,870 |
|  | D | 8,733 | 8,061 | 5,178 |
|  | C | 5,473 | 5,565 | 4,346 |
|  | All | 10,793 | 10,946 | 6,898 |
| DEC | W | 43,367 | 40,431 | 38,576 |
|  | AN | 19,040 | 19,936 | 19,338 |
|  | BN | 13,987 | 14,049 | 13,609 |
|  | D | 11,999 | 11,687 | 11,385 |
|  | C | 8,131 | 7,186 | 7,752 |
|  | All | 22,749 | 21,753 | 21,019 |

Table 28. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 1A: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 1,304 (1.8\%) | -6,136 (-7.8\%) |
|  | AN | -4,524 (-10.8\%) | -5,480 (-12.8\%) |
|  | BN | -2,250 (-10.7\%) | -1,298 (-6.5\%) |
|  | D | -191 (-1.3\%) | -224 (-1.5\%) |
|  | C | -1,031 (-8.7\%) | -1,780 (-14.1\%) |
|  | All | -826 (-2.2\%) | -3,279 (-8.3\%) |
| FEB | W | 2,103 (2.6\%) | -6,928 (-7.7\%) |
|  | AN | -1,885 (-3.6\%) | -4,705 (-8.5\%) |
|  | BN | -4,412 (-14.6\%) | -3,696 (-12.6\%) |
|  | D | -2,072 (-10.7\%) | -2,175 (-11.2\%) |
|  | C | -435 (-3.5\%) | -143 (-1.2\%) |
|  | All | -881 (-2\%) | -4,015 (-8.4\%) |
| MAR | W | -2,178 (-3.4\%) | -7,077 (-10.3\%) |
|  | AN | -5,700 (-12.2\%) | -7,463 (-15.4\%) |
|  | BN | -5,354 (-25.5\%) | -3,936 (-20.1\%) |
|  | D | -2,930 (-16.6\%) | -2,953 (-16.7\%) |
|  | C | -729 (-6.8\%) | -703 (-6.6\%) |
|  | All | -3,189 (-8.8\%) | -4,759 (-12.6\%) |
| APR | W | -6,189 (-16.2\%) | -6,398 (-16.7\%) |
|  | AN | -5,740 (-25.3\%) | -4,868 (-22.3\%) |
|  | BN | -1,876 (-12.8\%) | -1,430 (-10.1\%) |
|  | D | 219 (2.1\%) | 252 (2.4\%) |
|  | C | 218 (2.8\%) | 67 (0.9\%) |
|  | All | -3,043 (-14.3\%) | -2,920 (-13.8\%) |
| MAY | W | -12,626 (-46.9\%) | -5,739 (-28.6\%) |
|  | AN | -5,207 (-30.6\%) | -3,147 (-21.1\%) |
|  | BN | -1,482 (-13.6\%) | 88 (0.9\%) |
|  | D | 897 (11\%) | 468 (5.5\%) |
|  | C | 45 (0.9\%) | -204 (-3.7\%) |
|  | All | -4,815 (-31.2\%) | -2,192 (-17.1\%) |
| JUN | W | -8,555 (-51.7\%) | -3,416 (-29.9\%) |
|  | AN | -2,304 (-23.3\%) | -1,637 (-17.8\%) |
|  | BN | -298 (-4.3\%) | -538 (-7.4\%) |
|  | D | -200 (-3.3\%) | -516 (-8.1\%) |
|  | C | -312 (-7.2\%) | -493 (-10.9\%) |
|  | All | -3,190 (-32.4\%) | -1,600 (-19.4\%) |
| JUL | W | -3,129 (-28.1\%) | -4,185 (-34.4\%) |
|  | AN | -3,996 (-32.9\%) | -4,795 (-37.1\%) |
|  | BN | -4,855 (-41.5\%) | -4,526 (-39.8\%) |
|  | D | -4,608 (-43.8\%) | -4,391 (-42.6\%) |
|  | C | -3,283 (-42.4\%) | -2,143 (-32.5\%) |
|  | All | -3,897 (-36.3\%) | -4,079 (-37.4\%) |


| Alternative 1A: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{c}\text { EXISTING CONDITIONS } \\ \text { vs. A1A_LLT }\end{array}$ | NAA vs. A1A_LLT |$]--4,824(-55.8 \%)$

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.1.2.3 OMR Flow (Old and Middle Rivers)

Table 29. Mean Monthly Flows (cfs) for Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 1A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | -1,820 | -1,606 | 4,510 |
|  | AN | -3,553 | -3,446 | -115 |
|  | BN | -4,240 | -3,803 | -2,695 |
|  | D | -4,664 | -4,675 | -3,362 |
|  | C | -4,130 | -3,684 | -1,556 |
|  | All | -3,449 | -3,228 | -13 |
| FEB | W | -2,365 | -2,293 | 6,082 |
|  | AN | -3,274 | -3,147 | 1,971 |
|  | BN | -3,437 | -3,290 | 2 |
|  | D | -3,986 | -3,502 | -3,217 |
|  | C | -3,191 | -3,047 | -3,158 |
|  | All | -3,158 | -2,964 | 1,049 |
| MAR | W | -1,600 | -1,454 | 6,776 |
|  | AN | -4,251 | -3,815 | 2,649 |
|  | BN | -4,147 | -3,834 | -454 |
|  | D | -2,852 | -2,614 | -1,843 |
|  | C | -2,010 | -1,636 | -1,433 |
|  | All | -2,758 | -2,487 | 1,844 |
| APR | W | 2,431 | 2,415 | 3,673 |
|  | AN | 1,058 | 787 | 579 |
|  | BN | 677 | 214 | -1,777 |
|  | D | -268 | -615 | -1,832 |
|  | C | -950 | -845 | -1,124 |
|  | All | 843 | 659 | 379 |
| MAY | W | 1,651 | 1,555 | 3,149 |
|  | AN | 509 | 396 | -625 |
|  | BN | 272 | -237 | -1,583 |
|  | D | -647 | -1,010 | -1,296 |
|  | C | -1,019 | -911 | -730 |
|  | All | 353 | 155 | 246 |
| JUN | W | -4,164 | -4,369 | -540 |
|  | AN | -4,761 | -4,454 | -2,990 |
|  | BN | -4,154 | -3,420 | -2,008 |
|  | D | -3,301 | -2,592 | -1,840 |
|  | C | -2,250 | -2,143 | -1,706 |
|  | All | -3,780 | -3,504 | -1,605 |
| JUL | W | -8,959 | -8,699 | -5,531 |
|  | AN | -9,919 | -7,962 | -4,806 |
|  | BN | -10,853 | -9,942 | -5,238 |
|  | D | -10,891 | -9,505 | -4,365 |
|  | C | -8,058 | -5,234 | -2,661 |
|  | All | -9,715 | -8,473 | -4,699 |


| Alternative 1A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | -10,062 | -10,518 | -4,342 |
|  | AN | -10,348 | -10,985 | -5,549 |
|  | BN | -10,044 | -9,374 | -4,328 |
|  | D | -10,122 | -7,259 | -4,205 |
|  | C | -4,384 | -3,192 | -2,801 |
|  | All | -9,283 | -8,604 | -4,261 |
| SEP | W | -9,317 | -7,580 | -4,507 |
|  | AN | -9,163 | -9,002 | -5,149 |
|  | BN | -8,575 | -8,392 | -4,606 |
|  | D | -8,081 | -5,165 | -4,082 |
|  | C | -4,807 | -3,966 | -2,384 |
|  | All | -8,236 | -6,868 | -4,214 |
| OCT | W | -8,347 | -5,049 | -5,048 |
|  | AN | -7,643 | -3,648 | -4,681 |
|  | BN | -7,804 | -4,793 | -4,899 |
|  | D | -6,961 | -4,103 | -4,963 |
|  | C | -6,440 | -3,920 | -4,393 |
|  | All | -7,568 | -4,427 | -4,854 |
| NOV | W | -8,902 | -6,527 | -4,575 |
|  | AN | -7,264 | -6,003 | -4,678 |
|  | BN | -7,997 | -5,542 | -5,311 |
|  | D | -7,136 | -5,007 | -4,352 |
|  | C | -5,293 | -4,389 | -3,808 |
|  | All | -7,592 | -5,636 | -4,555 |
| DEC | W | -5,542 | -5,591 | -2,570 |
|  | AN | -6,987 | -7,050 | -5,652 |
|  | BN | -7,304 | -7,040 | -6,209 |
|  | D | -7,214 | -7,006 | -6,878 |
|  | C | -6,166 | -4,173 | -5,701 |
|  | All | -6,513 | -6,155 | -5,046 |

Table 30. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 1A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 6,330 (347.8\%) | 6,116 (380.9\%) |
|  | AN | 3,438 (96.8\%) | 3,332 (96.7\%) |
|  | BN | 1,545 (36.4\%) | 1,107 (29.1\%) |
|  | D | 1,302 (27.9\%) | 1,314 (28.1\%) |
|  | C | 2,574 (62.3\%) | 2,128 (57.8\%) |
|  | All | 3,436 (99.6\%) | 3,216 (99.6\%) |
| FEB | W | 8,447 (357.2\%) | 8,375 (365.3\%) |
|  | AN | 5,246 (160.2\%) | 5,118 (162.7\%) |
|  | BN | 3,439 (100.1\%) | 3,292 (100.1\%) |
|  | D | 768 (19.3\%) | 285 (8.1\%) |
|  | C | 33 (1\%) | -111 (-3.6\%) |
|  | All | 4,207 (133.2\%) | 4,013 (135.4\%) |
| MAR | W | 8,376 (523.5\%) | 8,230 (566.2\%) |
|  | AN | 6,900 (162.3\%) | 6,463 (169.4\%) |
|  | BN | 3,693 (89.1\%) | 3,380 (88.2\%) |
|  | D | 1,009 (35.4\%) | 770 (29.5\%) |
|  | C | 578 (28.7\%) | 204 (12.4\%) |
|  | All | 4,602 (166.9\%) | 4,331 (174.2\%) |
| APR | W | 1,241 (51\%) | 1,257 (52.1\%) |
|  | AN | -479 (-45.3\%) | -208 (-26.5\%) |
|  | BN | -2,454 (-362.6\%) | -1,991 (-930.7\%) |
|  | D | -1,564 (-583.8\%) | -1,217 (-197.8\%) |
|  | C | -174 (-18.3\%) | -279 (-33\%) |
|  | All | -464 (-55.1\%) | -280 (-42.5\%) |
| MAY | W | 1,498 (90.8\%) | 1,594 (102.5\%) |
|  | AN | -1,134 (-222.6\%) | -1,020 (-257.8\%) |
|  | BN | -1,855 (-682.3\%) | $-1,345(-566.6 \%)$ |
|  | D | -649 (-100.4\%) | -286 (-28.3\%) |
|  | C | 289 (28.4\%) | 181 (19.9\%) |
|  | All | -108 (-30.5\%) | 90 (58\%) |
| JUN | W | 3,624 (87\%) | 3,830 (87.6\%) |
|  | AN | 1,771 (37.2\%) | 1,464 (32.9\%) |
|  | BN | 2,146 (51.7\%) | 1,412 (41.3\%) |
|  | D | 1,460 (44.2\%) | 752 (29\%) |
|  | C | 544 (24.2\%) | 436 (20.4\%) |
|  | All | 2,175 (57.5\%) | 1,898 (54.2\%) |
| JUL | W | 3,428 (38.3\%) | 3,169 (36.4\%) |
|  | AN | 5,113 (51.5\%) | 3,156 (39.6\%) |
|  | BN | 5,615 (51.7\%) | 4,705 (47.3\%) |
|  | D | 6,526 (59.9\%) | 5,140 (54.1\%) |
|  | C | 5,397 (67\%) | 2,573 (49.2\%) |
|  | All | 5,016 (51.6\%) | 3,775 (44.5\%) |


| Alternative 1A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | 5,721 (56.9\%) | 6,177 (58.7\%) |
|  | AN | 4,799 (46.4\%) | 5,435 (49.5\%) |
|  | BN | 5,716 (56.9\%) | 5,046 (53.8\%) |
|  | D | 5,917 (58.5\%) | 3,054 (42.1\%) |
|  | C | 1,583 (36.1\%) | 391 (12.2\%) |
|  | All | 5,023 (54.1\%) | 4,343 (50.5\%) |
| SEP | W | 4,810 (51.6\%) | 3,073 (40.5\%) |
|  | AN | 4,014 (43.8\%) | 3,853 (42.8\%) |
|  | BN | 3,970 (46.3\%) | 3,786 (45.1\%) |
|  | D | 3,999 (49.5\%) | 1,083 (21\%) |
|  | C | 2,422 (50.4\%) | 1,581 (39.9\%) |
|  | All | 4,023 (48.8\%) | 2,654 (38.6\%) |
| OCT | W | 3,299 (39.5\%) | 1 (0\%) |
|  | AN | 2,962 (38.8\%) | -1,032 (-28.3\%) |
|  | BN | 2,906 (37.2\%) | -106 (-2.2\%) |
|  | D | 1,998 (28.7\%) | -859 (-20.9\%) |
|  | C | 2,047 (31.8\%) | -473 (-12.1\%) |
|  | All | 2,714 (35.9\%) | -427 (-9.6\%) |
| NOV | W | 4,327 (48.6\%) | 1,952 (29.9\%) |
|  | AN | 2,586 (35.6\%) | 1,326 (22.1\%) |
|  | BN | 2,686 (33.6\%) | 231 (4.2\%) |
|  | D | 2,784 (39\%) | 655 (13.1\%) |
|  | C | 1,485 (28.1\%) | 581 (13.2\%) |
|  | All | 3,038 (40\%) | 1,081 (19.2\%) |
| DEC | W | 2,972 (53.6\%) | 3,021 (54\%) |
|  | AN | 1,335 (19.1\%) | 1,398 (19.8\%) |
|  | BN | 1,095 (15\%) | 831 (11.8\%) |
|  | D | 336 (4.7\%) | 128 (1.8\%) |
|  | C | 466 (7.5\%) | -1,527 (-36.6\%) |
|  | All | 1,466 (22.5\%) | 1,109 (18\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are greater than $5 \%$ less positive than flows under the baseline; green boxes indicate that flows under the alternative are greater than 5\% more positive than flows under the baseline.

## 11C.1.2.4 Delta Outflow

Table 31. Mean Monthly Flows (cfs) for Model Scenarios at the Delta Outflow, Year-Round

| Alternative 1A: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 85,900 | 94,620 | 93,735 |
|  | AN | 49,448 | 51,100 | 48,196 |
|  | BN | 22,968 | 22,301 | 21,763 |
|  | D | 14,736 | 14,732 | 15,816 |
|  | C | 11,343 | 12,651 | 12,882 |
|  | All | 43,289 | 46,372 | 45,847 |
| FEB | W | 96,835 | 107,085 | 107,800 |
|  | AN | 62,321 | 65,873 | 65,435 |
|  | BN | 36,766 | 36,084 | 35,010 |
|  | D | 20,915 | 21,461 | 19,127 |
|  | C | 12,991 | 12,798 | 12,373 |
|  | All | 52,594 | 56,338 | 55,743 |
| MAR | W | 78,956 | 84,471 | 84,947 |
|  | AN | 54,171 | 56,737 | 54,848 |
|  | BN | 24,029 | 22,467 | 21,443 |
|  | D | 19,880 | 19,985 | 17,264 |
|  | C | 11,911 | 12,215 | 11,551 |
|  | All | 43,172 | 45,097 | 44,102 |
| APR | W | 54,394 | 54,562 | 48,246 |
|  | AN | 31,975 | 30,576 | 24,457 |
|  | BN | 21,928 | 20,641 | 16,714 |
|  | D | 14,142 | 13,413 | 12,324 |
|  | C | 9,053 | 9,294 | 9,012 |
|  | All | 30,099 | 29,603 | 25,754 |
| MAY | W | 41,040 | 32,880 | 27,984 |
|  | AN | 24,200 | 21,709 | 16,919 |
|  | BN | 16,299 | 13,596 | 12,204 |
|  | D | 10,487 | 10,375 | 10,508 |
|  | C | 6,000 | 6,286 | 6,196 |
|  | All | 22,517 | 19,121 | 16,646 |
| JUN | W | 23,451 | 15,640 | 15,739 |
|  | AN | 11,801 | 10,676 | 10,625 |
|  | BN | 8,004 | 8,943 | 9,688 |
|  | D | 6,636 | 7,689 | 7,844 |
|  | C | 5,322 | 5,632 | 5,365 |
|  | All | 12,765 | 10,560 | 10,706 |
| JUL | W | 11,441 | 11,407 | 9,186 |
|  | AN | 9,430 | 12,225 | 8,891 |
|  | BN | 7,151 | 7,668 | 6,388 |
|  | D | 5,024 | 6,448 | 5,397 |
|  | C | 4,238 | 5,832 | 5,344 |
|  | All | 7,951 | 8,984 | 7,271 |


| Alternative 1A: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 5,341 | 4,308 | 4,000 |
|  | AN | 4,000 | 4,713 | 4,175 |
|  | BN | 4,000 | 5,129 | 4,088 |
|  | D | 4,829 | 5,348 | 4,470 |
|  | C | 4,077 | 4,433 | 3,919 |
|  | All | 4,618 | 4,754 | 4,132 |
| SEP | W | 9,569 | 20,078 | 4,185 |
|  | AN | 3,672 | 11,581 | 3,077 |
|  | BN | 3,445 | 3,428 | 3,190 |
|  | D | 3,350 | 3,021 | 3,979 |
|  | C | 3,000 | 3,036 | 5,689 |
|  | All | 5,334 | 9,754 | 4,028 |
| OCT | W | 6,487 | 9,520 | 9,685 |
|  | AN | 4,021 | 8,982 | 9,717 |
|  | BN | 4,477 | 8,054 | 10,487 |
|  | D | 4,157 | 7,294 | 8,757 |
|  | C | 4,158 | 6,607 | 10,195 |
|  | All | 4,931 | 8,276 | 9,698 |
| NOV | W | 14,232 | 15,987 | 12,336 |
|  | AN | 9,683 | 11,529 | 6,760 |
|  | BN | 5,864 | 8,681 | 4,493 |
|  | D | 6,943 | 8,052 | 5,494 |
|  | C | 5,045 | 5,725 | 5,163 |
|  | All | 9,193 | 10,844 | 7,629 |
| DEC | W | 48,185 | 45,191 | 45,940 |
|  | AN | 18,014 | 19,119 | 20,042 |
|  | BN | 11,950 | 12,231 | 12,524 |
|  | D | 8,884 | 8,828 | 8,634 |
|  | C | 5,531 | 6,560 | 5,562 |
|  | All | 22,714 | 22,113 | 22,347 |

Table 32. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios at the Delta Outflow, Year-Round

| Alternative 1A: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 7,835 (9.1\%) | -885 (-0.9\%) |
|  | AN | -1,251 (-2.5\%) | -2,904 (-5.7\%) |
|  | BN | -1,205 (-5.2\%) | -538 (-2.4\%) |
|  | D | 1,081 (7.3\%) | 1,084 (7.4\%) |
|  | C | 1,540 (13.6\%) | 232 (1.8\%) |
|  | All | 2,558 (5.9\%) | -525 (-1.1\%) |
| FEB | W | 10,964 (11.3\%) | 714 (0.7\%) |
|  | AN | 3,113 (5\%) | -438 (-0.7\%) |
|  | BN | -1,756 (-4.8\%) | -1,074 (-3\%) |
|  | D | -1,788 (-8.5\%) | -2,334 (-10.9\%) |
|  | C | -618 (-4.8\%) | -425 (-3.3\%) |
|  | All | 3,149 (6\%) | -596 (-1.1\%) |
| MAR | W | 5,992 (7.6\%) | 476 (0.6\%) |
|  | AN | 677 (1.2\%) | -1,890 (-3.3\%) |
|  | BN | -2,586 (-10.8\%) | -1,024 (-4.6\%) |
|  | D | -2,617 (-13.2\%) | -2,722 (-13.6\%) |
|  | C | -360 (-3\%) | -664 (-5.4\%) |
|  | All | 930 (2.2\%) | -995 (-2.2\%) |
| APR | W | -6,148 (-11.3\%) | -6,316 (-11.6\%) |
|  | AN | -7,519 (-23.5\%) | -6,119 (-20\%) |
|  | BN | -5,214 (-23.8\%) | -3,927 (-19\%) |
|  | D | -1,818 (-12.9\%) | -1,090 (-8.1\%) |
|  | C | -41 (-0.5\%) | -282 (-3\%) |
|  | All | -4,345 (-14.4\%) | -3,849 (-13\%) |
| MAY | W | -13,056 (-31.8\%) | -4,897 (-14.9\%) |
|  | AN | -7,280 (-30.1\%) | -4,790 (-22.1\%) |
|  | BN | -4,095 (-25.1\%) | -1,392 (-10.2\%) |
|  | D | 21 (0.2\%) | 133 (1.3\%) |
|  | C | 196 (3.3\%) | -90 (-1.4\%) |
|  | All | -5,871 (-26.1\%) | -2,475 (-12.9\%) |
| JUN | W | -7,711 (-32.9\%) | 100 (0.6\%) |
|  | AN | -1,176 (-10\%) | -51 (-0.5\%) |
|  | BN | 1,684 (21\%) | 745 (8.3\%) |
|  | D | 1,209 (18.2\%) | 155 (2\%) |
|  | C | 43 (0.8\%) | -267 (-4.7\%) |
|  | All | -2,058 (-16.1\%) | 146 (1.4\%) |
| JUL | W | -2,255 (-19.7\%) | -2,221 (-19.5\%) |
|  | AN | -540 (-5.7\%) | -3,334 (-27.3\%) |
|  | BN | -763 (-10.7\%) | -1,280 (-16.7\%) |
|  | D | 374 (7.4\%) | -1,051 (-16.3\%) |
|  | C | 1,107 (26.1\%) | -488 (-8.4\%) |
|  | All | -680 (-8.6\%) | -1,713 (-19.1\%) |


| Alternative 1A: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | -1,341 (-25.1\%) | -308 (-7.2\%) |
|  | AN | 175 (4.4\%) | -538 (-11.4\%) |
|  | BN | 88 (2.2\%) | -1,041 (-20.3\%) |
|  | D | -358 (-7.4\%) | -877 (-16.4\%) |
|  | C | -158 (-3.9\%) | -514 (-11.6\%) |
|  | All | -486 (-10.5\%) | -622 (-13.1\%) |
| SEP | W | -5,384 (-56.3\%) | -15,893 (-79.2\%) |
|  | AN | -595 (-16.2\%) | -8,504 (-73.4\%) |
|  | BN | -256 (-7.4\%) | -238 (-6.9\%) |
|  | D | 628 (18.8\%) | 957 (31.7\%) |
|  | C | 2,689 (89.6\%) | 2,653 (87.4\%) |
|  | All | -1,306 (-24.5\%) | -5,726 (-58.7\%) |
| OCT | W | 3,199 (49.3\%) | 165 (1.7\%) |
|  | AN | 5,696 (141.7\%) | 735 (8.2\%) |
|  | BN | 6,010 (134.3\%) | 2,433 (30.2\%) |
|  | D | 4,600 (110.6\%) | 1,463 (20.1\%) |
|  | C | 6,037 (145.2\%) | 3,588 (54.3\%) |
|  | All | 4,767 (96.7\%) | 1,422 (17.2\%) |
| NOV | W | -1,897 (-13.3\%) | -3,652 (-22.8\%) |
|  | AN | -2,923 (-30.2\%) | -4,768 (-41.4\%) |
|  | BN | -1,371 (-23.4\%) | -4,188 (-48.2\%) |
|  | D | -1,449 (-20.9\%) | -2,558 (-31.8\%) |
|  | C | 118 (2.3\%) | -562 (-9.8\%) |
|  | All | -1,564 (-17\%) | -3,215 (-29.6\%) |
| DEC | W | -2,245 (-4.7\%) | 749 (1.7\%) |
|  | AN | 2,027 (11.3\%) | 923 (4.8\%) |
|  | BN | 574 (4.8\%) | 293 (2.4\%) |
|  | D | -250 (-2.8\%) | -194 (-2.2\%) |
|  | C | 31 (0.6\%) | -998 (-15.2\%) |
|  | All | -367 (-1.6\%) | 234 (1.1\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.1.2.5 San Joaquin River at Vernalis

Table 33. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 1A: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 9,004 | 9,003 | 9,811 |
|  | AN | 5,370 | 5,370 | 6,011 |
|  | BN | 2,252 | 2,252 | 2,255 |
|  | D | 2,214 | 2,215 | 2,236 |
|  | C | 1,607 | 1,607 | 1,592 |
|  | All | 4,705 | 4,705 | 5,067 |
| FEB | W | 12,605 | 12,599 | 13,196 |
|  | AN | 6,837 | 6,837 | 6,680 |
|  | BN | 2,885 | 2,886 | 2,849 |
|  | D | 2,447 | 2,447 | 2,246 |
|  | C | 1,953 | 1,954 | 1,943 |
|  | All | 6,250 | 6,248 | 6,352 |
| MAR | W | 14,262 | 14,263 | 15,234 |
|  | AN | 6,180 | 6,181 | 6,365 |
|  | BN | 2,751 | 2,752 | 2,476 |
|  | D | 2,361 | 2,362 | 2,146 |
|  | C | 1,689 | 1,690 | 1,688 |
|  | All | 6,520 | 6,521 | 6,763 |
| APR | W | 11,895 | 11,896 | 12,458 |
|  | AN | 5,980 | 5,981 | 6,044 |
|  | BN | 4,445 | 4,447 | 3,924 |
|  | D | 3,624 | 3,626 | 3,113 |
|  | C | 1,932 | 1,934 | 1,797 |
|  | All | 6,305 | 6,306 | 6,292 |
| MAY | W | 12,064 | 12,064 | 12,636 |
|  | AN | 5,380 | 5,384 | 5,094 |
|  | BN | 4,024 | 4,031 | 3,662 |
|  | D | 3,265 | 3,272 | 2,825 |
|  | C | 1,896 | 1,899 | 1,799 |
|  | All | 6,106 | 6,110 | 6,072 |
| JUN | W | 11,046 | 11,048 | 6,822 |
|  | AN | 2,928 | 2,933 | 2,682 |
|  | BN | 2,007 | 2,016 | 1,876 |
|  | D | 1,470 | 1,478 | 1,295 |
|  | C | 980 | 983 | 956 |
|  | All | 4,547 | 4,552 | 3,209 |
| JUL | W | 7,730 | 7,733 | 4,350 |
|  | AN | 1,927 | 1,938 | 1,808 |
|  | BN | 1,436 | 1,452 | 1,392 |
|  | D | 1,205 | 1,219 | 1,107 |
|  | C | 883 | 887 | 860 |
|  | All | 3,229 | 3,238 | 2,190 |


| Alternative 1A: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 3,522 | 3,525 | 2,648 |
|  | AN | 1,989 | 1,997 | 1,704 |
|  | BN | 1,426 | 1,438 | 1,383 |
|  | D | 1,339 | 1,348 | 1,230 |
|  | C | 1,018 | 1,021 | 988 |
|  | All | 2,056 | 2,062 | 1,715 |
| SEP | W | 3,475 | 3,476 | 3,129 |
|  | AN | 2,338 | 2,342 | 2,167 |
|  | BN | 1,804 | 1,810 | 1,752 |
|  | D | 1,770 | 1,774 | 1,645 |
|  | C | 1,407 | 1,408 | 1,379 |
|  | All | 2,314 | 2,317 | 2,146 |
| OCT | W | 2,748 | 2,750 | 2,744 |
|  | AN | 2,720 | 2,720 | 2,596 |
|  | BN | 2,481 | 2,482 | 2,349 |
|  | D | 2,942 | 2,944 | 2,792 |
|  | C | 2,190 | 2,191 | 2,032 |
|  | All | 2,622 | 2,623 | 2,521 |
| NOV | W | 2,495 | 2,495 | 2,418 |
|  | AN | 3,151 | 3,151 | 3,208 |
|  | BN | 2,120 | 2,120 | 1,997 |
|  | D | 2,244 | 2,245 | 2,253 |
|  | C | 1,944 | 1,944 | 1,898 |
|  | All | 2,416 | 2,417 | 2,378 |
| DEC | W | 4,351 | 4,350 | 4,556 |
|  | AN | 4,604 | 4,604 | 4,593 |
|  | BN | 2,151 | 2,151 | 2,060 |
|  | D | 2,100 | 2,101 | 2,163 |
|  | C | 1,704 | 1,704 | 1,694 |
|  | All | 3,178 | 3,178 | 3,230 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 34. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 1A: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | $\mathbf{W Y T}^{\text {b }}$ | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 807 (9\%) | 808 (9\%) |
|  | AN | 641 (11.9\%) | 641 (11.9\%) |
|  | BN | 3 (0.1\%) | 3 (0.1\%) |
|  | D | 22 (1\%) | 21 (1\%) |
|  | C | -15 (-0.9\%) | -15 (-0.9\%) |
|  | All | 362 (7.7\%) | 362 (7.7\%) |
| FEB | W | 591 (4.7\%) | 596 (4.7\%) |
|  | AN | -157 (-2.3\%) | -157 (-2.3\%) |
|  | BN | -36 (-1.3\%) | -37 (-1.3\%) |
|  | D | -201 (-8.2\%) | -202 (-8.2\%) |
|  | C | -11 (-0.6\%) | -11 (-0.6\%) |
|  | All | 103 (1.6\%) | 104 (1.7\%) |
| MAR | W | 972 (6.8\%) | 972 (6.8\%) |
|  | AN | 185 (3\%) | 184 (3\%) |
|  | BN | -275 (-10\%) | -276 (-10\%) |
|  | D | -215 (-9.1\%) | -215 (-9.1\%) |
|  | C | -2 (-0.1\%) | -2 (-0.1\%) |
|  | All | 243 (3.7\%) | 242 (3.7\%) |
| APR | W | 563 (4.7\%) | 562 (4.7\%) |
|  | AN | 64 (1.1\%) | 63 (1\%) |
|  | BN | -522 (-11.7\%) | -523 (-11.8\%) |
|  | D | -511 (-14.1\%) | -513 (-14.2\%) |
|  | C | -136 (-7\%) | -137 (-7.1\%) |
|  | All | -13 (-0.2\%) | -14 (-0.2\%) |
| MAY | W | 571 (4.7\%) | 572 (4.7\%) |
|  | AN | -287 (-5.3\%) | -291 (-5.4\%) |
|  | BN | -363 (-9\%) | -369 (-9.2\%) |
|  | D | -440 (-13.5\%) | -447 (-13.7\%) |
|  | C | -97 (-5.1\%) | -100 (-5.3\%) |
|  | All | -35 (-0.6\%) | -38 (-0.6\%) |
| JUN | W | -4,224 (-38.2\%) | -4,226 (-38.3\%) |
|  | AN | -246 (-8.4\%) | -252 (-8.6\%) |
|  | BN | -131 (-6.5\%) | -140 (-7\%) |
|  | D | -175 (-11.9\%) | -183 (-12.4\%) |
|  | C | -23 (-2.4\%) | -27 (-2.7\%) |
|  | All | -1,337 (-29.4\%) | -1,342 (-29.5\%) |
| JUL | W | -3,380 (-43.7\%) | -3,383 (-43.7\%) |
|  | AN | -119 (-6.2\%) | -130 (-6.7\%) |
|  | BN | -44 (-3.1\%) | -60 (-4.2\%) |
|  | D | -98 (-8.2\%) | -112 (-9.2\%) |
|  | C | -23 (-2.6\%) | -27 (-3\%) |
|  | All | -1,039 (-32.2\%) | -1,048 (-32.4\%) |


| Alternative 1A: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | -874 (-24.8\%) | -877 (-24.9\%) |
|  | AN | -285 (-14.3\%) | -293 (-14.7\%) |
|  | BN | -43 (-3\%) | -55 (-3.8\%) |
|  | D | -109 (-8.1\%) | -118 (-8.8\%) |
|  | C | -30 (-3\%) | -33 (-3.3\%) |
|  | All | -342 (-16.6\%) | -348 (-16.9\%) |
| SEP | W | -346 (-10\%) | -347 (-10\%) |
|  | AN | -171 (-7.3\%) | -175 (-7.5\%) |
|  | BN | -52 (-2.9\%) | -58 (-3.2\%) |
|  | D | -125 (-7.1\%) | -129 (-7.3\%) |
|  | C | -28 (-2\%) | -29 (-2.1\%) |
|  | All | -168 (-7.3\%) | -171 (-7.4\%) |
| OCT | W | -5 (-0.2\%) | -6 (-0.2\%) |
|  | AN | -124 (-4.6\%) | -125 (-4.6\%) |
|  | BN | -132 (-5.3\%) | -133 (-5.4\%) |
|  | D | -150 (-5.1\%) | -152 (-5.2\%) |
|  | C | -158 (-7.2\%) | -159 (-7.3\%) |
|  | All | -101 (-3.9\%) | -102 (-3.9\%) |
| NOV | W | -77 (-3.1\%) | -77 (-3.1\%) |
|  | AN | 57 (1.8\%) | 57 (1.8\%) |
|  | BN | -123 (-5.8\%) | -124 (-5.8\%) |
|  | D | 8 (0.4\%) | 8 (0.3\%) |
|  | C | -46 (-2.4\%) | -46 (-2.4\%) |
|  | All | -39 (-1.6\%) | -39 (-1.6\%) |
| DEC | W | 205 (4.7\%) | 206 (4.7\%) |
|  | AN | -11 (-0.2\%) | -11 (-0.2\%) |
|  | BN | -90 (-4.2\%) | -91 (-4.2\%) |
|  | D | 63 (3\%) | 62 (3\%) |
|  | C | -10 (-0.6\%) | -10 (-0.6\%) |
|  | All | 52 (1.6\%) | 52 (1.6\%) |

${ }^{a}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.1.2.6 Mokelumne River at the Delta

Table 35. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 1A: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A1A_LLT |
| JAN | W | 3,098 | 3,098 | 3,634 |
|  | AN | 1,691 | 1,691 | 1,876 |
|  | BN | 598 | 598 | 617 |
|  | D | 497 | 497 | 493 |
|  | C | 301 | 301 | 281 |
|  | All | 1,469 | 1,469 | 1,660 |
| FEB | W | 3,280 | 3,280 | 3,781 |
|  | AN | 2,648 | 2,648 | 2,913 |
|  | BN | 994 | 994 | 1,035 |
|  | D | 697 | 697 | 678 |
|  | C | 447 | 447 | 442 |
|  | All | 1,832 | 1,832 | 2,033 |
| MAR | W | 3,204 | 3,204 | 3,336 |
|  | AN | 1,651 | 1,651 | 1,639 |
|  | BN | 1,175 | 1,175 | 1,140 |
|  | D | 754 | 754 | 691 |
|  | C | 613 | 613 | 580 |
|  | All | 1,685 | 1,685 | 1,700 |
| APR | W | 2,803 | 2,803 | 2,694 |
|  | AN | 1,628 | 1,628 | 1,424 |
|  | BN | 1,251 | 1,251 | 1,068 |
|  | D | 627 | 627 | 550 |
|  | C | 350 | 350 | 311 |
|  | All | 1,504 | 1,504 | 1,384 |
| MAY | W | 3,137 | 3,137 | 2,885 |
|  | AN | 1,401 | 1,401 | 1,179 |
|  | BN | 959 | 959 | 812 |
|  | D | 406 | 406 | 333 |
|  | C | 196 | 196 | 170 |
|  | All | 1,446 | 1,446 | 1,289 |
| JUN | W | 1,731 | 1,731 | 1,415 |
|  | AN | 827 | 827 | 631 |
|  | BN | 458 | 458 | 366 |
|  | D | 93 | 93 | 76 |
|  | C | 52 | 52 | 44 |
|  | All | 766 | 766 | 616 |
| JUL | W | 748 | 313 | 469 |
|  | AN | 313 | 114 | 167 |
|  | BN | 114 | 7 | 70 |
|  | D | 7 | 3 | 6 |
|  | C | 3 | 300 | 3 |
|  | All | 300 | 680 | 183 |


| Alternative 1A: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A1A_LLT |
| AUG | W | 680 | 295 | 346 |
|  | AN | 295 | 103 | 216 |
|  | BN | 103 | 4 | 71 |
|  | D | 4 | 2 | 4 |
|  | C | 2 | 274 | 2 |
|  | All | 274 | 313 | 156 |
| SEP | W | 679 | 679 | 497 |
|  | AN | 299 | 299 | 259 |
|  | BN | 105 | 105 | 91 |
|  | D | 9 | 9 | 9 |
|  | C | 5 | 5 | 5 |
|  | All | 276 | 276 | 213 |
| OCT | W | 158 | 158 | 147 |
|  | AN | 183 | 183 | 180 |
|  | BN | 157 | 157 | 144 |
|  | D | 184 | 184 | 160 |
|  | C | 136 | 136 | 123 |
|  | All | 163 | 163 | 150 |
| NOV | W | 482 | 482 | 431 |
|  | AN | 918 | 918 | 855 |
|  | BN | 347 | 347 | 301 |
|  | D | 379 | 379 | 327 |
|  | C | 214 | 214 | 186 |
|  | All | 477 | 477 | 429 |
| DEC | W | 1,539 | 1,539 | 1,732 |
|  | AN | 1,412 | 1,412 | 1,628 |
|  | BN | 449 | 449 | 472 |
|  | D | 385 | 385 | 374 |
|  | C | 224 | 224 | 209 |
|  | All | 902 | 902 | 999 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 36. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 1A: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| JAN | W | 536 (17.3\%) | 536 (17.3\%) |
|  | AN | 185 (10.9\%) | 185 (10.9\%) |
|  | BN | 19 (3.3\%) | 19 (3.3\%) |
|  | D | -5 (-0.9\%) | -5 (-0.9\%) |
|  | C | -20 (-6.6\%) | -20 (-6.6\%) |
|  | All | 192 (13\%) | 192 (13\%) |
| FEB | W | 501 (15.3\%) | 501 (15.3\%) |
|  | AN | 265 (10\%) | 265 (10\%) |
|  | BN | 40 (4\%) | 40 (4\%) |
|  | D | -19 (-2.7\%) | -19 (-2.7\%) |
|  | C | -6 (-1.2\%) | -6 (-1.2\%) |
|  | All | 201 (10.9\%) | 201 (10.9\%) |
| MAR | W | 133 (4.1\%) | 133 (4.1\%) |
|  | AN | -12 (-0.7\%) | -12 (-0.7\%) |
|  | BN | -34 (-2.9\%) | -34 (-2.9\%) |
|  | D | -63 (-8.3\%) | -63 (-8.3\%) |
|  | C | -33 (-5.4\%) | -33 (-5.4\%) |
|  | All | 15 (0.9\%) | 15 (0.9\%) |
| APR | W | -109 (-3.9\%) | -109 (-3.9\%) |
|  | AN | -203 (-12.5\%) | -203 (-12.5\%) |
|  | BN | -183 (-14.6\%) | -183 (-14.6\%) |
|  | D | -77 (-12.3\%) | -77 (-12.3\%) |
|  | C | -39 (-11.1\%) | -39 (-11.1\%) |
|  | All | -120 (-8\%) | -120 (-8\%) |
| MAY | W | -252 (-8\%) | -252 (-8\%) |
|  | AN | -223 (-15.9\%) | -223 (-15.9\%) |
|  | BN | -147 (-15.3\%) | -147 (-15.3\%) |
|  | D | -72 (-17.8\%) | -72 (-17.8\%) |
|  | C | -27 (-13.7\%) | -27 (-13.7\%) |
|  | All | -157 (-10.9\%) | -157 (-10.9\%) |
| JUN | W | -316 (-18.3\%) | -316 (-18.3\%) |
|  | AN | -196 (-23.7\%) | -196 (-23.7\%) |
|  | BN | -92 (-20.1\%) | -92 (-20.1\%) |
|  | D | -17 (-18.8\%) | -17 (-18.8\%) |
|  | C | -8 (-14.7\%) | -8 (-14.7\%) |
|  | All | -150 (-19.5\%) | -150 (-19.5\%) |
| JUL | W | -280 (-37.4\%) | -280 (-37.4\%) |
|  | AN | -146 (-46.6\%) | -146 (-46.6\%) |
|  | BN | -44 (-38.9\%) | -44 (-38.9\%) |
|  | D | 0 (-3.1\%) | 0 (-3.1\%) |
|  | C | 0 (-4.4\%) | 0 (-4.4\%) |
|  | All | -117 (-39.1\%) | -117 (-39.1\%) |


| Alternative 1A: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A1A_LLT | NAA vs. A1A_LLT |
| AUG | W | -334 (-49.1\%) | -334 (-49.1\%) |
|  | AN | -79 (-26.8\%) | -79 (-26.8\%) |
|  | BN | -32 (-30.8\%) | -32 (-30.8\%) |
|  | D | 0 (-0.5\%) | 0 (-0.5\%) |
|  | C | 0 (-3.1\%) | 0 (-3.1\%) |
|  | All | -118 (-43.2\%) | -118 (-43.2\%) |
| SEP | W | -182 (-26.8\%) | -182 (-26.8\%) |
|  | AN | -40 (-13.5\%) | -40 (-13.5\%) |
|  | BN | -14 (-13.6\%) | -14 (-13.6\%) |
|  | D | -1 (-5.9\%) | -1 (-5.9\%) |
|  | C | 0 (-8.1\%) | 0 (-8.1\%) |
|  | All | -64 (-23\%) | -64 (-23\%) |
| OCT | W | -12 (-7.3\%) | -12 (-7.3\%) |
|  | AN | -4 (-2\%) | -4 (-2\%) |
|  | BN | -13 (-8.5\%) | -13 (-8.5\%) |
|  | D | -24 (-13.2\%) | -24 (-13.2\%) |
|  | C | -13 (-9.8\%) | -13 (-9.8\%) |
|  | All | -13 (-7.8\%) | -13 (-7.8\%) |
| NOV | W | -51 (-10.6\%) | -51 (-10.6\%) |
|  | AN | -63 (-6.9\%) | -63 (-6.9\%) |
|  | BN | -46 (-13.3\%) | -46 (-13.3\%) |
|  | D | -52 (-13.7\%) | -52 (-13.7\%) |
|  | C | -28 (-12.9\%) | -28 (-12.9\%) |
|  | All | -48 (-10.1\%) | -48 (-10.1\%) |
| DEC | W | 193 (12.5\%) | 193 (12.5\%) |
|  | AN | 215 (15.3\%) | 215 (15.3\%) |
|  | BN | 23 (5.1\%) | 23 (5.1\%) |
|  | D | -11 (-2.9\%) | -11 (-2.9\%) |
|  | C | -15 (-6.6\%) | -15 (-6.6\%) |
|  | All | 97 (10.8\%) | 97 (10.8\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C. 2 Alternative 2A

## 11C.2.1 Upstream

11C.2.1.1 Sacramento River at Keswick
Table 1. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 2A: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 16,526 | 18,233 | 18,565 |
|  | AN | 8,318 | 8,205 | 7,772 |
|  | BN | 4,502 | 4,184 | 4,315 |
|  | D | 3,996 | 4,096 | 3,745 |
|  | C | 3,490 | 4,238 | 4,073 |
|  | All | 8,614 | 9,215 | 9,179 |
| FEB | W | 18,577 | 20,853 | 20,779 |
|  | AN | 14,409 | 15,297 | 15,609 |
|  | BN | 5,981 | 5,544 | 6,318 |
|  | D | 3,684 | 3,410 | 3,408 |
|  | C | 3,599 | 3,372 | 3,364 |
|  | All | 10,355 | 11,039 | 11,192 |
| MAR | W | 16,200 | 17,065 | 17,152 |
|  | AN | 9,131 | 8,818 | 8,935 |
|  | BN | 5,200 | 4,318 | 4,246 |
|  | D | 3,903 | 3,814 | 3,858 |
|  | C | 3,487 | 3,583 | 3,835 |
|  | All | 8,728 | 8,800 | 8,879 |
| APR | W | 9,418 | 9,131 | 9,042 |
|  | AN | 6,182 | 5,536 | 5,779 |
|  | BN | 5,426 | 5,009 | 5,375 |
|  | D | 5,803 | 5,533 | 5,756 |
|  | C | 6,472 | 6,550 | 6,493 |
|  | All | 7,038 | 6,733 | 6,844 |
| MAY | W | 9,508 | 7,149 | 7,752 |
|  | AN | 7,709 | 7,783 | 9,049 |
|  | BN | 7,193 | 6,272 | 7,180 |
|  | D | 7,349 | 7,681 | 8,756 |
|  | C | 6,715 | 7,316 | 7,496 |
|  | All | 7,967 | 7,233 | 8,027 |
| JUN | W | 10,375 | 10,274 | 11,585 |
|  | AN | 11,147 | 12,032 | 13,776 |
|  | BN | 10,758 | 10,947 | 11,636 |
|  | D | 11,224 | 11,898 | 12,402 |
|  | C | 10,392 | 11,350 | 11,580 |
|  | All | 10,742 | 11,160 | 12,093 |


| Alternative 2A: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JUL | W | 12,779 | 14,098 | 14,048 |
|  | AN | 14,056 | 15,098 | 14,688 |
|  | BN | 12,965 | 13,177 | 12,911 |
|  | D | 13,302 | 13,727 | 12,833 |
|  | C | 12,849 | 11,935 | 11,087 |
|  | All | 13,123 | 13,689 | 13,248 |
| AUG | W | 11,029 | 10,491 | 10,275 |
|  | AN | 10,449 | 11,641 | 10,874 |
|  | BN | 10,139 | 10,261 | 9,839 |
|  | D | 10,627 | 10,986 | 9,368 |
|  | C | 9,473 | 7,348 | 6,896 |
|  | All | 10,476 | 10,269 | 9,595 |
| SEP | W | 9,385 | 12,833 | 13,114 |
|  | AN | 5,862 | 9,898 | 9,331 |
|  | BN | 5,492 | 5,601 | 4,723 |
|  | D | 5,985 | 4,469 | 4,874 |
|  | C | 5,563 | 4,368 | 5,145 |
|  | All | 6,899 | 8,094 | 8,153 |
| OCT | W | 6,886 | 7,034 | 6,954 |
|  | AN | 7,145 | 7,152 | 7,470 |
|  | BN | 6,396 | 7,072 | 6,578 |
|  | D | 6,128 | 6,494 | 6,789 |
|  | C | 5,902 | 5,752 | 5,997 |
|  | All | 6,530 | 6,752 | 6,789 |
| NOV | W | 6,672 | 7,539 | 6,350 |
|  | AN | 6,224 | 7,134 | 5,562 |
|  | BN | 5,088 | 5,936 | 4,655 |
|  | D | 5,669 | 5,406 | 4,604 |
|  | C | 4,822 | 4,710 | 4,454 |
|  | All | 5,845 | 6,324 | 5,284 |
| DEC | W | 12,766 | 11,022 | 10,803 |
|  | AN | 5,531 | 5,377 | 5,301 |
|  | BN | 5,413 | 5,195 | 5,728 |
|  | D | 4,215 | 3,936 | 4,113 |
|  | C | 3,828 | 3,582 | 4,171 |
|  | All | 7,267 | 6,557 | 6,692 |

Table 2. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 2A: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 2,039 (12.3\%) | 332 (1.8\%) |
|  | AN | -545 (-6.6\%) | -432 (-5.3\%) |
|  | BN | -186 (-4.1\%) | 132 (3.2\%) |
|  | D | -251 (-6.3\%) | -351 (-8.6\%) |
|  | C | 583 (16.7\%) | -165 (-3.9\%) |
|  | All | 565 (6.6\%) | -37 (-0.4\%) |
| FEB | W | 2,202 (11.9\%) | -74 (-0.4\%) |
|  | AN | 1,200 (8.3\%) | 312 (2\%) |
|  | BN | 337 (5.6\%) | 774 (14\%) |
|  | D | -275 (-7.5\%) | -2 (0\%) |
|  | C | -235 (-6.5\%) | -8 (-0.2\%) |
|  | All | 837 (8.1\%) | 153 (1.4\%) |
| MAR | W | 952 (5.9\%) | 87 (0.5\%) |
|  | AN | -196 (-2.1\%) | 117 (1.3\%) |
|  | BN | -954 (-18.3\%) | -72 (-1.7\%) |
|  | D | -45 (-1.2\%) | 44 (1.2\%) |
|  | C | 348 (10\%) | 251 (7\%) |
|  | All | 151 (1.7\%) | 79 (0.9\%) |
| APR | W | -375 (-4\%) | -88 (-1\%) |
|  | AN | -403 (-6.5\%) | 243 (4.4\%) |
|  | BN | -52 (-0.9\%) | 366 (7.3\%) |
|  | D | -46 (-0.8\%) | 223 (4\%) |
|  | C | 22 (0.3\%) | -57 (-0.9\%) |
|  | All | -194 (-2.8\%) | 111 (1.6\%) |
| MAY | W | -1,756 (-18.5\%) | 603 (8.4\%) |
|  | AN | 1,340 (17.4\%) | 1,265 (16.3\%) |
|  | BN | -13 (-0.2\%) | 909 (14.5\%) |
|  | D | 1,408 (19.2\%) | 1,075 (14\%) |
|  | C | 780 (11.6\%) | 180 (2.5\%) |
|  | All | 60 (0.8\%) | 794 (11\%) |
| JUN | W | 1,209 (11.7\%) | 1,311 (12.8\%) |
|  | AN | 2,629 (23.6\%) | 1,744 (14.5\%) |
|  | BN | 877 (8.2\%) | 688 (6.3\%) |
|  | D | 1,178 (10.5\%) | 504 (4.2\%) |
|  | C | 1,188 (11.4\%) | 230 (2\%) |
|  | All | 1,350 (12.6\%) | 933 (8.4\%) |
| JUL | W | 1,269 (9.9\%) | -49 (-0.3\%) |
|  | AN | 632 (4.5\%) | -410 (-2.7\%) |
|  | BN | -54 (-0.4\%) | -265 (-2\%) |
|  | D | -469 (-3.5\%) | -894 (-6.5\%) |
|  | C | -1,762 (-13.7\%) | -848 (-7.1\%) |
|  | All | 125 (1\%) | -441 (-3.2\%) |


| Alternative 2A: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -755 (-6.8\%) | -216 (-2.1\%) |
|  | AN | 425 (4.1\%) | -767 (-6.6\%) |
|  | BN | -300 (-3\%) | -422 (-4.1\%) |
|  | D | -1,259 (-11.8\%) | -1,617 (-14.7\%) |
|  | C | -2,577 (-27.2\%) | -452 (-6.2\%) |
|  | All | -882 (-8.4\%) | -674 (-6.6\%) |
| SEP | W | 3,729 (39.7\%) | 281 (2.2\%) |
|  | AN | 3,469 (59.2\%) | -567 (-5.7\%) |
|  | BN | -769 (-14\%) | -878 (-15.7\%) |
|  | D | -1,111 (-18.6\%) | 405 (9.1\%) |
|  | C | -418 (-7.5\%) | 776 (17.8\%) |
|  | All | 1,253 (18.2\%) | 59 (0.7\%) |
| OCT | W | 69 (1\%) | -80 (-1.1\%) |
|  | AN | 325 (4.5\%) | 318 (4.4\%) |
|  | BN | 182 (2.8\%) | -494 (-7\%) |
|  | D | 660 (10.8\%) | 294 (4.5\%) |
|  | C | 95 (1.6\%) | 245 (4.3\%) |
|  | All | 259 (4\%) | 37 (0.6\%) |
| NOV | W | -323 (-4.8\%) | -1,189 (-15.8\%) |
|  | AN | -662 (-10.6\%) | -1,572 (-22\%) |
|  | BN | -432 (-8.5\%) | -1,281 (-21.6\%) |
|  | D | -1,065 (-18.8\%) | -802 (-14.8\%) |
|  | C | -369 (-7.6\%) | -256 (-5.4\%) |
|  | All | -561 (-9.6\%) | -1,039 (-16.4\%) |
| DEC | W | -1,963 (-15.4\%) | -219 (-2\%) |
|  | AN | -230 (-4.2\%) | -76 (-1.4\%) |
|  | BN | 315 (5.8\%) | 533 (10.3\%) |
|  | D | -101 (-2.4\%) | 177 (4.5\%) |
|  | C | 343 (9\%) | 589 (16.5\%) |
|  | All | -574 (-7.9\%) | 135 (2.1\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.2.1.2 Sacramento River Upstream of Red Bluff

Table 3. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 2A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 28,036 | 30,390 | 30,719 |
|  | AN | 16,725 | 16,885 | 16,451 |
|  | BN | 9,381 | 9,146 | 9,270 |
|  | D | 7,098 | 7,262 | 6,908 |
|  | C | 6,143 | 6,942 | 6,782 |
|  | All | 15,396 | 16,278 | 16,239 |
| FEB | W | 30,255 | 33,472 | 33,393 |
|  | AN | 23,492 | 24,828 | 25,140 |
|  | BN | 12,005 | 11,614 | 12,385 |
|  | D | 8,947 | 8,790 | 8,790 |
|  | C | 6,599 | 6,378 | 6,362 |
|  | All | 18,010 | 19,092 | 19,242 |
| MAR | W | 25,004 | 26,210 | 26,296 |
|  | AN | 16,599 | 16,428 | 16,542 |
|  | BN | 9,333 | 8,474 | 8,384 |
|  | D | 8,385 | 8,300 | 8,344 |
|  | C | 5,999 | 6,101 | 6,355 |
|  | All | 14,669 | 14,876 | 14,952 |
| APR | W | 15,172 | 14,842 | 14,752 |
|  | AN | 10,477 | 9,761 | 10,002 |
|  | BN | 8,711 | 8,282 | 8,649 |
|  | D | 7,948 | 7,661 | 7,882 |
|  | C | 7,742 | 7,829 | 7,773 |
|  | All | 10,709 | 10,376 | 10,486 |
| MAY | W | 12,541 | 10,073 | 10,674 |
|  | AN | 10,012 | 10,047 | 11,308 |
|  | BN | 8,781 | 7,875 | 8,780 |
|  | D | 8,677 | 9,012 | 10,084 |
|  | C | 7,746 | 8,348 | 8,529 |
|  | All | 9,979 | 9,208 | 10,000 |
| JUN | W | 11,905 | 11,720 | 13,024 |
|  | AN | 12,001 | 12,789 | 14,523 |
|  | BN | 11,464 | 11,651 | 12,332 |
|  | D | 11,777 | 12,441 | 12,937 |
|  | C | 10,885 | 11,881 | 12,061 |
|  | All | 11,666 | 12,046 | 12,965 |
| JUL | W | 13,255 | 14,525 | 14,468 |
|  | AN | 14,129 | 15,142 | 14,723 |
|  | BN | 13,011 | 13,258 | 12,991 |
|  | D | 13,368 | 13,826 | 12,931 |
|  | C | 13,005 | 12,149 | 11,381 |
|  | All | 13,329 | 13,898 | 13,464 |


| Alternative 2A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 11,284 | 10,735 | 10,520 |
|  | AN | 10,580 | 11,775 | 11,012 |
|  | BN | 10,202 | 10,364 | 9,946 |
|  | D | 10,747 | 11,143 | 9,531 |
|  | C | 9,590 | 7,665 | 7,273 |
|  | All | 10,630 | 10,464 | 9,802 |
| SEP | W | 9,856 | 13,312 | 13,594 |
|  | AN | 6,279 | 10,320 | 9,758 |
|  | BN | 5,821 | 5,963 | 5,090 |
|  | D | 6,391 | 4,911 | 5,327 |
|  | C | 5,887 | 4,838 | 5,661 |
|  | All | 7,302 | 8,535 | 8,605 |
| OCT | W | 8,020 | 8,188 | 8,108 |
|  | AN | 8,112 | 8,162 | 8,480 |
|  | BN | 7,094 | 7,778 | 7,291 |
|  | D | 6,903 | 7,287 | 7,565 |
|  | C | 6,670 | 6,537 | 6,795 |
|  | All | 7,432 | 7,675 | 7,712 |
| NOV | W | 9,876 | 10,821 | 9,633 |
|  | AN | 8,144 | 9,098 | 7,521 |
|  | BN | 6,791 | 7,682 | 6,405 |
|  | D | 7,548 | 7,347 | 6,544 |
|  | C | 5,811 | 5,703 | 5,443 |
|  | All | 7,990 | 8,521 | 7,482 |
| DEC | W | 21,015 | 19,613 | 19,402 |
|  | AN | 10,019 | 10,053 | 9,989 |
|  | BN | 8,408 | 8,228 | 8,770 |
|  | D | 7,292 | 7,091 | 7,278 |
|  | C | 5,628 | 5,433 | 6,025 |
|  | All | 11,989 | 11,446 | 11,590 |

Table 4. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 2A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 2,683 (9.6\%) | 330 (1.1\%) |
|  | AN | -274 (-1.6\%) | -435 (-2.6\%) |
|  | BN | -111 (-1.2\%) | 124 (1.4\%) |
|  | D | -190 (-2.7\%) | -354 (-4.9\%) |
|  | C | 639 (10.4\%) | -160 (-2.3\%) |
|  | All | 844 (5.5\%) | -39 (-0.2\%) |
| FEB | W | 3,138 (10.4\%) | -79 (-0.2\%) |
|  | AN | 1,649 (7\%) | 312 (1.3\%) |
|  | BN | 381 (3.2\%) | 771 (6.6\%) |
|  | D | -157 (-1.8\%) | 0 (0\%) |
|  | C | -237 (-3.6\%) | -16 (-0.3\%) |
|  | All | 1,232 (6.8\%) | 150 (0.8\%) |
| MAR | W | 1,292 (5.2\%) | 86 (0.3\%) |
|  | AN | -57 (-0.3\%) | 114 (0.7\%) |
|  | BN | -948 (-10.2\%) | -89 (-1.1\%) |
|  | D | -41 (-0.5\%) | 44 (0.5\%) |
|  | C | 356 (5.9\%) | 254 (4.2\%) |
|  | All | 283 (1.9\%) | 75 (0.5\%) |
| APR | W | -420 (-2.8\%) | -90 (-0.6\%) |
|  | AN | -475 (-4.5\%) | 241 (2.5\%) |
|  | BN | -61 (-0.7\%) | 367 (4.4\%) |
|  | D | -66 (-0.8\%) | 221 (2.9\%) |
|  | C | 31 (0.4\%) | -57 (-0.7\%) |
|  | All | -223 (-2.1\%) | 110 (1.1\%) |
| MAY | W | -1,866 (-14.9\%) | 602 (6\%) |
|  | AN | 1,296 (12.9\%) | 1,261 (12.6\%) |
|  | BN | -1 (0\%) | 905 (11.5\%) |
|  | D | 1,407 (16.2\%) | 1,072 (11.9\%) |
|  | C | 783 (10.1\%) | 181 (2.2\%) |
|  | All | 21 (0.2\%) | 792 (8.6\%) |
| JUN | W | 1,118 (9.4\%) | 1,304 (11.1\%) |
|  | AN | 2,522 (21\%) | 1,734 (13.6\%) |
|  | BN | 868 (7.6\%) | 681 (5.8\%) |
|  | D | 1,159 (9.8\%) | 496 (4\%) |
|  | C | 1,176 (10.8\%) | 180 (1.5\%) |
|  | All | 1,298 (11.1\%) | 918 (7.6\%) |
| JUL | W | 1,213 (9.2\%) | -57 (-0.4\%) |
|  | AN | 593 (4.2\%) | -419 (-2.8\%) |
|  | BN | -20 (-0.2\%) | -267 (-2\%) |
|  | D | -438 (-3.3\%) | -896 (-6.5\%) |
|  | C | -1,624 (-12.5\%) | -769 (-6.3\%) |
|  | All | 134 (1\%) | -434 (-3.1\%) |


| Alternative 2A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -764 (-6.8\%) | -215 (-2\%) |
|  | AN | 432 (4.1\%) | -763 (-6.5\%) |
|  | BN | -256 (-2.5\%) | -418 (-4\%) |
|  | D | -1,216 (-11.3\%) | -1,612 (-14.5\%) |
|  | C | -2,318 (-24.2\%) | -392 (-5.1\%) |
|  | All | -829 (-7.8\%) | -663 (-6.3\%) |
| SEP | W | 3,738 (37.9\%) | 282 (2.1\%) |
|  | AN | 3,478 (55.4\%) | -563 (-5.5\%) |
|  | BN | -731 (-12.6\%) | -873 (-14.6\%) |
|  | D | -1,064 (-16.6\%) | 416 (8.5\%) |
|  | C | -226 (-3.8\%) | 823 (17\%) |
|  | All | 1,303 (17.8\%) | 70 (0.8\%) |
| OCT | W | 88 (1.1\%) | -80 (-1\%) |
|  | AN | 368 (4.5\%) | 318 (3.9\%) |
|  | BN | 197 (2.8\%) | -487 (-6.3\%) |
|  | D | 663 (9.6\%) | 279 (3.8\%) |
|  | C | 125 (1.9\%) | 258 (4\%) |
|  | All | 279 (3.8\%) | 37 (0.5\%) |
| NOV | W | -244 (-2.5\%) | -1,188 (-11\%) |
|  | AN | -622 (-7.6\%) | -1,576 (-17.3\%) |
|  | BN | -385 (-5.7\%) | -1,277 (-16.6\%) |
|  | D | -1,004 (-13.3\%) | -803 (-10.9\%) |
|  | C | -368 (-6.3\%) | -260 (-4.6\%) |
|  | All | -508 (-6.4\%) | -1,040 (-12.2\%) |
| DEC | W | -1,613 (-7.7\%) | -211 (-1.1\%) |
|  | AN | -31 (-0.3\%) | -65 (-0.6\%) |
|  | BN | 362 (4.3\%) | 542 (6.6\%) |
|  | D | -14 (-0.2\%) | 186 (2.6\%) |
|  | C | 398 (7.1\%) | 593 (10.9\%) |
|  | All | -399 (-3.3\%) | 144 (1.3\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.2.1.3 Sacramento River at Wilkins Slough

Table 5. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 2A: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 19,145 | 19,320 | 19,351 |
|  | AN | 17,084 | 16,593 | 16,560 |
|  | BN | 12,521 | 12,143 | 12,210 |
|  | D | 8,896 | 9,189 | 8,853 |
|  | C | 7,858 | 8,586 | 8,424 |
|  | All | 13,811 | 13,901 | 13,820 |
| FEB | W | 19,887 | 20,044 | 20,053 |
|  | AN | 19,139 | 19,095 | 19,106 |
|  | BN | 14,528 | 14,328 | 14,466 |
|  | D | 11,520 | 11,473 | 11,481 |
|  | C | 8,499 | 8,158 | 8,157 |
|  | All | 15,359 | 15,309 | 15,338 |
| MAR | W | 18,223 | 18,323 | 18,340 |
|  | AN | 17,696 | 17,537 | 17,698 |
|  | BN | 12,208 | 11,534 | 11,456 |
|  | D | 11,364 | 11,191 | 11,363 |
|  | C | 8,101 | 8,166 | 8,423 |
|  | All | 14,132 | 13,997 | 14,088 |
| APR | W | 13,392 | 13,119 | 13,058 |
|  | AN | 10,264 | 9,783 | 10,061 |
|  | BN | 7,152 | 6,858 | 7,221 |
|  | D | 5,319 | 5,112 | 5,327 |
|  | C | 4,164 | 4,331 | 4,265 |
|  | All | 8,746 | 8,518 | 8,639 |
| MAY | W | 10,467 | 8,435 | 9,044 |
|  | AN | 7,318 | 7,500 | 8,733 |
|  | BN | 5,638 | 4,871 | 5,743 |
|  | D | 4,669 | 5,088 | 6,133 |
|  | C | 3,998 | 4,528 | 4,724 |
|  | All | 6,962 | 6,383 | 7,164 |
| JUN | W | 6,503 | 6,435 | 7,688 |
|  | AN | 5,781 | 6,530 | 8,201 |
|  | BN | 5,243 | 5,628 | 6,260 |
|  | D | 5,245 | 6,075 | 6,515 |
|  | C | 5,140 | 6,253 | 6,257 |
|  | All | 5,707 | 6,205 | 7,052 |
| JUL | W | 6,685 | 7,771 | 7,646 |
|  | AN | 6,971 | 7,892 | 7,403 |
|  | BN | 6,122 | 6,560 | 6,277 |
|  | D | 6,788 | 7,474 | 6,530 |
|  | C | 7,162 | 6,649 | 5,940 |
|  | All | 6,723 | 7,353 | 6,882 |


| Alternative 2A: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 6,287 | 5,537 | 5,338 |
|  | AN | 5,498 | 6,610 | 5,880 |
|  | BN | 5,138 | 5,462 | 5,022 |
|  | D | 5,833 | 6,356 | 4,749 |
|  | C | 5,551 | 4,719 | 4,668 |
|  | All | 5,768 | 5,741 | 5,136 |
| SEP | W | 9,338 | 12,737 | 13,037 |
|  | AN | 5,631 | 9,546 | 9,036 |
|  | BN | 5,128 | 5,216 | 4,358 |
|  | D | 5,636 | 4,114 | 4,614 |
|  | C | 5,200 | 4,354 | 5,281 |
|  | All | 6,658 | 7,866 | 7,986 |
| OCT | W | 7,347 | 7,382 | 7,300 |
|  | AN | 6,799 | 6,927 | 7,171 |
|  | BN | 5,987 | 6,570 | 6,087 |
|  | D | 5,688 | 6,040 | 6,271 |
|  | C | 5,642 | 5,572 | 5,876 |
|  | All | 6,421 | 6,617 | 6,640 |
| NOV | W | 9,644 | 10,889 | 9,670 |
|  | AN | 8,210 | 9,141 | 7,531 |
|  | BN | 6,793 | 7,588 | 6,337 |
|  | D | 7,407 | 7,227 | 6,431 |
|  | C | 5,118 | 4,986 | 4,750 |
|  | All | 7,794 | 8,402 | 7,357 |
| DEC | W | 17,881 | 17,257 | 17,275 |
|  | AN | 10,809 | 10,755 | 10,874 |
|  | BN | 8,505 | 8,258 | 8,847 |
|  | D | 8,950 | 8,725 | 8,962 |
|  | C | 6,229 | 5,981 | 6,557 |
|  | All | 11,580 | 11,246 | 11,506 |

Table 6. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 2A: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 206 (1.1\%) | 30 (0.2\%) |
|  | AN | -524 (-3.1\%) | -33 (-0.2\%) |
|  | BN | -312 (-2.5\%) | 66 (0.5\%) |
|  | D | -42 (-0.5\%) | -335 (-3.6\%) |
|  | C | 566 (7.2\%) | -162 (-1.9\%) |
|  | ALL | 9 (0.1\%) | -81 (-0.6\%) |
| FEB | W | 166 (0.8\%) | 9 (0\%) |
|  | AN | -33 (-0.2\%) | 11 (0.1\%) |
|  | BN | -62 (-0.4\%) | 138 (1\%) |
|  | D | -39 (-0.3\%) | 7 (0.1\%) |
|  | C | -342 (-4\%) | -2 (0\%) |
|  | ALL | -22 (-0.1\%) | 29 (0.2\%) |
| MAR | W | 118 (0.6\%) | 18 (0.1\%) |
|  | AN | 2 (0\%) | 161 (0.9\%) |
|  | BN | -751 (-6.2\%) | -78 (-0.7\%) |
|  | D | -1 (0\%) | 172 (1.5\%) |
|  | C | 322 (4\%) | 257 (3.1\%) |
|  | ALL | -44 (-0.3\%) | 91 (0.7\%) |
| APR | W | -334 (-2.5\%) | -61 (-0.5\%) |
|  | AN | -203 (-2\%) | 278 (2.8\%) |
|  | BN | 68 (1\%) | 363 (5.3\%) |
|  | D | 8 (0.1\%) | 215 (4.2\%) |
|  | C | 101 (2.4\%) | -66 (-1.5\%) |
|  | ALL | -107 (-1.2\%) | 121 (1.4\%) |
| MAY | W | -1,423 (-13.6\%) | 609 (7.2\%) |
|  | AN | 1,415 (19.3\%) | 1,233 (16.4\%) |
|  | BN | 105 (1.9\%) | 872 (17.9\%) |
|  | D | 1,464 (31.4\%) | 1,046 (20.6\%) |
|  | C | 726 (18.2\%) | 196 (4.3\%) |
|  | ALL | 202 (2.9\%) | 781 (12.2\%) |
| JUN | W | 1,184 (18.2\%) | 1,252 (19.5\%) |
|  | AN | 2,420 (41.9\%) | 1,671 (25.6\%) |
|  | BN | 1,017 (19.4\%) | 632 (11.2\%) |
|  | D | 1,269 (24.2\%) | 440 (7.2\%) |
|  | C | 1,116 (21.7\%) | 4 (0.1\%) |
|  | ALL | 1,345 (23.6\%) | 847 (13.6\%) |
| JUL | W | 961 (14.4\%) | -125 (-1.6\%) |
|  | AN | 432 (6.2\%) | -489 (-6.2\%) |
|  | BN | 155 (2.5\%) | -283 (-4.3\%) |
|  | D | -257 (-3.8\%) | -944 (-12.6\%) |
|  | C | -1,222 (-17.1\%) | -709 (-10.7\%) |
|  | ALL | 159 (2.4\%) | -471 (-6.4\%) |


| Alternative 2A: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -949 (-15.1\%) | -199 (-3.6\%) |
|  | AN | 382 (6.9\%) | -730 (-11\%) |
|  | BN | -116 (-2.2\%) | -440 (-8.1\%) |
|  | D | -1,084 (-18.6\%) | -1,607 (-25.3\%) |
|  | C | -884 (-15.9\%) | -52 (-1.1\%) |
|  | ALL | -632 (-11\%) | -605 (-10.5\%) |
| SEP | W | 3,699 (39.6\%) | 299 (2.3\%) |
|  | AN | 3,404 (60.5\%) | -510 (-5.3\%) |
|  | BN | -769 (-15\%) | -857 (-16.4\%) |
|  | D | -1,022 (-18.1\%) | 500 (12.2\%) |
|  | C | 81 (1.6\%) | 927 (21.3\%) |
|  | ALL | 1,327 (19.9\%) | 119 (1.5\%) |
| OCT | W | -47 (-0.6\%) | -82 (-1.1\%) |
|  | AN | 371 (5.5\%) | 244 (3.5\%) |
|  | BN | 100 (1.7\%) | -483 (-7.4\%) |
|  | D | 583 (10.3\%) | 231 (3.8\%) |
|  | C | 234 (4.2\%) | 304 (5.4\%) |
|  | ALL | 219 (3.4\%) | 22 (0.3\%) |
| NOV | W | 26 (0.3\%) | -1,219 (-11.2\%) |
|  | AN | -678 (-8.3\%) | -1,609 (-17.6\%) |
|  | BN | -456 (-6.7\%) | -1,251 (-16.5\%) |
|  | D | -976 (-13.2\%) | -796 (-11\%) |
|  | C | -368 (-7.2\%) | -236 (-4.7\%) |
|  | ALL | -437 (-5.6\%) | -1,045 (-12.4\%) |
| DEC | W | -606 (-3.4\%) | 19 (0.1\%) |
|  | AN | 65 (0.6\%) | 119 (1.1\%) |
|  | BN | 342 (4\%) | 589 (7.1\%) |
|  | D | 12 (0.1\%) | 237 (2.7\%) |
|  | C | 329 (5.3\%) | 576 (9.6\%) |
|  | ALL | -73 (-0.6\%) | 260 (2.3\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.2.1.4 Sacramento River at Verona

Table 7. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 2A: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 44,589 | 45,567 | 43,947 |
|  | AN | 34,120 | 33,671 | 31,711 |
|  | BN | 20,175 | 19,121 | 17,565 |
|  | D | 14,756 | 14,782 | 14,040 |
|  | C | 12,085 | 13,051 | 12,305 |
|  | All | 27,583 | 27,795 | 26,457 |
| FEB | W | 49,892 | 51,326 | 50,131 |
|  | AN | 39,162 | 39,749 | 38,379 |
|  | BN | 26,429 | 25,341 | 24,187 |
|  | D | 18,402 | 18,090 | 17,151 |
|  | C | 12,822 | 12,325 | 11,876 |
|  | All | 31,979 | 32,192 | 31,144 |
| MAR | W | 43,455 | 44,624 | 42,433 |
|  | AN | 39,477 | 39,687 | 38,226 |
|  | BN | 21,484 | 19,448 | 17,994 |
|  | D | 17,868 | 17,649 | 16,715 |
|  | C | 11,903 | 11,789 | 11,808 |
|  | All | 28,888 | 28,877 | 27,518 |
| APR | W | 32,219 | 31,636 | 29,437 |
|  | AN | 22,250 | 21,313 | 20,184 |
|  | BN | 14,459 | 13,857 | 14,190 |
|  | D | 11,113 | 10,903 | 11,727 |
|  | C | 9,420 | 9,489 | 9,677 |
|  | All | 19,759 | 19,298 | 18,701 |
| MAY | W | 26,193 | 20,229 | 21,248 |
|  | AN | 17,079 | 16,002 | 18,170 |
|  | BN | 11,451 | 10,534 | 12,626 |
|  | D | 9,283 | 9,841 | 11,146 |
|  | C | 7,125 | 7,611 | 7,674 |
|  | All | 15,840 | 13,828 | 15,121 |
| JUN | W | 18,367 | 15,304 | 18,635 |
|  | AN | 13,590 | 13,574 | 19,205 |
|  | BN | 11,062 | 11,320 | 14,633 |
|  | D | 10,429 | 10,780 | 11,703 |
|  | C | 8,911 | 9,827 | 9,674 |
|  | All | 13,295 | 12,576 | 15,202 |
| JUL | W | 16,253 | 17,965 | 16,166 |
|  | AN | 17,488 | 18,338 | 17,178 |
|  | BN | 16,698 | 16,598 | 14,988 |
|  | D | 16,352 | 16,465 | 12,174 |
|  | C | 14,476 | 12,457 | 10,076 |
|  | All | 16,271 | 16,651 | 14,346 |


| Alternative 2A: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 12,464 | 14,016 | 11,999 |
|  | AN | 13,691 | 15,828 | 13,436 |
|  | BN | 13,389 | 14,074 | 11,964 |
|  | D | 14,688 | 13,018 | 9,952 |
|  | C | 9,207 | 8,085 | 8,004 |
|  | All | 12,813 | 13,204 | 11,169 |
| SEP | W | 14,279 | 23,592 | 22,647 |
|  | AN | 10,537 | 19,044 | 16,763 |
|  | BN | 9,961 | 10,576 | 8,063 |
|  | D | 10,542 | 7,664 | 8,239 |
|  | C | 7,764 | 6,832 | 8,071 |
|  | All | 11,220 | 14,755 | 14,000 |
| OCT | W | 11,503 | 11,232 | 11,144 |
|  | AN | 9,381 | 9,890 | 10,520 |
|  | BN | 9,867 | 10,146 | 9,465 |
|  | D | 8,681 | 8,989 | 9,587 |
|  | C | 8,543 | 8,104 | 9,142 |
|  | All | 9,861 | 9,900 | 10,131 |
| NOV | W | 15,307 | 15,754 | 14,418 |
|  | AN | 11,792 | 12,817 | 10,890 |
|  | BN | 9,852 | 10,437 | 9,023 |
|  | D | 10,157 | 9,731 | 8,918 |
|  | C | 7,341 | 7,223 | 6,973 |
|  | All | 11,565 | 11,846 | 10,684 |
| DEC | W | 33,840 | 31,254 | 29,564 |
|  | AN | 17,572 | 18,481 | 17,640 |
|  | BN | 13,099 | 13,028 | 13,428 |
|  | D | 12,685 | 12,532 | 12,391 |
|  | C | 9,770 | 8,627 | 9,080 |
|  | All | 19,752 | 18,852 | 18,297 |

Table 8. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 2A: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | -642 (-1.4\%) | -1,620 (-3.6\%) |
|  | AN | -2,409 (-7.1\%) | -1,960 (-5.8\%) |
|  | BN | -2,610 (-12.9\%) | -1,555 (-8.1\%) |
|  | D | -716 (-4.9\%) | -742 (-5\%) |
|  | C | 220 (1.8\%) | -746 (-5.7\%) |
|  | All | -1,127 (-4.1\%) | -1,338 (-4.8\%) |
| FEB | W | 239 (0.5\%) | -1,195 (-2.3\%) |
|  | AN | -782 (-2\%) | -1,369 (-3.4\%) |
|  | BN | -2,242 (-8.5\%) | -1,154 (-4.6\%) |
|  | D | -1,251 (-6.8\%) | -939 (-5.2\%) |
|  | C | -945 (-7.4\%) | -449 (-3.6\%) |
|  | All | -834 (-2.6\%) | -1,048 (-3.3\%) |
| MAR | W | -1,022 (-2.4\%) | -2,191 (-4.9\%) |
|  | AN | -1,252 (-3.2\%) | -1,462 (-3.7\%) |
|  | BN | -3,490 (-16.2\%) | -1,454 (-7.5\%) |
|  | D | -1,153 (-6.5\%) | -934 (-5.3\%) |
|  | C | -95 (-0.8\%) | 19 (0.2\%) |
|  | All | -1,370 (-4.7\%) | -1,359 (-4.7\%) |
| APR | W | -2,782 (-8.6\%) | -2,198 (-6.9\%) |
|  | AN | -2,066 (-9.3\%) | -1,129 (-5.3\%) |
|  | BN | -269 (-1.9\%) | 333 (2.4\%) |
|  | D | 614 (5.5\%) | 824 (7.6\%) |
|  | C | 257 (2.7\%) | 188 (2\%) |
|  | All | -1,058 (-5.4\%) | -597 (-3.1\%) |
| MAY | W | -4,945 (-18.9\%) | 1,020 (5\%) |
|  | AN | 1,090 (6.4\%) | 2,168 (13.5\%) |
|  | BN | 1,174 (10.3\%) | 2,091 (19.9\%) |
|  | D | 1,862 (20.1\%) | 1,305 (13.3\%) |
|  | C | 549 (7.7\%) | 63 (0.8\%) |
|  | All | -719 (-4.5\%) | 1,293 (9.4\%) |
| JUN | W | 268 (1.5\%) | 3,332 (21.8\%) |
|  | AN | 5,614 (41.3\%) | 5,630 (41.5\%) |
|  | BN | 3,571 (32.3\%) | 3,313 (29.3\%) |
|  | D | 1,275 (12.2\%) | 923 (8.6\%) |
|  | C | 763 (8.6\%) | -153 (-1.6\%) |
|  | All | 1,908 (14.3\%) | 2,626 (20.9\%) |
| JUL | W | -87 (-0.5\%) | -1,799 (-10\%) |
|  | AN | -310 (-1.8\%) | -1,160 (-6.3\%) |
|  | BN | -1,709 (-10.2\%) | -1,610 (-9.7\%) |
|  | D | -4,178 (-25.6\%) | -4,291 (-26.1\%) |
|  | C | -4,400 (-30.4\%) | -2,381 (-19.1\%) |
|  | All | -1,926 (-11.8\%) | -2,306 (-13.8\%) |


| Alternative 2A: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS <br> vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -465 (-3.7\%) | -2,017 (-14.4\%) |
|  | AN | -256 (-1.9\%) | -2,392 (-15.1\%) |
|  | BN | -1,424 (-10.6\%) | -2,110 (-15\%) |
|  | D | -4,736 (-32.2\%) | $-3,066$ (-23.6\%) |
|  | C | -1,203 (-13.1\%) | -81 (-1\%) |
|  | All | -1,644 (-12.8\%) | -2,035 (-15.4\%) |
| SEP | W | 8,368 (58.6\%) | -945 (-4\%) |
|  | AN | 6,227 (59.1\%) | -2,280 (-12\%) |
|  | BN | -1,898 (-19.1\%) | -2,513 (-23.8\%) |
|  | D | -2,303 (-21.8\%) | 575 (7.5\%) |
|  | C | 307 (3.9\%) | 1,239 (18.1\%) |
|  | All | 2,780 (24.8\%) | . 755 (-5.1\%) |
| OCT | W | -359 (-3.1\%) | -88 (-0.8\%) |
|  | AN | 1,140 (12.1\%) | 630 (6.4\%) |
|  | BN | -402 (-4.1\%) | -681 (-6.7\%) |
|  | D | 906 (10.4\%) | 598 (6.7\%) |
|  | C | 599 (7\%) | 1,038 (12.8\%) |
|  | All | 271 (2.7\%) | 231 (2.3\%) |
| NOV | W | -889 (-5.8\%) | -1,337 (-8.5\%) |
|  | AN | -903 (-7.7\%) | -1,927 (-15\%) |
|  | BN | -829 (-8.4\%) | -1,414 (-13.6\%) |
|  | D | -1,239 (-12.2\%) | -814 (-8.4\%) |
|  | C | -368(-5\%) | -250 (-3.5\%) |
|  | All | -881 (-7.6\%) | 1,162 (-9.8\%) |
| DEC | W | -4,277 (-12.6\%) | -1,691 (-5.4\%) |
|  | AN | 68 (0.4\%) | -841 (-4.5\%) |
|  | BN | 328 (2.5\%) | 400 (3.1\%) |
|  | D | -294 (-2.3\%) | -141 (-1.1\%) |
|  | C | -690 (-7.1\%) | 453 (5.3\%) |
|  | All | -1,455 (-7.4\%) | -556 (-2.9\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.2.1.5 Trinity River below Lewiston

Table 9. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 2A: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 1,440 | 1,518 | 1,425 |
|  | AN | 300 | 300 | 300 |
|  | BN | 358 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 287 | 275 |
|  | All | 671 | 684 | 653 |
| FEB | W | 1,056 | 1,495 | 1,426 |
|  | AN | 689 | 784 | 773 |
|  | BN | 517 | 568 | 662 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 275 |
|  | All | 634 | 795 | 784 |
| MAR | W | 1,209 | 1,385 | 1,376 |
|  | AN | 436 | 519 | 519 |
|  | BN | 319 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 611 | 676 | 673 |
| APR | W | 721 | 844 | 844 |
|  | AN | 469 | 513 | 511 |
|  | BN | 507 | 504 | 504 |
|  | D | 529 | 529 | 529 |
|  | C | 575 | 580 | 580 |
|  | All | 584 | 630 | 629 |
| MAY | W | 4,636 | 4,620 | 4,620 |
|  | AN | 4,462 | 4,416 | 4,416 |
|  | BN | 3,774 | 3,865 | 3,865 |
|  | D | 3,216 | 3,216 | 3,216 |
|  | C | 2,092 | 1,973 | 1,973 |
|  | All | 3,779 | 3,766 | 3,766 |
| JUN | W | 3,371 | 3,560 | 3,560 |
|  | AN | 2,488 | 3,188 | 3,188 |
|  | BN | 1,672 | 1,767 | 1,767 |
|  | D | 1,251 | 1,251 | 1,251 |
|  | C | 783 | 783 | 783 |
|  | All | 2,108 | 2,286 | 2,286 |
| JUL | W | 1,289 | 1,103 | 1,103 |
|  | AN | 1,048 | 1,048 | 1,048 |
|  | BN | 869 | 916 | 916 |
|  | D | 667 | 667 | 667 |
|  | C | 450 | 413 | 450 |
|  | All | 923 | 866 | 872 |


| Alternative 2A: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 338 | 300 |
|  | All | 450 | 434 | 428 |
| SEP | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 265 | 188 |
|  | All | 450 | 423 | 412 |
| OCT | W | 373 | 373 | 373 |
|  | AN | 373 | 311 | 332 |
|  | BN | 346 | 346 | 346 |
|  | D | 373 | 346 | 352 |
|  | C | 373 | 311 | 280 |
|  | All | 368 | 344 | 344 |
| NOV | W | 489 | 414 | 365 |
|  | AN | 300 | 275 | 275 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 283 | 283 |
|  | C | 300 | 225 | 225 |
|  | All | 360 | 318 | 302 |
| DEC | W | 1,072 | 837 | 933 |
|  | AN | 300 | 300 | 300 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 275 | 272 |
|  | All | 545 | 466 | 497 |

Table 10. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 2A: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | -14 (-1\%) | -93 (-6.1\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | -58 (-16.3\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -25 (-8.3\%) | -12 (-4.3\%) |
|  | All | -18 (-2.7\%) | -31 (-4.6\%) |
| FEB | W | 369 (35\%) | -69 (-4.6\%) |
|  | AN | 84 (12.2\%) | -10 (-1.3\%) |
|  | BN | 145 (28.1\%) | 94 (16.5\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -25 (-8.3\%) | -25 (-8.3\%) |
|  | All | 151 (23.8\%) | -11 (-1.4\%) |
| MAR | W | 167 (13.8\%) | -9 (-0.7\%) |
|  | AN | 83 (19.1\%) | 0 (0\%) |
|  | BN | -19 (-5.8\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 62 (10.1\%) | -3 (-0.4\%) |
| APR | W | 122 (17\%) | 0 (0\%) |
|  | AN | 42 (8.9\%) | -1 (-0.2\%) |
|  | BN | -3 (-0.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 5 (0.9\%) | 0 (0\%) |
|  | All | 45 (7.7\%) | 0 (0\%) |
| MAY | W | -16 (-0.3\%) | 0 (0\%) |
|  | AN | -46 (-1\%) | 0 (0\%) |
|  | BN | 90 (2.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -119 (-5.7\%) | 0 (0\%) |
|  | All | -14 (-0.4\%) | 0 (0\%) |
| JUN | W | 189 (5.6\%) | 0 (0\%) |
|  | AN | 700 (28.1\%) | 0 (0\%) |
|  | BN | 96 (5.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 179 (8.5\%) | 0 (0\%) |
| JUL | W | -185 (-14.4\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 47 (5.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 37 (9.1\%) |
|  | All | -51 (-5.5\%) | 5 (0.6\%) |


| Alternative 2A: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -150 (-33.3\%) | -37 (-11.1\%) |
|  | All | -22 (-4.9\%) | -5 (-1.3\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -262 (-58.3\%) | -78 (-29.3\%) |
|  | All | -38 (-8.5\%) | -11 (-2.7\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | -41 (-11.1\%) | 21 (6.7\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -21 (-5.6\%) | 6 (1.9\%) |
|  | C | -93 (-25\%) | -31 (-10\%) |
|  | All | -24 (-6.6\%) | 0 (0\%) |
| NOV | W | -123 (-25.2\%) | -49 (-11.7\%) |
|  | AN | -25 (-8.3\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -17 (-5.6\%) | 0 (0\%) |
|  | C | -75 (-25\%) | 0 (0\%) |
|  | All | -57 (-15.9\%) | -15 (-4.8\%) |
| DEC | W | -139 (-12.9\%) | 96 (11.5\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -28 (-9.3\%) | -3 (-0.9\%) |
|  | All | -48 (-8.8\%) | 30 (6.5\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.2.1.6 Clear Creek below Whiskeytown

Table 11. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 2A: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 220 | 339 | 339 |
|  | AN | 192 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 159 | 171 |
|  | All | 193 | 233 | 235 |
| FEB | W | 220 | 257 | 257 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 168 | 158 |
|  | All | 194 | 209 | 208 |
| MAR | W | 200 | 259 | 258 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 202 | 189 |
|  | D | 186 | 192 | 192 |
|  | C | 155 | 168 | 171 |
|  | All | 188 | 212 | 210 |
| APR | W | 200 | 200 | 200 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 188 | 192 | 192 |
|  | C | 155 | 168 | 171 |
|  | All | 189 | 191 | 191 |
| MAY | W | 277 | 277 | 277 |
|  | AN | 277 | 277 | 277 |
|  | BN | 263 | 269 | 269 |
|  | D | 264 | 264 | 264 |
|  | C | 211 | 224 | 224 |
|  | All | 262 | 265 | 265 |
| JUN | W | 200 | 200 | 200 |
|  | AN | 200 | 200 | 200 |
|  | BN | 181 | 186 | 186 |
|  | D | 180 | 180 | 180 |
|  | C | 115 | 131 | 120 |
|  | All | 180 | 183 | 181 |
| JUL | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 85 | 85 | 88 |
|  | All | 85 | 85 | 85 |


| Alternative 2A: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 94 | 71 | 78 |
|  | All | 86 | 83 | 84 |
| SEP | W | 150 | 150 | 150 |
|  | AN | 150 | 150 | 150 |
|  | BN | 150 | 150 | 150 |
|  | D | 144 | 150 | 150 |
|  | C | 133 | 96 | 95 |
|  | All | 146 | 142 | 142 |
| OCT | W | 198 | 198 | 198 |
|  | AN | 183 | 183 | 183 |
|  | BN | 189 | 182 | 189 |
|  | D | 175 | 183 | 175 |
|  | C | 150 | 142 | 140 |
|  | All | 182 | 182 | 181 |
| NOV | W | 198 | 198 | 198 |
|  | AN | 185 | 182 | 182 |
|  | BN | 184 | 189 | 189 |
|  | D | 177 | 177 | 176 |
|  | C | 155 | 145 | 146 |
|  | All | 183 | 182 | 182 |
| DEC | W | 198 | 198 | 198 |
|  | AN | 185 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 177 | 189 | 189 |
|  | C | 155 | 156 | 158 |
|  | All | 184 | 187 | 188 |

Table 12. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 2A: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 118 (53.6\%) | 0 (-0.1\%) |
|  | AN | 0 (-0.1\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0(0\%) |
|  | C | 16 (10.2\%) | 12 (7.4\%) |
|  | All | 41 (21.4\%) | 2 (0.7\%) |
| FEB | W | 38 (17.1\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 3 (2.2\%) | -10 (-5.8\%) |
|  | All | 14 (7.2\%) | -1 (-0.7\%) |
| MAR | W | 58 (29.2\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | -12 (-6.1\%) |
|  | D | 6 (3.2\%) | 0 (0\%) |
|  | C | 16 (10.2\%) | 3 (1.7 \%) |
|  | All | 22 (11.7\%) | -2 (-0.8\%) |
| APR | W | 0 (0\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 3 (1.7\%) | 0 (0\%) |
|  | C | 16 (10.2\%) | 3 (1.7\%) |
|  | All | 3 (1.5\%) | 0 (0.2\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 6 (2.2\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 13 (6.2\%) | 0 (0\%) |
|  | All | 3 (1.1\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 5 (2.6\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 5 (4.7\%) | -11 (-8.2\%) |
|  | All | 2 (0.9\%) | -2 (-0.9\%) |
| JUL | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 3 (3.3\%) | 3 (3.3\%) |
|  | All | 0 (0.5\%) | 0 (0.5\%) |


| Alternative 2A: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -16 (-17.4\%) | 7 (-10\%) |
|  | All | -2 (-2.8\%) | 1 (1.3\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 6 (3.8\%) | 0 (0\%) |
|  | C | -38 (-28.7\%) | -1 (-0.8\%) |
|  | All | -4 (-3\%) | 0 (-0.1\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 7 (4.1\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -10 (-6.8\%) | -2 (-1.3\%) |
|  | All | -1 (-0.8\%) | -1 (-0.5\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | -3 (-1.8\%) | 0 (0\%) |
|  | BN | 6 (3.1\%) | 0 (0\%) |
|  | D | -1 (-0.6\%) | 0 (-0.2\%) |
|  | C | -9 (-5.9\%) | 0 (0.3\%) |
|  | All | -1 (-0.6\%) | 0 (0\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 7 (3.6\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 12 (6.6\%) | 0 (0\%) |
|  | C | 3 (2.2\%) | 3 (1.6\%) |
|  | All | 4 (2.2\%) | 0 (0.2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.2.1.7 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

Table 13. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 2A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| FEB | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| MAR | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 797 |
|  | All | 800 | 800 | 800 |
| APR | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| MAY | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUN | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |


| Alternative 2A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JUL | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| AUG | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| SEP | W | 773 | 773 | 773 |
|  | AN | 773 | 773 | 773 |
|  | BN | 773 | 773 | 773 |
|  | D | 773 | 773 | 773 |
|  | C | 773 | 773 | 773 |
|  | All | 773 | 773 | 773 |
| OCT | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| NOV | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| DEC | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |

Table 14. Differences (Percent Differences) between Pairs of Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 2A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| FEB | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| MAR | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| APR | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| JUL | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |


| Alternative 2A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |

## 11C.2.1.8 Feather River High-Flow Channel (at Thermalito Afterbay)

Table 15. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 2A: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 11,257 | 11,896 | 11,116 |
|  | AN | 4,434 | 2,838 | 2,817 |
|  | BN | 2,640 | 1,441 | 1,483 |
|  | D | 1,798 | 1,459 | 1,709 |
|  | C | 1,459 | 1,648 | 1,444 |
|  | All | 5,277 | 4,995 | 4,777 |
| FEB | W | 12,466 | 14,787 | 16,021 |
|  | AN | 7,411 | 5,809 | 7,114 |
|  | BN | 3,916 | 1,897 | 2,166 |
|  | D | 1,817 | 1,659 | 1,617 |
|  | C | 1,610 | 1,482 | 1,488 |
|  | All | 6,340 | 6,444 | 7,063 |
| MAR | W | 12,895 | 14,772 | 14,470 |
|  | AN | 7,733 | 8,568 | 9,783 |
|  | BN | 3,373 | 1,985 | 1,824 |
|  | D | 2,017 | 1,762 | 1,915 |
|  | C | 1,697 | 1,634 | 1,804 |
|  | All | 6,487 | 6,902 | 7,015 |
| APR | W | 6,472 | 6,408 | 6,399 |
|  | AN | 2,251 | 2,170 | 2,208 |
|  | BN | 1,205 | 1,203 | 1,696 |
|  | D | 1,286 | 1,470 | 2,284 |
|  | C | 1,389 | 1,407 | 1,756 |
|  | All | 3,073 | 3,084 | 3,400 |
| MAY | W | 7,528 | 4,740 | 5,235 |
|  | AN | 3,340 | 3,101 | 4,116 |
|  | BN | 1,205 | 1,749 | 3,052 |
|  | D | 1,591 | 2,223 | 2,580 |
|  | C | 1,574 | 1,790 | 1,768 |
|  | All | 3,661 | 3,005 | 3,608 |
| JUN | W | 5,062 | 4,211 | 6,376 |
|  | AN | 3,301 | 3,930 | 8,043 |
|  | BN | 2,707 | 3,552 | 6,311 |
|  | D | 3,134 | 3,284 | 3,865 |
|  | C | 2,695 | 2,666 | 2,709 |
|  | All | 3,632 | 3,628 | 5,521 |
| JUL | W | 6,490 | 8,577 | 7,045 |
|  | AN | 8,757 | 9,488 | 8,900 |
|  | BN | 8,981 | 8,833 | 7,605 |
|  | D | 8,294 | 8,099 | 4,787 |
|  | C | 6,703 | 5,217 | 3,378 |
|  | All | 7,674 | 8,157 | 6,380 |


| Alternative 2A: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 3,308 | 6,228 | 4,726 |
|  | AN | 6,042 | 7,346 | 5,770 |
|  | BN | 6,295 | 6,868 | 5,249 |
|  | D | 7,036 | 4,990 | 3,620 |
|  | C | 2,613 | 2,163 | 2,208 |
|  | All | 4,935 | 5,634 | 4,356 |
| SEP | W | 2,280 | 8,327 | 7,231 |
|  | AN | 2,253 | 6,899 | 5,215 |
|  | BN | 2,466 | 3,068 | 1,470 |
|  | D | 2,366 | 1,052 | 1,275 |
|  | C | 1,421 | 1,345 | 1,693 |
|  | All | 2,201 | 4,601 | 3,835 |
| OCT | W | 3,456 | 3,051 | 3,116 |
|  | AN | 2,386 | 2,741 | 3,221 |
|  | BN | 3,183 | 2,862 | 2,747 |
|  | D | 2,688 | 2,652 | 3,090 |
|  | C | 2,472 | 2,102 | 2,924 |
|  | All | 2,940 | 2,747 | 3,035 |
| NOV | W | 3,292 | 2,470 | 2,391 |
|  | AN | 1,824 | 2,119 | 1,858 |
|  | BN | 2,101 | 1,900 | 1,824 |
|  | D | 1,859 | 1,664 | 1,737 |
|  | C | 1,854 | 1,876 | 1,970 |
|  | All | 2,349 | 2,058 | 2,011 |
| DEC | W | 7,157 | 3,948 | 4,617 |
|  | AN | 2,951 | 3,344 | 3,096 |
|  | BN | 2,176 | 2,102 | 2,268 |
|  | D | 2,364 | 2,229 | 2,173 |
|  | C | 2,609 | 1,694 | 1,684 |
|  | All | 3,973 | 2,837 | 3,028 |

Table 16. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 2A: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | -141 (-1.3\%) | -779 (-6.6\%) |
|  | AN | -1,616 (-36.5\%) | -21 (-0.7\%) |
|  | BN | -1,157 (-43.8\%) | 42 (2.9\%) |
|  | D | -90 (-5\%) | 250 (17.1\%) |
|  | C | -15 (-1\%) | -204 (-12.4\%) |
|  | All | -501 (-9.5\%) | -218 (-4.4\%) |
| FEB | W | 3,555 (28.5\%) | 1,233 (8.3\%) |
|  | AN | -296 (-4\%) | 1,306 (22.5\%) |
|  | BN | -1,750 (-44.7\%) | 270 (14.2\%) |
|  | D | -200 (-11\%) | -43 (-2.6\%) |
|  | C | -122 (-7.6\%) | 7 (0.5\%) |
|  | All | 723 (11.4\%) | 620 (9.6\%) |
| MAR | W | 1,575 (12.2\%) | -302 (-2\%) |
|  | AN | 2,050 (26.5\%) | 1,215 (14.2\%) |
|  | BN | -1,550 (-45.9\%) | -161 (-8.1\%) |
|  | D | -102 (-5.1\%) | 153 (8.7\%) |
|  | C | 107 (6.3\%) | 170 (10.4\%) |
|  | All | 528 (8.1\%) | 113 (1.6\%) |
| APR | W | -73 (-1.1\%) | -9 (-0.1\%) |
|  | AN | -43 (-1.9\%) | 38 (1.8\%) |
|  | BN | 491 (40.8\%) | 492 (40.9\%) |
|  | D | 998 (77.6\%) | 814 (55.4\%) |
|  | C | 367 (26.4\%) | 349 (24.8\%) |
|  | All | 327 (10.6\%) | 316 (10.3\%) |
| MAY | W | -2,292 (-30.5\%) | 495 (10.5\%) |
|  | AN | 776 (23.2\%) | 1,014 (32.7\%) |
|  | BN | 1,847 (153.2\%) | 1,303 (74.5\%) |
|  | D | 988 (62.1\%) | 356 (16\%) |
|  | C | 193 (12.3\%) | -22 (-1.2\%) |
|  | All | -53 (-1.4\%) | 603 (20.1\%) |
| JUN | W | 1,314 (26\%) | 2,165 (51.4\%) |
|  | AN | 4,742 (143.6\%) | 4,114 (104.7\%) |
|  | BN | 3,605 (133.2\%) | 2,760 (77.7\%) |
|  | D | 732 (23.3\%) | 581 (17.7\%) |
|  | C | 14 (0.5\%) | 43 (1.6\%) |
|  | All | 1,889 (52\%) | 1,894 (52.2\%) |
| JUL | W | 555 (8.6\%) | -1,532 (-17.9\%) |
|  | AN | 144 (1.6\%) | -588 (-6.2\%) |
|  | BN | -1,376 (-15.3\%) | -1,228 (-13.9\%) |
|  | D | -3,507 (-42.3\%) | -3,312 (-40.9\%) |
|  | C | -3,325 (-49.6\%) | -1,839 (-35.3\%) |
|  | All | -1,294 (-16.9\%) | -1,777 (-21.8\%) |


| Alternative 2A: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | 1,417 (42.8\%) | -1,503 (-24.1\%) |
|  | AN | -273 (-4.5\%) | -1,576 (-21.5\%) |
|  | BN | -1,046 (-16.6\%) | -1,619 (-23.6\%) |
|  | D | -3,417 (-48.6\%) | -1,371 (-27.5\%) |
|  | C | -406 (-15.5\%) | 45 (2.1\%) |
|  | All | -578 (-11.7\%) | -1,278 (-22.7\%) |
| SEP | W | 4,951 (217.1\%) | -1,096 (-13.2\%) |
|  | AN | 2,962 (131.5\%) | -1,684 (-24.4\%) |
|  | BN | -996 (-40.4\%) | -1,598 (-52.1\%) |
|  | D | -1,090 (-46.1\%) | 223 (21.2\%) |
|  | C | 273 (19.2\%) | 349 (25.9\%) |
|  | All | 1,634 (74.2\%) | -767 (-16.7\%) |
| OCT | W | -340 (-9.8\%) | 65 (2.1\%) |
|  | AN | 834 (35\%) | 479 (17.5\%) |
|  | BN | -436 (-13.7\%) | -114 (-4\%) |
|  | D | 402 (15\%) | 438 (16.5\%) |
|  | C | 452 (18.3\%) | 822 (39.1\%) |
|  | All | 94 (3.2\%) | 288 (10.5\%) |
| NOV | W | -902 (-27.4\%) | -79 (-3.2\%) |
|  | AN | 34 (1.9\%) | -261 (-12.3\%) |
|  | BN | -277 (-13.2\%) | -76 (-4\%) |
|  | D | -122 (-6.6\%) | 73 (4.4\%) |
|  | C | 116 (6.2\%) | 94 (5\%) |
|  | All | -338 (-14.4\%) | -47 (-2.3\%) |
| DEC | W | -2,540 (-35.5\%) | 669 (16.9\%) |
|  | AN | 145 (4.9\%) | -248 (-7.4\%) |
|  | BN | 92(4.2\%) | 166(7.9\%) |
|  | D | -191 (-8.1\%) | -56 (-2.5\%) |
|  | C | -924 (-35.4\%) | -10 (-0.6\%) |
|  | All | -946 (-23.8\%) | 190 (6.7\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.2.1.9 Feather River at Confluence with Sacramento River

Table 17. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 2A: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 23,533 | 26,106 | 25,333 |
|  | AN | 12,430 | 11,953 | 11,939 |
|  | BN | 6,499 | 5,575 | 5,619 |
|  | D | 4,621 | 4,412 | 4,665 |
|  | C | 3,646 | 3,837 | 3,646 |
|  | All | 11,938 | 12,509 | 12,297 |
| FEB | W | 27,039 | 31,065 | 32,306 |
|  | AN | 14,818 | 14,599 | 15,912 |
|  | BN | 9,153 | 7,892 | 8,165 |
|  | D | 4,402 | 4,436 | 4,395 |
|  | C | 3,237 | 3,096 | 3,107 |
|  | All | 13,744 | 14,761 | 15,385 |
| MAR | W | 24,172 | 26,784 | 26,491 |
|  | AN | 19,990 | 21,490 | 22,709 |
|  | BN | 8,136 | 6,882 | 6,710 |
|  | D | 5,073 | 4,940 | 5,082 |
|  | C | 2,933 | 2,756 | 2,922 |
|  | All | 13,521 | 14,300 | 14,412 |
| APR | W | 15,897 | 15,852 | 15,854 |
|  | AN | 9,832 | 9,585 | 9,628 |
|  | BN | 5,401 | 5,189 | 5,693 |
|  | D | 4,152 | 4,137 | 4,955 |
|  | C | 3,298 | 3,185 | 3,541 |
|  | All | 8,796 | 8,689 | 9,014 |
| MAY | W | 14,387 | 10,385 | 10,890 |
|  | AN | 8,068 | 6,884 | 7,907 |
|  | BN | 4,704 | 4,509 | 5,818 |
|  | D | 3,652 | 3,767 | 4,123 |
|  | C | 2,389 | 2,321 | 2,289 |
|  | All | 7,697 | 6,237 | 6,843 |
| JUN | W | 10,222 | 7,199 | 9,362 |
|  | AN | 6,391 | 5,598 | 9,674 |
|  | BN | 4,495 | 4,342 | 7,115 |
|  | D | 3,853 | 3,367 | 3,949 |
|  | C | 2,782 | 2,522 | 2,472 |
|  | All | 6,197 | 4,951 | 6,827 |
| JUL | W | 8,177 | 8,734 | 7,070 |
|  | AN | 9,322 | 9,223 | 8,540 |
|  | BN | 9,380 | 8,725 | 7,450 |
|  | D | 8,290 | 7,674 | 4,330 |
|  | C | 6,450 | 4,891 | 3,056 |
|  | All | 8,322 | 8,009 | 6,161 |


| Alternative 2A: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 4,923 | 7,222 | 5,407 |
|  | AN | 7,080 | 8,089 | 6,418 |
|  | BN | 7,236 | 7,570 | 5,892 |
|  | D | 7,711 | 5,487 | 4,054 |
|  | C | 2,841 | 2,340 | 2,394 |
|  | All | 5,941 | 6,313 | 4,900 |
| SEP | W | 4,351 | 10,329 | 9,250 |
|  | AN | 4,194 | 8,773 | 7,084 |
|  | BN | 4,252 | 4,786 | 3,211 |
|  | D | 4,179 | 2,848 | 3,015 |
|  | C | 2,054 | 1,964 | 2,327 |
|  | All | 3,937 | 6,289 | 5,520 |
| OCT | W | 4,176 | 3,746 | 3,828 |
|  | AN | 2,630 | 2,988 | 3,466 |
|  | BN | 3,754 | 3,437 | 3,317 |
|  | D | 3,033 | 2,987 | 3,431 |
|  | C | 2,938 | 2,566 | 3,385 |
|  | All | 3,446 | 3,243 | 3,536 |
| NOV | W | 4,697 | 3,825 | 3,752 |
|  | AN | 3,065 | 3,186 | 2,937 |
|  | BN | 2,687 | 2,455 | 2,385 |
|  | D | 2,342 | 2,125 | 2,201 |
|  | C | 2,084 | 2,107 | 2,187 |
|  | All | 3,216 | 2,873 | 2,830 |
| DEC | W | 12,409 | 10,246 | 10,918 |
|  | AN | 5,193 | 6,000 | 5,758 |
|  | BN | 3,079 | 3,249 | 3,421 |
|  | D | 2,838 | 2,811 | 2,758 |
|  | C | 2,975 | 2,054 | 2,057 |
|  | All | 6,279 | 5,599 | 5,795 |

Table 18. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 2A: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 1,801 (7.7\%) | -772 (-3\%) |
|  | AN | -490 (-3.9\%) | -14 (-0.1\%) |
|  | BN | -880 (-13.5\%) | 44 (0.8\%) |
|  | D | 43 (0.9\%) | 252 (5.7\%) |
|  | C | 0 (0\%) | -191 (-5\%) |
|  | All | 358 (3\%) | -212 (-1.7\%) |
| FEB | W | 5,267 (19.5\%) | 1,241 (4\%) |
|  | AN | 1,094 (7.4\%) | 1,313 (9\%) |
|  | BN | -988 (-10.8\%) | 273 (3.5\%) |
|  | D | -7 (-0.2\%) | -42 (-0.9\%) |
|  | C | -131 (-4\%) | 10 (0.3\%) |
|  | All | 1,641 (11.9\%) | 625 (4.2\%) |
| MAR | W | 2,319 (9.6\%) | -293 (-1.1\%) |
|  | AN | 2,718 (13.6\%) | 1,219 (5.7\%) |
|  | BN | -1,426 (-17.5\%) | -172 (-2.5\%) |
|  | D | 9 (0.2\%) | 142 (2.9\%) |
|  | C | -11 (-0.4\%) | 166 (6\%) |
|  | All | 890 (6.6\%) | 112 (0.8\%) |
| APR | W | -43 (-0.3\%) | 2 (0\%) |
|  | AN | -205 (-2.1\%) | 43 (0.4\%) |
|  | BN | 292 (5.4\%) | 504 (9.7\%) |
|  | D | 804 (19.4\%) | 819 (19.8\%) |
|  | C | 243 (7.4\%) | 356 (11.2\%) |
|  | All | 218 (2.5\%) | 325 (3.7\%) |
| MAY | W | -3,496 (-24.3\%) | 505 (4.9\%) |
|  | AN | -161 (-2\%) | 1,024 (14.9\%) |
|  | BN | 1,113 (23.7\%) | 1,309 (29\%) |
|  | D | 471 (12.9\%) | 355 (9.4\%) |
|  | C | -99 (-4.2\%) | -31 (-1.4\%) |
|  | All | -853 (-11.1\%) | 607 (9.7\%) |
| JUN | W | -860 (-8.4\%) | 2,163 (30\%) |
|  | AN | 3,283 (51.4\%) | 4,076 (72.8\%) |
|  | BN | 2,620 (58.3\%) | 2,773 (63.9\%) |
|  | D | 96 (2.5\%) | 583 (17.3\%) |
|  | C | -310 (-11.2\%) | -50 (-2\%) |
|  | All | 631 (10.2\%) | 1,876 (37.9\%) |
| JUL | W | -1,107 (-13.5\%) | -1,664 (-19.1\%) |
|  | AN | -782 (-8.4\%) | -682 (-7.4\%) |
|  | BN | -1,931 (-20.6\%) | -1,275 (-14.6\%) |
|  | D | -3,960 (-47.8\%) | -3,344 (-43.6\%) |
|  | C | -3,394 (-52.6\%) | -1,835 (-37.5\%) |
|  | All | -2,161 (-26\%) | -1,848 (-23.1\%) |


| Alternative 2A: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | 484 (9.8\%) | -1,815 (-25.1\%) |
|  | AN | -662 (-9.4\%) | -1,671 (-20.7\%) |
|  | BN | -1,343 (-18.6\%) | -1,677 (-22.2\%) |
|  | D | -3,657 (-47.4\%) | -1,433 (-26.1\%) |
|  | C | -447 (-15.7\%) | 54 (2.3\%) |
|  | All | -1,041 (-17.5\%) | -1,413 (-22.4\%) |
| SEP | W | 4,898 (112.6\%) | -1,079 (-10.5\%) |
|  | AN | 2,890 (68.9\%) | -1,689 (-19.3\%) |
|  | BN | -1,041 (-24.5\%) | -1,575 (-32.9\%) |
|  | D | -1,164 (-27.8\%) | 167 (5.9\%) |
|  | C | 273 (13.3\%) | 364 (18.5\%) |
|  | All | 1,583 (40.2\%) | -768 (-12.2\%) |
| OCT | W | -348 (-8.3\%) | 82 (2.2\%) |
|  | AN | 836 (31.8\%) | 478 (16\%) |
|  | BN | -437 (-11.6\%) | -121 (-3.5\%) |
|  | D | 398 (13.1\%) | 444 (14.9\%) |
|  | C | 446 (15.2\%) | 819 (31.9\%) |
|  | All | 90 (2.6\%) | 293 (9\%) |
| NOV | W | -945 (-20.1\%) | -73 (-1.9\%) |
|  | AN | -128 (-4.2\%) | -249 (-7.8\%) |
|  | BN | -302 (-11.2\%) | -70 (-2.8\%) |
|  | D | -142 (-6\%) | 76 (3.6\%) |
|  | C | 103 (4.9\%) | 80 (3.8\%) |
|  | All | -386 (-12\%) | -43 (-1.5\%) |
| DEC | W | -1,491 (-12\%) | 672 (6.6\%) |
|  | AN | 565 (10.9\%) | -242 (-4\%) |
|  | BN | 341 (11.1\%) | 172 (5.3\%) |
|  | D | -80 (-2.8\%) | -53 (-1.9\%) |
|  | C | -918 (-30.8\%) | 3 (0.1\%) |
|  | All | -484 (-7.7\%) | 196 (3.5\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.2.1.10 American River at Nimbus Dam

Table 19. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 2A: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 8,806 | 11,036 | 11,011 |
|  | AN | 4,833 | 5,805 | 5,811 |
|  | BN | 2,392 | 2,073 | 2,034 |
|  | D | 1,723 | 1,506 | 1,442 |
|  | C | 1,474 | 1,095 | 1,237 |
|  | All | 4,502 | 5,194 | 5,187 |
| FEB | W | 9,294 | 11,102 | 11,106 |
|  | AN | 6,469 | 8,153 | 8,247 |
|  | BN | 4,360 | 4,961 | 4,992 |
|  | D | 1,852 | 1,844 | 1,969 |
|  | C | 1,185 | 1,007 | 1,036 |
|  | All | 5,218 | 6,112 | 6,165 |
| MAR | W | 6,089 | 6,992 | 6,989 |
|  | AN | 5,454 | 5,790 | 5,848 |
|  | BN | 2,429 | 2,794 | 2,797 |
|  | D | 2,191 | 2,314 | 2,191 |
|  | C | 939 | 938 | 868 |
|  | All | 3,762 | 4,187 | 4,157 |
| APR | W | 5,300 | 5,508 | 5,515 |
|  | AN | 3,546 | 3,298 | 3,300 |
|  | BN | 3,126 | 2,970 | 2,993 |
|  | D | 1,837 | 1,888 | 1,841 |
|  | C | 1,156 | 1,255 | 1,226 |
|  | All | 3,305 | 3,334 | 3,326 |
| MAY | W | 6,157 | 4,592 | 4,695 |
|  | AN | 3,885 | 2,521 | 3,004 |
|  | BN | 2,930 | 1,969 | 2,418 |
|  | D | 1,790 | 1,686 | 2,098 |
|  | C | 1,182 | 992 | 1,002 |
|  | All | 3,587 | 2,676 | 2,948 |
| JUN | W | 6,003 | 3,694 | 4,520 |
|  | AN | 3,346 | 3,022 | 3,651 |
|  | BN | 2,863 | 2,883 | 3,551 |
|  | D | 2,506 | 2,596 | 2,750 |
|  | C | 1,824 | 1,025 | 1,267 |
|  | All | 3,699 | 2,825 | 3,363 |
| JUL | W | 4,108 | 3,860 | 3,575 |
|  | AN | 4,638 | 4,927 | 4,590 |
|  | BN | 4,744 | 4,328 | 3,995 |
|  | D | 3,577 | 3,143 | 2,733 |
|  | C | 1,784 | 2,022 | 2,221 |
|  | All | 3,838 | 3,670 | 3,412 |


| Alternative 2A: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 3,520 | 2,132 | 2,162 |
|  | AN | 2,542 | 1,944 | 1,768 |
|  | BN | 2,495 | 2,324 | 1,799 |
|  | D | 2,613 | 1,620 | 1,320 |
|  | C | 1,500 | 1,100 | 802 |
|  | All | 2,707 | 1,874 | 1,659 |
| SEP | W | 4,025 | 3,622 | 2,966 |
|  | AN | 2,764 | 2,044 | 1,863 |
|  | BN | 2,370 | 1,605 | 1,377 |
|  | D | 1,856 | 1,182 | 1,177 |
|  | C | 1,164 | 594 | 608 |
|  | All | 2,663 | 2,068 | 1,795 |
| OCT | W | 1,723 | 1,634 | 1,476 |
|  | AN | 1,706 | 1,732 | 1,630 |
|  | BN | 1,602 | 1,767 | 1,910 |
|  | D | 1,468 | 1,258 | 1,422 |
|  | C | 1,461 | 1,655 | 1,660 |
|  | All | 1,605 | 1,592 | 1,588 |
| NOV | W | 3,527 | 2,612 | 2,495 |
|  | AN | 3,181 | 2,554 | 2,439 |
|  | BN | 2,067 | 1,716 | 1,700 |
|  | D | 2,176 | 1,424 | 1,501 |
|  | C | 1,994 | 1,608 | 1,479 |
|  | All | 2,706 | 2,043 | 1,984 |
| DEC | W | 6,302 | 6,171 | 6,083 |
|  | AN | 3,137 | 2,933 | 2,922 |
|  | BN | 2,676 | 2,527 | 2,694 |
|  | D | 1,741 | 1,351 | 1,348 |
|  | C | 1,524 | 1,251 | 1,409 |
|  | All | 3,519 | 3,297 | 3,319 |

Table 20. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 2A: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 2,205 (25\%) | -25 (-0.2\%) |
|  | AN | 978 (20.2\%) | 6 (0.1\%) |
|  | BN | -359 (-15\%) | -39 (-1.9\%) |
|  | D | -281 (-16.3\%) | -64 (-4.3\%) |
|  | C | -237 (-16.1\%) | 142 (13\%) |
|  | All | 685 (15.2\%) | -7 (-0.1\%) |
| FEB | W | 1,812 (19.5\%) | 4 (0\%) |
|  | AN | 1,778 (27.5\%) | 95 (1.2\%) |
|  | BN | 632 (14.5\%) | 31 (0.6\%) |
|  | D | 117 (6.3\%) | 126 (6.8\%) |
|  | C | -149 (-12.5\%) | 30 (3\%) |
|  | All | 947 (18.1\%) | 52 (0.9\%) |
| MAR | W | 901 (14.8\%) | -3 (0\%) |
|  | AN | 394 (7.2\%) | 57 (1\%) |
|  | BN | 368 (15.2\%) | 3 (0.1\%) |
|  | D | -1 (0\%) | -124 (-5.3\%) |
|  | C | -71 (-7.6\%) | -70 (-7.5\%) |
|  | All | 396 (10.5\%) | -29 (-0.7\%) |
| APR | W | 215 (4.1\%) | 7 (0.1\%) |
|  | AN | -246 (-6.9\%) | 2 (0.1\%) |
|  | BN | -132 (-4.2\%) | 24 (0.8\%) |
|  | D | 4 (0.2\%) | -47 (-2.5\%) |
|  | C | 71 (6.1\%) | -29 (-2.3\%) |
|  | All | 21 (0.6\%) | -8 (-0.2\%) |
| MAY | W | -1,462 (-23.7\%) | 103 (2.2\%) |
|  | AN | -881 (-22.7\%) | 483 (19.1\%) |
|  | BN | -512 (-17.5\%) | 449 (22.8\%) |
|  | D | 308 (17.2\%) | 412 (24.5\%) |
|  | C | -180 (-15.2\%) | 10 (1.1\%) |
|  | All | -638 (-17.8\%) | 272 (10.2\%) |
| JUN | W | -1,484 (-24.7\%) | 826 (22.4\%) |
|  | AN | 306 (9.1\%) | 629 (20.8\%) |
|  | BN | 688 (24\%) | 668 (23.2\%) |
|  | D | 244 (9.7\%) | 154 (5.9\%) |
|  | C | -557 (-30.5\%) | 243 (23.7\%) |
|  | All | -336 (-9.1\%) | 537 (19\%) |
| JUL | W | -534 (-13\%) | -286 (-7.4\%) |
|  | AN | -48 (-1\%) | -337 (-6.8\%) |
|  | BN | -750 (-15.8\%) | -334 (-7.7\%) |
|  | D | -845 (-23.6\%) | -411 (-13.1\%) |
|  | C | 437 (24.5\%) | 199 (9.8\%) |
|  | All | -426 (-11.1\%) | -258 (-7\%) |


| Alternative 2A: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -1,358 (-38.6\%) | 30 (1.4\%) |
|  | AN | -773 (-30.4\%) | -176 (-9.1\%) |
|  | BN | -696 (-27.9\%) | -526 (-22.6\%) |
|  | D | -1,292 (-49.5\%) | -300 (-18.5\%) |
|  | C | -698 (-46.5\%) | -298 (-27.1\%) |
|  | All | -1,048 (-38.7\%) | -215 (-11.5\%) |
| SEP | W | -1,058 (-26.3\%) | -656 (-18.1\%) |
|  | AN | -901 (-32.6\%) | -181 (-8.8\%) |
|  | BN | -993 (-41.9\%) | -228 (-14.2\%) |
|  | D | -679 (-36.6\%) | -5 (-0.4\%) |
|  | C | -557 (-47.8\%) | 14 (2.4\%) |
|  | All | -868 (-32.6\%) | -272 (-13.2\%) |
| OCT | W | -246 (-14.3\%) | -158 (-9.7\%) |
|  | AN | -76 (-4.5\%) | -102 (-5.9\%) |
|  | BN | 308 (19.2\%) | 143 (8.1\%) |
|  | D | -46 (-3.1\%) | 164 (13\%) |
|  | C | 199 (13.6\%) | 5 (0.3\%) |
|  | All | -18 (-1.1\%) | -4 (-0.2\%) |
| NOV | W | -1,032 (-29.3\%) | -117 (-4.5\%) |
|  | AN | -741 (-23.3\%) | -115 (-4.5\%) |
|  | BN | -367 (-17.8\%) | -16 (-0.9\%) |
|  | D | -675 (-31\%) | 77 (5.4\%) |
|  | C | -515 (-25.8\%) | -129 (-8\%) |
|  | All | -722 (-26.7\%) | -59 (-2.9\%) |
| DEC | W | -218 (-3.5\%) | -88 (-1.4\%) |
|  | AN | -215 (-6.8\%) | -11 (-0.4\%) |
|  | BN | 18 (0.7\%) | 167 (6.6\%) |
|  | D | -392 (-22.5\%) | -3 (-0.2\%) |
|  | C | -115 (-7.5\%) | 158 (12.6\%) |
|  | All | -200 (-5.7\%) | 22 (0.7\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.2.1.11 American River at Confluence with Sacramento River

Table 21. Mean Monthly Flows (cfs) for Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 2A: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 8,748 | 10,960 | 10,936 |
|  | AN | 4,806 | 5,760 | 5,766 |
|  | BN | 2,326 | 1,988 | 1,947 |
|  | D | 1,654 | 1,424 | 1,360 |
|  | C | 1,403 | 1,008 | 1,154 |
|  | All | 4,443 | 5,118 | 5,111 |
| FEB | W | 9,183 | 10,947 | 10,951 |
|  | AN | 6,422 | 8,073 | 8,167 |
|  | BN | 4,309 | 4,888 | 4,920 |
|  | D | 1,781 | 1,756 | 1,882 |
|  | C | 1,119 | 921 | 960 |
|  | All | 5,142 | 6,007 | 6,061 |
| MAR | W | 5,979 | 6,837 | 6,834 |
|  | AN | 5,364 | 5,661 | 5,718 |
|  | BN | 2,340 | 2,672 | 2,675 |
|  | D | 2,121 | 2,224 | 2,099 |
|  | C | 864 | 836 | 778 |
|  | All | 3,672 | 4,063 | 4,035 |
| APR | W | 5,156 | 5,300 | 5,306 |
|  | AN | 3,383 | 3,079 | 3,080 |
|  | BN | 2,984 | 2,778 | 2,801 |
|  | D | 1,672 | 1,677 | 1,630 |
|  | C | 996 | 1,059 | 1,031 |
|  | All | 3,152 | 3,128 | 3,120 |
| MAY | W | 5,959 | 4,332 | 4,435 |
|  | AN | 3,700 | 2,285 | 2,768 |
|  | BN | 2,733 | 1,726 | 2,175 |
|  | D | 1,605 | 1,454 | 1,867 |
|  | C | 1,014 | 790 | 800 |
|  | All | 3,398 | 2,438 | 2,710 |
| JUN | W | 5,743 | 3,388 | 4,214 |
|  | AN | 3,103 | 2,736 | 3,360 |
|  | BN | 2,631 | 2,603 | 3,267 |
|  | D | 2,282 | 2,320 | 2,470 |
|  | C | 1,621 | 793 | 1,036 |
|  | All | 3,462 | 2,545 | 3,079 |
| JUL | W | 3,844 | 3,560 | 3,267 |
|  | AN | 4,399 | 4,635 | 4,293 |
|  | BN | 4,509 | 4,038 | 3,699 |
|  | D | 3,347 | 2,858 | 2,446 |
|  | C | 1,568 | 1,784 | 1,980 |
|  | All | 3,597 | 3,385 | 3,122 |


| Alternative 2A: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 3,295 | 1,858 | 1,891 |
|  | AN | 2,313 | 1,663 | 1,490 |
|  | BN | 2,265 | 2,048 | 1,525 |
|  | D | 2,395 | 1,357 | 1,061 |
|  | C | 1,314 | 899 | 605 |
|  | All | 2,488 | 1,612 | 1,399 |
| SEP | W | 3,846 | 3,415 | 2,758 |
|  | AN | 2,594 | 1,838 | 1,659 |
|  | BN | 2,205 | 1,402 | 1,179 |
|  | D | 1,691 | 987 | 984 |
|  | C | 1,011 | 427 | 447 |
|  | All | 2,495 | 1,870 | 1,600 |
| OCT | W | 1,607 | 1,499 | 1,343 |
|  | AN | 1,597 | 1,613 | 1,506 |
|  | BN | 1,472 | 1,617 | 1,770 |
|  | D | 1,344 | 1,114 | 1,282 |
|  | C | 1,342 | 1,517 | 1,522 |
|  | All | 1,486 | 1,454 | 1,453 |
| NOV | W | 3,472 | 2,540 | 2,424 |
|  | AN | 3,100 | 2,455 | 2,341 |
|  | BN | 1,990 | 1,618 | 1,600 |
|  | D | 2,094 | 1,326 | 1,401 |
|  | C | 1,897 | 1,489 | 1,360 |
|  | All | 2,632 | 1,950 | 1,891 |
| DEC | W | 6,255 | 6,115 | 6,028 |
|  | AN | 3,072 | 2,856 | 2,846 |
|  | BN | 2,609 | 2,445 | 2,618 |
|  | D | 1,675 | 1,275 | 1,272 |
|  | C | 1,443 | 1,158 | 1,317 |
|  | All | 3,457 | 3,224 | 3,247 |

Table 22. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 2A: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 2,188 (25\%) | -24 (-0.2\%) |
|  | AN | 961 (20\%) | 6 (0.1\%) |
|  | BN | -379 (-16.3\%) | -41 (-2.1\%) |
|  | D | -294 (-17.8\%) | -64 (-4.5\%) |
|  | C | -249 (-17.8\%) | 146 (14.5\%) |
|  | All | 669 (15.1\%) | -6 (-0.1\%) |
| FEB | W | 1,768 (19.3\%) | 4 (0\%) |
|  | AN | 1,745 (27.2\%) | 95 (1.2\%) |
|  | BN | 611 (14.2\%) | 31 (0.6\%) |
|  | D | 102 (5.7\%) | 127 (7.2\%) |
|  | C | -158 (-14.2\%) | 39 (4.3\%) |
|  | All | 919 (17.9\%) | 54 (0.9\%) |
| MAR | W | 854 (14.3\%) | -3 (0\%) |
|  | AN | 353 (6.6\%) | 56 (1\%) |
|  | BN | 336 (14.4\%) | 3 (0.1\%) |
|  | D | -22 (-1\%) | -125 (-5.6\%) |
|  | C | -86 (-10\%) | -58 (-6.9\%) |
|  | All | 363 (9.9\%) | -28 (-0.7\%) |
| APR | W | 151 (2.9\%) | 7 (0.1\%) |
|  | AN | -303 (-8.9\%) | 1 (0\%) |
|  | BN | -182 (-6.1\%) | 23 (0.8\%) |
|  | D | -42 (-2.5\%) | -46 (-2.8\%) |
|  | C | 35 (3.6\%) | -28 (-2.7\%) |
|  | All | -32 (-1\%) | -8 (-0.3\%) |
| MAY | W | -1,524 (-25.6\%) | 103 (2.4\%) |
|  | AN | -931 (-25.2\%) | 483 (21.1\%) |
|  | BN | -558 (-20.4\%) | 449 (26\%) |
|  | D | 262 (16.3\%) | 413 (28.4\%) |
|  | C | -213 (-21\%) | 10 (1.3\%) |
|  | All | -688 (-20.3\%) | 272 (11.2\%) |
| JUN | W | -1,529 (-26.6\%) | 825 (24.3\%) |
|  | AN | 257 (8.3\%) | 625 (22.8\%) |
|  | BN | 636 (24.2\%) | 664 (25.5\%) |
|  | D | 188 (8.2\%) | 150 (6.4\%) |
|  | C | -586 (-36.1\%) | 243 (30.6\%) |
|  | All | -383 (-11.1\%) | 535 (21\%) |
| JUL | W | -577 (-15\%) | -293 (-8.2\%) |
|  | AN | -106 (-2.4\%) | -343 (-7.4\%) |
|  | BN | -810 (-18\%) | -340 (-8.4\%) |
|  | D | -901 (-26.9\%) | -412 (-14.4\%) |
|  | C | 412 (26.3\%) | 196 (11\%) |
|  | All | -474 (-13.2\%) | -263 (-7.8\%) |


| Alternative 2A: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -1,404 (-42.6\%) | 33 (1.8\%) |
|  | AN | -823 (-35.6\%) | -173 (-10.4\%) |
|  | BN | -739 (-32.7\%) | -523 (-25.5\%) |
|  | D | -1,334 (-55.7\%) | -295 (-21.8\%) |
|  | C | -709 (-54\%) | -295 (-32.8\%) |
|  | All | -1,088 (-43.7\%) | -212 (-13.2\%) |
| SEP | W | -1,087 (-28.3\%) | -657 (-19.2\%) |
|  | AN | -935 (-36.1\%) | -179 (-9.7\%) |
|  | BN | -1,026 (-46.5\%) | -223 (-15.9\%) |
|  | D | -706 (-41.8\%) | -3 (-0.3\%) |
|  | C | -563 (-55.7\%) | 20 (4.8\%) |
|  | All | -894 (-35.9\%) | -270 (-14.4\%) |
| OCT | W | -265 (-16.5\%) | -156 (-10.4\%) |
|  | AN | -91 (-5.7\%) | -106 (-6.6\%) |
|  | BN | 298 (20.2\%) | 153 (9.5\%) |
|  | D | -62 (-4.6\%) | 168 (15.1\%) |
|  | C | 180 (13.4\%) | 5 (0.3\%) |
|  | All | -33 (-2.3\%) | -1 (-0.1\%) |
| NOV | W | -1,048 (-30.2\%) | -115 (-4.5\%) |
|  | AN | -759 (-24.5\%) | -113 (-4.6\%) |
|  | BN | -389 (-19.6\%) | -18 (-1.1\%) |
|  | D | -693 (-33.1\%) | 75 (5.7\%) |
|  | C | -536 (-28.3\%) | -129 (-8.6\%) |
|  | All | -740 (-28.1\%) | -58 (-3\%) |
| DEC | W | -227 (-3.6\%) | -87 (-1.4\%) |
|  | AN | -225 (-7.3\%) | -10 (-0.3\%) |
|  | BN | 9 (0.3\%) | 172 (7\%) |
|  | D | -403 (-24\%) | -3 (-0.2\%) |
|  | C | -126 (-8.8\%) | 159 (13.7\%) |
|  | All | -210 (-6.1\%) | 23 (0.7\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.2.1.12 Stanislaus River at the Confluence with the San Joaquin River

Table 23. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 2A: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | $\mathrm{WYT}^{\text {a }}$ | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 956 | 885 | 885 |
|  | AN | 843 | 963 | 963 |
|  | BN | 416 | 369 | 369 |
|  | D | 403 | 366 | 366 |
|  | C | 314 | 265 | 265 |
|  | All | 635 | 615 | 615 |
| FEB | W | 1,285 | 1,236 | 1,228 |
|  | AN | 917 | 858 | 858 |
|  | BN | 551 | 438 | 438 |
|  | D | 562 | 359 | 359 |
|  | C | 490 | 348 | 348 |
|  | All | 827 | 723 | 721 |
| MAR | W | 2,063 | 2,217 | 2,217 |
|  | AN | 1,295 | 956 | 956 |
|  | BN | 732 | 548 | 548 |
|  | D | 559 | 390 | 390 |
|  | C | 541 | 444 | 444 |
|  | All | 1,167 | 1,071 | 1,071 |
| APR | W | 2,054 | 1,965 | 1,965 |
|  | AN | 1,719 | 1,535 | 1,535 |
|  | BN | 1,494 | 1,211 | 1,211 |
|  | D | 1,438 | 1,199 | 1,199 |
|  | C | 823 | 670 | 669 |
|  | All | 1,562 | 1,387 | 1,387 |
| MAY | W | 1,653 | 1,613 | 1,614 |
|  | AN | 1,389 | 1,243 | 1,243 |
|  | BN | 1,238 | 898 | 898 |
|  | D | 1,140 | 916 | 916 |
|  | C | 715 | 627 | 626 |
|  | All | 1,271 | 1,125 | 1,124 |
| JUN | W | 1,608 | 1,763 | 1,761 |
|  | AN | 1,134 | 985 | 984 |
|  | BN | 663 | 568 | 567 |
|  | D | 447 | 364 | 364 |
|  | C | 332 | 296 | 292 |
|  | All | 932 | 914 | 912 |
| JUL | W | 1,064 | 1,080 | 1,080 |
|  | AN | 489 | 454 | 454 |
|  | BN | 450 | 425 | 425 |
|  | D | 398 | 359 | 360 |
|  | C | 337 | 310 | 311 |
|  | All | 607 | 590 | 590 |


| Alternative 2A: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 930 | 717 | 717 |
|  | AN | 476 | 454 | 454 |
|  | BN | 423 | 418 | 418 |
|  | D | 387 | 382 | 382 |
|  | C | 341 | 338 | 339 |
|  | All | 560 | 491 | 492 |
| SEP | W | 1,040 | 863 | 863 |
|  | AN | 502 | 474 | 474 |
|  | BN | 417 | 407 | 407 |
|  | D | 395 | 390 | 390 |
|  | C | 324 | 317 | 334 |
|  | All | 595 | 533 | 537 |
| OCT | W | 897 | 845 | 846 |
|  | AN | 873 | 822 | 825 |
|  | BN | 903 | 844 | 844 |
|  | D | 984 | 925 | 925 |
|  | C | 689 | 612 | 609 |
|  | All | 867 | 808 | 808 |
| NOV | W | 426 | 408 | 408 |
|  | AN | 580 | 524 | 524 |
|  | BN | 341 | 334 | 334 |
|  | D | 345 | 321 | 321 |
|  | C | 325 | 308 | 308 |
|  | All | 410 | 386 | 386 |
| DEC | W | 512 | 429 | 439 |
|  | AN | 722 | 697 | 697 |
|  | BN | 331 | 353 | 353 |
|  | D | 317 | 294 | 294 |
|  | C | 289 | 272 | 272 |
|  | All | 450 | 417 | 420 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

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Table 24. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 2A: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | $\mathbf{W Y T}^{\text {b }}$ | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | -71 (-7.4\%) | 0 (0\%) |
|  | AN | 120 (14.3\%) | 0 (0\%) |
|  | BN | -47 (-11.3\%) | 0 (0\%) |
|  | D | -37 (-9.1\%) | 0 (0\%) |
|  | C | -49 (-15.5\%) | 0 (0\%) |
|  | All | -20 (-3.2\%) | 0 (0\%) |
| FEB | W | -57 (-4.4\%) | -8 (-0.6\%) |
|  | AN | -59 (-6.4\%) | 0 (0\%) |
|  | BN | -113 (-20.5\%) | 0 (0\%) |
|  | D | -203 (-36.1\%) | 0 (0\%) |
|  | C | -142 (-29\%) | 0 (0\%) |
|  | All | -106 (-12.8\%) | -2 (-0.3\%) |
| MAR | W | 154 (7.5\%) | 0 (0\%) |
|  | AN | -339 (-26.2\%) | 0 (0\%) |
|  | BN | -185 (-25.2\%) | 0 (0\%) |
|  | D | -168 (-30.1\%) | 0 (0\%) |
|  | C | -97 (-17.9\%) | 0 (0\%) |
|  | All | -96 (-8.2\%) | 0 (0\%) |
| APR | W | -89 (-4.3\%) | 0 (0\%) |
|  | AN | -184 (-10.7\%) | 0 (0\%) |
|  | BN | -283 (-18.9\%) | 0 (0\%) |
|  | D | -240 (-16.7\%) | 0 (0\%) |
|  | C | -153 (-18.6\%) | 0 (0\%) |
|  | All | -175 (-11.2\%) | 0 (0\%) |
| MAY | W | -39 (-2.4\%) | 0 (0\%) |
|  | AN | -146 (-10.5\%) | 0 (0\%) |
|  | BN | -340 (-27.5\%) | 0 (0\%) |
|  | D | -224 (-19.7\%) | 0 (0\%) |
|  | C | -89 (-12.5\%) | -1 (-0.2\%) |
|  | All | -147 (-11.6\%) | 0 (0\%) |
| JUN | W | 154 (9.6\%) | -2 (-0.1\%) |
|  | AN | -150 (-13.2\%) | -1 (-0.1\%) |
|  | BN | -96 (-14.4\%) | -1 (-0.1\%) |
|  | D | -82 (-18.4\%) | 0 (0\%) |
|  | C | -40 (-12.1\%) | -4 (-1.3\%) |
|  | All | -20 (-2.2\%) | -2 (-0.2\%) |
| JUL | W | 16 (1.5\%) | 0 (0\%) |
|  | AN | -35 (-7.2\%) | 0 (0\%) |
|  | BN | -25 (-5.5\%) | 0 (0\%) |
|  | D | -38 (-9.7\%) | 0 (0.1\%) |
|  | C | -25 (-7.5\%) | 1 (0.3\%) |
|  | All | -17 (-2.8\%) | 0 (0\%) |


| Alternative 2A: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | $\mathbf{W Y T}^{\text {b }}$ | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -212 (-22.8\%) | 0 (0\%) |
|  | AN | -22 (-4.6\%) | 0 (0\%) |
|  | BN | -4 (-1\%) | 0 (0\%) |
|  | D | -5 (-1.2\%) | 0 (0\%) |
|  | C | -2 (-0.6\%) | 1 (0.4\%) |
|  | All | -68 (-12.2\%) | 0 (0.1\%) |
| SEP | W | -177 (-17\%) | 0 (0\%) |
|  | AN | -28 (-5.6\%) | 0 (0\%) |
|  | BN | -10 (-2.4\%) | 0 (0\%) |
|  | D | -5 (-1.3\%) | 0 (0\%) |
|  | C | 10 (3\%) | 17 (5.5\%) |
|  | All | -58 (-9.7\%) | 3 (0.6\%) |
| OCT | W | -52 (-5.8\%) | 0 (0.1\%) |
|  | AN | -48 (-5.5\%) | 2 (0.3\%) |
|  | BN | -59 (-6.5\%) | 0 (0\%) |
|  | D | -59 (-6\%) | 0 (0\%) |
|  | C | -80 (-11.6\%) | -3 (-0.5\%) |
|  | All | -59 (-6.8\%) | 0 (0\%) |
| NOV | W | -18 (-4.3\%) | 0 (0\%) |
|  | AN | -56 (-9.7\%) | 0 (0\%) |
|  | BN | -8 (-2.3\%) | 0 (0\%) |
|  | D | -23 (-6.7\%) | 0 (0\%) |
|  | C | -16 (-5.1\%) | 0 (0\%) |
|  | All | -24 (-5.9\%) | 0 (0\%) |
| DEC | W | -74 (-14.4\%) | 10 (2.2\%) |
|  | AN | -25 (-3.5\%) | 0 (0\%) |
|  | BN | 23 (6.8\%) | 0 (0\%) |
|  | D | -23 (-7.3\%) | 0 (0\%) |
|  | C | -16 (-5.7\%) | 0 (0\%) |
|  | All | -30 (-6.6\%) | 3 (0.7\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
${ }^{\text {b }}$ Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.2.2 In Delta

## 11C.2.2.1 Sacramento River Downstream of North Delta Diversion Facility

Table 25. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 2A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 50,961 | 52,878 | 40,419 |
|  | AN | 39,863 | 40,484 | 30,852 |
|  | BN | 23,781 | 22,653 | 17,663 |
|  | D | 17,444 | 17,451 | 14,801 |
|  | C | 14,281 | 15,073 | 13,442 |
|  | All | 31,971 | 32,595 | 25,562 |
| FEB | W | 57,314 | 59,847 | 46,712 |
|  | AN | 45,676 | 47,786 | 36,520 |
|  | BN | 31,934 | 31,592 | 23,503 |
|  | D | 21,202 | 21,107 | 17,208 |
|  | C | 14,708 | 14,291 | 12,905 |
|  | All | 37,116 | 38,087 | 29,834 |
| MAR | W | 49,416 | 50,993 | 38,511 |
|  | AN | 44,495 | 45,088 | 32,919 |
|  | BN | 24,489 | 22,915 | 15,997 |
|  | D | 20,656 | 20,650 | 15,698 |
|  | C | 13,245 | 13,137 | 11,938 |
|  | All | 32,834 | 33,134 | 24,952 |
| APR | W | 37,809 | 37,543 | 26,975 |
|  | AN | 25,979 | 24,931 | 16,667 |
|  | BN | 17,752 | 17,128 | 13,920 |
|  | D | 12,990 | 12,904 | 11,935 |
|  | C | 10,229 | 10,365 | 9,880 |
|  | All | 23,169 | 22,826 | 17,434 |
| MAY | W | 31,948 | 24,500 | 17,350 |
|  | AN | 21,021 | 18,657 | 14,639 |
|  | BN | 14,227 | 12,394 | 12,188 |
|  | D | 10,959 | 11,427 | 11,691 |
|  | C | 7,749 | 8,011 | 7,612 |
|  | All | 19,175 | 16,295 | 13,404 |
| JUN | W | 23,900 | 18,603 | 14,262 |
|  | AN | 16,309 | 16,051 | 13,581 |
|  | BN | 13,576 | 13,898 | 13,028 |
|  | D | 12,222 | 12,656 | 11,879 |
|  | C | 9,884 | 10,123 | 9,507 |
|  | All | 16,412 | 14,880 | 12,733 |


| Alternative 2A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JUL | W | 19,876 | 21,425 | 16,241 |
|  | AN | 21,574 | 22,727 | 18,516 |
|  | BN | 20,953 | 20,513 | 16,620 |
|  | D | 19,272 | 18,957 | 13,125 |
|  | C | 15,397 | 13,767 | 10,805 |
|  | All | 19,520 | 19,797 | 15,159 |
| AUG | W | 15,816 | 16,064 | 9,536 |
|  | AN | 15,877 | 17,491 | 11,496 |
|  | BN | 15,643 | 16,232 | 11,431 |
|  | D | 16,965 | 14,351 | 10,382 |
|  | C | 10,095 | 8,996 | 8,527 |
|  | All | 15,210 | 14,891 | 10,184 |
| SEP | W | 18,254 | 27,212 | 19,649 |
|  | AN | 13,198 | 21,006 | 13,394 |
|  | BN | 12,427 | 12,306 | 8,434 |
|  | D | 12,155 | 8,620 | 8,621 |
|  | C | 8,485 | 7,292 | 8,497 |
|  | All | 13,751 | 16,763 | 12,821 |
| OCT | W | 13,505 | 13,277 | 10,130 |
|  | AN | 11,118 | 11,864 | 10,490 |
|  | BN | 11,557 | 12,124 | 9,995 |
|  | D | 10,279 | 10,487 | 9,611 |
|  | C | 10,073 | 9,964 | 10,078 |
|  | All | 11,613 | 11,776 | 10,038 |
| NOV | W | 19,447 | 19,285 | 13,973 |
|  | AN | 15,309 | 15,925 | 11,369 |
|  | BN | 12,574 | 13,037 | 9,556 |
|  | D | 12,868 | 11,914 | 9,210 |
|  | C | 9,633 | 9,295 | 8,308 |
|  | All | 14,788 | 14,647 | 10,963 |
| DEC | W | 39,708 | 37,022 | 29,862 |
|  | AN | 21,663 | 22,629 | 19,798 |
|  | BN | 16,678 | 16,692 | 15,555 |
|  | D | 15,442 | 15,159 | 13,998 |
|  | C | 11,816 | 10,632 | 10,776 |
|  | All | 23,727 | 22,784 | 19,671 |

Table 26. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 2A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | -10,542 (-20.7\%) | -12,459 (-23.6\%) |
|  | AN | -9,011 (-22.6\%) | -9,632 (-23.8\%) |
|  | BN | -6,118 (-25.7\%) | -4,990 (-22\%) |
|  | D | -2,643 (-15.1\%) | -2,650 (-15.2\%) |
|  | C | -839 (-5.9\%) | -1,631 (-10.8\%) |
|  | All | -6,409 (-20\%) | -7,033 (-21.6\%) |
| FEB | W | -10,602 (-18.5\%) | -13,135 (-21.9\%) |
|  | AN | -9,156 (-20\%) | -11,266 (-23.6\%) |
|  | BN | -8,431 (-26.4\%) | -8,089 (-25.6\%) |
|  | D | -3,994 (-18.8\%) | -3,899 (-18.5\%) |
|  | C | -1,803 (-12.3\%) | -1,386 (-9.7\%) |
|  | All | -7,282 (-19.6\%) | -8,253 (-21.7\%) |
| MAR | W | -10,905 (-22.1\%) | -12,482 (-24.5\%) |
|  | AN | -11,576 (-26\%) | -12,169 (-27\%) |
|  | BN | -8,492 (-34.7\%) | -6,918 (-30.2\%) |
|  | D | -4,958 (-24\%) | -4,952 (-24\%) |
|  | C | -1,307 (-9.9\%) | -1,199 (-9.1\%) |
|  | All | -7,882 (-24\%) | -8,182 (-24.7\%) |
| APR | W | -10,834 (-28.7\%) | -10,568 (-28.1\%) |
|  | AN | -9,312 (-35.8\%) | -8,264 (-33.1\%) |
|  | BN | -3,832 (-21.6\%) | -3,208 (-18.7\%) |
|  | D | -1,055 (-8.1\%) | -969 (-7.5\%) |
|  | C | -349 (-3.4\%) | -485 (-4.7\%) |
|  | All | -5,735 (-24.8\%) | -5,392 (-23.6\%) |
| MAY | W | -14,598 (-45.7\%) | -7,150 (-29.2\%) |
|  | AN | -6,382 (-30.4\%) | -4,018 (-21.5\%) |
|  | BN | -2,039 (-14.3\%) | -206 (-1.7\%) |
|  | D | 732 (6.7\%) | 264 (2.3\%) |
|  | C | -137 (-1.8\%) | -399 (-5\%) |
|  | All | -5,771 (-30.1\%) | -2,891 (-17.7\%) |
| JUN | W | -9,638 (-40.3\%) | -4,341 (-23.3\%) |
|  | AN | -2,728 (-16.7\%) | -2,470 (-15.4\%) |
|  | BN | -548 (-4\%) | -870 (-6.3\%) |
|  | D | -343 (-2.8\%) | -777 (-6.1\%) |
|  | C | -377 (-3.8\%) | -616 (-6.1\%) |
|  | All | -3,679 (-22.4\%) | -2,147 (-14.4\%) |
| JUL | W | -3,635 (-18.3\%) | -5,184 (-24.2\%) |
|  | AN | -3,058 (-14.2\%) | -4,211 (-18.5\%) |
|  | BN | -4,333 (-20.7\%) | -3,893 (-19\%) |
|  | D | -6,147 (-31.9\%) | -5,832 (-30.8\%) |
|  | C | -4,592 (-29.8\%) | -2,962 (-21.5\%) |
|  | All | -4,361 (-22.3\%) | -4,638 (-23.4\%) |


| Alternative 2A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -6,280 (-39.7\%) | -6,528 (-40.6\%) |
|  | AN | -4,381 (-27.6\%) | -5,995 (-34.3\%) |
|  | BN | -4,212 (-26.9\%) | -4,801 (-29.6\%) |
|  | D | -6,583 (-38.8\%) | -3,969 (-27.7\%) |
|  | C | -1,568 (-15.5\%) | -469 (-5.2\%) |
|  | All | -5,026 (-33\%) | -4,707 (-31.6\%) |
| SEP | W | 1,395 (7.6\%) | -7,563 (-27.8\%) |
|  | AN | 196 (1.5\%) | -7,612 (-36.2\%) |
|  | BN | -3,993 (-32.1\%) | -3,872 (-31.5\%) |
|  | D | -3,534 (-29.1\%) | 1 (0\%) |
|  | C | 12 (0.1\%) | 1,205 (16.5\%) |
|  | All | -930 (-6.8\%) | -3,942 (-23.5\%) |
| OCT | W | -3,375 (-25\%) | -3,147 (-23.7\%) |
|  | AN | -628 (-5.6\%) | -1,374 (-11.6\%) |
|  | BN | -1,562 (-13.5\%) | -2,129 (-17.6\%) |
|  | D | -668 (-6.5\%) | -876 (-8.4\%) |
|  | C | 5 (0\%) | 114 (1.1\%) |
|  | All | -1,575 (-13.6\%) | -1,738 (-14.8\%) |
| NOV | W | -5,474 (-28.1\%) | -5,312 (-27.5\%) |
|  | AN | -3,940 (-25.7\%) | -4,556 (-28.6\%) |
|  | BN | -3,018 (-24\%) | -3,481 (-26.7\%) |
|  | D | -3,658 (-28.4\%) | -2,704 (-22.7\%) |
|  | C | -1,325 (-13.8\%) | -987 (-10.6\%) |
|  | All | -3,825 (-25.9\%) | -3,684 (-25.2\%) |
| DEC | W | -9,846 (-24.8\%) | -7,160 (-19.3\%) |
|  | AN | -1,865 (-8.6\%) | -2,831 (-12.5\%) |
|  | BN | -1,123 (-6.7\%) | -1,137 (-6.8\%) |
|  | D | -1,444 (-9.4\%) | -1,161 (-7.7\%) |
|  | C | -1,040 (-8.8\%) | 144 (1.4\%) |
|  | All | -4,056 (-17.1\%) | -3,113 (-13.7\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.2.2.2 Sacramento River at Rio Vista

Table 27. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 2A: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 71,111 | 78,551 | 68,716 |
|  | AN | 41,963 | 42,919 | 36,090 |
|  | BN | 20,943 | 19,991 | 17,296 |
|  | D | 14,895 | 14,927 | 13,237 |
|  | C | 11,853 | 12,601 | 11,589 |
|  | All | 37,268 | 39,721 | 34,624 |
| FEB | W | 80,958 | 89,989 | 80,937 |
|  | AN | 52,542 | 55,363 | 48,579 |
|  | BN | 30,159 | 29,442 | 24,564 |
|  | D | 19,320 | 19,422 | 16,954 |
|  | C | 12,247 | 11,956 | 11,220 |
|  | All | 44,541 | 47,675 | 42,330 |
| MAR | W | 63,763 | 68,663 | 59,808 |
|  | AN | 46,750 | 48,513 | 40,734 |
|  | BN | 20,980 | 19,562 | 14,764 |
|  | D | 17,656 | 17,679 | 14,510 |
|  | C | 10,710 | 10,684 | 10,049 |
|  | All | 36,084 | 37,655 | 32,101 |
| APR | W | 38,214 | 38,422 | 31,360 |
|  | AN | 22,726 | 21,855 | 16,132 |
|  | BN | 14,652 | 14,207 | 11,952 |
|  | D | 10,331 | 10,299 | 9,676 |
|  | C | 7,665 | 7,816 | 7,499 |
|  | All | 21,333 | 21,211 | 17,566 |
| MAY | W | 26,933 | 20,046 | 13,940 |
|  | AN | 17,008 | 14,948 | 11,545 |
|  | BN | 10,924 | 9,355 | 9,257 |
|  | D | 8,135 | 8,564 | 8,883 |
|  | C | 5,305 | 5,554 | 5,304 |
|  | All | 15,456 | 12,833 | 10,416 |
| JUN | W | 16,557 | 11,418 | 7,896 |
|  | AN | 9,887 | 9,220 | 7,078 |
|  | BN | 7,001 | 7,241 | 6,681 |
|  | D | 6,020 | 6,335 | 5,848 |
|  | C | 4,333 | 4,513 | 4,163 |
|  | All | 9,847 | 8,257 | 6,573 |
| JUL | W | 11,125 | 12,181 | 8,299 |
|  | AN | 12,128 | 12,927 | 9,931 |
|  | BN | 11,686 | 11,357 | 8,620 |
|  | D | 10,523 | 10,307 | 6,498 |
|  | C | 7,736 | 6,596 | 4,574 |
|  | All | 10,739 | 10,921 | 7,652 |


| Alternative 2A: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 8,507 | 8,650 | 4,041 |
|  | AN | 8,538 | 9,648 | 5,391 |
|  | BN | 8,371 | 8,753 | 5,371 |
|  | D | 9,264 | 7,417 | 4,645 |
|  | C | 4,390 | 3,615 | 3,415 |
|  | All | 8,052 | 7,806 | 4,507 |
| SEP | W | 10,767 | 21,199 | 11,639 |
|  | AN | 6,788 | 12,832 | 7,001 |
|  | BN | 6,283 | 6,197 | 3,539 |
|  | D | 6,116 | 3,644 | 3,701 |
|  | C | 3,588 | 2,996 | 3,720 |
|  | All | 7,348 | 10,896 | 6,676 |
| OCT | W | 8,718 | 8,287 | 5,676 |
|  | AN | 6,183 | 7,207 | 5,943 |
|  | BN | 6,258 | 6,976 | 5,632 |
|  | D | 5,312 | 5,727 | 5,274 |
|  | C | 5,215 | 4,969 | 5,496 |
|  | All | 6,667 | 6,858 | 5,593 |
| NOV | W | 15,829 | 15,879 | 11,172 |
|  | AN | 11,333 | 12,156 | 8,096 |
|  | BN | 8,184 | 9,071 | 5,946 |
|  | D | 8,733 | 8,061 | 5,728 |
|  | C | 5,473 | 5,565 | 4,674 |
|  | All | 10,793 | 10,946 | 7,684 |
| DEC | W | 43,367 | 40,431 | 36,394 |
|  | AN | 19,040 | 19,936 | 18,003 |
|  | BN | 13,987 | 14,049 | 13,530 |
|  | D | 11,999 | 11,687 | 11,101 |
|  | C | 8,131 | 7,186 | 7,660 |
|  | All | 22,749 | 21,753 | 20,042 |

## 1

Table 28. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 2A: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | -2,395 (-3.4\%) | -9,835 (-12.5\%) |
|  | AN | -5,873 (-14\%) | -6,829 (-15.9\%) |
|  | BN | -3,647 (-17.4\%) | -2,695 (-13.5\%) |
|  | D | -1,658 (-11.1\%) | -1,690 (-11.3\%) |
|  | C | -264 (-2.2\%) | -1,012 (-8\%) |
|  | All | -2,644 (-7.1\%) | -5,097 (-12.8\%) |
| FEB | W | -21 (0\%) | -9,052 (-10.1\%) |
|  | AN | -3,963 (-7.5\%) | -6,783 (-12.3\%) |
|  | BN | -5,595 (-18.6\%) | -4,878 (-16.6\%) |
|  | D | -2,365 (-12.2\%) | -2,468 (-12.7\%) |
|  | C | -1,027 (-8.4\%) | -736 (-6.2\%) |
|  | All | -2,211 (-5\%) | -5,345 (-11.2\%) |
| MAR | W | -3,955 (-6.2\%) | -8,854 (-12.9\%) |
|  | AN | -6,017 (-12.9\%) | -7,779 (-16\%) |
|  | BN | -6,216 (-29.6\%) | -4,798 (-24.5\%) |
|  | D | -3,146 (-17.8\%) | -3,169 (-17.9\%) |
|  | C | -661 (-6.2\%) | -635 (-5.9\%) |
|  | All | -3,983 (-11\%) | -5,554 (-14.7\%) |
| APR | W | -6,854 (-17.9\%) | -7,062 (-18.4\%) |
|  | AN | -6,594 (-29\%) | -5,722 (-26.2\%) |
|  | BN | -2,700 (-18.4\%) | -2,255 (-15.9\%) |
|  | D | -655 (-6.3\%) | -622 (-6\%) |
|  | C | -166 (-2.2\%) | -318 (-4.1\%) |
|  | All | -3,767 (-17.7\%) | -3,645 (-17.2\%) |
| MAY | W | -12,993 (-48.2\%) | -6,106 (-30.5\%) |
|  | AN | -5,463 (-32.1\%) | -3,403 (-22.8\%) |
|  | BN | -1,667 (-15.3\%) | -98 (-1\%) |
|  | D | 748 (9.2\%) | 319 (3.7\%) |
|  | C | -1 (0\%) | -250 (-4.5\%) |
|  | All | -5,039 (-32.6\%) | -2,417 (-18.8\%) |
| JUN | W | -8,661 (-52.3\%) | -3,522 (-30.8\%) |
|  | AN | -2,809 (-28.4\%) | -2,142 (-23.2\%) |
|  | BN | -320 (-4.6\%) | -560 (-7.7\%) |
|  | D | -172 (-2.9\%) | -488 (-7.7\%) |
|  | C | -169 (-3.9\%) | -350 (-7.7\%) |
|  | All | -3,275 (-33.3\%) | -1,684 (-20.4\%) |
| JUL | W | -2,826 (-25.4\%) | -3,882 (-31.9\%) |
|  | AN | -2,197 (-18.1\%) | -2,996 (-23.2\%) |
|  | BN | -3,066 (-26.2\%) | -2,737 (-24.1\%) |
|  | D | -4,025 (-38.3\%) | -3,809 (-37\%) |
|  | C | -3,162 (-40.9\%) | -2,023 (-30.7\%) |
|  | All | -3,087 (-28.7\%) | -3,269 (-29.9\%) |


| Alternative 2A: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -4,466 (-52.5\%) | -4,609 (-53.3\%) |
|  | AN | -3,147 (-36.9\%) | -4,257 (-44.1\%) |
|  | BN | -3,000 (-35.8\%) | -3,382 (-38.6\%) |
|  | D | -4,620 (-49.9\%) | -2,772 (-37.4\%) |
|  | C | -975 (-22.2\%) | -200 (-5.5\%) |
|  | All | -3,546 (-44\%) | -3,299 (-42.3\%) |
| SEP | W | 872 (8.1\%) | -9,560 (-45.1\%) |
|  | AN | 213 (3.1\%) | -5,831 (-45.4\%) |
|  | BN | -2,744 (-43.7\%) | -2,658 (-42.9\%) |
|  | D | -2,415 (-39.5\%) | 57 (1.6\%) |
|  | C | 132 (3.7\%) | 724 (24.2\%) |
|  | All | -672 (-9.1\%) | -4,220 (-38.7\%) |
| OCT | W | -3,042 (-34.9\%) | -2,611 (-31.5\%) |
|  | AN | -240 (-3.9\%) | -1,265 (-17.5\%) |
|  | BN | -626 (-10\%) | -1,344 (-19.3\%) |
|  | D | -38 (-0.7\%) | -453 (-7.9\%) |
|  | C | 281 (5.4\%) | 527 (10.6\%) |
|  | All | -1,074 (-16.1\%) | -1,265 (-18.4\%) |
| NOV | W | -4,657 (-29.4\%) | -4,707 (-29.6\%) |
|  | AN | -3,236 (-28.6\%) | -4,059 (-33.4\%) |
|  | BN | -2,238 (-27.3\%) | -3,125 (-34.4\%) |
|  | D | -3,004 (-34.4\%) | -2,332 (-28.9\%) |
|  | C | -799 (-14.6\%) | -891 (-16\%) |
|  | All | -3,109 (-28.8\%) | -3,262 (-29.8\%) |
| DEC | W | -6,973 (-16.1\%) | -4,037 (-10\%) |
|  | AN | -1,037 (-5.4\%) | -1,933 (-9.7\%) |
|  | BN | -458 (-3.3\%) | -520 (-3.7\%) |
|  | D | -898 (-7.5\%) | -586 (-5\%) |
|  | C | -472 (-5.8\%) | 474 (6.6\%) |
|  | All | -2,707 (-11.9\%) | -1,711 (-7.9\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.2.2.3 OMR Flow (Old and Middle Rivers)

Table 29. Mean Monthly Flows (cfs) for Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 2A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | -1,820 | -1,606 | 3,921 |
|  | AN | -3,553 | -3,446 | 370 |
|  | BN | -4,240 | -3,803 | -2,333 |
|  | D | -4,664 | -4,675 | -2,729 |
|  | C | -4,130 | -3,684 | -2,328 |
|  | All | -3,449 | -3,228 | -40 |
| FEB | W | -2,365 | -2,293 | 5,529 |
|  | AN | -3,274 | -3,147 | 1,323 |
|  | BN | -3,437 | -3,290 | -1,215 |
|  | D | -3,986 | -3,502 | -2,863 |
|  | C | -3,191 | -3,047 | -2,746 |
|  | All | -3,158 | -2,964 | 709 |
| MAR | W | -1,600 | -1,454 | 6,044 |
|  | AN | -4,251 | -3,815 | 1,821 |
|  | BN | -4,147 | -3,834 | -1,752 |
|  | D | -2,852 | -2,614 | -2,335 |
|  | C | -2,010 | -1,636 | -1,652 |
|  | All | -2,758 | -2,487 | 1,129 |
| APR | W | 2,431 | 2,415 | 3,148 |
|  | AN | 1,058 | 787 | 618 |
|  | BN | 677 | 214 | -650 |
|  | D | -268 | -615 | -1,216 |
|  | C | -950 | -845 | -1,196 |
|  | All | 843 | 659 | 536 |
| MAY | W | 1,651 | 1,555 | 2,741 |
|  | AN | 509 | 396 | 304 |
|  | BN | 272 | -237 | -681 |
|  | D | -647 | -1,010 | -1,231 |
|  | C | -1,020 | -911 | -1,007 |
|  | All | 353 | 155 | 380 |
| JUN | W | -4,164 | -4,369 | -818 |
|  | AN | -4,761 | -4,454 | -2,420 |
|  | BN | -4,154 | -3,420 | -2,241 |
|  | D | -3,301 | -2,592 | -1,974 |
|  | C | -2,250 | -2,143 | -1,994 |
|  | All | -3,780 | -3,504 | -1,721 |
| JUL | W | -8,959 | -8,699 | -5,831 |
|  | AN | -9,919 | -7,962 | -6,768 |
|  | BN | -10,853 | -9,942 | -7,235 |
|  | D | -10,891 | -9,505 | -5,150 |
|  | C | -8,058 | -5,234 | -2,774 |
|  | All | -9,715 | -8,473 | -5,611 |


| Alternative 2A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | -10,062 | -10,518 | -4,636 |
|  | AN | -10,348 | -10,985 | -5,883 |
|  | BN | -10,044 | -9,374 | -5,765 |
|  | D | -10,122 | -7,259 | -4,334 |
|  | C | -4,384 | -3,192 | -3,173 |
|  | All | -9,283 | -8,604 | -4,731 |
| SEP | W | -9,317 | -7,580 | 918 |
|  | AN | -9,163 | -9,002 | -495 |
|  | BN | -8,575 | -8,392 | -4,639 |
|  | D | -8,081 | -5,165 | -4,068 |
|  | C | -4,807 | -3,966 | -2,099 |
|  | All | -8,236 | -6,868 | -1,773 |
| OCT | W | -8,347 | -5,049 | -1,100 |
|  | AN | -7,643 | -3,648 | -1,383 |
|  | BN | -7,804 | -4,793 | -1,045 |
|  | D | -6,961 | -4,103 | -1,675 |
|  | C | -6,440 | -3,920 | -1,871 |
|  | All | -7,568 | -4,427 | -1,371 |
| NOV | W | -8,902 | -6,527 | -1,092 |
|  | AN | -7,264 | -6,003 | -1,929 |
|  | BN | -7,997 | -5,542 | -2,253 |
|  | D | -7,136 | -5,007 | -2,098 |
|  | C | -5,294 | -4,389 | -2,688 |
|  | All | -7,592 | -5,636 | -1,867 |
| DEC | W | -5,542 | -5,591 | -2,306 |
|  | AN | -6,987 | -7,050 | -5,122 |
|  | BN | -7,304 | -7,040 | -6,057 |
|  | D | -7,214 | -7,006 | -5,827 |
|  | C | -6,166 | -4,173 | -4,884 |
|  | All | -6,513 | -6,155 | -4,509 |

Table 30. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 2A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 5,741 (315.5\%) | 5,527 (344.2\%) |
|  | AN | 3,922 (110.4\%) | 3,816 (110.7\%) |
|  | BN | 1,907 (45\%) | 1,470 (38.7\%) |
|  | D | 1,935 (41.5\%) | 1,947 (41.6\%) |
|  | C | 1,802 (43.6\%) | 1,357 (36.8\%) |
|  | All | 3,408 (98.8\%) | 3,188 (98.8\%) |
| FEB | W | 7,894 (333.8\%) | 7,822 (341.1\%) |
|  | AN | 4,597 (140.4\%) | 4,469 (142\%) |
|  | BN | 2,222 (64.6\%) | 2,075 (63.1\%) |
|  | D | 1,122 (28.2\%) | 639 (18.2\%) |
|  | C | 445 (13.9\%) | 301 (9.9\%) |
|  | All | 3,866 (122.4\%) | 3,673 (123.9\%) |
| MAR | W | 7,644 (477.7\%) | 7,497 (515.8\%) |
|  | AN | 6,072 (142.8\%) | 5,635 (147.7\%) |
|  | BN | 2,395 (57.8\%) | 2,083 (54.3\%) |
|  | D | 518 (18.1\%) | 279 (10.7\%) |
|  | C | 358 (17.8\%) | -16 (-1\%) |
|  | All | 3,887 (141\%) | 3,616 (145.4\%) |
| APR | W | 717 (29.5\%) | 733 (30.4\%) |
|  | AN | -440 (-41.6\%) | -169 (-21.5\%) |
|  | BN | -1,327 (-196.1\%) | -864 (-404\%) |
|  | D | -948 (-354\%) | -601 (-97.7\%) |
|  | C | -246 (-25.9\%) | -351 (-41.5\%) |
|  | All | -308 (-36.5\%) | -123 (-18.7\%) |
| MAY | W | 1,090 (66\%) | 1,186 (76.3\%) |
|  | AN | -205 (-40.2\%) | -91 (-23.1\%) |
|  | BN | -952 (-350.6\%) | -443 (-186.7\%) |
|  | D | -585 (-90.4\%) | -221 (-21.9\%) |
|  | C | 13 (1.3\%) | -95 (-10.5\%) |
|  | All | 27 (7.6\%) | 224 (144.4\%) |
| JUN | W | 3,346 (80.4\%) | 3,552 (81.3\%) |
|  | AN | 2,341 (49.2\%) | 2,034 (45.7\%) |
|  | BN | 1,913 (46\%) | 1,178 (34.5\%) |
|  | D | 1,326 (40.2\%) | 617 (23.8\%) |
|  | C | 255 (11.4\%) | 148 (6.9\%) |
|  | All | 2,059 (54.5\%) | 1,782 (50.9\%) |
| JUL | W | 3,128 (34.9\%) | 2,868 (33\%) |
|  | AN | 3,151 (31.8\%) | 1,195 (15\%) |
|  | BN | 3,617 (33.3\%) | 2,707 (27.2\%) |
|  | D | 5,741 (52.7\%) | 4,355 (45.8\%) |
|  | C | 5,284 (65.6\%) | 2,460 (47\%) |
|  | All | 4,104 (42.2\%) | 2,862 (33.8\%) |


| Alternative 2A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | 5,426 (53.9\%) | 5,882 (55.9\%) |
|  | AN | 4,466 (43.2\%) | 5,102 (46.4\%) |
|  | BN | 4,280 (42.6\%) | 3,609 (38.5\%) |
|  | D | 5,788 (57.2\%) | 2,926 (40.3\%) |
|  | C | 1,211 (27.6\%) | 18 (0.6\%) |
|  | All | 4,553 (49\%) | 3,873 (45\%) |
| SEP | W | 10,235 (109.9\%) | 8,499 (112.1\%) |
|  | AN | 8,668 (94.6\%) | 8,507 (94.5\%) |
|  | BN | 3,937 (45.9\%) | 3,753 (44.7\%) |
|  | D | 4,014 (49.7\%) | 1,097 (21.2\%) |
|  | C | 2,708 (56.3\%) | 1,867 (47.1\%) |
|  | All | 6,463 (78.5\%) | 5,095 (74.2\%) |
| OCT | W | 7,246 (86.8\%) | 3,948 (78.2\%) |
|  | AN | 6,260 (81.9\%) | 2,265 (62.1\%) |
|  | BN | 6,759 (86.6\%) | 3,748 (78.2\%) |
|  | D | 5,286 (75.9\%) | 2,429 (59.2\%) |
|  | C | 4,570 (71\%) | 2,050 (52.3\%) |
|  | All | 6,197 (81.9\%) | 3,056 (69\%) |
| NOV | W | 7,810 (87.7\%) | 5,435 (83.3\%) |
|  | AN | 5,335 (73.4\%) | 4,074 (67.9\%) |
|  | BN | 5,743 (71.8\%) | 3,289 (59.3\%) |
|  | D | 5,038 (70.6\%) | 2,909 (58.1\%) |
|  | C | 2,606 (49.2\%) | 1,702 (38.8\%) |
|  | All | 5,725 (75.4\%) | 3,769 (66.9\%) |
| DEC | W | 3,236 (58.4\%) | 3,286 (58.8\%) |
|  | AN | 1,865 (26.7\%) | 1,928 (27.3\%) |
|  | BN | 1,246 (17.1\%) | 983 (14\%) |
|  | D | 1,387 (19.2\%) | 1,179 (16.8\%) |
|  | C | 1,282 (20.8\%) | -710 (-17\%) |
|  | All | 2,004 (30.8\%) | 1,646 (26.7\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.2.2.4 Delta Outflow

Table 31. Mean Monthly Flows (cfs) for Model Scenarios at the Delta Outflow, Year-Round

| Alternative 2A: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 85,900 | 94,620 | 89,743 |
|  | AN | 49,448 | 51,100 | 47,604 |
|  | BN | 22,968 | 22,301 | 21,243 |
|  | D | 14,736 | 14,732 | 15,291 |
|  | C | 11,343 | 12,651 | 13,294 |
|  | All | 43,289 | 46,372 | 44,350 |
| FEB | W | 96,835 | 107,085 | 105,519 |
|  | AN | 62,321 | 65,873 | 63,432 |
|  | BN | 36,766 | 36,084 | 33,176 |
|  | D | 20,915 | 21,461 | 19,767 |
|  | C | 12,991 | 12,798 | 12,617 |
|  | All | 52,594 | 56,338 | 54,590 |
| MAR | W | 78,956 | 84,471 | 82,842 |
|  | AN | 54,171 | 56,737 | 54,465 |
|  | BN | 24,029 | 22,467 | 19,914 |
|  | D | 19,880 | 19,985 | 16,996 |
|  | C | 11,911 | 12,215 | 11,806 |
|  | All | 43,172 | 45,097 | 43,096 |
| APR | W | 54,394 | 54,562 | 48,560 |
|  | AN | 31,975 | 30,576 | 24,901 |
|  | BN | 21,928 | 20,641 | 18,125 |
|  | D | 14,142 | 13,413 | 12,682 |
|  | C | 9,053 | 9,294 | 8,890 |
|  | All | 30,099 | 29,603 | 26,221 |
| MAY | W | 41,040 | 32,880 | 28,585 |
|  | AN | 24,200 | 21,709 | 18,855 |
|  | BN | 16,299 | 13,596 | 13,896 |
|  | D | 10,487 | 10,375 | 11,047 |
|  | C | 6,000 | 6,286 | 6,263 |
|  | All | 22,517 | 19,121 | 17,537 |
| JUN | W | 23,451 | 15,640 | 15,593 |
|  | AN | 11,801 | 10,676 | 10,806 |
|  | BN | 8,004 | 8,943 | 9,575 |
|  | D | 6,636 | 7,689 | 7,821 |
|  | C | 5,322 | 5,632 | 5,321 |
|  | All | 12,765 | 10,560 | 10,656 |
| JUL | W | 11,441 | 11,407 | 9,277 |
|  | AN | 9,430 | 12,225 | 9,312 |
|  | BN | 7,151 | 7,668 | 6,822 |
|  | D | 5,024 | 6,448 | 5,433 |
|  | C | 4,238 | 5,832 | 5,449 |
|  | All | 7,951 | 8,984 | 7,459 |


| Alternative 2A: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 5,341 | 4,308 | 4,000 |
|  | AN | 4,000 | 4,713 | 4,117 |
|  | BN | 4,000 | 5,129 | 4,255 |
|  | D | 4,829 | 5,348 | 4,571 |
|  | C | 4,077 | 4,433 | 3,989 |
|  | All | 4,618 | 4,754 | 4,184 |
| SEP | W | 9,569 | 20,078 | 21,496 |
|  | AN | 3,672 | 11,581 | 12,799 |
|  | BN | 3,445 | 3,428 | 3,327 |
|  | D | 3,350 | 3,021 | 3,975 |
|  | C | 3,000 | 3,036 | 5,905 |
|  | All | 5,334 | 9,754 | 10,994 |
| OCT | W | 6,487 | 9,520 | 10,423 |
|  | AN | 4,021 | 8,982 | 9,893 |
|  | BN | 4,477 | 8,054 | 9,859 |
|  | D | 4,157 | 7,294 | 8,940 |
|  | C | 4,158 | 6,607 | 8,894 |
|  | All | 4,931 | 8,276 | 9,700 |
| NOV | W | 14,232 | 15,987 | 15,785 |
|  | AN | 9,683 | 11,529 | 10,833 |
|  | BN | 5,864 | 8,681 | 8,258 |
|  | D | 6,943 | 8,052 | 7,949 |
|  | C | 5,045 | 5,725 | 6,032 |
|  | All | 9,193 | 10,844 | 10,628 |
| DEC | W | 48,185 | 45,191 | 43,734 |
|  | AN | 18,014 | 19,119 | 18,954 |
|  | BN | 11,950 | 12,231 | 12,565 |
|  | D | 8,884 | 8,828 | 9,207 |
|  | C | 5,531 | 6,560 | 6,036 |
|  | All | 22,714 | 22,113 | 21,691 |

Table 32. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios at the Delta Outflow, Year-Round

| Alternative 2A: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 3,843 (4.5\%) | -4,877 (-5.2\%) |
|  | AN | -1,844 (-3.7\%) | -3,496 (-6.8\%) |
|  | BN | -1,725 (-7.5\%) | -1,058 (-4.7\%) |
|  | D | 555 (3.8\%) | 559 (3.8\%) |
|  | C | 1,951 (17.2\%) | 643 (5.1\%) |
|  | All | 1,061 (2.5\%) | -2,022 (-4.4\%) |
| FEB | W | 8,684 (9\%) | -1,566 (-1.5\%) |
|  | AN | 1,111 (1.8\%) | -2,441 (-3.7\%) |
|  | BN | -3,590 (-9.8\%) | -2,908 (-8.1\%) |
|  | D | -1,148 (-5.5\%) | -1,694 (-7.9\%) |
|  | C | -374 (-2.9\%) | -181 (-1.4\%) |
|  | All | 1,996 (3.8\%) | -1,748 (-3.1\%) |
| MAR | W | 3,886 (4.9\%) | -1,629 (-1.9\%) |
|  | AN | 294 (0.5\%) | -2,272 (-4\%) |
|  | BN | -4,115 (-17.1\%) | -2,553 (-11.4\%) |
|  | D | -2,884 (-14.5\%) | -2,989 (-15\%) |
|  | C | -105 (-0.9\%) | -409 (-3.3\%) |
|  | All | -76 (-0.2\%) | -2,001 (-4.4\%) |
| APR | W | -5,834 (-10.7\%) | -6,002 (-11\%) |
|  | AN | -7,074 (-22.1\%) | -5,675 (-18.6\%) |
|  | BN | -3,803 (-17.3\%) | -2,516 (-12.2\%) |
|  | D | -1,460 (-10.3\%) | -731 (-5.5\%) |
|  | C | -163 (-1.8\%) | -404 (-4.3\%) |
|  | All | -3,878 (-12.9\%) | -3,382 (-11.4\%) |
| MAY | W | -12,455 (-30.3\%) | -4,295 (-13.1\%) |
|  | AN | -5,345 (-22.1\%) | -2,854 (-13.1\%) |
|  | BN | -2,403 (-14.7\%) | 300 (2.2\%) |
|  | D | 560 (5.3\%) | 672 (6.5\%) |
|  | C | 263 (4.4\%) | -23 (-0.4\%) |
|  | All | -4,980 (-22.1\%) | -1,584 (-8.3\%) |
| JUN | W | -7,858 (-33.5\%) | -47 (-0.3\%) |
|  | AN | -995 (-8.4\%) | 130 (1.2\%) |
|  | BN | 1,571 (19.6\%) | 632 (7.1\%) |
|  | D | 1,185 (17.9\%) | 132 (1.7\%) |
|  | C | -1 (0\%) | -311 (-5.5\%) |
|  | All | -2,109 (-16.5\%) | 96 (0.9\%) |
| JUL | W | -2,164 (-18.9\%) | -2,130 (-18.7\%) |
|  | AN | -118 (-1.3\%) | -2,913 (-23.8\%) |
|  | BN | -329 (-4.6\%) | -846 (-11\%) |
|  | D | 409 (8.1\%) | -1,015 (-15.7\%) |
|  | C | 1,211 (28.6\%) | -383 (-6.6\%) |
|  | All | -492 (-6.2\%) | -1,525 (-17\%) |


| Alternative 2A: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -1,341 (-25.1\%) | -308 (-7.2\%) |
|  | AN | 117 (2.9\%) | -596 (-12.7\%) |
|  | BN | 255 (6.4\%) | -874 (-17\%) |
|  | D | -258 (-5.3\%) | -777 (-14.5\%) |
|  | C | -88 (-2.2\%) | -444 (-10\%) |
|  | All | -434 (-9.4\%) | -570 (-12\%) |
| SEP | W | 11,927 (124.6\%) | 1,418 (7.1\%) |
|  | AN | 9,127 (248.6\%) | 1,218 (10.5\%) |
|  | BN | -118 (-3.4\%) | -101 (-2.9\%) |
|  | D | 625 (18.6\%) | 954 (31.6\%) |
|  | C | 2,905 (96.8\%) | 2,869 (94.5\%) |
|  | All | 5,660 (106.1\%) | 1,240 (12.7\%) |
| OCT | W | 3,936 (60.7\%) | 903 (9.5\%) |
|  | AN | 5,872 (146\%) | 911 (10.1\%) |
|  | BN | 5,382 (120.2\%) | 1,805 (22.4\%) |
|  | D | 4,783 (115\%) | 1,646 (22.6\%) |
|  | C | 4,736 (113.9\%) | 2,287 (34.6\%) |
|  | All | 4,769 (96.7\%) | 1,424 (17.2\%) |
| NOV | W | 1,553 (10.9\%) | -202 (-1.3\%) |
|  | AN | 1,150 (11.9\%) | -696 (-6\%) |
|  | BN | 2,394 (40.8\%) | -423 (-4.9\%) |
|  | D | 1,006 (14.5\%) | -103 (-1.3\%) |
|  | C | 987 (19.6\%) | 307 (5.4\%) |
|  | All | 1,435 (15.6\%) | -216 (-2\%) |
| DEC | W | -4,451 (-9.2\%) | -1,457 (-3.2\%) |
|  | AN | 940 (5.2\%) | -165 (-0.9\%) |
|  | BN | 615 (5.1\%) | 334 (2.7\%) |
|  | D | 323 (3.6\%) | 379 (4.3\%) |
|  | C | 505 (9.1\%) | -524 (-8\%) |
|  | All | -1,023 (-4.5\%) | -422 (-1.9\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.2.2.5 San Joaquin River at Vernalis

Table 33. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 2A: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 9,089 | 9,681 | 9,689 |
|  | AN | 5,447 | 6,011 | 5,968 |
|  | BN | 2,326 | 2,220 | 2,182 |
|  | D | 2,270 | 2,202 | 2,222 |
|  | C | 1,667 | 1,592 | 1,591 |
|  | All | 4,777 | 5,018 | 5,009 |
| FEB | W | 12,750 | 13,191 | 13,181 |
|  | AN | 6,965 | 6,721 | 6,678 |
|  | BN | 2,983 | 2,841 | 2,853 |
|  | D | 2,590 | 2,269 | 2,245 |
|  | C | 2,120 | 1,941 | 1,942 |
|  | All | 6,388 | 6,361 | 6,348 |
| MAR | W | 14,374 | 15,235 | 15,230 |
|  | AN | 6,284 | 6,364 | 6,365 |
|  | BN | 2,949 | 2,476 | 2,476 |
|  | D | 2,479 | 2,146 | 2,146 |
|  | C | 1,813 | 1,688 | 1,688 |
|  | All | 6,648 | 6,763 | 6,762 |
| APR | W | 11,955 | 12,457 | 12,462 |
|  | AN | 6,014 | 6,042 | 6,043 |
|  | BN | 4,490 | 3,922 | 3,923 |
|  | D | 3,656 | 3,112 | 3,112 |
|  | C | 1,983 | 1,796 | 1,796 |
|  | All | 6,351 | 6,291 | 6,292 |
| MAY | W | 12,109 | 12,632 | 12,633 |
|  | AN | 5,381 | 5,092 | 5,092 |
|  | BN | 4,074 | 3,657 | 3,659 |
|  | D | 3,308 | 2,823 | 2,823 |
|  | C | 1,964 | 1,798 | 1,797 |
|  | All | 6,148 | 6,069 | 6,069 |
| JUN | W | 11,058 | 6,820 | 6,820 |
|  | AN | 2,965 | 2,678 | 2,680 |
|  | BN | 2,051 | 1,870 | 1,873 |
|  | D | 1,537 | 1,291 | 1,292 |
|  | C | 1,020 | 956 | 956 |
|  | All | 4,583 | 3,206 | 3,207 |
| JUL | W | 7,654 | 4,345 | 4,348 |
|  | AN | 1,958 | 1,801 | 1,805 |
|  | BN | 1,491 | 1,381 | 1,387 |
|  | D | 1,295 | 1,100 | 1,101 |
|  | C | 898 | 858 | 858 |
|  | All | 3,239 | 2,184 | 2,186 |


| Alternative 2A: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 3,539 | 2,645 | 2,647 |
|  | AN | 2,000 | 1,699 | 1,702 |
|  | BN | 1,460 | 1,375 | 1,379 |
|  | D | 1,375 | 1,225 | 1,226 |
|  | C | 1,007 | 987 | 987 |
|  | All | 2,072 | 1,710 | 1,712 |
| SEP | W | 3,519 | 3,127 | 3,128 |
|  | AN | 2,355 | 2,164 | 2,166 |
|  | BN | 1,829 | 1,748 | 1,750 |
|  | D | 1,796 | 1,643 | 1,643 |
|  | C | 1,402 | 1,378 | 1,379 |
|  | All | 2,338 | 2,144 | 2,145 |
| OCT | W | 2,760 | 2,726 | 2,681 |
|  | AN | 2,745 | 2,595 | 2,595 |
|  | BN | 2,502 | 2,348 | 2,348 |
|  | D | 2,945 | 2,790 | 2,791 |
|  | C | 2,213 | 2,031 | 2,028 |
|  | All | 2,639 | 2,515 | 2,502 |
| NOV | W | 2,534 | 2,411 | 2,415 |
|  | AN | 3,182 | 3,193 | 3,202 |
|  | BN | 2,150 | 1,997 | 1,995 |
|  | D | 2,272 | 2,217 | 2,220 |
|  | C | 1,968 | 1,898 | 1,898 |
|  | All | 2,448 | 2,367 | 2,370 |
| DEC | W | 4,370 | 4,504 | 4,511 |
|  | AN | 4,711 | 4,567 | 4,601 |
|  | BN | 2,182 | 2,065 | 2,062 |
|  | D | 2,129 | 2,166 | 2,153 |
|  | C | 1,729 | 1,694 | 1,681 |
|  | All | 3,219 | 3,211 | 3,214 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 34. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 2A: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 600 (6.6\%) | 8 (0.1\%) |
|  | AN | 521 (9.6\%) | -42 (-0.7\%) |
|  | BN | -144 (-6.2\%) | -38 (-1.7\%) |
|  | D | -48 (-2.1\%) | 21 (0.9\%) |
|  | C | -76 (-4.5\%) | 0 (0\%) |
|  | All | 232 (4.9\%) | -9 (-0.2\%) |
| FEB | W | 431 (3.4\%) | -10 (-0.1\%) |
|  | AN | -286 (-4.1\%) | -43 (-0.6\%) |
|  | BN | -129 (-4.3\%) | 13 (0.4\%) |
|  | D | -345 (-13.3\%) | -24 (-1.1\%) |
|  | C | -178 (-8.4\%) | 1 (0\%) |
|  | All | -40 (-0.6\%) | -13 (-0.2\%) |
| MAR | W | 856 (6\%) | -5 (0\%) |
|  | AN | 80 (1.3\%) | 0 (0\%) |
|  | BN | -473 (-16\%) | 0 (0\%) |
|  | D | -333 (-13.4\%) | 0 (0\%) |
|  | C | -125 (-6.9\%) | 0 (0\%) |
|  | All | 114 (1.7\%) | -1 (0\%) |
| APR | W | 507 (4.2\%) | 5 (0\%) |
|  | AN | 28 (0.5\%) | 0 (0\%) |
|  | BN | -567 (-12.6\%) | 1 (0\%) |
|  | D | -545 (-14.9\%) | 0 (0\%) |
|  | C | -187 (-9.4\%) | 0 (0\%) |
|  | All | -59 (-0.9\%) | 2 (0\%) |
| MAY | W | 524 (4.3\%) | 1 (0\%) |
|  | AN | -289 (-5.4\%) | 0 (0\%) |
|  | BN | -414 (-10.2\%) | 3 (0.1\%) |
|  | D | -485 (-14.7\%) | 1 (0\%) |
|  | C | -168 (-8.5\%) | -1 (-0.1\%) |
|  | All | -78 (-1.3\%) | 1 (0\%) |
| JUN | W | -4,238 (-38.3\%) | 0 (0\%) |
|  | AN | -285 (-9.6\%) | 2 (0.1\%) |
|  | BN | -178 (-8.7\%) | 3 (0.2\%) |
|  | D | -246 (-16\%) | 1 (0.1\%) |
|  | C | -65 (-6.3\%) | 0 (0\%) |
|  | All | -1,376 (-30\%) | 1 (0\%) |
| JUL | W | -3,306 (-43.2\%) | 3 (0.1\%) |
|  | AN | -153 (-7.8\%) | 4 (0.2\%) |
|  | BN | -104 (-7\%) | 6 (0.4\%) |
|  | D | -194 (-15\%) | 1 (0.1\%) |
|  | C | -40 (-4.5\%) | 0 (0\%) |
|  | All | -1,053 (-32.5\%) | 3 (0.1\%) |


| Alternative 2A: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -892 (-25.2\%) | 2 (0.1\%) |
|  | AN | -299 (-14.9\%) | 3 (0.2\%) |
|  | BN | -81 (-5.5\%) | 4 (0.3\%) |
|  | D | -149 (-10.8\%) | 1 (0.1\%) |
|  | C | -20 (-2\%) | 0 (0\%) |
|  | All | -360 (-17.4\%) | 2 (0.1\%) |
| SEP | W | -391 (-11.1\%) | 1 (0\%) |
|  | AN | -189 (-8\%) | 1 (0.1\%) |
|  | BN | -79 (-4.3\%) | 2 (0.1\%) |
|  | D | -153 (-8.5\%) | 0 (0\%) |
|  | C | -23 (-1.7\%) | 1 (0.1\%) |
|  | All | -193 (-8.2\%) | 1 (0.1\%) |
| OCT | W | -79 (-2.8\%) | -45 (-1.6\%) |
|  | AN | -150 (-5.4\%) | 0 (0\%) |
|  | BN | -154 (-6.1\%) | 1 (0\%) |
|  | D | -153 (-5.2\%) | 1 (0\%) |
|  | C | -184 (-8.3\%) | -3 (-0.1\%) |
|  | All | -137 (-5.2\%) | -13 (-0.5\%) |
| NOV | W | -118 (-4.7\%) | 4 (0.2\%) |
|  | AN | 20 (0.6\%) | 9 (0.3\%) |
|  | BN | -155 (-7.2\%) | -1 (-0.1\%) |
|  | D | -52 (-2.3\%) | 2 (0.1\%) |
|  | C | -70 (-3.6\%) | 0 (0\%) |
|  | All | -77 (-3.2\%) | 3 (0.1\%) |
| DEC | W | 140 (3.2\%) | 7 (0.2\%) |
|  | AN | -110 (-2.3\%) | 34 (0.7\%) |
|  | BN | -120 (-5.5\%) | -3 (-0.1\%) |
|  | D | 24 (1.1\%) | -13 (-0.6\%) |
|  | C | -48 (-2.8\%) | -13 (-0.8\%) |
|  | All | -5 (-0.2\%) | 3 (0.1\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.2.2.6 Mokelumne River at the Delta

Table 35. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 2A: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A2A_LLT |
| JAN | W | 3,071 | 3,634 | 3,634 |
|  | AN | 1,707 | 1,876 | 1,876 |
|  | BN | 597 | 617 | 617 |
|  | D | 495 | 493 | 493 |
|  | C | 280 | 281 | 281 |
|  | All | 1,460 | 1,660 | 1,660 |
| FEB | W | 3,290 | 3,781 | 3,781 |
|  | AN | 2,525 | 2,913 | 2,913 |
|  | BN | 1,011 | 1,035 | 1,035 |
|  | D | 695 | 678 | 678 |
|  | C | 426 | 442 | 442 |
|  | All | 1,809 | 2,033 | 2,033 |
| MAR | W | 3,179 | 3,336 | 3,336 |
|  | AN | 1,582 | 1,639 | 1,639 |
|  | BN | 1,181 | 1,140 | 1,140 |
|  | D | 754 | 691 | 691 |
|  | C | 595 | 580 | 580 |
|  | All | 1,662 | 1,700 | 1,700 |
| APR | W | 2,819 | 2,694 | 2,694 |
|  | AN | 1,619 | 1,424 | 1,424 |
|  | BN | 1,243 | 1,068 | 1,068 |
|  | D | 623 | 550 | 550 |
|  | C | 340 | 311 | 311 |
|  | All | 1,503 | 1,384 | 1,384 |
| MAY | W | 3,170 | 2,885 | 2,885 |
|  | AN | 1,439 | 1,179 | 1,179 |
|  | BN | 976 | 812 | 812 |
|  | D | 406 | 333 | 333 |
|  | C | 181 | 170 | 170 |
|  | All | 1,463 | 1,289 | 1,289 |
| JUN | W | 1,755 | 1,415 | 1,415 |
|  | AN | 851 | 631 | 631 |
|  | BN | 471 | 366 | 366 |
|  | D | 93 | 76 | 76 |
|  | C | 52 | 44 | 44 |
|  | All | 779 | 616 | 616 |
| JUL | W | 772 | 469 | 469 |
|  | AN | 347 | 167 | 167 |
|  | BN | 123 | 70 | 70 |
|  | D | 7 | 6 | 6 |
|  | C | 3 | 3 | 3 |
|  | All | 315 | 183 | 183 |


| Alternative 2A: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A2A_LLT |
| AUG | W | 703 | 346 | 346 |
|  | AN | 328 | 216 | 216 |
|  | BN | 112 | 71 | 71 |
|  | D | 4 | 4 | 4 |
|  | C | 2 | 2 | 2 |
|  | All | 289 | 156 | 156 |
| SEP | W | 702 | 497 | 497 |
|  | AN | 333 | 259 | 259 |
|  | BN | 114 | 91 | 91 |
|  | D | 9 | 9 | 9 |
|  | C | 5 | 5 | 5 |
|  | All | 291 | 213 | 213 |
| OCT | W | 161 | 147 | 147 |
|  | AN | 178 | 180 | 180 |
|  | BN | 154 | 144 | 144 |
|  | D | 180 | 160 | 160 |
|  | C | 117 | 123 | 123 |
|  | All | 158 | 150 | 150 |
| NOV | W | 487 | 431 | 431 |
|  | AN | 912 | 855 | 855 |
|  | BN | 347 | 301 | 301 |
|  | D | 380 | 327 | 327 |
|  | C | 195 | 186 | 186 |
|  | All | 474 | 429 | 429 |
| DEC | W | 1,504 | 1,732 | 1,732 |
|  | AN | 1,411 | 1,628 | 1,628 |
|  | BN | 447 | 472 | 472 |
|  | D | 384 | 374 | 374 |
|  | C | 204 | 209 | 209 |
|  | All | 887 | 999 | 999 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 36. Differences ${ }^{a}$ (Percent Differences) between Pairs of Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 2A: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| JAN | W | 563 (18.3\%) | 0 (0\%) |
|  | AN | 169 (9.9\%) | 0 (0\%) |
|  | BN | 21 (3.4\%) | 0 (0\%) |
|  | D | -2 (-0.5\%) | 0 (0\%) |
|  | C | 1 (0.3\%) | 0 (0\%) |
|  | All | 201 (13.8\%) | 0 (0\%) |
| FEB | W | 491 (14.9\%) | 0 (0\%) |
|  | AN | 388 (15.4\%) | 0 (0\%) |
|  | BN | 24 (2.4\%) | 0 (0\%) |
|  | D | -17 (-2.4\%) | 0 (0\%) |
|  | C | 15 (3.5\%) | 0 (0\%) |
|  | All | 223 (12.3\%) | 0 (0\%) |
| MAR | W | 158 (5\%) | 0 (0\%) |
|  | AN | 57 (3.6\%) | 0 (0\%) |
|  | BN | -41 (-3.4\%) | 0 (0\%) |
|  | D | -63 (-8.3\%) | 0 (0\%) |
|  | C | -15 (-2.5\%) | 0 (0\%) |
|  | All | 38 (2.3\%) | 0 (0\%) |
| APR | W | -125 (-4.4\%) | 0 (0\%) |
|  | AN | -194 (-12\%) | 0 (0\%) |
|  | BN | -175 (-14.1\%) | 0 (0\%) |
|  | D | -73 (-11.7\%) | 0 (0\%) |
|  | C | -29 (-8.7\%) | 0 (0\%) |
|  | All | -120 (-8\%) | 0 (0\%) |
| MAY | W | -284 (-9\%) | 0 (0\%) |
|  | AN | -260 (-18.1\%) | 0 (0\%) |
|  | BN | -164 (-16.8\%) | 0 (0\%) |
|  | D | -72 (-17.8\%) | 0 (0\%) |
|  | C | -11 (-6.1\%) | 0 (0\%) |
|  | All | -174 (-11.9\%) | 0 (0\%) |
| JUN | W | -339 (-19.3\%) | 0 (0\%) |
|  | AN | -220 (-25.8\%) | 0 (0\%) |
|  | BN | -105 (-22.3\%) | 0 (0\%) |
|  | D | -17 (-18.8\%) | 0 (0\%) |
|  | C | -8 (-14.7\%) | 0 (0\%) |
|  | All | -163 (-20.9\%) | 0 (0\%) |
| JUL | W | -303 (-39.3\%) | 0 (0\%) |
|  | AN | -180 (-51.8\%) | 0 (0\%) |
|  | BN | -54 (-43.4\%) | 0 (0\%) |
|  | D | 0 (-3.1\%) | 0 (0\%) |
|  | C | 0 (-4.4\%) | 0 (0\%) |
|  | All | -132 (-42\%) | 0 (0\%) |


| Alternative 2A: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | $\mathbf{W Y T}^{\text {b }}$ | EXISTING CONDITIONS vs. A2A_LLT | NAA vs. A2A_LLT |
| AUG | W | -357 (-50.8\%) | 0 (0\%) |
|  | AN | -113 (-34.3\%) | 0 (0\%) |
|  | BN | -41 (-36.5\%) | 0 (0\%) |
|  | D | 0 (-0.5\%) | 0 (0\%) |
|  | C | 0 (-3.1\%) | 0 (0\%) |
|  | All | -133 (-46.1\%) | 0 (0\%) |
| SEP | W | -205 (-29.3\%) | 0 (0\%) |
|  | AN | -74 (-22.2\%) | 0 (0\%) |
|  | BN | -23 (-20.5\%) | 0 (0\%) |
|  | D | -1 (-5.9\%) | 0 (0\%) |
|  | C | 0 (4.6\%) | 0 (0\%) |
|  | All | -78 (-26.9\%) | 0 (0\%) |
| OCT | W | -14 (-8.7\%) | 0 (0\%) |
|  | AN | 2 (1.1\%) | 0 (0\%) |
|  | BN | -10 (-6.6\%) | 0 (0\%) |
|  | D | -20 (-11.1\%) | 0 (0\%) |
|  | C | 6 (4.7\%) | 0 (0\%) |
|  | All | -7 (-4.7\%) | 0 (0\%) |
| NOV | W | -56 (-11.5\%) | 0 (0\%) |
|  | AN | -57 (-6.3\%) | 0 (0\%) |
|  | BN | -46 (-13.2\%) | 0 (0\%) |
|  | D | -53 (-13.9\%) | 0 (0\%) |
|  | C | -9 (-4.6\%) | 0 (0\%) |
|  | All | -45 (-9.5\%) | 0 (0\%) |
| DEC | W | 228 (15.2\%) | 0 (0\%) |
|  | AN | 217 (15.4\%) | 0 (0\%) |
|  | BN | 25 (5.5\%) | 0 (0\%) |
|  | D | -10 (-2.6\%) | 0 (0\%) |
|  | C | 6 (2.9\%) | 0 (0\%) |
|  | All | 113 (12.7\%) | 0 (0\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C. 3 Alternative 3

## 11C.3.1 Upstream

## 11C.3.1.1 Sacramento River at Keswick

Table 1. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 3: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 16,526 | 18,233 | 18,760 |
|  | AN | 8,318 | 8,205 | 8,054 |
|  | BN | 4,502 | 4,184 | 5,344 |
|  | D | 3,996 | 4,096 | 4,237 |
|  | C | 3,490 | 4,238 | 3,689 |
|  | All | 8,614 | 9,215 | 9,509 |
| FEB | W | 18,577 | 20,853 | 21,163 |
|  | AN | 14,409 | 15,297 | 15,935 |
|  | BN | 5,981 | 5,544 | 6,636 |
|  | D | 3,684 | 3,410 | 3,761 |
|  | C | 3,599 | 3,372 | 3,341 |
|  | All | 10,355 | 11,039 | 11,490 |
| MAR | W | 16,200 | 17,065 | 17,207 |
|  | AN | 9,131 | 8,818 | 8,788 |
|  | BN | 5,200 | 4,318 | 4,868 |
|  | D | 3,903 | 3,814 | 3,747 |
|  | C | 3,487 | 3,583 | 3,945 |
|  | All | 8,728 | 8,800 | 8,973 |
| APR | W | 9,418 | 9,131 | 9,089 |
|  | AN | 6,182 | 5,536 | 6,062 |
|  | BN | 5,426 | 5,009 | 5,684 |
|  | D | 5,803 | 5,533 | 5,886 |
|  | C | 6,472 | 6,550 | 6,709 |
|  | All | 7,038 | 6,733 | 7,013 |
| MAY | W | 9,508 | 7,149 | 7,824 |
|  | AN | 7,709 | 7,783 | 8,823 |
|  | BN | 7,193 | 6,272 | 7,481 |
|  | D | 7,349 | 7,681 | 8,971 |
|  | C | 6,715 | 7,316 | 7,567 |
|  | All | 7,967 | 7,233 | 8,126 |
| JUN | W | 10,375 | 10,274 | 11,605 |
|  | AN | 11,147 | 12,032 | 13,622 |
|  | BN | 10,758 | 10,947 | 11,535 |
|  | D | 11,224 | 11,898 | 12,202 |
|  | C | 10,392 | 11,350 | 11,829 |
|  | All | 10,742 | 11,160 | 12,052 |


| Alternative 3: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JUL | W | 12,779 | 14,098 | 14,236 |
|  | AN | 14,056 | 15,098 | 14,721 |
|  | BN | 12,965 | 13,177 | 12,706 |
|  | D | 13,302 | 13,727 | 12,516 |
|  | C | 12,849 | 11,935 | 11,459 |
|  | All | 13,123 | 13,689 | 13,262 |
| AUG | W | 11,029 | 10,491 | 10,327 |
|  | AN | 10,449 | 11,641 | 10,634 |
|  | BN | 10,139 | 10,261 | 9,373 |
|  | D | 10,627 | 10,986 | 9,019 |
|  | C | 9,473 | 7,348 | 6,947 |
|  | All | 10,476 | 10,269 | 9,427 |
| SEP | W | 9,385 | 12,833 | 7,066 |
|  | AN | 5,862 | 9,898 | 6,412 |
|  | BN | 5,492 | 5,601 | 5,251 |
|  | D | 5,985 | 4,469 | 4,651 |
|  | C | 5,563 | 4,368 | 5,194 |
|  | All | 6,899 | 8,094 | 5,857 |
| OCT | W | 6,886 | 7,034 | 7,984 |
|  | AN | 7,145 | 7,152 | 8,802 |
|  | BN | 6,396 | 7,072 | 8,371 |
|  | D | 6,128 | 6,494 | 7,926 |
|  | C | 5,902 | 5,752 | 7,851 |
|  | All | 6,530 | 6,752 | 8,138 |
| NOV | W | 6,672 | 7,539 | 6,096 |
|  | AN | 6,224 | 7,134 | 4,524 |
|  | BN | 5,088 | 5,936 | 4,211 |
|  | D | 5,669 | 5,406 | 4,475 |
|  | C | 4,822 | 4,710 | 4,233 |
|  | All | 5,845 | 6,324 | 4,916 |
| DEC | W | 12,766 | 11,022 | 11,856 |
|  | AN | 5,531 | 5,377 | 5,276 |
|  | BN | 5,413 | 5,195 | 5,523 |
|  | D | 4,215 | 3,936 | 4,695 |
|  | C | 3,828 | 3,582 | 3,688 |
|  | All | 7,267 | 6,557 | 7,044 |

Table 2. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 3: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 2,234 (13.5\%) | 527 (2.9\%) |
|  | AN | -263 (-3.2\%) | -151 (-1.8\%) |
|  | BN | 842 (18.7\%) | 1,160 (27.7\%) |
|  | D | 242 (6.1\%) | 142 (3.5\%) |
|  | C | 199 (5.7\%) | -549 (-13\%) |
|  | All | 896 (10.4\%) | 294 (3.2\%) |
| FEB | W | 2,586 (13.9\%) | 309 (1.5\%) |
|  | AN | 1,525 (10.6\%) | 638 (4.2\%) |
|  | BN | 655 (11\%) | 1,092 (19.7\%) |
|  | D | 77 (2.1\%) | 351 (10.3\%) |
|  | C | -258 (-7.2\%) | -31 (-0.9\%) |
|  | All | 1,134 (11\%) | 450 (4.1\%) |
| MAR | W | 1,007 (6.2\%) | 141 (0.8\%) |
|  | AN | -343 (-3.8\%) | -29 (-0.3\%) |
|  | BN | -332 (-6.4\%) | 550 (12.7\%) |
|  | D | -156 (-4\%) | -67 (-1.7\%) |
|  | C | 458 (13.1\%) | 362 (10.1\%) |
|  | All | 245 (2.8\%) | 173 (2\%) |
| APR | W | -329 (-3.5\%) | -42 (-0.5\%) |
|  | AN | -120 (-1.9\%) | 526 (9.5\%) |
|  | BN | 257 (4.7\%) | 675 (13.5\%) |
|  | D | 84 (1.4\%) | 353 (6.4\%) |
|  | C | 237 (3.7\%) | 159 (2.4\%) |
|  | All | -25 (-0.4\%) | 280 (4.2\%) |
| MAY | W | -1,684 (-17.7\%) | 674 (9.4\%) |
|  | AN | 1,114 (14.5\%) | 1,040 (13.4\%) |
|  | BN | 288 (4\%) | 1,210 (19.3\%) |
|  | D | 1,622 (22.1\%) | 1,289 (16.8\%) |
|  | C | 851 (12.7\%) | 251 (3.4\%) |
|  | All | 159 (2\%) | 892 (12.3\%) |
| JUN | W | 1,229 (11.8\%) | 1,330 (12.9\%) |
|  | AN | 2,475 (22.2\%) | 1,591 (13.2\%) |
|  | BN | 777 (7.2\%) | 588 (5.4\%) |
|  | D | 979 (8.7\%) | 304 (2.6\%) |
|  | C | 1,437 (13.8\%) | 478 (4.2\%) |
|  | All | 1,310 (12.2\%) | 892 (8\%) |
| JUL | W | 1,457 (11.4\%) | 138 (1\%) |
|  | AN | 665 (4.7\%) | -376 (-2.5\%) |
|  | BN | -259 (-2\%) | -471 (-3.6\%) |
|  | D | -786 (-5.9\%) | -1,211 (-8.8\%) |
|  | C | -1,391 (-10.8\%) | -476 (-4\%) |
|  | All | 139 (1.1\%) | -427 (-3.1\%) |


| Alternative 3: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | -703 (-6.4\%) | -164 (-1.6\%) |
|  | AN | 186 (1.8\%) | -1,006 (-8.6\%) |
|  | BN | -766 (-7.6\%) | -888 (-8.7\%) |
|  | D | -1,608 (-15.1\%) | -1,967 (-17.9\%) |
|  | C | -2,525 (-26.7\%) | -400 (-5.4\%) |
|  | All | -1,049 (-10\%) | -841 (-8.2\%) |
| SEP | W | -2,319 (-24.7\%) | -5,767 (-44.9\%) |
|  | AN | 550 (9.4\%) | -3,486 (-35.2\%) |
|  | BN | -242 (-4.4\%) | -350 (-6.3\%) |
|  | D | -1,335 (-22.3\%) | 182 (4.1\%) |
|  | C | -368 (-6.6\%) | 826 (18.9\%) |
|  | All | -1,043 (-15.1\%) | -2,237 (-27.6\%) |
| OCT | W | 1,098 (16\%) | 949 (13.5\%) |
|  | AN | 1,657 (23.2\%) | 1,650 (23.1\%) |
|  | BN | 1,975 (30.9\%) | 1,299 (18.4\%) |
|  | D | 1,798 (29.3\%) | 1,432 (22\%) |
|  | C | 1,949 (33\%) | 2,100 (36.5\%) |
|  | All | 1,608 (24.6\%) | 1,386 (20.5\%) |
| NOV | W | -576 (-8.6\%) | -1,443 (-19.1\%) |
|  | AN | -1,700 (-27.3\%) | -2,610 (-36.6\%) |
|  | BN | -876 (-17.2\%) | -1,725 (-29.1\%) |
|  | D | -1,194 (-21.1\%) | -931 (-17.2\%) |
|  | C | -590 (-12.2\%) | -477 (-10.1\%) |
|  | All | -929 (-15.9\%) | -1,408 (-22.3\%) |
| DEC | W | -910 (-7.1\%) | 834 (7.6\%) |
|  | AN | -255 (-4.6\%) | -102 (-1.9\%) |
|  | BN | 110 (2\%) | 328 (6.3\%) |
|  | D | 481 (11.4\%) | 759 (19.3\%) |
|  | C | -141 (-3.7\%) | 105 (2.9\%) |
|  | All | -222 (-3.1\%) | 488 (7.4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.3.1.2 Sacramento River Upstream of Red Bluff

Table 3. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 3: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 28,036 | 30,390 | 30,907 |
|  | AN | 16,725 | 16,885 | 16,730 |
|  | BN | 9,381 | 9,146 | 10,298 |
|  | D | 7,098 | 7,262 | 7,396 |
|  | C | 6,143 | 6,942 | 6,405 |
|  | All | 15,396 | 16,278 | 16,567 |
| FEB | W | 30,255 | 33,472 | 33,775 |
|  | AN | 23,492 | 24,828 | 25,463 |
|  | BN | 12,005 | 11,614 | 12,696 |
|  | D | 8,947 | 8,790 | 9,139 |
|  | C | 6,599 | 6,378 | 6,343 |
|  | All | 18,010 | 19,092 | 19,537 |
| MAR | W | 25,004 | 26,210 | 26,349 |
|  | AN | 16,599 | 16,428 | 16,394 |
|  | BN | 9,333 | 8,474 | 9,004 |
|  | D | 8,385 | 8,300 | 8,231 |
|  | C | 5,999 | 6,101 | 6,466 |
|  | All | 14,669 | 14,876 | 15,044 |
| APR | W | 15,172 | 14,842 | 14,797 |
|  | AN | 10,477 | 9,761 | 10,285 |
|  | BN | 8,711 | 8,282 | 8,951 |
|  | D | 7,948 | 7,661 | 8,012 |
|  | C | 7,742 | 7,829 | 7,987 |
|  | All | 10,709 | 10,376 | 10,653 |
| MAY | W | 12,541 | 10,073 | 10,743 |
|  | AN | 10,012 | 10,047 | 11,078 |
|  | BN | 8,781 | 7,875 | 9,073 |
|  | D | 8,677 | 9,012 | 10,295 |
|  | C | 7,746 | 8,348 | 8,597 |
|  | All | 9,979 | 9,208 | 10,095 |
| JUN | W | 11,905 | 11,720 | 13,039 |
|  | AN | 12,001 | 12,789 | 14,368 |
|  | BN | 11,464 | 11,651 | 12,222 |
|  | D | 11,777 | 12,441 | 12,731 |
|  | C | 10,885 | 11,881 | 12,317 |
|  | All | 11,666 | 12,046 | 12,921 |
| JUL | W | 13,255 | 14,525 | 14,651 |
|  | AN | 14,129 | 15,142 | 14,753 |
|  | BN | 13,011 | 13,258 | 12,778 |
|  | D | 13,368 | 13,826 | 12,610 |
|  | C | 13,005 | 12,149 | 11,750 |
|  | All | 13,329 | 13,898 | 13,474 |


| Alternative 3: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 11,284 | 10,735 | 10,567 |
|  | AN | 10,580 | 11,775 | 10,769 |
|  | BN | 10,202 | 10,364 | 9,472 |
|  | D | 10,747 | 11,143 | 9,178 |
|  | C | 9,590 | 7,665 | 7,274 |
|  | All | 10,630 | 10,464 | 9,623 |
| SEP | W | 9,856 | 13,312 | 7,544 |
|  | AN | 6,279 | 10,320 | 6,840 |
|  | BN | 5,821 | 5,963 | 5,617 |
|  | D | 6,391 | 4,911 | 5,105 |
|  | C | 5,887 | 4,838 | 5,661 |
|  | All | 7,302 | 8,535 | 6,301 |
| OCT | W | 8,020 | 8,188 | 9,159 |
|  | AN | 8,112 | 8,162 | 9,826 |
|  | BN | 7,094 | 7,778 | 9,099 |
|  | D | 6,903 | 7,287 | 8,722 |
|  | C | 6,670 | 6,537 | 8,663 |
|  | All | 7,432 | 7,675 | 9,078 |
| NOV | W | 9,876 | 10,821 | 9,366 |
|  | AN | 8,144 | 9,098 | 6,472 |
|  | BN | 6,791 | 7,682 | 5,945 |
|  | D | 7,548 | 7,347 | 6,403 |
|  | C | 5,811 | 5,703 | 5,222 |
|  | All | 7,990 | 8,521 | 7,102 |
| DEC | W | 21,015 | 19,613 | 20,455 |
|  | AN | 10,019 | 10,053 | 9,973 |
|  | BN | 8,408 | 8,228 | 8,570 |
|  | D | 7,292 | 7,091 | 7,859 |
|  | C | 5,628 | 5,433 | 5,548 |
|  | All | 11,989 | 11,446 | 11,945 |

Table 4. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 3: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 2,870 (10.2\%) | 517 (1.7\%) |
|  | AN | 5 (0\%) | -156 (-0.9\%) |
|  | BN | 917 (9.8\%) | 1,152 (12.6\%) |
|  | D | 298 (4.2\%) | 134 (1.8\%) |
|  | C | 261 (4.3\%) | -537 (-7.7\%) |
|  | All | 1,171 (7.6\%) | 289 (1.8\%) |
| FEB | W | 3,521 (11.6\%) | 304 (0.9\%) |
|  | AN | 1,971 (8.4\%) | 635 (2.6\%) |
|  | BN | 691 (5.8\%) | 1,082 (9.3\%) |
|  | D | 192 (2.1\%) | 349 (4\%) |
|  | C | -256 (-3.9\%) | -35 (-0.5\%) |
|  | All | 1,527 (8.5\%) | 445 (2.3\%) |
| MAR | W | 1,345 (5.4\%) | 139 (0.5\%) |
|  | AN | -205 (-1.2\%) | -34 (-0.2\%) |
|  | BN | -328 (-3.5\%) | 531 (6.3\%) |
|  | D | -154 (-1.8\%) | -69 (-0.8\%) |
|  | C | 467 (7.8\%) | 364 (6\%) |
|  | All | 375 (2.6\%) | 168 (1.1\%) |
| APR | W | -375 (-2.5\%) | -45 (-0.3\%) |
|  | AN | -192 (-1.8\%) | 524 (5.4\%) |
|  | BN | 241 (2.8\%) | 669 (8.1\%) |
|  | D | 63 (0.8\%) | 350 (4.6\%) |
|  | C | 244 (3.2\%) | 157 (2\%) |
|  | All | -56 (-0.5\%) | 276 (2.7\%) |
| MAY | W | -1,798 (-14.3\%) | 670 (6.7\%) |
|  | AN | 1,066 (10.7\%) | 1,032 (10.3\%) |
|  | BN | 292 (3.3\%) | 1,199 (15.2\%) |
|  | D | 1,618 (18.6\%) | 1,283 (14.2\%) |
|  | C | 851 (11\%) | 249 (3\%) |
|  | All | 116 (1.2\%) | 886 (9.6\%) |
| JUN | W | 1,134 (9.5\%) | 1,319 (11.3\%) |
|  | AN | 2,367 (19.7\%) | 1,578 (12.3\%) |
|  | BN | 758 (6.6\%) | 572 (4.9\%) |
|  | D | 954 (8.1\%) | 290 (2.3\%) |
|  | C | 1,433 (13.2\%) | 436 (3.7\%) |
|  | All | 1,254 (10.8\%) | 874 (7.3\%) |
| JUL | W | 1,396 (10.5\%) | 126 (0.9\%) |
|  | AN | 624 (4.4\%) | -388 (-2.6\%) |
|  | BN | -233 (-1.8\%) | -480 (-3.6\%) |
|  | D | -758 (-5.7\%) | -1,216 (-8.8\%) |
|  | C | -1,255 (-9.6\%) | -400 (-3.3\%) |
|  | All | 144 (1.1\%) | -424 (-3.1\%) |


| Alternative 3: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | -716 (-6.3\%) | -168 (-1.6\%) |
|  | AN | 189 (1.8\%) | -1,006 (-8.5\%) |
|  | BN | -730 (-7.2\%) | -892 (-8.6\%) |
|  | D | -1,569 (-14.6\%) | -1,965 (-17.6\%) |
|  | C | -2,317 (-24.2\%) | -391 (-5.1\%) |
|  | All | -1,007 (-9.5\%) | -841 (-8\%) |
| SEP | W | -2,312 (-23.5\%) | -5,768 (-43.3\%) |
|  | AN | 560 (8.9\%) | -3,481 (-33.7\%) |
|  | BN | -203 (-3.5\%) | -346 (-5.8\%) |
|  | D | -1,286 (-20.1\%) | 194 (3.9\%) |
|  | C | -226 (-3.8\%) | 823 (17\%) |
|  | All | -1,001 (-13.7\%) | -2,234 (-26.2\%) |
| OCT | W | 1,140 (14.2\%) | 971 (11.9\%) |
|  | AN | 1,715 (21.1\%) | 1,665 (20.4\%) |
|  | BN | 2,004 (28.3\%) | 1,321 (17\%) |
|  | D | 1,819 (26.4\%) | 1,435 (19.7\%) |
|  | C | 1,993 (29.9\%) | 2,127 (32.5\%) |
|  | All | 1,645 (22.1\%) | 1,403 (18.3\%) |
| NOV | W | -510 (-5.2\%) | -1,455 (-13.4\%) |
|  | AN | -1,672 (-20.5\%) | -2,626 (-28.9\%) |
|  | BN | -846 (-12.5\%) | -1,737 (-22.6\%) |
|  | D | -1,145 (-15.2\%) | -944 (-12.8\%) |
|  | C | -590 (-10.1\%) | -482 (-8.4\%) |
|  | All | -888 (-11.1\%) | -1,420 (-16.7\%) |
| DEC | W | -560 (-2.7\%) | 843 (4.3\%) |
|  | AN | -47 (-0.5\%) | -80 (-0.8\%) |
|  | BN | 161 (1.9\%) | 341 (4.1\%) |
|  | D | 567 (7.8\%) | 768 (10.8\%) |
|  | C | -80 (-1.4\%) | 115 (2.1\%) |
|  | All | -44 (-0.4\%) | 499 (4.4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.3.1.3 Sacramento River at Wilkins Slough

Table 5. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 3: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 19,145 | 19,320 | 19,371 |
|  | AN | 17,084 | 16,593 | 17,133 |
|  | BN | 12,521 | 12,143 | 13,045 |
|  | D | 8,896 | 9,189 | 9,356 |
|  | C | 7,858 | 8,586 | 8,080 |
|  | All | 13,811 | 13,901 | 14,113 |
| FEB | W | 19,887 | 20,044 | 20,068 |
|  | AN | 19,139 | 19,095 | 19,106 |
|  | BN | 14,528 | 14,328 | 14,718 |
|  | D | 11,520 | 11,473 | 11,891 |
|  | C | 8,499 | 8,158 | 8,159 |
|  | All | 15,359 | 15,309 | 15,476 |
| MAR | W | 18,223 | 18,323 | 18,384 |
|  | AN | 17,696 | 17,537 | 17,695 |
|  | BN | 12,208 | 11,534 | 12,048 |
|  | D | 11,364 | 11,191 | 11,402 |
|  | C | 8,101 | 8,166 | 8,524 |
|  | All | 14,132 | 13,997 | 14,226 |
| APR | W | 13,392 | 13,119 | 13,148 |
|  | AN | 10,264 | 9,783 | 10,309 |
|  | BN | 7,152 | 6,858 | 7,514 |
|  | D | 5,319 | 5,112 | 5,444 |
|  | C | 4,164 | 4,331 | 4,442 |
|  | All | 8,746 | 8,518 | 8,805 |
| MAY | W | 10,467 | 8,435 | 9,064 |
|  | AN | 7,318 | 7,500 | 8,487 |
|  | BN | 5,638 | 4,871 | 5,957 |
|  | D | 4,669 | 5,088 | 6,331 |
|  | C | 3,998 | 4,528 | 4,768 |
|  | All | 6,962 | 6,383 | 7,220 |
| JUN | W | 6,503 | 6,435 | 7,664 |
|  | AN | 5,781 | 6,530 | 8,023 |
|  | BN | 5,243 | 5,628 | 6,079 |
|  | D | 5,245 | 6,075 | 6,263 |
|  | C | 5,140 | 6,253 | 6,494 |
|  | All | 5,707 | 6,205 | 6,967 |
| JUL | W | 6,685 | 7,771 | 7,792 |
|  | AN | 6,971 | 7,892 | 7,384 |
|  | BN | 6,122 | 6,560 | 5,998 |
|  | D | 6,788 | 7,474 | 6,177 |
|  | C | 7,162 | 6,649 | 6,404 |
|  | All | 6,723 | 7,353 | 6,868 |


| Alternative 3: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 6,287 | 5,537 | 5,355 |
|  | AN | 5,498 | 6,610 | 5,613 |
|  | BN | 5,138 | 5,462 | 4,501 |
|  | D | 5,833 | 6,356 | 4,378 |
|  | C | 5,551 | 4,719 | 4,375 |
|  | All | 5,768 | 5,741 | 4,889 |
| SEP | W | 9,338 | 12,737 | 6,984 |
|  | AN | 5,631 | 9,546 | 6,123 |
|  | BN | 5,128 | 5,216 | 4,901 |
|  | D | 5,636 | 4,114 | 4,380 |
|  | C | 5,200 | 4,354 | 5,273 |
|  | All | 6,658 | 7,866 | 5,680 |
| OCT | W | 7,347 | 7,382 | 8,461 |
|  | AN | 6,799 | 6,927 | 8,618 |
|  | BN | 5,987 | 6,570 | 7,981 |
|  | D | 5,688 | 6,040 | 7,521 |
|  | C | 5,642 | 5,572 | 7,727 |
|  | All | 6,421 | 6,617 | 8,088 |
| NOV | W | 9,644 | 10,889 | 9,272 |
|  | AN | 8,210 | 9,141 | 6,399 |
|  | BN | 6,793 | 7,588 | 5,748 |
|  | D | 7,407 | 7,227 | 6,226 |
|  | C | 5,118 | 4,986 | 4,405 |
|  | All | 7,794 | 8,402 | 6,869 |
| DEC | W | 17,881 | 17,257 | 17,675 |
|  | AN | 10,809 | 10,755 | 11,142 |
|  | BN | 8,505 | 8,258 | 8,752 |
|  | D | 8,950 | 8,725 | 9,544 |
|  | C | 6,229 | 5,981 | 6,121 |
|  | All | 11,580 | 11,246 | 11,720 |

Table 6. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 3: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 227 (1.2\%) | 51 (0.3\%) |
|  | AN | 49 (0.3\%) | 540 (3.3\%) |
|  | BN | 524 (4.2\%) | 902 (7.4\%) |
|  | D | 460 (5.2\%) | 167 (1.8\%) |
|  | C | 222 (2.8\%) | -506 (-5.9\%) |
|  | All | 302 (2.2\%) | 212 (1.5\%) |
| FEB | W | 181 (0.9\%) | 24 (0.1\%) |
|  | AN | -33 (-0.2\%) | 11 (0.1\%) |
|  | BN | 191 (1.3\%) | 391 (2.7\%) |
|  | D | 371 (3.2\%) | 417 (3.6\%) |
|  | C | -339 (-4\%) | 1 (0\%) |
|  | All | 117 (0.8\%) | 168 (1.1\%) |
| MAR | W | 162 (0.9\%) | 62 (0.3\%) |
|  | AN | -1 (0\%) | 158 (0.9\%) |
|  | BN | -160 (-1.3\%) | 514 (4.5\%) |
|  | D | 38 (0.3\%) | 211 (1.9\%) |
|  | C | 423 (5.2\%) | 358 (4.4\%) |
|  | All | 94 (0.7\%) | 229 (1.6\%) |
| APR | W | -244 (-1.8\%) | 29 (0.2\%) |
|  | AN | 45 (0.4\%) | 526 (5.4\%) |
|  | BN | 362 (5.1\%) | 657 (9.6\%) |
|  | D | 124 (2.3\%) | 331 (6.5\%) |
|  | C | 278 (6.7\%) | 111 (2.6\%) |
|  | All | 59 (0.7\%) | 287 (3.4\%) |
| MAY | W | -1,403 (-13.4\%) | 628 (7.4\%) |
|  | AN | 1,169 (16\%) | 988 (13.2\%) |
|  | BN | 319 (5.7\%) | 1,086 (22.3\%) |
|  | D | 1,662 (35.6\%) | 1,244 (24.4\%) |
|  | C | 770 (19.3\%) | 240 (5.3\%) |
|  | All | 258 (3.7\%) | 837 (13.1\%) |
| JUN | W | 1,161 (17.9\%) | 1,229 (19.1\%) |
|  | AN | 2,243 (38.8\%) | 1,494 (22.9\%) |
|  | BN | 836 (15.9\%) | 451 (8\%) |
|  | D | 1,017 (19.4\%) | 188 (3.1\%) |
|  | C | 1,353 (26.3\%) | 241 (3.9\%) |
|  | All | 1,260 (22.1\%) | 762 (12.3\%) |
| JUL | W | 1,108 (16.6\%) | 22 (0.3\%) |
|  | AN | 413 (5.9\%) | -508 (-6.4\%) |
|  | BN | -124 (-2\%) | -562 (-8.6\%) |
|  | D | -610 (-9\%) | -1,297 (-17.4\%) |
|  | C | -757 (-10.6\%) | -245 (-3.7\%) |
|  | All | 146 (2.2\%) | -484 (-6.6\%) |


| Alternative 3: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | -932 (-14.8\%) | -181 (-3.3\%) |
|  | AN | 115 (2.1\%) | -997 (-15.1\%) |
|  | BN | -637 (-12.4\%) | -962 (-17.6\%) |
|  | D | -1,455 (-24.9\%) | -1,978 (-31.1\%) |
|  | C | -1,176 (-21.2\%) | -344 (-7.3\%) |
|  | All | -879 (-15.2\%) | -852 (-14.8\%) |
| SEP | W | -2,354 (-25.2\%) | -5,753 (-45.2\%) |
|  | AN | 492 (8.7\%) | -3,422 (-35.9\%) |
|  | BN | -227 (-4.4\%) | -315 (-6\%) |
|  | D | -1,256 (-22.3\%) | 266 (6.5\%) |
|  | C | 73 (1.4\%) | 919 (21.1\%) |
|  | All | -978 (-14.7\%) | -2,186 (-27.8\%) |
| OCT | W | 1,114 (15.2\%) | 1,079 (14.6\%) |
|  | AN | 1,819 (26.8\%) | 1,691 (24.4\%) |
|  | BN | 1,994 (33.3\%) | 1,411 (21.5\%) |
|  | D | 1,833 (32.2\%) | 1,481 (24.5\%) |
|  | C | 2,086 (37\%) | 2,155 (38.7\%) |
|  | All | 1,668 (26\%) | 1,471 (22.2\%) |
| NOV | W | -372 (-3.9\%) | -1,617 (-14.9\%) |
|  | AN | -1,811 (-22.1\%) | -2,742 (-30\%) |
|  | BN | -1,044 (-15.4\%) | -1,839 (-24.2\%) |
|  | D | -1,181 (-15.9\%) | -1,001 (-13.8\%) |
|  | C | -713 (-13.9\%) | -581 (-11.6\%) |
|  | All | -925 (-11.9\%) | -1,533 (-18.2\%) |
| DEC | W | -206 (-1.2\%) | 418 (2.4\%) |
|  | AN | 333 (3.1\%) | 387 (3.6\%) |
|  | BN | 247 (2.9\%) | 494 (6\%) |
|  | D | 595 (6.6\%) | 820 (9.4\%) |
|  | C | -108 (-1.7\%) | 140 (2.3\%) |
|  | All | 140 (1.2\%) | 474 (4.2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.3.1.4 Sacramento River at Verona

Table 7. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 3: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 44,589 | 45,567 | 45,128 |
|  | AN | 34,120 | 33,671 | 32,953 |
|  | BN | 20,175 | 19,121 | 18,589 |
|  | D | 14,756 | 14,782 | 15,126 |
|  | C | 12,085 | 13,051 | 11,830 |
|  | All | 27,583 | 27,795 | 27,357 |
| FEB | W | 49,892 | 51,326 | 50,301 |
|  | AN | 39,162 | 39,749 | 38,461 |
|  | BN | 26,429 | 25,341 | 24,762 |
|  | D | 18,402 | 18,090 | 18,014 |
|  | C | 12,822 | 12,325 | 11,978 |
|  | All | 31,979 | 32,192 | 31,512 |
| MAR | W | 43,455 | 44,624 | 42,759 |
|  | AN | 39,477 | 39,687 | 38,446 |
|  | BN | 21,484 | 19,448 | 18,720 |
|  | D | 17,868 | 17,649 | 17,021 |
|  | C | 11,903 | 11,789 | 11,967 |
|  | All | 28,888 | 28,877 | 27,868 |
| APR | W | 32,219 | 31,636 | 29,548 |
|  | AN | 22,250 | 21,313 | 20,604 |
|  | BN | 14,459 | 13,857 | 14,835 |
|  | D | 11,113 | 10,903 | 11,939 |
|  | C | 9,420 | 9,489 | 9,989 |
|  | All | 19,759 | 19,298 | 18,999 |
| MAY | W | 26,193 | 20,229 | 21,326 |
|  | AN | 17,079 | 16,002 | 17,987 |
|  | BN | 11,451 | 10,534 | 12,794 |
|  | D | 9,283 | 9,841 | 11,394 |
|  | C | 7,125 | 7,611 | 7,754 |
|  | All | 15,840 | 13,828 | 15,215 |
| JUN | W | 18,367 | 15,304 | 17,501 |
|  | AN | 13,590 | 13,574 | 16,782 |
|  | BN | 11,062 | 11,320 | 13,032 |
|  | D | 10,429 | 10,780 | 10,915 |
|  | C | 8,911 | 9,827 | 9,725 |
|  | All | 13,295 | 12,576 | 14,049 |
| JUL | W | 16,253 | 17,965 | 15,781 |
|  | AN | 17,488 | 18,338 | 15,913 |
|  | BN | 16,698 | 16,598 | 13,824 |
|  | D | 16,352 | 16,465 | 11,505 |
|  | C | 14,476 | 12,457 | 10,487 |
|  | All | 16,271 | 16,651 | 13,753 |


| Alternative 3: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 12,464 | 14,016 | 11,787 |
|  | AN | 13,691 | 15,828 | 12,899 |
|  | BN | 13,389 | 14,074 | 11,195 |
|  | D | 14,688 | 13,018 | 9,333 |
|  | C | 9,207 | 8,085 | 7,546 |
|  | All | 12,813 | 13,204 | 10,689 |
| SEP | W | 14,279 | 23,592 | 10,801 |
|  | AN | 10,537 | 19,044 | 10,916 |
|  | BN | 9,961 | 10,576 | 8,692 |
|  | D | 10,542 | 7,664 | 8,185 |
|  | C | 7,764 | 6,832 | 8,088 |
|  | All | 11,220 | 14,755 | 9,487 |
| OCT | W | 11,503 | 11,232 | 12,627 |
|  | AN | 9,381 | 9,890 | 12,190 |
|  | BN | 9,867 | 10,146 | 11,575 |
|  | D | 8,681 | 8,989 | 10,863 |
|  | C | 8,543 | 8,104 | 11,622 |
|  | All | 9,861 | 9,900 | 11,849 |
| NOV | W | 15,307 | 15,754 | 14,229 |
|  | AN | 11,792 | 12,817 | 9,813 |
|  | BN | 9,852 | 10,437 | 8,428 |
|  | D | 10,157 | 9,731 | 8,902 |
|  | C | 7,341 | 7,223 | 6,649 |
|  | All | 11,565 | 11,846 | 10,314 |
| DEC | W | 33,840 | 31,254 | 30,980 |
|  | AN | 17,572 | 18,481 | 19,030 |
|  | BN | 13,099 | 13,028 | 13,973 |
|  | D | 12,685 | 12,532 | 13,426 |
|  | C | 9,770 | 8,627 | 9,493 |
|  | All | 19,752 | 18,852 | 19,330 |

Table 8. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 3: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 539 (1.2\%) | -439 (-1\%) |
|  | AN | -1,167 (-3.4\%) | -718 (-2.1\%) |
|  | BN | -1,586 (-7.9\%) | -532 (-2.8\%) |
|  | D | 370 (2.5\%) | 345 (2.3\%) |
|  | C | -255 (-2.1\%) | -1,221 (-9.4\%) |
|  | All | -227 (-0.8\%) | -438 (-1.6\%) |
| FEB | W | 410 (0.8\%) | -1,024 (-2\%) |
|  | AN | -701 (-1.8\%) | -1,288 (-3.2\%) |
|  | BN | -1,667 (-6.3\%) | -579 (-2.3\%) |
|  | D | -388 (-2.1\%) | -76 (-0.4\%) |
|  | C | -844 (-6.6\%) | -348 (-2.8\%) |
|  | All | -466 (-1.5\%) | -680 (-2.1\%) |
| MAR | W | -696 (-1.6\%) | -1,865 (-4.2\%) |
|  | AN | -1,032 (-2.6\%) | -1,242 (-3.1\%) |
|  | BN | -2,764 (-12.9\%) | -728 (-3.7\%) |
|  | D | -847 (-4.7\%) | -628 (-3.6\%) |
|  | C | 64 (0.5\%) | 178 (1.5\%) |
|  | All | -1,020 (-3.5\%) | -1,009 (-3.5\%) |
| APR | W | -2,672 (-8.3\%) | -2,088 (-6.6\%) |
|  | AN | -1,647 (-7.4\%) | -709 (-3.3\%) |
|  | BN | 376 (2.6\%) | 978 (7.1\%) |
|  | D | 826 (7.4\%) | 1,036 (9.5\%) |
|  | C | 569 (6\%) | 500 (5.3\%) |
|  | All | -759 (-3.8\%) | -298 (-1.5\%) |
| MAY | W | -4,867 (-18.6\%) | 1,098 (5.4\%) |
|  | AN | 908 (5.3\%) | 1,985 (12.4\%) |
|  | BN | 1,343 (11.7\%) | 2,260 (21.5\%) |
|  | D | 2,111 (22.7\%) | 1,553 (15.8\%) |
|  | C | 629 (8.8\%) | 143 (1.9\%) |
|  | All | -626 (-3.9\%) | 1,386 (10\%) |
| JUN | W | -866 (-4.7\%) | 2,198 (14.4\%) |
|  | AN | 3,191 (23.5\%) | 3,207 (23.6\%) |
|  | BN | 1,970 (17.8\%) | 1,712 (15.1\%) |
|  | D | 486 (4.7\%) | 134 (1.2\%) |
|  | C | 814 (9.1\%) | -101 (-1\%) |
|  | All | 755 (5.7\%) | 1,473 (11.7\%) |
| JUL | W | -472 (-2.9\%) | -2,184 (-12.2\%) |
|  | AN | -1,575 (-9\%) | -2,425 (-13.2\%) |
|  | BN | -2,874 (-17.2\%) | -2,775 (-16.7\%) |
|  | D | -4,847 (-29.6\%) | -4,960 (-30.1\%) |
|  | C | -3,989 (-27.6\%) | -1,971 (-15.8\%) |
|  | All | -2,518 (-15.5\%) | -2,898 (-17.4\%) |


| Alternative 3: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | -677 (-5.4\%) | -2,230 (-15.9\%) |
|  | AN | -792 (-5.8\%) | -2,929 (-18.5\%) |
|  | BN | -2,194 (-16.4\%) | -2,879 (-20.5\%) |
|  | D | -5,354 (-36.5\%) | -3,684 (-28.3\%) |
|  | C | -1,661 (-18\%) | -539 (-6.7\%) |
|  | All | -2,124 (-16.6\%) | -2,515 (-19\%) |
| SEP | W | -3,478 (-24.4\%) | -12,791 (-54.2\%) |
|  | AN | 380 (3.6\%) | -8,127 (-42.7\%) |
|  | BN | -1,269 (-12.7\%) | -1,884 (-17.8\%) |
|  | D | -2,357 (-22.4\%) | 521 (6.8\%) |
|  | C | 323 (4.2\%) | 1,256 (18.4\%) |
|  | All | -1,734 (-15.5\%) | -5,268 (-35.7\%) |
| OCT | W | 1,124 (9.8\%) | 1,396 (12.4\%) |
|  | AN | 2,809 (29.9\%) | 2,300 (23.3\%) |
|  | BN | 1,708 (17.3\%) | 1,428 (14.1\%) |
|  | D | 2,182 (25.1\%) | 1,874 (20.9\%) |
|  | C | 3,078 (36\%) | 3,518 (43.4\%) |
|  | All | 1,989 (20.2\%) | 1,949 (19.7\%) |
| NOV | W | -1,078 (-7\%) | -1,526 (-9.7\%) |
|  | AN | -1,979 (-16.8\%) | -3,004 (-23.4\%) |
|  | BN | -1,424 (-14.5\%) | -2,009 (-19.3\%) |
|  | D | -1,255 (-12.4\%) | -830 (-8.5\%) |
|  | C | -692 (-9.4\%) | -574 (-7.9\%) |
|  | All | -1,251 (-10.8\%) | -1,533 (-12.9\%) |
| DEC | W | -2,861 (-8.5\%) | -275 (-0.9\%) |
|  | AN | 1,458 (8.3\%) | 550 (3\%) |
|  | BN | 873 (6.7\%) | 945 (7.3\%) |
|  | D | 741 (5.8\%) | 894 (7.1\%) |
|  | C | -278 (-2.8\%) | 865 (10\%) |
|  | All | -423 (-2.1\%) | 477 (2.5\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.3.1.5 Trinity River below Lewiston

Table 9. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 3: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 1,440 | 1,518 | 1,484 |
|  | AN | 300 | 300 | 483 |
|  | BN | 358 | 300 | 383 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 287 | 275 |
|  | All | 671 | 684 | 713 |
| FEB | W | 1,056 | 1,495 | 1,486 |
|  | AN | 689 | 784 | 1,043 |
|  | BN | 517 | 568 | 636 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 275 |
|  | All | 634 | 795 | 839 |
| MAR | W | 1,209 | 1,385 | 1,402 |
|  | AN | 436 | 519 | 519 |
|  | BN | 319 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 611 | 676 | 681 |
| APR | W | 721 | 844 | 844 |
|  | AN | 469 | 513 | 458 |
|  | BN | 507 | 504 | 504 |
|  | D | 529 | 529 | 529 |
|  | C | 575 | 580 | 580 |
|  | All | 584 | 630 | 622 |
| MAY | W | 4,636 | 4,620 | 4,620 |
|  | AN | 4,462 | 4,416 | 4,416 |
|  | BN | 3,774 | 3,865 | 3,865 |
|  | D | 3,216 | 3,216 | 3,216 |
|  | C | 2,092 | 1,973 | 1,973 |
|  | All | 3,779 | 3,766 | 3,766 |
| JUN | W | 3,371 | 3,560 | 3,560 |
|  | AN | 2,488 | 3,188 | 3,188 |
|  | BN | 1,672 | 1,767 | 1,767 |
|  | D | 1,251 | 1,251 | 1,251 |
|  | C | 783 | 783 | 783 |
|  | All | 2,108 | 2,286 | 2,286 |
| JUL | W | 1,289 | 1,103 | 1,103 |
|  | AN | 1,048 | 1,048 | 1,048 |
|  | BN | 869 | 916 | 916 |
|  | D | 667 | 667 | 667 |
|  | C | 450 | 413 | 417 |
|  | All | 923 | 866 | 867 |


| Alternative 3: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 338 | 338 |
|  | All | 450 | 434 | 434 |
| SEP | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 265 | 278 |
|  | All | 450 | 423 | 425 |
| OCT | W | 373 | 373 | 373 |
|  | AN | 373 | 311 | 323 |
|  | BN | 346 | 346 | 346 |
|  | D | 373 | 346 | 352 |
|  | C | 373 | 311 | 293 |
|  | All | 368 | 344 | 345 |
| NOV | W | 489 | 414 | 385 |
|  | AN | 300 | 275 | 275 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 283 | 283 |
|  | C | 300 | 225 | 225 |
|  | All | 360 | 318 | 309 |
| DEC | W | 1,072 | 837 | 1,006 |
|  | AN | 300 | 300 | 300 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 300 | 283 |
|  | C | 300 | 275 | 250 |
|  | All | 545 | 466 | 513 |

Table 10. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 3: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 44 (3.1\%) | -34 (-2.2\%) |
|  | AN | 183 (60.9\%) | 183 (60.9\%) |
|  | BN | 24 (6.7\%) | 83 (27.5\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -25 (-8.3\%) | -12 (-4.3\%) |
|  | All | 41 (6.1\%) | 28 (4.1\%) |
| FEB | W | 430 (40.7\%) | -9 (-0.6\%) |
|  | AN | 354 (51.4\%) | 260 (33.1\%) |
|  | BN | 120 (23.2\%) | 68 (12\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -25 (-8.3\%) | -25 (-8.3\%) |
|  | All | 205 (32.3\%) | 43 (5.4\%) |
| MAR | W | 193 (16\%) | 17 (1.2\%) |
|  | AN | 83 (19.1\%) | 0 (0\%) |
|  | BN | -19 (-5.8\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 70 (11.5\%) | 5 (0.8\%) |
| APR | W | 122 (17\%) | 0 (0\%) |
|  | AN | -11 (-2.3\%) | -54 (-10.6\%) |
|  | BN | -3 (-0.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 5 (0.9\%) | 0 (0\%) |
|  | All | 37 (6.4\%) | -8 (-1.3\%) |
| MAY | W | -16 (-0.3\%) | 0 (0\%) |
|  | AN | -46 (-1\%) | 0 (0\%) |
|  | BN | 90 (2.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -119 (-5.7\%) | 0 (0\%) |
|  | All | -14 (-0.4\%) | 0 (0\%) |
| JUN | W | 189 (5.6\%) | 0 (0\%) |
|  | AN | 700 (28.1\%) | 0 (0\%) |
|  | BN | 96 (5.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 179 (8.5\%) | 0 (0\%) |
| JUL | W | -185 (-14.4\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 47 (5.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -33 (-7.3\%) | 5 (1.1\%) |
|  | All | -56 (-6\%) | 1 (0.1\%) |


| Alternative 3: Upstream—Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -112 (-25\%) | 0 (0\%) |
|  | All | -16 (-3.7\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -172 (-38.3\%) | 13 (4.8\%) |
|  | All | -25 (-5.6\%) | 2 (0.4\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | -50 (-13.4\%) | 12 (3.9\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -21 (-5.6\%) | 6 (1.9\%) |
|  | C | -80 (-21.4\%) | -18 (-5.6\%) |
|  | All | -24 (-6.4\%) | 1 (0.2\%) |
| NOV | W | -104 (-21.3\%) | -29 (-7.1\%) |
|  | AN | -25 (-8.3\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -17 (-5.6\%) | 0 (0\%) |
|  | C | -75 (-25\%) | 0 (0\%) |
|  | All | -51 (-14.2\%) | -9 (-2.9\%) |
| DEC | W | -66 (-6.1\%) | 169 (20.2\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -17 (-5.5\%) | -17 (-5.5\%) |
|  | C | -50 (-16.6\%) | -25 (-8.9\%) |
|  | All | -32 (-5.8\%) | 46 (9.9\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.3.1.6 Clear Creek below Whiskeytown

Table 11. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 3: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 220 | 339 | 339 |
|  | AN | 192 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 159 | 171 |
|  | All | 193 | 233 | 235 |
| FEB | W | 220 | 257 | 257 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 168 | 158 |
|  | All | 194 | 209 | 208 |
| MAR | W | 200 | 259 | 258 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 202 | 189 |
|  | D | 186 | 192 | 192 |
|  | C | 155 | 168 | 171 |
|  | All | 188 | 212 | 210 |
| APR | W | 200 | 200 | 200 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 188 | 192 | 192 |
|  | C | 155 | 168 | 171 |
|  | All | 189 | 191 | 191 |
| MAY | W | 277 | 277 | 277 |
|  | AN | 277 | 277 | 277 |
|  | BN | 263 | 269 | 269 |
|  | D | 264 | 264 | 264 |
|  | C | 211 | 224 | 224 |
|  | All | 262 | 265 | 265 |
| JUN | W | 200 | 200 | 200 |
|  | AN | 200 | 200 | 200 |
|  | BN | 181 | 186 | 186 |
|  | D | 180 | 180 | 180 |
|  | C | 115 | 131 | 131 |
|  | All | 180 | 183 | 183 |
| JUL | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 85 | 85 | 98 |
|  | All | 85 | 85 | 87 |


| Alternative 3: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 94 | 71 | 78 |
|  | All | 86 | 83 | 84 |
| SEP | W | 150 | 150 | 150 |
|  | AN | 150 | 150 | 150 |
|  | BN | 150 | 150 | 150 |
|  | D | 144 | 150 | 150 |
|  | C | 133 | 96 | 83 |
|  | All | 146 | 142 | 140 |
| OCT | W | 198 | 198 | 198 |
|  | AN | 183 | 183 | 183 |
|  | BN | 189 | 182 | 189 |
|  | D | 175 | 183 | 178 |
|  | C | 150 | 142 | 152 |
|  | All | 182 | 182 | 183 |
| NOV | W | 198 | 198 | 198 |
|  | AN | 185 | 182 | 182 |
|  | BN | 184 | 189 | 189 |
|  | D | 177 | 177 | 176 |
|  | C | 155 | 145 | 158 |
|  | All | 183 | 182 | 183 |
| DEC | W | 198 | 198 | 198 |
|  | AN | 185 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 177 | 189 | 189 |
|  | C | 155 | 156 | 158 |
|  | All | 184 | 187 | 188 |

Table 12. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 3: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{c}\text { EXISTING CONDITIONS } \\ \text { vs. A3_LLT }\end{array}$ | NAA vs. A3_LLT |
|  | W | $118(53.6 \%)$ | $0(-0.1 \%)$ |
|  | AN | $0(-0.1 \%)$ | $0(0 \%)$ |
|  | BN | $0(0 \%)$ | $0(0 \%)$ |
|  |  | D | $7(3.9 \%)$ |$] 0(0 \%)$


| Alternative 3: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -16 (-17.4\%) | 7 (10\%) |
|  | All | -2 (-2.8\%) | 1 (1.2\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 6 (3.8\%) | 0 (0\%) |
|  | C | -50 (-37.5\%) | -13 (-13\%) |
|  | All | -6 (-4.2\%) | -2 (-1.3\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 7 (4.1\%) |
|  | D | 3 (1.7\%) | -5 (-3\%) |
|  | C | 2 (1.5\%) | 11 (7.5\%) |
|  | All | 1 (0.5\%) | 2 (0.9\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | -3 (-1.8\%) | 0 (0\%) |
|  | BN | 6 (3.1\%) | 0 (0\%) |
|  | D | -1 (-0.6\%) | 0 (-0.2\%) |
|  | C | 3 (1.9\%) | 13 (8.6\%) |
|  | All | 1 (0.4\%) | 2 (1\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 7 (3.6\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 12 (6.6\%) | 0 (0\%) |
|  | C | 3 (2.2\%) | 3 (1.6\%) |
|  | All | 4 (2.2\%) | 0 (0.2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.3.1.7 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

Table 13. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 3: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| FEB | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| MAR | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 797 |
|  | All | 800 | 800 | 800 |
| APR | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| MAY | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUN | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUL | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |


| Alternative 3: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| SEP | W | 773 | 773 | 773 |
|  | AN | 773 | 773 | 773 |
|  | BN | 773 | 773 | 773 |
|  | D | 773 | 773 | 773 |
|  | C | 773 | 773 | 773 |
|  | All | 773 | 773 | 773 |
| OCT | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| NOV | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| DEC | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |

Table 14. Differences (Percent Differences) between Pairs of Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 3: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| FEB | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| MAR | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| APR | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| JUL | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |


| Alternative 3: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |

## 11C.3.1.8 Feather River High-Flow Channel (at Thermalito Afterbay)

Table 15. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 3: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 11,257 | 11,896 | 14,347 |
|  | AN | 4,434 | 2,838 | 4,175 |
|  | BN | 2,640 | 1,441 | 1,679 |
|  | D | 1,798 | 1,459 | 2,414 |
|  | C | 1,459 | 1,648 | 1,312 |
|  | All | 5,277 | 4,995 | 6,168 |
| FEB | W | 12,466 | 14,787 | 16,515 |
|  | AN | 7,411 | 5,809 | 7,670 |
|  | BN | 3,916 | 1,897 | 3,059 |
|  | D | 1,817 | 1,659 | 2,207 |
|  | C | 1,610 | 1,482 | 1,560 |
|  | All | 6,340 | 6,444 | 7,594 |
| MAR | W | 12,895 | 14,772 | 15,093 |
|  | AN | 7,733 | 8,568 | 10,085 |
|  | BN | 3,373 | 1,985 | 2,275 |
|  | D | 2,017 | 1,762 | 2,311 |
|  | C | 1,697 | 1,634 | 1,846 |
|  | All | 6,487 | 6,902 | 7,427 |
| APR | W | 6,472 | 6,408 | 6,442 |
|  | AN | 2,251 | 2,170 | 2,351 |
|  | BN | 1,205 | 1,203 | 2,049 |
|  | D | 1,286 | 1,470 | 2,369 |
|  | C | 1,389 | 1,407 | 1,887 |
|  | All | 3,073 | 3,084 | 3,533 |
| MAY | W | 7,528 | 4,740 | 5,280 |
|  | AN | 3,340 | 3,101 | 4,176 |
|  | BN | 1,205 | 1,749 | 3,007 |
|  | D | 1,591 | 2,223 | 2,628 |
|  | C | 1,574 | 1,790 | 1,803 |
|  | All | 3,661 | 3,005 | 3,639 |
| JUN | W | 5,062 | 4,211 | 5,284 |
|  | AN | 3,301 | 3,930 | 5,795 |
|  | BN | 2,707 | 3,552 | 4,904 |
|  | D | 3,134 | 3,284 | 3,341 |
|  | C | 2,695 | 2,666 | 2,570 |
|  | All | 3,632 | 3,628 | 4,470 |
| JUL | W | 6,490 | 8,577 | 6,557 |
|  | AN | 8,757 | 9,488 | 7,751 |
|  | BN | 8,981 | 8,833 | 6,779 |
|  | D | 8,294 | 8,099 | 4,501 |
|  | C | 6,703 | 5,217 | 3,353 |
|  | All | 7,674 | 8,157 | 5,850 |


| Alternative 3: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 3,308 | 6,228 | 4,552 |
|  | AN | 6,042 | 7,346 | 5,586 |
|  | BN | 6,295 | 6,868 | 5,216 |
|  | D | 7,036 | 4,990 | 3,441 |
|  | C | 2,613 | 2,163 | 2,071 |
|  | All | 4,935 | 5,634 | 4,210 |
| SEP | W | 2,280 | 8,327 | 1,323 |
|  | AN | 2,253 | 6,899 | 2,299 |
|  | BN | 2,466 | 3,068 | 1,569 |
|  | D | 2,366 | 1,052 | 1,494 |
|  | C | 1,421 | 1,345 | 1,730 |
|  | All | 2,201 | 4,601 | 1,605 |
| OCT | W | 3,456 | 3,051 | 3,421 |
|  | AN | 2,386 | 2,741 | 3,415 |
|  | BN | 3,183 | 2,862 | 2,946 |
|  | D | 2,688 | 2,652 | 3,112 |
|  | C | 2,472 | 2,102 | 3,536 |
|  | All | 2,940 | 2,747 | 3,288 |
| NOV | W | 3,292 | 2,470 | 2,780 |
|  | AN | 1,824 | 2,119 | 1,944 |
|  | BN | 2,101 | 1,900 | 1,836 |
|  | D | 1,859 | 1,664 | 1,937 |
|  | C | 1,854 | 1,876 | 1,998 |
|  | All | 2,349 | 2,058 | 2,197 |
| DEC | W | 7,157 | 3,948 | 5,987 |
|  | AN | 2,951 | 3,344 | 4,499 |
|  | BN | 2,176 | 2,102 | 2,907 |
|  | D | 2,364 | 2,229 | 2,739 |
|  | C | 2,609 | 1,694 | 2,542 |
|  | All | 3,973 | 2,837 | 4,026 |

Table 16. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 3: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 3,089 (27.4\%) | 2,451 (20.6\%) |
|  | AN | -259 (-5.8\%) | 1,337 (47.1\%) |
|  | BN | -961 (-36.4\%) | 238 (16.5\%) |
|  | D | 615 (34.2\%) | 955 (65.4\%) |
|  | C | -147 (-10.1\%) | -336 (-20.4\%) |
|  | All | 891 (16.9\%) | 1,174 (23.5\%) |
| FEB | W | 4,049 (32.5\%) | 1,727 (11.7\%) |
|  | AN | 260 (3.5\%) | 1,862 (32.1\%) |
|  | BN | -857 (-21.9\%) | 1,163 (61.3\%) |
|  | D | 390 (21.5\%) | 548 (33\%) |
|  | C | -50 (-3.1\%) | 79 (5.3\%) |
|  | All | 1,254 (19.8\%) | 1,150 (17.9\%) |
| MAR | W | 2,198 (17\%) | 321 (2.2\%) |
|  | AN | 2,353 (30.4\%) | 1,518 (17.7\%) |
|  | BN | -1,098 (-32.5\%) | 291 (14.7\%) |
|  | D | 295 (14.6\%) | 550 (31.2\%) |
|  | C | 149 (8.8\%) | 212 (13\%) |
|  | All | 940 (14.5\%) | 525 (7.6\%) |
| APR | W | -30 (-0.5\%) | 34 (0.5\%) |
|  | AN | 99 (4.4\%) | 180 (8.3\%) |
|  | BN | 844 (70.1\%) | 846 (70.3\%) |
|  | D | 1,083 (84.3\%) | 899 (61.1\%) |
|  | C | 498 (35.9\%) | 480 (34.1\%) |
|  | All | 460 (15\%) | 449 (14.6\%) |
| MAY | W | -2,248 (-29.9\%) | 540 (11.4\%) |
|  | AN | 836 (25\%) | 1,074 (34.6\%) |
|  | BN | 1,801 (149.4\%) | 1,258 (72\%) |
|  | D | 1,036 (65.1\%) | 404 (18.2\%) |
|  | C | 229 (14.5\%) | 14 (0.8\%) |
|  | All | -22 (-0.6\%) | 634 (21.1\%) |
| JUN | W | 222 (4.4\%) | 1,073 (25.5\%) |
|  | AN | 2,494 (75.5\%) | 1,865 (47.5\%) |
|  | BN | 2,197 (81.2\%) | 1,352 (38.1\%) |
|  | D | 207 (6.6\%) | 57 (1.7\%) |
|  | C | -125 (-4.6\%) | -96 (-3.6\%) |
|  | All | 838 (23.1\%) | 843 (23.2\%) |
| JUL | W | 67 (1\%) | -2,020 (-23.6\%) |
|  | AN | -1,005 (-11.5\%) | -1,737 (-18.3\%) |
|  | BN | -2,201 (-24.5\%) | -2,053 (-23.2\%) |
|  | D | -3,793 (-45.7\%) | -3,597 (-44.4\%) |
|  | C | -3,350 (-50\%) | -1,864 (-35.7\%) |
|  | All | -1,825 (-23.8\%) | -2,308 (-28.3\%) |


| Alternative 3: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | 1,244 (37.6\%) | -1,676 (-26.9\%) |
|  | AN | -457 (-7.6\%) | -1,760 (-24\%) |
|  | BN | -1,079 (-17.1\%) | -1,652 (-24.1\%) |
|  | D | -3,595 (-51.1\%) | -1,549 (-31\%) |
|  | C | -542 (-20.7\%) | -92 (-4.3\%) |
|  | All | -725 (-14.7\%) | -1,425 (-25.3\%) |
| SEP | W | -957 (-42\%) | -7,004 (-84.1\%) |
|  | AN | 46 (2\%) | -4,601 (-66.7\%) |
|  | BN | -897 (-36.4\%) | -1,499 (-48.9\%) |
|  | D | -872 (-36.8\%) | 442 (42\%) |
|  | C | 309 (21.7\%) | 385 (28.6\%) |
|  | All | -596 (-27.1\%) | -2,997 (-65.1\%) |
| OCT | W | -35 (-1\%) | 370 (12.1\%) |
|  | AN | 1,028 (43.1\%) | 673 (24.6\%) |
|  | BN | -237 (-7.4\%) | 84 (3\%) |
|  | D | 424 (15.8\%) | 460 (17.3\%) |
|  | C | 1,065 (43.1\%) | 1,434 (68.2\%) |
|  | All | 348 (11.8\%) | 541 (19.7\%) |
| NOV | W | -513 (-15.6\%) | 310 (12.5\%) |
|  | AN | 120 (6.6\%) | -175 (-8.3\%) |
|  | BN | -266 (-12.6\%) | -65 (-3.4\%) |
|  | D | 77 (4.2\%) | 273 (16.4\%) |
|  | C | 144 (7.8\%) | 122 (6.5\%) |
|  | All | -152 (-6.5\%) | 139 (6.8\%) |
| DEC | W | -1,170 (-16.4\%) | 2,039 (51.6\%) |
|  | AN | 1,548 (52.5\%) | 1,155 (34.5\%) |
|  | BN | 732 (33.6\%) | 806 (38.3\%) |
|  | D | 376 (15.9\%) | 510 (22.9\%) |
|  | C | -67 (-2.5\%) | 848 (50.1\%) |
|  | All | 53 (1.3\%) | 1,189 (41.9\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.3.1.9 Feather River at Confluence with Sacramento River

Table 17. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 3: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 23,533 | 26,106 | 28,552 |
|  | AN | 12,430 | 11,953 | 13,291 |
|  | BN | 6,499 | 5,575 | 5,821 |
|  | D | 4,621 | 4,412 | 5,375 |
|  | C | 3,646 | 3,837 | 3,512 |
|  | All | 11,938 | 12,509 | 13,686 |
| FEB | W | 27,039 | 31,065 | 32,789 |
|  | AN | 14,818 | 14,599 | 16,463 |
|  | BN | 9,153 | 7,892 | 9,057 |
|  | D | 4,402 | 4,436 | 4,998 |
|  | C | 3,237 | 3,096 | 3,183 |
|  | All | 13,744 | 14,761 | 15,915 |
| MAR | W | 24,172 | 26,784 | 27,115 |
|  | AN | 19,990 | 21,490 | 23,011 |
|  | BN | 8,136 | 6,882 | 7,180 |
|  | D | 5,073 | 4,940 | 5,482 |
|  | C | 2,933 | 2,756 | 2,983 |
|  | All | 13,521 | 14,300 | 14,831 |
| APR | W | 15,897 | 15,852 | 15,897 |
|  | AN | 9,832 | 9,585 | 9,771 |
|  | BN | 5,401 | 5,189 | 6,044 |
|  | D | 4,152 | 4,137 | 5,041 |
|  | C | 3,298 | 3,185 | 3,675 |
|  | All | 8,796 | 8,689 | 9,147 |
| MAY | W | 14,387 | 10,385 | 10,938 |
|  | AN | 8,068 | 6,884 | 7,968 |
|  | BN | 4,704 | 4,509 | 5,772 |
|  | D | 3,652 | 3,767 | 4,172 |
|  | C | 2,389 | 2,321 | 2,325 |
|  | All | 7,697 | 6,237 | 6,876 |
| JUN | W | 10,222 | 7,199 | 8,250 |
|  | AN | 6,391 | 5,598 | 7,371 |
|  | BN | 4,495 | 4,342 | 5,695 |
|  | D | 3,853 | 3,367 | 3,413 |
|  | C | 2,782 | 2,522 | 2,319 |
|  | All | 6,197 | 4,951 | 5,755 |
| JUL | W | 8,177 | 8,734 | 6,559 |
|  | AN | 9,322 | 9,223 | 7,357 |
|  | BN | 9,380 | 8,725 | 6,567 |
|  | D | 8,290 | 7,674 | 4,014 |
|  | C | 6,450 | 4,891 | 2,991 |
|  | All | 8,322 | 8,009 | 5,597 |


| Alternative 3: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 4,923 | 7,222 | 5,187 |
|  | AN | 7,080 | 8,089 | 6,155 |
|  | BN | 7,236 | 7,570 | 5,644 |
|  | D | 7,711 | 5,487 | 3,806 |
|  | C | 2,841 | 2,340 | 2,190 |
|  | All | 5,941 | 6,313 | 4,665 |
| SEP | W | 4,351 | 10,329 | 3,331 |
|  | AN | 4,194 | 8,773 | 4,168 |
|  | BN | 4,252 | 4,786 | 3,299 |
|  | D | 4,179 | 2,848 | 3,189 |
|  | C | 2,054 | 1,964 | 2,335 |
|  | All | 3,937 | 6,289 | 3,271 |
| OCT | W | 4,176 | 3,746 | 4,148 |
|  | AN | 2,630 | 2,988 | 3,676 |
|  | BN | 3,754 | 3,437 | 3,528 |
|  | D | 3,033 | 2,987 | 3,463 |
|  | C | 2,938 | 2,566 | 4,008 |
|  | All | 3,446 | 3,243 | 3,802 |
| NOV | W | 4,697 | 3,825 | 4,110 |
|  | AN | 3,065 | 3,186 | 2,986 |
|  | BN | 2,687 | 2,455 | 2,383 |
|  | D | 2,342 | 2,125 | 2,390 |
|  | C | 2,084 | 2,107 | 2,204 |
|  | All | 3,216 | 2,873 | 2,994 |
| DEC | W | 12,409 | 10,246 | 12,287 |
|  | AN | 5,193 | 6,000 | 7,160 |
|  | BN | 3,079 | 3,249 | 4,058 |
|  | D | 2,838 | 2,811 | 3,317 |
|  | C | 2,975 | 2,054 | 2,910 |
|  | All | 6,279 | 5,599 | 6,791 |

Table 18. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 3: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 5,019 (21.3\%) | 2,446 (9.4\%) |
|  | AN | 862 (6.9\%) | 1,338 (11.2\%) |
|  | BN | -678 (-10.4\%) | 246 (4.4\%) |
|  | D | 754 (16.3\%) | 963 (21.8\%) |
|  | C | -134 (-3.7\%) | -324 (-8.5\%) |
|  | All | 1,748 (14.6\%) | 1,177 (9.4\%) |
| FEB | W | 5,750 (21.3\%) | 1,724 (5.5\%) |
|  | AN | 1,645 (11.1\%) | 1,864 (12.8\%) |
|  | BN | -96 (-1\%) | 1,164 (14.8\%) |
|  | D | 596 (13.5\%) | 562 (12.7\%) |
|  | C | -54 (-1.7\%) | 87 (2.8\%) |
|  | All | 2,170 (15.8\%) | 1,154 (7.8\%) |
| MAR | W | 2,943 (12.2\%) | 332 (1.2\%) |
|  | AN | 3,020 (15.1\%) | 1,521 (7.1\%) |
|  | BN | -956 (-11.7\%) | 298 (4.3\%) |
|  | D | 410 (8.1\%) | 543 (11\%) |
|  | C | 51 (1.7\%) | 227 (8.2\%) |
|  | All | 1,309 (9.7\%) | 531 (3.7\%) |
| APR | W | 0 (0\%) | 46 (0.3\%) |
|  | AN | -61 (-0.6\%) | 187 (1.9\%) |
|  | BN | 643 (11.9\%) | 855 (16.5\%) |
|  | D | 890 (21.4\%) | 905 (21.9\%) |
|  | C | 377 (11.4\%) | 490 (15.4\%) |
|  | All | 351 (4\%) | 458 (5.3\%) |
| MAY | W | -3,449 (-24\%) | 553 (5.3\%) |
|  | AN | -100 (-1.2\%) | 1,084 (15.8\%) |
|  | BN | 1,067 (22.7\%) | 1,263 (28\%) |
|  | D | 520 (14.2\%) | 405 (10.7\%) |
|  | C | -63 (-2.6\%) | 5 (0.2\%) |
|  | All | -821 (-10.7\%) | 639 (10.2\%) |
| JUN | W | -1,971 (-19.3\%) | 1,051 (14.6\%) |
|  | AN | 980 (15.3\%) | 1,773 (31.7\%) |
|  | BN | 1,199 (26.7\%) | 1,353 (31.2\%) |
|  | D | -440 (-11.4\%) | 46 (1.4\%) |
|  | C | -463 (-16.6\%) | -203 (-8\%) |
|  | All | -441 (-7.1\%) | 804 (16.2\%) |
| JUL | W | -1,617 (-19.8\%) | -2,175 (-24.9\%) |
|  | AN | -1,966 (-21.1\%) | -1,866 (-20.2\%) |
|  | BN | -2,813 (-30\%) | -2,158 (-24.7\%) |
|  | D | -4,275 (-51.6\%) | -3,660 (-47.7\%) |
|  | C | -3,460 (-53.6\%) | -1,901 (-38.9\%) |
|  | All | -2,726 (-32.8\%) | -2,413 (-30.1\%) |


| Alternative 3: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | 263 (5.4\%) | -2,035 (-28.2\%) |
|  | AN | -925 (-13.1\%) | -1,934 (-23.9\%) |
|  | BN | -1,592 (-22\%) | -1,926 (-25.4\%) |
|  | D | -3,905 (-50.6\%) | -1,681 (-30.6\%) |
|  | C | -651 (-22.9\%) | -150 (-6.4\%) |
|  | All | -1,276 (-21.5\%) | -1,648 (-26.1\%) |
| SEP | W | -1,021 (-23.5\%) | -6,999 (-67.8\%) |
|  | AN | -27 (-0.6\%) | -4,606 (-52.5\%) |
|  | BN | -952 (-22.4\%) | -1,486 (-31.1\%) |
|  | D | -990 (-23.7\%) | 341 (12\%) |
|  | C | 281 (13.7\%) | 371 (18.9\%) |
|  | All | -666 (-16.9\%) | -3,018 (-48\%) |
| OCT | W | -28 (-0.7\%) | 403 (10.8\%) |
|  | AN | 1,046 (39.8\%) | 688 (23\%) |
|  | BN | -226 (-6\%) | 90 (2.6\%) |
|  | D | 430 (14.2\%) | 476 (15.9\%) |
|  | C | 1,070 (36.4\%) | 1,442 (56.2\%) |
|  | All | 357 (10.4\%) | 559 (17.2\%) |
| NOV | W | -587 (-12.5\%) | 285 (7.5\%) |
|  | AN | -79 (-2.6\%) | -201 (-6.3\%) |
|  | BN | -304 (-11.3\%) | -72 (-2.9\%) |
|  | D | 48 (2\%) | 266 (12.5\%) |
|  | C | 119 (5.7\%) | 96 (4.6\%) |
|  | All | -222 (-6.9\%) | 121 (4.2\%) |
| DEC | W | -122 (-1\%) | 2,041 (19.9\%) |
|  | AN | 1,967 (37.9\%) | 1,160 (19.3\%) |
|  | BN | 979 (31.8\%) | 809 (24.9\%) |
|  | D | 479 (16.9\%) | 506 (18\%) |
|  | C | -65 (-2.2\%) | 856 (41.6\%) |
|  | All | 512 (8.2\%) | 1,191 (21.3\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.3.1.10 American River at Nimbus Dam

Table 19. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 3: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 8,806 | 11,036 | 10,985 |
|  | AN | 4,833 | 5,805 | 5,812 |
|  | BN | 2,392 | 2,073 | 2,358 |
|  | D | 1,723 | 1,506 | 1,532 |
|  | C | 1,474 | 1,095 | 1,244 |
|  | All | 4,502 | 5,194 | 5,254 |
| FEB | W | 9,294 | 11,102 | 11,092 |
|  | AN | 6,469 | 8,153 | 8,327 |
|  | BN | 4,360 | 4,961 | 4,727 |
|  | D | 1,852 | 1,844 | 1,858 |
|  | C | 1,185 | 1,007 | 1,033 |
|  | All | 5,218 | 6,112 | 6,102 |
| MAR | W | 6,089 | 6,992 | 6,987 |
|  | AN | 5,454 | 5,790 | 5,887 |
|  | BN | 2,429 | 2,794 | 2,804 |
|  | D | 2,191 | 2,314 | 2,151 |
|  | C | 939 | 938 | 860 |
|  | All | 3,762 | 4,187 | 4,154 |
| APR | W | 5,300 | 5,508 | 5,519 |
|  | AN | 3,546 | 3,298 | 3,322 |
|  | BN | 3,126 | 2,970 | 3,047 |
|  | D | 1,837 | 1,888 | 2,016 |
|  | C | 1,156 | 1,255 | 1,237 |
|  | All | 3,305 | 3,334 | 3,380 |
| MAY | W | 6,157 | 4,592 | 4,727 |
|  | AN | 3,885 | 2,521 | 2,924 |
|  | BN | 2,930 | 1,969 | 2,584 |
|  | D | 1,790 | 1,686 | 2,156 |
|  | C | 1,182 | 992 | 1,005 |
|  | All | 3,587 | 2,676 | 2,988 |
| JUN | W | 6,003 | 3,694 | 4,465 |
|  | AN | 3,346 | 3,022 | 3,815 |
|  | BN | 2,863 | 2,883 | 3,770 |
|  | D | 2,506 | 2,596 | 2,596 |
|  | C | 1,824 | 1,025 | 1,122 |
|  | All | 3,699 | 2,825 | 3,352 |
| JUL | W | 4,108 | 3,860 | 3,576 |
|  | AN | 4,638 | 4,927 | 4,348 |
|  | BN | 4,744 | 4,328 | 3,738 |
|  | D | 3,577 | 3,143 | 2,712 |
|  | C | 1,784 | 2,022 | 2,093 |
|  | All | 3,838 | 3,670 | 3,310 |


| Alternative 3: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 3,520 | 2,132 | 2,165 |
|  | AN | 2,542 | 1,944 | 1,798 |
|  | BN | 2,495 | 2,324 | 1,620 |
|  | D | 2,613 | 1,620 | 1,266 |
|  | C | 1,500 | 1,100 | 915 |
|  | All | 2,707 | 1,874 | 1,638 |
| SEP | W | 4,025 | 3,622 | 1,929 |
|  | AN | 2,764 | 2,044 | 1,519 |
|  | BN | 2,370 | 1,605 | 1,369 |
|  | D | 1,856 | 1,182 | 1,134 |
|  | C | 1,164 | 594 | 620 |
|  | All | 2,663 | 2,068 | 1,407 |
| OCT | W | 1,723 | 1,634 | 1,877 |
|  | AN | 1,706 | 1,732 | 1,935 |
|  | BN | 1,602 | 1,767 | 2,030 |
|  | D | 1,468 | 1,258 | 1,624 |
|  | C | 1,461 | 1,655 | 1,883 |
|  | All | 1,605 | 1,592 | 1,857 |
| NOV | W | 3,527 | 2,612 | 2,574 |
|  | AN | 3,181 | 2,554 | 2,168 |
|  | BN | 2,067 | 1,716 | 1,646 |
|  | D | 2,176 | 1,424 | 1,423 |
|  | C | 1,994 | 1,608 | 1,724 |
|  | All | 2,706 | 2,043 | 1,979 |
| DEC | W | 6,302 | 6,171 | 6,435 |
|  | AN | 3,137 | 2,933 | 2,962 |
|  | BN | 2,676 | 2,527 | 2,739 |
|  | D | 1,741 | 1,351 | 1,376 |
|  | C | 1,524 | 1,251 | 1,248 |
|  | All | 3,519 | 3,297 | 3,426 |

Table 20. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 3: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 2,178 (24.7\%) | -52 (-0.5\%) |
|  | AN | 979 (20.3\%) | 7 (0.1\%) |
|  | BN | -35 (-1.4\%) | 285 (13.7\%) |
|  | D | -191 (-11.1\%) | 26 (1.7\%) |
|  | C | -230 (-15.6\%) | 149 (13.6\%) |
|  | All | 752 (16.7\%) | 60 (1.2\%) |
| FEB | W | 1,798 (19.3\%) | -10 (-0.1\%) |
|  | AN | 1,858 (28.7\%) | 174 (2.1\%) |
|  | BN | 367 (8.4\%) | -234 (-4.7\%) |
|  | D | 6 (0.3\%) | 14 (0.8\%) |
|  | C | -152 (-12.8\%) | 26 (2.6\%) |
|  | All | 884 (16.9\%) | -10 (-0.2\%) |
| MAR | W | 898 (14.7\%) | -5 (-0.1\%) |
|  | AN | 433 (7.9\%) | 97 (1.7\%) |
|  | BN | 375 (15.4\%) | 10 (0.3\%) |
|  | D | -40 (-1.8\%) | -164 (-7.1\%) |
|  | C | -79 (-8.4\%) | -78 (-8.3\%) |
|  | All | 392 (10.4\%) | -33 (-0.8\%) |
| APR | W | 219 (4.1\%) | 11 (0.2\%) |
|  | AN | -224 (-6.3\%) | 24 (0.7\%) |
|  | BN | -78 (-2.5\%) | 78 (2.6\%) |
|  | D | 179 (9.7\%) | 128 (6.8\%) |
|  | C | 82 (7.1\%) | -18 (-1.4\%) |
|  | All | 75 (2.3\%) | 46 (1.4\%) |
| MAY | W | -1,430 (-23.2\%) | 135 (2.9\%) |
|  | AN | -960 (-24.7\%) | 404 (16\%) |
|  | BN | -346 (-11.8\%) | 615 (31.2\%) |
|  | D | 366 (20.4\%) | 470 (27.9\%) |
|  | C | -176 (-14.9\%) | 14 (1.4\%) |
|  | All | -598 (-16.7\%) | 312 (11.7\%) |
| JUN | W | -1,538 (-25.6\%) | 771 (20.9\%) |
|  | AN | 469 (14\%) | 793 (26.2\%) |
|  | BN | 907 (31.7\%) | 888 (30.8\%) |
|  | D | 91 (3.6\%) | 0 (0\%) |
|  | C | -702 (-38.5\%) | 98 (9.5\%) |
|  | All | -347 (-9.4\%) | 526 (18.6\%) |
| JUL | W | -533 (-13\%) | -285 (-7.4\%) |
|  | AN | -290 (-6.2\%) | -579 (-11.7\%) |
|  | BN | -1,007 (-21.2\%) | -591 (-13.6\%) |
|  | D | -865 (-24.2\%) | -431 (-13.7\%) |
|  | C | 309 (17.3\%) | 71 (3.5\%) |
|  | All | -528 (-13.8\%) | -360 (-9.8\%) |


| Alternative 3: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{gathered} \hline \text { EXISTING CONDITIONS } \\ \text { vs. A3_LLT } \\ \hline \end{gathered}$ | NAA vs. A3_LLT |
| AUG | W | -1,355 (-38.5\%) | 33 (1.5\%) |
|  | AN | -744 (-29.3\%) | -147 (-7.5\%) |
|  | BN | -875 (-35.1\%) | -704 (-30.3\%) |
|  | D | -1,347 (-51.6\%) | -354 (-21.9\%) |
|  | C | -585 (-39\%) | -185 (-16.8\%) |
|  | All | -1,069 (-39.5\%) | -236 (-12.6\%) |
| SEP | W | -2,096 (-52.1\%) | -1,694 (-46.8\%) |
|  | AN | -1,246 (-45.1\%) | -525 (-25.7\%) |
|  | BN | -1,001 (-42.2\%) | -236 (-14.7\%) |
|  | D | -722 (-38.9\%) | -48 (-4.1\%) |
|  | C | -545 (-46.8\%) | 26 (4.4\%) |
|  | All | -1,256 (-47.2\%) | -661 (-32\%) |
| OCT | W | 154 (8.9\%) | 242 (14.8\%) |
|  | AN | 229 (13.4\%) | 203 (11.7\%) |
|  | BN | 428 (26.7\%) | 263 (14.9\%) |
|  | D | 156 (10.6\%) | 366 (29.1\%) |
|  | C | 423 (28.9\%) | 229 (13.8\%) |
|  | All | 251 (15.7\%) | 265 (16.7\%) |
| NOV | W | -953 (-27\%) | -38 (-1.5\%) |
|  | AN | -1,013 (-31.9\%) | -386 (-15.1\%) |
|  | BN | -421 (-20.4\%) | -70 (-4.1\%) |
|  | D | -754 (-34.6\%) | -2 (-0.1\%) |
|  | C | -270 (-13.5\%) | 116 (7.2\%) |
|  | All | -727 (-26.9\%) | -64 (-3.1\%) |
| DEC | W | 134 (2.1\%) | 264 (4.3\%) |
|  | AN | -175 (-5.6\%) | 29 (1\%) |
|  | BN | 63 (2.4\%) | 212 (8.4\%) |
|  | D | -365 (-21\%) | 25 (1.8\%) |
|  | C | -276 (-18.1\%) | -4 (-0.3\%) |
|  | All | -93 (-2.6\%) | 129 (3.9\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.3.1.11 American River at Confluence with Sacramento River

Table 21. Mean Monthly Flows (cfs) for Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 3: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 8,748 | 10,960 | 10,906 |
|  | AN | 4,806 | 5,760 | 5,767 |
|  | BN | 2,326 | 1,988 | 2,276 |
|  | D | 1,654 | 1,424 | 1,454 |
|  | C | 1,403 | 1,008 | 1,168 |
|  | All | 4,443 | 5,118 | 5,181 |
| FEB | W | 9,183 | 10,947 | 10,937 |
|  | AN | 6,422 | 8,073 | 8,247 |
|  | BN | 4,309 | 4,888 | 4,651 |
|  | D | 1,781 | 1,756 | 1,775 |
|  | C | 1,119 | 921 | 958 |
|  | All | 5,142 | 6,007 | 5,999 |
| MAR | W | 5,979 | 6,837 | 6,832 |
|  | AN | 5,364 | 5,661 | 5,756 |
|  | BN | 2,340 | 2,672 | 2,684 |
|  | D | 2,121 | 2,224 | 2,060 |
|  | C | 864 | 836 | 762 |
|  | All | 3,672 | 4,063 | 4,030 |
| APR | W | 5,156 | 5,300 | 5,310 |
|  | AN | 3,383 | 3,079 | 3,102 |
|  | BN | 2,984 | 2,778 | 2,855 |
|  | D | 1,672 | 1,677 | 1,806 |
|  | C | 996 | 1,059 | 1,035 |
|  | All | 3,152 | 3,128 | 3,173 |
| MAY | W | 5,959 | 4,332 | 4,467 |
|  | AN | 3,700 | 2,285 | 2,689 |
|  | BN | 2,733 | 1,726 | 2,340 |
|  | D | 1,605 | 1,454 | 1,923 |
|  | C | 1,014 | 790 | 807 |
|  | All | 3,398 | 2,438 | 2,750 |
| JUN | W | 5,743 | 3,388 | 4,158 |
|  | AN | 3,103 | 2,736 | 3,525 |
|  | BN | 2,631 | 2,603 | 3,485 |
|  | D | 2,282 | 2,320 | 2,316 |
|  | C | 1,621 | 793 | 890 |
|  | All | 3,462 | 2,545 | 3,068 |
| JUL | W | 3,844 | 3,560 | 3,269 |
|  | AN | 4,399 | 4,635 | 4,050 |
|  | BN | 4,509 | 4,038 | 3,440 |
|  | D | 3,347 | 2,858 | 2,428 |
|  | C | 1,568 | 1,784 | 1,851 |
|  | All | 3,597 | 3,385 | 3,020 |


| Alternative 3: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 3,295 | 1,858 | 1,894 |
|  | AN | 2,313 | 1,663 | 1,522 |
|  | BN | 2,265 | 2,048 | 1,349 |
|  | D | 2,395 | 1,357 | 1,007 |
|  | C | 1,314 | 899 | 716 |
|  | All | 2,488 | 1,612 | 1,379 |
| SEP | W | 3,846 | 3,415 | 1,721 |
|  | AN | 2,594 | 1,838 | 1,314 |
|  | BN | 2,205 | 1,402 | 1,173 |
|  | D | 1,691 | 987 | 942 |
|  | C | 1,011 | 427 | 454 |
|  | All | 2,495 | 1,870 | 1,212 |
| OCT | W | 1,607 | 1,499 | 1,749 |
|  | AN | 1,597 | 1,613 | 1,813 |
|  | BN | 1,472 | 1,617 | 1,895 |
|  | D | 1,344 | 1,114 | 1,486 |
|  | C | 1,342 | 1,517 | 1,746 |
|  | All | 1,486 | 1,454 | 1,725 |
| NOV | W | 3,472 | 2,540 | 2,499 |
|  | AN | 3,100 | 2,455 | 2,067 |
|  | BN | 1,990 | 1,618 | 1,545 |
|  | D | 2,094 | 1,326 | 1,321 |
|  | C | 1,897 | 1,489 | 1,610 |
|  | All | 2,632 | 1,950 | 1,884 |
| DEC | W | 6,255 | 6,115 | 6,379 |
|  | AN | 3,072 | 2,856 | 2,892 |
|  | BN | 2,609 | 2,445 | 2,663 |
|  | D | 1,675 | 1,275 | 1,300 |
|  | C | 1,443 | 1,158 | 1,164 |
|  | All | 3,457 | 3,224 | 3,356 |

Table 22. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 3: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 2,158 (24.7\%) | -54 (-0.5\%) |
|  | AN | 961 (20\%) | 7 (0.1\%) |
|  | BN | -50 (-2.1\%) | 288 (14.5\%) |
|  | D | -200 (-12.1\%) | 30 (2.1\%) |
|  | C | -235 (-16.7\%) | 160 (15.9\%) |
|  | All | 738 (16.6\%) | 63 (1.2\%) |
| FEB | W | 1,755 (19.1\%) | -10 (-0.1\%) |
|  | AN | 1,825 (28.4\%) | 174 (2.2\%) |
|  | BN | 342 (7.9\%) | -237 (-4.8\%) |
|  | D | -6 (-0.3\%) | 19 (1.1\%) |
|  | C | -161 (-14.4\%) | 37 (4\%) |
|  | All | 857 (16.7\%) | -8 (-0.1\%) |
| MAR | W | 853 (14.3\%) | -5 (-0.1\%) |
|  | AN | 392 (7.3\%) | 95 (1.7\%) |
|  | BN | 344 (14.7\%) | 12 (0.4\%) |
|  | D | -61 (-2.9\%) | -164 (-7.4\%) |
|  | C | -102 (-11.8\%) | -74 (-8.9\%) |
|  | All | 358 (9.7\%) | -33 (-0.8\%) |
| APR | W | 155 (3\%) | 11 (0.2\%) |
|  | AN | -281 (-8.3\%) | 23 (0.7\%) |
|  | BN | -129 (-4.3\%) | 77 (2.8\%) |
|  | D | 134 (8\%) | 129 (7.7\%) |
|  | C | 39 (3.9\%) | -25 (-2.3\%) |
|  | All | 21 (0.7\%) | 45 (1.4\%) |
| MAY | W | -1,492 (-25\%) | 135 (3.1\%) |
|  | AN | -1,011 (-27.3\%) | 404 (17.7\%) |
|  | BN | -393 (-14.4\%) | 614 (35.6\%) |
|  | D | 318 (19.8\%) | 469 (32.3\%) |
|  | C | -207 (-20.4\%) | 17 (2.2\%) |
|  | All | -648 (-19.1\%) | 312 (12.8\%) |
| JUN | W | -1,584 (-27.6\%) | 770 (22.7\%) |
|  | AN | 422 (13.6\%) | 789 (28.8\%) |
|  | BN | 854 (32.5\%) | 882 (33.9\%) |
|  | D | 34 (1.5\%) | -4 (-0.2\%) |
|  | C | -731 (-45.1\%) | 98 (12.2\%) |
|  | All | -394 (-11.4\%) | 523 (20.6\%) |
| JUL | W | -575 (-15\%) | -291 (-8.2\%) |
|  | AN | -349 (-7.9\%) | -585 (-12.6\%) |
|  | BN | -1,069 (-23.7\%) | -598 (-14.8\%) |
|  | D | -919 (-27.5\%) | -430 (-15\%) |
|  | C | 283 (18\%) | 67 (3.8\%) |
|  | All | -577 (-16\%) | -365 (-10.8\%) |


| Alternative 3: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | -1,401 (-42.5\%) | 36 (1.9\%) |
|  | AN | -791 (-34.2\%) | -141 (-8.5\%) |
|  | BN | -915 (-40.4\%) | -699 (-34.1\%) |
|  | D | -1,388 (-58\%) | -350 (-25.8\%) |
|  | C | -598 (-45.5\%) | -183 (-20.4\%) |
|  | All | -1,109 (-44.6\%) | -232 (-14.5\%) |
| SEP | W | -2,125 (-55.3\%) | -1,694 (-49.6\%) |
|  | AN | -1,280 (-49.3\%) | -524 (-28.5\%) |
|  | BN | -1,032 (-46.8\%) | -229 (-16.3\%) |
|  | D | -749 (-44.3\%) | -45 (-4.6\%) |
|  | C | -557 (-55.1\%) | 27 (6.3\%) |
|  | All | -1,283 (-51.4\%) | -658 (-35.2\%) |
| OCT | W | 142 (8.8\%) | 250 (16.7\%) |
|  | AN | 217 (13.5\%) | 200 (12.4\%) |
|  | BN | 423 (28.7\%) | 278 (17.2\%) |
|  | D | 142 (10.6\%) | 372 (33.4\%) |
|  | C | 404 (30.1\%) | 229 (15.1\%) |
|  | All | 239 (16.1\%) | 271 (18.6\%) |
| NOV | W | -973 (-28\%) | -41 (-1.6\%) |
|  | AN | -1,033 (-33.3\%) | -388 (-15.8\%) |
|  | BN | -445 (-22.4\%) | -73 (-4.5\%) |
|  | D | -773 (-36.9\%) | -5 (-0.4\%) |
|  | C | -287 (-15.1\%) | 121 (8.1\%) |
|  | All | -748 (-28.4\%) | -66 (-3.4\%) |
| DEC | W | 124 (2\%) | 264 (4.3\%) |
|  | AN | -180 (-5.9\%) | 36 (1.3\%) |
|  | BN | 54 (2.1\%) | 218 (8.9\%) |
|  | D | -375 (-22.4\%) | 25 (2\%) |
|  | C | -279 (-19.3\%) | 6 (0.5\%) |
|  | All | -101 (-2.9\%) | 132 (4.1\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.3.1.12 Stanislaus River at the Confluence with the San Joaquin River

Table 23. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 3: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 956 | 885 | 885 |
|  | AN | 843 | 963 | 963 |
|  | BN | 416 | 369 | 369 |
|  | D | 403 | 366 | 366 |
|  | C | 314 | 265 | 265 |
|  | All | 635 | 615 | 615 |
| FEB | W | 1,285 | 1,236 | 1,239 |
|  | AN | 917 | 858 | 858 |
|  | BN | 551 | 438 | 438 |
|  | D | 562 | 359 | 359 |
|  | C | 490 | 348 | 348 |
|  | All | 827 | 723 | 724 |
| MAR | W | 2,063 | 2,217 | 2,216 |
|  | AN | 1,295 | 956 | 956 |
|  | BN | 732 | 548 | 547 |
|  | D | 559 | 390 | 390 |
|  | C | 541 | 444 | 444 |
|  | All | 1,167 | 1,071 | 1,071 |
| APR | W | 2,054 | 1,965 | 1,965 |
|  | AN | 1,719 | 1,535 | 1,534 |
|  | BN | 1,494 | 1,211 | 1,210 |
|  | D | 1,438 | 1,199 | 1,198 |
|  | C | 823 | 670 | 670 |
|  | All | 1,562 | 1,387 | 1,387 |
| MAY | W | 1,653 | 1,613 | 1,614 |
|  | AN | 1,389 | 1,243 | 1,243 |
|  | BN | 1,238 | 898 | 898 |
|  | D | 1,140 | 916 | 916 |
|  | C | 715 | 627 | 626 |
|  | All | 1,271 | 1,125 | 1,125 |
| JUN | W | 1,608 | 1,763 | 1,762 |
|  | AN | 1,134 | 985 | 984 |
|  | BN | 663 | 568 | 566 |
|  | D | 447 | 364 | 365 |
|  | C | 332 | 296 | 292 |
|  | All | 932 | 914 | 912 |
| JUL | W | 1,064 | 1,080 | 1,080 |
|  | AN | 489 | 454 | 454 |
|  | BN | 450 | 425 | 425 |
|  | D | 398 | 359 | 360 |
|  | C | 337 | 310 | 313 |
|  | All | 607 | 590 | 590 |


| Alternative 3: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 930 | 717 | 717 |
|  | AN | 476 | 454 | 454 |
|  | BN | 423 | 418 | 418 |
|  | D | 387 | 382 | 382 |
|  | C | 341 | 338 | 338 |
|  | All | 560 | 491 | 491 |
| SEP | W | 1,040 | 863 | 863 |
|  | AN | 502 | 474 | 474 |
|  | BN | 417 | 407 | 407 |
|  | D | 395 | 390 | 390 |
|  | C | 324 | 317 | 331 |
|  | All | 595 | 533 | 536 |
| OCT | W | 897 | 845 | 845 |
|  | AN | 873 | 822 | 823 |
|  | BN | 903 | 844 | 844 |
|  | D | 984 | 925 | 925 |
|  | C | 689 | 612 | 612 |
|  | All | 867 | 808 | 808 |
| NOV | W | 426 | 408 | 408 |
|  | AN | 580 | 524 | 524 |
|  | BN | 341 | 334 | 334 |
|  | D | 345 | 321 | 321 |
|  | C | 325 | 308 | 309 |
|  | All | 410 | 386 | 386 |
| DEC | W | 512 | 429 | 418 |
|  | AN | 722 | 697 | 697 |
|  | BN | 331 | 353 | 353 |
|  | D | 317 | 294 | 294 |
|  | C | 289 | 272 | 272 |
|  | All | 450 | 417 | 414 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

## 1

Table 24. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 3: Upstream-Stanislaus River at Confluence with San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | -71 (-7.4\%) | 0 (0\%) |
|  | AN | 120 (14.3\%) | 0 (0\%) |
|  | BN | -47 (-11.3\%) | 0 (0\%) |
|  | D | -37 (-9.1\%) | 0 (0\%) |
|  | C | -49 (-15.5\%) | 0 (0\%) |
|  | All | -20 (-3.2\%) | 0 (0\%) |
| FEB | W | -46 (-3.6\%) | 3 (0.2\%) |
|  | AN | -59 (-6.4\%) | 0 (0\%) |
|  | BN | -113 (-20.5\%) | 0 (0\%) |
|  | D | -203 (-36.2\%) | 0 (0\%) |
|  | C | -142 (-29\%) | 0 (0\%) |
|  | All | -103 (-12.4\%) | 1 (0.1\%) |
| MAR | W | 153 (7.4\%) | 0 (0\%) |
|  | AN | -339 (-26.2\%) | 0 (0\%) |
|  | BN | -185 (-25.2\%) | 0 (-0.1\%) |
|  | D | -169 (-30.2\%) | 0 (-0.1\%) |
|  | C | -97 (-17.9\%) | 0 (0\%) |
|  | All | -96 (-8.2\%) | 0 (0\%) |
| APR | W | -89 (-4.3\%) | 0 (0\%) |
|  | AN | -185 (-10.7\%) | 0 (0\%) |
|  | BN | -283 (-19\%) | -1 (0\%) |
|  | D | -240 (-16.7\%) | 0 (0\%) |
|  | C | -153 (-18.6\%) | 0 (0\%) |
|  | All | -175 (-11.2\%) | 0 (0\%) |
| MAY | W | -39 (-2.4\%) | 1 (0\%) |
|  | AN | -146 (-10.5\%) | 0 (0\%) |
|  | BN | -340 (-27.5\%) | -1 (-0.1\%) |
|  | D | -224 (-19.7\%) | 0 (0\%) |
|  | C | -89 (-12.5\%) | -1 (-0.2\%) |
|  | All | -147 (-11.5\%) | 0 (0\%) |
| JUN | W | 155 (9.6\%) | 0 (0\%) |
|  | AN | -150 (-13.2\%) | -1 (-0.1\%) |
|  | BN | -97 (-14.6\%) | -2 (-0.3\%) |
|  | D | -82 (-18.4\%) | 0 (0\%) |
|  | C | -40 (-12\%) | -4 (-1.3\%) |
|  | All | -20 (-2.2\%) | -1 (-0.2\%) |
| JUL | W | 17 (1.6\%) | 0 (0\%) |
|  | AN | -35 (-7.2\%) | 0 (0\%) |
|  | BN | -25 (-5.5\%) | 0 (0\%) |
|  | D | -38 (-9.4\%) | 1 (0.3\%) |
|  | C | -24 (-7.2\%) | 2 (0.7\%) |
|  | All | -17 (-2.7\%) | 1 (0.1\%) |


| Alternative 3: Upstream-Stanislaus River at Confluence with San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | -212 (-22.8\%) | 0 (0\%) |
|  | AN | -22 (-4.6\%) | 0 (0\%) |
|  | BN | -4 (-1\%) | 0 (0\%) |
|  | D | -5 (-1.2\%) | 0 (0\%) |
|  | C | -3 (-0.9\%) | 0 (0.1\%) |
|  | All | -68 (-12.2\%) | 0 (0\%) |
| SEP | W | -177 (-17\%) | 0 (0\%) |
|  | AN | -28 (-5.6\%) | 0 (0\%) |
|  | BN | -10 (-2.4\%) | 0 (0\%) |
|  | D | -5 (-1.3\%) | 0 (0\%) |
|  | C | 6 (1.9\%) | 14 (4.4\%) |
|  | All | -59 (-9.8\%) | 3 (0.5\%) |
| OCT | W | -52 (-5.8\%) | 0 (0\%) |
|  | AN | -50 (-5.8\%) | 0 (0.1\%) |
|  | BN | -59 (-6.5\%) | 0 (0\%) |
|  | D | -59 (-6\%) | 0 (0\%) |
|  | C | -77 (-11.1\%) | 0 (0\%) |
|  | All | -59 (-6.8\%) | 0 (0\%) |
| NOV | W | -18 (-4.3\%) | 0 (0\%) |
|  | AN | -56 (-9.7\%) | 0 (0\%) |
|  | BN | -8 (-2.3\%) | 0 (0\%) |
|  | D | -23 (-6.7\%) | 0 (0\%) |
|  | C | -16 (-4.9\%) | 0 (0.2\%) |
|  | All | -24 (-5.9\%) | 0 (0\%) |
| DEC | W | -94 (-18.4\%) | -11 (-2.6\%) |
|  | AN | -25 (-3.5\%) | 0 (0\%) |
|  | BN | 23 (6.8\%) | 0 (0\%) |
|  | D | -23 (-7.3\%) | 0 (0\%) |
|  | C | -16 (-5.7\%) | 0 (0\%) |
|  | All | -36 (-8\%) | -3 (-0.8\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.3.2 In Delta

## 11C.3.2.1 OMR Flow (Old and Middle Rivers)

Table 25. Mean Monthly Flows (cfs) for Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 3: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | -1,820 | -1,606 | 532 |
|  | AN | -3,553 | -3,446 | -2,261 |
|  | BN | -4,240 | -3,803 | -3,853 |
|  | D | -4,664 | -4,675 | -3,466 |
|  | C | -4,130 | -3,684 | -1,542 |
|  | All | -3,449 | -3,228 | -1,807 |
| FEB | W | -2,365 | -2,293 | 2,061 |
|  | AN | -3,274 | -3,147 | -1,359 |
|  | BN | -3,437 | -3,290 | -2,104 |
|  | D | -3,986 | -3,502 | -3,384 |
|  | C | -3,191 | -3,047 | -2,809 |
|  | All | -3,158 | -2,964 | -1,058 |
| MAR | W | -1,600 | -1,454 | 3,772 |
|  | AN | -4,251 | -3,815 | -1,592 |
|  | BN | -4,147 | -3,834 | -1,910 |
|  | D | -2,852 | -2,614 | -2,391 |
|  | C | -2,010 | -1,636 | -1,687 |
|  | All | -2,758 | -2,487 | -135 |
| APR | W | 2,431 | 2,415 | 438 |
|  | AN | 1,058 | 787 | -2,013 |
|  | BN | 677 | 214 | -2,398 |
|  | D | -268 | -615 | -1,740 |
|  | C | -950 | -845 | -1,140 |
|  | All | 843 | 659 | -1,114 |
| MAY | W | 1,651 | 1,555 | 434 |
|  | AN | 509 | 396 | -1,997 |
|  | BN | 272 | -237 | -2,003 |
|  | D | -647 | -1,010 | -1,481 |
|  | C | -1,020 | -911 | -767 |
|  | All | 353 | 155 | -934 |
| JUN | W | -4,164 | -4,369 | -2,663 |
|  | AN | -4,761 | -4,454 | -3,918 |
|  | BN | -4,154 | -3,420 | -2,077 |
|  | D | -3,301 | -2,592 | -1,640 |
|  | C | -2,250 | -2,143 | -1,616 |
|  | All | -3,780 | -3,504 | -2,369 |


| Alternative 3: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JUL | W | -8,959 | -8,699 | -5,716 |
|  | AN | -9,919 | -7,962 | -5,241 |
|  | BN | -10,853 | -9,942 | -6,272 |
|  | D | -10,891 | -9,505 | -4,542 |
|  | C | -8,058 | -5,234 | -2,958 |
|  | All | -9,715 | -8,473 | -5,080 |
| AUG | W | -10,062 | -10,518 | -4,552 |
|  | AN | -10,348 | -10,985 | -5,739 |
|  | BN | -10,044 | -9,374 | -4,964 |
|  | D | -10,122 | -7,259 | -3,939 |
|  | C | -4,384 | -3,192 | -2,872 |
|  | All | -9,283 | -8,604 | -4,416 |
| SEP | W | -9,317 | -7,580 | -5,003 |
|  | AN | -9,163 | -9,002 | -5,430 |
|  | BN | -8,575 | -8,392 | -4,533 |
|  | D | -8,081 | -5,165 | -4,031 |
|  | C | -4,807 | -3,966 | -2,536 |
|  | All | -8,236 | -6,868 | -4,411 |
| OCT | W | -8,347 | -5,049 | -5,121 |
|  | AN | -7,643 | -3,648 | -4,602 |
|  | BN | -7,804 | -4,793 | -4,918 |
|  | D | -6,961 | -4,103 | -4,826 |
|  | C | -6,440 | -3,920 | -4,051 |
|  | All | -7,568 | -4,427 | -4,789 |
| NOV | W | -8,902 | -6,527 | -5,959 |
|  | AN | -7,264 | -6,003 | -5,307 |
|  | BN | -7,997 | -5,542 | -5,443 |
|  | D | -7,136 | -5,007 | -5,030 |
|  | C | -5,294 | -4,389 | -3,714 |
|  | All | -7,592 | -5,636 | -5,243 |
| DEC | W | -5,542 | -5,591 | -4,502 |
|  | AN | -6,987 | -7,050 | -6,087 |
|  | BN | -7,304 | -7,040 | -6,635 |
|  | D | -7,214 | -7,006 | -7,006 |
|  | C | -6,166 | -4,173 | -5,849 |
|  | All | -6,513 | -6,155 | -5,845 |

Table 26. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 3: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 2,352 (129.2\%) | 2,138 (133.1\%) |
|  | AN | 1,291 (36.4\%) | 1,185 (34.4\%) |
|  | BN | 386 (9.1\%) | -51 (-1.3\%) |
|  | D | 1,197 (25.7\%) | 1,209 (25.9\%) |
|  | C | 2,588 (62.7\%) | 2,142 (58.1\%) |
|  | All | 1,642 (47.6\%) | 1,422 (44\%) |
| FEB | W | 4,426 (187.1\%) | 4,354 (189.9\%) |
|  | AN | 1,916 (58.5\%) | 1,788 (56.8\%) |
|  | BN | 1,333 (38.8\%) | 1,186 (36.1\%) |
|  | D | 601 (15.1\%) | 118 (3.4\%) |
|  | C | 382 (12\%) | 239 (7.8\%) |
|  | All | 2,099 (66.5\%) | 1,905 (64.3\%) |
| MAR | W | 5,372 (335.7\%) | 5,225 (359.5\%) |
|  | AN | 2,659 (62.6\%) | 2,223 (58.3\%) |
|  | BN | 2,237 (53.9\%) | 1,924 (50.2\%) |
|  | D | 461 (16.2\%) | 223 (8.5\%) |
|  | C | 324 (16.1\%) | -50 (-3.1\%) |
|  | All | 2,623 (95.1\%) | 2,352 (94.6\%) |
| APR | W | -1,994 (-82\%) | -1,978 (-81.9\%) |
|  | AN | -3,071 (-290.2\%) | -2,800 (-355.7\%) |
|  | BN | -3,074 (-454.2\%) | -2,611 (-1,220.5\%) |
|  | D | -1,472 (-549.5\%) | -1,125 (-182.8\%) |
|  | C | -190 (-19.9\%) | -295 (-34.9\%) |
|  | All | -1,957 (-232.1\%) | -1,773 (-269.1\%) |
| MAY | W | -1,217 (-73.7\%) | -1,121 (-72.1\%) |
|  | AN | -2,507 (-492.1\%) | -2,393 (-604.6\%) |
|  | BN | -2,274 (-837.1\%) | -1,765 (-743.3\%) |
|  | D | -835 (-129\%) | -471 (-46.7\%) |
|  | C | 253 (24.8\%) | 145 (15.9\%) |
|  | All | -1,287 (-364.4\%) | -1,089 (-700.8\%) |
| JUN | W | 1,501 (36.1\%) | 1,707 (39.1\%) |
|  | AN | 843 (17.7\%) | 535 (12\%) |
|  | BN | 2,078 (50\%) | 1,343 (39.3\%) |
|  | D | 1,660 (50.3\%) | 951 (36.7\%) |
|  | C | 634 (28.2\%) | 526 (24.6\%) |
|  | All | 1,411 (37.3\%) | 1,135 (32.4\%) |
| JUL | W | 3,242 (36.2\%) | 2,983 (34.3\%) |
|  | AN | 4,678 (47.2\%) | 2,721 (34.2\%) |
|  | BN | 4,581 (42.2\%) | 3,670 (36.9\%) |
|  | D | 6,349 (58.3\%) | 4,963 (52.2\%) |
|  | C | 5,099 (63.3\%) | 2,275 (43.5\%) |
|  | All | 4,635 (47.7\%) | 3,393 (40\%) |


| Alternative 3: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | 5,510 (54.8\%) | 5,966 (56.7\%) |
|  | AN | 4,610 (44.5\%) | 5,246 (47.8\%) |
|  | BN | 5,080 (50.6\%) | 4,410 (47\%) |
|  | D | 6,184 (61.1\%) | 3,321 (45.7\%) |
|  | C | 1,513 (34.5\%) | 320 (10\%) |
|  | All | 4,868 (52.4\%) | 4,188 (48.7\%) |
| SEP | W | 4,314 (46.3\%) | 2,578 (34\%) |
|  | AN | 3,732 (40.7\%) | 3,572 (39.7\%) |
|  | BN | 4,042 (47.1\%) | 3,859 (46\%) |
|  | D | 4,050 (50.1\%) | 1,134 (22\%) |
|  | C | 2,271 (47.2\%) | 1,430 (36.1\%) |
|  | All | 3,826 (46.4\%) | 2,457 (35.8\%) |
| OCT | W | 3,226 (38.6\%) | -72 (-1.4\%) |
|  | AN | 3,041 (39.8\%) | -953 (-26.1\%) |
|  | BN | 2,886 (37\%) | -125 (-2.6\%) |
|  | D | 2,134 (30.7\%) | -723 (-17.6\%) |
|  | C | 2,389 (37.1\%) | -131 (-3.3\%) |
|  | All | 2,779 (36.7\%) | -362 (-8.2\%) |
| NOV | W | 2,943 (33.1\%) | 568 (8.7\%) |
|  | AN | 1,957 (26.9\%) | 696 (11.6\%) |
|  | BN | 2,553 (31.9\%) | 99 (1.8\%) |
|  | D | 2,107 (29.5\%) | -23 (-0.5\%) |
|  | C | 1,579 (29.8\%) | 675 (15.4\%) |
|  | All | 2,,349 (30.9\%) | 393 (7\%) |
| DEC | W | 1,040 (18.8\%) | 1,090 (19.5\%) |
|  | AN | 900 (12.9\%) | 963 (13.7\%) |
|  | BN | 669 (9.2\%) | 406 (5.8\%) |
|  | D | 208 (2.9\%) | -1 (0\%) |
|  | C | 317 (5.1\%) | -1,675 (-40.1\%) |
|  | All | 668 (10.3\%) | 310 (5\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.3.2.2 Sacramento River Downstream of North Delta Diversion Facility

Table 27. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 3: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 50,961 | 52,878 | 47,110 |
|  | AN | 39,863 | 40,484 | 35,796 |
|  | BN | 23,781 | 22,653 | 20,276 |
|  | D | 17,444 | 17,451 | 16,758 |
|  | C | 14,281 | 15,073 | 13,124 |
|  | All | 31,971 | 32,595 | 29,237 |
| FEB | W | 57,314 | 59,847 | 52,834 |
|  | AN | 45,676 | 47,786 | 41,555 |
|  | BN | 31,934 | 31,592 | 26,948 |
|  | D | 21,202 | 21,107 | 18,985 |
|  | C | 14,708 | 14,291 | 13,210 |
|  | All | 37,116 | 38,087 | 33,535 |
| MAR | W | 49,416 | 50,993 | 43,239 |
|  | AN | 44,495 | 45,088 | 38,037 |
|  | BN | 24,489 | 22,915 | 18,251 |
|  | D | 20,656 | 20,650 | 17,175 |
|  | C | 13,245 | 13,137 | 12,343 |
|  | All | 32,834 | 33,134 | 27,969 |
| APR | W | 37,809 | 37,543 | 31,285 |
|  | AN | 25,979 | 24,931 | 20,064 |
|  | BN | 17,752 | 17,128 | 15,612 |
|  | D | 12,990 | 12,904 | 12,515 |
|  | C | 10,229 | 10,365 | 10,273 |
|  | All | 23,169 | 22,826 | 19,772 |
| MAY | W | 31,948 | 24,500 | 21,012 |
|  | AN | 21,021 | 18,657 | 16,732 |
|  | BN | 14,227 | 12,394 | 12,836 |
|  | D | 10,959 | 11,427 | 12,132 |
|  | C | 7,749 | 8,011 | 7,720 |
|  | All | 19,175 | 16,295 | 15,096 |
| JUN | W | 23,900 | 18,603 | 16,649 |
|  | AN | 16,309 | 16,051 | 15,314 |
|  | BN | 13,576 | 13,898 | 13,144 |
|  | D | 12,222 | 12,656 | 11,544 |
|  | C | 9,884 | 10,123 | 9,302 |
|  | All | 16,412 | 14,880 | 13,660 |
| JUL | W | 19,876 | 21,425 | 16,224 |
|  | AN | 21,574 | 22,727 | 16,596 |
|  | BN | 20,953 | 20,513 | 15,349 |
|  | D | 19,272 | 18,957 | 12,628 |
|  | C | 15,397 | 13,767 | 10,940 |
|  | All | 19,520 | 19,797 | 14,566 |


| Alternative 3: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 15,816 | 16,064 | 9,409 |
|  | AN | 15,877 | 17,491 | 11,332 |
|  | BN | 15,643 | 16,232 | 10,460 |
|  | D | 16,965 | 14,351 | 9,704 |
|  | C | 10,095 | 8,996 | 8,150 |
|  | All | 15,210 | 14,891 | 9,751 |
| SEP | W | 18,254 | 27,212 | 8,534 |
|  | AN | 13,198 | 21,006 | 8,740 |
|  | BN | 12,427 | 12,306 | 8,112 |
|  | D | 12,155 | 8,620 | 8,225 |
|  | C | 8,485 | 7,292 | 8,512 |
|  | All | 13,751 | 16,763 | 8,421 |
| OCT | W | 13,505 | 13,277 | 13,568 |
|  | AN | 11,118 | 11,864 | 14,074 |
|  | BN | 11,557 | 12,124 | 13,743 |
|  | D | 10,279 | 10,487 | 12,294 |
|  | C | 10,073 | 9,964 | 13,727 |
|  | All | 11,613 | 11,776 | 13,415 |
| NOV | W | 19,447 | 19,285 | 14,617 |
|  | AN | 15,309 | 15,925 | 10,477 |
|  | BN | 12,574 | 13,037 | 8,652 |
|  | D | 12,868 | 11,914 | 9,347 |
|  | C | 9,633 | 9,295 | 8,035 |
|  | All | 14,788 | 14,647 | 10,873 |
| DEC | W | 39,708 | 37,022 | 33,793 |
|  | AN | 21,663 | 22,629 | 22,076 |
|  | BN | 16,678 | 16,692 | 16,691 |
|  | D | 15,442 | 15,159 | 15,185 |
|  | C | 11,816 | 10,632 | 11,087 |
|  | All | 23,727 | 22,784 | 21,751 |

Table 28. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 3: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | -3,851 (-7.6\%) | -5,768 (-10.9\%) |
|  | AN | -4,067 (-10.2\%) | -4,688 (-11.6\%) |
|  | BN | -3,505 (-14.7\%) | -2,377 (-10.5\%) |
|  | D | -686 (-3.9\%) | -693 (-4\%) |
|  | C | -1,157 (-8.1\%) | -1,949 (-12.9\%) |
|  | All | -2,734 (-8.6\%) | -3,358 (-10.3\%) |
| FEB | W | -4,480 (-7.8\%) | -7,013 (-11.7\%) |
|  | AN | -4,121 (-9\%) | -6,231 (-13\%) |
|  | BN | -4,986 (-15.6\%) | -4,644 (-14.7\%) |
|  | D | -2,217 (-10.5\%) | -2,122 (-10.1\%) |
|  | C | -1,498 (-10.2\%) | -1,081 (-7.6\%) |
|  | All | -3,581 (-9.6\%) | -4,552 (-12\%) |
| MAR | W | -6,177 (-12.5\%) | -7,754 (-15.2\%) |
|  | AN | -6,458 (-14.5\%) | -7,051 (-15.6\%) |
|  | BN | -6,238 (-25.5\%) | -4,664 (-20.4\%) |
|  | D | -3,481 (-16.9\%) | -3,475 (-16.8\%) |
|  | C | -902 (-6.8\%) | -794 (-6\%) |
|  | All | -4,865 (-14.8\%) | -5,165 (-15.6\%) |
| APR | W | -6,524 (-17.3\%) | -6,258 (-16.7\%) |
|  | AN | -5,915 (-22.8\%) | -4,867 (-19.5\%) |
|  | BN | -2,140 (-12.1\%) | -1,516 (-8.9\%) |
|  | D | -475 (-3.7\%) | -389 (-3\%) |
|  | C | 44 (0.4\%) | -92 (-0.9\%) |
|  | All | -3,397 (-14.7\%) | -3,054 (-13.4\%) |
| MAY | W | -10,936 (-34.2\%) | -3,488 (-14.2\%) |
|  | AN | -4,289 (-20.4\%) | -1,925 (-10.3\%) |
|  | BN | -1,391 (-9.8\%) | 442 (3.6\%) |
|  | D | 1,173 (10.7\%) | 705 (6.2\%) |
|  | C | -29 (-0.4\%) | -291 (-3.6\%) |
|  | All | -4,079 (-21.3\%) | -1,199 (-7.4\%) |
| JUN | W | -7,251 (-30.3\%) | -1,954 (-10.5\%) |
|  | AN | -995 (-6.1\%) | -737 (-4.6\%) |
|  | BN | -432 (-3.2\%) | -754 (-5.4\%) |
|  | D | -678 (-5.6\%) | -1,112 (-8.8\%) |
|  | C | -582 (-5.9\%) | -821 (-8.1\%) |
|  | All | -2,752 (-16.8\%) | -1,220 (-8.2\%) |
| JUL | W | -3,652 (-18.4\%) | -5,201 (-24.3\%) |
|  | AN | -4,978 (-23.1\%) | -6,131 (-27\%) |
|  | BN | -5,604 (-26.7\%) | -5,164 (-25.2\%) |
|  | D | -6,644 (-34.5\%) | -6,329 (-33.4\%) |
|  | C | -4,457 (-28.9\%) | -2,827 (-20.5\%) |
|  | All | -4,954 (-25.4\%) | -5,231 (-26.4\%) |


| Alternative 3: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | -6,407 (-40.5\%) | -6,655 (-41.4\%) |
|  | AN | -4,545 (-28.6\%) | -6,159 (-35.2\%) |
|  | BN | -5,183 (-33.1\%) | -5,772 (-35.6\%) |
|  | D | -7,261 (-42.8\%) | -4,647 (-32.4\%) |
|  | C | -1,945 (-19.3\%) | -846 (-9.4\%) |
|  | All | -5,459 (-35.9\%) | -5,140 (-34.5\%) |
| SEP | W | -9,720 (-53.2\%) | -18,678 (-68.6\%) |
|  | AN | -4,458 (-33.8\%) | -12,266 (-58.4\%) |
|  | BN | -4,315 (-34.7\%) | -4,194 (-34.1\%) |
|  | D | -3,930 (-32.3\%) | -395 (-4.6\%) |
|  | C | 27 (0.3\%) | 1,220 (16.7\%) |
|  | All | -5,330 (-38.8\%) | -8,342 (-49.8\%) |
| OCT | W | 63 (0.5\%) | 291 (2.2\%) |
|  | AN | 2,956 (26.6\%) | 2,210 (18.6\%) |
|  | BN | 2,186 (18.9\%) | 1,619 (13.4\%) |
|  | D | 2,015 (19.6\%) | 1,807 (17.2\%) |
|  | C | 3,654 (36.3\%) | 3,763 (37.8\%) |
|  | All | 1,802 (15.5\%) | 1,639 (13.9\%) |
| NOV | W | -4,830 (-24.8\%) | -4,668 (-24.2\%) |
|  | AN | -4,832 (-31.6\%) | -5,448 (-34.2\%) |
|  | BN | -3,922 (-31.2\%) | -4,385 (-33.6\%) |
|  | D | -3,521 (-27.4\%) | -2,567 (-21.5\%) |
|  | C | -1,598 (-16.6\%) | -1,260 (-13.6\%) |
|  | All | -3,915 (-26.5\%) | -3,774 (-25.8\%) |
| DEC | W | -5,915 (-14.9\%) | -3,229 (-8.7\%) |
|  | AN | 413 (1.9\%) | -553 (-2.4\%) |
|  | BN | 13 (0.1\%) | -1 (0\%) |
|  | D | -257 (-1.7\%) | 26 (0.2\%) |
|  | C | -729 (-6.2\%) | 455 (4.3\%) |
|  | All | -1,976 (-8.3\%) | -1,033 (-4.5\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.3.2.3 Sacramento River at Rio Vista

Table 29. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 3: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 71,111 | 78,551 | 76,879 |
|  | AN | 41,963 | 42,919 | 40,693 |
|  | BN | 20,943 | 19,991 | 19,814 |
|  | D | 14,895 | 14,927 | 15,067 |
|  | C | 11,853 | 12,601 | 11,304 |
|  | All | 37,268 | 39,721 | 38,676 |
| FEB | W | 80,958 | 89,989 | 86,983 |
|  | AN | 52,542 | 55,363 | 53,741 |
|  | BN | 30,159 | 29,442 | 28,133 |
|  | D | 19,320 | 19,422 | 18,615 |
|  | C | 12,247 | 11,956 | 11,457 |
|  | All | 44,541 | 47,675 | 46,011 |
| MAR | W | 63,763 | 68,663 | 64,264 |
|  | AN | 46,750 | 48,513 | 45,102 |
|  | BN | 20,980 | 19,562 | 17,064 |
|  | D | 17,656 | 17,679 | 15,746 |
|  | C | 10,710 | 10,684 | 10,404 |
|  | All | 36,084 | 37,655 | 34,869 |
| APR | W | 38,214 | 38,422 | 35,059 |
|  | AN | 22,726 | 21,855 | 19,103 |
|  | BN | 14,652 | 14,207 | 13,415 |
|  | D | 10,331 | 10,299 | 10,184 |
|  | C | 7,665 | 7,816 | 7,840 |
|  | All | 21,333 | 21,211 | 19,585 |
| MAY | W | 26,933 | 20,046 | 17,128 |
|  | AN | 17,008 | 14,948 | 13,364 |
|  | BN | 10,924 | 9,355 | 9,812 |
|  | D | 8,135 | 8,564 | 9,269 |
|  | C | 5,305 | 5,554 | 5,405 |
|  | All | 15,456 | 12,833 | 11,887 |
| JUN | W | 16,557 | 11,418 | 9,675 |
|  | AN | 9,887 | 9,220 | 8,339 |
|  | BN | 7,001 | 7,241 | 6,758 |
|  | D | 6,020 | 6,335 | 5,604 |
|  | C | 4,333 | 4,513 | 4,027 |
|  | All | 9,847 | 8,257 | 7,261 |
| JUL | W | 11,125 | 12,181 | 8,504 |
|  | AN | 12,128 | 12,927 | 8,573 |
|  | BN | 11,686 | 11,357 | 7,734 |
|  | D | 10,523 | 10,307 | 6,161 |
|  | C | 7,736 | 6,596 | 4,701 |
|  | All | 10,739 | 10,921 | 7,312 |


| Alternative 3: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 8,507 | 8,650 | 3,979 |
|  | AN | 8,538 | 9,648 | 5,297 |
|  | BN | 8,371 | 8,753 | 4,694 |
|  | D | 9,264 | 7,417 | 4,185 |
|  | C | 4,390 | 3,615 | 3,234 |
|  | All | 8,052 | 7,806 | 4,230 |
| SEP | W | 10,767 | 21,199 | 3,569 |
|  | AN | 6,788 | 12,832 | 3,706 |
|  | BN | 6,283 | 6,197 | 3,309 |
|  | D | 6,116 | 3,644 | 3,416 |
|  | C | 3,588 | 2,996 | 3,764 |
|  | All | 7,348 | 10,896 | 3,540 |
| OCT | W | 8,718 | 8,287 | 9,070 |
|  | AN | 6,183 | 7,207 | 9,573 |
|  | BN | 6,258 | 6,976 | 8,217 |
|  | D | 5,312 | 5,727 | 7,343 |
|  | C | 5,215 | 4,969 | 9,179 |
|  | All | 6,667 | 6,858 | 8,635 |
| NOV | W | 15,829 | 15,879 | 11,738 |
|  | AN | 11,333 | 12,156 | 6,972 |
|  | BN | 8,184 | 9,071 | 5,003 |
|  | D | 8,733 | 8,061 | 5,845 |
|  | C | 5,473 | 5,565 | 4,348 |
|  | All | 10,793 | 10,946 | 7,516 |
| DEC | W | 43,367 | 40,431 | 40,845 |
|  | AN | 19,040 | 19,936 | 20,136 |
|  | BN | 13,987 | 14,049 | 14,409 |
|  | D | 11,999 | 11,687 | 12,086 |
|  | C | 8,131 | 7,186 | 7,692 |
|  | All | 22,749 | 21,753 | 22,136 |

Table 30. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 3: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 5,768 (8.1\%) | -1,672 (-2.1\%) |
|  | AN | -1,270 (-3\%) | -2,226 (-5.2\%) |
|  | BN | -1,129 (-5.4\%) | -177 (-0.9\%) |
|  | D | 172 (1.2\%) | 140 (0.9\%) |
|  | C | -549 (-4.6\%) | -1,297 (-10.3\%) |
|  | All | 1,408 (3.8\%) | -1,045 (-2.6\%) |
| FEB | W | 6,025 (7.4\%) | -3,006 (-3.3\%) |
|  | AN | 1,199 (2.3\%) | -1,622 (-2.9\%) |
|  | BN | -2,026 (-6.7\%) | -1,309 (-4.4\%) |
|  | D | -705 (-3.6\%) | -807 (-4.2\%) |
|  | C | -790 (-6.5\%) | -499 (-4.2\%) |
|  | All | 1,470 (3.3\%) | -1,664 (-3.5\%) |
| MAR | W | 501 (0.8\%) | -4,399 (-6.4\%) |
|  | AN | -1,648 (-3.5\%) | -3,411 (-7\%) |
|  | BN | -3,916 (-18.7\%) | -2,498 (-12.8\%) |
|  | D | -1,910 (-10.8\%) | -1,933 (-10.9\%) |
|  | C | -306 (-2.9\%) | -280 (-2.6\%) |
|  | All | -1,215 (-3.4\%) | -2,786 (-7.4\%) |
| APR | W | -3,155 (-8.3\%) | -3,363 (-8.8\%) |
|  | AN | -3,623 (-15.9\%) | -2,752 (-12.6\%) |
|  | BN | -1,237 (-8.4\%) | -792 (-5.6\%) |
|  | D | -147 (-1.4\%) | -115 (-1.1\%) |
|  | C | 175 (2.3\%) | 24 (0.3\%) |
|  | All | -1,748 (-8.2\%) | -1,626 (-7.7\%) |
| MAY | W | -9,805 (-36.4\%) | -2,918 (-14.6\%) |
|  | AN | -3,644 (-21.4\%) | -1,584 (-10.6\%) |
|  | BN | -1,112 (-10.2\%) | 457 (4.9\%) |
|  | D | 1,134 (13.9\%) | 705 (8.2\%) |
|  | C | 100 (1.9\%) | -149 (-2.7\%) |
|  | All | -3,569 (-23.1\%) | -946 (-7.4\%) |
| JUN | W | -6,882 (-41.6\%) | -1,743 (-15.3\%) |
|  | AN | -1,548 (-15.7\%) | -881 (-9.6\%) |
|  | BN | -243 (-3.5\%) | -483 (-6.7\%) |
|  | D | -416 (-6.9\%) | -731 (-11.5\%) |
|  | C | -306 (-7.1\%) | -486 (-10.8\%) |
|  | All | -2,586 (-26.3\%) | -996 (-12.1\%) |
| JUL | W | -2,621 (-23.6\%) | -3,677 (-30.2\%) |
|  | AN | -3,555 (-29.3\%) | -4,354 (-33.7\%) |
|  | BN | -3,952 (-33.8\%) | -3,623 (-31.9\%) |
|  | D | -4,362 (-41.5\%) | -4,146 (-40.2\%) |
|  | C | -3,035 (-39.2\%) | -1,895 (-28.7\%) |
|  | All | -3,427 (-31.9\%) | -3,609 (-33\%) |


| Alternative 3: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | -4,528 (-53.2\%) | -4,671 (-54\%) |
|  | AN | -3,241 (-38\%) | -4,351 (-45.1\%) |
|  | BN | -3,677 (-43.9\%) | -4,059 (-46.4\%) |
|  | D | -5,079 (-54.8\%) | -3,232 (-43.6\%) |
|  | C | -1,156 (-26.3\%) | -381 (-10.5\%) |
|  | All | -3,822 (-47.5\%) | -3,576 (-45.8\%) |
| SEP | W | -7,198 (-66.9\%) | -17,630 (-83.2\%) |
|  | AN | -3,082 (-45.4\%) | -9,126 (-71.1\%) |
|  | BN | -2,974 (-47.3\%) | -2,888 (-46.6\%) |
|  | D | -2,700 (-44.1\%) | -228 (-6.3\%) |
|  | C | 176 (4.9\%) | 768 (25.6\%) |
|  | All | -3,808 (-51.8\%) | -7,356 (-67.5\%) |
| OCT | W | 352 (4\%) | 783 (9.4\%) |
|  | AN | 3,390 (54.8\%) | 2,366 (32.8\%) |
|  | BN | 1,959 (31.3\%) | 1,241 (17.8\%) |
|  | D | 2,031 (38.2\%) | 1,616 (28.2\%) |
|  | C | 3,964 (76\%) | 4,210 (84.7\%) |
|  | All | 1,968 (29.5\%) | 1,777 (25.9\%) |
| NOV | W | -4,091 (-25.8\%) | -4,141 (-26.1\%) |
|  | AN | -4,361 (-38.5\%) | -5,184 (-42.6\%) |
|  | BN | -3,181 (-38.9\%) | -4,068 (-44.8\%) |
|  | D | -2,888 (-33.1\%) | -2,216 (-27.5\%) |
|  | C | -1,125 (-20.6\%) | -1,217 (-21.9\%) |
|  | All | -3,277 (-30.4\%) | -3,430 (-31.3\%) |
| DEC | W | -2,522 (-5.8\%) | 414 (1\%) |
|  | AN | 1,096 (5.8\%) | 200 (1\%) |
|  | BN | 422 (3\%) | 360 (2.6\%) |
|  | D | 87 (0.7\%) | 399 (3.4\%) |
|  | C | -439 (-5.4\%) | 506 (7\%) |
|  | All | -613 (-2.7\%) | 383 (1.8\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.3.2.4 Delta Outflow

Table 31. Mean Monthly Flows (cfs) for Model Scenarios at the Delta Outflow, Year-Round

| Alternative 3: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 85,900 | 94,620 | 94,461 |
|  | AN | 49,448 | 51,100 | 49,621 |
|  | BN | 22,968 | 22,301 | 21,773 |
|  | D | 14,736 | 14,732 | 16,098 |
|  | C | 11,343 | 12,651 | 13,453 |
|  | All | 43,289 | 46,372 | 46,432 |
| FEB | W | 96,835 | 107,085 | 107,861 |
|  | AN | 62,321 | 65,873 | 65,321 |
|  | BN | 36,766 | 36,084 | 35,420 |
|  | D | 20,915 | 21,461 | 20,525 |
|  | C | 12,991 | 12,798 | 12,340 |
|  | All | 52,594 | 56,338 | 56,118 |
| MAR | W | 78,956 | 84,471 | 84,730 |
|  | AN | 54,171 | 56,737 | 54,844 |
|  | BN | 24,029 | 22,467 | 21,471 |
|  | D | 19,880 | 19,985 | 17,847 |
|  | C | 11,911 | 12,215 | 11,759 |
|  | All | 43,172 | 45,097 | 44,196 |
| APR | W | 54,394 | 54,562 | 48,187 |
|  | AN | 31,975 | 30,576 | 24,101 |
|  | BN | 21,928 | 20,641 | 16,785 |
|  | D | 14,142 | 13,413 | 12,008 |
|  | C | 9,053 | 9,294 | 8,953 |
|  | All | 30,099 | 29,603 | 25,618 |
| MAY | W | 41,040 | 32,880 | 28,263 |
|  | AN | 24,200 | 21,709 | 17,230 |
|  | BN | 16,299 | 13,596 | 12,172 |
|  | D | 10,487 | 10,375 | 10,591 |
|  | C | 6,000 | 6,286 | 6,205 |
|  | All | 22,517 | 19,121 | 16,794 |
| JUN | W | 23,451 | 15,640 | 15,657 |
|  | AN | 11,801 | 10,676 | 10,597 |
|  | BN | 8,004 | 8,943 | 9,685 |
|  | D | 6,636 | 7,689 | 7,779 |
|  | C | 5,322 | 5,632 | 5,443 |
|  | All | 12,765 | 10,560 | 10,673 |
| JUL | W | 11,441 | 11,407 | 9,386 |
|  | AN | 9,430 | 12,225 | 9,017 |
|  | BN | 7,151 | 7,668 | 6,529 |
|  | D | 5,024 | 6,448 | 5,504 |
|  | C | 4,238 | 5,832 | 5,355 |
|  | All | 7,951 | 8,984 | 7,402 |


| Alternative 3: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 5,341 | 4,308 | 4,000 |
|  | AN | 4,000 | 4,713 | 4,136 |
|  | BN | 4,000 | 5,129 | 4,126 |
|  | D | 4,829 | 5,348 | 4,300 |
|  | C | 4,077 | 4,433 | 3,956 |
|  | All | 4,618 | 4,754 | 4,101 |
| SEP | W | 9,569 | 20,078 | 4,205 |
|  | AN | 3,672 | 11,581 | 3,263 |
|  | BN | 3,445 | 3,428 | 3,490 |
|  | D | 3,350 | 3,021 | 3,925 |
|  | C | 3,000 | 3,036 | 5,746 |
|  | All | 5,334 | 9,754 | 4,109 |
| OCT | W | 6,487 | 9,520 | 9,900 |
|  | AN | 4,021 | 8,982 | 10,282 |
|  | BN | 4,477 | 8,054 | 9,695 |
|  | D | 4,157 | 7,294 | 8,521 |
|  | C | 4,158 | 6,607 | 10,384 |
|  | All | 4,931 | 8,276 | 9,689 |
| NOV | W | 14,232 | 15,987 | 12,201 |
|  | AN | 9,683 | 11,529 | 6,899 |
|  | BN | 5,864 | 8,681 | 4,490 |
|  | D | 6,943 | 8,052 | 5,583 |
|  | C | 5,045 | 5,725 | 5,248 |
|  | All | 9,193 | 10,844 | 7,638 |
| DEC | W | 48,185 | 45,191 | 46,430 |
|  | AN | 18,014 | 19,119 | 20,297 |
|  | BN | 11,950 | 12,231 | 13,008 |
|  | D | 8,884 | 8,828 | 9,263 |
|  | C | 5,531 | 6,560 | 5,297 |
|  | All | 22,714 | 22,113 | 22,722 |

Table 32. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios at the Delta Outflow, Year-Round

| Alternative 3: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 8,561 (10\%) | -159 (-0.2\%) |
|  | AN | 173 (0.3\%) | -1,479 (-2.9\%) |
|  | BN | -1,195 (-5.2\%) | -528 (-2.4\%) |
|  | D | 1,362 (9.2\%) | 1,366 (9.3\%) |
|  | C | 2,110 (18.6\%) | 802 (6.3\%) |
|  | All | 3,143 (7.3\%) | 60 (0.1\%) |
| FEB | W | 11,026 (11.4\%) | 776 (0.7\%) |
|  | AN | 3,000 (4.8\%) | -552 (-0.8\%) |
|  | BN | -1,346 (-3.7\%) | -664 (-1.8\%) |
|  | D | -390 (-1.9\%) | -936 (-4.4\%) |
|  | C | -651 (-5\%) | -458 (-3.6\%) |
|  | All | 3,524 (6.7\%) | -220 (-0.4\%) |
| MAR | W | 5,774 (7.3\%) | 259 (0.3\%) |
|  | AN | 673 (1.2\%) | -1,893 (-3.3\%) |
|  | BN | -2,558 (-10.6\%) | -996 (-4.4\%) |
|  | D | -2,033 (-10.2\%) | -2,138 (-10.7\%) |
|  | C | -152 (-1.3\%) | -456 (-3.7\%) |
|  | All | 1,024 (2.4\%) | -901 (-2\%) |
| APR | W | -6,207 (-11.4\%) | -6,375 (-11.7\%) |
|  | AN | -7,874 (-24.6\%) | -6,475 (-21.2\%) |
|  | BN | -5,143 (-23.5\%) | -3,856 (-18.7\%) |
|  | D | -2,134 (-15.1\%) | -1,405 (-10.5\%) |
|  | C | -100 (-1.1\%) | -341 (-3.7\%) |
|  | All | -4,481 (-14.9\%) | -3,985 (-13.5\%) |
| MAY | W | -12,777 (-31.1\%) | -4,617 (-14\%) |
|  | AN | -6,970 (-28.8\%) | -4,479 (-20.6\%) |
|  | BN | -4,127 (-25.3\%) | -1,424 (-10.5\%) |
|  | D | 104 (1\%) | 216 (2.1\%) |
|  | C | 205 (3.4\%) | -81 (-1.3\%) |
|  | All | -5,723 (-25.4\%) | -2,327 (-12.2\%) |
| JUN | W | -7,794 (-33.2\%) | 17 (0.1\%) |
|  | AN | -1,204 (-10.2\%) | -79 (-0.7\%) |
|  | BN | 1,681 (21\%) | 742 (8.3\%) |
|  | D | 1,143 (17.2\%) | 90 (1.2\%) |
|  | C | 121 (2.3\%) | -189 (-3.4\%) |
|  | All | -2,092 (-16.4\%) | 113 (1.1\%) |
| JUL | W | -2,055 (-18\%) | -2,021 (-17.7\%) |
|  | AN | -413 (-4.4\%) | -3,208 (-26.2\%) |
|  | BN | -622 (-8.7\%) | -1,139 (-14.9\%) |
|  | D | 480 (9.6\%) | -944 (-14.6\%) |
|  | C | 1,117 (26.4\%) | -477 (-8.2\%) |
|  | All | -549 (-6.9\%) | -1,582 (-17.6\%) |


| Alternative 3: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | -1,341 (-25.1\%) | -308 (-7.1\%) |
|  | AN | 136 (3.4\%) | -577 (-12.2\%) |
|  | BN | 126 (3.2\%) | -1,003 (-19.6\%) |
|  | D | -529 (-11\%) | -1,048 (-19.6\%) |
|  | C | -121 (-3\%) | -477 (-10.8\%) |
|  | All | -517 (-11.2\%) | -653 (-13.7\%) |
| SEP | W | -5,364 (-56.1\%) | -15,873 (-79.1\%) |
|  | AN | -409 (-11.1\%) | -8,318 (-71.8\%) |
|  | BN | 45 (1.3\%) | 62 (1.8\%) |
|  | D | 575 (17.2\%) | 904 (29.9\%) |
|  | C | 2,746 (91.5\%) | 2,710 (89.3\%) |
|  | All | -1,225 (-23\%) | -5,645 (-57.9\%) |
| OCT | W | 3,413 (52.6\%) | 380 (4\%) |
|  | AN | 6,261 (155.7\%) | 1,300 (14.5\%) |
|  | BN | 5,218 (116.6\%) | 1,641 (20.4\%) |
|  | D | 4,364 (105\%) | 1,227 (16.8\%) |
|  | C | 6,226 (149.7\%) | 3,777 (57.2\%) |
|  | All | 4,758 (96.5\%) | 1,413 (17.1\%) |
| NOV | W | -2,031 (-14.3\%) | -3,786 (-23.7\%) |
|  | AN | -2,784 (-28.8\%) | -4,630 (-40.2\%) |
|  | BN | -1,374 (-23.4\%) | -4,191 (-48.3\%) |
|  | D | -1,360 (-19.6\%) | -2,469 (-30.7\%) |
|  | C | 203 (4\%) | -477 (-8.3\%) |
|  | All | -1,555 (-16.9\%) | -3,206 (-29.6\%) |
| DEC | W | -1,755 (-3.6\%) | 1,239 (2.7\%) |
|  | AN | 2,283 (12.7\%) | 1,178 (6.2\%) |
|  | BN | 1,058 (8.9\%) | 777 (6.4\%) |
|  | D | 379 (4.3\%) | 435 (4.9\%) |
|  | C | -234 (-4.2\%) | -1,263 (-19.3\%) |
|  | All | 8 (0\%) | 609 (2.8\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.3.2.5 San Joaquin River at Vernalis

Table 33. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 3: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 9,089 | 9,681 | 9,794 |
|  | AN | 5,447 | 6,011 | 5,988 |
|  | BN | 2,326 | 2,220 | 2,248 |
|  | D | 2,270 | 2,202 | 2,236 |
|  | C | 1,667 | 1,592 | 1,592 |
|  | All | 4,777 | 5,018 | 5,056 |
| FEB | W | 12,750 | 13,191 | 13,195 |
|  | AN | 6,965 | 6,721 | 6,693 |
|  | BN | 2,983 | 2,841 | 2,845 |
|  | D | 2,590 | 2,269 | 2,246 |
|  | C | 2,120 | 1,941 | 1,942 |
|  | All | 6,388 | 6,361 | 6,354 |
| MAR | W | 14,374 | 15,235 | 15,242 |
|  | AN | 6,284 | 6,364 | 6,365 |
|  | BN | 2,949 | 2,476 | 2,476 |
|  | D | 2,479 | 2,146 | 2,146 |
|  | C | 1,813 | 1,688 | 1,688 |
|  | All | 6,648 | 6,763 | 6,765 |
| APR | W | 11,955 | 12,457 | 12,449 |
|  | AN | 6,014 | 6,042 | 6,043 |
|  | BN | 4,490 | 3,922 | 3,924 |
|  | D | 3,656 | 3,112 | 3,113 |
|  | C | 1,983 | 1,796 | 1,796 |
|  | All | 6,351 | 6,291 | 6,289 |
| MAY | W | 12,109 | 12,632 | 12,638 |
|  | AN | 5,381 | 5,092 | 5,094 |
|  | BN | 4,074 | 3,657 | 3,661 |
|  | D | 3,308 | 2,823 | 2,825 |
|  | C | 1,964 | 1,798 | 1,798 |
|  | All | 6,148 | 6,069 | 6,072 |
| JUN | W | 11,058 | 6,820 | 6,823 |
|  | AN | 2,965 | 2,678 | 2,681 |
|  | BN | 2,051 | 1,870 | 1,875 |
|  | D | 1,537 | 1,291 | 1,295 |
|  | C | 1,020 | 956 | 956 |
|  | All | 4,583 | 3,206 | 3,209 |
| JUL | W | 7,654 | 4,345 | 4,350 |
|  | AN | 1,958 | 1,801 | 1,807 |
|  | BN | 1,491 | 1,381 | 1,391 |
|  | D | 1,295 | 1,100 | 1,107 |
|  | C | 898 | 858 | 860 |
|  | All | 3,239 | 2,184 | 2,190 |


| Alternative 3: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 3,539 | 2,645 | 2,648 |
|  | AN | 2,000 | 1,699 | 1,704 |
|  | BN | 1,460 | 1,375 | 1,382 |
|  | D | 1,375 | 1,225 | 1,230 |
|  | C | 1,007 | 987 | 988 |
|  | All | 2,072 | 1,710 | 1,714 |
| SEP | W | 3,519 | 3,127 | 3,129 |
|  | AN | 2,355 | 2,164 | 2,166 |
|  | BN | 1,829 | 1,748 | 1,752 |
|  | D | 1,796 | 1,643 | 1,645 |
|  | C | 1,402 | 1,378 | 1,380 |
|  | All | 2,338 | 2,144 | 2,146 |
| OCT | W | 2,760 | 2,726 | 2,744 |
|  | AN | 2,745 | 2,595 | 2,596 |
|  | BN | 2,502 | 2,348 | 2,349 |
|  | D | 2,945 | 2,790 | 2,792 |
|  | C | 2,213 | 2,031 | 2,032 |
|  | All | 2,639 | 2,515 | 2,521 |
| NOV | W | 2,534 | 2,411 | 2,418 |
|  | AN | 3,182 | 3,193 | 3,154 |
|  | BN | 2,150 | 1,997 | 1,997 |
|  | D | 2,272 | 2,217 | 2,253 |
|  | C | 1,968 | 1,898 | 1,898 |
|  | All | 2,448 | 2,367 | 2,367 |
| DEC | W | 4,370 | 4,504 | 4,547 |
|  | AN | 4,711 | 4,567 | 4,585 |
|  | BN | 2,182 | 2,065 | 2,083 |
|  | D | 2,129 | 2,166 | 2,163 |
|  | C | 1,729 | 1,694 | 1,681 |
|  | All | 3,219 | 3,211 | 3,227 |

[^0]Table 34. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 3: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 705 (7.8\%) | 112 (1.2\%) |
|  | AN | 541 (9.9\%) | -23 (-0.4\%) |
|  | BN | -78 (-3.3\%) | 28 (1.3\%) |
|  | D | -35 (-1.5\%) | 34 (1.5\%) |
|  | C | -75 (-4.5\%) | 0 (0\%) |
|  | All | 279 (5.8\%) | 38 (0.8\%) |
| FEB | W | 445 (3.5\%) | 4 (0\%) |
|  | AN | -272 (-3.9\%) | -28 (-0.4\%) |
|  | BN | -138 (-4.6\%) | 4 (0.2\%) |
|  | D | -345 (-13.3\%) | -24 (-1\%) |
|  | C | -178 (-8.4\%) | 1 (0\%) |
|  | All | -34 (-0.5\%) | -7 (-0.1\%) |
| MAR | W | 868 (6\%) | 7 (0\%) |
|  | AN | 81 (1.3\%) | 0 (0\%) |
|  | BN | -473 (-16\%) | 0 (0\%) |
|  | D | -333 (-13.4\%) | 0 (0\%) |
|  | C | -125 (-6.9\%) | 0 (0\%) |
|  | All | 118 (1.8\%) | 2 (0\%) |
| APR | W | 494 (4.1\%) | -8 (-0.1\%) |
|  | AN | 29 (0.5\%) | 1 (0\%) |
|  | BN | -566 (-12.6\%) | 1 (0\%) |
|  | D | -544 (-14.9\%) | 1 (0\%) |
|  | C | -187 (-9.4\%) | 0 (0\%) |
|  | All | -62 (-1\%) | -2 (0\%) |
| MAY | W | 528 (4.4\%) | 5 (0\%) |
|  | AN | -288 (-5.3\%) | 2 (0\%) |
|  | BN | -412 (-10.1\%) | 5 (0.1\%) |
|  | D | -483 (-14.6\%) | 2 (0.1\%) |
|  | C | -167 (-8.5\%) | 0 (0\%) |
|  | All | -76 (-1.2\%) | 3 (0\%) |
| JUN | W | -4,235 (-38.3\%) | 3 (0\%) |
|  | AN | -283 (-9.6\%) | 3 (0.1\%) |
|  | BN | -175 (-8.5\%) | 6 (0.3\%) |
|  | D | -242 (-15.7\%) | 5 (0.4\%) |
|  | C | -64 (-6.2\%) | 1 (0.1\%) |
|  | All | -1,373 (-30\%) | 3 (0.1\%) |
| JUL | W | -3,304 (-43.2\%) | 5 (0.1\%) |
|  | AN | -151 (-7.7\%) | 6 (0.3\%) |
|  | BN | -99 (-6.7\%) | 11 (0.8\%) |
|  | D | -188 (-14.5\%) | 7 (0.7\%) |
|  | C | -38 (-4.2\%) | 2 (0.3\%) |
|  | All | -1,049 (-32.4\%) | 6 (0.3\%) |


| Alternative 3: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | -891 (-25.2\%) | 4 (0.1\%) |
|  | AN | -297 (-14.8\%) | 5 (0.3\%) |
|  | BN | -77 (-5.3\%) | 8 (0.6\%) |
|  | D | -145 (-10.6\%) | 5 (0.4\%) |
|  | C | -19 (-1.9\%) | 1 (0.1\%) |
|  | All | -358 (-17.3\%) | 4 (0.2\%) |
| SEP | W | -390 (-11.1\%) | 2 (0.1\%) |
|  | AN | -188 (-8\%) | 2 (0.1\%) |
|  | BN | -77 (-4.2\%) | 4 (0.2\%) |
|  | D | -151 (-8.4\%) | 2 (0.1\%) |
|  | C | -22 (-1.6\%) | 2 (0.2\%) |
|  | All | -191 (-8.2\%) | 2 (0.1\%) |
| OCT | W | -16 (-0.6\%) | 18 (0.7\%) |
|  | AN | -149 (-5.4\%) | 1 (0\%) |
|  | BN | -153 (-6.1\%) | 1 (0\%) |
|  | D | -153 (-5.2\%) | 1 (0\%) |
|  | C | -181 (-8.2\%) | 1 (0\%) |
|  | All | -118 (-4.5\%) | 6 (0.2\%) |
| NOV | W | -116 (-4.6\%) | 6 (0.3\%) |
|  | AN | -28 (-0.9\%) | -39 (-1.2\%) |
|  | BN | -154 (-7.1\%) | 0 (0\%) |
|  | D | -20 (-0.9\%) | 35 (1.6\%) |
|  | C | -70 (-3.6\%) | 0 (0\%) |
|  | All | -80 (-3.3\%) | 0 (0\%) |
| DEC | W | 176 (4\%) | 43 (0.9\%) |
|  | AN | -126 (-2.7\%) | 18 (0.4\%) |
|  | BN | -99 (-4.5\%) | 18 (0.9\%) |
|  | D | 34 (1.6\%) | -3 (-0.1\%) |
|  | C | -48 (-2.8\%) | -13 (-0.8\%) |
|  | All | 7 (0.2\%) | 16 (0.5\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
${ }^{\text {b }}$ Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.3.2.6 Mokelumne River at the Delta

Table 35. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 3: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A3_LLT |
| JAN | W | 3,071 | 3,634 | 3,634 |
|  | AN | 1,707 | 1,876 | 1,876 |
|  | BN | 597 | 617 | 617 |
|  | D | 495 | 493 | 493 |
|  | C | 280 | 281 | 281 |
|  | All | 1,460 | 1,660 | 1,660 |
| FEB | W | 3,290 | 3,781 | 3,781 |
|  | AN | 2,525 | 2,913 | 2,913 |
|  | BN | 1,011 | 1,035 | 1,035 |
|  | D | 695 | 678 | 678 |
|  | C | 426 | 442 | 442 |
|  | All | 1,809 | 2,033 | 2,033 |
| MAR | W | 3,179 | 3,336 | 3,336 |
|  | AN | 1,582 | 1,639 | 1,639 |
|  | BN | 1,181 | 1,140 | 1,140 |
|  | D | 754 | 691 | 691 |
|  | C | 595 | 580 | 580 |
|  | All | 1,662 | 1,700 | 1,700 |
| APR | W | 2,819 | 2,694 | 2,694 |
|  | AN | 1,619 | 1,424 | 1,424 |
|  | BN | 1,243 | 1,068 | 1,068 |
|  | D | 623 | 550 | 550 |
|  | C | 340 | 311 | 311 |
|  | All | 1,503 | 1,384 | 1,384 |
| MAY | W | 3,170 | 2,885 | 2,885 |
|  | AN | 1,439 | 1,179 | 1,179 |
|  | BN | 976 | 812 | 812 |
|  | D | 406 | 333 | 333 |
|  | C | 181 | 170 | 170 |
|  | All | 1,463 | 1,289 | 1,289 |
| JUN | W | 1,755 | 1,415 | 1,415 |
|  | AN | 851 | 631 | 631 |
|  | BN | 471 | 366 | 366 |
|  | D | 93 | 76 | 76 |
|  | C | 52 | 44 | 44 |
|  | All | 779 | 616 | 616 |
| JUL | W | 772 | 469 | 469 |
|  | AN | 347 | 167 | 167 |
|  | BN | 123 | 70 | 70 |
|  | D | 7 | 6 | 6 |
|  | C | 3 | 3 | 3 |
|  | All | 315 | 183 | 183 |


| Alternative 3: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A3_LLT |
| AUG | W | 703 | 346 | 346 |
|  | AN | 328 | 216 | 216 |
|  | BN | 112 | 71 | 71 |
|  | D | 4 | 4 | 4 |
|  | C | 2 | 2 | 2 |
|  | All | 289 | 156 | 156 |
| SEP | W | 702 | 497 | 497 |
|  | AN | 333 | 259 | 259 |
|  | BN | 114 | 91 | 91 |
|  | D | 9 | 9 | 9 |
|  | C | 5 | 5 | 5 |
|  | All | 291 | 213 | 213 |
| OCT | W | 161 | 147 | 147 |
|  | AN | 178 | 180 | 180 |
|  | BN | 154 | 144 | 144 |
|  | D | 180 | 160 | 160 |
|  | C | 117 | 123 | 123 |
|  | All | 158 | 150 | 150 |
| NOV | W | 487 | 431 | 431 |
|  | AN | 912 | 855 | 855 |
|  | BN | 347 | 301 | 301 |
|  | D | 380 | 327 | 327 |
|  | C | 195 | 186 | 186 |
|  | All | 474 | 429 | 429 |
| DEC | W | 1,504 | 1,732 | 1,732 |
|  | AN | 1,411 | 1,628 | 1,628 |
|  | BN | 447 | 472 | 472 |
|  | D | 384 | 374 | 374 |
|  | C | 204 | 209 | 209 |
|  | All | 887 | 999 | 999 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 36. Differences ${ }^{a}$ (Percent Differences) between Pairs of Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 3: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| JAN | W | 563 (18.3\%) | 0 (0\%) |
|  | AN | 169 (9.9\%) | 0 (0\%) |
|  | BN | 21 (3.4\%) | 0 (0\%) |
|  | D | -2 (-0.5\%) | 0 (0\%) |
|  | C | 1 (0.3\%) | 0 (0\%) |
|  | All | 201 (13.8\%) | 0 (0\%) |
| FEB | W | 491 (14.9\%) | 0 (0\%) |
|  | AN | 388 (15.4\%) | 0 (0\%) |
|  | BN | 24 (2.4\%) | 0 (0\%) |
|  | D | -17 (-2.4\%) | 0 (0\%) |
|  | C | 15 (3.5\%) | 0 (0\%) |
|  | All | 223 (12.3\%) | 0 (0\%) |
| MAR | W | 158 (5\%) | 0 (0\%) |
|  | AN | 57 (3.6\%) | 0 (0\%) |
|  | BN | -41 (-3.4\%) | 0 (0\%) |
|  | D | -63 (-8.3\%) | 0 (0\%) |
|  | C | -15 (-2.5\%) | 0 (0\%) |
|  | All | 38 (2.3\%) | 0 (0\%) |
| APR | W | -125 (-4.4\%) | 0 (0\%) |
|  | AN | -194 (-12\%) | 0 (0\%) |
|  | BN | -175 (-14.1\%) | 0 (0\%) |
|  | D | -73 (-11.7\%) | 0 (0\%) |
|  | C | -29 (-8.7\%) | 0 (0\%) |
|  | All | -120 (-8\%) | 0 (0\%) |
| MAY | W | -284 (-9\%) | 0 (0\%) |
|  | AN | -260 (-18.1\%) | 0 (0\%) |
|  | BN | -164 (-16.8\%) | 0 (0\%) |
|  | D | -72 (-17.8\%) | 0 (0\%) |
|  | C | -11 (-6.1\%) | 0 (0\%) |
|  | All | -174 (-11.9\%) | 0 (0\%) |
| JUN | W | -339 (-19.3\%) | 0 (0\%) |
|  | AN | -220 (-25.8\%) | 0 (0\%) |
|  | BN | -105 (-22.3\%) | 0 (0\%) |
|  | D | -17 (-18.8\%) | 0 (0\%) |
|  | C | -8 (-14.7\%) | 0 (0\%) |
|  | All | -163 (-20.9\%) | 0 (0\%) |
| JUL | W | -303 (-39.3\%) | 0 (0\%) |
|  | AN | -180 (-51.8\%) | 0 (0\%) |
|  | BN | -54 (-43.4\%) | 0 (0\%) |
|  | D | 0 (-3.1\%) | 0 (0\%) |
|  | C | 0 (-4.4\%) | 0 (0\%) |
|  | All | -132 (-42\%) | 0 (0\%) |


| Alternative 3: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | $\mathbf{W Y T}^{\text {b }}$ | EXISTING CONDITIONS vs. A3_LLT | NAA vs. A3_LLT |
| AUG | W | -357 (-50.8\%) | 0 (0\%) |
|  | AN | -113 (-34.3\%) | 0 (0\%) |
|  | BN | -41 (-36.5\%) | 0 (0\%) |
|  | D | 0 (-0.5\%) | 0 (0\%) |
|  | C | 0 (-3.1\%) | 0 (0\%) |
|  | All | -133 (-46.1\%) | 0 (0\%) |
| SEP | W | -205 (-29.3\%) | 0 (0\%) |
|  | AN | -74 (-22.2\%) | 0 (0\%) |
|  | BN | -23 (-20.5\%) | 0 (0\%) |
|  | D | -1 (-5.9\%) | 0 (0\%) |
|  | C | 0 (4.6\%) | 0 (0\%) |
|  | All | -78 (-26.9\%) | 0 (0\%) |
| OCT | W | -14 (-8.7\%) | 0 (0\%) |
|  | AN | 2 (1.1\%) | 0 (0\%) |
|  | BN | -10 (-6.6\%) | 0 (0\%) |
|  | D | -20 (-11.1\%) | 0 (0\%) |
|  | C | 6 (4.7\%) | 0 (0\%) |
|  | All | -7 (-4.7\%) | 0 (0\%) |
| NOV | W | -56 (-11.5\%) | 0 (0\%) |
|  | AN | -57 (-6.3\%) | 0 (0\%) |
|  | BN | -46 (-13.2\%) | 0 (0\%) |
|  | D | -53 (-13.9\%) | 0 (0\%) |
|  | C | -9 (-4.6\%) | 0 (0\%) |
|  | All | -45 (-9.5\%) | 0 (0\%) |
| DEC | W | 228 (15.2\%) | 0 (0\%) |
|  | AN | 217 (15.4\%) | 0 (0\%) |
|  | BN | 25 (5.5\%) | 0 (0\%) |
|  | D | -10 (-2.6\%) | 0 (0\%) |
|  | C | 6 (2.9\%) | 0 (0\%) |
|  | All | 113 (12.7\%) | 0 (0\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C. 4 Alternative 4

11C.4.1 Upstream
11C.4.1.1 Sacramento River at Keswick
Table 1. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 4: Upstream-Sacramento River at Keswick |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 16,526 | 18,233 | 19,502 | 19,415 | 18,545 | 18,577 |
|  | AN | 8,318 | 8,205 | 9,589 | 9,370 | 7,795 | 7,694 |
|  | BN | 4,502 | 4,184 | 5,129 | 5,163 | 4,342 | 4,543 |
|  | D | 3,996 | 4,096 | 4,043 | 4,375 | 3,803 | 3,763 |
|  | C | 3,490 | 4,238 | 4,780 | 4,357 | 4,364 | 3,506 |
|  | All | 8,614 | 9,215 | 10,050 | 10,006 | 9,235 | 9,131 |
| FEB | W | 18,577 | 20,853 | 21,375 | 21,503 | 20,888 | 20,905 |
|  | AN | 14,409 | 15,297 | 16,952 | 16,830 | 15,871 | 15,709 |
|  | BN | 5,981 | 5,544 | 7,083 | 6,657 | 6,301 | 6,664 |
|  | D | 3,684 | 3,410 | 3,415 | 3,408 | 3,407 | 3,447 |
|  | C | 3,599 | 3,372 | 3,470 | 3,429 | 3,358 | 3,429 |
|  | All | 10,355 | 11,039 | 11,725 | 11,667 | 11,261 | 11,323 |
| MAR | W | 16,200 | 17,065 | 17,171 | 17,165 | 17,139 | 17,135 |
|  | AN | 9,131 | 8,818 | 9,319 | 9,239 | 8,803 | 8,541 |
|  | BN | 5,200 | 4,318 | 4,896 | 4,745 | 4,252 | 4,171 |
|  | D | 3,903 | 3,814 | 3,746 | 3,753 | 3,753 | 3,992 |
|  | C | 3,487 | 3,583 | 3,940 | 3,718 | 3,842 | 3,708 |
|  | All | 8,728 | 8,800 | 9,043 | 8,973 | 8,834 | 8,814 |
| APR | W | 9,418 | 9,131 | 9,155 | 9,132 | 9,009 | 9,004 |
|  | AN | 6,182 | 5,536 | 5,833 | 5,712 | 5,827 | 5,859 |
|  | BN | 5,426 | 5,009 | 5,398 | 5,242 | 5,414 | 4,914 |
|  | D | 5,803 | 5,533 | 5,774 | 5,609 | 5,776 | 5,502 |
|  | C | 6,472 | 6,550 | 6,494 | 6,431 | 6,498 | 6,424 |
|  | All | 7,038 | 6,733 | 6,896 | 6,799 | 6,852 | 6,699 |
| MAY | W | 9,508 | 7,149 | 7,589 | 7,345 | 7,541 | 7,296 |
|  | AN | 7,709 | 7,783 | 8,750 | 8,482 | 8,971 | 8,723 |
|  | BN | 7,193 | 6,272 | 7,383 | 6,481 | 7,169 | 6,383 |
|  | D | 7,349 | 7,681 | 8,721 | 8,198 | 8,608 | 7,899 |
|  | C | 6,715 | 7,316 | 7,505 | 7,424 | 7,499 | 7,359 |
|  | All | 7,967 | 7,233 | 7,960 | 7,563 | 7,915 | 7,490 |
| JUN | W | 10,375 | 10,274 | 11,390 | 10,618 | 11,240 | 10,485 |
|  | AN | 11,147 | 12,032 | 13,532 | 11,648 | 13,610 | 11,861 |
|  | BN | 10,758 | 10,947 | 11,929 | 10,863 | 11,711 | 10,690 |
|  | D | 11,224 | 11,898 | 12,667 | 12,120 | 12,648 | 11,842 |
|  | C | 10,392 | 11,350 | 11,276 | 11,240 | 11,456 | 11,105 |
|  | All | 10,742 | 11,160 | 12,059 | 11,231 | 12,008 | 11,110 |


| Alternative 4: Upstream-Sacramento River at Keswick |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JUL | W | 12,779 | 14,098 | 14,332 | 14,135 | 14,230 | 14,242 |
|  | AN | 14,056 | 15,098 | 15,088 | 14,809 | 14,940 | 14,730 |
|  | BN | 12,965 | 13,177 | 13,090 | 12,910 | 13,020 | 12,840 |
|  | D | 13,302 | 13,727 | 13,117 | 13,495 | 12,764 | 12,991 |
|  | C | 12,849 | 11,935 | 11,346 | 11,681 | 11,605 | 11,837 |
|  | All | 13,123 | 13,689 | 13,527 | 13,525 | 13,421 | 13,447 |
| AUG | W | 11,029 | 10,491 | 10,385 | 10,820 | 10,445 | 10,848 |
|  | AN | 10,449 | 11,641 | 11,427 | 11,946 | 11,287 | 11,964 |
|  | BN | 10,139 | 10,261 | 9,961 | 10,673 | 10,172 | 10,764 |
|  | D | 10,627 | 10,986 | 9,485 | 10,772 | 9,420 | 10,657 |
|  | C | 9,473 | 7,348 | 7,582 | 7,707 | 6,761 | 7,710 |
|  | All | 10,476 | 10,269 | 9,857 | 10,494 | 9,757 | 10,496 |
| SEP | W | 9,385 | 12,833 | 7,110 | 7,242 | 13,194 | 13,550 |
|  | AN | 5,862 | 9,898 | 6,205 | 6,304 | 9,315 | 10,153 |
|  | BN | 5,492 | 5,601 | 5,516 | 6,654 | 4,836 | 5,521 |
|  | D | 5,985 | 4,469 | 5,160 | 5,573 | 5,053 | 5,223 |
|  | C | 5,563 | 4,368 | 5,187 | 5,632 | 5,239 | 5,251 |
|  | All | 6,899 | 8,094 | 5,996 | 6,402 | 8,248 | 8,640 |
| OCT | W | 6,886 | 7,034 | 6,437 | 6,599 | 6,895 | 6,738 |
|  | AN | 7,145 | 7,152 | 6,886 | 7,339 | 7,247 | 8,230 |
|  | BN | 6,396 | 7,072 | 6,543 | 6,415 | 6,435 | 6,331 |
|  | D | 6,128 | 6,494 | 6,663 | 6,726 | 6,326 | 6,788 |
|  | C | 5,902 | 5,752 | 6,148 | 6,897 | 5,610 | 5,772 |
|  | All | 6,530 | 6,752 | 6,528 | 6,747 | 6,555 | 6,756 |
| NOV | W | 6,672 | 7,539 | 5,788 | 5,893 | 6,369 | 6,500 |
|  | AN | 6,224 | 7,134 | 4,559 | 4,519 | 5,469 | 6,115 |
|  | BN | 5,088 | 5,936 | 4,178 | 4,445 | 4,845 | 4,679 |
|  | D | 5,669 | 5,406 | 4,256 | 4,365 | 4,535 | 4,598 |
|  | C | 4,822 | 4,710 | 4,294 | 4,062 | 4,413 | 4,246 |
|  | All | 5,845 | 6,324 | 4,778 | 4,841 | 5,288 | 5,385 |
| DEC | W | 12,766 | 11,022 | 12,552 | 12,997 | 10,870 | 11,173 |
|  | AN | 5,531 | 5,377 | 5,453 | 5,165 | 5,472 | 5,318 |
|  | BN | 5,413 | 5,195 | 5,712 | 5,343 | 5,500 | 5,250 |
|  | D | 4,215 | 3,936 | 4,314 | 3,925 | 3,973 | 3,728 |
|  | C | 3,828 | 3,582 | 3,777 | 3,560 | 3,613 | 3,584 |
|  | All | 7,267 | 6,557 | 7,253 | 7,172 | 6,587 | 6,560 |

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Table 2. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 4: Upstream-Sacramento River at Keswick |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 |  | NAA vs. H3 |  | NAA vs. H4 |
| JAN | W | $\begin{gathered} \hline 2,976 \\ (18 \%) \end{gathered}$ | $\begin{aligned} & 1,269 \\ & (7 \%) \end{aligned}$ | $\begin{gathered} 2,889 \\ (17.5 \%) \end{gathered}$ | $\begin{gathered} \hline 1,181 \\ (6.5 \%) \end{gathered}$ | $\begin{gathered} \hline 2,018 \\ (12.2 \%) \end{gathered}$ | $\begin{gathered} \hline 311 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,051 \\ (12.4 \%) \end{gathered}$ | $\begin{gathered} \hline 344 \\ (1.9 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 1,272 \\ (15.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,385 \\ (16.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,052 \\ (12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,165 \\ (14.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -522 \\ (-6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -409 \\ (-5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -623 \\ (-7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -510 \\ (-6.2 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 628 \\ (13.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 946 \\ (22.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 661 \\ (14.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 979 \\ (23.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -160 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 159 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} 41 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 359 \\ (8.6 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 48 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -53 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 379 \\ (9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 279 \\ (6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -193 \\ (-4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -293 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -233 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -333 \\ (-8.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 1,289 \\ (36.9 \%) \end{gathered}$ | $\begin{gathered} 542 \\ (12.8 \%) \end{gathered}$ | $\begin{gathered} 867 \\ (24.8 \%) \end{gathered}$ | $\begin{gathered} 119 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} 873 \\ (25 \%) \end{gathered}$ | $\begin{gathered} 126 \\ (3 \%) \end{gathered}$ | $\begin{gathered} 15 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-732 \\ (-17.3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 1,436 \\ (16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 834 \\ (9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,393 \\ (16.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 791 \\ (8.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 622 \\ (7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 517 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -84 \\ (-0.9 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} 2,798 \\ (15.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 522 \\ (2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,925 \\ (15.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 649 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,311 \\ (12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 34 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,328 \\ (12.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 51 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 2,542 \\ (17.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,655 \\ (10.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,420 \\ (16.8 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 1,533 \\ & (10 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 1,461 \\ (10.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 574 \\ (3.8 \%) \end{array}$ | $\begin{aligned} & \hline 1,300 \\ & (9 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 412 \\ (2.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 1,102 \\ (18.4 \%) \end{gathered}$ | $\begin{gathered} 1,539 \\ (27.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 675 \\ (11.3 \%) \end{gathered}$ | $\begin{gathered} 1,113 \\ (20.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 320 \\ (5.3 \%) \end{gathered}$ | $\begin{gathered} 757 \\ (13.7 \%) \end{gathered}$ | $\begin{gathered} 683 \\ (11.4 \%) \end{gathered}$ | $\begin{gathered} 1,120 \\ (20.2 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -269 \\ (-7.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -276 \\ (-7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -276 \\ (-7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -237 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 37 \\ (1.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -129 \\ (-3.6 \%) \end{gathered}$ | $\begin{gathered} 97 \\ (2.9 \%) \end{gathered}$ | $\begin{gathered} -170 \\ (-4.7 \%) \end{gathered}$ | $\begin{gathered} 57 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -241 \\ (-6.7 \%) \end{gathered}$ | $\begin{gathered} -15 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -170 \\ (-4.7 \%) \end{gathered}$ | $\begin{gathered} 56 \\ (1.7 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 1,369 \\ (13.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 686 \\ (6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,312 \\ (12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 628 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 905 \\ (8.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 221 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 968 \\ (9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 284 \\ (2.6 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 971 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 106 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 965 \\ (6 \%) \end{gathered}$ | $\begin{gathered} 100 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 939 \\ (5.8 \%) \end{gathered}$ | $\begin{gathered} 73 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 935 \\ (5.8 \%) \end{gathered}$ | $\begin{gathered} 70 \\ (0.4 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 188 \\ (2.1 \%) \end{gathered}$ | $\begin{gathered} 501 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 108 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} 421 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -328 \\ (-3.6 \%) \end{gathered}$ | $\begin{gathered} -15 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -590 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -277 \\ (-3.1 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -303 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 579 \\ (13.4 \%) \end{gathered}$ | $\begin{gathered} -455 \\ (-8.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 427 \\ (9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -948 \\ (-18.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -66 \\ (-1.5 \%) \end{gathered}$ | $\begin{gathered} \hline-1,028 \\ (-19.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -146 \\ (-3.4 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -157 \\ (-4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -68 \\ (-1.8 \%) \end{gathered}$ | $\begin{gathered} -151 \\ (-3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -61 \\ (-1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -150 \\ (-3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -61 \\ (-1.6 \%) \end{gathered}$ | $\begin{gathered} 89 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} 178 \\ (4.7 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 452 \\ (13 \%) \end{gathered}$ | $\begin{gathered} 356 \\ (9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 231 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 134 \\ (3.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 355 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 259 \\ (7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 221 \\ (6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 124 \\ (3.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 315 \\ (3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 243 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 245 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 172 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 107 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 34 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 86 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (0.2 \%) \\ \hline \end{gathered}$ |
| APR | W | $\begin{gathered} -263 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} 25 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} -286 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -409 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} -122 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} -413 \\ (-4.4 \%) \end{gathered}$ | $\begin{gathered} -126 \\ (-1.4 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -349 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 297 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -470 \\ (-7.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 176 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -355 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 291 \\ (5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -323 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 323 \\ (5.8 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -29 \\ (-0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 389 \\ (7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -185 \\ (-3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 233 \\ (4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -12 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 406 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -513 \\ (-9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -95 \\ (-1.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -29 \\ (-0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 241 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -194 \\ (-3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 76 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -27 \\ (-0.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 243 \\ (4.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -300 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -31 \\ (-0.6 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 22 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} -56 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -40 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -119 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 26 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -53 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -48 \\ (-0.7 \%) \end{gathered}$ | $\begin{gathered} -126 \\ (-1.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -142 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 162 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -239 \\ (-3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 65 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -186 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 119 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -339 \\ (-4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -34 \\ (-0.5 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-Sacramento River at Keswick |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{gathered} \hline-1,919 \\ (-20.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 440 \\ (6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,163 \\ (-22.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 196 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,967 \\ (-20.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 392 \\ (5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,213 \\ (-23.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 146 \\ (2 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 1,041 \\ (13.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 967 \\ (12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 773 \\ (10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 699 \\ (9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,263 \\ (16.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,188 \\ (15.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,014 \\ (13.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 939 \\ (12.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 190 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} 1,111 \\ (17.7 \%) \end{gathered}$ | $\begin{gathered} -712 \\ (-9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 209 \\ (3.3 \%) \end{gathered}$ | $\begin{gathered} -24 \\ (-0.3 \%) \end{gathered}$ | $\begin{gathered} 898 \\ (14.3 \%) \end{gathered}$ | $\begin{gathered} -810 \\ (-11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 111 \\ (1.8 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 1,372 \\ (18.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,040 \\ (13.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 849 \\ (11.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 516 \\ (6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,259 \\ (17.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} 927 \\ (12.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 550 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 218 \\ (2.8 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 790 \\ (11.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 190 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 709 \\ (10.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 109 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 784 \\ (11.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 184 \\ (2.5 \%) \\ \hline \end{array}$ | $\begin{gathered} 644 \\ (9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 44 \\ (0.6 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -7 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 727 \\ (10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -404 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 329 \\ (4.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -52 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 682 \\ (9.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -476 \\ (-6 \%) \\ \hline \end{array}$ | $\begin{gathered} 257 \\ (3.6 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} 1,015 \\ (9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,116 \\ (10.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 242 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 343 \\ (3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 865 \\ (8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 966 \\ (9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 110 \\ (1.1 \%) \end{gathered}$ | $\begin{gathered} 211 \\ (2.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 2,385 \\ (21.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,500 \\ (12.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 501 \\ (4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -383 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,463 \\ (22.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,578 \\ (13.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 714 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -171 \\ (-1.4 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 1,171 \\ (10.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 982 \\ (9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 105 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -84 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 952 \\ (8.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 763 \\ (7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -68 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -257 \\ (-2.4 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 1,443 \\ (12.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 769 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 897 \\ (8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 222 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,425 \\ (12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 750 \\ (6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 618 \\ (5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -56 \\ (-0.5 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 884 \\ (8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -74 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 848 \\ (8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -111 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,064 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 106 \\ (0.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 713 \\ (6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -245 \\ (-2.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 1,317 \\ (12.3 \%) \end{gathered}$ | $\begin{gathered} 899 \\ (8.1 \%) \end{gathered}$ | $\begin{gathered} 489 \\ (4.6 \%) \end{gathered}$ | $\begin{gathered} 71 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,266 \\ (11.8 \%) \end{gathered}$ | $\begin{array}{c\|} \hline 848 \\ (7.6 \%) \\ \hline \end{array}$ | $\begin{gathered} 368 \\ (3.4 \%) \end{gathered}$ | $\begin{gathered} -50 \\ (-0.5 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} 1,553 \\ (12.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 234 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,355 \\ (10.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 37 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,451 \\ (11.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 132 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,463 \\ (11.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 144 \\ (1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} \hline 1,032 \\ (7.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -9 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 753 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -288 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 884 \\ (6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -158 \\ (-1 \%) \end{gathered}$ | $\begin{gathered} 674 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -367 \\ (-2.4 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 125 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -87 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -55 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -267 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 55 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-157 \\ (-1.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -125 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -337 \\ (-2.6 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -185 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} -610 \\ (-4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 192 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} -232 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -538 \\ (-4 \%) \end{gathered}$ | $\begin{gathered} -963 \\ (-7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -311 \\ (-2.3 \%) \end{gathered}$ | $\begin{gathered} -736 \\ (-5.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -1,504 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -589 \\ (-4.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -1,168 \\ (-9.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -254 \\ (-2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,245 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-330 \\ (-2.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,013 \\ (-7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -98 \\ (-0.8 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 404 \\ (3.1 \%) \end{gathered}$ | $\begin{gathered} -162 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} 402 \\ (3.1 \%) \end{gathered}$ | $\begin{gathered} -164 \\ (-1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 298 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} -268 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} 325 \\ (2.5 \%) \end{gathered}$ | $\begin{gathered} -241 \\ (-1.8 \%) \end{gathered}$ |
| AUG | W | $\begin{gathered} -644 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -106 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -210 \\ (-1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 329 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -584 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -45 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -181 \\ (-1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 358 \\ (3.4 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 978 \\ (9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -214 \\ (-1.8 \%) \end{gathered}$ | $\begin{gathered} 1,498 \\ (14.3 \%) \end{gathered}$ | $\begin{gathered} 306 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 838 \\ (8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -354 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} 1,516 \\ (14.5 \%) \end{gathered}$ | $\begin{gathered} 324 \\ (2.8 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -178 \\ (-1.8 \%) \end{gathered}$ | $\begin{gathered} -300 \\ (-2.9 \%) \end{gathered}$ | $\begin{gathered} 534 \\ (5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 412 \\ (4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 33 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -89 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} 625 \\ (6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 503 \\ (4.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -1,143 \\ (-10.8 \%) \end{gathered}$ | $\begin{gathered} -1,501 \\ (-13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 145 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} -214 \\ (-1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,208 \\ (-11.4 \%) \end{gathered}$ | $\begin{gathered} -1,566 \\ (-14.3 \%) \end{gathered}$ | $\begin{gathered} 30 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} -328 \\ (-3 \%) \end{gathered}$ |
|  | C | $\begin{aligned} & -1,891 \\ & (-20 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 234 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,766 \\ (-18.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 359 \\ (4.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,712 \\ (-28.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -587 \\ (-8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,763 \\ (-18.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 363 \\ (4.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -619 \\ (-5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -411 \\ (-4 \%) \end{gathered}$ | $\begin{gathered} 17 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} 225 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -719 \\ (-6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -511 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} 20 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 228 \\ (2.2 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-Sacramento River at Keswick |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 |  | NAA vs. H2 |  | NAA vs. H3 |  | NAA vs. H4 |
| SEP | W | $\begin{gathered} -2,274 \\ (-24.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,723 \\ (-44.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,143 \\ (-22.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,592 \\ (-43.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,809 \\ (40.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 361 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} \hline 4,165 \\ (44.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 717 \\ (5.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 342 \\ (5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,693 \\ (-37.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 441 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,594 \\ (-36.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,452 \\ (58.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -583 \\ (-5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \mathrm{c} 290 \\ (73.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 255 \\ (2.6 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 24 \\ (0.4 \%) \end{gathered}$ | $\begin{gathered} -85 \\ (-1.5 \%) \end{gathered}$ | $\begin{gathered} 1,161 \\ (21.1 \%) \end{gathered}$ | $\begin{gathered} \hline 1,053 \\ (18.8 \%) \end{gathered}$ | $\begin{gathered} -656 \\ (-11.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -765 \\ (-13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 29 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} -80 \\ (-1.4 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -825 \\ (-13.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 692 \\ (15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -412 \\ (-6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,105 \\ (24.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -933 \\ (-15.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 584 \\ (13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -763 \\ (-12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 754 \\ (16.9 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -376 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 818 \\ (18.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,264 \\ (28.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -324 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 871 \\ (19.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -312 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 883 \\ (20.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -903 \\ (-13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,098 \\ (-25.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -497 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,692 \\ (-20.9 \%) \end{gathered}$ | $\begin{gathered} 1,349 \\ (19.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 154 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,740 \\ (25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 546 \\ (6.7 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} -448 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -597 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -287 \\ (-4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -436 \\ (-6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -140 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -148 \\ (-2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -297 \\ (-4.2 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -258 \\ (-3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -265 \\ (-3.7 \%) \end{gathered}$ | $\begin{gathered} 195 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 188 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} 102 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 95 \\ (1.3 \%) \end{gathered}$ | $\begin{gathered} 1,085 \\ (15.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,078 \\ (15.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 147 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -529 \\ (-7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 19 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -657 \\ (-9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 39 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -637 \\ (-9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -65 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -741 \\ (-10.5 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 535 \\ (8.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 168 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} 598 \\ (9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 231 \\ (3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 198 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -168 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 660 \\ (10.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 294 \\ (4.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 246 \\ (4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 396 \\ (6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 995 \\ (16.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,145 \\ (19.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -293 \\ (-5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-142 \\ (-2.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -130 \\ (-2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (0.4 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -2 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -224 \\ (-3.3 \%) \end{gathered}$ | $\begin{gathered} 218 \\ (3.3 \%) \end{gathered}$ | $\begin{gathered} -4 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 25 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-197 \\ (-2.9 \%) \end{array}$ | $\begin{gathered} 227 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.1 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} -885 \\ (-13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,752 \\ (-23.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -779 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,646 \\ (-21.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -304 \\ (-4.6 \%) \end{gathered}$ | $\begin{gathered} -1,170 \\ (-15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -172 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,039 \\ (-13.8 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} \hline-1,665 \\ (-26.7 \%) \end{gathered}$ | $\begin{gathered} -2,575 \\ (-36.1 \%) \end{gathered}$ | $\begin{gathered} \hline-1,705 \\ (-27.4 \%) \end{gathered}$ | $\begin{gathered} -2,615 \\ (-36.7 \%) \end{gathered}$ | $\begin{gathered} -755 \\ (-12.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,665 \\ (-23.3 \%) \end{gathered}$ | $\begin{gathered} -109 \\ (-1.8 \%) \end{gathered}$ | $\begin{gathered} \hline-1,019 \\ (-14.3 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -909 \\ (-17.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,757 \\ (-29.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -643 \\ (-12.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,491 \\ (-25.1 \%) \end{array}$ | $\begin{gathered} -242 \\ (-4.8 \%) \end{gathered}$ | $\begin{gathered} -1,090 \\ (-18.4 \%) \end{gathered}$ | $\begin{gathered} -409 \\ (-8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,257 \\ (-21.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -1,413 \\ (-24.9 \%) \end{gathered}$ | $\begin{gathered} -1,150 \\ (-21.3 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -1,304 \\ & (-23 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline-1,041 \\ (-19.3 \%) \\ \hline \end{array}$ | $\begin{array}{r} -1,134 \\ (-20 \%) \\ \hline \end{array}$ | $\begin{gathered} -871 \\ (-16.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,071 \\ (-18.9 \%) \end{gathered}$ | $\begin{gathered} -808 \\ (-15 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -529 \\ (-11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -416 \\ (-8.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -761 \\ (-15.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-648 \\ (-13.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -410 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-297 \\ (-6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -577 \\ (-12 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -464 \\ (-9.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} \hline-1,067 \\ (-18.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,545 \\ (-24.4 \%) \end{gathered}$ | $\begin{gathered} \hline-1,004 \\ (-17.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,483 \\ (-23.4 \%) \end{array}$ | $\begin{gathered} -557 \\ (-9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,036 \\ (-16.4 \%) \end{gathered}$ | $\begin{gathered} -460 \\ (-7.9 \%) \end{gathered}$ | $\begin{gathered} \hline-939 \\ (-14.8 \%) \\ \hline \end{gathered}$ |
| DEC | W | $\begin{gathered} -214 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,529 \\ (13.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 231 \\ (1.8 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,975 \\ (17.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,896 \\ (-14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -153 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,593 \\ (-12.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 150 \\ (1.4 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -78 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} 76 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} -366 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -212 \\ (-3.9 \%) \end{gathered}$ | $\begin{gathered} -59 \\ (-1.1 \%) \end{gathered}$ | $\begin{gathered} 95 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} -213 \\ (-3.9 \%) \end{gathered}$ | $\begin{gathered} -59 \\ (-1.1 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 299 \\ (5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 518 \\ (10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -70 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 148 \\ (2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 87 \\ (1.6 \%) \end{gathered}$ | $\begin{gathered} 306 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -163 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} 55 \\ (1.1 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 100 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 378 \\ (9.6 \%) \end{gathered}$ | $\begin{gathered} -290 \\ (-6.9 \%) \end{gathered}$ | $\begin{gathered} -11 \\ (-0.3 \%) \end{gathered}$ | $\begin{gathered} -242 \\ (-5.7 \%) \end{gathered}$ | $\begin{gathered} 37 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -487 \\ (-11.6 \%) \end{gathered}$ | $\begin{gathered} -208 \\ (-5.3 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -51 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 195 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -268 \\ (-7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -215 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 31 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -244 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -14 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 696 \\ (10.6 \%) \end{gathered}$ | $\begin{gathered} -95 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 615 \\ (9.4 \%) \end{gathered}$ | $\begin{gathered} -679 \\ (-9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -707 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0 \%) \\ \hline \end{gathered}$ |

## 11C.4.1.2 Sacramento River Upstream of Red Bluff

Table 3. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 4: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 28,036 | 30,390 | 31,643 | 31,556 | 30,699 | 30,731 |
|  | AN | 16,725 | 16,885 | 18,262 | 18,047 | 16,472 | 16,376 |
|  | BN | 9,381 | 9,146 | 10,082 | 10,120 | 9,299 | 9,502 |
|  | D | 7,098 | 7,262 | 7,202 | 7,538 | 6,967 | 6,930 |
|  | C | 6,143 | 6,942 | 7,484 | 7,073 | 7,077 | 6,220 |
|  | All | 15,396 | 16,278 | 17,103 | 17,064 | 16,297 | 16,194 |
| FEB | W | 30,255 | 33,472 | 33,983 | 34,114 | 33,502 | 33,520 |
|  | AN | 23,492 | 24,828 | 26,470 | 26,350 | 25,402 | 25,243 |
|  | BN | 12,005 | 11,614 | 13,144 | 12,718 | 12,368 | 12,729 |
|  | D | 8,947 | 8,790 | 8,792 | 8,783 | 8,788 | 8,828 |
|  | C | 6,599 | 6,378 | 6,474 | 6,436 | 6,365 | 6,443 |
|  | All | 18,010 | 19,092 | 19,771 | 19,714 | 19,312 | 19,376 |
| MAR | W | 25,004 | 26,210 | 26,313 | 26,309 | 26,282 | 26,280 |
|  | AN | 16,599 | 16,428 | 16,920 | 16,841 | 16,409 | 16,149 |
|  | BN | 9,333 | 8,474 | 9,035 | 8,895 | 8,402 | 8,320 |
|  | D | 8,385 | 8,300 | 8,231 | 8,238 | 8,238 | 8,477 |
|  | C | 5,999 | 6,101 | 6,461 | 6,240 | 6,362 | 6,226 |
|  | All | 14,669 | 14,876 | 15,114 | 15,047 | 14,909 | 14,888 |
| APR | W | 15,172 | 14,842 | 14,865 | 14,844 | 14,719 | 14,716 |
|  | AN | 10,477 | 9,761 | 10,056 | 9,971 | 10,051 | 10,086 |
|  | BN | 8,711 | 8,282 | 8,671 | 8,511 | 8,689 | 8,192 |
|  | D | 7,948 | 7,661 | 7,897 | 7,732 | 7,902 | 7,628 |
|  | C | 7,742 | 7,829 | 7,772 | 7,714 | 7,777 | 7,706 |
|  | All | 10,709 | 10,376 | 10,536 | 10,445 | 10,494 | 10,343 |
| MAY | W | 12,541 | 10,073 | 10,509 | 10,268 | 10,464 | 10,220 |
|  | AN | 10,012 | 10,047 | 11,010 | 10,743 | 11,230 | 10,982 |
|  | BN | 8,781 | 7,875 | 8,976 | 8,076 | 8,768 | 7,988 |
|  | D | 8,677 | 9,012 | 10,043 | 9,521 | 9,935 | 9,230 |
|  | C | 7,746 | 8,348 | 8,538 | 8,460 | 8,533 | 8,395 |
|  | All | 9,979 | 9,208 | 9,930 | 9,535 | 9,888 | 9,466 |
| JUN | W | 11,905 | 11,720 | 12,828 | 12,058 | 12,681 | 11,929 |
|  | AN | 12,001 | 12,789 | 14,280 | 12,400 | 14,358 | 12,611 |
|  | BN | 11,464 | 11,651 | 12,615 | 11,557 | 12,406 | 11,393 |
|  | D | 11,777 | 12,441 | 13,193 | 12,650 | 13,183 | 12,383 |
|  | C | 10,885 | 11,881 | 11,754 | 11,722 | 11,937 | 11,590 |
|  | All | 11,666 | 12,046 | 12,927 | 12,103 | 12,881 | 11,987 |
| JUL | W | 13,255 | 14,525 | 14,748 | 14,556 | 14,651 | 14,668 |
|  | AN | 14,129 | 15,142 | 15,122 | 14,852 | 14,975 | 14,774 |
|  | BN | 13,011 | 13,258 | 13,156 | 12,982 | 13,098 | 12,924 |
|  | D | 13,368 | 13,826 | 13,203 | 13,582 | 12,859 | 13,090 |
|  | C | 13,005 | 12,149 | 11,659 | 11,908 | 11,851 | 12,066 |
|  | All | 13,329 | 13,898 | 13,740 | 13,729 | 13,630 | 13,659 |


| Alternative 4: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 11,284 | 10,735 | 10,625 | 11,061 | 10,689 | 11,092 |
|  | AN | 10,580 | 11,775 | 11,561 | 12,080 | 11,424 | 12,099 |
|  | BN | 10,202 | 10,364 | 10,057 | 10,769 | 10,277 | 10,869 |
|  | D | 10,747 | 11,143 | 9,637 | 10,921 | 9,582 | 10,818 |
|  | C | 9,590 | 7,665 | 7,915 | 7,999 | 7,128 | 8,026 |
|  | All | 10,630 | 10,464 | 10,052 | 10,681 | 9,962 | 10,692 |
| SEP | W | 9,856 | 13,312 | 7,588 | 7,717 | 13,674 | 14,028 |
|  | AN | 6,279 | 10,320 | 6,629 | 6,722 | 9,739 | 10,572 |
|  | BN | 5,821 | 5,963 | 5,878 | 7,009 | 5,201 | 5,881 |
|  | D | 6,391 | 4,911 | 5,608 | 6,013 | 5,505 | 5,667 |
|  | C | 5,887 | 4,838 | 5,660 | 6,090 | 5,727 | 5,683 |
|  | All | 7,302 | 8,535 | 6,439 | 6,838 | 8,695 | 9,075 |
| OCT | W | 8,020 | 8,188 | 7,612 | 7,769 | 8,048 | 7,889 |
|  | AN | 8,112 | 8,162 | 7,905 | 8,362 | 8,257 | 9,241 |
|  | BN | 7,094 | 7,778 | 7,269 | 7,127 | 7,146 | 7,029 |
|  | D | 6,903 | 7,287 | 7,456 | 7,517 | 7,107 | 7,562 |
|  | C | 6,670 | 6,537 | 6,965 | 7,680 | 6,411 | 6,553 |
|  | All | 7,432 | 7,675 | 7,467 | 7,678 | 7,478 | 7,673 |
| NOV | W | 9,876 | 10,821 | 9,070 | 9,176 | 9,653 | 9,787 |
|  | AN | 8,144 | 9,098 | 6,522 | 6,478 | 7,430 | 8,071 |
|  | BN | 6,791 | 7,682 | 5,925 | 6,194 | 6,597 | 6,432 |
|  | D | 7,548 | 7,347 | 6,193 | 6,305 | 6,480 | 6,540 |
|  | C | 5,811 | 5,703 | 5,280 | 5,044 | 5,416 | 5,250 |
|  | All | 7,990 | 8,521 | 6,974 | 7,037 | 7,489 | 7,586 |
| DEC | W | 21,015 | 19,613 | 21,152 | 21,598 | 19,469 | 19,771 |
|  | AN | 10,019 | 10,053 | 10,146 | 9,861 | 10,161 | 10,004 |
|  | BN | 8,408 | 8,228 | 8,757 | 8,386 | 8,541 | 8,292 |
|  | D | 7,292 | 7,091 | 7,478 | 7,089 | 7,137 | 6,893 |
|  | C | 5,628 | 5,433 | 5,647 | 5,433 | 5,480 | 5,441 |
|  | All | 11,989 | 11,446 | 12,155 | 12,074 | 11,487 | 11,458 |

Table 4. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 4: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| JAN | W | $\begin{gathered} 3,607 \\ (12.9 \%) \end{gathered}$ | $\begin{gathered} 1,253 \\ (4.1 \%) \end{gathered}$ | $\begin{gathered} 3,520 \\ (12.6 \%) \end{gathered}$ | $\begin{gathered} 1,166 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} \hline 2,663 \\ (9.5 \%) \end{gathered}$ | $\begin{gathered} \hline 309 \\ (1 \%) \end{gathered}$ | $\begin{gathered} 2,695 \\ (9.6 \%) \end{gathered}$ | $\begin{gathered} 341 \\ (1.1 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 1,538 \\ (9.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,377 \\ \text { (8.2\%) } \\ \hline \end{gathered}$ | $\begin{gathered} 1,323 \\ (7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,162 \\ (6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -252 \\ (-1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -413 \\ (-2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -349 \\ (-2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -510 \\ (-3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 701 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 935 \\ (10.2 \%) \end{array}$ | $\begin{gathered} 738 \\ (7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 973 \\ (10.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -82 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 153 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 121 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 356 \\ (3.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 104 \\ (1.5 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-60 \\ (-0.8 \%) \end{array}$ | $\begin{gathered} 440 \\ (6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 276 \\ (3.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -131 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-295 \\ (-4.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -167 \\ (-2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -331 \\ (-4.6 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 1,341 \\ (21.8 \%) \end{gathered}$ | $\begin{gathered} 542 \\ (7.8 \%) \end{gathered}$ | $\begin{gathered} 930 \\ (15.1 \%) \end{gathered}$ | $\begin{gathered} 131 \\ (1.9 \%) \end{gathered}$ | $\begin{gathered} 934 \\ (15.2 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 135 \\ (1.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 77 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} -722 \\ (-10.4 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 1,707 \\ (11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 825 \\ (5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,668 \\ (10.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 786 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 901 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 19 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 799 \\ (5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -84 \\ (-0.5 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} 3,728 \\ (12.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 512 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,859 \\ (12.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 643 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,247 \\ (10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,265 \\ (10.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 49 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 2,979 \\ (12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,643 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,858 \\ (12.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,522 \\ (6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,910 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 574 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,752 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 415 \\ (1.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 1,139 \\ (9.5 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,530 \\ (13.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 714 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,104 \\ (9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 363 \\ (3 \%) \end{gathered}$ | $\begin{gathered} 754 \\ (6.5 \%) \end{gathered}$ | $\begin{gathered} 725 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,115 \\ (9.6 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -155 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -164 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -159 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -119 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 38 \\ (0.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -125 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 96 \\ (1.5 \%) \end{gathered}$ | $\begin{gathered} -163 \\ (-2.5 \%) \end{gathered}$ | $\begin{gathered} 58 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -234 \\ (-3.5 \%) \end{gathered}$ | $\begin{gathered} -13 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} -156 \\ (-2.4 \%) \end{gathered}$ | $\begin{gathered} 64 \\ (1 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 1,760 \\ (9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 679 \\ (3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,704 \\ (9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 622 \\ (3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,302 \\ (7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 220 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,366 \\ (7.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 284 \\ (1.5 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 1,310 \\ \text { (5.2\%) } \end{gathered}$ | $\begin{gathered} 103 \\ (0.4 \%) \end{gathered}$ | $\begin{gathered} 1,305 \\ (5.2 \%) \end{gathered}$ | $\begin{gathered} 99 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,279 \\ (5.1 \%) \end{gathered}$ | $\begin{gathered} 72 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} 1,276 \\ (5.1 \%) \end{gathered}$ | $\begin{gathered} 69 \\ (0.3 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 321 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 492 \\ (3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 242 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 413 \\ (2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -190 \\ (-1.1 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-20 \\ (-0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -450 \\ (-2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -279 \\ (-1.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -297 \\ (-3.2 \%) \end{gathered}$ | $\begin{gathered} 562 \\ (6.6 \%) \end{gathered}$ | $\begin{gathered} -438 \\ (-4.7 \%) \end{gathered}$ | $\begin{gathered} 421 \\ (5 \%) \end{gathered}$ | $\begin{gathered} -931 \\ (-10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -72 \\ (-0.8 \%) \end{gathered}$ | $\begin{gathered} -1,013 \\ (-10.9 \%) \end{gathered}$ | $\begin{gathered} -154 \\ (-1.8 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -154 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -69 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -147 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -62 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -147 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -62 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 92 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 177 \\ (2.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 462 \\ (7.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 360 \\ (5.9 \%) \end{array}$ | $\begin{gathered} 241 \\ (4 \%) \end{gathered}$ | $\begin{gathered} 138 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} 363 \\ (6.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 261 \\ (4.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 228 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} 125 \\ (2 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 445 \\ (3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 238 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 378 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 170 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 240 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 219 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (0.1 \%) \\ \hline \end{gathered}$ |
| APR | W | $\begin{gathered} -307 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} 23 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} -328 \\ (-2.2 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -453 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} -123 \\ (-0.8 \%) \end{gathered}$ | $\begin{gathered} -456 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} -126 \\ (-0.9 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -421 \\ (-4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 295 \\ (3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -507 \\ (-4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 209 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -426 \\ (-4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 290 \\ (3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -392 \\ (-3.7 \%) \end{gathered}$ | $\begin{gathered} 325 \\ (3.3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -40 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} 389 \\ (4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -200 \\ (-2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 229 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-0.3 \%) \end{gathered}$ | $\begin{gathered} 406 \\ (4.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -519 \\ (-6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -91 \\ (-1.1 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -52 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 235 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -216 \\ (-2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 71 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -46 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 241 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -320 \\ (-4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -33 \\ (-0.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 30 \\ (0.4 \%) \end{gathered}$ | $\begin{gathered} -57 \\ (-0.7 \%) \end{gathered}$ | $\begin{gathered} -28 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -115 \\ (-1.5 \%) \end{gathered}$ | $\begin{gathered} 34 \\ (0.4 \%) \end{gathered}$ | $\begin{gathered} -53 \\ (-0.7 \%) \end{gathered}$ | $\begin{gathered} -36 \\ (-0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -124 \\ (-1.6 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -173 \\ (-1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 160 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -264 \\ (-2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -215 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 118 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -366 \\ (-3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -33 \\ (-0.3 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\qquad$ CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{gathered} -2,031 \\ (-16.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 437 \\ (4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-2,273 \\ (-18.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 195 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-2,077 \\ (-16.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 391 \\ (3.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -2,321 \\ (-18.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 147 \\ (1.5 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 998 \\ (10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 963 \\ (9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 731 \\ (7.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 696 \\ (6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,218 \\ (12.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,184 \\ (11.8 \%) \end{array}$ | $\begin{gathered} 970 \\ (9.7 \%) \end{gathered}$ | $\begin{gathered} 935 \\ (9.3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 195 \\ (2.2 \%) \end{gathered}$ | $\begin{gathered} 1,101 \\ (14 \%) \end{gathered}$ | $\begin{gathered} -705 \\ (-8 \%) \end{gathered}$ | $\begin{gathered} 201 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} -13 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 893 \\ (11.3 \%) \end{gathered}$ | $\begin{gathered} -793 \\ (-9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 113 \\ (1.4 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 1,366 \\ (15.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 1,031 \\ (11.4 \%) \\ \hline \end{array}$ | $\begin{gathered} 844 \\ (9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 509 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,258 \\ (14.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 923 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 553 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 218 \\ (2.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 791 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 189 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 713 \\ (9.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 111 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 787 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 185 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 649 \\ (8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 47 \\ (0.6 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -49 \\ (-0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 721 \\ (7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -444 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 326 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -91 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 679 \\ (7.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -513 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 258 \\ (2.8 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} 923 \\ (7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,108 \\ \text { (9.5\%) } \\ \hline \end{gathered}$ | $\begin{gathered} 153 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 339 \\ (2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 775 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 961 \\ (8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 209 \\ (1.8 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} \hline 2,279 \\ (19 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,491 \\ (11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 399 \\ (3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -390 \\ (-3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,357 \\ (19.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 1,568 \\ (12.3 \%) \end{array}$ | $\begin{gathered} 610 \\ (5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -178 \\ (-1.4 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{aligned} & 1,151 \\ & (10 \%) \\ & \hline \end{aligned}$ | $\begin{array}{c\|} \hline 964 \\ (8.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 93 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -94 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 942 \\ (8.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 756 \\ (6.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -71 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -258 \\ (-2.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 1,416 \\ (12 \%) \end{gathered}$ | $\begin{gathered} 752 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 873 \\ (7.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 209 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,406 \\ (11.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 742 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 606 \\ (5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -58 \\ (-0.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 870 \\ (8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -127 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 838 \\ (7.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -159 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,052 \\ (9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 56 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 706 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -291 \\ (-2.4 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 1,261 \\ (10.8 \%) \end{gathered}$ | $\begin{gathered} 881 \\ (7.3 \%) \end{gathered}$ | $\begin{gathered} 437 \\ (3.7 \%) \end{gathered}$ | $\begin{gathered} 57 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} 1,214 \\ (10.4 \%) \end{gathered}$ | $\begin{gathered} 834 \\ (6.9 \%) \end{gathered}$ | $\begin{gathered} 321 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} -59 \\ (-0.5 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} 1,494 \\ (11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 224 \\ (1.5 \%) \end{gathered}$ | $\begin{gathered} 1,302 \\ (9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,396 \\ (10.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} 126 \\ (0.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,413 \\ (10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 143 \\ (1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} \hline 993 \\ (7 \%) \end{gathered}$ | $\begin{gathered} -20 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 723 \\ (5.1 \%) \end{gathered}$ | $\begin{gathered} -289 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} \hline 846 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -166 \\ (-1.1 \%) \end{gathered}$ | $\begin{gathered} 645 \\ (4.6 \%) \end{gathered}$ | $\begin{gathered} -368 \\ (-2.4 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 145 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -102 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -29 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -276 \\ (-2.1 \%) \end{gathered}$ | $\begin{gathered} 87 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -160 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} -87 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -334 \\ (-2.5 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -165 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} -623 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 213 \\ (1.6 \%) \end{gathered}$ | $\begin{gathered} -245 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -509 \\ (-3.8 \%) \end{gathered}$ | $\begin{array}{r} -967 \\ (-7 \%) \\ \hline \end{array}$ | $\begin{gathered} -278 \\ (-2.1 \%) \end{gathered}$ | $\begin{gathered} -736 \\ (-5.3 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -1,346 \\ (-10.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -490 \\ (-4 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -1,097 \\ & (-8.4 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -242 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,153 \\ (-8.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -298 \\ (-2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -938 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -83 \\ (-0.7 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 410 \\ (3.1 \%) \end{gathered}$ | $\begin{gathered} -158 \\ (-1.1 \%) \end{gathered}$ | $\begin{gathered} 400 \\ (3 \%) \end{gathered}$ | $\begin{gathered} -169 \\ (-1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 301 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} -268 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 329 \\ (2.5 \%) \end{gathered}$ | $\begin{gathered} -239 \\ (-1.7 \%) \end{gathered}$ |
| AUG | W | $\begin{gathered} -658 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -110 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -222 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 326 \\ (3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -594 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -46 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -191 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 357 \\ (3.3 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 980 \\ (9.3 \%) \end{gathered}$ | $\begin{gathered} \hline-215 \\ (-1.8 \%) \end{gathered}$ | $\begin{gathered} 1,499 \\ (14.2 \%) \end{gathered}$ | $\begin{gathered} 304 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} 843 \\ (8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -351 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} 1,519 \\ (14.4 \%) \end{gathered}$ | $\begin{gathered} 324 \\ (2.8 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -145 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -307 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} 567 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 405 \\ (3.9 \%) \end{gathered}$ | $\begin{gathered} 75 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -87 \\ (-0.8 \%) \end{gathered}$ | $\begin{gathered} 667 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 505 \\ (4.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -1,110 \\ (-10.3 \%) \end{gathered}$ | $\begin{gathered} -1,506 \\ (-13.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 174 \\ (1.6 \%) \end{gathered}$ | $\begin{gathered} -222 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} -1,165 \\ (-10.8 \%) \end{gathered}$ | $\begin{aligned} & -1,561 \\ & (-14 \%) \end{aligned}$ | $\begin{gathered} 71 \\ (0.7 \%) \end{gathered}$ | $\begin{gathered} -325 \\ (-2.9 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -1,675 \\ (-17.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 251 \\ (3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,592 \\ (-16.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 334 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,463 \\ (-25.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -537 \\ (-7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,565 \\ (-16.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 361 \\ (4.7 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -579 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -413 \\ (-3.9 \%) \end{gathered}$ | $\begin{gathered} 51 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 217 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -668 \\ (-6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -502 \\ (-4.8 \%) \end{gathered}$ | $\begin{gathered} 62 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} 228 \\ (2.2 \%) \end{gathered}$ |


| Alternative 4: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | $\begin{gathered} \text { NAA vs. } \\ \text { H2 } \end{gathered}$ | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{aligned} & -2,268 \\ & (-23 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & -5,724 \\ & (-43 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -2,139 \\ (-21.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -5,595 \\ (-42 \%) \\ \hline \end{array}$ | $\begin{gathered} 3,818 \\ (38.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 361 \\ (2.7 \%) \end{gathered}$ | $\begin{gathered} 4,172 \\ (42.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 716 \\ (5.4 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 349 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,692 \\ (-35.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 443 \\ (7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-3,598 \\ (-34.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,460 \\ (55.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -581 \\ (-5.6 \%) \end{gathered}$ | $\begin{gathered} 4,292 \\ (68.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 251 \\ (2.4 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 57 \\ (1 \%) \end{gathered}$ | $\begin{gathered} -85 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} 1,189 \\ (20.4 \%) \end{gathered}$ | $\begin{gathered} \hline 1,046 \\ (17.5 \%) \end{gathered}$ | $\begin{gathered} -620 \\ (-10.6 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-762 \\ (-12.8 \%) \\ \hline \end{array}$ | $\begin{gathered} 61 \\ (1 \%) \end{gathered}$ | $\begin{gathered} -82 \\ (-1.4 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -783 \\ (-12.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 697 \\ (14.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -378 \\ (-5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,101 \\ (22.4 \%) \end{gathered}$ | $\begin{gathered} -886 \\ (-13.9 \%) \end{gathered}$ | $\begin{gathered} 594 \\ (12.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -724 \\ (-11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 756 \\ (15.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -226 \\ (-3.8 \%) \end{gathered}$ | $\begin{gathered} 822 \\ (17 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 203 \\ (3.4 \%) \end{gathered}$ | $\begin{gathered} \hline 1,252 \\ (25.9 \%) \end{gathered}$ | $\begin{gathered} -160 \\ (-2.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 889 \\ (18.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -203 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 845 \\ (17.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -863 \\ (-11.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,096 \\ (-24.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -464 \\ (-6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,697 \\ (-19.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,393 \\ (19.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 160 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,773 \\ (24.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 539 \\ (6.3 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} -407 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -576 \\ (-7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -250 \\ (-3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -419 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 28 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -140 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -130 \\ (-1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -298 \\ (-3.6 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -207 \\ (-2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -257 \\ (-3.1 \%) \end{gathered}$ | $\begin{gathered} 250 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 200 \\ (2.5 \%) \end{gathered}$ | $\begin{gathered} 145 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 95 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} 1,129 \\ (13.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,079 \\ (13.2 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 175 \\ (2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -509 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -651 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 52 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-632 \\ (-8.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -66 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -750 \\ (-9.6 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 553 \\ (8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 169 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 615 \\ (8.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 231 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 204 \\ (3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -180 \\ (-2.5 \%) \end{gathered}$ | $\begin{gathered} 659 \\ (9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 275 \\ (3.8 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 294 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 428 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,010 \\ (15.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 1,144 \\ (17.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -259 \\ (-3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -126 \\ (-1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -118 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 35 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} -207 \\ (-2.7 \%) \end{gathered}$ | $\begin{gathered} 245 \\ (3.3 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 46 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -196 \\ (-2.6 \%) \end{gathered}$ | $\begin{gathered} 240 \\ (3.2 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (0 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} -806 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,751 \\ (-16.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -701 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,645 \\ (-15.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -223 \\ (-2.3 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,168 \\ (-10.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -90 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,034 \\ (-9.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -1,622 \\ (-19.9 \%) \end{gathered}$ | $\begin{gathered} -2,576 \\ (-28.3 \%) \end{gathered}$ | $\begin{gathered} -1,665 \\ (-20.4 \%) \end{gathered}$ | $\begin{gathered} -2,619 \\ (-28.8 \%) \end{gathered}$ | $\begin{gathered} -714 \\ (-8.8 \%) \end{gathered}$ | $\begin{gathered} -1,668 \\ (-18.3 \%) \end{gathered}$ | $\begin{gathered} -73 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} -1,027 \\ (-11.3 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -866 \\ (-12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,757 \\ (-22.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -596 \\ (-8.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,488 \\ (-19.4 \%) \end{gathered}$ | $\begin{gathered} -193 \\ (-2.8 \%) \end{gathered}$ | $\left(\begin{array}{c} -1,085 \\ (-14.1 \%) \end{array}\right.$ | $\begin{gathered} -358 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,250 \\ (-16.3 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{aligned} & -1,355 \\ & (-18 \%) \end{aligned}$ | $\begin{gathered} -1,153 \\ (-15.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,244 \\ (-16.5 \%) \end{gathered}$ | $\begin{array}{\|c} \hline-1,042 \\ (-14.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,068 \\ (-14.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-867 \\ (-11.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,009 \\ (-13.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -807 \\ (-11 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -531 \\ (-9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -423 \\ (-7.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -767 \\ (-13.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-659 \\ (-11.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -395 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -287 \\ (-5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -561 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -453 \\ (-7.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} \hline-1,016 \\ (-12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,547 \\ (-18.2 \%) \end{gathered}$ | $\begin{gathered} -953 \\ (-11.9 \%) \end{gathered}$ | $\begin{gathered} -1,484 \\ (-17.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -501 \\ (-6.3 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,032 \\ (-12.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -404 \\ (-5.1 \%) \end{gathered}$ | $\begin{gathered} -935 \\ (-11 \%) \\ \hline \end{gathered}$ |
| DEC | W | $\begin{gathered} 137 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} 1,539 \\ (7.8 \%) \\ \hline \end{array}$ | $\begin{gathered} 583 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} 1,986 \\ (10.1 \%) \end{gathered}$ | $\begin{array}{r} -1,546 \\ (-7.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -144 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,244 \\ (-5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 159 \\ (0.8 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 127 \\ (1.3 \%) \end{gathered}$ | $\begin{gathered} 93 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} -158 \\ (-1.6 \%) \end{gathered}$ | $\begin{gathered} \hline-192 \\ (-1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 141 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} 107 \\ (1.1 \%) \end{gathered}$ | $\begin{gathered} -16 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} -49 \\ (-0.5 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 349 \\ (4.1 \%) \end{gathered}$ | $\begin{gathered} 529 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 158 \\ (1.9 \%) \end{gathered}$ | $\begin{gathered} 133 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 313 \\ (3.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -116 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} 64 \\ (0.8 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 186 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} 387 \\ (5.5 \%) \end{gathered}$ | $\begin{gathered} -203 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -155 \\ (-2.1 \%) \end{gathered}$ | $\begin{gathered} 45 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -399 \\ (-5.5 \%) \end{gathered}$ | $\begin{gathered} -199 \\ (-2.8 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 19 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 214 \\ (3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -194 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -148 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 47 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -187 \\ (-3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 8 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 165 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} 708 \\ (6.2 \%) \end{gathered}$ | $\begin{gathered} 85 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 628 \\ (5.5 \%) \end{gathered}$ | $\begin{gathered} -503 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} 40 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -531 \\ (-4.4 \%) \end{gathered}$ | $\begin{gathered} 12 \\ (0.1 \%) \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.4.1.3 Sacramento River at Wilkins Slough

Table 5. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 4: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 19,145 | 19,320 | 19,383 | 19,404 | 19,359 | 19,348 |
|  | AN | 17,084 | 16,593 | 17,295 | 17,502 | 16,553 | 16,423 |
|  | BN | 12,521 | 12,143 | 12,682 | 12,722 | 12,270 | 12,502 |
|  | D | 8,896 | 9,189 | 9,121 | 9,501 | 8,906 | 8,899 |
|  | C | 7,858 | 8,586 | 9,125 | 8,719 | 8,744 | 7,861 |
|  | All | 13,811 | 13,901 | 14,180 | 14,247 | 13,890 | 13,776 |
| FEB | W | 19,887 | 20,044 | 20,076 | 20,089 | 20,053 | 20,069 |
|  | AN | 19,139 | 19,095 | 19,485 | 19,588 | 19,120 | 19,143 |
|  | BN | 14,528 | 14,328 | 14,904 | 14,652 | 14,445 | 14,600 |
|  | D | 11,520 | 11,473 | 11,451 | 11,441 | 11,471 | 11,494 |
|  | C | 8,499 | 8,158 | 8,235 | 8,214 | 8,135 | 8,260 |
|  | All | 15,359 | 15,309 | 15,480 | 15,451 | 15,331 | 15,389 |
| MAR | W | 18,223 | 18,323 | 18,330 | 18,337 | 18,324 | 18,331 |
|  | AN | 17,696 | 17,537 | 17,775 | 17,780 | 17,686 | 17,526 |
|  | BN | 12,208 | 11,534 | 12,032 | 11,939 | 11,462 | 11,382 |
|  | D | 11,364 | 11,191 | 11,295 | 11,211 | 11,337 | 11,414 |
|  | C | 8,101 | 8,166 | 8,526 | 8,316 | 8,426 | 8,285 |
|  | All | 14,132 | 13,997 | 14,194 | 14,132 | 14,077 | 14,038 |
| APR | W | 13,392 | 13,119 | 13,136 | 13,134 | 13,032 | 13,037 |
|  | AN | 10,264 | 9,783 | 10,054 | 10,045 | 10,072 | 10,149 |
|  | BN | 7,152 | 6,858 | 7,227 | 7,068 | 7,262 | 6,759 |
|  | D | 5,319 | 5,112 | 5,331 | 5,136 | 5,342 | 5,059 |
|  | C | 4,164 | 4,331 | 4,246 | 4,224 | 4,264 | 4,221 |
|  | All | 8,746 | 8,518 | 8,662 | 8,587 | 8,642 | 8,501 |
| MAY | W | 10,467 | 8,435 | 8,843 | 8,597 | 8,826 | 8,579 |
|  | AN | 7,318 | 7,500 | 8,411 | 8,177 | 8,652 | 8,393 |
|  | BN | 5,638 | 4,871 | 5,870 | 4,958 | 5,712 | 4,960 |
|  | D | 4,669 | 5,088 | 6,054 | 5,528 | 5,974 | 5,309 |
|  | C | 3,998 | 4,528 | 4,717 | 4,667 | 4,728 | 4,613 |
|  | All | 6,962 | 6,383 | 7,056 | 6,665 | 7,043 | 6,636 |
| JUN | W | 6,503 | 6,435 | 7,471 | 6,738 | 7,353 | 6,642 |
|  | AN | 5,781 | 6,530 | 7,947 | 6,101 | 8,036 | 6,325 |
|  | BN | 5,243 | 5,628 | 6,459 | 5,473 | 6,330 | 5,380 |
|  | D | 5,245 | 6,075 | 6,706 | 6,192 | 6,758 | 6,011 |
|  | C | 5,140 | 6,253 | 5,925 | 5,931 | 6,129 | 5,821 |
|  | All | 5,707 | 6,205 | 6,974 | 6,191 | 6,968 | 6,122 |
| JUL | W | 6,685 | 7,771 | 7,897 | 7,751 | 7,838 | 7,910 |
|  | AN | 6,971 | 7,892 | 7,783 | 7,592 | 7,667 | 7,541 |
|  | BN | 6,122 | 6,560 | 6,348 | 6,215 | 6,378 | 6,242 |
|  | D | 6,788 | 7,474 | 6,716 | 7,102 | 6,435 | 6,692 |
|  | C | 7,162 | 6,649 | 6,175 | 6,308 | 6,366 | 6,449 |
|  | All | 6,723 | 7,353 | 7,105 | 7,112 | 7,041 | 7,090 |


| Month | Alternative 4: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 6,287 | 5,537 | 5,393 | 5,838 | 5,482 | 5,891 |
|  | AN | 5,498 | 6,610 | 6,393 | 6,894 | 6,280 | 6,950 |
|  | BN | 5,138 | 5,462 | 5,070 | 5,771 | 5,350 | 5,930 |
|  | D | 5,833 | 6,356 | 4,789 | 6,041 | 4,799 | 6,014 |
|  | C | 5,551 | 4,719 | 5,153 | 4,752 | 4,524 | 4,726 |
|  | All | 5,768 | 5,741 | 5,317 | 5,867 | 5,286 | 5,909 |
| SEP | W | 9,338 | 12,737 | 7,025 | 7,125 | 13,105 | 13,439 |
|  | AN | 5,631 | 9,546 | 5,880 | 5,932 | 8,995 | 9,782 |
|  | BN | 5,128 | 5,216 | 5,118 | 6,218 | 4,453 | 5,101 |
|  | D | 5,636 | 4,114 | 4,872 | 5,212 | 4,783 | 4,895 |
|  | C | 5,200 | 4,354 | 5,251 | 5,554 | 5,303 | 5,114 |
|  | All | 6,658 | 7,866 | 5,800 | 6,146 | 8,058 | 8,386 |
| OCT | W | 7,347 | 7,382 | 6,932 | 7,074 | 7,240 | 7,093 |
|  | AN | 6,799 | 6,927 | 6,640 | 7,101 | 6,943 | 7,937 |
|  | BN | 5,987 | 6,570 | 6,148 | 5,981 | 5,935 | 5,800 |
|  | D | 5,688 | 6,040 | 6,254 | 6,322 | 5,809 | 6,260 |
|  | C | 5,642 | 5,572 | 6,096 | 6,691 | 5,531 | 5,543 |
|  | All | 6,421 | 6,617 | 6,484 | 6,670 | 6,409 | 6,586 |
| NOV | W | 9,644 | 10,889 | 8,913 | 9,119 | 9,709 | 9,964 |
|  | AN | 8,210 | 9,141 | 6,532 | 6,521 | 7,467 | 8,112 |
|  | BN | 6,793 | 7,588 | 5,817 | 6,124 | 6,539 | 6,404 |
|  | D | 7,407 | 7,227 | 6,042 | 6,173 | 6,394 | 6,445 |
|  | C | 5,118 | 4,986 | 4,503 | 4,233 | 4,679 | 4,507 |
|  | All | 7,794 | 8,402 | 6,761 | 6,866 | 7,376 | 7,514 |
| DEC | W | 17,881 | 17,257 | 17,548 | 17,744 | 17,141 | 17,372 |
|  | AN | 10,809 | 10,755 | 11,071 | 10,876 | 10,981 | 10,991 |
|  | BN | 8,505 | 8,258 | 8,613 | 8,360 | 8,458 | 8,277 |
|  | D | 8,950 | 8,725 | 9,155 | 8,775 | 8,813 | 8,587 |
|  | C | 6,229 | 5,981 | 6,192 | 6,013 | 6,010 | 5,993 |
|  | All | 11,580 | 11,246 | 11,570 | 11,451 | 11,300 | 11,292 |

Table 6. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 4: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{gathered} \text { EXISTING } \\ \text { CONDITIONS } \\ \text { vs. H1 } \end{gathered}$ | $\begin{gathered} \text { NAA vs. } \\ \text { H1 } \end{gathered}$ | $\begin{aligned} & \text { EXISTING } \\ & \text { CONDITIONS } \\ & \text { vs. H2 } \end{aligned}$ | $\begin{gathered} \text { NAA vs. } \\ \text { H2 } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { EXISTING } \\ \text { CONDITIONS } \\ \text { vs. H3 } \\ \hline \end{array}$ | $\begin{gathered} \text { NAA vs. } \\ \text { H3 } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { EXISTING } \\ & \text { CONDITIONS } \\ & \text { vs. H4 } \end{aligned}$ | $\begin{array}{\|c} \text { NAA vs. } \\ \hline \end{array}$ |
| JAN | W | $\begin{gathered} 239 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 63 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} 259 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} 83 \\ (0.4 \%) \end{gathered}$ | $\begin{gathered} 214 \\ (1.1 \%) \end{gathered}$ | $\begin{gathered} 38 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} 203 \\ (1.1 \%) \end{gathered}$ | $\begin{gathered} 27 \\ (0.1 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 211 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 701 \\ (4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 418 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 909 \\ (5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -531 \\ (-3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -41 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -661 \\ (-3.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -171 \\ (-1 \%) \\ \hline \end{array}$ |
|  | BN | $\begin{gathered} 161 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 538 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 201 \\ (1.6 \%) \end{gathered}$ | $\begin{gathered} 579 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -251 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 127 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -20 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 358 \\ (2.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 225 \\ (2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -67 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 605 \\ (6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 312 \\ (3.4 \%) \end{gathered}$ | $\begin{gathered} 11 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -282 \\ (-3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -289 \\ (-3.1 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 1,267 \\ (16.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 539 \\ (6.3 \%) \end{gathered}$ | $\begin{gathered} \hline 861 \\ (11 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 133 \\ (1.5 \%) \end{array}$ | $\begin{gathered} 886 \\ (11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 158 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} \hline 3 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -725 \\ (-8.4 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 369 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 279 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 436 \\ (3.2 \%) \end{gathered}$ | $\begin{gathered} 346 \\ (2.5 \%) \end{gathered}$ | $\begin{gathered} 79 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -35 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -125 \\ (-0.9 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} 188 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 31 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} 202 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 45 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 166 \\ (0.8 \%) \end{gathered}$ | $\begin{gathered} 9 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 181 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 346 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 390 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 449 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 493 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -19 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 48 \\ (0.3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 376 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 576 \\ (4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 124 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 324 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -83 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 72 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 272 \\ (1.9 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -69 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -79 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -33 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -49 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -26 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -264 \\ (-3.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 76 \\ (0.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -284 \\ (-3.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 56 \\ (0.7 \%) \end{array}$ | $\begin{gathered} -364 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} -24 \\ (-0.3 \%) \end{gathered}$ | $\begin{gathered} -239 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} \hline 101 \\ (1.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 121 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 172 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 92 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 143 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -28 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 80 \\ (0.5 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 107 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} 7 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 114 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} 14 \\ (0.1 \%) \end{gathered}$ | $\begin{gathered} 101 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 108 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 8 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 79 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 238 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 84 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 243 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -10 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 149 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -170 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-0.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -176 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} 498 \\ (4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -268 \\ (-2.2 \%) \end{gathered}$ | $\begin{gathered} 406 \\ (3.5 \%) \end{gathered}$ | $\begin{gathered} -745 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -72 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} -826 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -152 \\ (-1.3 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -68 \\ (-0.6 \%) \\ \left(\begin{array}{c} -1 \end{array}\right) \end{gathered}$ | $\begin{gathered} \hline 105 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -152 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -27 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 146 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 50 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} 223 \\ (2 \%) \\ \hline \end{array}$ |
|  | C | $\begin{gathered} 425 \\ (5.2 \%) \end{gathered}$ | $\begin{gathered} 360 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 216 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 151 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 325 \\ (4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 260 \\ (3.2 \%) \end{gathered}$ | $\begin{gathered} 184 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 119 \\ (1.5 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 63 \\ (0.4 \%) \end{gathered}$ | $\begin{gathered} 198 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \end{gathered}$ | $\begin{aligned} & 136 \\ & (1 \%) \end{aligned}$ | $\begin{gathered} -55 \\ (-0.4 \%) \end{gathered}$ | $\begin{gathered} 80 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} -94 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 41 \\ (0.3 \%) \\ \hline \end{array}$ |
| APR | W | $\begin{gathered} \hline-256 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 17 \\ (0.1 \%) \end{gathered}$ | $\begin{gathered} -258 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 15 \\ (0.1 \%) \end{gathered}$ | $\begin{gathered} -360 \\ (-2.7 \%) \end{gathered}$ | $\begin{gathered} -87 \\ (-0.7 \%) \end{gathered}$ | $\begin{gathered} -355 \\ (-2.7 \%) \end{gathered}$ | $\begin{gathered} -83 \\ (-0.6 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -209 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} 272 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} -219 \\ (-2.1 \%) \end{gathered}$ | $\begin{gathered} 262 \\ (2.7 \%) \end{gathered}$ | $\begin{gathered} -191 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 290 \\ (3 \%) \end{gathered}$ | $\begin{gathered} -115 \\ (-1.1 \%) \end{gathered}$ | $\begin{gathered} \hline 366 \\ 3.7 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 75 \\ (1 \%) \end{gathered}$ | $\begin{gathered} 369 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -84 \\ (-1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 210 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 109 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 404 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -393 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -99 \\ (-1.4 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 11 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 218 \\ (4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -183 \\ (-3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 229 \\ (4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -261 \\ (-4.9 \%) \end{gathered}$ | $\begin{gathered} -54 \\ (-1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 82 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -84 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 60 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -107 \\ (-2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 100 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} -67 \\ (-1.5 \%) \end{gathered}$ | $\begin{gathered} 57 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -110 \\ (-2.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -84 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 144 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -159 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -104 \\ (-1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 124 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -245 \\ (-2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -17 \\ (-0.2 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{gathered} \hline-1,624 \\ (-15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 408 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,870 \\ (-17.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 162 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,641 \\ (-15.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 391 \\ (4.6 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -1,888 \\ & (-18 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 144 \\ (1.7 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 1,093 \\ (14.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 911 \\ (12.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 859 \\ (11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 678 \\ (9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,334 \\ (18.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,152 \\ (15.4 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,075 \\ (14.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 893 \\ (11.9 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 232 \\ (4.1 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 999 \\ (20.5 \%) \end{array}$ | $\begin{gathered} -680 \\ (-12.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 87 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 74 \\ (1.3 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 841 \\ (17.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -677 \\ (-12 \%) \end{gathered}$ | $\begin{gathered} 89 \\ (1.8 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 1,385 \\ (29.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 966 \\ (19 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 859 \\ (18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 440 \\ (8.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} 1,305 \\ (28 \%) \\ \hline \end{array}$ | $\begin{gathered} 887 \\ (17.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 640 \\ (13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 222 \\ (4.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 719 \\ (18 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 189 \\ (4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 669 \\ (16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 139 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 730 \\ (18.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 200 \\ (4.4 \%) \\ \hline \end{array}$ | $\begin{gathered} 615 \\ (15.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 85 \\ (1.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 94 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 673 \\ (10.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -297 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} 282 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 81 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} 660 \\ (10.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -326 \\ (-4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 253 \\ (4 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} 967 \\ (14.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,035 \\ (16.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 235 \\ (3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 303 \\ (4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 849 \\ (13.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 917 \\ (14.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 139 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 207 \\ (3.2 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 2,167 \\ (37.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,418 \\ (21.7 \%) \\ \hline \end{array}$ | $\begin{gathered} 320 \\ (5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -429 \\ (-6.6 \%) \end{gathered}$ | $\begin{gathered} 2,255 \\ (39 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,506 \\ (23.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 544 \\ (9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -205 \\ (-3.1 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 1,217 \\ (23.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 832 \\ (14.8 \%) \\ \hline \end{array}$ | $\begin{gathered} 230 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-155 \\ (-2.8 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,087 \\ (20.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 702 \\ (12.5 \%) \\ \hline \end{array}$ | $\begin{gathered} 137 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -248 \\ (-4.4 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 1,461 \\ (27.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 632 \\ (10.4 \%) \end{array}$ | $\begin{gathered} 946 \\ (18 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (1.9 \%) \end{gathered}$ | $\begin{gathered} 1,513 \\ (28.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 683 \\ (11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 766 \\ (14.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -63 \\ (-1 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 785 \\ (15.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-328 \\ (-5.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 791 \\ (15.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-322 \\ (-5.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 988 \\ (19.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -124 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 680 \\ (13.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-432 \\ (-6.9 \%) \\ \hline \end{array}$ |
|  | All | $\begin{gathered} 1,267 \\ (22.2 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 768 \\ (12.4 \%) \end{array}$ | $\begin{gathered} 484 \\ (8.5 \%) \end{gathered}$ | $\begin{gathered} -15 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} 1,262 \\ (22.1 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 763 \\ (12.3 \%) \end{array}$ | $\begin{gathered} 415 \\ (7.3 \%) \end{gathered}$ | $\begin{gathered} -84 \\ (-1.3 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} 1,213 \\ (18.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 127 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,066 \\ (15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -20 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,154 \\ (17.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 67 \\ (0.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,226 \\ (18.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 140 \\ (1.8 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 812 \\ (11.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-109 \\ (-1.4 \%) \end{array}$ | $\begin{gathered} 621 \\ (8.9 \%) \end{gathered}$ | $\begin{gathered} -300 \\ (-3.8 \%) \end{gathered}$ | $\begin{gathered} 696 \\ (10 \%) \end{gathered}$ | $\begin{gathered} -225 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} 570 \\ (8.2 \%) \end{gathered}$ | $\begin{gathered} -351 \\ (-4.4 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 226 \\ (3.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-212 \\ (-3.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 93 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -345 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 256 \\ (4.2 \%) \end{gathered}$ | $\begin{gathered} -182 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} 120 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} -318 \\ (-4.8 \%) \end{array}$ |
|  | D | $\begin{gathered} -71 \\ (-1.1 \%) \end{gathered}$ | $\begin{array}{c\|} \hline-758 \\ (-10.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 315 \\ (4.6 \%) \end{gathered}$ | $\begin{gathered} -372 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} -352 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,039 \\ (-13.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -95 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -782 \\ (-10.5 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -986 \\ (-13.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-474 \\ (-7.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -853 \\ (-11.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -341 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -795 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-283 \\ (-4.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -713 \\ (-10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -201 \\ (-3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 382 \\ (5.7 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-248 \\ (-3.4 \%) \end{array}$ | $\begin{gathered} 389 \\ (5.8 \%) \end{gathered}$ | $\begin{gathered} -241 \\ (-3.3 \%) \end{gathered}$ | $\begin{gathered} 318 \\ (4.7 \%) \end{gathered}$ | $\begin{gathered} -312 \\ (-4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 367 \\ (5.5 \%) \end{gathered}$ | $\begin{gathered} -262 \\ (-3.6 \%) \end{gathered}$ |
| AUG | W | $\begin{gathered} -894 \\ (-14.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-143 \\ (-2.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -449 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 302 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -805 \\ (-12.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -54 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -396 \\ (-6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 355 \\ (6.4 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 894 \\ (16.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-218 \\ (-3.3 \%) \end{array}$ | $\begin{gathered} 1,396 \\ (25.4 \%) \end{gathered}$ | $\begin{gathered} 284 \\ (4.3 \%) \end{gathered}$ | $\begin{gathered} 782 \\ (14.2 \%) \end{gathered}$ | $\begin{gathered} -330 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} 1,452 \\ (26.4 \%) \end{gathered}$ | $\begin{gathered} 340 \\ (5.1 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -67 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -392 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 634 \\ (12.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 309 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 213 \\ (4.1 \%) \end{gathered}$ | $\begin{gathered} -112 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} 792 \\ (15.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 468 \\ (8.6 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -1,044 \\ (-17.9 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,567 \\ (-24.7 \%) \\ \hline \end{array}$ | $\begin{gathered} 208 \\ (3.6 \%) \end{gathered}$ | $\begin{gathered} -315 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} -1,034 \\ (-17.7 \%) \end{gathered}$ | $\begin{gathered} \hline-1,557 \\ (-24.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 181 \\ (3.1 \%) \end{gathered}$ | $\begin{gathered} -342 \\ (-5.4 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -399 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 433 \\ (9.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -799 \\ (-14.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 33 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,027 \\ (-18.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -195 \\ (-4.1 \%) \end{gathered}$ | $\begin{gathered} -825 \\ (-14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -452 \\ (-7.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-425 \\ (-7.4 \%) \end{array}$ | $\begin{gathered} 99 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 126 \\ (2.2 \%) \end{gathered}$ | $\begin{gathered} -482 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -455 \\ (-7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 141 \\ (2.5 \%) \end{gathered}$ | $\begin{gathered} 168 \\ (2.9 \%) \end{gathered}$ |


| Alternative 4: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | $\begin{gathered} \text { NAA vs. } \\ \text { H1 } \end{gathered}$ |  | $\begin{array}{\|c} \hline \text { NAA vs. } \\ \text { H2 } \\ \hline \end{array}$ | EXISTING CONDITIONS vs. H3 | NAA vs. H3 |  | NAA vs. H4 |
| SEP | W | $\begin{gathered} -2,312 \\ (-24.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,712 \\ (-44.8 \%) \end{gathered}$ | $\begin{gathered} -2,212 \\ (-23.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,612 \\ (-44.1 \%) \end{gathered}$ | $\begin{gathered} 3,768 \\ (40.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 368 \\ (2.9 \%) \end{gathered}$ | $\begin{gathered} 4,101 \\ (43.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 702 \\ (5.5 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 249 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,666 \\ (-38.4 \%) \end{gathered}$ | $\begin{gathered} 301 \\ (5.3 \%) \end{gathered}$ | $\begin{gathered} -3,614 \\ (-37.9 \%) \end{gathered}$ | $\begin{gathered} 3,364 \\ (59.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -551 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,150 \\ (73.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 236 \\ (2.5 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -10 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} -98 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 1,090 \\ (21.3 \%) \end{gathered}$ | $\begin{gathered} \hline 1,002 \\ (19.2 \%) \end{gathered}$ | $\begin{gathered} -675 \\ (-13.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-763 \\ (-14.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -27 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} -115 \\ (-2.2 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -764 \\ (-13.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 758 \\ (18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -423 \\ (-7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,098 \\ (26.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -853 \\ (-15.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 669 \\ (16.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -741 \\ (-13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 781 \\ (19 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 51 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 897 \\ (20.6 \%) \\ \hline \end{array}$ | $\begin{gathered} 354 \\ (6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,200 \\ (27.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 103 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 949 \\ (21.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -86 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 760 \\ (17.4 \%) \\ \hline \end{array}$ |
|  | All | $\begin{gathered} -859 \\ (-12.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,067 \\ (-26.3 \%) \end{gathered}$ | $\begin{gathered} -512 \\ (-7.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,720 \\ (-21.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,400 \\ (21 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 191 \\ (2.4 \%) \\ \hline \end{array}$ | $\begin{aligned} & 1,728 \\ & (26 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 520 \\ (6.6 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} -415 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -450 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -272 \\ (-3.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -308 \\ (-4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -107 \\ (-1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -142 \\ (-1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -254 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -289 \\ (-3.9 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -160 \\ (-2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -288 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} 302 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 174 \\ (2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 143 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 16 \\ (0.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,138 \\ (16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,010 \\ (14.6 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 161 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -422 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -6 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -589 \\ (-9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -51 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-635 \\ (-9.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -187 \\ (-3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -770 \\ (-11.7 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 566 \\ (10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 214 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 634 \\ (11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 282 \\ (4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 121 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -231 \\ (-3.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 572 \\ (10.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 220 \\ (3.6 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 454 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 524 \\ (9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,050 \\ (18.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,119 \\ (20.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -111 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-41 \\ (-0.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -99 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -29 \\ (-0.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 63 \\ (1 \%) \end{gathered}$ | $\begin{gathered} -133 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} 250 \\ (3.9 \%) \end{gathered}$ | $\begin{gathered} 53 \\ (0.8 \%) \end{gathered}$ | $\begin{gathered} -11 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} -208 \\ (-3.1 \%) \end{gathered}$ | $\begin{gathered} 165 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -31 \\ (-0.5 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} -731 \\ (-7.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,976 \\ (-18.1 \%) \end{gathered}$ | $\begin{gathered} -525 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,770 \\ (-16.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 65 \\ (0.7 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,180 \\ (-10.8 \%) \\ \hline \end{array}$ | $\begin{gathered} 320 \\ (3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -926 \\ (-8.5 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -1,677 \\ (-20.4 \%) \end{gathered}$ | $\begin{gathered} -2,608 \\ (-28.5 \%) \end{gathered}$ | $\begin{gathered} -1,689 \\ (-20.6 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,620 \\ (-28.7 \%) \end{array}$ | $\begin{gathered} -742 \\ (-9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,673 \\ (-18.3 \%) \end{gathered}$ | $\begin{gathered} -97 \\ (-1.2 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,028 \\ (-11.2 \%) \end{array}$ |
|  | BN | $\begin{gathered} -975 \\ (-14.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,770 \\ (-23.3 \%) \end{gathered}$ | $\begin{gathered} -669 \\ (-9.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,464 \\ (-19.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -254 \\ (-3.7 \%) \end{gathered}$ | $\begin{gathered} -1,049 \\ (-13.8 \%) \end{gathered}$ | $\begin{gathered} -388 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,183 \\ (-15.6 \%) \\ \hline \end{array}$ |
|  | D | $\begin{gathered} -1,365 \\ (-18.4 \%) \end{gathered}$ | $\begin{gathered} -1,185 \\ (-16.4 \%) \end{gathered}$ | $\begin{gathered} -1,235 \\ (-16.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,054 \\ (-14.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,013 \\ (-13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -833 \\ (-11.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -962 \\ (-13 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -781 \\ (-10.8 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -615 \\ (-12 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -483 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -885 \\ (-17.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-752 \\ (-15.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -439 \\ (-8.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-306 \\ (-6.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -611 \\ (-11.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-478 \\ (-9.6 \%) \\ \hline \end{array}$ |
|  | All | $\begin{gathered} \hline-1,033 \\ (-13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,641 \\ (-19.5 \%) \end{gathered}$ | $\begin{gathered} -928 \\ (-11.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,536 \\ (-18.3 \%) \end{gathered}$ | $\begin{gathered} -418 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,026 \\ (-12.2 \%) \end{array}$ | $\begin{gathered} -280 \\ (-3.6 \%) \end{gathered}$ | $\begin{gathered} -887 \\ (-10.6 \%) \\ \hline \end{gathered}$ |
| DEC | W | $\begin{gathered} -334 \\ (-1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 291 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -137 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 487 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -740 \\ (-4.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-116 \\ (-0.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -510 \\ (-2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 115 \\ (0.7 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 262 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 316 \\ (2.9 \%) \end{gathered}$ | $\begin{gathered} 67 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 121 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 173 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 227 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 182 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 236 \\ (2.2 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 108 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 355 \\ (4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -145 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 102 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -47 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 199 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -228 \\ (-2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 19 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 205 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} 430 \\ (4.9 \%) \end{gathered}$ | $\begin{gathered} -175 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} 50 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} -137 \\ (-1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 88 \\ (1 \%) \end{gathered}$ | $\begin{gathered} -363 \\ (-4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -138 \\ (-1.6 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -37 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 210 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -216 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -219 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 29 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -236 \\ (-3.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -9 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 324 \\ (2.9 \%) \end{gathered}$ | $\begin{gathered} -128 \\ (-1.1 \%) \end{gathered}$ | $\begin{gathered} 205 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -280 \\ (-2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 54 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -288 \\ (-2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 46 \\ (0.4 \%) \\ \hline \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.4.1.4 Sacramento River at Verona

Table 7. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 4: Upstream-Sacramento River at Verona |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 44,589 | 45,567 | 44,929 | 44,737 | 43,978 | 43,717 |
|  | AN | 34,120 | 33,671 | 33,229 | 33,460 | 31,703 | 31,835 |
|  | BN | 20,175 | 19,121 | 18,066 | 18,507 | 17,594 | 17,870 |
|  | D | 14,756 | 14,782 | 14,415 | 14,732 | 13,967 | 13,934 |
|  | C | 12,085 | 13,051 | 13,167 | 13,105 | 12,837 | 11,896 |
|  | All | 27,583 | 27,795 | 27,284 | 27,393 | 26,532 | 26,371 |
| FEB | W | 49,892 | 51,326 | 50,416 | 50,113 | 50,214 | 49,831 |
|  | AN | 39,162 | 39,749 | 39,121 | 39,349 | 38,602 | 38,766 |
|  | BN | 26,429 | 25,341 | 24,855 | 25,358 | 24,153 | 24,641 |
|  | D | 18,402 | 18,090 | 17,167 | 17,047 | 17,163 | 17,122 |
|  | C | 12,822 | 12,325 | 11,896 | 11,875 | 11,881 | 11,984 |
|  | All | 31,979 | 32,192 | 31,463 | 31,457 | 31,200 | 31,192 |
| MAR | W | 43,455 | 44,624 | 42,607 | 42,665 | 42,403 | 42,545 |
|  | AN | 39,477 | 39,687 | 38,833 | 38,134 | 37,875 | 36,892 |
|  | BN | 21,484 | 19,448 | 18,564 | 18,910 | 17,809 | 18,151 |
|  | D | 17,868 | 17,649 | 16,692 | 16,673 | 16,658 | 16,715 |
|  | C | 11,903 | 11,789 | 11,898 | 11,769 | 11,736 | 11,686 |
|  | All | 28,888 | 28,877 | 27,767 | 27,719 | 27,402 | 27,367 |
| APR | W | 32,219 | 31,636 | 29,519 | 32,276 | 29,403 | 32,143 |
|  | AN | 22,250 | 21,313 | 20,270 | 23,608 | 20,197 | 23,380 |
|  | BN | 14,459 | 13,857 | 14,258 | 17,896 | 14,249 | 18,508 |
|  | D | 11,113 | 10,903 | 11,587 | 11,135 | 11,498 | 11,112 |
|  | C | 9,420 | 9,489 | 9,632 | 9,322 | 9,555 | 9,347 |
|  | All | 19,759 | 19,298 | 18,713 | 20,552 | 18,634 | 20,580 |
| MAY | W | 26,193 | 20,229 | 20,834 | 22,911 | 20,855 | 23,431 |
|  | AN | 17,079 | 16,002 | 17,645 | 18,878 | 17,899 | 19,656 |
|  | BN | 11,451 | 10,534 | 12,225 | 12,550 | 12,319 | 12,319 |
|  | D | 9,283 | 9,841 | 11,126 | 10,731 | 10,969 | 10,383 |
|  | C | 7,125 | 7,611 | 7,689 | 7,623 | 7,671 | 7,579 |
|  | All | 15,840 | 13,828 | 14,843 | 15,641 | 14,865 | 15,798 |
| JUN | W | 18,367 | 15,304 | 18,077 | 15,380 | 18,346 | 15,116 |
|  | AN | 13,590 | 13,574 | 17,840 | 13,458 | 17,972 | 13,789 |
|  | BN | 11,062 | 11,320 | 14,813 | 13,067 | 14,742 | 12,167 |
|  | D | 10,429 | 10,780 | 11,905 | 11,532 | 11,870 | 10,651 |
|  | C | 8,911 | 9,827 | 9,294 | 9,213 | 9,578 | 9,084 |
|  | All | 13,295 | 12,576 | 14,845 | 12,956 | 14,971 | 12,555 |
| JUL | W | 16,253 | 17,965 | 17,038 | 14,967 | 17,237 | 15,771 |
|  | AN | 17,488 | 18,338 | 17,965 | 14,441 | 18,003 | 14,331 |
|  | BN | 16,698 | 16,598 | 15,213 | 14,013 | 15,348 | 13,926 |
|  | D | 16,352 | 16,465 | 13,150 | 13,386 | 12,407 | 12,237 |
|  | C | 14,476 | 12,457 | 9,828 | 10,212 | 9,749 | 10,240 |
|  | All | 16,271 | 16,651 | 14,953 | 13,684 | 14,871 | 13,660 |


| Alternative 4: Upstream-Sacramento River at Verona |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 12,464 | 14,016 | 12,412 | 11,137 | 12,540 | 11,258 |
|  | AN | 13,691 | 15,828 | 14,153 | 13,292 | 14,064 | 12,818 |
|  | BN | 13,389 | 14,074 | 12,569 | 12,060 | 12,640 | 11,623 |
|  | D | 14,688 | 13,018 | 10,643 | 11,340 | 10,109 | 10,722 |
|  | C | 9,207 | 8,085 | 8,321 | 8,355 | 7,776 | 8,487 |
|  | All | 12,813 | 13,204 | 11,707 | 11,247 | 11,549 | 11,026 |
| SEP | W | 14,279 | 23,592 | 10,723 | 10,732 | 22,522 | 22,255 |
|  | AN | 10,537 | 19,044 | 10,709 | 10,001 | 16,665 | 16,350 |
|  | BN | 9,961 | 10,576 | 9,023 | 9,655 | 8,446 | 8,545 |
|  | D | 10,542 | 7,664 | 8,953 | 9,131 | 8,385 | 8,768 |
|  | C | 7,764 | 6,832 | 8,181 | 8,963 | 8,062 | 8,534 |
|  | All | 11,220 | 14,755 | 9,670 | 9,831 | 14,042 | 14,081 |
| OCT | W | 11,503 | 11,232 | 10,915 | 10,667 | 11,049 | 10,579 |
|  | AN | 9,381 | 9,890 | 10,072 | 9,950 | 10,231 | 10,963 |
|  | BN | 9,867 | 10,146 | 9,749 | 9,405 | 9,468 | 9,378 |
|  | D | 8,681 | 8,989 | 9,450 | 9,154 | 9,138 | 8,743 |
|  | C | 8,543 | 8,104 | 9,336 | 10,053 | 8,534 | 9,046 |
|  | All | 9,861 | 9,900 | 10,040 | 9,925 | 9,872 | 9,803 |
| NOV | W | 15,307 | 15,754 | 13,942 | 13,972 | 14,453 | 14,702 |
|  | AN | 11,792 | 12,817 | 9,900 | 9,744 | 10,873 | 11,484 |
|  | BN | 9,852 | 10,437 | 8,538 | 8,713 | 9,306 | 9,142 |
|  | D | 10,157 | 9,731 | 8,582 | 8,510 | 8,924 | 8,866 |
|  | C | 7,341 | 7,223 | 6,572 | 6,590 | 6,760 | 6,798 |
|  | All | 11,565 | 11,846 | 10,173 | 10,176 | 10,711 | 10,844 |
| DEC | W | 33,840 | 31,254 | 31,104 | 31,864 | 29,513 | 29,982 |
|  | AN | 17,572 | 18,481 | 18,057 | 16,602 | 17,667 | 17,327 |
|  | BN | 13,099 | 13,028 | 13,639 | 12,830 | 12,914 | 12,640 |
|  | D | 12,685 | 12,532 | 12,443 | 11,847 | 12,285 | 11,919 |
|  | C | 9,770 | 8,627 | 9,648 | 9,043 | 9,443 | 8,786 |
|  | All | 19,752 | 18,852 | 18,977 | 18,647 | 18,227 | 18,102 |

Table 8. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 4: Upstream-Sacramento River at Verona |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | $\begin{gathered} \hline \text { EXISTING } \\ \text { CONDITIONS } \\ \text { vs. H4 } \\ \hline \end{gathered}$ | NAA vs. H4 |
| JAN | W | $\begin{gathered} 239 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} 63 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 259 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} 83 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 214 \\ (1.1 \%) \end{gathered}$ | $\begin{gathered} 38 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} \hline 203 \\ (1.1 \%) \end{gathered}$ | $\begin{gathered} 27 \\ (0.1 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 211 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 701 \\ (4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 418 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 909 \\ (5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -531 \\ (-3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -41 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -661 \\ (-3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -171 \\ (-1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} \hline 161 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 538 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 201 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 579 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -251 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 127 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -20 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 358 \\ (2.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 225 \\ (2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -67 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 605 \\ (6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 312 \\ (3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -282 \\ (-3.1 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -289 \\ (-3.1 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 1,267 \\ (16.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 539 \\ (6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 861 \\ (11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 133 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 886 \\ (11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 158 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -725 \\ (-8.4 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 369 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 279 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 436 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 346 \\ (2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 79 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -35 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -125 \\ (-0.9 \%) \end{gathered}$ |
| FEB | W | $\begin{gathered} 188 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 31 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 202 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 45 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 166 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 181 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 346 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 390 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 449 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 493 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -19 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 48 \\ (0.3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 376 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} 576 \\ (4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 124 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 324 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} -83 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} 117 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 72 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 272 \\ (1.9 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -69 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -79 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -33 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -49 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -26 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -264 \\ (-3.1 \%) \end{gathered}$ | $\begin{gathered} 76 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -284 \\ (-3.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 56 \\ (0.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -364 \\ (-4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -24 \\ (-0.3 \%) \end{gathered}$ | $\begin{gathered} -239 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} 101 \\ (1.2 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 121 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 172 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 92 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 143 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -28 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 80 \\ (0.5 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 107 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} 7 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 114 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} 14 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 101 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 108 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} 8 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 79 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 238 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 84 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 243 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -10 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 149 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -170 \\ (-1 \%) \end{gathered}$ | $\begin{gathered} -11 \\ (-0.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -176 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 498 \\ (4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -268 \\ (-2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 406 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-745 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -72 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} -826 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -152 \\ (-1.3 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -68 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} 105 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -152 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -27 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} 146 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 50 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 223 \\ (2 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 425 \\ (5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 360 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 216 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 151 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 325 \\ (4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 260 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 184 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 119 \\ (1.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 63 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 198 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 136 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -55 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 80 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -94 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 41 \\ (0.3 \%) \\ \hline \end{gathered}$ |
| APR | W | $\begin{gathered} -256 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 17 \\ (0.1 \%) \end{gathered}$ | $\begin{gathered} -258 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 15 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -360 \\ (-2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -87 \\ (-0.7 \%) \end{gathered}$ | $\begin{gathered} -355 \\ (-2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -83 \\ (-0.6 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -209 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 272 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -219 \\ (-2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 262 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -191 \\ (-1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 290 \\ (3 \%) \end{gathered}$ | $\begin{gathered} -115 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 366 \\ (3.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 75 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 369 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -84 \\ (-1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 210 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 109 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 404 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -393 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -99 \\ (-1.4 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 11 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 218 \\ (4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -183 \\ (-3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 229 \\ (4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -261 \\ (-4.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -54 \\ (-1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 82 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -84 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 60 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} -107 \\ (-2.5 \%) \end{gathered}$ | $\begin{gathered} 100 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} -67 \\ (-1.5 \%) \end{gathered}$ | $\begin{gathered} 57 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -110 \\ (-2.5 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -84 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 144 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -159 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ (0.8 \%) \end{gathered}$ | $\begin{gathered} -104 \\ (-1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 124 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -245 \\ (-2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -17 \\ (-0.2 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-Sacramento River at Verona |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 vs. H2 | NAA vs. H2 | EXISTING CONDITIONS Vs. vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{gathered} \hline-1,624 \\ (-15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 408 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,870 \\ (-17.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 162 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,641 \\ (-15.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 391 \\ (4.6 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-1,888 \\ & (-18 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 144 \\ (1.7 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 1,093 \\ (14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 911 \\ (12.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 859 \\ (11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 678 \\ (9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,334 \\ (18.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,152 \\ (15.4 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,075 \\ (14.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 893 \\ (11.9 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 232 \\ (4.1 \%) \end{gathered}$ | $\begin{gathered} 999 \\ (20.5 \%) \end{gathered}$ | $\begin{gathered} -680 \\ (-12.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 87 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 74 \\ (1.3 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 841 \\ (17.3 \%) \end{array}$ | $\begin{gathered} -677 \\ (-12 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 89 \\ (1.8 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 1,385 \\ (29.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 966 \\ (19 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 859 \\ (18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 440 \\ (8.7 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 1,305 \\ & (28 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline 887 \\ (17.4 \%) \\ \hline \end{array}$ | $\begin{gathered} 640 \\ (13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 222 \\ (4.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 719 \\ (18 \%) \end{gathered}$ | $\begin{gathered} 189 \\ (4.2 \%) \end{gathered}$ | $\begin{gathered} 669 \\ (16.7 \%) \end{gathered}$ | $\begin{gathered} 139 \\ (3.1 \%) \end{gathered}$ | $\begin{gathered} 730 \\ (18.3 \%) \end{gathered}$ | $\begin{gathered} 200 \\ (4.4 \%) \end{gathered}$ | $\begin{gathered} 615 \\ (15.4 \%) \end{gathered}$ | $\begin{gathered} 85 \\ (1.9 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 94 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 673 \\ (10.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -297 \\ (-4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 282 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 81 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 660 \\ (10.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -326 \\ (-4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 253 \\ (4 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} 967 \\ (14.9 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,035 \\ (16.1 \%) \end{array}$ | $\begin{gathered} 235 \\ (3.6 \%) \end{gathered}$ | $\begin{gathered} 303 \\ (4.7 \%) \end{gathered}$ | $\begin{gathered} 849 \\ (13.1 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 917 \\ (14.3 \%) \end{array}$ | $\begin{gathered} 139 \\ (2.1 \%) \end{gathered}$ | $\begin{gathered} 207 \\ (3.2 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 2,167 \\ (37.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,418 \\ (21.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 320 \\ (5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -429 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,255 \\ (39 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,506 \\ (23.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 544 \\ (9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -205 \\ (-3.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} \hline 1,217 \\ (23.2 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 832 \\ (14.8 \%) \end{array}$ | $\begin{gathered} 230 \\ (4.4 \%) \end{gathered}$ | $\begin{gathered} -155 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} \hline 1,087 \\ (20.7 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 702 \\ (12.5 \%) \end{array}$ | $\begin{gathered} 137 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} -248 \\ (-4.4 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 1,461 \\ (27.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 632 \\ (10.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 946 \\ (18 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 117 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,513 \\ (28.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 683 \\ (11.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 766 \\ (14.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -63 \\ (-1 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 785 \\ (15.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -328 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 791 \\ (15.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -322 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 988 \\ (19.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -124 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 680 \\ (13.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -432 \\ (-6.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 1,267 \\ (22.2 \%) \end{gathered}$ | $\begin{gathered} 768 \\ (12.4 \%) \end{gathered}$ | $\begin{gathered} 484 \\ (8.5 \%) \end{gathered}$ | $\begin{gathered} -15 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} 1,262 \\ (22.1 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 763 \\ (12.3 \%) \end{array}$ | $\begin{gathered} 415 \\ (7.3 \%) \end{gathered}$ | $\begin{gathered} -84 \\ (-1.3 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} 1,213 \\ (18.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 127 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,066 \\ (15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -20 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,154 \\ (17.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 67 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,226 \\ (18.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 140 \\ (1.8 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 812 \\ (11.6 \%) \end{gathered}$ | $\begin{gathered} -109 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} 621 \\ (8.9 \%) \end{gathered}$ | $\begin{gathered} -300 \\ (-3.8 \%) \end{gathered}$ | $\begin{gathered} 696 \\ (10 \%) \end{gathered}$ | $\begin{gathered} -225 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} 570 \\ (8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -351 \\ (-4.4 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 226 \\ (3.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -212 \\ (-3.2 \%) \end{gathered}$ | $\begin{gathered} 93 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -345 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 256 \\ (4.2 \%) \end{gathered}$ | $\begin{gathered} -182 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} 120 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -318 \\ (-4.8 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -71 \\ (-1.1 \%) \end{gathered}$ | $\begin{gathered} -758 \\ (-10.1 \%) \end{gathered}$ | $\begin{gathered} 315 \\ (4.6 \%) \end{gathered}$ | $\begin{gathered} -372 \\ (-5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -352 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,039 \\ (-13.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -95 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -782 \\ (-10.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} \hline-986 \\ (-13.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -474 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-853 \\ (-11.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-341 \\ (-5.1 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-795 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-283 \\ (-4.3 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-713 \\ (-10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -201 \\ (-3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 382 \\ (5.7 \%) \end{gathered}$ | $\begin{gathered} -248 \\ (-3.4 \%) \end{gathered}$ | $\begin{gathered} 389 \\ (5.8 \%) \end{gathered}$ | $\begin{gathered} -241 \\ (-3.3 \%) \end{gathered}$ | $\begin{gathered} 318 \\ (4.7 \%) \end{gathered}$ | $\begin{gathered} -312 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} 367 \\ (5.5 \%) \end{gathered}$ | $\begin{gathered} -262 \\ (-3.6 \%) \end{gathered}$ |
| AUG | W | $\begin{gathered} -894 \\ (-14.2 \%) \end{gathered}$ | $\begin{gathered} -143 \\ (-2.6 \%) \end{gathered}$ | $\begin{gathered} -449 \\ (-7.1 \%) \end{gathered}$ | $\begin{gathered} 302 \\ (5.4 \%) \end{gathered}$ | $\begin{gathered} -805 \\ (-12.8 \%) \end{gathered}$ | $\begin{gathered} -54 \\ (-1 \%) \end{gathered}$ | $\begin{gathered} -396 \\ (-6.3 \%) \end{gathered}$ | $\begin{gathered} 355 \\ (6.4 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 894 \\ (16.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -218 \\ (-3.3 \%) \end{gathered}$ | $\begin{gathered} 1,396 \\ (25.4 \%) \end{gathered}$ | $\begin{gathered} 284 \\ (4.3 \%) \end{gathered}$ | $\begin{gathered} 782 \\ (14.2 \%) \end{gathered}$ | $\begin{gathered} -330 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} 1,452 \\ (26.4 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 340 \\ (5.1 \%) \\ \hline \end{array}$ |
|  | BN | $\begin{gathered} -67 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -392 \\ (-7.2 \%) \end{gathered}$ | $\begin{gathered} 634 \\ (12.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 309 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 213 \\ (4.1 \%) \end{gathered}$ | $\begin{gathered} -112 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} 792 \\ (15.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 468 \\ (8.6 \%) \\ \hline \end{array}$ |
|  | D | $\begin{gathered} -1,044 \\ (-17.9 \%) \end{gathered}$ | $\begin{gathered} -1,567 \\ (-24.7 \%) \end{gathered}$ | $\begin{gathered} 208 \\ (3.6 \%) \end{gathered}$ | $\begin{gathered} -315 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} -1,034 \\ (-17.7 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,557 \\ (-24.5 \%) \\ \hline \end{array}$ | $\begin{gathered} 181 \\ (3.1 \%) \end{gathered}$ | $\begin{gathered} -342 \\ (-5.4 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -399 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 433 \\ (9.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -799 \\ (-14.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 33 \\ (0.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,027 \\ (-18.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-195 \\ (-4.1 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-825 \\ (-14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -452 \\ (-7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -425 \\ (-7.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 99 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 126 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -482 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -455 \\ (-7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 141 \\ (2.5 \%) \end{gathered}$ | $\begin{gathered} \hline 168 \\ (2.9 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-Sacramento River at Verona |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. <br> H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | $\begin{array}{\|c} \text { NAA vs. } \\ \text { H3 } \end{array}$ | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{gathered} -2,312 \\ (-24.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-5,712 \\ (-44.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -2,212 \\ (-23.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-5,612 \\ (-44.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 3,768 \\ (40.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 368 \\ (2.9 \%) \end{gathered}$ | $\begin{gathered} 4,101 \\ (43.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 702 \\ (5.5 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 249 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,666 \\ (-38.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 301 \\ (5.3 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-3,614 \\ (-37.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 3,364 \\ (59.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -551 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,150 \\ (73.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 236 \\ (2.5 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -10 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} -98 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} 1,090 \\ (21.3 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,002 \\ (19.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -675 \\ (-13.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-763 \\ (-14.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -27 \\ (-0.5 \%) \end{gathered}$ | $\begin{array}{c\|} \hline-115 \\ (-2.2 \%) \end{array}$ |
|  | D | $\begin{gathered} -764 \\ (-13.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 758 \\ (18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -423 \\ (-7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,098 \\ (26.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-853 \\ (-15.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 669 \\ (16.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -741 \\ (-13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 781 \\ (19 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 51 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 897 \\ (20.6 \%) \\ \hline \end{array}$ | $\begin{gathered} 354 \\ (6.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,200 \\ (27.6 \%) \\ \hline \end{array}$ | $\begin{gathered} 103 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} 949 \\ (21.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -86 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 760 \\ (17.4 \%) \\ \hline \end{array}$ |
|  | All | $\begin{gathered} \hline-859 \\ (-12.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-2,067 \\ (-26.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -512 \\ (-7.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,720 \\ (-21.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,400 \\ (21 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 191 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 1,728 \\ & (26 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 520 \\ (6.6 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} -415 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-450 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -272 \\ (-3.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -308 \\ (-4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -107 \\ (-1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -142 \\ (-1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -254 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-289 \\ (-3.9 \%) \\ \hline \end{array}$ |
|  | AN | $\begin{gathered} -160 \\ (-2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -288 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} 302 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 174 \\ (2.5 \%) \end{gathered}$ | $\begin{gathered} \hline 143 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} 1,138 \\ (16.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,010 \\ (14.6 \%) \\ \hline \end{array}$ |
|  | BN | $\begin{gathered} 161 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -422 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -6 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -589 \\ (-9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -51 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -635 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -187 \\ (-3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-770 \\ (-11.7 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 566 \\ (10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 214 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 634 \\ (11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 282 \\ (4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 121 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} -231 \\ (-3.8 \%) \\ \hline \end{array}$ | $\begin{gathered} 572 \\ (10.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 220 \\ (3.6 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 454 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 524 \\ (9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,050 \\ (18.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,119 \\ (20.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -111 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -41 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -99 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -29 \\ (-0.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 63 \\ (1 \%) \end{gathered}$ | $\begin{gathered} -133 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} 250 \\ (3.9 \%) \end{gathered}$ | $\begin{gathered} 53 \\ (0.8 \%) \end{gathered}$ | $\begin{gathered} -11 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} -208 \\ (-3.1 \%) \end{gathered}$ | $\begin{gathered} 165 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} -31 \\ (-0.5 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} -731 \\ (-7.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,976 \\ (-18.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -525 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\left.\begin{array}{\|c\|} \hline-1,770 \\ (-16.3 \%) \end{array} \right\rvert\,$ | $\begin{gathered} 65 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,180 \\ (-10.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 320 \\ (3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -926 \\ (-8.5 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -1,677 \\ (-20.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,608 \\ (-28.5 \%) \end{gathered}$ | $\begin{gathered} -1,689 \\ (-20.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,620 \\ (-28.7 \%) \end{array}$ | $\begin{gathered} -742 \\ (-9 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,673 \\ (-18.3 \%) \end{array}$ | $\begin{gathered} -97 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} -1,028 \\ (-11.2 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -975 \\ (-14.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,770 \\ (-23.3 \%) \end{gathered}$ | $\begin{gathered} -669 \\ (-9.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,464 \\ (-19.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -254 \\ (-3.7 \%) \end{gathered}$ | $\left\lvert\, \begin{gathered} -1,049 \\ (-13.8 \%) \end{gathered}\right.$ | $\begin{gathered} -388 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,183 \\ (-15.6 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} \hline-1,365 \\ (-18.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-1,185 \\ (-16.4 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-1,235 \\ (-16.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,054 \\ (-14.6 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-1,013 \\ (-13.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-833 \\ (-11.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -962 \\ (-13 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-781 \\ (-10.8 \%) \\ \hline \end{array}$ |
|  | C | $\begin{gathered} -615 \\ (-12 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -483 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -885 \\ (-17.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-752 \\ (-15.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -439 \\ (-8.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -306 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -611 \\ (-11.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-478 \\ (-9.6 \%) \\ \hline \end{array}$ |
|  | All | $\begin{gathered} \hline-1,033 \\ (-13.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-1,641 \\ (-19.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -928 \\ (-11.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,536 \\ (-18.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -418 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,026 \\ (-12.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -280 \\ (-3.6 \%) \end{gathered}$ | $\begin{array}{c\|} \hline-887 \\ (-10.6 \%) \end{array}$ |
| DEC | W | $\begin{gathered} -334 \\ (-1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 291 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -137 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 487 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -740 \\ (-4.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} -116 \\ (-0.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -510 \\ (-2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 115 \\ (0.7 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 262 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 316 \\ (2.9 \%) \end{gathered}$ | $\begin{gathered} 67 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 121 \\ (1.1 \%) \end{gathered}$ | $\begin{gathered} 173 \\ (1.6 \%) \end{gathered}$ | $\begin{gathered} 227 \\ (2.1 \%) \end{gathered}$ | $\begin{gathered} 182 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 236 \\ (2.2 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 108 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 355 \\ (4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -145 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 102 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -47 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 199 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -228 \\ (-2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 19 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 205 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} \hline 430 \\ (4.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -175 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} 50 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -137 \\ (-1.5 \%) \end{gathered}$ | $\begin{gathered} \hline 88 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -363 \\ (-4.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-138 \\ (-1.6 \%) \end{array}$ |
|  | C | $\begin{gathered} -37 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 210 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -216 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -219 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 29 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -236 \\ (-3.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -9 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 324 \\ (2.9 \%) \end{gathered}$ | $\begin{gathered} -128 \\ (-1.1 \%) \end{gathered}$ | $\begin{gathered} 205 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} -280 \\ (-2.4 \%) \end{gathered}$ | $\begin{gathered} 54 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} -288 \\ (-2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 46 \\ (0.4 \%) \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.4.1.5 Trinity River below Lewiston

Table 9. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 4: Upstream-Trinity River below Lewiston |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{gathered} \text { EXISTING } \\ \text { CONDITIONS } \end{gathered}$ | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 1,440 | 1,518 | 1,474 | 1,552 | 1,416 | 1,474 |
|  | AN | 300 | 300 | 405 | 478 | 300 | 300 |
|  | BN | 358 | 300 | 300 | 521 | 300 | 300 |
|  | D | 300 | 300 | 300 | 300 | 300 | 300 |
|  | C | 300 | 287 | 287 | 300 | 275 | 278 |
|  | All | 671 | 684 | 686 | 761 | 650 | 669 |
| FEB | W | 1,056 | 1,495 | 1,617 | 1,614 | 1,480 | 1,448 |
|  | AN | 689 | 784 | 1,043 | 1,043 | 767 | 533 |
|  | BN | 517 | 568 | 662 | 662 | 662 | 662 |
|  | D | 300 | 300 | 300 | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 | 300 | 300 | 300 |
|  | All | 634 | 795 | 888 | 887 | 804 | 760 |
| MAR | W | 1,209 | 1,385 | 1,438 | 1,480 | 1,385 | 1,385 |
|  | AN | 436 | 519 | 519 | 519 | 519 | 519 |
|  | BN | 319 | 300 | 300 | 300 | 300 | 300 |
|  | D | 300 | 300 | 300 | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 | 300 | 300 | 300 |
|  | All | 611 | 676 | 693 | 706 | 676 | 676 |
| APR | W | 721 | 844 | 844 | 844 | 844 | 844 |
|  | AN | 469 | 513 | 458 | 513 | 458 | 458 |
|  | BN | 507 | 504 | 504 | 504 | 504 | 504 |
|  | D | 529 | 529 | 529 | 529 | 529 | 529 |
|  | C | 575 | 580 | 580 | 580 | 580 | 580 |
|  | All | 584 | 630 | 622 | 630 | 622 | 622 |
| MAY | W | 4,636 | 4,620 | 4,620 | 4,620 | 4,620 | 4,620 |
|  | AN | 4,462 | 4,416 | 4,416 | 4,416 | 4,416 | 4,416 |
|  | BN | 3,774 | 3,865 | 3,865 | 3,865 | 3,865 | 3,865 |
|  | D | 3,216 | 3,216 | 3,216 | 3,216 | 3,216 | 3,216 |
|  | C | 2,092 | 1,973 | 1,973 | 1,973 | 1,973 | 1,973 |
|  | All | 3,779 | 3,766 | 3,766 | 3,766 | 3,766 | 3,766 |
| JUN | W | 3,371 | 3,560 | 3,560 | 3,560 | 3,560 | 3,560 |
|  | AN | 2,488 | 3,188 | 3,188 | 3,188 | 3,188 | 3,188 |
|  | BN | 1,672 | 1,767 | 1,767 | 1,767 | 1,767 | 1,767 |
|  | D | 1,251 | 1,251 | 1,251 | 1,251 | 1,251 | 1,251 |
|  | C | 783 | 783 | 783 | 783 | 783 | 783 |
|  | All | 2,108 | 2,286 | 2,286 | 2,286 | 2,286 | 2,286 |
| JUL | W | 1,289 | 1,103 | 1,103 | 1,103 | 1,103 | 1,103 |
|  | AN | 1,048 | 1,048 | 1,048 | 1,048 | 1,048 | 1,048 |
|  | BN | 869 | 916 | 916 | 916 | 916 | 916 |
|  | D | 667 | 667 | 667 | 667 | 667 | 667 |
|  | C | 450 | 413 | 450 | 450 | 450 | 450 |
|  | All | 923 | 866 | 872 | 872 | 872 | 872 |


| Alternative 4: Upstream-Trinity River below Lewiston |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 450 | 450 | 450 | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 | 450 | 450 | 450 |
|  | C | 450 | 338 | 300 | 338 | 300 | 375 |
|  | All | 450 | 434 | 428 | 434 | 428 | 439 |
| SEP | W | 450 | 450 | 450 | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 | 450 | 450 | 450 |
|  | C | 450 | 265 | 225 | 280 | 248 | 315 |
|  | All | 450 | 423 | 417 | 425 | 420 | 430 |
| OCT | W | 373 | 373 | 373 | 373 | 373 | 373 |
|  | AN | 373 | 311 | 332 | 314 | 332 | 332 |
|  | BN | 346 | 346 | 346 | 346 | 346 | 346 |
|  | D | 373 | 346 | 352 | 352 | 352 | 352 |
|  | C | 373 | 311 | 280 | 311 | 280 | 311 |
|  | All | 368 | 344 | 344 | 346 | 344 | 349 |
| NOV | W | 489 | 414 | 365 | 402 | 365 | 365 |
|  | AN | 300 | 275 | 275 | 275 | 275 | 275 |
|  | BN | 300 | 300 | 300 | 300 | 300 | 300 |
|  | D | 300 | 283 | 283 | 283 | 283 | 283 |
|  | C | 300 | 225 | 225 | 250 | 225 | 225 |
|  | All | 360 | 318 | 302 | 318 | 302 | 302 |
| DEC | W | 1,072 | 837 | 1,151 | 1,169 | 926 | 938 |
|  | AN | 300 | 300 | 300 | 300 | 300 |  |
|  | BN | 300 | 300 | 300 | 300 | 300 |  |
|  | D | 300 | 300 | 299 | 300 | 298 |  |
|  | C | 300 | 275 | 272 | 297 | 272 |  |
|  | All | 545 | 466 | 566 | 575 | 494 |  |

Table 10. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 4: Upstream-Trinity River below Lewiston |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\qquad$ | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| JAN | W | $\begin{gathered} 34 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} -44 \\ (-2.9 \%) \end{gathered}$ | $\begin{gathered} 112 \\ (7.8 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 34 \\ (2.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -24 \\ (-1.6 \%) \end{gathered}$ | $\begin{gathered} -102 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 34 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -45 \\ (-2.9 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 105 \\ (35 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 105 \\ (35 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 178 \\ (59.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} 178 \\ (59.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -58 \\ (-16.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 163 \\ (45.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 221 \\ (73.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -58 \\ (-16.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -58 \\ (-16.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -13 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 13 \\ (4.4 \%) \end{gathered}$ | $\begin{gathered} -25 \\ (-8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -12 \\ (-4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -9 \\ (-3.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 14 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 89 \\ (13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 76 \\ (11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -21 \\ (-3.2 \%) \end{gathered}$ | $\begin{gathered} -34 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -15 \\ (-2.3 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} 561 \\ (53.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 122 \\ (8.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 557 \\ (52.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 119 \\ (7.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 424 \\ (40.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -14 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 391 \\ (37 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-47 \\ (-3.2 \%) \\ \hline \end{array}$ |
|  | AN | $\begin{gathered} 354 \\ (51.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 260 \\ (33.1 \%) \end{gathered}$ | $\begin{gathered} 354 \\ (51.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 260 \\ (33.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 77 \\ (11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -17 \\ (-2.2 \%) \end{gathered}$ | $\begin{gathered} -156 \\ (-22.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -251 \\ (-32 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 145 \\ (28.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 94 \\ (16.5 \%) \end{gathered}$ | $\begin{gathered} 145 \\ (28.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 94 \\ (16.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 145 \\ (28.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 94 \\ (16.5 \%) \end{array}$ | $\begin{gathered} 145 \\ (28.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 94 \\ (16.5 \%) \\ \hline \end{array}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 254 \\ (40.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 93 \\ (11.7 \%) \\ \hline \end{array}$ | $\begin{gathered} 253 \\ (40 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 92 \\ (11.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 171 \\ (26.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 126 \\ (19.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -36 \\ (-4.5 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 229 \\ (18.9 \%) \end{gathered}$ | $\begin{gathered} 53 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} 271 \\ (22.4 \%) \end{gathered}$ | $\begin{gathered} 95 \\ (6.9 \%) \end{gathered}$ | $\begin{gathered} 176 \\ (14.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 176 \\ (14.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 83 \\ (19.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 83 \\ (19.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 83 \\ (19.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 83 \\ (19.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -19 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -19 \\ (-5.8 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -19 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -19 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 82 \\ (13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 17 \\ (2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 95 \\ (15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 65 \\ (10.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 65 \\ (10.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
| APR | W | $\begin{gathered} 122 \\ (17 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 122 \\ (17 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 122 \\ (17 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 122 \\ (17 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -11 \\ (-2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -54 \\ (-10.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 43 \\ (9.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 0 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -11 \\ (-2.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-54 \\ (-10.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -11 \\ (-2.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-54 \\ (-10.6 \%) \\ \hline \end{array}$ |
|  | BN | $\begin{gathered} -3 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 5 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 37 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 45 \\ (7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 37 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 37 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-1.3 \%) \end{gathered}$ |


| Alternative 4: Upstream-Trinity River below Lewiston |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT |  vs. H1 | NAA vs. H1 | EXISTING CONDITIONS <br> vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{gathered} -16 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -16 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -16 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -16 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -46 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -46 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -46 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -46 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 90 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 90 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 90 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 90 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -119 \\ (-5.7 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -119 \\ (-5.7 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -119 \\ (-5.7 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -119 \\ (-5.7 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -14 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -14 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -14 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -14 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} 189 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 189 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 189 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 189 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 700 \\ (28.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 700 \\ (28.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 700 \\ (28.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 700 \\ (28.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 96 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 96 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 96 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 96 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 179 \\ (8.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 179 \\ (8.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 179 \\ (8.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 179 \\ (8.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} -185 \\ (-14.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -185 \\ (-14.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -185 \\ (-14.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -185 \\ (-14.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 47 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 47 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 47 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 47 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 37 \\ (9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 37 \\ (9.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 37 \\ (9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 37 \\ (9.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -51 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} -51 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -51 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} -51 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.6 \%) \\ \hline \end{gathered}$ |
| AUG | W | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -150 \\ (-33.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-37 \\ (-11.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -112 \\ (-25 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -150 \\ (-33.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-37 \\ (-11.1 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-75 \\ (-16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 38 \\ (11.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -22 \\ (-4.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-5 \\ (-1.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -16 \\ (-3.7 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-4.9 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-5 \\ (-1.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -11 \\ (-2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5 \\ (1.3 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-Trinity River below Lewiston |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | $\begin{gathered} \text { NAA vs. } \\ \text { H1 } \\ \hline \end{gathered}$ | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -225 \\ (-50 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-40 \\ (-15.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -170 \\ (-37.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -202 \\ (-44.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -17 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -135 \\ (-29.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 50 \\ (18.9 \%) \\ \hline \end{array}$ |
|  | All | $\begin{gathered} -33 \\ (-7.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-6 \\ (-1.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -25 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 2 \\ (0.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -30 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -20 \\ (-4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (1.7 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -41 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -41 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -41 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (6.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -21 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (1.9 \%) \end{gathered}$ | $\begin{gathered} -21 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -21 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (1.9 \%) \end{gathered}$ | $\begin{gathered} -21 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (1.9 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -93 \\ (-25 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -31 \\ (-10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -62 \\ (-16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -93 \\ (-25 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -31 \\ (-10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-62 \\ (-16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -24 \\ (-6.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -22 \\ (-6.1 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -24 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -20 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (1.3 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} -123 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-49 \\ (-11.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -87 \\ (-17.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -12 \\ (-3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -123 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -49 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -123 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -49 \\ (-11.7 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -25 \\ (-8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -25 \\ (-8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -25 \\ (-8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -25 \\ (-8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -17 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -17 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -17 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -17 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -75 \\ (-25 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -50 \\ (-16.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 25 \\ (11.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -75 \\ (-25 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -75 \\ (-25 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -57 \\ (-15.9 \%) \end{gathered}$ | $\begin{gathered} -15 \\ (-4.8 \%) \end{gathered}$ | $\begin{gathered} -42 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 0 \\ (-0.1 \%) \end{array}$ | $\begin{gathered} -57 \\ (-15.9 \%) \end{gathered}$ | $\begin{gathered} -15 \\ (-4.8 \%) \end{gathered}$ | $\begin{gathered} -57 \\ (-15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -15 \\ (-4.8 \%) \end{gathered}$ |
| DEC | W | $\begin{gathered} 80 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 315 \\ (37.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 98 \\ (9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 333 \\ (39.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -146 \\ (-13.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 89 \\ (10.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -134 \\ (-12.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 101 \\ (12.1 \%) \\ \hline \end{array}$ |
|  | AN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -1 \\ (-0.4 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-1 \\ (-0.4 \%) \\ \hline \end{array}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (-0.7 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (-0.7 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -28 \\ (-9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -28 \\ (-9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -28 \\ (-9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 21 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} 99 \\ (21.3 \%) \end{gathered}$ | $\begin{gathered} 31 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 109 \\ (23.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -51 \\ (-9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 27 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -47 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (6.8 \%) \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.4.1.6 Clear Creek below Whiskeytown

Table 11. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 4: Upstream-Clear Creek below Whiskeytown |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 220 | 339 | 339 | 339 | 339 | 339 |
|  | AN | 192 | 192 | 192 | 192 | 192 | 192 |
|  | BN | 189 | 189 | 189 | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 | 192 | 192 | 192 |
|  | C | 155 | 159 | 162 | 171 | 171 | 171 |
|  | All | 193 | 233 | 234 | 235 | 235 | 235 |
| FEB | W | 220 | 257 | 257 | 257 | 257 | 257 |
|  | AN | 197 | 196 | 196 | 196 | 196 | 196 |
|  | BN | 189 | 189 | 189 | 190 | 189 | 189 |
|  | D | 184 | 192 | 192 | 192 | 192 | 192 |
|  | C | 155 | 168 | 171 | 171 | 171 | 171 |
|  | All | 194 | 209 | 210 | 210 | 210 | 210 |
| MAR | W | 200 | 259 | 258 | 259 | 258 | 259 |
|  | AN | 197 | 196 | 196 | 196 | 196 | 196 |
|  | BN | 189 | 202 | 196 | 203 | 201 | 201 |
|  | D | 186 | 192 | 192 | 192 | 192 | 192 |
|  | C | 155 | 168 | 171 | 171 | 171 | 171 |
|  | All | 188 | 212 | 211 | 212 | 212 | 212 |
| APR | W | 200 | 200 | 200 | 200 | 200 | 200 |
|  | AN | 197 | 196 | 196 | 230 | 196 | 196 |
|  | BN | 189 | 189 | 196 | 190 | 189 | 189 |
|  | D | 188 | 192 | 192 | 192 | 192 | 192 |
|  | C | 155 | 168 | 171 | 171 | 171 | 171 |
|  | All | 189 | 191 | 193 | 197 | 191 | 192 |
| MAY | W | 277 | 277 | 277 | 277 | 277 | 277 |
|  | AN | 277 | 277 | 277 | 277 | 277 | 277 |
|  | BN | 263 | 269 | 269 | 269 | 269 | 269 |
|  | D | 264 | 264 | 264 | 264 | 264 | 264 |
|  | C | 211 | 224 | 224 | 224 | 224 | 224 |
|  | All | 262 | 265 | 265 | 265 | 265 | 265 |
| JUN | W | 200 | 200 | 200 | 200 | 200 | 200 |
|  | AN | 200 | 200 | 200 | 200 | 200 | 200 |
|  | BN | 181 | 186 | 186 | 186 | 186 | 186 |
|  | D | 180 | 180 | 180 | 180 | 180 | 180 |
|  | C | 115 | 131 | 120 | 120 | 120 | 120 |
|  | All | 180 | 183 | 181 | 181 | 181 | 181 |
| JUL | W | 85 | 85 | 85 | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 | 85 | 85 | 85 |
|  | C | 85 | 85 | 88 | 98 | 85 | 98 |
|  | All | 85 | 85 | 85 | 87 | 85 | 87 |


| Alternative 4: Upstream-Clear Creek below Whiskeytown |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 85 | 85 | 85 | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 | 85 | 85 | 85 |
|  | C | 94 | 71 | 78 | 78 | 71 | 78 |
|  | All | 86 | 83 | 84 | 84 | 83 | 84 |
| SEP | W | 150 | 150 | 150 | 150 | 150 | 150 |
|  | AN | 150 | 150 | 150 | 150 | 150 | 150 |
|  | BN | 150 | 150 | 150 | 150 | 150 | 150 |
|  | D | 144 | 150 | 150 | 150 | 150 | 150 |
|  | C | 133 | 96 | 96 | 108 | 96 | 96 |
|  | All | 146 | 142 | 142 | 144 | 142 | 142 |
| OCT | W | 198 | 198 | 198 | 198 | 198 | 198 |
|  | AN | 183 | 183 | 183 | 183 | 183 | 183 |
|  | BN | 189 | 182 | 189 | 179 | 189 | 179 |
|  | D | 175 | 183 | 175 | 175 | 180 | 175 |
|  | C | 150 | 142 | 152 | 142 | 142 | 142 |
|  | All | 182 | 182 | 183 | 179 | 182 | 179 |
| NOV | W | 198 | 198 | 198 | 198 | 198 | 198 |
|  | AN | 185 | 182 | 182 | 182 | 182 | 182 |
|  | BN | 184 | 189 | 189 | 189 | 189 | 189 |
|  | D | 177 | 177 | 176 | 177 | 177 | 177 |
|  | C | 155 | 145 | 145 | 146 | 158 | 158 |
|  | All | 183 | 182 | 182 | 182 | 184 | 184 |
| DEC | W | 198 | 198 | 198 | 198 | 198 | 198 |
|  | AN | 185 | 192 | 192 | 192 | 192 | 192 |
|  | BN | 189 | 189 | 189 | 189 | 189 | 189 |
|  | D | 177 | 189 | 189 | 189 | 189 | 189 |
|  | C | 155 | 156 | 171 | 171 | 171 | 158 |
|  | All | 184 | 187 | 190 | 190 | 190 | 188 |

Table 12. Differences ${ }^{a}$ (Percent Differences) between Pairs of Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 4: Upstream-Clear Creek below Whiskeytown |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITION <br> S vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITION S vs. H4 | NAA vs. H4 |
| JAN | W | $\begin{gathered} 118 \\ (53.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 119 \\ (53.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 118 \\ (53.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 118 \\ (53.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 0 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 7 \\ (3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 7 \\ (4.5 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 12 \\ (7.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (7.4 \%) \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \end{gathered}$ | $\begin{gathered} 12 \\ (7.4 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 40 \\ (20.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 41 \\ (21.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 41 \\ (21.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 41 \\ (21.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.7 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} 38 \\ (17.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 38 \\ (17.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 38 \\ (17.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 38 \\ (17.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -1 \\ (-0.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.3 \%) \end{gathered}$ | $\begin{gathered} \hline 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \end{gathered}$ | $\begin{array}{c\|} \hline 0 \\ (0.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 7 \\ (3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 7 \\ (3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 16 \\ (10.2 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \end{gathered}$ | $\begin{array}{\|c} \hline 3 \\ (1.7 \%) \\ \hline \end{array}$ | $\begin{gathered} 16 \\ (10.2 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 16 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 58 \\ (29.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 59 \\ (29.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 58 \\ (29.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 59 \\ (29.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -1 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 6 \\ (3.4 \%) \end{gathered}$ | $\begin{gathered} -6 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} 14 \\ (7.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (6.1 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.4 \%) \end{gathered}$ | $\begin{gathered} 12 \\ (6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.4 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 6 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 3 \\ (1.7 \%) \\ \hline \end{array}$ | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 23 \\ (12.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 25 \\ (13 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (12.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (12.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ |
| APR | W | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} \hline 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -1 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 33 \\ (17 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 34 \\ (17.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 6 \\ (3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 0 \\ (0.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 3 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.7 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 4 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 8 \\ (4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-Clear Creek below Whiskeytown |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITION <br> S vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITION S vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{gathered} \hline 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 6 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 13 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 3 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 5 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 5 \\ (4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-11 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-8.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 2 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.9 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 3 \\ (3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (15.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 0 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} \hline 2 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (2.3 \%) \\ \hline \end{gathered}$ |
| AUG | W | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | C | $\begin{gathered} \hline-16 \\ (-17.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-16 \\ (-17.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -23 \\ (-24.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-16 \\ (-17.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (10.3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -2 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.3 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} -3 \\ (-4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-2.7 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (1.3 \%) \end{gathered}$ |


| Alternative 4: Upstream-Clear Creek below Whiskeytown |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITION S vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITION S vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 6 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -37 \\ (-28.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -25 \\ (-18.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (13 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -37 \\ (-28.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -37 \\ (-28.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -4 \\ (-2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4 \\ (-2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4 \\ (-2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-1.8 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -8 \\ (-4.5 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} -3 \\ (-1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -8 \\ (-4.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 2 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-1.7 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-1.3 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -3 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 6 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -1 \\ (-0.6 \%) \end{gathered}$ | $\begin{array}{\|c} \hline 0 \\ (-0.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -1 \\ (-0.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -10 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -9 \\ (-5.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 0 \\ (0.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 3 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (8.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (8.6 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -1 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (1 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (1 \%) \end{gathered}$ |
| DEC | W | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 0 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 7 \\ (3.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (3.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 12 \\ (6.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 12 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 12 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 12 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.6 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 6 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (3.2 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.2 \%) \\ \hline \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.4.1.7 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

Table 13. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 4: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{aligned} & \text { EXISTING } \\ & \text { CONDITIONS } \end{aligned}$ | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 800 | 800 | 800 | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 | 800 | 800 | 800 |
| FEB | W | 800 | 800 | 800 | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 | 800 | 800 | 800 |
| MAR | W | 800 | 800 | 800 | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 | 800 | 800 | 800 |
| APR | W | 700 | 700 | 700 | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 | 700 | 700 | 700 |
| MAY | W | 700 | 700 | 700 | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 | 700 | 700 | 700 |
| JUN | W | 700 | 700 | 700 | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 | 700 | 700 | 700 |


| rbay |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JUL | W | 700 | 700 | 700 | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 | 700 | 700 | 700 |
| AUG | W | 700 | 700 | 700 | 700 | 700 | 699 |
|  | AN | 700 | 700 | 700 | 700 | 700 | 697 |
|  | BN | 700 | 700 | 700 | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 | 700 | 700 | 679 |
|  | All | 700 | 700 | 700 | 700 | 700 | 696 |
| SEP | W | 773 | 773 | 773 | 773 | 773 | 773 |
|  | AN | 773 | 773 | 773 | 773 | 773 | 773 |
|  | BN | 773 | 773 | 773 | 773 | 773 | 773 |
|  | D | 773 | 773 | 773 | 770 | 773 | 772 |
|  | C | 773 | 773 | 773 | 773 | 773 | 773 |
|  | All | 773 | 773 | 773 | 773 | 773 | 773 |
| OCT | W | 800 | 800 | 800 | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 | 800 | 800 | 800 |
| NOV | W | 800 | 800 | 800 | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 | 800 | 800 | 800 |
| DEC | W | 800 | 800 | 800 | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 | 800 | 800 | 800 |

Table 14. Differences (Percent Differences) between Pairs of Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 4: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 |  | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| JAN | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
| FEB | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
| MAR | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
| APR | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
| MAY | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
| JUL | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |


| Alternative 4: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\qquad$ | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | $\qquad$ | NAA vs. H3 | $\qquad$ | NAA vs. H4 |
| AUG | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | -1 (-0.2\%) | -1 (-0.2\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | -3 (-0.4\%) | -3 (-0.4\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | -21 (-2.9\%) | -21 (-2.9\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | -4 (-0.6\%) | -4 (-0.6\%) |
| SEP | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | -3 (-0.4\%) | -4 (-0.5\%) | 0 (0\%) | 0 (0\%) | -1 (-0.1\%) | -1 (-0.2\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (-0.1\%) | -1 (-0.1\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
| NOV | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
| DEC | W | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) | 0 (0\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

11C.4.1.8 Feather River High-Flow Channel (at Thermalito Afterbay)
Table 15. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 4: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 11,257 | 11,896 | 13,569 | 13,308 | 11,023 | 12,105 |
|  | AN | 4,434 | 2,838 | 3,673 | 3,798 | 2,874 | 3,687 |
|  | BN | 2,640 | 1,441 | 1,387 | 1,862 | 1,419 | 1,602 |
|  | D | 1,798 | 1,459 | 1,802 | 1,810 | 1,556 | 1,521 |
|  | C | 1,459 | 1,648 | 1,691 | 1,976 | 1,721 | 1,620 |
|  | All | 5,277 | 4,995 | 5,720 | 5,780 | 4,751 | 5,222 |
| FEB | W | 12,466 | 14,787 | 16,167 | 15,655 | 16,276 | 15,221 |
|  | AN | 7,411 | 5,809 | 7,609 | 8,383 | 6,955 | 7,555 |
|  | BN | 3,916 | 1,897 | 2,763 | 3,752 | 2,145 | 2,760 |
|  | D | 1,817 | 1,659 | 1,676 | 1,548 | 1,636 | 1,551 |
|  | C | 1,610 | 1,482 | 1,404 | 1,407 | 1,516 | 1,496 |
|  | All | 6,340 | 6,444 | 7,285 | 7,377 | 7,126 | 6,962 |
| MAR | W | 12,895 | 14,772 | 14,854 | 14,943 | 14,401 | 14,794 |
|  | AN | 7,733 | 8,568 | 10,269 | 9,610 | 9,456 | 8,466 |
|  | BN | 3,373 | 1,985 | 2,061 | 2,681 | 1,598 | 2,140 |
|  | D | 2,017 | 1,762 | 1,955 | 1,969 | 1,930 | 1,796 |
|  | C | 1,697 | 1,634 | 1,759 | 1,814 | 1,729 | 1,766 |
|  | All | 6,487 | 6,902 | 7,251 | 7,300 | 6,900 | 6,948 |
| APR | W | 6,472 | 6,408 | 6,402 | 9,816 | 6,399 | 9,774 |
|  | AN | 2,251 | 2,170 | 2,280 | 6,591 | 2,180 | 5,997 |
|  | BN | 1,205 | 1,203 | 1,762 | 6,390 | 1,728 | 7,436 |
|  | D | 1,286 | 1,470 | 2,134 | 2,059 | 2,036 | 2,097 |
|  | C | 1,389 | 1,407 | 1,731 | 1,443 | 1,637 | 1,471 |
|  | All | 3,073 | 3,084 | 3,386 | 5,831 | 3,330 | 5,922 |
| MAY | W | 7,528 | 4,740 | 5,021 | 7,370 | 5,060 | 7,908 |
|  | AN | 3,340 | 3,101 | 3,914 | 5,420 | 3,929 | 5,979 |
|  | BN | 1,205 | 1,749 | 2,526 | 3,807 | 2,780 | 3,581 |
|  | D | 1,591 | 2,223 | 2,638 | 2,773 | 2,563 | 2,646 |
|  | C | 1,574 | 1,790 | 1,779 | 1,771 | 1,762 | 1,783 |
|  | All | 3,661 | 3,005 | 3,436 | 4,648 | 3,475 | 4,836 |
| JUN | W | 5,062 | 4,211 | 6,031 | 4,093 | 6,423 | 3,916 |
|  | AN | 3,301 | 3,930 | 6,963 | 4,390 | 7,008 | 4,501 |
|  | BN | 2,707 | 3,552 | 6,303 | 5,558 | 6,365 | 4,731 |
|  | D | 3,134 | 3,284 | 3,875 | 4,020 | 3,790 | 3,319 |
|  | C | 2,695 | 2,666 | 2,582 | 2,626 | 2,648 | 2,607 |
|  | All | 3,632 | 3,628 | 5,236 | 4,156 | 5,368 | 3,818 |
| JUL | W | 6,490 | 8,577 | 7,629 | 5,684 | 7,849 | 6,348 |
|  | AN | 8,757 | 9,488 | 9,241 | 5,931 | 9,427 | 5,855 |
|  | BN | 8,981 | 8,833 | 7,746 | 6,721 | 7,843 | 6,486 |
|  | D | 8,294 | 8,099 | 5,551 | 5,420 | 5,117 | 4,690 |
|  | C | 6,703 | 5,217 | 2,933 | 3,348 | 2,618 | 3,235 |
|  | All | 7,674 | 8,157 | 6,742 | 5,497 | 6,714 | 5,480 |


| Alternative 4: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 3,308 | 6,228 | 5,025 | 3,300 | 5,037 | 3,362 |
|  | AN | 6,042 | 7,346 | 5,930 | 4,505 | 5,955 | 3,976 |
|  | BN | 6,295 | 6,868 | 5,739 | 4,550 | 5,550 | 3,898 |
|  | D | 7,036 | 4,990 | 4,257 | 3,687 | 3,743 | 3,119 |
|  | C | 2,613 | 2,163 | 2,066 | 2,599 | 2,116 | 2,728 |
|  | All | 4,935 | 5,634 | 4,678 | 3,672 | 4,547 | 3,397 |
| SEP | W | 2,280 | 8,327 | 1,208 | 1,119 | 7,049 | 6,453 |
|  | AN | 2,253 | 6,899 | 2,318 | 1,573 | 5,142 | 4,094 |
|  | BN | 2,466 | 3,068 | 1,670 | 1,212 | 1,790 | 1,219 |
|  | D | 2,366 | 1,052 | 1,713 | 1,564 | 1,266 | 1,541 |
|  | C | 1,421 | 1,345 | 1,875 | 2,398 | 1,638 | 2,495 |
|  | All | 2,201 | 4,601 | 1,658 | 1,486 | 3,811 | 3,557 |
| OCT | W | 3,456 | 3,051 | 3,243 | 2,873 | 3,087 | 2,782 |
|  | AN | 2,386 | 2,741 | 3,287 | 2,718 | 3,163 | 2,917 |
|  | BN | 3,183 | 2,862 | 2,950 | 2,816 | 2,895 | 2,990 |
|  | D | 2,688 | 2,652 | 2,970 | 2,607 | 3,101 | 2,272 |
|  | C | 2,472 | 2,102 | 2,887 | 3,031 | 2,656 | 3,172 |
|  | All | 2,940 | 2,747 | 3,087 | 2,805 | 3,006 | 2,782 |
| NOV | W | 3,292 | 2,470 | 2,790 | 2,648 | 2,391 | 2,485 |
|  | AN | 1,824 | 2,119 | 1,906 | 1,769 | 1,916 | 1,883 |
|  | BN | 2,101 | 1,900 | 1,873 | 1,757 | 1,904 | 1,885 |
|  | D | 1,859 | 1,664 | 1,796 | 1,604 | 1,782 | 1,678 |
|  | C | 1,854 | 1,876 | 1,837 | 2,143 | 1,829 | 2,052 |
|  | All | 2,349 | 2,058 | 2,146 | 2,064 | 2,022 | 2,054 |
| DEC | W | 7,157 | 3,948 | 5,293 | 6,461 | 4,456 | 5,222 |
|  | AN | 2,951 | 3,344 | 3,361 | 1,816 | 2,864 | 3,012 |
|  | BN | 2,176 | 2,102 | 2,616 | 2,108 | 2,029 | 1,948 |
|  | D | 2,364 | 2,229 | 2,062 | 1,849 | 2,221 | 2,090 |
|  | C | 2,609 | 1,694 | 2,622 | 2,207 | 2,610 | 1,967 |
|  | All | 3,973 | 2,837 | 3,453 | 3,403 | 3,048 | 3,175 |

Table 16. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 4: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{\|c\|} \hline \text { EXISTING } \\ \text { CONDITIONS } \\ \text { vs. H1 } \\ \hline \end{array}$ | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| JAN | W | $\begin{gathered} \hline 2,312 \\ (20.5 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,674 \\ (14.1 \%) \end{array}$ | $\begin{gathered} \hline 2,051 \\ (18.2 \%) \end{gathered}$ | $\begin{gathered} \hline 1,413 \\ (11.9 \%) \end{gathered}$ | $\begin{gathered} -235 \\ (-2.1 \%) \end{gathered}$ | $\begin{gathered} -873 \\ (-7.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 847 \\ (7.5 \%) \end{gathered}$ | $\begin{gathered} 209 \\ (1.8 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -761 \\ (-17.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 835 \\ (29.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -635 \\ (-14.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 960 \\ (33.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,559 \\ (-35.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 36 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -747 \\ (-16.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 848 \\ (29.9 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -1,253 \\ (-47.5 \%) \end{gathered}$ | $\begin{gathered} -54 \\ (-3.7 \%) \end{gathered}$ | $\begin{gathered} -777 \\ (-29.4 \%) \end{gathered}$ | $\begin{gathered} 421 \\ (29.2 \%) \end{gathered}$ | $\begin{gathered} -1,221 \\ (-46.3 \%) \end{gathered}$ | $\begin{gathered} -22 \\ (-1.6 \%) \end{gathered}$ | $\begin{gathered} -1,038 \\ (-39.3 \%) \end{gathered}$ | $\begin{gathered} 161 \\ (11.2 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 4 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 343 \\ (23.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 351 \\ (24.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -242 \\ (-13.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 97 \\ (6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-278 \\ (-15.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 62 \\ (4.2 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 231 \\ (15.9 \%) \end{gathered}$ | $\begin{gathered} 43 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} 517 \\ (35.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 328 \\ (19.9 \%) \end{gathered}$ | $\begin{gathered} 262 \\ (17.9 \%) \end{gathered}$ | $\begin{gathered} 73 \\ (4.4 \%) \end{gathered}$ | $\begin{gathered} 161 \\ (11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -28 \\ (-1.7 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 443 \\ (8.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 725 \\ (14.5 \%) \\ \hline \end{array}$ | $\begin{gathered} 503 \\ (9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 785 \\ (15.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -526 \\ (-10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -243 \\ (-4.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -55 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 227 \\ (4.6 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} 3,701 \\ (29.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,380 \\ (9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,189 \\ (25.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 868 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,810 \\ (30.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,489 \\ (10.1 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline 2,755 \\ (22.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 434 \\ (2.9 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 199 \\ (2.7 \%) \end{gathered}$ | $\begin{aligned} & 1,801 \\ & (31 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 972 \\ (13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,574 \\ (44.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -456 \\ (-6.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 1,146 \\ (19.7 \%) \\ \hline \end{array}$ | $\begin{gathered} 144 \\ (1.9 \%) \end{gathered}$ | $\begin{gathered} 1,747 \\ (30.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -1,153 \\ (-29.4 \%) \end{gathered}$ | $\begin{gathered} 866 \\ (45.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -164 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} 1,855 \\ (97.8 \%) \end{gathered}$ | $\begin{gathered} -1,771 \\ (-45.2 \%) \end{gathered}$ | $\begin{gathered} 248 \\ (13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,156 \\ (-29.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 863 \\ (45.5 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -141 \\ (-7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -268 \\ (-14.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -111 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -181 \\ (-9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -23 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -266 \\ (-14.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -109 \\ (-6.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -207 \\ (-12.8 \%) \end{gathered}$ | $\begin{gathered} -78 \\ (-5.3 \%) \end{gathered}$ | $\begin{gathered} -203 \\ (-12.6 \%) \end{gathered}$ | $\begin{gathered} -75 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} -94 \\ (-5.9 \%) \end{gathered}$ | $\begin{gathered} 34 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -114 \\ (-7.1 \%) \end{gathered}$ | $\begin{gathered} 15 \\ (1 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 944 \\ (14.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 841 \\ (13.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,037 \\ (16.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 933 \\ (14.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 785 \\ (12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 682 \\ (10.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 622 \\ (9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 519 \\ (8.1 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 1,959 \\ (15.2 \%) \end{gathered}$ | $\begin{gathered} 82 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,048 \\ (15.9 \%) \end{gathered}$ | $\begin{gathered} 171 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} 1,506 \\ (11.7 \%) \end{gathered}$ | $\begin{gathered} -371 \\ (-2.5 \%) \end{gathered}$ | $\begin{gathered} 1,899 \\ (14.7 \%) \end{gathered}$ | $\begin{gathered} 22 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 2,536 \\ (32.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,701 \\ (19.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,877 \\ (24.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,042 \\ (12.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,724 \\ (22.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 888 \\ (10.4 \%) \end{gathered}$ | $\begin{gathered} 733 \\ (9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -102 \\ (-1.2 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} \hline-1,313 \\ (-38.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 76 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} -692 \\ (-20.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 697 \\ (35.1 \%) \end{gathered}$ | $\begin{gathered} -1,775 \\ (-52.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -387 \\ (-19.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,233 \\ (-36.6 \%) \end{gathered}$ | $\begin{gathered} 156 \\ (7.8 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -62 \\ (-3.1 \%) \end{gathered}$ | $\begin{array}{c\|} \hline 193 \\ (10.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -47 \\ (-2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 207 \\ (11.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -87 \\ (-4.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} 168 \\ (9.5 \%) \end{array}$ | $\begin{gathered} -221 \\ (-11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 34 \\ (1.9 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 63 \\ (3.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 126 \\ (7.7 \%) \end{gathered}$ | $\begin{gathered} 117 \\ (6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 180 \\ (11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 95 \\ (5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ (4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 132 \\ (8.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 764 \\ (11.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 349 \\ (5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 813 \\ (12.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 398 \\ (5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 412 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 460 \\ \text { (7.1\%) } \\ \hline \end{gathered}$ | $\begin{gathered} 45 \\ (0.7 \%) \\ \hline \end{gathered}$ |
| APR | W | $\begin{gathered} -71 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,343 \\ (51.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,408 \\ (53.2 \%) \end{gathered}$ | $\begin{gathered} -73 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -9 \\ (-0.1 \%) \end{gathered}$ | $\begin{aligned} & 3,302 \\ & (51 \%) \end{aligned}$ | $\begin{gathered} 3,366 \\ (52.5 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 29 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 110 \\ \text { (5.1\%) } \\ \hline \end{gathered}$ | $\begin{gathered} 4,340 \\ (192.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,421 \\ (203.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -71 \\ (-3.1 \%) \end{gathered}$ | $\begin{gathered} 10 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,746 \\ (166.4 \%) \end{gathered}$ | $\begin{gathered} 3,827 \\ (176.4 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 557 \\ (46.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 559 \\ (46.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,185 \\ (430.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,187 \\ (431.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 523 \\ (43.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 524 \\ (43.6 \%) \\ \hline \end{array}$ | $\begin{gathered} 6,231 \\ (517.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6,233 \\ (518 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 848 \\ (65.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 664 \\ (45.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 773 \\ (60.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 589 \\ (40 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 750 \\ (58.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 565 \\ (38.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 811 \\ (63.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 627 \\ (42.6 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 342 \\ (24.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 324 \\ (23 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 54 \\ (3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 36 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} 248 \\ (17.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 230 \\ (16.3 \%) \end{array}$ | $\begin{gathered} 82 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 64 \\ (4.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 313 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 302 \\ (9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,758 \\ (89.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,747 \\ (89.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 257 \\ (8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 246 \\ (8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,849 \\ (92.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} 2,838 \\ (92 \%) \\ \hline \end{array}$ |


| Alternative 4: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | $\begin{gathered} \text { NAA vs. } \\ \text { H1 } \\ \hline \end{gathered}$ | EXISTING CONDITIONS vs. H2 | NAA vs. $\mathrm{H} 2$ | EXISTING CONDITIONS vs. H3 | NAA vs. <br> H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{gathered} -2,507 \\ (-33.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 281 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -158 \\ (-2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,630 \\ (55.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,468 \\ (-32.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 320 \\ (6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 380 \\ (5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,168 \\ (66.8 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 574 \\ (17.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 812 \\ (26.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,080 \\ (62.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,319 \\ (74.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 590 \\ (17.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 828 \\ (26.7 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline 2,639 \\ (79 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,878 \\ (92.8 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 1,321 \\ (109.6 \%) \end{gathered}$ | $\begin{gathered} 778 \\ (44.5 \%) \end{gathered}$ | $\begin{gathered} 2,601 \\ (215.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,058 \\ (117.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,575 \\ (130.6 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 1,032 \\ & (59 \%) \end{aligned}$ | $\begin{gathered} 2,376 \\ (197.1 \%) \end{gathered}$ | $\begin{gathered} 1,833 \\ (104.8 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 1,047 \\ (65.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 415 \\ (18.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,182 \\ (74.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 550 \\ (24.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 972 \\ (61.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 340 \\ (15.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,055 \\ (66.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 423 \\ (19 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 205 \\ (13 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 197 \\ (12.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -18 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 187 \\ (11.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -28 \\ (-1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 209 \\ (13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -6 \\ (-0.4 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -226 \\ (-6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 430 \\ (14.3 \%) \end{gathered}$ | $\begin{gathered} 987 \\ (27 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,643 \\ (54.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -187 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 469 \\ (15.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,175 \\ (32.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,830 \\ (60.9 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} 969 \\ (19.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,820 \\ (43.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -968 \\ (-19.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -117 \\ (-2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,361 \\ (26.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,212 \\ (52.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,146 \\ (-22.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -295 \\ (-7 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 3,662 \\ (110.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,033 \\ (77.2 \%) \end{gathered}$ | $\begin{gathered} 1,089 \\ (33 \%) \end{gathered}$ | $\begin{gathered} \hline 461 \\ (11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,707 \\ (112.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 3,079 \\ (78.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,199 \\ (36.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 571 \\ (14.5 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 3,596 \\ (132.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,751 \\ (77.5 \%) \end{gathered}$ | $\begin{gathered} 2,851 \\ (105.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,006 \\ (56.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,658 \\ (135.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 2,813 \\ (79.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 2,024 \\ (74.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,179 \\ (33.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 741 \\ (23.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 591 \\ (18 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 886 \\ (28.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 736 \\ (22.4 \%) \\ \hline \end{gathered}$ | 656 $(20.9 \%)$ | $\begin{gathered} 506 \\ (15.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 185 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 35 \\ (1.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -113 \\ (-4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -84 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -69 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -40 \\ (-1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -47 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-18 \\ (-0.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -88 \\ (-3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-2.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 1,603 \\ (44.1 \%) \end{gathered}$ | $\begin{gathered} 1,608 \\ (44.3 \%) \end{gathered}$ | $\begin{gathered} 523 \\ (14.4 \%) \end{gathered}$ | $\begin{gathered} 528 \\ (14.6 \%) \end{gathered}$ | $\begin{gathered} 1,736 \\ (47.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,741 \\ (48 \%) \end{gathered}$ | $\begin{gathered} 186 \\ (5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 190 \\ (5.2 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} 1,139 \\ (17.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -948 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -806 \\ (-12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,893 \\ (-33.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,359 \\ (20.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -728 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -143 \\ (-2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,230 \\ (-26 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 484 \\ (5.5 \%) \end{gathered}$ | $\begin{gathered} -247 \\ (-2.6 \%) \end{gathered}$ | $\begin{gathered} -2,826 \\ (-32.3 \%) \end{gathered}$ | $\begin{gathered} -3,557 \\ (-37.5 \%) \end{gathered}$ | $\begin{gathered} 670 \\ (7.7 \%) \end{gathered}$ | $\begin{gathered} -61 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} -2,901 \\ (-33.1 \%) \end{gathered}$ | $\begin{gathered} -3,633 \\ (-38.3 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -1,234 \\ (-13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,086 \\ (-12.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,260 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-2,112 \\ (-23.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,138 \\ (-12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -989 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,494 \\ (-27.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,346 \\ (-26.6 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -2,743 \\ (-33.1 \%) \end{gathered}$ | $\begin{gathered} -2,548 \\ (-31.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,874 \\ (-34.7 \%) \end{gathered}$ | $\begin{gathered} -2,679 \\ (-33.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,177 \\ (-38.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-2,981 \\ (-36.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,604 \\ (-43.5 \%) \end{gathered}$ | $\begin{gathered} -3,409 \\ (-42.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -3,770 \\ (-56.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-2,285 \\ (-43.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -3,355 \\ (-50.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,870 \\ (-35.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-4,085 \\ (-60.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-2,599 \\ (-49.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,468 \\ (-51.7 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -1,982 \\ & (-38 \%) \\ & \hline \end{aligned}$ |
|  | All | $\begin{gathered} \hline-933 \\ (-12.2 \%) \end{gathered}$ | $\begin{gathered} -1,416 \\ (-17.4 \%) \end{gathered}$ | $\begin{gathered} -2,177 \\ (-28.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,660 \\ (-32.6 \%) \end{gathered}$ | $\begin{gathered} -960 \\ (-12.5 \%) \end{gathered}$ | $\begin{gathered} -1,444 \\ (-17.7 \%) \end{gathered}$ | $\begin{gathered} \hline-2,194 \\ (-28.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,677 \\ (-32.8 \%) \end{gathered}$ |
| AUG | W | $\begin{gathered} 1,717 \\ (51.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,203 \\ (-19.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -2,928 \\ (-47 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,729 \\ (52.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,191 \\ (-19.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 54 \\ (1.6 \%) \end{gathered}$ | $\begin{array}{r} -2,866 \\ (-46 \%) \\ \hline \end{array}$ |
|  | AN | $\begin{gathered} -112 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} -1,416 \\ (-19.3 \%) \end{gathered}$ | $\begin{gathered} -1,537 \\ (-25.4 \%) \end{gathered}$ | $\begin{gathered} -2,841 \\ (-38.7 \%) \end{gathered}$ | $\begin{gathered} -87 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} -1,391 \\ (-18.9 \%) \end{gathered}$ | $\begin{gathered} -2,066 \\ (-34.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,370 \\ (-45.9 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -556 \\ (-8.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,129 \\ (-16.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,744 \\ (-27.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,318 \\ (-33.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -745 \\ (-11.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,318 \\ (-19.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,396 \\ (-38.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,970 \\ (-43.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -2,779 \\ (-39.5 \%) \end{gathered}$ | $\begin{gathered} -733 \\ (-14.7 \%) \end{gathered}$ | $\begin{gathered} -3,350 \\ (-47.6 \%) \end{gathered}$ | $\begin{gathered} -1,304 \\ (-26.1 \%) \end{gathered}$ | $\begin{gathered} -3,294 \\ (-46.8 \%) \end{gathered}$ | $\begin{aligned} & -1,248 \\ & (-25 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -3,917 \\ (-55.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,871 \\ (-37.5 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -548 \\ (-21 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -97 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -14 \\ (-0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 436 \\ (20.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -497 \\ (-19 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-47 \\ (-2.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 115 \\ (4.4 \%) \end{gathered}$ | $\begin{gathered} 566 \\ (26.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -257 \\ (-5.2 \%) \end{gathered}$ | $\begin{gathered} -957 \\ (-17 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,263 \\ (-25.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,962 \\ (-34.8 \%) \end{gathered}$ | $\begin{gathered} -388 \\ (-7.9 \%) \end{gathered}$ | $\begin{gathered} \hline-1,087 \\ (-19.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,537 \\ (-31.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,237 \\ (-39.7 \%) \end{gathered}$ |


| Alternative 4: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. <br> H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{aligned} & \hline-1,072 \\ & (-47 \%) \\ & \hline \end{aligned}$ | $\begin{array}{c\|} \hline-7,118 \\ (-85.5 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-1,161 \\ (-50.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7,208 \\ (-86.6 \%) \end{gathered}$ | $\begin{gathered} 4,769 \\ (209.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,278 \\ (-15.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4,173 \\ (183 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,874 \\ (-22.5 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 65 \\ (2.9 \%) \end{gathered}$ | $\begin{gathered} \hline-4,582 \\ (-66.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -680 \\ (-30.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,327 \\ (-77.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,889 \\ (128.3 \%) \end{gathered}$ | $\begin{gathered} \hline-1,757 \\ (-25.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,841 \\ (81.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,805 \\ (-40.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -795 \\ (-32.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,398 \\ (-45.6 \%) \end{gathered}$ | $\begin{gathered} -1,254 \\ (-50.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,856 \\ (-60.5 \%) \end{gathered}$ | $\begin{gathered} -675 \\ (-27.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,278 \\ (-41.6 \%) \end{gathered}$ | $\begin{gathered} -1,247 \\ (-50.6 \%) \end{gathered}$ | $\begin{gathered} -1,849 \\ (-60.3 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -653 \\ (-27.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 661 \\ (62.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -802 \\ (-33.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 512 \\ (48.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,100 \\ (-46.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 214 \\ (20.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -824 \\ (-34.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 489 \\ (46.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 455 \\ (32 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 531 \\ (39.5 \%) \\ \hline \end{array}$ | $\begin{gathered} 977 \\ (68.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,053 \\ (78.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 218 \\ (15.3 \%) \end{gathered}$ | $\begin{gathered} 294 \\ (21.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,075 \\ (75.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,150 \\ (85.6 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -543 \\ (-24.7 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-2,944 \\ & (-64 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -715 \\ (-32.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,115 \\ (-67.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,610 \\ (73.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-791 \\ (-17.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,356 \\ (61.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,045 \\ (-22.7 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} -213 \\ (-6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 192 \\ (6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -583 \\ (-16.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -178 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -369 \\ (-10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 36 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -674 \\ (-19.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -269 \\ (-8.8 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 901 \\ (37.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 546 \\ (19.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 332 \\ (13.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -23 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 776 \\ (32.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 422 \\ (15.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 531 \\ (22.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 176 \\ (6.4 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -233 \\ (-7.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 88 \\ (3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -367 \\ (-11.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -46 \\ (-1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -288 \\ (-9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 34 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -193 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 128 \\ (4.5 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 282 \\ (10.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 318 \\ (12 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -81 \\ (-3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -45 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 413 \\ (15.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 449 \\ (16.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -416 \\ (-15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -380 \\ (-14.3 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 415 \\ (16.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 785 \\ (37.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 559 \\ (22.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 929 \\ (44.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 184 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 554 \\ (26.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 701 \\ (28.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,070 \\ (50.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 147 \\ (5 \%) \end{gathered}$ | $\begin{gathered} 340 \\ (12.4 \%) \end{gathered}$ | $\begin{gathered} -135 \\ (-4.6 \%) \end{gathered}$ | $\begin{gathered} 58 \\ (2.1 \%) \end{gathered}$ | $\begin{gathered} 65 \\ (2.2 \%) \end{gathered}$ | $\begin{gathered} 258 \\ (9.4 \%) \end{gathered}$ | $\begin{gathered} -158 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 35 \\ (1.3 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} -503 \\ (-15.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 320 \\ (12.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -645 \\ (-19.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 178 \\ (7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -902 \\ (-27.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -79 \\ (-3.2 \%) \end{gathered}$ | $\begin{gathered} -808 \\ (-24.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (0.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 82 \\ (4.5 \%) \end{gathered}$ | $\begin{gathered} -214 \\ (-10.1 \%) \end{gathered}$ | $\begin{gathered} -56 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} -351 \\ (-16.5 \%) \end{gathered}$ | $\begin{gathered} 92 \\ (5.1 \%) \end{gathered}$ | $\begin{gathered} -203 \\ (-9.6 \%) \end{gathered}$ | $\begin{gathered} 59 \\ (3.2 \%) \end{gathered}$ | $\begin{gathered} -236 \\ (-11.1 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -228 \\ (-10.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -27 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -344 \\ (-16.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -143 \\ (-7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -197 \\ (-9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -217 \\ (-10.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -16 \\ (-0.8 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -64 \\ (-3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 131 \\ (7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-256 \\ (-13.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -61 \\ (-3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -78 \\ (-4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -181 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (0.8 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -17 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} -38 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 289 \\ (15.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 267 \\ (14.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -25 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -47 \\ (-2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 198 \\ (10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 176 \\ (9.4 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -203 \\ (-8.6 \%) \end{gathered}$ | $\begin{gathered} 89 \\ (4.3 \%) \end{gathered}$ | $\begin{gathered} -285 \\ (-12.1 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} -327 \\ (-13.9 \%) \end{gathered}$ | $\begin{gathered} -35 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -295 \\ (-12.6 \%) \end{gathered}$ | $\begin{gathered} -4 \\ (-0.2 \%) \end{gathered}$ |
| DEC | W | $\begin{gathered} -1,864 \\ (-26.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,345 \\ (34.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -696 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,513 \\ (63.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,701 \\ (-37.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 508 \\ (12.9 \%) \\ \hline \end{array}$ | $\begin{aligned} & -1,935 \\ & (-27 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 1,274 \\ (32.3 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 411 \\ (13.9 \%) \end{gathered}$ | $\begin{gathered} 18 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} \hline-1,135 \\ (-38.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,528 \\ (-45.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -87 \\ (-2.9 \%) \end{gathered}$ | $\begin{gathered} -480 \\ (-14.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 61 \\ (2.1 \%) \end{gathered}$ | $\begin{gathered} -332 \\ (-9.9 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 440 \\ (20.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 514 \\ (24.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -68 \\ (-3.1 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} -147 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -73 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -228 \\ (-10.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -154 \\ (-7.3 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} \hline-301 \\ (-12.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -167 \\ (-7.5 \%) \end{gathered}$ | $\begin{gathered} -515 \\ (-21.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -380 \\ (-17.1 \%) \end{gathered}$ | $\begin{gathered} -142 \\ (-6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-8 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -274 \\ (-11.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -139 \\ (-6.2 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 13 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 928 \\ (54.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -402 \\ (-15.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 513 \\ (30.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \end{gathered}$ | $\begin{gathered} 916 \\ (54.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -642 \\ (-24.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 273 \\ (16.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -520 \\ (-13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 616 \\ (21.7 \%) \end{gathered}$ | $\begin{gathered} -570 \\ (-14.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 566 \\ (19.9 \%) \end{gathered}$ | $\begin{gathered} -925 \\ (-23.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 211 \\ (7.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -798 \\ (-20.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 338 \\ (11.9 \%) \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.4.1.9 Feather River at Confluence with Sacramento River

Table 17. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 4: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{aligned} & \text { EXISTING } \\ & \text { CONDITIONS } \end{aligned}$ | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 23,533 | 26,106 | 27,778 | 27,508 | 25,241 | 26,310 |
|  | AN | 12,430 | 11,953 | 12,792 | 12,924 | 11,993 | 12,810 |
|  | BN | 6,499 | 5,575 | 5,522 | 5,996 | 5,556 | 5,737 |
|  | D | 4,621 | 4,412 | 4,768 | 4,761 | 4,510 | 4,471 |
|  | C | 3,646 | 3,837 | 3,875 | 4,160 | 3,921 | 3,806 |
|  | All | 11,938 | 12,509 | 13,236 | 13,291 | 12,271 | 12,735 |
| FEB | W | 27,039 | 31,065 | 32,444 | 31,933 | 32,560 | 31,504 |
|  | AN | 14,818 | 14,599 | 16,400 | 17,173 | 15,749 | 16,347 |
|  | BN | 9,153 | 7,892 | 8,764 | 9,746 | 8,144 | 8,755 |
|  | D | 4,402 | 4,436 | 4,453 | 4,322 | 4,413 | 4,328 |
|  | C | 3,237 | 3,096 | 3,019 | 3,022 | 3,130 | 3,113 |
|  | All | 13,744 | 14,761 | 15,603 | 15,693 | 15,446 | 15,282 |
| MAR | W | 24,172 | 26,784 | 26,873 | 26,953 | 26,416 | 26,811 |
|  | AN | 19,990 | 21,490 | 23,191 | 22,526 | 22,379 | 21,385 |
|  | BN | 8,136 | 6,882 | 6,970 | 7,582 | 6,480 | 7,024 |
|  | D | 5,073 | 4,940 | 5,127 | 5,138 | 5,103 | 4,962 |
|  | C | 2,933 | 2,756 | 2,907 | 3,005 | 2,844 | 2,938 |
|  | All | 13,521 | 14,300 | 14,655 | 14,704 | 14,294 | 14,349 |
| APR | W | 15,897 | 15,852 | 15,853 | 19,265 | 15,852 | 19,220 |
|  | AN | 9,832 | 9,585 | 9,696 | 14,007 | 9,598 | 13,420 |
|  | BN | 5,401 | 5,189 | 5,755 | 10,378 | 5,722 | 11,424 |
|  | D | 4,152 | 4,137 | 4,805 | 4,726 | 4,705 | 4,766 |
|  | C | 3,298 | 3,185 | 3,514 | 3,230 | 3,418 | 3,258 |
|  | All | 8,796 | 8,689 | 8,997 | 11,440 | 8,941 | 11,531 |
| MAY | W | 14,387 | 10,385 | 10,676 | 13,004 | 10,713 | 13,542 |
|  | AN | 8,068 | 6,884 | 7,704 | 9,185 | 7,718 | 9,747 |
|  | BN | 4,704 | 4,509 | 5,290 | 6,546 | 5,541 | 6,312 |
|  | D | 3,652 | 3,767 | 4,182 | 4,315 | 4,106 | 4,188 |
|  | C | 2,389 | 2,321 | 2,310 | 2,295 | 2,282 | 2,306 |
|  | All | 7,697 | 6,237 | 6,672 | 7,868 | 6,708 | 8,055 |
| JUN | W | 10,222 | 7,199 | 9,022 | 7,068 | 9,407 | 6,899 |
|  | AN | 6,391 | 5,598 | 8,594 | 6,014 | 8,637 | 6,120 |
|  | BN | 4,495 | 4,342 | 7,095 | 6,347 | 7,154 | 5,537 |
|  | D | 3,853 | 3,367 | 3,959 | 4,102 | 3,873 | 3,401 |
|  | C | 2,782 | 2,522 | 2,423 | 2,369 | 2,504 | 2,350 |
|  | All | 6,197 | 4,951 | 6,553 | 5,452 | 6,685 | 5,119 |
| JUL | W | 8,177 | 8,734 | 7,694 | 5,774 | 7,923 | 6,446 |
|  | AN | 9,322 | 9,223 | 8,922 | 5,635 | 9,107 | 5,560 |
|  | BN | 9,380 | 8,725 | 7,631 | 6,593 | 7,709 | 6,380 |
|  | D | 8,290 | 7,674 | 5,101 | 4,970 | 4,658 | 4,231 |
|  | C | 6,450 | 4,891 | 2,573 | 2,963 | 2,296 | 2,851 |
|  | All | 8,322 | 8,009 | 6,544 | 5,306 | 6,519 | 5,293 |


| Alternative 4: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 4,923 | 7,222 | 5,763 | 4,048 | 5,801 | 4,116 |
|  | AN | 7,080 | 8,089 | 6,629 | 5,268 | 6,652 | 4,739 |
|  | BN | 7,236 | 7,570 | 6,442 | 5,233 | 6,239 | 4,625 |
|  | D | 7,711 | 5,487 | 4,704 | 4,135 | 4,161 | 3,560 |
|  | C | 2,841 | 2,340 | 2,214 | 2,736 | 2,306 | 2,841 |
|  | All | 5,941 | 6,313 | 5,254 | 4,256 | 5,129 | 3,985 |
| SEP | W | 4,351 | 10,329 | 3,212 | 3,131 | 9,057 | 8,469 |
|  | AN | 4,194 | 8,773 | 4,207 | 3,464 | 7,030 | 5,989 |
|  | BN | 4,252 | 4,786 | 3,418 | 2,970 | 3,501 | 2,970 |
|  | D | 4,179 | 2,848 | 3,465 | 3,305 | 2,991 | 3,269 |
|  | C | 2,054 | 1,964 | 2,485 | 2,969 | 2,296 | 2,994 |
|  | All | 3,937 | 6,289 | 3,342 | 3,167 | 5,490 | 5,225 |
| OCT | W | 4,176 | 3,746 | 3,967 | 3,593 | 3,795 | 3,486 |
|  | AN | 2,630 | 2,988 | 3,543 | 2,982 | 3,409 | 3,162 |
|  | BN | 3,754 | 3,437 | 3,535 | 3,401 | 3,467 | 3,562 |
|  | D | 3,033 | 2,987 | 3,320 | 2,972 | 3,447 | 2,628 |
|  | C | 2,938 | 2,566 | 3,357 | 3,493 | 3,123 | 3,638 |
|  | All | 3,446 | 3,243 | 3,600 | 3,320 | 3,507 | 3,286 |
| NOV | W | 4,697 | 3,825 | 4,121 | 3,977 | 3,750 | 3,848 |
|  | AN | 3,065 | 3,186 | 2,949 | 2,814 | 2,982 | 2,956 |
|  | BN | 2,687 | 2,455 | 2,424 | 2,309 | 2,464 | 2,447 |
|  | D | 2,342 | 2,125 | 2,254 | 2,068 | 2,243 | 2,141 |
|  | C | 2,084 | 2,107 | 2,038 | 2,333 | 2,045 | 2,264 |
|  | All | 3,216 | 2,873 | 2,945 | 2,862 | 2,838 | 2,872 |
| DEC | W | 12,409 | 10,246 | 11,590 | 12,754 | 10,755 | 11,520 |
|  | AN | 5,193 | 6,000 | 6,021 | 4,478 | 5,523 | 5,673 |
|  | BN | 3,079 | 3,249 | 3,768 | 3,255 | 3,181 | 3,097 |
|  | D | 2,838 | 2,811 | 2,644 | 2,431 | 2,800 | 2,669 |
|  | C | 2,975 | 2,054 | 2,991 | 2,568 | 2,973 | 2,332 |
|  | All | 6,279 | 5,599 | 6,217 | 6,165 | 5,811 | 5,939 |

Table 18. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 4: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 |  | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING <br> CONDITIONS <br> vs. H4 | $\begin{gathered} \text { NAA vs. } \\ \text { H4 } \end{gathered}$ |
| JAN | W | $\begin{gathered} \hline 4,245 \\ (18 \%) \end{gathered}$ | $\begin{gathered} \hline 1,672 \\ (6.4 \%) \end{gathered}$ | $\begin{gathered} \hline 3,975 \\ (16.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,403 \\ (5.4 \%) \end{gathered}$ | $\begin{gathered} \hline 1,708 \\ (7.3 \%) \end{gathered}$ | $\begin{gathered} -865 \\ (-3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,777 \\ (11.8 \%) \end{gathered}$ | $\begin{gathered} \hline 205 \\ (0.8 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 362 \\ (2.9 \%) \end{gathered}$ | $\begin{gathered} 838 \\ (7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 495 \\ (4 \%) \end{gathered}$ | $\begin{gathered} 971 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -437 \\ (-3.5 \%) \end{gathered}$ | $\begin{gathered} 40 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 380 \\ (3.1 \%) \end{gathered}$ | $\begin{gathered} 857 \\ (7.2 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -977 \\ (-15 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -53 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -503 \\ (-7.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 421 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -944 \\ (-14.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -20 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -762 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 162 \\ (2.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 147 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 356 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 140 \\ (3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 349 \\ (7.9 \%) \end{gathered}$ | $\begin{gathered} -111 \\ (-2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 98 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -150 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 59 \\ (1.3 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 229 \\ (6.3 \%) \end{gathered}$ | $\begin{gathered} 39 \\ (1 \%) \end{gathered}$ | $\begin{gathered} 514 \\ (14.1 \%) \end{gathered}$ | $\begin{gathered} 323 \\ (8.4 \%) \end{gathered}$ | $\begin{gathered} 275 \\ (7.5 \%) \end{gathered}$ | $\begin{gathered} 85 \\ (2.2 \%) \end{gathered}$ | $\begin{gathered} 159 \\ (4.4 \%) \end{gathered}$ | $\begin{gathered} -31 \\ (-0.8 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 1,298 \\ (10.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 728 \\ (5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,353 \\ (11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 783 \\ (6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 332 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} -238 \\ (-1.9 \%) \end{gathered}$ | $\begin{array}{r} 797 \\ (6.7 \%) \\ \hline \end{array}$ | $\begin{gathered} 226 \\ (1.8 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} 5,405 \\ (20 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,379 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,894 \\ (18.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 868 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,521 \\ (20.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,495 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,465 \\ (16.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 439 \\ (1.4 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 1,582 \\ (10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,801 \\ (12.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,354 \\ (15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,574 \\ (17.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 930 \\ (6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,149 \\ (7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,528 \\ (10.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,748 \\ (12 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -389 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} 871 \\ (11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 593 \\ (6.5 \%) \end{gathered}$ | $\begin{gathered} 1,853 \\ (23.5 \%) \end{gathered}$ | $\begin{aligned} & -1,009 \\ & (-11 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 251 \\ (3.2 \%) \end{gathered}$ | $\begin{gathered} -398 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} 862 \\ (10.9 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 52 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} 17 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -80 \\ (-1.8 \%) \end{gathered}$ | $\begin{gathered} -115 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -23 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} -74 \\ (-1.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-108 \\ (-2.4 \%) \\ \hline \end{array}$ |
|  | C | $\begin{gathered} -219 \\ (-6.8 \%) \end{gathered}$ | $\begin{gathered} -78 \\ (-2.5 \%) \end{gathered}$ | $\begin{gathered} -215 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -74 \\ (-2.4 \%) \end{gathered}$ | $\begin{gathered} -107 \\ (-3.3 \%) \end{gathered}$ | $\begin{gathered} 34 \\ (1.1 \%) \end{gathered}$ | $\begin{gathered} -124 \\ (-3.8 \%) \end{gathered}$ | $\begin{gathered} 17 \\ (0.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 1,858 \\ (13.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 842 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,948 \\ (14.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 932 \\ (6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,701 \\ (12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 685 \\ (4.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,537 \\ (11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 521 \\ (3.5 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 2,701 \\ (11.2 \%) \end{gathered}$ | $\begin{gathered} 89 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,781 \\ (11.5 \%) \end{gathered}$ | $\begin{gathered} 169 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,244 \\ (9.3 \%) \end{gathered}$ | $\begin{gathered} -367 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} 2,639 \\ (10.9 \%) \end{gathered}$ | $\begin{gathered} 27 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 3,201 \\ (16 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,701 \\ (7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,536 \\ (12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,036 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} 2,389 \\ (12 \%) \\ \hline \end{array}$ | $\begin{gathered} 890 \\ (4.1 \%) \end{gathered}$ | $\begin{aligned} & 1,395 \\ & (7 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -104 \\ (-0.5 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -1,166 \\ (-14.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 88 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -554 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 700 \\ (10.2 \%) \end{gathered}$ | $\begin{gathered} -1,656 \\ (-20.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -402 \\ (-5.8 \%) \end{gathered}$ | $\begin{gathered} \hline-1,112 \\ (-13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 142 \\ (2.1 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 54 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 187 \\ (3.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 65 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 198 \\ (4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} 163 \\ (3.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -111 \\ (-2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (0.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -26 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} 151 \\ (5.5 \%) \end{gathered}$ | $\begin{gathered} 72 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 248 \\ (9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -88 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} 88 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} 182 \\ (6.6 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} \hline 1,134 \\ (8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 355 \\ (2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,183 \\ (8.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 404 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 772 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -6 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 827 \\ (6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 49 \\ (0.3 \%) \\ \hline \end{gathered}$ |
| APR | W | $\begin{gathered} -45 \\ (-0.3 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3,368 \\ (21.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3,413 \\ (21.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -45 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,322 \\ (20.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,368 \\ (21.2 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -136 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 111 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,175 \\ (42.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,423 \\ (46.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -234 \\ (-2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,588 \\ (36.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} 3,835 \\ (40 \%) \\ \hline \end{array}$ |
|  | BN | $\begin{gathered} 354 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 566 \\ (10.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,977 \\ (92.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5,189 \\ (100 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 321 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 533 \\ (10.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6,023 \\ (111.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 6,235 \\ (120.2 \%) \\ \hline \end{array}$ |
|  | D | $\begin{gathered} 654 \\ (15.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 669 \\ (16.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 575 \\ (13.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 590 \\ (14.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 554 \\ (13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 569 \\ (13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 615 \\ (14.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} 629 \\ (15.2 \%) \\ \hline \end{array}$ |
|  | C | $\begin{gathered} 216 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 329 \\ (10.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -69 \\ (-2.1 \%) \end{gathered}$ | $\begin{gathered} 45 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 120 \\ (3.6 \%) \end{gathered}$ | $\begin{gathered} 233 \\ (7.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -40 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} 73 \\ (2.3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 201 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 308 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,645 \\ (30.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,751 \\ (31.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 145 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 252 \\ (2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,736 \\ (31.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,843 \\ (32.7 \%) \end{gathered}$ |


| Alternative 4: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{gathered} -3,710 \\ (-25.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 292 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,382 \\ (-9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,619 \\ (25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,674 \\ (-25.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 328 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -845 \\ (-5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3,157 \\ (30.4 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -364 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 821 \\ (11.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,117 \\ (13.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,301 \\ (33.4 \%) \end{gathered}$ | $\begin{gathered} -350 \\ (-4.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 835 \\ (12.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,679 \\ (20.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,864 \\ (41.6 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 585 \\ (12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 781 \\ (17.3 \%) \end{gathered}$ | $\begin{gathered} 1,841 \\ (39.1 \%) \end{gathered}$ | $\begin{gathered} 2,037 \\ (45.2 \%) \end{gathered}$ | $\begin{gathered} 837 \\ (17.8 \%) \end{gathered}$ | $\begin{array}{c\|} \hline 1,033 \\ (22.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,607 \\ (34.2 \%) \end{gathered}$ | $\begin{aligned} & 1,803 \\ & (40 \%) \\ & \hline \end{aligned}$ |
|  | D | $\begin{gathered} 530 \\ (14.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 415 \\ (11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 663 \\ (18.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 548 \\ (14.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 454 \\ (12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 338 \\ (9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 536 \\ (14.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 421 \\ (11.2 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -79 \\ (-3.3 \%) \end{gathered}$ | $\begin{gathered} -11 \\ (-0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -94 \\ (-3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -26 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -107 \\ (-4.5 \%) \end{gathered}$ | $\begin{gathered} -39 \\ (-1.7 \%) \end{gathered}$ | $\begin{gathered} -83 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -14 \\ (-0.6 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -1,025 \\ (-13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 435 \\ (7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 171 \\ (2.2 \%) \end{gathered}$ | $\begin{gathered} 1,632 \\ (26.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -989 \\ (-12.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 471 \\ (7.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 358 \\ (4.7 \%) \end{gathered}$ | $\begin{gathered} 1,818 \\ (29.2 \%) \end{gathered}$ |
| JUN | W | $\begin{gathered} -1,200 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 1,823 \\ (25.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -3,154 \\ (-30.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -131 \\ (-1.8 \%) \end{gathered}$ | $\begin{gathered} -815 \\ (-8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,208 \\ (30.7 \%) \end{gathered}$ | $\begin{gathered} -3,323 \\ (-32.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -300 \\ (-4.2 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 2,203 \\ (34.5 \%) \end{gathered}$ | $\begin{gathered} \hline 2,997 \\ (53.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -377 \\ (-5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 416 \\ (7.4 \%) \end{gathered}$ | $\begin{gathered} 2,246 \\ (35.1 \%) \end{gathered}$ | $\begin{gathered} \hline 3,040 \\ (54.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -271 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} 523 \\ (9.3 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 2,600 \\ (57.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 2,753 \\ (63.4 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,852 \\ (41.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,005 \\ (46.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,659 \\ (59.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 2,812 \\ (64.8 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,041 \\ (23.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,195 \\ (27.5 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 106 \\ (2.8 \%) \end{gathered}$ | $\begin{array}{\|c} 592 \\ (17.6 \%) \\ \hline \end{array}$ | $\begin{gathered} 249 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 735 \\ (21.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} 506 \\ (15 \%) \end{gathered}$ | $\begin{gathered} -452 \\ (-11.7 \%) \end{gathered}$ | $\begin{gathered} 34 \\ (1 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -359 \\ (-12.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -99 \\ (-3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -413 \\ (-14.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -153 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -278 \\ (-10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -18 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -432 \\ (-15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -172 \\ (-6.8 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 357 \\ (5.8 \%) \end{gathered}$ | $\begin{gathered} \hline 1,602 \\ (32.4 \%) \end{gathered}$ | $\begin{gathered} -745 \\ (-12 \%) \end{gathered}$ | $\begin{gathered} 501 \\ (10.1 \%) \end{gathered}$ | $\begin{gathered} 488 \\ (7.9 \%) \end{gathered}$ | $\begin{gathered} 1,734 \\ (35 \%) \end{gathered}$ | $\begin{gathered} -1,078 \\ (-17.4 \%) \end{gathered}$ | $\begin{gathered} 168 \\ (3.4 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} -483 \\ (-5.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,041 \\ (-11.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -2,403 \\ (-29.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,960 \\ (-33.9 \%) \end{gathered}$ | $\begin{gathered} -255 \\ (-3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -812 \\ (-9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,731 \\ (-21.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,288 \\ (-26.2 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -400 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} -300 \\ (-3.3 \%) \end{gathered}$ | $\begin{gathered} \hline-3,687 \\ (-39.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,588 \\ (-38.9 \%) \end{gathered}$ | $\begin{gathered} -216 \\ (-2.3 \%) \end{gathered}$ | $\begin{gathered} -116 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} -3,763 \\ (-40.4 \%) \end{gathered}$ | $\begin{gathered} \hline-3,663 \\ (-39.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -1,749 \\ (-18.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,094 \\ (-12.5 \%) \end{gathered}$ | $\begin{gathered} -2,787 \\ (-29.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,132 \\ (-24.4 \%) \end{gathered}$ | $\begin{gathered} -1,672 \\ (-17.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,016 \\ (-11.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -3,001 \\ (-32 \%) \\ \hline \end{array}$ | $\begin{gathered} -2,345 \\ (-26.9 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -3,189 \\ (-38.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,573 \\ (-33.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -3,319 \\ (-40 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,704 \\ (-35.2 \%) \end{gathered}$ | $\begin{gathered} -3,632 \\ (-43.8 \%) \end{gathered}$ | $\begin{gathered} -3,016 \\ (-39.3 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -4,059 \\ & (-49 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -3,443 \\ (-44.9 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -3,878 \\ (-60.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,319 \\ (-47.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,487 \\ (-54.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,928 \\ (-39.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,154 \\ (-64.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,595 \\ (-53.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,600 \\ (-55.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,040 \\ (-41.7 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -1,778 \\ (-21.4 \%) \end{gathered}$ | $\begin{gathered} -1,465 \\ (-18.3 \%) \end{gathered}$ | $\begin{gathered} -3,016 \\ (-36.2 \%) \end{gathered}$ | $\begin{gathered} -2,703 \\ (-33.8 \%) \end{gathered}$ | $\begin{gathered} -1,803 \\ (-21.7 \%) \end{gathered}$ | $\begin{gathered} -1,490 \\ (-18.6 \%) \end{gathered}$ | $\begin{gathered} -3,029 \\ (-36.4 \%) \end{gathered}$ | $\begin{gathered} -2,716 \\ (-33.9 \%) \end{gathered}$ |
| AUG | W | $\begin{gathered} 840 \\ (17.1 \%) \\ \hline \end{gathered}$ | $\left(\begin{array}{c} -1,459 \\ (-20.2 \%) \end{array}\right.$ | $\begin{gathered} -875 \\ (-17.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,174 \\ (-43.9 \%) \end{gathered}$ | $\begin{gathered} 878 \\ (17.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,421 \\ (-19.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -808 \\ (-16.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -3,106 \\ (-43 \%) \\ \hline \end{array}$ |
|  | AN | $\begin{gathered} -451 \\ (-6.4 \%) \end{gathered}$ | $\begin{aligned} & -1,460 \\ & (-18 \%) \end{aligned}$ | $\begin{gathered} -1,812 \\ (-25.6 \%) \end{gathered}$ | $\begin{gathered} -2,821 \\ (-34.9 \%) \end{gathered}$ | $\begin{gathered} -428 \\ (-6.1 \%) \end{gathered}$ | $\begin{gathered} -1,437 \\ (-17.8 \%) \end{gathered}$ | $\begin{gathered} -2,341 \\ (-33.1 \%) \end{gathered}$ | $\begin{gathered} -3,350 \\ (-41.4 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -794 \\ (-11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,128 \\ (-14.9 \%) \end{gathered}$ | $\begin{gathered} -2,003 \\ (-27.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,337 \\ (-30.9 \%) \end{gathered}$ | $\begin{gathered} -996 \\ (-13.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,330 \\ (-17.6 \%) \end{gathered}$ | $\begin{gathered} -2,611 \\ (-36.1 \%) \end{gathered}$ | $\begin{gathered} -2,945 \\ (-38.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{aligned} & \hline-3,007 \\ & (-39 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -783 \\ (-14.3 \%) \end{gathered}$ | $\begin{gathered} \hline-3,576 \\ (-46.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,352 \\ (-24.6 \%) \end{gathered}$ | $\begin{aligned} & \hline-3,550 \\ & (-46 \%) \end{aligned}$ | $\begin{gathered} -1,326 \\ (-24.2 \%) \end{gathered}$ | $\begin{gathered} -4,152 \\ (-53.8 \%) \end{gathered}$ | $\begin{gathered} -1,928 \\ (-35.1 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -626 \\ (-22.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -126 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -104 \\ (-3.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 396 \\ (16.9 \%) \end{gathered}$ | $\begin{gathered} -534 \\ (-18.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -34 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 501 \\ (21.4 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -687 \\ (-11.6 \%) \end{gathered}$ | $\begin{gathered} -1,059 \\ (-16.8 \%) \end{gathered}$ | $\begin{gathered} -1,685 \\ (-28.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,057 \\ (-32.6 \%) \end{gathered}$ | $\begin{gathered} -812 \\ (-13.7 \%) \end{gathered}$ | $\begin{gathered} -1,184 \\ (-18.8 \%) \end{gathered}$ | $\begin{gathered} -1,956 \\ (-32.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,328 \\ (-36.9 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{gathered} -1,139 \\ (-26.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7,117 \\ (-68.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -1,220 \\ (-28 \%) \\ \hline \end{array}$ | $\begin{gathered} -7,198 \\ (-69.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4,705 \\ (108.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,273 \\ (-12.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,118 \\ (94.6 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-1,860 \\ & (-18 \%) \\ & \hline \end{aligned}$ |
|  | AN | $\begin{gathered} 12 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} -4,567 \\ (-52.1 \%) \end{gathered}$ | $\begin{gathered} -730 \\ (-17.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,309 \\ (-60.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,835 \\ (67.6 \%) \end{gathered}$ | $\begin{gathered} -1,744 \\ (-19.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,795 \\ (42.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,785 \\ (-31.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -833 \\ (-19.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,368 \\ (-28.6 \%) \end{gathered}$ | $\begin{gathered} -1,282 \\ (-30.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,816 \\ (-37.9 \%) \end{gathered}$ | $\begin{gathered} -751 \\ (-17.7 \%) \end{gathered}$ | $\begin{gathered} -1,285 \\ (-26.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,282 \\ (-30.1 \%) \end{gathered}$ | $\begin{gathered} -1,816 \\ (-37.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -714 \\ (-17.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 617 \\ (21.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -874 \\ (-20.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 457 \\ (16.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,188 \\ (-28.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 143 \\ (5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -910 \\ (-21.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 421 \\ (14.8 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 431 \\ (21 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} 521 \\ (26.5 \%) \\ \hline \end{array}$ | $\begin{gathered} 915 \\ (44.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,005 \\ (51.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 242 \\ (11.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 332 \\ (16.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 940 \\ (45.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,031 \\ (52.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -595 \\ (-15.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,947 \\ (-46.9 \%) \end{gathered}$ | $\begin{gathered} -770 \\ (-19.6 \%) \end{gathered}$ | $\begin{gathered} -3,122 \\ (-49.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,553 \\ (39.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -798 \\ (-12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,287 \\ (32.7 \%) \end{gathered}$ | $\begin{gathered} -1,064 \\ (-16.9 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} -209 \\ (-5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 222 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -583 \\ (-14 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -153 \\ (-4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -381 \\ (-9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 49 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -690 \\ (-16.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -259 \\ (-6.9 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 912 \\ (34.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 554 \\ (18.6 \%) \end{gathered}$ | $\begin{gathered} 352 \\ (13.4 \%) \end{gathered}$ | $\begin{gathered} -6 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} 779 \\ (29.6 \%) \end{gathered}$ | $\begin{gathered} 421 \\ (14.1 \%) \end{gathered}$ | $\begin{gathered} 532 \\ (20.2 \%) \end{gathered}$ | $\begin{gathered} 174 \\ (5.8 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -219 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 97 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -352 \\ (-9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -36 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -287 \\ (-7.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 29 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -192 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 124 \\ (3.6 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 288 \\ (9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 334 \\ (11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -60 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -15 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} 414 \\ (13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 460 \\ (15.4 \%) \end{gathered}$ | $\begin{gathered} -404 \\ (-13.3 \%) \end{gathered}$ | $\begin{gathered} -359 \\ (-12 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 419 \\ (14.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 792 \\ (30.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 554 \\ (18.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 927 \\ (36.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 184 \\ (6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 557 \\ (21.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 700 \\ (23.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,072 \\ (41.8 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 155 \\ (4.5 \%) \end{gathered}$ | $\begin{gathered} 357 \\ (11 \%) \end{gathered}$ | $\begin{gathered} -126 \\ (-3.6 \%) \end{gathered}$ | $\begin{gathered} 77 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 62 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 265 \\ (8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -160 \\ (-4.6 \%) \end{gathered}$ | $\begin{gathered} 43 \\ (1.3 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} -575 \\ (-12.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 296 \\ (7.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -720 \\ (-15.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 152 \\ (4 \%) \end{gathered}$ | $\begin{gathered} -947 \\ (-20.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -75 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} -849 \\ (-18.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 23 \\ (0.6 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -116 \\ (-3.8 \%) \end{gathered}$ | $\begin{gathered} -238 \\ (-7.5 \%) \end{gathered}$ | $\begin{gathered} -251 \\ (-8.2 \%) \end{gathered}$ | $\begin{gathered} -372 \\ (-11.7 \%) \end{gathered}$ | $\begin{gathered} -83 \\ (-2.7 \%) \end{gathered}$ | $\begin{gathered} -205 \\ (-6.4 \%) \end{gathered}$ | $\begin{gathered} -108 \\ (-3.5 \%) \end{gathered}$ | $\begin{gathered} -230 \\ (-7.2 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -263 \\ (-9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -31 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} -379 \\ (-14.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -146 \\ (-5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -223 \\ (-8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 10 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -240 \\ (-8.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-0.3 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -89 \\ (-3.8 \%) \end{gathered}$ | $\begin{gathered} 129 \\ (6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -275 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -57 \\ (-2.7 \%) \end{gathered}$ | $\begin{gathered} -99 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} 118 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -202 \\ (-8.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (0.8 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -47 \\ (-2.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-69 \\ (-3.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 249 \\ (12 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 226 \\ (10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -40 \\ (-1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -62 \\ (-3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 180 \\ (8.6 \%) \end{gathered}$ | $\begin{gathered} 157 \\ (7.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -271 \\ (-8.4 \%) \end{gathered}$ | $\begin{gathered} 72 \\ (2.5 \%) \end{gathered}$ | $\begin{gathered} -354 \\ (-11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-0.4 \%) \end{gathered}$ | $\begin{gathered} -378 \\ (-11.8 \%) \end{gathered}$ | $\begin{gathered} -35 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} -344 \\ (-10.7 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (0 \%) \end{gathered}$ |
| DEC | W | $\begin{gathered} -819 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,344 \\ (13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 345 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} 2,509 \\ (24.5 \%) \end{gathered}$ | $\begin{gathered} -1,654 \\ (-13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 509 \\ (5 \%) \end{gathered}$ | $\begin{gathered} -889 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,274 \\ (12.4 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 828 \\ (15.9 \%) \end{gathered}$ | $\begin{gathered} 21 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} -715 \\ (-13.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,522 \\ (-25.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 329 \\ (6.3 \%) \end{gathered}$ | $\begin{gathered} -477 \\ (-8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 479 \\ (9.2 \%) \end{gathered}$ | $\begin{gathered} -327 \\ (-5.5 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 688 \\ (22.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 519 \\ (16 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 176 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} 102 \\ (3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -68 \\ (-2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 17 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -152 \\ (-4.7 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -194 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -167 \\ (-6 \%) \end{gathered}$ | $\begin{gathered} -407 \\ (-14.3 \%) \end{gathered}$ | $\begin{gathered} -380 \\ (-13.5 \%) \end{gathered}$ | $\begin{gathered} -38 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} -11 \\ (-0.4 \%) \end{gathered}$ | $\begin{gathered} -169 \\ (-6 \%) \end{gathered}$ | $\begin{gathered} -143 \\ (-5.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 16 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 936 \\ (45.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -407 \\ (-13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 514 \\ (25 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 918 \\ (44.7 \%) \end{gathered}$ | $\begin{gathered} -643 \\ (-21.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 277 \\ (13.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -61 \\ (-1 \%) \end{gathered}$ | $\begin{gathered} 618 \\ (11 \%) \end{gathered}$ | $\begin{gathered} -114 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 565 \\ (10.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -467 \\ (-7.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 212 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} -340 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 339 \\ (6.1 \%) \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.4.1.10 American River at Nimbus Dam

Table 19. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 4: Upstream-American River at Nimbus Dam |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 8,806 | 11,036 | 11,143 | 11,115 | 11,040 | 11,005 |
|  | AN | 4,833 | 5,805 | 5,969 | 6,096 | 5,753 | 5,729 |
|  | BN | 2,392 | 2,073 | 2,098 | 2,210 | 2,026 | 2,137 |
|  | D | 1,723 | 1,506 | 1,411 | 1,571 | 1,417 | 1,446 |
|  | C | 1,474 | 1,095 | 1,156 | 1,175 | 1,258 | 1,153 |
|  | All | 4,502 | 5,194 | 5,244 | 5,310 | 5,184 | 5,179 |
| FEB | W | 9,294 | 11,102 | 11,163 | 11,167 | 11,107 | 11,114 |
|  | AN | 6,469 | 8,153 | 8,327 | 8,344 | 8,243 | 8,223 |
|  | BN | 4,360 | 4,961 | 5,029 | 5,215 | 4,934 | 5,144 |
|  | D | 1,852 | 1,844 | 1,888 | 1,961 | 1,972 | 1,850 |
|  | C | 1,185 | 1,007 | 1,075 | 1,069 | 1,036 | 1,089 |
|  | All | 5,218 | 6,112 | 6,189 | 6,239 | 6,155 | 6,171 |
| MAR | W | 6,089 | 6,992 | 6,982 | 6,989 | 6,987 | 6,984 |
|  | AN | 5,454 | 5,790 | 5,920 | 5,914 | 5,811 | 5,752 |
|  | BN | 2,429 | 2,794 | 2,834 | 2,841 | 2,842 | 2,802 |
|  | D | 2,191 | 2,314 | 2,200 | 2,282 | 2,194 | 2,240 |
|  | C | 939 | 938 | 867 | 856 | 872 | 865 |
|  | All | 3,762 | 4,187 | 4,174 | 4,193 | 4,160 | 4,153 |
| APR | W | 5,300 | 5,508 | 5,510 | 5,504 | 5,517 | 5,522 |
|  | AN | 3,546 | 3,298 | 3,321 | 3,295 | 3,301 | 3,303 |
|  | BN | 3,126 | 2,970 | 2,995 | 2,986 | 2,952 | 2,976 |
|  | D | 1,837 | 1,888 | 1,913 | 1,874 | 1,884 | 1,817 |
|  | C | 1,156 | 1,255 | 1,278 | 1,250 | 1,270 | 1,251 |
|  | All | 3,305 | 3,334 | 3,351 | 3,331 | 3,336 | 3,324 |
| MAY | W | 6,157 | 4,592 | 4,654 | 4,598 | 4,674 | 4,603 |
|  | AN | 3,885 | 2,521 | 2,758 | 2,658 | 2,775 | 2,713 |
|  | BN | 2,930 | 1,969 | 2,435 | 1,985 | 2,381 | 2,009 |
|  | D | 1,790 | 1,686 | 1,957 | 1,822 | 2,029 | 1,863 |
|  | C | 1,182 | 992 | 1,011 | 1,007 | 1,002 | 1,005 |
|  | All | 3,587 | 2,676 | 2,873 | 2,733 | 2,886 | 2,756 |
| JUN | W | 6,003 | 3,694 | 4,472 | 3,905 | 4,373 | 3,912 |
|  | AN | 3,346 | 3,022 | 3,605 | 2,791 | 3,597 | 2,877 |
|  | BN | 2,863 | 2,883 | 4,040 | 2,941 | 3,517 | 3,042 |
|  | D | 2,506 | 2,596 | 2,743 | 2,474 | 2,815 | 2,573 |
|  | C | 1,824 | 1,025 | 1,563 | 1,355 | 1,226 | 1,508 |
|  | All | 3,699 | 2,825 | 3,466 | 2,890 | 3,311 | 2,966 |
| JUL | W | 4,108 | 3,860 | 3,729 | 3,708 | 3,706 | 3,802 |
|  | AN | 4,638 | 4,927 | 4,696 | 4,627 | 4,738 | 4,612 |
|  | BN | 4,744 | 4,328 | 3,866 | 4,146 | 4,198 | 4,064 |
|  | D | 3,577 | 3,143 | 2,812 | 2,998 | 2,771 | 2,767 |
|  | C | 1,784 | 2,022 | 1,663 | 2,067 | 2,070 | 1,966 |
|  | All | 3,838 | 3,670 | 3,390 | 3,521 | 3,496 | 3,470 |


| Alternative 4: Upstream-American River at Nimbus Dam |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 3,520 | 2,132 | 2,122 | 2,238 | 2,118 | 2,236 |
|  | AN | 2,542 | 1,944 | 1,971 | 2,058 | 1,971 | 2,070 |
|  | BN | 2,495 | 2,324 | 1,793 | 2,131 | 1,757 | 2,310 |
|  | D | 2,613 | 1,620 | 1,346 | 1,424 | 1,369 | 1,539 |
|  | C | 1,500 | 1,100 | 860 | 997 | 855 | 1,021 |
|  | All | 2,707 | 1,874 | 1,689 | 1,833 | 1,685 | 1,893 |
| SEP | W | 4,025 | 3,622 | 1,960 | 2,013 | 3,026 | 3,604 |
|  | AN | 2,764 | 2,044 | 1,515 | 1,483 | 1,819 | 2,038 |
|  | BN | 2,370 | 1,605 | 1,370 | 1,500 | 1,377 | 1,533 |
|  | D | 1,856 | 1,182 | 1,170 | 1,236 | 1,228 | 1,315 |
|  | C | 1,164 | 594 | 705 | 711 | 662 | 640 |
|  | All | 2,663 | 2,068 | 1,437 | 1,487 | 1,827 | 2,085 |
| OCT | W | 1,723 | 1,634 | 1,557 | 1,659 | 1,649 | 1,448 |
|  | AN | 1,706 | 1,732 | 1,589 | 1,650 | 1,430 | 1,484 |
|  | BN | 1,602 | 1,767 | 2,062 | 1,943 | 2,297 | 1,769 |
|  | D | 1,468 | 1,258 | 1,449 | 1,371 | 1,529 | 1,319 |
|  | C | 1,461 | 1,655 | 1,531 | 1,502 | 991 | 1,576 |
|  | All | 1,605 | 1,592 | 1,620 | 1,620 | 1,605 | 1,498 |
| NOV | W | 3,527 | 2,612 | 2,482 | 2,719 | 2,508 | 2,522 |
|  | AN | 3,181 | 2,554 | 2,284 | 2,390 | 2,406 | 2,391 |
|  | BN | 2,067 | 1,716 | 1,612 | 1,664 | 1,593 | 1,578 |
|  | D | 2,176 | 1,424 | 1,341 | 1,455 | 1,494 | 1,552 |
|  | C | 1,994 | 1,608 | 1,601 | 1,595 | 1,490 | 1,495 |
|  | All | 2,706 | 2,043 | 1,925 | 2,049 | 1,965 | 1,979 |
| DEC | W | 6,302 | 6,171 | 6,452 | 6,710 | 6,090 | 6,313 |
|  | AN | 3,137 | 2,933 | 2,947 | 3,011 | 2,927 | 3,045 |
|  | BN | 2,676 | 2,527 | 2,806 | 2,794 | 2,591 | 2,606 |
|  | D | 1,741 | 1,351 | 1,416 | 1,471 | 1,340 | 1,401 |
|  | C | 1,524 | 1,251 | 1,318 | 1,368 | 1,315 | 1,320 |
|  | All | 3,519 | 3,297 | 3,460 | 3,568 | 3,288 | 3,393 |

Table 20. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 4: Upstream-American River at Nimbus Dam |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| JAN | W | $\begin{gathered} \hline 2,336 \\ (26.5 \%) \end{gathered}$ | $\begin{gathered} \hline 106 \\ (1 \%) \end{gathered}$ | $\begin{gathered} \hline 2,309 \\ (26.2 \%) \end{gathered}$ | $\begin{gathered} 79 \\ (0.7 \%) \end{gathered}$ | $\begin{gathered} \hline 2,233 \\ (25.4 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,199 \\ (25 \%) \end{gathered}$ | $\begin{gathered} -31 \\ (-0.3 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 1,137 \\ (23.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 164 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,263 \\ (26.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 291 \\ (5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 921 \\ (19.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -51 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 896 \\ (18.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -76 \\ (-1.3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -294 \\ (-12.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 25 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} -182 \\ (-7.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 137 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -366 \\ (-15.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -47 \\ (-2.2 \%) \end{gathered}$ | $\begin{gathered} -256 \\ (-10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 64 \\ (3.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} \hline-312 \\ (-18.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -95 \\ (-6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -152 \\ (-8.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 65 \\ (4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-306 \\ (-17.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-89 \\ (-5.9 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-277 \\ (-16.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -60 \\ (-4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -318 \\ (-21.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 61 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -300 \\ (-20.3 \%) \end{gathered}$ | $\begin{gathered} 80 \\ (7.3 \%) \end{gathered}$ | $\begin{gathered} -216 \\ (-14.7 \%) \end{gathered}$ | $\begin{gathered} 163 \\ (14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -321 \\ (-21.8 \%) \end{gathered}$ | $\begin{gathered} 58 \\ (5.3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 742 \\ (16.5 \%) \end{gathered}$ | $\begin{gathered} 50 \\ (1 \%) \end{gathered}$ | $\begin{gathered} 808 \\ (18 \%) \end{gathered}$ | $\begin{gathered} 117 \\ (2.2 \%) \end{gathered}$ | $\begin{gathered} 682 \\ (15.1 \%) \end{gathered}$ | $\begin{gathered} -10 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} 677 \\ (15 \%) \end{gathered}$ | $\begin{gathered} -15 \\ (-0.3 \%) \end{gathered}$ |
| FEB | W | $\begin{gathered} 1,870 \\ (20.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 61 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,874 \\ (20.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 65 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,814 \\ (19.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,820 \\ (19.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 1,858 \\ (28.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 174 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,875 \\ (29 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 192 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,774 \\ (27.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 90 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,754 \\ (27.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 71 \\ (0.9 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 669 \\ (15.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 68 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 855 \\ (19.6 \%) \end{gathered}$ | $\begin{gathered} 254 \\ (5.1 \%) \end{gathered}$ | $\begin{gathered} 574 \\ (13.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-27 \\ (-0.5 \%) \end{array}$ | $\begin{gathered} 784 \\ (18 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 182 \\ (3.7 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 36 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 45 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 109 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 120 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 128 \\ (7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (0.3 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -110 \\ (-9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ (6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -116 \\ (-9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 63 \\ (6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-149 \\ (-12.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -96 \\ (-8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 83 \\ (8.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 971 \\ (18.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 76 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,022 \\ (19.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 127 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 937 \\ (18 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 43 \\ (0.7 \%) \\ \hline \end{array}$ | $\begin{gathered} 953 \\ (18.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 59 \\ (1 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 893 \\ (14.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -10 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 900 \\ (14.8 \%) \end{gathered}$ | $\begin{gathered} -3 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 898 \\ (14.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 895 \\ (14.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 467 \\ (8.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 130 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 461 \\ (8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 124 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 358 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} 21 \\ (0.4 \%) \\ \hline \end{array}$ | $\begin{gathered} 299 \\ (5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -38 \\ (-0.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 405 \\ (16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 412 \\ (16.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 47 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 413 \\ (17 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 48 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 373 \\ (15.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 8 \\ (0.3 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 8 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -115 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} 91 \\ (4.1 \%) \end{gathered}$ | $\begin{gathered} -32 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \end{gathered}$ | $\begin{gathered} -121 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 49 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -74 \\ (-3.2 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -72 \\ (-7.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -71 \\ (-7.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -83 \\ (-8.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -81 \\ (-8.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -68 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -66 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -74 \\ (-7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -73 \\ (-7.8 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 412 \\ (10.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -13 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 431 \\ (11.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 398 \\ (10.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} -27 \\ (-0.6 \%) \\ \hline \end{array}$ | $\begin{gathered} 391 \\ (10.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -34 \\ (-0.8 \%) \\ \hline \end{gathered}$ |
| APR | W | $\begin{gathered} 210 \\ (4 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 204 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} -4 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 217 \\ (4.1 \%) \end{gathered}$ | $\begin{array}{\|c} 9 \\ (0.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 222 \\ (4.2 \%) \end{gathered}$ | $\begin{gathered} 13 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -225 \\ (-6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 22 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -251 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -245 \\ (-6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -243 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -130 \\ (-4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 26 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -140 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -174 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -18 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -150 \\ (-4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 76 \\ (4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 25 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 36 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -15 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 46 \\ (2.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-4 \\ (-0.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -21 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -72 \\ (-3.8 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 123 \\ (10.6 \%) \end{gathered}$ | $\begin{gathered} 23 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 94 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -6 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} 115 \\ (9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 96 \\ (8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4 \\ (-0.3 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 46 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 17 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 26 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 19 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -10 \\ (-0.3 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-American River at Nimbus Dam |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | $\begin{array}{\|c\|} \hline \text { EXISTING } \\ \text { CONDITIONS } \\ \text { vs. H3 } \\ \hline \end{array}$ | NAA vs. H3 | $\begin{array}{\|c\|} \hline \text { EXISTING } \\ \text { CONDITIONS } \\ \text { vs. H4 } \\ \hline \end{array}$ | NAA vs. H4 |
| MAY | W | $\begin{gathered} -1,502 \\ (-24.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 62 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,558 \\ (-25.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,483 \\ (-24.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 82 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,554 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 11 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{aligned} & -1,127 \\ & (-29 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 237 \\ (9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,227 \\ (-31.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 137 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,110 \\ (-28.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 254 \\ (10.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,172 \\ (-30.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 192 \\ (7.6 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -495 \\ (-16.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 466 \\ (23.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -945 \\ (-32.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (0.8 \%) \end{gathered}$ | $\begin{gathered} -549 \\ (-18.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 412 \\ (20.9 \%) \end{array}$ | $\begin{gathered} -921 \\ (-31.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 167 \\ (9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 271 \\ (16.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 136 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 239 \\ (13.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 343 \\ (20.4 \%) \\ \hline \end{array}$ | $\begin{gathered} 74 \\ (4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 178 \\ (10.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -171 \\ (-14.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 19 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -175 \\ (-14.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -180 \\ (-15.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 10 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -177 \\ (-15 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (1.3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -714 \\ (-19.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 196 \\ (7.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -854 \\ (-23.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 57 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -700 \\ (-19.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 210 \\ (7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -831 \\ (-23.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 79 \\ (3 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} -1,531 \\ (-25.5 \%) \end{gathered}$ | $\begin{gathered} 779 \\ (21.1 \%) \end{gathered}$ | $\begin{aligned} & -2,099 \\ & (-35 \%) \end{aligned}$ | $\begin{gathered} 211 \\ (5.7 \%) \end{gathered}$ | $\begin{gathered} -1,630 \\ (-27.1 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 680 \\ (18.4 \%) \end{array}$ | $\begin{gathered} -2,091 \\ (-34.8 \%) \end{gathered}$ | $\begin{gathered} 219 \\ (5.9 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 260 \\ (7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 583 \\ (19.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -554 \\ (-16.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -231 \\ (-7.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 252 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 575 \\ (19 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -469 \\ (-14 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-145 \\ (-4.8 \%) \\ \hline \end{array}$ |
|  | BN | $\begin{gathered} 1,177 \\ (41.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 1,158 \\ (40.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 77 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 58 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 654 \\ (22.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 635 \\ (22 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 178 \\ (6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 159 \\ (5.5 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 237 \\ (9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 147 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -32 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} -122 \\ (-4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 310 \\ (12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 219 \\ (8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 67 \\ (2.7 \%) \end{gathered}$ | $\begin{gathered} -23 \\ (-0.9 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -261 \\ (-14.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 538 \\ (52.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -469 \\ (-25.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 330 \\ (32.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -598 \\ (-32.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 201 \\ (19.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -316 \\ (-17.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 484 \\ (47.2 \%) \\ \hline \end{array}$ |
|  | All | $\begin{gathered} -233 \\ (-6.3 \%) \end{gathered}$ | $\begin{gathered} 641 \\ (22.7 \%) \end{gathered}$ | $\begin{gathered} -809 \\ (-21.9 \%) \end{gathered}$ | $\begin{gathered} 65 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} -388 \\ (-10.5 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 486 \\ (17.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -733 \\ (-19.8 \%) \end{gathered}$ | $\begin{gathered} 141 \\ (5 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} -379 \\ (-9.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -131 \\ (-3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -400 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -152 \\ (-3.9 \%) \end{gathered}$ | $\begin{gathered} -402 \\ (-9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -154 \\ (-4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -306 \\ (-7.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -58 \\ (-1.5 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 58 \\ (1.3 \%) \end{gathered}$ | $\begin{gathered} -231 \\ (-4.7 \%) \end{gathered}$ | $\begin{gathered} -11 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} -300 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 100 \\ (2.2 \%) \end{gathered}$ | $\begin{gathered} -189 \\ (-3.8 \%) \end{gathered}$ | $\begin{gathered} -26 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} -315 \\ (-6.4 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -879 \\ (-18.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -462 \\ (-10.7 \%) \end{gathered}$ | $\begin{gathered} -599 \\ (-12.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -183 \\ (-4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -547 \\ (-11.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -131 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} -680 \\ (-14.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -264 \\ (-6.1 \%) \\ \hline \end{array}$ |
|  | D | $\begin{gathered} -765 \\ (-21.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -331 \\ (-10.5 \%) \end{gathered}$ | $\begin{gathered} -579 \\ (-16.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -145 \\ (-4.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -807 \\ (-22.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-373 \\ (-11.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -810 \\ (-22.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -376 \\ (-12 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -121 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -359 \\ (-17.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 283 \\ (15.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 45 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 285 \\ (16 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 48 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 182 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -56 \\ (-2.8 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -447 \\ (-11.7 \%) \end{gathered}$ | $\begin{gathered} -280 \\ (-7.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -316 \\ (-8.2 \%) \end{gathered}$ | $\begin{gathered} -149 \\ (-4 \%) \end{gathered}$ | $\begin{gathered} -341 \\ (-8.9 \%) \end{gathered}$ | $\begin{gathered} -174 \\ (-4.7 \%) \end{gathered}$ | $\begin{gathered} -368 \\ (-9.6 \%) \end{gathered}$ | $\begin{gathered} -200 \\ (-5.5 \%) \\ \hline \end{gathered}$ |
| AUG | W | $\begin{gathered} -1,398 \\ (-39.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -10 \\ (-0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,283 \\ (-36.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} 106 \\ (5 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,402 \\ (-39.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -14 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,284 \\ (-36.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 104 \\ (4.9 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -571 \\ (-22.4 \%) \end{gathered}$ | $\begin{gathered} 27 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} -484 \\ (-19 \%) \end{gathered}$ | $\begin{gathered} 114 \\ (5.9 \%) \end{gathered}$ | $\begin{gathered} -571 \\ (-22.5 \%) \end{gathered}$ | $\begin{gathered} 26 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} -472 \\ (-18.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 125 \\ (6.4 \%) \\ \hline \end{array}$ |
|  | BN | $\begin{gathered} -702 \\ (-28.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -531 \\ (-22.9 \%) \end{gathered}$ | $\begin{gathered} -364 \\ (-14.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -193 \\ (-8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -738 \\ (-29.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-568 \\ (-24.4 \%) \end{array}$ | $\begin{gathered} -185 \\ (-7.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -15 \\ (-0.6 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -1,267 \\ (-48.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -274 \\ (-16.9 \%) \end{gathered}$ | $\begin{gathered} -1,188 \\ (-45.5 \%) \end{gathered}$ | $\begin{gathered} -195 \\ (-12.1 \%) \end{gathered}$ | $\begin{gathered} -1,244 \\ (-47.6 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-251 \\ (-15.5 \%) \end{array}$ | $\begin{gathered} -1,074 \\ (-41.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -81 \\ (-5 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -640 \\ (-42.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -240 \\ (-21.8 \%) \end{gathered}$ | $\begin{gathered} -503 \\ (-33.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -103 \\ (-9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -645 \\ (-43 \%) \end{gathered}$ | $\begin{gathered} -245 \\ (-22.3 \%) \end{gathered}$ | $\begin{gathered} -479 \\ (-31.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -79 \\ (-7.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -1,018 \\ (-37.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -185 \\ (-9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -874 \\ (-32.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -41 \\ (-2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,022 \\ (-37.7 \%) \\ \hline \end{gathered}$ | $\left\|\begin{array}{c} -189 \\ (-10.1 \%) \end{array}\right\|$ | $\begin{gathered} -814 \\ (-30.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ (1 \%) \end{gathered}$ |


| Alternative 4: Upstream-American River at Nimbus Dam |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{gathered} -2,065 \\ (-51.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,663 \\ (-45.9 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-2,012 \\ & (-50 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-1,610 \\ (-44.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -998 \\ (-24.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-596 \\ (-16.5 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-421 \\ (-10.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -19 \\ (-0.5 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} \hline-1,249 \\ (-45.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-529 \\ (-25.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,281 \\ (-46.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -561 \\ (-27.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -945 \\ (-34.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -225 \\ (-11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -726 \\ (-26.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -6 \\ (-0.3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -1,001 \\ (-42.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-235 \\ (-14.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -871 \\ (-36.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -105 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -994 \\ (-41.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-228 \\ (-14.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -838 \\ (-35.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -72 \\ (-4.5 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -686 \\ (-37 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -12 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -620 \\ (-33.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 55 \\ (4.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -629 \\ (-33.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 46 \\ (3.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -542 \\ (-29.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 133 \\ (11.2 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -459 \\ (-39.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 112 \\ (18.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -453 \\ (-38.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 118 \\ (19.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-503 \\ (-43.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 68 \\ (11.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -524 \\ (-45 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 47 \\ (7.8 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{aligned} & -1,226 \\ & (-46 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-631 \\ (-30.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,176 \\ (-44.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -581 \\ (-28.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -836 \\ (-31.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-241 \\ (-11.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -578 \\ (-21.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 17 \\ (0.8 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} -166 \\ (-9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -77 \\ (-4.7 \%) \end{gathered}$ | $\begin{gathered} -63 \\ (-3.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 25 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-232 \\ (-13.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -143 \\ (-8.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -275 \\ (-15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -186 \\ (-11.4 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -116 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -142 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -56 \\ (-3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-82 \\ (-4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -42 \\ (-2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -68 \\ (-4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -222 \\ (-13 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -248 \\ (-14.3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 460 \\ (28.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 296 \\ (16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 341 \\ (21.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 176 \\ (10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 399 \\ (24.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 235 \\ (13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 167 \\ (10.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -19 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 191 \\ (15.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -97 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 113 \\ (9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -38 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 172 \\ (13.6 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-149 \\ (-10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 60 \\ (4.8 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 70 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -124 \\ (-7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 41 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -153 \\ (-9.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 189 \\ (13 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-5 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 115 \\ (7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -79 \\ (-4.8 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 15 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 29 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 15 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 29 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 8 \\ (0.5 \%) \end{gathered}$ | $\begin{array}{\|c} \hline 22 \\ (1.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -107 \\ (-6.7 \%) \end{gathered}$ | $\begin{gathered} -93 \\ (-5.9 \%) \\ \hline \end{gathered}$ |
| NOV | W | $\begin{gathered} -1,045 \\ (-29.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -130 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} \hline-808 \\ (-22.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 107 \\ (4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,019 \\ (-28.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -104 \\ (-4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,004 \\ (-28.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -90 \\ (-3.4 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -897 \\ (-28.2 \%) \end{gathered}$ | $\begin{gathered} \hline-270 \\ (-10.6 \%) \end{gathered}$ | $\begin{gathered} -791 \\ (-24.9 \%) \end{gathered}$ | $\begin{gathered} -164 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -774 \\ (-24.3 \%) \end{gathered}$ | $\begin{gathered} -148 \\ (-5.8 \%) \end{gathered}$ | $\begin{gathered} -790 \\ (-24.8 \%) \end{gathered}$ | $\begin{gathered} -163 \\ (-6.4 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -455 \\ (-22 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -104 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -403 \\ (-19.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -52 \\ (-3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -475 \\ (-23 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -124 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -489 \\ (-23.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -138 \\ (-8.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -835 \\ (-38.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -83 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -721 \\ (-33.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 31 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -682 \\ (-31.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 70 \\ (4.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -625 \\ (-28.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 127 \\ (8.9 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -393 \\ (-19.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -6 \\ (-0.4 \%) \end{gathered}$ | $\begin{gathered} -399 \\ (-20 \%) \end{gathered}$ | $\begin{gathered} -13 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -504 \\ (-25.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -118 \\ (-7.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -499 \\ (-25 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -113 \\ (-7 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -781 \\ (-28.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -118 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -657 \\ (-24.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} -741 \\ (-27.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -77 \\ (-3.8 \%) \end{gathered}$ | $\begin{gathered} -728 \\ (-26.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -64 \\ (-3.2 \%) \end{gathered}$ |
| DEC | W | $\begin{gathered} 151 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 281 \\ (4.6 \%) \end{gathered}$ | $\begin{gathered} 409 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 539 \\ (8.7 \%) \end{gathered}$ | $\begin{gathered} -211 \\ (-3.4 \%) \end{gathered}$ | $\begin{gathered} -81 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 12 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} 142 \\ (2.3 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -190 \\ (-6 \%) \end{gathered}$ | $\begin{gathered} 14 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} -126 \\ (-4 \%) \end{gathered}$ | $\begin{gathered} 78 \\ (2.7 \%) \end{gathered}$ | $\begin{gathered} -209 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-5 \\ (-0.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -92 \\ (-2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 112 \\ (3.8 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 130 \\ (4.9 \%) \end{gathered}$ | $\begin{gathered} 279 \\ (11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 118 \\ (4.4 \%) \end{gathered}$ | $\begin{gathered} \hline 267 \\ (10.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -85 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 64 \\ (2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -69 \\ (-2.6 \%) \end{gathered}$ | $\begin{gathered} 80 \\ (3.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -325 \\ (-18.7 \%) \end{gathered}$ | $\begin{gathered} 65 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -270 \\ (-15.5 \%) \end{gathered}$ | $\begin{gathered} 119 \\ (8.8 \%) \end{gathered}$ | $\begin{gathered} -401 \\ (-23 \%) \end{gathered}$ | $\begin{gathered} -11 \\ (-0.8 \%) \end{gathered}$ | $\begin{gathered} -339 \\ (-19.5 \%) \end{gathered}$ | $\begin{gathered} 50 \\ (3.7 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -206 \\ (-13.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 67 \\ (5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-156 \\ (-10.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 116 \\ (9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -209 \\ (-13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 64 \\ (5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-204 \\ (-13.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 68 \\ (5.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -59 \\ (-1.7 \%) \end{gathered}$ | $\begin{gathered} 163 \\ (4.9 \%) \end{gathered}$ | $\begin{gathered} 49 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} 271 \\ (8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -231 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-0.3 \%) \end{gathered}$ | $\begin{gathered} -126 \\ (-3.6 \%) \end{gathered}$ | $\begin{gathered} 96 \\ (2.9 \%) \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

11C.4.1.11 American River at Confluence with Sacramento River
Table 21. Mean Monthly Flows (cfs) for Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 4: Upstream-American River at Confluence with Sacramento River |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 8,748 | 10,960 | 11,064 | 11,034 | 10,964 | 10,930 |
|  | AN | 4,806 | 5,760 | 5,925 | 6,056 | 5,709 | 5,683 |
|  | BN | 2,326 | 1,988 | 2,011 | 2,123 | 1,941 | 2,051 |
|  | D | 1,654 | 1,424 | 1,331 | 1,495 | 1,336 | 1,363 |
|  | C | 1,403 | 1,008 | 1,068 | 1,086 | 1,176 | 1,065 |
|  | All | 4,443 | 5,118 | 5,167 | 5,234 | 5,109 | 5,103 |
| FEB | W | 9,183 | 10,947 | 11,007 | 11,012 | 10,952 | 10,962 |
|  | AN | 6,422 | 8,073 | 8,244 | 8,260 | 8,163 | 8,144 |
|  | BN | 4,309 | 4,888 | 4,956 | 5,140 | 4,862 | 5,069 |
|  | D | 1,781 | 1,756 | 1,802 | 1,872 | 1,886 | 1,763 |
|  | C | 1,119 | 921 | 989 | 983 | 956 | 1,003 |
|  | All | 5,142 | 6,007 | 6,083 | 6,133 | 6,051 | 6,067 |
| MAR | W | 5,979 | 6,837 | 6,826 | 6,833 | 6,831 | 6,829 |
|  | AN | 5,364 | 5,661 | 5,789 | 5,783 | 5,681 | 5,622 |
|  | BN | 2,340 | 2,672 | 2,711 | 2,717 | 2,721 | 2,679 |
|  | D | 2,121 | 2,224 | 2,109 | 2,190 | 2,102 | 2,150 |
|  | C | 864 | 836 | 764 | 754 | 782 | 762 |
|  | All | 3,672 | 4,063 | 4,049 | 4,068 | 4,038 | 4,029 |
| APR | W | 5,156 | 5,300 | 5,301 | 5,295 | 5,309 | 5,313 |
|  | AN | 3,383 | 3,079 | 3,100 | 3,074 | 3,081 | 3,084 |
|  | BN | 2,984 | 2,778 | 2,803 | 2,793 | 2,760 | 2,784 |
|  | D | 1,672 | 1,677 | 1,703 | 1,662 | 1,673 | 1,606 |
|  | C | 996 | 1,059 | 1,075 | 1,046 | 1,075 | 1,047 |
|  | All | 3,152 | 3,128 | 3,144 | 3,124 | 3,130 | 3,117 |
| MAY | W | 5,959 | 4,332 | 4,395 | 4,339 | 4,414 | 4,343 |
|  | AN | 3,700 | 2,285 | 2,522 | 2,422 | 2,540 | 2,478 |
|  | BN | 2,733 | 1,726 | 2,192 | 1,742 | 2,138 | 1,766 |
|  | D | 1,605 | 1,454 | 1,725 | 1,590 | 1,797 | 1,632 |
|  | C | 1,014 | 790 | 807 | 804 | 800 | 802 |
|  | All | 3,398 | 2,438 | 2,633 | 2,494 | 2,648 | 2,517 |
| JUN | W | 5,743 | 3,388 | 4,166 | 3,599 | 4,068 | 3,607 |
|  | AN | 3,103 | 2,736 | 3,316 | 2,503 | 3,309 | 2,589 |
|  | BN | 2,631 | 2,603 | 3,756 | 2,661 | 3,234 | 2,762 |
|  | D | 2,282 | 2,320 | 2,464 | 2,196 | 2,536 | 2,295 |
|  | C | 1,621 | 793 | 1,322 | 1,114 | 994 | 1,270 |
|  | All | 3,462 | 2,545 | 3,182 | 2,607 | 3,028 | 2,684 |
| JUL | W | 3,844 | 3,560 | 3,422 | 3,407 | 3,400 | 3,500 |
|  | AN | 4,399 | 4,635 | 4,400 | 4,338 | 4,441 | 4,321 |
|  | BN | 4,509 | 4,038 | 3,566 | 3,855 | 3,902 | 3,773 |
|  | D | 3,347 | 2,858 | 2,526 | 2,714 | 2,484 | 2,483 |
|  | C | 1,568 | 1,784 | 1,419 | 1,823 | 1,829 | 1,720 |
|  | All | 3,597 | 3,385 | 3,100 | 3,236 | 3,207 | 3,183 |


| Alternative 4: Upstream-American River at Confluence with Sacramento River |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 3,295 | 1,858 | 1,849 | 1,965 | 1,845 | 1,963 |
|  | AN | 2,313 | 1,663 | 1,692 | 1,780 | 1,691 | 1,791 |
|  | BN | 2,265 | 2,048 | 1,521 | 1,857 | 1,482 | 2,036 |
|  | D | 2,395 | 1,357 | 1,086 | 1,163 | 1,112 | 1,279 |
|  | C | 1,314 | 899 | 661 | 794 | 649 | 818 |
|  | All | 2,488 | 1,612 | 1,429 | 1,572 | 1,425 | 1,632 |
| SEP | W | 3,846 | 3,415 | 1,753 | 1,804 | 2,819 | 3,395 |
|  | AN | 2,594 | 1,838 | 1,309 | 1,276 | 1,613 | 1,831 |
|  | BN | 2,205 | 1,402 | 1,172 | 1,298 | 1,179 | 1,330 |
|  | D | 1,691 | 987 | 978 | 1,043 | 1,035 | 1,121 |
|  | C | 1,011 | 427 | 539 | 543 | 494 | 471 |
|  | All | 2,495 | 1,870 | 1,241 | 1,289 | 1,631 | 1,887 |
| OCT | W | 1,607 | 1,499 | 1,429 | 1,531 | 1,357 | 1,312 |
|  | AN | 1,597 | 1,613 | 1,468 | 1,528 | 1,539 | 1,356 |
|  | BN | 1,472 | 1,617 | 1,927 | 1,799 | 1,862 | 1,618 |
|  | D | 1,344 | 1,114 | 1,310 | 1,231 | 1,289 | 1,176 |
|  | C | 1,342 | 1,517 | 1,395 | 1,366 | 1,521 | 1,438 |
|  | All | 1,486 | 1,454 | 1,488 | 1,486 | 1,479 | 1,359 |
| NOV | W | 3,472 | 2,540 | 2,410 | 2,646 | 2,437 | 2,452 |
|  | AN | 3,100 | 2,455 | 2,186 | 2,291 | 2,308 | 2,294 |
|  | BN | 1,990 | 1,618 | 1,511 | 1,564 | 1,492 | 1,480 |
|  | D | 2,094 | 1,326 | 1,241 | 1,356 | 1,395 | 1,453 |
|  | C | 1,897 | 1,489 | 1,484 | 1,477 | 1,371 | 1,377 |
|  | All | 2,632 | 1,950 | 1,832 | 1,955 | 1,872 | 1,886 |
| DEC | W | 6,255 | 6,115 | 6,397 | 6,658 | 6,035 | 6,261 |
|  | AN | 3,072 | 2,856 | 2,873 | 2,935 | 2,852 | 2,969 |
|  | BN | 2,609 | 2,445 | 2,726 | 2,713 | 2,511 | 2,526 |
|  | D | 1,675 | 1,275 | 1,341 | 1,394 | 1,264 | 1,324 |
|  | C | 1,443 | 1,158 | 1,224 | 1,272 | 1,222 | 1,227 |
|  | All | 3,457 | 3,224 | 3,388 | 3,496 | 3,216 | 3,321 |

Table 22. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 4: Upstream-American River at Confluence with Sacramento River |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| JAN | W | $\begin{gathered} \hline 2,316 \\ (26.5 \%) \end{gathered}$ | $\begin{gathered} \hline 104 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,286 \\ (26.1 \%) \end{gathered}$ | $\begin{gathered} 74 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,217 \\ (25.3 \%) \end{gathered}$ | $\begin{gathered} \hline 4 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 2,183 \\ & (25 \%) \end{aligned}$ | $\begin{gathered} -30 \\ (-0.3 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 1,119 \\ (23.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 164 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,251 \\ (26 \%) \end{gathered}$ | $\begin{gathered} 296 \\ (5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 903 \\ (18.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -52 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 877 \\ (18.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -77 \\ (-1.3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -315 \\ (-13.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 23 \\ (1.1 \%) \end{gathered}$ | $\begin{gathered} -203 \\ (-8.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 135 \\ (6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -385 \\ (-16.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -47 \\ (-2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -275 \\ (-11.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 63 \\ (3.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -323 \\ (-19.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -93 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -159 \\ (-9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 71 \\ (5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -318 \\ (-19.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -88 \\ (-6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -291 \\ (-17.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -61 \\ (-4.3 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -335 \\ (-23.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 60 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -317 \\ (-22.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 78 \\ (7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -227 \\ (-16.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 168 \\ (16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -338 \\ (-24.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 57 \\ (5.7 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 724 \\ (16.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 49 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 792 \\ (17.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 666 \\ (15 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -9 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 660 \\ (14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -15 \\ (-0.3 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} 1,825 \\ (19.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 60 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,829 \\ (19.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 65 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,769 \\ (19.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,780 \\ (19.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 1,821 \\ (28.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 171 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,837 \\ (28.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 187 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,740 \\ (27.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 90 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,721 \\ (26.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 71 \\ (0.9 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 647 \\ (15 \%) \end{gathered}$ | $\begin{gathered} 67 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 831 \\ (19.3 \%) \end{gathered}$ | $\begin{gathered} 252 \\ (5.1 \%) \end{gathered}$ | $\begin{gathered} 553 \\ (12.8 \%) \end{gathered}$ | $\begin{gathered} -27 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} 761 \\ (17.7 \%) \end{gathered}$ | $\begin{gathered} 181 \\ (3.7 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 21 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} 46 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 92 \\ (5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 105 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 130 \\ (7.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -18 \\ (-1 \%) \end{gathered}$ | $\begin{gathered} 7 \\ (0.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -130 \\ (-11.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 68 \\ (7.4 \%) \end{gathered}$ | $\begin{gathered} -136 \\ (-12.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 61 \\ (6.7 \%) \end{gathered}$ | $\begin{gathered} -163 \\ (-14.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 35 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} -116 \\ (-10.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 82 \\ (8.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 941 \\ (18.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 76 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 991 \\ (19.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 125 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 909 \\ (17.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 44 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 925 \\ (18 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 60 \\ (1 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 847 \\ (14.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 853 \\ (14.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 852 \\ (14.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 849 \\ (14.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 424 \\ (7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 128 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 418 \\ (7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 122 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 316 \\ (5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 258 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -39 \\ (-0.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 372 \\ (15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 39 \\ (1.5 \%) \end{gathered}$ | $\begin{gathered} 377 \\ (16.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 44 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 381 \\ (16.3 \%) \end{gathered}$ | $\begin{gathered} 48 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 339 \\ (14.5 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -12 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} -115 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 70 \\ (3.3 \%) \end{gathered}$ | $\begin{gathered} -34 \\ (-1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -18 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -122 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 29 \\ (1.4 \%) \end{gathered}$ | $\begin{gathered} -74 \\ (-3.3 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -101 \\ (-11.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -72 \\ (-8.7 \%) \end{gathered}$ | $\begin{gathered} -111 \\ (-12.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -83 \\ (-9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -82 \\ (-9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -54 \\ (-6.5 \%) \end{gathered}$ | $\begin{gathered} \hline-103 \\ (-11.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -74 \\ (-8.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 377 \\ (10.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -14 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 395 \\ (10.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 365 \\ (9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -25 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} 356 \\ (9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -34 \\ (-0.8 \%) \\ \hline \end{gathered}$ |
| APR | W | $\begin{gathered} 145 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 139 \\ (2.7 \%) \end{gathered}$ | $\begin{gathered} -4 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 153 \\ (3 \%) \end{gathered}$ | $\begin{gathered} 9 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} 157 \\ (3.1 \%) \end{gathered}$ | $\begin{gathered} 13 \\ (0.3 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -283 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -309 \\ (-9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -301 \\ (-8.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -299 \\ (-8.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -180 \\ (-6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 25 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -190 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -224 \\ (-7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -18 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -199 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 31 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 26 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -10 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -14 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -66 \\ (-4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -71 \\ (-4.2 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 79 \\ (7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 50 \\ (5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -14 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 79 \\ (8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 52 \\ (5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -12 \\ (-1.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -8 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} -28 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -35 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-0.4 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-American River at Confluence with Sacramento River |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | $\begin{gathered} \text { NAA vs. } \\ \text { H1 } \end{gathered}$ | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{gathered} \hline-1,564 \\ (-26.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 62 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,620 \\ (-27.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,545 \\ (-25.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 82 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,615 \\ (-27.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -1,178 \\ (-31.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 236 \\ (10.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,277 \\ (-34.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 137 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,160 \\ (-31.4 \%) \end{gathered}$ | $\begin{gathered} 254 \\ (11.1 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -1,222 \\ & (-33 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 192 \\ (8.4 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -542 \\ (-19.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 466 \\ (27 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -991 \\ (-36.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} -595 \\ (-21.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 412 \\ (23.9 \%) \end{gathered}$ | $\begin{gathered} -967 \\ (-35.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (2.3 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 120 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 271 \\ (18.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -14 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 136 \\ (9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 193 \\ (12 \%) \end{gathered}$ | $\begin{gathered} 343 \\ (23.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 28 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 178 \\ (12.3 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -206 \\ (-20.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 17 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -210 \\ (-20.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 14 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-214 \\ (-21.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -212 \\ (-20.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (1.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -765 \\ (-22.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 196 \\ (8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -904 \\ (-26.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 57 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -750 \\ (-22.1 \%) \end{gathered}$ | $\begin{gathered} 210 \\ (8.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -881 \\ (-25.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 79 \\ (3.3 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} \hline-1,576 \\ (-27.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 778 \\ (23 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,143 \\ (-37.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 211 \\ (6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,675 \\ (-29.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 679 \\ (20 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,135 \\ (-37.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 219 \\ (6.5 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 213 \\ (6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 581 \\ (21.2 \%) \end{gathered}$ | $\begin{gathered} \hline-600 \\ (-19.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -232 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 205 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 573 \\ (20.9 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-515 \\ (-16.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -147 \\ (-5.4 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 1,125 \\ (42.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,153 \\ (44.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 30 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 58 \\ (2.2 \%) \end{gathered}$ | $\begin{gathered} 603 \\ (22.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 631 \\ (24.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 131 \\ (5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 159 \\ (6.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} \hline 183 \\ (8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 144 \\ (6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -85 \\ (-3.7 \%) \end{gathered}$ | $\begin{gathered} -124 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 254 \\ (11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 216 \\ (9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} -25 \\ (-1.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -300 \\ (-18.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 529 \\ (66.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -507 \\ (-31.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 321 \\ (40.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -627 \\ (-38.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 201 \\ (25.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -352 \\ (-21.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 477 \\ (60.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -280 \\ (-8.1 \%) \end{gathered}$ | 638 $(25.1 \%)$ | $\begin{gathered} -855 \\ (-24.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 63 \\ (2.5 \%) \end{gathered}$ | $\begin{gathered} -434 \\ (-12.5 \%) \end{gathered}$ | $\begin{gathered} 484 \\ (19 \%) \end{gathered}$ | $\begin{gathered} -779 \\ (-22.5 \%) \end{gathered}$ | $\begin{gathered} 139 \\ (5.5 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} -422 \\ (-11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -138 \\ (-3.9 \%) \end{gathered}$ | $\begin{gathered} -438 \\ (-11.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -154 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} -444 \\ (-11.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -160 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -344 \\ (-8.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -60 \\ (-1.7 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 1 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -236 \\ (-5.1 \%) \end{gathered}$ | $\begin{gathered} -61 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} -298 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 43 \\ (1 \%) \end{gathered}$ | $\begin{gathered} -194 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} -77 \\ (-1.8 \%) \end{gathered}$ | $\begin{gathered} -314 \\ (-6.8 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -944 \\ (-20.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -473 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -654 \\ (-14.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -183 \\ (-4.5 \%) \end{gathered}$ | $\begin{gathered} -607 \\ (-13.5 \%) \end{gathered}$ | $\begin{array}{c\|} \hline-136 \\ (-3.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -736 \\ (-16.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -266 \\ (-6.6 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -821 \\ (-24.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -332 \\ (-11.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -633 \\ (-18.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -144 \\ (-5 \%) \\ \hline \end{array}$ | $\begin{gathered} -863 \\ (-25.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -375 \\ (-13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -864 \\ (-25.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -376 \\ (-13.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -149 \\ (-9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -365 \\ (-20.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 255 \\ (16.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 39 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 261 \\ (16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 46 \\ (2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 152 \\ (9.7 \%) \end{gathered}$ | $\begin{gathered} -64 \\ (-3.6 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -497 \\ (-13.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -285 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -361 \\ (-10 \%) \end{gathered}$ | $\begin{gathered} -150 \\ (-4.4 \%) \end{gathered}$ | $\begin{gathered} -389 \\ (-10.8 \%) \end{gathered}$ | $\begin{gathered} -178 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -413 \\ (-11.5 \%) \end{gathered}$ | $\begin{gathered} -202 \\ (-6 \%) \end{gathered}$ |
| AUG | W | $\begin{gathered} -1,445 \\ (-43.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -9 \\ (-0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,330 \\ (-40.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 107 \\ (5.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -1,449 \\ (-44 \%) \\ \hline \end{array}$ | $\begin{gathered} -13 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,332 \\ (-40.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 105 \\ (5.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -621 \\ (-26.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 29 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} -534 \\ (-23.1 \%) \end{gathered}$ | $\begin{gathered} 116 \\ (7 \%) \end{gathered}$ | $\begin{gathered} -622 \\ (-26.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 28 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} -522 \\ (-22.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 128 \\ (7.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -744 \\ (-32.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -527 \\ (-25.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -408 \\ (-18 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -191 \\ (-9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -783 \\ (-34.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -566 \\ (-27.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -229 \\ (-10.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -12 \\ (-0.6 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -1,308 \\ (-54.6 \%) \end{gathered}$ | $\begin{gathered} -270 \\ (-19.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,232 \\ (-51.4 \%) \end{gathered}$ | $\begin{gathered} -194 \\ (-14.3 \%) \end{gathered}$ | $\begin{gathered} -1,283 \\ (-53.6 \%) \end{gathered}$ | $\begin{gathered} -245 \\ (-18 \%) \end{gathered}$ | $\begin{gathered} -1,115 \\ (-46.6 \%) \end{gathered}$ | $\begin{gathered} -77 \\ (-5.7 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -652 \\ (-49.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -238 \\ (-26.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -520 \\ (-39.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -105 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -664 \\ (-50.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -250 \\ (-27.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -496 \\ (-37.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -82 \\ (-9.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} \hline-1,059 \\ (-42.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -183 \\ (-11.3 \%) \end{gathered}$ | $\begin{gathered} -916 \\ (-36.8 \%) \end{gathered}$ | $\begin{gathered} -40 \\ (-2.5 \%) \end{gathered}$ | $\begin{gathered} -1,063 \\ (-42.7 \%) \end{gathered}$ | $\begin{gathered} -187 \\ (-11.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -855 \\ (-34.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (1.3 \%) \end{gathered}$ |


| Alternative 4: Upstream-American River at Confluence with Sacramento River |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT |  | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{gathered} -2,093 \\ (-54.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-1,662 \\ (-48.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -2,041 \\ (-53.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,611 \\ (-47.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,027 \\ (-26.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -596 \\ (-17.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -450 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -20 \\ (-0.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -1,285 \\ (-49.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-529 \\ (-28.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,318 \\ (-50.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -562 \\ (-30.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -981 \\ (-37.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -225 \\ (-12.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -763 \\ (-29.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7 \\ (-0.4 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -1,034 \\ (-46.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-230 \\ (-16.4 \%) \end{array}$ | $\begin{gathered} -907 \\ (-41.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -104 \\ (-7.4 \%) \end{gathered}$ | $\begin{gathered} -1,027 \\ (-46.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -223 \\ (-15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -876 \\ (-39.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -72 \\ (-5.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -713 \\ (-42.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -9 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} -647 \\ (-38.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 56 \\ (5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -656 \\ (-38.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 48 \\ (4.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -570 \\ (-33.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 134 \\ (13.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -472 \\ (-46.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 112 \\ (26.2 \%) \end{array}$ | $\begin{gathered} -468 \\ (-46.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 116 \\ (27.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -517 \\ (-51.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 67 \\ (15.7 \%) \end{gathered}$ | $\begin{gathered} -539 \\ (-53.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 44 \\ (10.4 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -1,254 \\ (-50.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-630 \\ (-33.7 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-1,206 \\ (-48.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -581 \\ (-31.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -864 \\ (-34.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -240 \\ (-12.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -608 \\ (-24.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (0.9 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} -179 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -70 \\ (-4.7 \%) \end{gathered}$ | $\begin{gathered} -77 \\ (-4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 32 \\ (2.2 \%) \end{gathered}$ | $\begin{gathered} \hline-250 \\ (-15.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -142 \\ (-9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -295 \\ (-18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-186 \\ (-12.4 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -129 \\ (-8.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -145 \\ (-9 \%) \\ \hline \end{array}$ | $\begin{gathered} -69 \\ (-4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -84 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -58 \\ (-3.6 \%) \end{gathered}$ | $\begin{gathered} -74 \\ (-4.6 \%) \end{gathered}$ | $\begin{gathered} -241 \\ (-15.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-256 \\ (-15.9 \%) \\ \hline \end{array}$ |
|  | BN | $\begin{gathered} 455 \\ (30.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 310 \\ (19.2 \%) \end{array}$ | $\begin{gathered} 327 \\ (22.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 182 \\ (11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 390 \\ (26.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 245 \\ (15.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 146 \\ (9.9 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -34 \\ (-2.5 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 196 \\ (17.6 \%) \end{array}$ | $\begin{gathered} -112 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (10.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -55 \\ (-4.1 \%) \\ \hline \end{gathered}$ | 175 $(15.7 \%)$ | $\begin{gathered} -167 \\ (-12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 62 \\ (5.6 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 53 \\ (3.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-122 \\ (-8.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 24 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-151 \\ (-10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 179 \\ (13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 96 \\ (7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -79 \\ (-5.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 2 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} 35 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 33 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} 25 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} -127 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -94 \\ (-6.5 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} -1,062 \\ (-30.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -130 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -826 \\ (-23.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 107 \\ (4.2 \%) \end{gathered}$ | $\begin{gathered} -1,035 \\ (-29.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -102 \\ (-4 \%) \end{gathered}$ | $\begin{gathered} -1,020 \\ (-29.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -88 \\ (-3.5 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -913 \\ (-29.5 \%) \end{gathered}$ | $\begin{gathered} -269 \\ (-10.9 \%) \end{gathered}$ | $\begin{gathered} -809 \\ (-26.1 \%) \end{gathered}$ | $\begin{gathered} -164 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -792 \\ (-25.5 \%) \end{gathered}$ | $\begin{gathered} -147 \\ (-6 \%) \end{gathered}$ | $\begin{gathered} -805 \\ (-26 \%) \end{gathered}$ | $\begin{gathered} -161 \\ (-6.5 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -479 \\ (-24.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-107 \\ (-6.6 \%) \end{array}$ | $\begin{gathered} -425 \\ (-21.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -54 \\ (-3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -498 \\ (-25 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -126 \\ (-7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -510 \\ (-25.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -138 \\ (-8.6 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -853 \\ (-40.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-85 \\ (-6.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -739 \\ (-35.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 30 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -700 \\ (-33.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 68 \\ (5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -642 \\ (-30.6 \%) \end{gathered}$ | $\begin{gathered} 127 \\ (9.6 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -413 \\ (-21.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-6 \\ (-0.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -420 \\ (-22.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -12 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -526 \\ (-27.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -118 \\ (-7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -520 \\ (-27.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -112 \\ (-7.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -800 \\ (-30.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -118 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -676 \\ (-25.7 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} -760 \\ (-28.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -78 \\ (-4 \%) \end{gathered}$ | $\begin{gathered} \hline-745 \\ (-28.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -63 \\ (-3.3 \%) \end{gathered}$ |
| DEC | W | $\begin{gathered} 142 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} 282 \\ (4.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 403 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 544 \\ (8.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -220 \\ (-3.5 \%) \end{gathered}$ | $\begin{gathered} -80 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 146 \\ (2.4 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -199 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 17 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} -136 \\ (-4.4 \%) \end{gathered}$ | $\begin{gathered} 79 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} -220 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -102 \\ (-3.3 \%) \end{gathered}$ | $\begin{gathered} 113 \\ (4 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 117 \\ (4.5 \%) \end{gathered}$ | $\begin{gathered} 281 \\ (11.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 104 \\ (4 \%) \end{gathered}$ | $\begin{gathered} 268 \\ (11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -99 \\ (-3.8 \%) \end{gathered}$ | $\begin{gathered} 65 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -83 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 81 \\ (3.3 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -334 \\ (-20 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 66 \\ (5.1 \%) \end{array}$ | $\begin{gathered} -281 \\ (-16.8 \%) \end{gathered}$ | $\begin{gathered} 119 \\ (9.3 \%) \end{gathered}$ | $\begin{gathered} -411 \\ (-24.6 \%) \end{gathered}$ | $\begin{gathered} -11 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -351 \\ (-20.9 \%) \end{gathered}$ | $\begin{gathered} 49 \\ (3.8 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -219 \\ (-15.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 67 \\ (5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -171 \\ (-11.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 115 \\ (9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -221 \\ (-15.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 64 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -216 \\ (-15 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 69 \\ (6 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -69 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} 164 \\ (5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 39 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 273 \\ (8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -241 \\ (-7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} -136 \\ (-3.9 \%) \end{gathered}$ | $\begin{gathered} 97 \\ (3 \%) \\ \hline \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.4.1.12 Stanislaus River at the Confluence with the San Joaquin River

Table 23. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 4: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 956 | 885 | 885 | 885 | 885 | 885 |
|  | AN | 843 | 963 | 963 | 963 | 963 | 963 |
|  | BN | 416 | 369 | 369 | 369 | 369 | 369 |
|  | D | 403 | 366 | 366 | 366 | 366 | 366 |
|  | C | 314 | 265 | 265 | 265 | 265 | 265 |
|  | All | 635 | 615 | 615 | 615 | 615 | 615 |
| FEB | W | 1,285 | 1,236 | 1,226 | 1,240 | 1,227 | 1,243 |
|  | AN | 917 | 858 | 858 | 858 | 858 | 858 |
|  | BN | 551 | 438 | 438 | 438 | 437 | 438 |
|  | D | 562 | 359 | 359 | 359 | 359 | 359 |
|  | C | 490 | 348 | 348 | 348 | 348 | 348 |
|  | All | 827 | 723 | 721 | 725 | 721 | 725 |
| MAR | W | 2,063 | 2,217 | 2,217 | 2,216 | 2,217 | 2,217 |
|  | AN | 1,295 | 956 | 956 | 956 | 956 | 956 |
|  | BN | 732 | 548 | 548 | 548 | 548 | 548 |
|  | D | 559 | 390 | 390 | 390 | 390 | 390 |
|  | C | 541 | 444 | 444 | 443 | 444 | 443 |
|  | All | 1,167 | 1,071 | 1,071 | 1,070 | 1,071 | 1,070 |
| APR | W | 2,054 | 1,965 | 1,965 | 1,965 | 1,965 | 1,965 |
|  | AN | 1,719 | 1,535 | 1,535 | 1,534 | 1,535 | 1,534 |
|  | BN | 1,494 | 1,211 | 1,210 | 1,210 | 1,211 | 1,211 |
|  | D | 1,438 | 1,199 | 1,198 | 1,198 | 1,199 | 1,198 |
|  | C | 823 | 670 | 670 | 669 | 669 | 668 |
|  | All | 1,562 | 1,387 | 1,387 | 1,387 | 1,387 | 1,387 |
| MAY | W | 1,653 | 1,613 | 1,614 | 1,614 | 1,614 | 1,614 |
|  | AN | 1,389 | 1,243 | 1,243 | 1,243 | 1,243 | 1,243 |
|  | BN | 1,238 | 898 | 898 | 898 | 898 | 898 |
|  | D | 1,140 | 916 | 916 | 915 | 916 | 915 |
|  | C | 715 | 627 | 627 | 626 | 626 | 625 |
|  | All | 1,271 | 1,125 | 1,125 | 1,124 | 1,125 | 1,124 |
| JUN | W | 1,608 | 1,763 | 1,761 | 1,765 | 1,761 | 1,765 |
|  | AN | 1,134 | 985 | 984 | 983 | 984 | 984 |
|  | BN | 663 | 568 | 566 | 566 | 567 | 567 |
|  | D | 447 | 364 | 365 | 364 | 364 | 364 |
|  | C | 332 | 296 | 292 | 289 | 292 | 289 |
|  | All | 932 | 914 | 912 | 912 | 912 | 913 |
| JUL | W | 1,064 | 1,080 | 1,080 | 1,080 | 1,080 | 1,080 |
|  | AN | 489 | 454 | 454 | 454 | 454 | 454 |
|  | BN | 450 | 425 | 425 | 425 | 425 | 425 |
|  | D | 398 | 359 | 360 | 359 | 360 | 358 |
|  | C | 337 | 310 | 313 | 309 | 311 | 307 |
|  | All | 607 | 590 | 590 | 589 | 590 | 589 |


| Alternative 4: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 930 | 717 | 717 | 717 | 717 | 717 |
|  | AN | 476 | 454 | 454 | 454 | 454 | 454 |
|  | BN | 423 | 418 | 418 | 418 | 418 | 418 |
|  | D | 387 | 382 | 382 | 382 | 382 | 382 |
|  | C | 341 | 338 | 338 | 334 | 339 | 334 |
|  | All | 560 | 491 | 492 | 491 | 492 | 491 |
| SEP | W | 1,040 | 863 | 863 | 863 | 863 | 863 |
|  | AN | 503 | 474 | 474 | 474 | 474 | 474 |
|  | BN | 417 | 407 | 407 | 407 | 407 | 407 |
|  | D | 395 | 390 | 390 | 390 | 390 | 390 |
|  | C | 324 | 317 | 331 | 333 | 330 | 329 |
|  | All | 594 | 533 | 536 | 536 | 536 | 536 |
| OCT | W | 897 | 845 | 846 | 846 | 846 | 846 |
|  | AN | 873 | 822 | 825 | 825 | 825 | 825 |
|  | BN | 903 | 844 | 844 | 844 | 844 | 844 |
|  | D | 984 | 925 | 925 | 925 | 925 | 925 |
|  | C | 689 | 612 | 612 | 612 | 614 | 612 |
|  | All | 867 | 808 | 808 | 808 | 809 | 808 |
| NOV | W | 426 | 408 | 408 | 408 | 408 | 408 |
|  | AN | 580 | 524 | 524 | 524 | 524 | 524 |
|  | BN | 341 | 334 | 334 | 334 | 334 | 334 |
|  | D | 345 | 321 | 321 | 321 | 321 | 321 |
|  | C | 325 | 308 | 308 | 308 | 308 | 308 |
|  | All | 410 | 386 | 386 | 386 | 386 | 386 |
| DEC | W | 513 | 429 | 441 | 418 | 441 | 418 |
|  | AN | 722 | 697 | 697 | 697 | 697 | 697 |
|  | BN | 331 | 353 | 353 | 353 | 353 | 353 |
|  | D | 317 | 294 | 294 | 294 | 294 | 294 |
|  | C | 289 | 272 | 272 | 272 | 272 | 272 |
|  | All | 450 | 417 | 421 | 414 | 421 | 414 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 24. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 4: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. H1 | NAA vs. H1 |  | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| JAN | W | $\begin{gathered} -71 \\ (-7.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -71 \\ (-7.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -71 \\ (-7.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -71 \\ (-7.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 120 \\ (14.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 120 \\ (14.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 120 \\ (14.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 120 \\ (14.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -47 \\ (-11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -47 \\ (-11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -47 \\ (-11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -47 \\ (-11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -37 \\ (-9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -37 \\ (-9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -37 \\ (-9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -37 \\ (-9.1 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -49 \\ (-15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -49 \\ (-15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -49 \\ (-15.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -49 \\ (-15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -20 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -20 \\ (-3.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -20 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -20 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} -58 \\ (-4.5 \%) \end{gathered}$ | $\begin{gathered} -9 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -44 \\ (-3.4 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -58 \\ (-4.5 \%) \end{gathered}$ | $\begin{array}{\|c} \hline-9 \\ (-0.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -42 \\ (-3.2 \%) \end{gathered}$ | $\begin{gathered} 7 \\ (0.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -59 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-6.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -113 \\ (-20.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -113 \\ (-20.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -114 \\ (-20.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} -113 \\ (-20.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -203 \\ (-36.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -203 \\ (-36.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -203 \\ (-36.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -203 \\ (-36.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -142 \\ (-29 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -142 \\ (-29 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -142 \\ (-29 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -142 \\ (-29 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -106 \\ (-12.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -102 \\ (-12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} -106 \\ (-12.9 \%) \end{gathered}$ | $\begin{gathered} -3 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -102 \\ (-12.3 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0.3 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 154 \\ (7.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 153 \\ (7.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 154 \\ (7.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 154 \\ (7.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -339 \\ (-26.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -339 \\ (-26.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -339 \\ (-26.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -339 \\ (-26.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -185 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -185 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -185 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -185 \\ (-25.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -168 \\ (-30.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -169 \\ (-30.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -168 \\ (-30.1 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -169 \\ (-30.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -97 \\ (-17.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -98 \\ (-18 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -97 \\ (-17.9 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -98 \\ (-18.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.2 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -96 \\ (-8.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -96 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -96 \\ (-8.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -96 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
| APR | W | $\begin{gathered} -89 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -89 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -88 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -89 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} \hline-184 \\ (-10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -185 \\ (-10.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-184 \\ (-10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-185 \\ (-10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -283 \\ (-19 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -283 \\ (-19 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -283 \\ (-18.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -283 \\ (-18.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -240 \\ (-16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -241 \\ (-16.7 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -240 \\ (-16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -240 \\ (-16.7 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -153 \\ (-18.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -154 \\ (-18.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -153 \\ (-18.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -155 \\ (-18.8 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.2 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -175 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -175 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -175 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -175 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |


| Alternative 4: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{gathered} -39 \\ (-2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -40 \\ (-2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -39 \\ (-2.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | -39 (-2.4\%) | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -146 \\ (-10.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -146 \\ (-10.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -146 \\ (-10.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-146 \\ (-10.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -340 \\ (-27.5 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -1(- \\ & 0.1 \%) \end{aligned}$ | $\begin{gathered} -340 \\ (-27.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -340 \\ (-27.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -340 \\ (-27.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -224 \\ (-19.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -225 \\ (-19.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -225 \\ (-19.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -225 \\ (-19.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -88 \\ (-12.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -89 \\ (-12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -89 \\ (-12.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -89 \\ (-12.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -147 \\ (-11.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -147 \\ (-11.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -147 \\ (-11.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -147 \\ (-11.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} 153 \\ (9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} 158 \\ (9.8 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 154 \\ (9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 157 \\ (9.8 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -150 \\ (-13.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -150 \\ (-13.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -150 \\ (-13.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -150 \\ (-13.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -97 \\ (-14.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -96 \\ (-14.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -96 \\ (-14.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -96 \\ (-14.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -82 \\ (-18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -82 \\ (-18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -82 \\ (-18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -82 \\ (-18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} \hline-40 \\ (-12 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4 \\ (-1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-43 \\ (-13 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-7 \\ (-2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-40 \\ (-11.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-3 \\ (-1.1 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-43 \\ (-13 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7 \\ (-2.4 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -20 \\ (-2.2 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} -20 \\ (-2.1 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -20 \\ (-2.2 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} -20 \\ (-2.1 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} 16 \\ (1.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (1.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (1.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 16 \\ (1.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -35 \\ (-7.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -35 \\ (-7.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -35 \\ (-7.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -35 \\ (-7.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -25 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -25 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -25 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -25 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -37 \\ (-9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -39 \\ (-9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -38 \\ (-9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \end{gathered}$ | $\begin{gathered} -40 \\ (-10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.3 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -24 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -28 \\ (-8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -25 \\ (-7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -29 \\ (-8.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -17 \\ (-2.7 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -18 \\ (-2.9 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -17 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -18 \\ (-3 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ |
| AUG | W | $\begin{gathered} -212 \\ (-22.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -212 \\ (-22.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -212 \\ (-22.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -212 \\ (-22.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -22 \\ (-4.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-4.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-4.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-4.6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -4 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -5 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -5 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -5 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -5 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -3 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} -4 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.7 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7 \\ (-2.1 \%) \end{gathered}$ | $\begin{gathered} -4 \\ (-1.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -68 \\ (-12.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -69 \\ (-12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} \hline-68 \\ (-12.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-69 \\ (-12.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ |


| Alternative 4: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. H1 | NAA vs. H1 |  | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 |  | NAA vs. H4 |
| SEP | W | $\begin{gathered} -177 \\ (-17 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -177 \\ (-17 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -177 \\ (-17 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -177 \\ (-17 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} \hline-28 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -28 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -28 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -28 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -10 \\ (-2.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -10 \\ (-2.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -10 \\ (-2.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -10 \\ (-2.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -5 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 7 \\ (2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (2.7 \%) \end{gathered}$ | $\begin{gathered} 16 \\ (5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 13 \\ (4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (3.7 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -58 \\ (-9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -58 \\ (-9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.4 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} -52 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -52 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -52 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -52 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -49 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -49 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -49 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -49 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -59 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -59 \\ (-6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -77 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -77 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -75 \\ (-10.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-77 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -58 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -58 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -58 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -58 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} -18 \\ (-4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -18 \\ (-4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -18 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -18 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -56 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -56 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -56 \\ (-9.7 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -56 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -8 \\ (-2.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-2.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-2.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-2.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -23 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -23 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -23 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -23 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -16 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -17 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -17 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -16 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -24 \\ (-6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -24 \\ (-6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -24 \\ (-6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -24 \\ (-6 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
| DEC | W | $\begin{gathered} -72 \\ (-14 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -95 \\ (-18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -72 \\ (-14 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 12 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -94 \\ (-18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11 \\ (-2.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -25 \\ (-3.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -25 \\ (-3.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -25 \\ (-3.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -25 \\ (-3.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 23 \\ (6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 23 \\ (6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 23 \\ (6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 23 \\ (6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -23 \\ (-7.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -23 \\ (-7.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -23 \\ (-7.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -23 \\ (-7.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -16 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -16 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -16 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -16 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -29 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -36 \\ (-8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.8 \%) \end{gathered}$ | $\begin{gathered} -29 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -36 \\ (-8 \%) \end{gathered}$ | $\begin{gathered} -3 \\ (-0.8 \%) \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.4.2 In Delta

## 11C.4.2.1 OMR Flow (Old and Middle Rivers)

Table 25. Mean Monthly Flows (cfs) for Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 4: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{gathered} \text { EXISTING } \\ \text { CONDITIONS } \end{gathered}$ | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | -1,820 | -1,606 | 1,767 | 1,667 | 1,693 | 1,725 |
|  | AN | -3,553 | -3,446 | -1,351 | -1,640 | -1,202 | -1,692 |
|  | BN | -4,240 | -3,803 | -2,681 | -2,660 | -2,676 | -2,663 |
|  | D | -4,664 | -4,675 | -2,976 | -2,844 | -2,769 | -2,789 |
|  | C | -4,130 | -3,684 | -2,862 | -2,793 | -2,686 | -2,571 |
|  | All | -3,449 | -3,228 | -1,167 | -1,199 | -1,097 | -1,144 |
| FEB | W | -2,365 | -2,293 | 3,398 | 3,604 | 3,000 | 3,336 |
|  | AN | -3,274 | -3,147 | -610 | -352 | -621 | -566 |
|  | BN | -3,437 | -3,290 | -2,187 | -2,150 | -2,149 | -2,120 |
|  | D | -3,986 | -3,502 | -2,876 | -2,822 | -2,909 | -2,815 |
|  | C | -3,191 | -3,047 | -2,821 | -2,738 | -2,902 | -2,766 |
|  | All | -3,158 | -2,964 | -430 | -296 | -570 | -410 |
| MAR | W | -1,600 | -1,454 | 4,965 | 5,723 | 4,583 | 5,063 |
|  | AN | -4,251 | -3,815 | 592 | 1,057 | 580 | 1,049 |
|  | BN | -4,147 | -3,834 | -2,496 | -561 | -2,638 | -449 |
|  | D | -2,852 | -2,614 | -2,449 | -1,391 | -2,352 | -1,417 |
|  | C | -2,010 | -1,636 | -1,718 | -1,442 | -1,627 | -1,470 |
|  | All | -2,758 | -2,487 | 446 | 1,357 | 333 | 1,156 |
| APR | W | 2,431 | 2,415 | 2,299 | 2,733 | 2,284 | 2,633 |
|  | AN | 1,058 | 787 | -38 | 796 | -26 | 822 |
|  | BN | 677 | 214 | -537 | 217 | -687 | 280 |
|  | D | -268 | -615 | -1,170 | -407 | -1,168 | -392 |
|  | C | -950 | -845 | -1,157 | -926 | -1,135 | -906 |
|  | All | 843 | 659 | 205 | 795 | 181 | 784 |
| MAY | W | 1,651 | 1,555 | 2,194 | 2,422 | 2,208 | 2,409 |
|  | AN | 509 | 396 | -108 | 420 | -200 | 407 |
|  | BN | 272 | -237 | -742 | -217 | -681 | -212 |
|  | D | -647 | -1,010 | -1,263 | -1,017 | -1,196 | -910 |
|  | C | -1,019 | -911 | -976 | -819 | -983 | -827 |
|  | All | 353 | 155 | 133 | 449 | 148 | 467 |
| JUN | W | -4,164 | -4,369 | -1,281 | 65 | -1,392 | -175 |
|  | AN | -4,761 | -4,454 | -2,602 | -1,337 | -2,602 | -1,254 |
|  | BN | -4,154 | -3,420 | -2,291 | -1,784 | -2,352 | -1,977 |
|  | D | -3,301 | -2,592 | -2,154 | -1,914 | -2,175 | -1,686 |
|  | C | -2,250 | -2,143 | -1,881 | -1,595 | -1,914 | -1,612 |
|  | All | -3,780 | -3,504 | -1,926 | -1,133 | -1,981 | -1,182 |


| Alternative 4: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JUL | W | -8,959 | -8,699 | -7,132 | -5,474 | -7,313 | -5,689 |
|  | AN | -9,919 | -7,962 | -8,020 | -4,820 | -8,080 | -4,950 |
|  | BN | -10,853 | -9,942 | -7,396 | -6,990 | -7,767 | -6,867 |
|  | D | -10,891 | -9,505 | -6,108 | -6,452 | -5,370 | -5,342 |
|  | C | -8,058 | -5,234 | -2,333 | -2,743 | -2,511 | $-2,718$ |
|  | All | -9,715 | -8,473 | -6,380 | -5,452 | -6,373 | -5,271 |
| AUG | W | -10,062 | -10,518 | $-4,981$ | -4,974 | -5,487 | -5,117 |
|  | AN | -10,348 | -10,985 | -6,519 | -6,433 | -6,488 | -5,709 |
|  | BN | -10,044 | -9,374 | -6,023 | -6,685 | -6,365 | -6,814 |
|  | D | -10,122 | -7,259 | -4,755 | -5,560 | $-4,552$ | -5,783 |
|  | C | -4,384 | -3,192 | -3,182 | -3,325 | -3,047 | -3,561 |
|  | All | -9,283 | -8,604 | -5,071 | -5,367 | -5,221 | -5,412 |
| SEP | W | -9,317 | -7,580 | -4,142 | -4,113 | 843 | 904 |
|  | AN | -9,163 | -9,002 | -5,216 | -5,139 | -533 | -257 |
|  | BN | -8,575 | -8,392 | -4,304 | -4,984 | -4,686 | -4,786 |
|  | D | -8,081 | -5,165 | -4,235 | -4,479 | -4,062 | -4,620 |
|  | C | -4,807 | -3,966 | -2,529 | -2,332 | -2,163 | -2,377 |
|  | All | -8,236 | -6,868 | -4,111 | -4,231 | -1,819 | -1,930 |
| OCT | W | -8,347 | -5,049 | -2,125 | -1,984 | -1,077 | -1,020 |
|  | AN | -7,643 | -3,648 | -2,165 | -2,150 | -1,374 | -1,360 |
|  | BN | -7,804 | -4,793 | -1,991 | -1,943 | -1,055 | -1,039 |
|  | D | -6,961 | -4,103 | -2,165 | -2,265 | -1,630 | -1,696 |
|  | C | -6,440 | -3,920 | -2,096 | -2,181 | -1,726 | -1,920 |
|  | All | -7,568 | -4,427 | -2,112 | -2,092 | -1,333 | -1,353 |
| NOV | W | -8,902 | -6,527 | -3,778 | -3,829 | -1,323 | -1,513 |
|  | AN | -7,264 | $-6,003$ | -4,201 | -3,999 | -1,928 | -1,888 |
|  | BN | -7,997 | -5,542 | -4,621 | -4,264 | -2,148 | -1,904 |
|  | D | -7,136 | -5,007 | -4,176 | -4,010 | -2,393 | -2,141 |
|  | C | -5,293 | $-4,389$ | -3,656 | -3,878 | -2,864 | -2,743 |
|  | All | -7,592 | -5,636 | -4,054 | -3,975 | -2,013 | -1,953 |
| DEC | W | -5,542 | -5,591 | -2,946 | -3,107 | -3,285 | -3,433 |
|  | AN | -6,987 | -7,050 | -5,139 | -4,927 | -5,370 | -5,265 |
|  | BN | -7,304 | -7,040 | -6,025 | -5,501 | -6,011 | -5,921 |
|  | D | -7,214 | -7,006 | -5,556 | -5,202 | -5,547 | -5,140 |
|  | C | -6,166 | -4,173 | -4,600 | -4,150 | -4,734 | -4,488 |
|  | All | -6,513 | -6,155 | $-4,607$ | -4,394 | $-4,764$ | -4,655 |

Table 26. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 4: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS <br> vs. H1 | $\begin{array}{\|c} \hline \text { NAA vs. } \\ \text { H1 } \end{array}$ | EXISTING <br> vs. H 2 | $\begin{aligned} & \text { NAA vs. } \\ & \text { H2 } \end{aligned}$ | EXISTING CONDITIONS <br> vs. H3 | $\begin{array}{\|c} \hline \text { NAA vs. } \\ \text { H3 } \\ \hline \end{array}$ | EXISTING CONDITIONS <br> vs. H4 | $\begin{gathered} \text { NAA vs. } \\ \text { H4 } \end{gathered}$ |
| JAN | W | $\begin{gathered} \hline 3,587 \\ (197.1 \%) \end{gathered}$ | $\begin{gathered} 3,373 \\ (210 \%) \end{gathered}$ | $\begin{gathered} \hline 3,487 \\ (191.6 \%) \end{gathered}$ | $\begin{gathered} 3,273 \\ (203.8 \%) \end{gathered}$ | $\begin{gathered} \hline 3,512 \\ (193 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 3,298 \\ (205.4 \%) \end{array}$ | $\begin{gathered} 3,544 \\ (194.8 \%) \end{gathered}$ | $\begin{gathered} 3,330 \\ (207.4 \%) \end{gathered}$ |
|  | AN | $\begin{array}{r} 2,202 \\ (62 \%) \\ \hline \end{array}$ | $\begin{gathered} 2,095 \\ (60.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,912 \\ (53.8 \%) \end{gathered}$ | $\begin{gathered} 1,806 \\ (52.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,351 \\ (66.2 \%) \end{gathered}$ | $\begin{gathered} 2,244 \\ (65.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,861 \\ (52.4 \%) \end{gathered}$ | $\begin{gathered} 1,755 \\ (50.9 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 1,559 \\ (36.8 \%) \end{gathered}$ | $\begin{gathered} 1,121 \\ (29.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,580 \\ (37.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,143 \\ (30 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,563 \\ (36.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,126 \\ (29.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,577 \\ (37.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,140 \\ (30 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 1,687 \\ (36.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,699 \\ (36.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,820 \\ (39 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,832 \\ (39.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,894 \\ (40.6 \%) \end{gathered}$ | $\begin{gathered} \hline 1,906 \\ (40.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,874 \\ (40.2 \%) \end{gathered}$ | $\begin{gathered} 1,886 \\ (40.3 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 1,268 \\ (30.7 \%) \end{gathered}$ | $\begin{gathered} 823 \\ (22.3 \%) \end{gathered}$ | $\begin{gathered} 1,337 \\ (32.4 \%) \end{gathered}$ | $\begin{gathered} 891 \\ (24.2 \%) \end{gathered}$ | $\begin{aligned} & 1,444 \\ & (35 \%) \end{aligned}$ | $\begin{gathered} 998 \\ (27.1 \%) \end{gathered}$ | $\begin{gathered} 1,559 \\ (37.8 \%) \end{gathered}$ | $\begin{gathered} 1,114 \\ (30.2 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 2,282 \\ (66.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,061 \\ (63.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,250 \\ (65.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,030 \\ (62.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,352 \\ (68.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,131 \\ (66 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,305 \\ (66.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,084 \\ (64.6 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} 5,763 \\ (243.7 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 5,691 \\ (248.2 \%) \end{array}$ | $\begin{gathered} 5,969 \\ (252.4 \%) \end{gathered}$ | $\begin{gathered} 5,897 \\ (257.2 \%) \end{gathered}$ | $\begin{gathered} 5,366 \\ (226.9 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 5,293 \\ (230.9 \%) \end{array}$ | $\begin{gathered} 5,701 \\ (241.1 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 5,629 \\ (245.5 \%) \end{array}$ |
|  | AN | $\begin{gathered} 2,664 \\ (81.4 \%) \end{gathered}$ | $\begin{gathered} \hline 2,536 \\ (80.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,923 \\ (89.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,795 \\ (88.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,654 \\ (81 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,526 \\ (80.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,708 \\ (82.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,580 \\ (82 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 1,250 \\ (36.4 \%) \end{gathered}$ | $\begin{gathered} 1,103 \\ (33.5 \%) \end{gathered}$ | $\begin{gathered} 1,287 \\ (37.4 \%) \end{gathered}$ | $\begin{gathered} 1,140 \\ (34.7 \%) \end{gathered}$ | $\begin{gathered} 1,288 \\ (37.5 \%) \end{gathered}$ | $\begin{gathered} 1,142 \\ (34.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,317 \\ (38.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,170 \\ (35.6 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 1,109 \\ (27.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 626 \\ (17.9 \%) \end{gathered}$ | $\begin{gathered} 1,164 \\ (29.2 \%) \end{gathered}$ | $\begin{gathered} 680 \\ (19.4 \%) \end{gathered}$ | $\begin{aligned} & 1,076 \\ & (27 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 50.10) \\ 562 \\ (16.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,171 \\ (29.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 687 \\ (19.6 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 370 \\ (11.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 227 \\ (7.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 453 \\ (14.2 \%) \end{gathered}$ | $\begin{gathered} 309 \\ (10.1 \%) \end{gathered}$ | $\begin{gathered} 289 \\ (9.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 145 \\ (4.8 \%) \\ \hline \end{array}$ | $\begin{gathered} 425 \\ (13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 281 \\ (9.2 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 2,728 \\ (86.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,534 \\ (85.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,862 \\ (90.6 \%) \end{gathered}$ | $\begin{gathered} 2,668 \\ (90 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,588 \\ (82 \%) \end{gathered}$ | $\begin{gathered} 2,394 \\ (80.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} 2,748 \\ (87 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline 2,554 \\ (86.2 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} 6,565 \\ (410.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6,418 \\ (441.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7,324 \\ (457.7 \%) \end{gathered}$ | $\begin{gathered} 7,177 \\ (493.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6,183 \\ (386.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 6,036 \\ (415.3 \%) \end{array}$ | $\begin{gathered} 6,664 \\ (416.4 \%) \end{gathered}$ | $\begin{gathered} 6,517 \\ (448.3 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 4,843 \\ (113.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,406 \\ (115.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,308 \\ (124.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,872 \\ (127.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,831 \\ (113.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 4,394 \\ (115.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 5,300 \\ (124.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,864 \\ (127.5 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 1,651 \\ (39.8 \%) \end{gathered}$ | $\begin{gathered} 1,338 \\ (34.9 \%) \end{gathered}$ | $\begin{gathered} 3,586 \\ (86.5 \%) \end{gathered}$ | $\begin{gathered} 3,273 \\ (85.4 \%) \end{gathered}$ | $\begin{gathered} 1,509 \\ (36.4 \%) \end{gathered}$ | $\begin{gathered} 1,197 \\ (31.2 \%) \end{gathered}$ | $\begin{gathered} \text { 3,698 } \\ \text { (89.2\%) } \end{gathered}$ | $\begin{gathered} 3,386 \\ (88.3 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 404 \\ (14.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 165 \\ (6.3 \%) \end{gathered}$ | $\begin{gathered} 1,461 \\ (51.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,222 \\ (46.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 500 \\ (17.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 262 \\ (10 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,435 \\ (50.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,197 \\ (45.8 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 292 \\ (14.5 \%) \end{gathered}$ | $\begin{gathered} \hline-82 \\ (-5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 568 \\ (28.3 \%) \end{gathered}$ | $\begin{gathered} 194 \\ (11.9 \%) \end{gathered}$ | $\begin{gathered} \hline 383 \\ (19.1 \%) \end{gathered}$ | $\begin{gathered} 9 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 540 \\ (26.9 \%) \end{gathered}$ | $\begin{gathered} 166 \\ (10.2 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 3,204 \\ (116.2 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 2,933 \\ (117.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 4,115 \\ (149.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,844 \\ (154.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,091 \\ (112.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 2,820 \\ (113.4 \%) \end{array}$ | $\begin{gathered} 3,914 \\ (141.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,643 \\ (146.5 \%) \end{gathered}$ |
| APR | W | $\begin{gathered} -132 \\ (-5.4 \%) \end{gathered}$ | $\begin{gathered} -116 \\ (-4.8 \%) \end{gathered}$ | $\begin{gathered} 301 \\ (12.4 \%) \end{gathered}$ | $\begin{gathered} 318 \\ (13.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -147 \\ (-6.1 \%) \end{gathered}$ | $\begin{gathered} -131 \\ (-5.4 \%) \end{gathered}$ | $\begin{gathered} 202 \\ (8.3 \%) \end{gathered}$ | $\begin{gathered} 218 \\ (9 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -1,096 \\ (-103.6 \%) \end{gathered}$ | $\begin{gathered} -826 \\ (-104.9 \%) \end{gathered}$ | $\begin{gathered} -262 \\ (-24.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,084 \\ (-102.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-813 \\ (-103.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -236 \\ (-22.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 35 \\ (4.5 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -1,214 \\ (-179.3 \%) \end{gathered}$ | $\begin{gathered} -751 \\ (-350.9 \%) \end{gathered}$ | $\begin{gathered} -460 \\ (-67.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,364 \\ (-201.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-901 \\ (-421.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -396 \\ (-58.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 67 \\ (31.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -902 \\ (-336.8 \%) \end{gathered}$ | $\begin{gathered} -555 \\ (-90.2 \%) \end{gathered}$ | $\begin{gathered} -139 \\ (-51.8 \%) \end{gathered}$ | $\begin{gathered} 209 \\ (33.9 \%) \end{gathered}$ | $\begin{gathered} -900 \\ (-335.9 \%) \end{gathered}$ | $\begin{gathered} -553 \\ (-89.8 \%) \end{gathered}$ | $\begin{gathered} -124 \\ (-46.4 \%) \end{gathered}$ | $\begin{gathered} 223 \\ (36.2 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -207 \\ (-21.8 \%) \end{gathered}$ | $\begin{gathered} -312 \\ (-36.9 \%) \end{gathered}$ | $\begin{gathered} 25 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} -80 \\ (-9.5 \%) \end{gathered}$ | $\begin{gathered} -185 \\ (-19.4 \%) \end{gathered}$ | $\begin{gathered} -290 \\ (-34.3 \%) \end{gathered}$ | $\begin{gathered} 44 \\ (4.6 \%) \end{gathered}$ | $\begin{gathered} -61 \\ (-7.2 \%) \end{gathered}$ |
|  | All | $\begin{gathered} (-21.07) \\ -638 \\ (-75.6 \%) \end{gathered}$ | $\begin{gathered} -453 \\ (-68.8 \%) \end{gathered}$ | $\begin{gathered} -48 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} (-.070) \\ 137 \\ (20.7 \%) \end{gathered}$ | $\begin{gathered} (-17.470) \\ -663 \\ (-78.6 \%) \end{gathered}$ | $\left[\left.\begin{array}{c} -478 \\ (-72.6 \%) \end{array} \right\rvert\,\right.$ | $\begin{array}{r} -59 \\ (-7 \%) \\ \hline \end{array}$ | $\begin{gathered} (126 \\ (19.1 \%) \end{gathered}$ |


| Alternative 4: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING <br> CONDITIONS <br> vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{gathered} 544 \\ (32.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 639 \\ (41.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 771 \\ (46.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 866 \\ (55.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 557 \\ (33.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 652 \\ (41.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 758 \\ (45.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 854 \\ (54.9 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -618 \\ (-121.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -504 \\ (-127.4 \%) \end{gathered}$ | $\begin{gathered} -90 \\ (-17.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 24 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -710 \\ (-139.3 \%) \end{gathered}$ | $\begin{gathered} -596 \\ (-150.6 \%) \end{gathered}$ | $\begin{gathered} -102 \\ (-20.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (2.9 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -1,013 \\ (-372.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -504 \\ (-212.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -489 \\ (-180 \%) \end{gathered}$ | $\begin{gathered} 20 \\ (8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -953 \\ (-350.5 \%) \end{gathered}$ | $\begin{gathered} -443 \\ (-186.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -484 \\ (-177.9 \%) \end{gathered}$ | $\begin{gathered} 26 \\ (10.8 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -616 \\ (-95.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -253 \\ (-25 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -370 \\ (-57.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7 \\ (-0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -549 \\ (-84.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -186 \\ (-18.4 \%) \end{gathered}$ | $\begin{gathered} -263 \\ (-40.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 100 \\ (9.9 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 44 \\ (4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -64 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 200 \\ (19.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 92 \\ (10.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 36 \\ (3.5 \%) \end{gathered}$ | $\begin{gathered} -72 \\ (-7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 192 \\ (18.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 84 \\ (9.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -220 \\ (-62.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -22 \\ (-14.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 96 \\ (27.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 294 \\ (188.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -205 \\ (-58.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 113 \\ (32.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 311 \\ (200.1 \%) \\ \hline \end{array}$ |
| JUN | W | $\begin{gathered} 2,883 \\ (69.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3,088 \\ (70.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,228 \\ (101.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4,434 \\ (101.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,772 \\ (66.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,978 \\ (68.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,989 \\ (95.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4,194 \\ (96 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 2,159 \\ (45.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,851 \\ (41.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,424 \\ (71.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,117 \\ (70 \%) \end{gathered}$ | $\begin{gathered} 2,159 \\ (45.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 1,851 \\ (41.6 \%) \end{array}$ | $\begin{gathered} 3,507 \\ (73.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,200 \\ (71.8 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 1,863 \\ (44.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,129 \\ (33 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 2,370 \\ & (57 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 1,636 \\ (47.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,802 \\ (43.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,068 \\ (31.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,178 \\ (52.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,443 \\ (42.2 \%) \\ \hline \end{array}$ |
|  | D | $\begin{gathered} 1,146 \\ (34.7 \%) \end{gathered}$ | $\begin{gathered} 438 \\ (16.9 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 1,386 \\ & (42 \%) \end{aligned}$ | $\begin{gathered} 678 \\ (26.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,126 \\ (34.1 \%) \end{gathered}$ | $\begin{gathered} 417 \\ (16.1 \%) \end{gathered}$ | $\begin{gathered} 1,615 \\ (48.9 \%) \end{gathered}$ | $\begin{gathered} 906 \\ (35 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 369 \\ (16.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 262 \\ (12.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 655 \\ (29.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 548 \\ (25.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 336 \\ (14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 228 \\ (10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 638 \\ (28.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 531 \\ (24.8 \%) \\ \hline \end{array}$ |
|  | All | $\begin{aligned} & 1,854 \\ & (49 \%) \end{aligned}$ | $\begin{gathered} 1,577 \\ (45 \%) \end{gathered}$ | $\begin{gathered} 2,647 \\ (70 \%) \end{gathered}$ | $\begin{gathered} 2,370 \\ (67.7 \%) \end{gathered}$ | $\begin{gathered} 1,799 \\ (47.6 \%) \end{gathered}$ | $\begin{gathered} 1,522 \\ (43.5 \%) \end{gathered}$ | $\begin{gathered} 2,598 \\ (68.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,321 \\ (66.2 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} 1,827 \\ (20.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,567 \\ (18 \%) \end{gathered}$ | $\begin{gathered} 3,485 \\ (38.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,225 \\ (37.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,646 \\ (18.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,386 \\ (15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,269 \\ (36.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,010 \\ (34.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 1,899 \\ (19.1 \%) \end{gathered}$ | $\begin{gathered} -57 \\ (-0.7 \%) \end{gathered}$ | $\begin{gathered} 5,099 \\ (51.4 \%) \end{gathered}$ | $\begin{gathered} 3,142 \\ (39.5 \%) \end{gathered}$ | $\begin{gathered} 1,839 \\ (18.5 \%) \end{gathered}$ | $\begin{gathered} \hline-117 \\ (-1.5 \%) \end{gathered}$ | $\begin{gathered} 4,969 \\ (50.1 \%) \end{gathered}$ | $\begin{gathered} \hline 3,012 \\ (37.8 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 3,456 \\ (31.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,546 \\ (25.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,863 \\ (35.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,952 \\ (29.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,086 \\ (28.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,175 \\ (21.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,985 \\ (36.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 3,075 \\ (30.9 \%) \\ \hline \end{array}$ |
|  | D | $\begin{gathered} 4,783 \\ (43.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,397 \\ (35.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,439 \\ (40.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,053 \\ (32.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,521 \\ (50.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 4,135 \\ (43.5 \%) \\ \hline \end{array}$ | $\begin{aligned} & 5,549 \\ & (51 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 4,164 \\ (43.8 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{aligned} & 5,725 \\ & (71 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 2,901 \\ (55.4 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 5,315 \\ & (66 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 2,491 \\ (47.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,547 \\ (68.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,723 \\ \text { (52\%) } \\ \hline \end{gathered}$ | $\begin{gathered} 5,340 \\ (66.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,516 \\ (48.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 3,335 \\ (34.3 \%) \end{gathered}$ | $\begin{gathered} \hline 2,093 \\ (24.7 \%) \end{gathered}$ | $\begin{gathered} 4,263 \\ (43.9 \%) \end{gathered}$ | $\begin{gathered} 3,021 \\ (35.7 \%) \end{gathered}$ | $\begin{gathered} 3,342 \\ (34.4 \%) \end{gathered}$ | $\begin{gathered} \hline 2,100 \\ (24.8 \%) \end{gathered}$ | $\begin{gathered} 4,444 \\ (45.7 \%) \end{gathered}$ | $\begin{gathered} 3,202 \\ (37.8 \%) \end{gathered}$ |
| AUG | W | $\begin{gathered} 5,081 \\ (50.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,537 \\ (52.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,088 \\ (50.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,544 \\ (52.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,575 \\ (45.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,031 \\ (47.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,945 \\ (49.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,401 \\ (51.3 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{aligned} & \hline 3,829 \\ & (37 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 4,465 \\ (40.7 \%) \end{gathered}$ | $\begin{gathered} 3,915 \\ (37.8 \%) \end{gathered}$ | $\begin{gathered} 4,551 \\ (41.4 \%) \end{gathered}$ | $\begin{gathered} 3,861 \\ (37.3 \%) \end{gathered}$ | $\begin{gathered} 4,497 \\ (40.9 \%) \end{gathered}$ | $\begin{gathered} 4,640 \\ (44.8 \%) \end{gathered}$ | $\begin{gathered} 5,276 \\ (48 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{aligned} & 4,021 \\ & (40 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 3,351 \\ (35.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,359 \\ (33.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,689 \\ (28.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,680 \\ (36.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,009 \\ (32.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,230 \\ (32.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,560 \\ (27.3 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{aligned} & 5,368 \\ & \text { (53\%) } \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 2,505 \\ (34.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,562 \\ (45.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,699 \\ (23.4 \%) \end{gathered}$ | $\begin{gathered} 5,571 \\ \text { (55\%) } \\ \hline \end{gathered}$ | $\begin{gathered} 2,708 \\ (37.3 \%) \end{gathered}$ | $\begin{gathered} 4,339 \\ (42.9 \%) \end{gathered}$ | $\begin{array}{c\|} \hline 1,476 \\ (20.3 \%) \end{array}$ |
|  | C | $\begin{gathered} 1,202 \\ (27.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 10 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,059 \\ (24.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -133 \\ (-4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,338 \\ (30.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 145 \\ (4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 823 \\ (18.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -369 \\ (-11.6 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 4,212 \\ (45.4 \%) \end{gathered}$ | $\begin{gathered} 3,533 \\ (41.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,916 \\ (42.2 \%) \end{gathered}$ | $\begin{gathered} 3,236 \\ (37.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,062 \\ (43.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,383 \\ (39.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,871 \\ (41.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,192 \\ (37.1 \%) \end{gathered}$ |


| Alternative 4: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING <br> CONDITIONS <br> vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{gathered} 5,175 \\ (55.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,439 \\ (45.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,204 \\ (55.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,468 \\ (45.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 10,160 \\ (109.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 8,424 \\ (111.1 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline 10,221 \\ (109.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 8,485 \\ (111.9 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 3,947 \\ (43.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,786 \\ (42.1 \%) \end{gathered}$ | $\begin{gathered} 4,024 \\ (43.9 \%) \end{gathered}$ | $\begin{gathered} 3,863 \\ (42.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 8,630 \\ (94.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 8,469 \\ (94.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 8,906 \\ (97.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 8,745 \\ (97.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 4,272 \\ (49.8 \%) \end{gathered}$ | $\begin{gathered} 4,088 \\ (48.7 \%) \end{gathered}$ | $\begin{gathered} 3,592 \\ (41.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,408 \\ (40.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,889 \\ (45.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,706 \\ (44.2 \%) \end{gathered}$ | $\begin{gathered} 3,789 \\ (44.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,606 \\ (43 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 3,846 \\ (47.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 930 \\ (18 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,602 \\ (44.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 686 \\ (13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,019 \\ (49.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,103 \\ (21.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,461 \\ (42.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 545 \\ (10.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 2,278 \\ (47.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,437 \\ (36.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,475 \\ (51.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,634 \\ (41.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,643 \\ (55 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,803 \\ (45.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,430 \\ (50.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,589 \\ (40.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 4,125 \\ (50.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,757 \\ (40.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,005 \\ (48.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,636 \\ (38.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6,417 \\ (77.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,049 \\ (73.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6,306 \\ (76.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,938 \\ (71.9 \%) \end{gathered}$ |
| OCT | W | $\begin{gathered} 6,222 \\ (74.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,924 \\ (57.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6,362 \\ (76.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,064 \\ (60.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7,270 \\ (87.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,972 \\ (78.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7,327 \\ (87.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,029 \\ (79.8 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 5,478 \\ (71.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,483 \\ (40.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,493 \\ (71.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,499 \\ (41.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6,268 \\ (82 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,274 \\ (62.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6,283 \\ (82.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,288 \\ (62.7 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 5,813 \\ (74.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,802 \\ (58.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,861 \\ (75.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,850 \\ (59.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6,749 \\ (86.5 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 3,738 \\ & (78 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 6,765 \\ (86.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3,753 \\ (78.3 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 4,796 \\ (68.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,939 \\ (47.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,695 \\ (67.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,838 \\ (44.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,330 \\ (76.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,473 \\ (60.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,264 \\ (75.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,407 \\ (58.7 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 4,344 \\ (67.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,824 \\ (46.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,260 \\ (66.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,740 \\ (44.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4,715 \\ (73.2 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 2,195 \\ & (56 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 4,520 \\ (70.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,000 \\ (51 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 5,455 \\ (72.1 \%) \end{gathered}$ | $\begin{gathered} 2,315 \\ (52.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,476 \\ (72.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,336 \\ (52.8 \%) \end{gathered}$ | $\begin{gathered} 6,235 \\ (82.4 \%) \end{gathered}$ | $\begin{gathered} 3,094 \\ (69.9 \%) \end{gathered}$ | $\begin{gathered} 6,215 \\ (82.1 \%) \end{gathered}$ | $\begin{gathered} 3,074 \\ (69.4 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} 5,124 \\ (57.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,749 \\ (42.1 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 5,073 \\ & \text { (57\%) } \\ & \hline \end{aligned}$ | $\begin{gathered} 2,698 \\ (41.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7,579 \\ (85.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 5,204 \\ (79.7 \%) \\ \hline \end{array}$ | $\begin{gathered} 7,389 \\ (83 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,014 \\ (76.8 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 3,063 \\ (42.2 \%) \end{gathered}$ | $\begin{aligned} & 1,802 \\ & (30 \%) \end{aligned}$ | $\begin{gathered} 3,265 \\ (44.9 \%) \end{gathered}$ | $\begin{gathered} 2,004 \\ (33.4 \%) \end{gathered}$ | $\begin{gathered} 5,336 \\ (73.5 \%) \end{gathered}$ | $\begin{gathered} 4,075 \\ (67.9 \%) \end{gathered}$ | $\begin{gathered} 5,376 \\ (74 \%) \end{gathered}$ | $\begin{gathered} 4,115 \\ (68.5 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 3,376 \\ (42.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 921 \\ (16.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,732 \\ (46.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,278 \\ (23.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,849 \\ (73.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 3,394 \\ (61.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 6,092 \\ (76.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,638 \\ (65.6 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 2,960 \\ (41.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 830 \\ (16.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,126 \\ (43.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 997 \\ (19.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,743 \\ (66.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 2,613 \\ (52.2 \%) \\ \hline \end{array}$ | $\begin{aligned} & 4,995 \\ & (70 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 2,865 \\ (57.2 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 1,637 \\ (30.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 733 \\ (16.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,415 \\ (26.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 511 \\ (11.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,429 \\ (45.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,525 \\ (34.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,551 \\ (48.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,647 \\ (37.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 3,539 \\ (46.6 \%) \end{gathered}$ | $\begin{gathered} 1,582 \\ (28.1 \%) \end{gathered}$ | $\begin{gathered} 3,617 \\ (47.6 \%) \end{gathered}$ | $\begin{gathered} 1,661 \\ (29.5 \%) \end{gathered}$ | $\begin{gathered} 5,579 \\ (73.5 \%) \end{gathered}$ | $\begin{gathered} \hline 3,623 \\ (64.3 \%) \end{gathered}$ | $\begin{gathered} 5,640 \\ (74.3 \%) \end{gathered}$ | $\begin{gathered} 3,683 \\ (65.4 \%) \end{gathered}$ |
| DEC | W | $\begin{gathered} 2,596 \\ (46.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,645 \\ (47.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,435 \\ (43.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,485 \\ (44.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,257 \\ (40.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 2,307 \\ (41.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 2,108 \\ (38 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,158 \\ (38.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 1,849 \\ (26.5 \%) \end{gathered}$ | $\begin{gathered} \hline 1,911 \\ (27.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,061 \\ (29.5 \%) \end{gathered}$ | $\begin{gathered} \hline 2,124 \\ (30.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,617 \\ (23.1 \%) \end{gathered}$ | $\begin{gathered} 1,680 \\ (23.8 \%) \end{gathered}$ | $\begin{gathered} 1,722 \\ (24.6 \%) \end{gathered}$ | $\begin{gathered} 1,785 \\ (25.3 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 1,279 \\ (17.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,016 \\ (14.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,803 \\ (24.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,540 \\ (21.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,293 \\ (17.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1,029 \\ (14.6 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,383 \\ (18.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,119 \\ (15.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 1,658 \\ (23 \%) \end{gathered}$ | $\begin{gathered} 1,450 \\ (20.7 \%) \end{gathered}$ | $\begin{gathered} 2,012 \\ (27.9 \%) \end{gathered}$ | $\begin{gathered} 1,803 \\ (25.7 \%) \end{gathered}$ | $\begin{gathered} 1,667 \\ (23.1 \%) \end{gathered}$ | $\begin{gathered} 1,459 \\ (20.8 \%) \end{gathered}$ | $\begin{gathered} \hline 2,074 \\ (28.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,866 \\ (26.6 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 1,567 \\ (25.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -426 \\ (-10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,016 \\ (32.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 23 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,432 \\ (23.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -561 \\ (-13.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,678 \\ (27.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -315 \\ (-7.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 1,905 \\ (29.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,548 \\ (25.1 \%) \end{gathered}$ | $\begin{gathered} 2,118 \\ (32.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,761 \\ (28.6 \%) \end{gathered}$ | $\begin{gathered} 1,749 \\ (26.8 \%) \end{gathered}$ | $\begin{gathered} 1,391 \\ (22.6 \%) \end{gathered}$ | $\begin{gathered} 1,857 \\ (28.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,500 \\ (24.4 \%) \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

11C.4.2.2 Sacramento River Downstream of North Delta Diversion Facility
Table 27. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 4: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 50,961 | 52,878 | 44,637 | 44,482 | 43,883 | 43,431 |
|  | AN | 39,863 | 40,484 | 34,572 | 34,999 | 33,047 | 32,999 |
|  | BN | 23,781 | 22,653 | 18,739 | 19,332 | 18,431 | 18,786 |
|  | D | 17,444 | 17,451 | 15,344 | 15,937 | 14,939 | 14,662 |
|  | C | 14,281 | 15,073 | 14,139 | 14,176 | 13,966 | 12,682 |
|  | All | 31,971 | 32,595 | 27,849 | 28,099 | 27,220 | 26,882 |
| FEB | W | 57,314 | 59,847 | 50,234 | 50,033 | 49,932 | 49,815 |
|  | AN | 45,676 | 47,786 | 40,095 | 40,123 | 39,397 | 39,450 |
|  | BN | 31,934 | 31,592 | 25,892 | 26,821 | 25,437 | 26,096 |
|  | D | 21,202 | 21,107 | 17,651 | 17,589 | 17,751 | 17,765 |
|  | C | 14,708 | 14,291 | 12,995 | 12,886 | 12,979 | 13,098 |
|  | All | 37,116 | 38,087 | 31,992 | 32,062 | 31,736 | 31,840 |
| MAR | W | 49,416 | 50,993 | 40,575 | 42,051 | 40,299 | 41,904 |
|  | AN | 44,495 | 45,088 | 36,077 | 36,263 | 35,162 | 35,541 |
|  | BN | 24,489 | 22,915 | 16,891 | 19,063 | 16,710 | 18,484 |
|  | D | 20,656 | 20,650 | 16,418 | 16,961 | 16,213 | 16,956 |
|  | C | 13,245 | 13,137 | 12,081 | 11,983 | 11,961 | 11,884 |
|  | All | 32,834 | 33,134 | 26,401 | 27,372 | 26,086 | 27,105 |
| APR | W | 37,809 | 37,543 | 28,525 | 32,600 | 28,339 | 32,440 |
|  | AN | 25,979 | 24,931 | 17,833 | 23,186 | 17,897 | 23,219 |
|  | BN | 17,752 | 17,128 | 14,230 | 18,697 | 14,235 | 18,304 |
|  | D | 12,990 | 12,904 | 11,925 | 12,030 | 11,826 | 12,022 |
|  | C | 10,229 | 10,365 | 9,893 | 9,626 | 9,808 | 9,686 |
|  | All | 23,169 | 22,826 | 18,149 | 20,971 | 18,066 | 20,865 |
| MAY | W | 31,948 | 24,500 | 18,675 | 22,164 | 18,652 | 22,238 |
|  | AN | 21,021 | 18,657 | 15,550 | 18,067 | 15,722 | 18,057 |
|  | BN | 14,227 | 12,394 | 12,064 | 13,225 | 12,134 | 12,955 |
|  | D | 10,959 | 11,427 | 11,686 | 11,426 | 11,633 | 11,240 |
|  | C | 7,749 | 8,011 | 7,645 | 7,575 | 7,608 | 7,575 |
|  | All | 19,175 | 16,295 | 13,941 | 15,546 | 13,953 | 15,481 |
| JUN | W | 23,900 | 18,603 | 14,999 | 13,271 | 15,070 | 13,371 |
|  | AN | 16,309 | 16,051 | 13,982 | 11,897 | 14,041 | 11,894 |
|  | BN | 13,576 | 13,898 | 13,415 | 12,811 | 13,247 | 13,020 |
|  | D | 12,222 | 12,656 | 12,119 | 11,746 | 12,087 | 11,528 |
|  | C | 9,884 | 10,123 | 9,435 | 9,127 | 9,403 | 9,151 |
|  | All | 16,412 | 14,880 | 13,134 | 12,050 | 13,124 | 12,072 |
| JUL | W | 19,876 | 21,425 | 17,886 | 15,749 | 18,173 | 16,275 |
|  | AN | 21,574 | 22,727 | 20,243 | 15,907 | 20,291 | 16,332 |
|  | BN | 20,953 | 20,513 | 16,670 | 16,028 | 17,266 | 16,143 |
|  | D | 19,272 | 18,957 | 14,341 | 14,891 | 13,429 | 13,557 |
|  | C | 15,397 | 13,767 | 10,060 | 10,670 | 10,410 | 10,630 |
|  | All | 19,520 | 19,797 | 16,100 | 14,888 | 16,151 | 14,838 |


| Alternative 4: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 15,816 | 16,064 | 9,874 | 9,879 | 10,427 | 10,041 |
|  | AN | 15,877 | 17,491 | 12,203 | 11,980 | 12,175 | 11,215 |
|  | BN | 15,643 | 16,232 | 11,902 | 12,575 | 12,274 | 12,675 |
|  | D | 16,965 | 14,351 | 10,855 | 11,890 | 10,582 | 12,117 |
|  | C | 10,095 | 8,996 | 8,727 | 8,666 | 8,382 | 8,994 |
|  | All | 15,210 | 14,891 | 10,609 | 10,911 | 10,733 | 10,965 |
| SEP | W | 18,254 | 27,212 | 8,137 | 8,227 | 19,827 | 19,710 |
|  | AN | 13,198 | 21,006 | 8,939 | 9,146 | 13,210 | 13,146 |
|  | BN | 12,427 | 12,306 | 8,041 | 9,534 | 8,515 | 8,982 |
|  | D | 12,155 | 8,620 | 9,148 | 9,553 | 8,861 | 9,937 |
|  | C | 8,485 | 7,292 | 8,693 | 8,942 | 8,580 | 9,106 |
|  | All | 13,751 | 16,763 | 8,541 | 8,980 | 12,874 | 13,221 |
| OCT | W | 13,505 | 13,277 | 10,243 | 9,994 | 10,166 | 10,117 |
|  | AN | 11,118 | 11,864 | 10,574 | 10,707 | 10,291 | 10,625 |
|  | BN | 11,557 | 12,124 | 10,494 | 9,628 | 10,197 | 9,340 |
|  | D | 10,279 | 10,487 | 9,364 | 9,476 | 9,011 | 8,880 |
|  | C | 10,073 | 9,964 | 10,018 | 10,738 | 9,452 | 9,606 |
|  | All | 11,613 | 11,776 | 10,108 | 10,031 | 9,831 | 9,712 |
| NOV | W | 19,447 | 19,285 | 13,472 | 13,653 | 14,622 | 14,557 |
|  | AN | 15,309 | 15,925 | 10,283 | 10,247 | 11,531 | 11,685 |
|  | BN | 12,574 | 13,037 | 8,404 | 8,534 | 9,467 | 9,586 |
|  | D | 12,868 | 11,914 | 8,795 | 8,710 | 9,467 | 9,345 |
|  | C | 9,633 | 9,295 | 7,654 | 7,721 | 8,209 | 8,320 |
|  | All | 14,788 | 14,647 | 10,262 | 10,327 | 11,219 | 11,231 |
| DEC | W | 39,708 | 37,022 | 32,758 | 33,605 | 31,257 | 31,752 |
|  | AN | 21,663 | 22,629 | 20,699 | 19,421 | 20,348 | 19,748 |
|  | BN | 16,678 | 16,692 | 15,969 | 15,185 | 15,155 | 14,902 |
|  | D | 15,442 | 15,159 | 14,196 | 13,509 | 13,977 | 13,537 |
|  | C | 11,816 | 10,632 | 11,263 | 10,616 | 11,005 | 10,300 |
|  | All | 23,727 | 22,784 | 20,906 | 20,609 | 20,154 | 19,981 |

Table 28. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 4: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | $\begin{gathered} \text { NAA } \\ \text { vs. H1 } \end{gathered}$ | EXISTING CONDITIONS vs. H2 | $\begin{gathered} \text { NAA } \\ \text { vs. H2 } \end{gathered}$ | EXISTING <br> CONDITIONS <br> vs. H3 | $\begin{gathered} \text { NAA } \\ \text { vs. H3 } \end{gathered}$ | EXISTING CONDITIONS vs. H4 | $\begin{gathered} \text { NAA } \\ \text { vs. H4 } \end{gathered}$ |
| JAN | W | -12.4 | -15.6 | -12.7 | -15.9 | -13.9 | -17.0 | -14.8 | -17.9 |
|  | AN | -13.3 | -14.6 | -12.2 | -13.6 | -17.1 | -18.4 | -17.2 | -18.5 |
|  | BN | -21.2 | -17.3 | -18.7 | -14.7 | -22.5 | -18.6 | -21.0 | -17.1 |
|  | D | -12.0 | -12.1 | -8.6 | -8.7 | -14.4 | -14.4 | -15.9 | -16.0 |
|  | C | -1.0 | -6.2 | -0.7 | -6.0 | -2.2 | -7.3 | -11.2 | -15.9 |
|  | All | -12.9 | -14.6 | -12.1 | -13.8 | -14.9 | -16.5 | -15.9 | -17.5 |
| FEB | W | -12.4 | -16.1 | -12.7 | -16.4 | -12.9 | -16.6 | -13.1 | -16.8 |
|  | AN | -12.2 | -16.1 | -12.2 | -16.0 | -13.7 | -17.6 | -13.6 | -17.4 |
|  | BN | -18.9 | -18.0 | -16.0 | -15.1 | -20.3 | -19.5 | -18.3 | -17.4 |
|  | D | -16.7 | -16.4 | -17.0 | -16.7 | -16.3 | -15.9 | -16.2 | -15.8 |
|  | C | -11.6 | -9.1 | -12.4 | -9.8 | -11.8 | -9.2 | -10.9 | -8.3 |
|  | All | -13.8 | -16.0 | -13.6 | -15.8 | -14.5 | -16.7 | -14.2 | -16.4 |
| MAR | W | -17.9 | -20.4 | -14.9 | -17.5 | -18.4 | -21.0 | -15.2 | -17.8 |
|  | AN | -18.9 | -20.0 | -18.5 | -19.6 | -21.0 | -22.0 | -20.1 | -21.2 |
|  | BN | -31.0 | -26.3 | -22.2 | -16.8 | -31.8 | -27.1 | -24.5 | -19.3 |
|  | D | -20.5 | -20.5 | -17.9 | -17.9 | -21.5 | -21.5 | -17.9 | -17.9 |
|  | C | -8.8 | -8.0 | -9.5 | -8.8 | -9.7 | -9.0 | -10.3 | -9.5 |
|  | All | -19.6 | -20.3 | -16.6 | -17.4 | -20.6 | -21.3 | -17.4 | -18.2 |
| APR | W | -24.6 | -24.0 | -13.8 | -13.2 | -25.0 | -24.5 | -14.2 | -13.6 |
|  | AN | -31.4 | -28.5 | -10.7 | -7.0 | -31.1 | -28.2 | -10.6 | -6.9 |
|  | BN | -19.8 | -16.9 | 5.3 | 9.2 | -19.8 | -16.9 | 3.1 | 6.9 |
|  | D | -8.2 | -7.6 | -7.4 | -6.8 | -9.0 | -8.4 | -7.5 | -6.8 |
|  | C | -3.3 | -4.6 | -5.9 | -7.1 | -4.1 | -5.4 | -5.3 | -6.6 |
|  | All | -21.7 | -20.5 | -9.5 | -8.1 | -22.0 | -20.9 | -9.9 | -8.6 |
| MAY | W | -41.5 | -23.8 | -30.6 | -9.5 | -41.6 | -23.9 | -30.4 | -9.2 |
|  | AN | -26.0 | -16.7 | -14.1 | -3.2 | -25.2 | -15.7 | -14.1 | -3.2 |
|  | BN | -15.2 | -2.7 | -7.0 | 6.7 | -14.7 | -2.1 | -8.9 | 4.5 |
|  | D | 6.6 | 2.3 | 4.3 | 0.0 | 6.1 | 1.8 | 2.6 | -1.6 |
|  | C | -1.3 | -4.6 | -2.3 | -5.4 | -1.8 | -5.0 | -2.2 | -5.4 |
|  | All | -27.3 | -14.5 | -18.9 | -4.6 | -27.2 | -14.4 | -19.3 | -5.0 |
| JUN | W | -37.2 | -19.4 | -44.5 | -28.7 | -36.9 | -19.0 | -44.1 | -28.1 |
|  | AN | -14.3 | -12.9 | -27.1 | -25.9 | -13.9 | -12.5 | -27.1 | -25.9 |
|  | BN | -1.2 | -3.5 | -5.6 | -7.8 | -2.4 | -4.7 | -4.1 | -6.3 |
|  | D | -0.8 | -4.2 | -3.9 | -7.2 | -1.1 | -4.5 | -5.7 | -8.9 |
|  | C | -4.5 | -6.8 | -7.7 | -9.8 | -4.9 | -7.1 | -7.4 | -9.6 |
|  | All | -20.0 | -11.7 | -26.6 | -19.0 | -20.0 | -11.8 | -26.4 | -18.9 |
| JUL | W | -10.0 | -16.5 | -20.8 | -26.5 | -8.6 | -15.2 | -18.1 | -24.0 |
|  | AN | -6.2 | -10.9 | -26.3 | -30.0 | -5.9 | -10.7 | -24.3 | -28.1 |
|  | BN | -20.4 | -18.7 | -23.5 | -21.9 | -17.6 | -15.8 | -23.0 | -21.3 |
|  | D | -25.6 | -24.3 | -22.7 | -21.4 | -30.3 | -29.2 | -29.7 | -28.5 |
|  | C | -34.7 | -26.9 | -30.7 | -22.5 | -32.4 | -24.4 | -31.0 | -22.8 |
|  | All | -17.5 | -18.7 | -23.7 | -24.8 | -17.3 | -18.4 | -24.0 | -25.1 |


| Alternative 4: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{gathered} \text { EXISTING } \\ \text { CONDITIONS } \\ \text { vs. H1 } \end{gathered}$ | $\begin{gathered} \text { NAA } \\ \text { vs. H1 } \end{gathered}$ | EXISTING CONDITIONS vs. H2 | $\begin{gathered} \text { NAA } \\ \text { vs. H2 } \end{gathered}$ | EXISTING CONDITIONS vs. H3 | $\begin{gathered} \text { NAA } \\ \text { vs. H3 } \end{gathered}$ | EXISTING CONDITIONS vs. H4 | $\begin{array}{\|c} \text { NAA } \\ \text { vs. H4 } \end{array}$ |
| AUG | W | -37.6 | -38.5 | -37.5 | -38.5 | -34.1 | -35.1 | -36.5 | -37.5 |
|  | AN | -23.1 | -30.2 | -24.5 | -31.5 | -23.3 | -30.4 | -29.4 | -35.9 |
|  | BN | -23.9 | -26.7 | -19.6 | -22.5 | -21.5 | -24.4 | -19.0 | -21.9 |
|  | D | -36.0 | -24.4 | -29.9 | -17.1 | -37.6 | -26.3 | -28.6 | -15.6 |
|  | C | -13.5 | -3.0 | -14.2 | -3.7 | -17.0 | -6.8 | -10.9 | 0.0 |
|  | All | -30.3 | -28.8 | -28.3 | -26.7 | -29.4 | -27.9 | -27.9 | -26.4 |
| SEP | W | -55.4 | -70.1 | -54.9 | -69.8 | 8.6 | -27.1 | 8.0 | -27.6 |
|  | AN | -32.3 | -57.4 | -30.7 | -56.5 | 0.1 | -37.1 | -0.4 | -37.4 |
|  | BN | -35.3 | -34.7 | -23.3 | -22.5 | -31.5 | -30.8 | -27.7 | -27.0 |
|  | D | -24.7 | 6.1 | -21.4 | 10.8 | -27.1 | 2.8 | -18.3 | 15.3 |
|  | C | 2.4 | 19.2 | 5.4 | 22.6 | 1.1 | 17.7 | 7.3 | 24.9 |
|  | All | -37.9 | -49.0 | -34.7 | -46.4 | -6.4 | -23.2 | -3.9 | -21.1 |
| OCT | W | -24.2 | -22.9 | -26.0 | -24.7 | -24.7 | -23.4 | -25.1 | -23.8 |
|  | AN | -4.9 | -10.9 | -3.7 | -9.7 | -7.4 | -13.3 | -4.4 | -10.4 |
|  | BN | -9.2 | -13.4 | -16.7 | -20.6 | -11.8 | -15.9 | -19.2 | -23.0 |
|  | D | -8.9 | -10.7 | -7.8 | -9.6 | -12.3 | -14.1 | -13.6 | -15.3 |
|  | C | -0.5 | 0.5 | 6.6 | 7.8 | -6.2 | -5.1 | -4.6 | -3.6 |
|  | All | -13.0 | -14.2 | -13.6 | -14.8 | -15.3 | -16.5 | -16.4 | -17.5 |
| NOV | W | -30.7 | -30.1 | -29.8 | -29.2 | -24.8 | -24.2 | -25.1 | -24.5 |
|  | AN | -32.8 | -35.4 | -33.1 | -35.7 | -24.7 | -27.6 | -23.7 | -26.6 |
|  | BN | -33.2 | -35.5 | -32.1 | -34.5 | -24.7 | -27.4 | -23.8 | -26.5 |
|  | D | -31.7 | -26.2 | -32.3 | -26.9 | -26.4 | -20.5 | -27.4 | -21.6 |
|  | C | -20.5 | -17.7 | -19.8 | -16.9 | -14.8 | -11.7 | -13.6 | -10.5 |
|  | All | -30.6 | -29.9 | -30.2 | -29.5 | -24.1 | -23.4 | -24.0 | -23.3 |
| DEC | W | -17.5 | -11.5 | -15.4 | -9.2 | -21.3 | -15.6 | -20.0 | -14.2 |
|  | AN | -4.4 | -8.5 | -10.4 | -14.2 | -6.1 | -10.1 | -8.8 | -12.7 |
|  | BN | -4.3 | -4.3 | -9.0 | -9.0 | -9.1 | -9.2 | -10.6 | -10.7 |
|  | D | -8.1 | -6.4 | -12.5 | -10.9 | -9.5 | -7.8 | -12.3 | -10.7 |
|  | C | -4.7 | 5.9 | -10.2 | -0.2 | -6.9 | 3.5 | -12.8 | -3.1 |
|  | All | -11.9 | -8.2 | -13.1 | -9.5 | -15.1 | -11.5 | -15.8 | -12.3 |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.4.2.3 Sacramento River at Rio Vista

Table 29. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 4: In Delta-Sacramento River at Rio Vista |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 71,111 | 78,551 | 74,943 | 74,601 | 71,570 | 72,741 |
|  | AN | 41,963 | 42,919 | 40,415 | 40,560 | 38,028 | 38,395 |
|  | BN | 20,943 | 19,991 | 18,460 | 19,086 | 17,958 | 18,402 |
|  | D | 14,895 | 14,927 | 13,734 | 14,278 | 13,330 | 13,082 |
|  | C | 11,853 | 12,601 | 12,258 | 12,236 | 12,107 | 10,923 |
|  | All | 37,268 | 39,721 | 37,637 | 37,773 | 36,022 | 36,295 |
| FEB | W | 80,958 | 89,989 | 84,456 | 84,248 | 84,018 | 83,252 |
|  | AN | 52,542 | 55,363 | 52,751 | 53,242 | 50,962 | 51,496 |
|  | BN | 30,159 | 29,442 | 27,323 | 28,249 | 26,223 | 27,124 |
|  | D | 19,320 | 19,422 | 17,322 | 17,278 | 17,419 | 17,431 |
|  | C | 12,247 | 11,956 | 11,257 | 11,173 | 11,275 | 11,386 |
|  | All | 44,541 | 47,675 | 44,613 | 44,755 | 44,049 | 44,057 |
| MAR | W | 63,763 | 68,663 | 61,821 | 63,137 | 61,293 | 62,982 |
|  | AN | 46,750 | 48,513 | 43,722 | 43,862 | 42,558 | 42,880 |
|  | BN | 20,980 | 19,562 | 15,848 | 17,865 | 15,344 | 16,995 |
|  | D | 17,656 | 17,679 | 15,087 | 15,590 | 14,923 | 15,569 |
|  | C | 10,710 | 10,684 | 10,171 | 10,095 | 10,066 | 9,996 |
|  | All | 36,084 | 37,655 | 33,506 | 34,388 | 33,031 | 34,027 |
| APR | W | 38,214 | 38,422 | 32,733 | 36,918 | 32,540 | 36,752 |
|  | AN | 22,726 | 21,855 | 17,162 | 22,738 | 17,208 | 22,857 |
|  | BN | 14,652 | 14,207 | 12,214 | 16,928 | 12,240 | 16,574 |
|  | D | 10,331 | 10,299 | 9,652 | 9,938 | 9,583 | 9,930 |
|  | C | 7,665 | 7,816 | 7,513 | 7,277 | 7,437 | 7,330 |
|  | All | 21,333 | 21,211 | 18,194 | 21,170 | 18,118 | 21,080 |
| MAY | W | 26,933 | 20,046 | 15,090 | 18,123 | 15,068 | 18,187 |
|  | AN | 17,008 | 14,948 | 12,337 | 14,531 | 12,487 | 14,528 |
|  | BN | 10,924 | 9,355 | 9,140 | 10,168 | 9,214 | 9,935 |
|  | D | 8,135 | 8,564 | 8,870 | 8,663 | 8,835 | 8,502 |
|  | C | 5,305 | 5,554 | 5,335 | 5,275 | 5,302 | 5,274 |
|  | All | 15,456 | 12,833 | 10,878 | 12,282 | 10,893 | 12,227 |
| JUN | W | 16,557 | 11,418 | 8,452 | 7,216 | 8,500 | 7,287 |
|  | AN | 9,887 | 9,220 | 7,370 | 5,890 | 7,412 | 5,890 |
|  | BN | 7,001 | 7,241 | 6,957 | 6,540 | 6,839 | 6,686 |
|  | D | 6,020 | 6,335 | 6,021 | 5,757 | 5,997 | 5,594 |
|  | C | 4,333 | 4,513 | 4,127 | 3,894 | 4,101 | 3,913 |
|  | All | 9,847 | 8,257 | 6,872 | 6,100 | 6,864 | 6,114 |
| JUL | W | 11,125 | 12,181 | 9,672 | 8,184 | 10,079 | 8,563 |
|  | AN | 12,128 | 12,927 | 12,036 | 8,109 | 11,187 | 8,421 |
|  | BN | 11,686 | 11,357 | 8,655 | 8,220 | 9,076 | 8,291 |
|  | D | 10,523 | 10,307 | 7,358 | 7,773 | 6,721 | 6,548 |
|  | C | 7,736 | 6,596 | 4,045 | 4,545 | 4,312 | 4,514 |
|  | All | 10,739 | 10,921 | 8,513 | 7,556 | 8,488 | 7,461 |


| Alternative 4: In Delta-Sacramento River at Rio Vista |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 8,507 | 8,650 | 4,292 | 4,295 | 4,670 | 4,401 |
|  | AN | 8,538 | 9,648 | 5,892 | 5,747 | 5,872 | 5,207 |
|  | BN | 8,371 | 8,753 | 5,698 | 6,186 | 5,963 | 6,261 |
|  | D | 9,264 | 7,417 | 4,968 | 5,713 | 4,792 | 5,864 |
|  | C | 4,390 | 3,615 | 3,586 | 3,565 | 3,308 | 3,779 |
|  | All | 8,052 | 7,806 | 4,811 | 5,035 | 4,894 | 5,066 |
| SEP | W | 10,767 | 21,199 | 3,288 | 3,355 | 11,644 | 11,592 |
|  | AN | 6,788 | 12,832 | 3,847 | 3,998 | 6,873 | 6,896 |
|  | BN | 6,283 | 6,197 | 3,254 | 4,316 | 3,602 | 3,937 |
|  | D | 6,116 | 3,644 | 4,046 | 4,329 | 3,864 | 4,600 |
|  | C | 3,588 | 2,996 | 3,787 | 3,972 | 3,783 | 4,094 |
|  | All | 7,348 | 10,896 | 3,603 | 3,917 | 6,715 | 6,966 |
| OCT | W | 8,718 | 8,287 | 6,391 | 5,713 | 5,931 | 5,902 |
|  | AN | 6,183 | 7,207 | 6,462 | 5,807 | 5,964 | 6,673 |
|  | BN | 6,258 | 6,976 | 6,301 | 5,322 | 5,908 | 4,818 |
|  | D | 5,312 | 5,727 | 5,127 | 4,632 | 4,719 | 4,508 |
|  | C | 5,215 | 4,969 | 5,717 | 6,310 | 4,978 | 4,986 |
|  | All | 6,667 | 6,858 | 6,010 | 5,510 | 5,526 | 5,390 |
| NOV | W | 15,829 | 15,879 | 10,845 | 10,946 | 11,744 | 11,767 |
|  | AN | 11,333 | 12,156 | 6,882 | 6,841 | 8,253 | 8,533 |
|  | BN | 8,184 | 9,071 | 4,855 | 4,959 | 5,952 | 6,020 |
|  | D | 8,733 | 8,061 | 5,336 | 5,234 | 5,935 | 5,853 |
|  | C | 5,473 | 5,565 | 4,070 | 4,109 | 4,607 | 4,683 |
|  | All | 10,793 | 10,946 | 7,042 | 7,069 | 7,925 | 7,978 |
| DEC | W | 43,367 | 40,431 | 39,856 | 41,546 | 37,564 | 38,547 |
|  | AN | 19,040 | 19,936 | 18,791 | 17,467 | 18,525 | 17,760 |
|  | BN | 13,987 | 14,049 | 14,021 | 13,250 | 13,237 | 12,916 |
|  | D | 11,999 | 11,687 | 11,300 | 10,657 | 11,101 | 10,631 |
|  | C | 8,131 | 7,186 | 7,917 | 7,297 | 7,603 | 7,042 |
|  | All | 22,749 | 21,753 | 21,420 | 21,399 | 20,431 | 20,391 |

Table 30. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 4: In Delta-Sacramento River at Rio Vista |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITION S vs. H1 | NAA vs. H1 | EXISTING CONDITION S vs. H2 | NAA vs. H2 | EXISTING CONDITION S vs. H3 | NAA vs. H3 | $\begin{gathered} \hline \text { EXISTING } \\ \text { CONDITION } \\ \mathrm{S} \text { vs. H4 } \end{gathered}$ | NAA vs. H4 |
| JAN | W | $\begin{aligned} & \hline 3,832 \\ & (5.4 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-3,608 \\ & (-4.6 \%) \end{aligned}$ | $\begin{gathered} \hline 3,489 \\ (4.9 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -3,951 \\ & (-5 \%) \end{aligned}$ | $\begin{gathered} \hline 458 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} -6,982 \\ (-8.9 \%) \end{gathered}$ | $\begin{gathered} \hline 1,630 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} -5,810 \\ (-7.4 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -1,548 \\ (-3.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,504 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,403 \\ (-3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,359 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -3,935 \\ (-9.4 \%) \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline-4,891 \\ (-11.4 \%) \\ \hline \end{array}$ | $\begin{array}{r} -3,568 \\ (-8.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -4,524 \\ (-10.5 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -2,482 \\ (-11.9 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-1,530 \\ & (-7.7 \%) \\ & \hline \end{aligned}$ | $\begin{array}{r} -1,856 \\ (-8.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -904 \\ (-4.5 \%) \end{gathered}$ | $\begin{gathered} -2,985 \\ (-14.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,033 \\ (-10.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -2,541 \\ (-12.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,589 \\ (-7.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{array}{r} -1,161 \\ (-7.8 \%) \\ \hline \end{array}$ | $\begin{aligned} & -1,193 \\ & (-8 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -616 \\ (-4.1 \%) \end{gathered}$ | $\begin{gathered} -649 \\ (-4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,565 \\ (-10.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,597 \\ (-10.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,812 \\ (-12.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,845 \\ (-12.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 405 \\ (3.4 \%) \end{gathered}$ | $\begin{gathered} -344 \\ (-2.7 \%) \end{gathered}$ | $\begin{gathered} 384 \\ (3.2 \%) \end{gathered}$ | $\begin{gathered} -365 \\ (-2.9 \%) \end{gathered}$ | $\begin{gathered} 254 \\ (2.1 \%) \end{gathered}$ | $\begin{gathered} -494 \\ (-3.9 \%) \end{gathered}$ | $\begin{gathered} -930 \\ (-7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,679 \\ (-13.3 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 369 \\ (1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,084 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 505 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,948 \\ (-4.9 \%) \end{gathered}$ | $\begin{gathered} -1,246 \\ (-3.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -3,699 \\ (-9.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -973 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,426 \\ (-8.6 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} \hline 3,498 \\ (4.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,533 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3,290 \\ (4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,741 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3,060 \\ (3.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-5,971 \\ (-6.6 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline 2,294 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-6,737 \\ (-7.5 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 208 \\ (0.4 \%) \end{gathered}$ | $\begin{gathered} -2,612 \\ (-4.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 699 \\ (1.3 \%) \end{gathered}$ | $\begin{gathered} -2,121 \\ (-3.8 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -1,580 \\ & (-3 \%) \end{aligned}$ | $\begin{aligned} & -4,401 \\ & (-7.9 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & -1,046 \\ & (-2 \%) \end{aligned}$ | $\begin{aligned} & -3,866 \\ & (-7 \%) \\ & \hline \end{aligned}$ |
|  | BN | $\begin{aligned} & -2,836 \\ & (-9.4 \%) \end{aligned}$ | $\begin{gathered} -2,120 \\ (-7.2 \%) \end{gathered}$ | $\begin{gathered} -1,910 \\ (-6.3 \%) \end{gathered}$ | $\begin{gathered} -1,194 \\ (-4.1 \%) \end{gathered}$ | $\begin{gathered} -3,936 \\ (-13.1 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-3,220 \\ (-10.9 \%) \end{array}$ | $\begin{gathered} -3,035 \\ (-10.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,319 \\ (-7.9 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -1,998 \\ (-10.3 \%) \end{gathered}$ | $\begin{gathered} -2,101 \\ (-10.8 \%) \end{gathered}$ | $\begin{gathered} -2,042 \\ (-10.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,145 \\ (-11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,900 \\ (-9.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,003 \\ (-10.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,888 \\ (-9.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-1,991 \\ (-10.3 \%) \\ \hline \end{array}$ |
|  | C | $\begin{gathered} -990 \\ (-8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -699 \\ (-5.8 \%) \end{gathered}$ | $\begin{gathered} \hline-1,073 \\ (-8.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -782 \\ (-6.5 \%) \end{gathered}$ | $\begin{gathered} -972 \\ (-7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -681 \\ (-5.7 \%) \end{gathered}$ | $\begin{gathered} -861 \\ (-7 \%) \end{gathered}$ | $\begin{gathered} -569 \\ (-4.8 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 72 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,062 \\ (-6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 214 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} -2,920 \\ (-6.1 \%) \end{gathered}$ | $\begin{gathered} -492 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,626 \\ (-7.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -484 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,618 \\ (-7.6 \%) \\ \hline \end{gathered}$ |
| MAR | W | $\begin{gathered} -1,942 \\ (-3 \%) \end{gathered}$ | $\begin{aligned} & -6,842 \\ & (-10 \%) \end{aligned}$ | $\begin{gathered} -626 \\ (-1 \%) \end{gathered}$ | $\begin{gathered} -5,525 \\ (-8 \%) \end{gathered}$ | $\begin{gathered} -2,470 \\ (-3.9 \%) \end{gathered}$ | $\left\|\begin{array}{c} -7,369 \\ (-10.7 \%) \end{array}\right\|$ | $\begin{gathered} -781 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} -5,680 \\ (-8.3 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} \hline-3,029 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,791 \\ (-9.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,889 \\ (-6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,651 \\ (-9.6 \%) \end{gathered}$ | $\begin{aligned} & -4,193 \\ & (-9 \%) \\ & \hline \end{aligned}$ | $\left\lvert\, \begin{gathered} -5,955 \\ (-12.3 \%) \end{gathered}\right.$ | $\begin{gathered} -3,871 \\ (-8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,633 \\ (-11.6 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -5,132 \\ (-24.5 \%) \end{gathered}$ | $\begin{aligned} & \hline-3,714 \\ & (-19 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-3,114 \\ (-14.8 \%) \end{gathered}$ | $\begin{gathered} -1,697 \\ (-8.7 \%) \end{gathered}$ | $\begin{gathered} -5,636 \\ (-26.9 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-4,218 \\ (-21.6 \%) \end{array}$ | $\begin{aligned} & -3,985 \\ & (-19 \%) \end{aligned}$ | $\begin{gathered} \hline-2,567 \\ (-13.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -2,569 \\ (-14.5 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,591 \\ (-14.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -2,066 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,089 \\ (-11.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,733 \\ (-15.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,755 \\ (-15.6 \%) \end{array}$ | $\begin{gathered} -2,087 \\ (-11.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-2,110 \\ (-11.9 \%) \\ \hline \end{array}$ |
|  | C | $\begin{gathered} -540 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} -513 \\ (-4.8 \%) \end{gathered}$ | $\begin{gathered} -615 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -588 \\ (-5.5 \%) \end{gathered}$ | $\begin{gathered} -644 \\ (-6 \%) \end{gathered}$ | $\begin{gathered} -617 \\ (-5.8 \%) \end{gathered}$ | $\begin{gathered} -714 \\ (-6.7 \%) \end{gathered}$ | $\begin{gathered} -687 \\ (-6.4 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -2,578 \\ (-7.1 \%) \end{gathered}$ | $\begin{aligned} & \hline-4,148 \\ & (-11 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -1,696 \\ (-4.7 \%) \end{gathered}$ | $\begin{gathered} -3,267 \\ (-8.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,053 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\left\lvert\, \begin{gathered} -4,624 \\ (-12.3 \%) \end{gathered}\right.$ | $\begin{array}{r} -2,057 \\ (-5.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -3,627 \\ (-9.6 \%) \end{gathered}$ |
| APR | W | $\begin{gathered} -5,480 \\ (-14.3 \%) \end{gathered}$ | $\begin{gathered} -5,689 \\ (-14.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,295 \\ (-3.4 \%) \end{gathered}$ | $\begin{gathered} -1,504 \\ (-3.9 \%) \end{gathered}$ | $\begin{gathered} -5,674 \\ (-14.8 \%) \end{gathered}$ | $\begin{gathered} -5,883 \\ (-15.3 \%) \end{gathered}$ | $\begin{gathered} -1,461 \\ (-3.8 \%) \end{gathered}$ | $\begin{gathered} -1,670 \\ (-4.3 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -5,564 \\ (-24.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-4,693 \\ (-21.5 \%) \\ \hline \end{array}$ | $\begin{gathered} 12 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 883 \\ (4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,518 \\ (-24.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,647 \\ (-21.3 \%) \end{gathered}$ | $\begin{gathered} 130 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} 1,002 \\ (4.6 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -2,439 \\ (-16.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,993 \\ (-14 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,276 \\ (15.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,721 \\ (19.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,412 \\ (-16.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,967 \\ (-13.8 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,922 \\ (13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,367 \\ (16.7 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -679 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -646 \\ (-6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -393 \\ (-3.8 \%) \end{gathered}$ | $\begin{gathered} -360 \\ (-3.5 \%) \end{gathered}$ | $\begin{gathered} -748 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-715 \\ (-6.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -401 \\ (-3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -368 \\ (-3.6 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -152 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} -303 \\ (-3.9 \%) \end{gathered}$ | $\begin{gathered} -388 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -539 \\ (-6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -228 \\ (-3 \%) \end{gathered}$ | $\begin{array}{\|c} -379 \\ (-4.8 \%) \end{array}$ | $\begin{gathered} -335 \\ (-4.4 \%) \end{gathered}$ | $\begin{gathered} -487 \\ (-6.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} \hline-3,139 \\ (-14.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,017 \\ (-14.2 \%) \end{gathered}$ | $\begin{gathered} -163 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -41 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,216 \\ (-15.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-3,094 \\ (-14.6 \%) \end{array}$ | $\begin{gathered} -253 \\ (-1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -131 \\ (-0.6 \%) \\ \hline \end{gathered}$ |


| Alternative 4: In Delta-Sacramento River at Rio Vista |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITION S vs. H1 | $\begin{aligned} & \text { NAA vs. } \\ & \text { H1 } \end{aligned}$ | EXISTING CONDITION S vs. H2 | NAA vs. H2 | EXISTING CONDITION S vs. H3 | NAA vs. H3 | EXISTING CONDITION S vs. H4 | NAA vs. H4 |
| MAY | W | $\begin{array}{r} -11,843 \\ (-44 \%) \\ \hline \end{array}$ | $\begin{gathered} -4,956 \\ (-24.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8,810 \\ (-32.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -1,923 \\ (-9.6 \%) \\ \hline \end{array}$ | $\begin{aligned} & \hline-11,865 \\ & (-44.1 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline-4,978 \\ (-24.8 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-8,745 \\ (-32.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -1,858 \\ (-9.3 \%) \\ \hline \end{array}$ |
|  | AN | $\begin{gathered} -4,671 \\ (-27.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,611 \\ (-17.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,476 \\ (-14.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -417 \\ (-2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-4,521 \\ (-26.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,461 \\ (-16.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -2,480 \\ (-14.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -420 \\ (-2.8 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -1,784 \\ (-16.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -215 \\ (-2.3 \%) \end{gathered}$ | $\begin{gathered} -756 \\ (-6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 813 \\ (8.7 \%) \end{gathered}$ | $\begin{gathered} -1,710 \\ (-15.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -141 \\ (-1.5 \%) \end{gathered}$ | $\begin{gathered} -989 \\ (-9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 580 \\ (6.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{array}{r} 735 \\ (9 \%) \\ \hline \end{array}$ | $\begin{gathered} 306 \\ (3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 528 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 99 \\ (1.2 \%) \end{gathered}$ | $\begin{gathered} 701 \\ (8.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 272 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 367 \\ (4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -62 \\ (-0.7 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 29 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -219 \\ (-4 \%) \end{gathered}$ | $\begin{gathered} -30 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} -279 \\ (-5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -252 \\ (-4.5 \%) \end{gathered}$ | $\begin{gathered} -31 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -280 \\ (-5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -4,577 \\ (-29.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,955 \\ (-15.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,173 \\ (-20.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -551 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} -4,562 \\ (-29.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,940 \\ (-15.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -3,229 \\ (-20.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -606 \\ (-4.7 \%) \end{gathered}$ |
| JUN | W | $\begin{aligned} & -8,105 \\ & (-49 \%) \\ & \hline \end{aligned}$ | $\begin{aligned} & -2,966 \\ & (-26 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -9,341 \\ (-56.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-4,202 \\ (-36.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -8,057 \\ (-48.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,918 \\ (-25.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -9,270 \\ (-56 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,131 \\ (-36.2 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} \hline-2,517 \\ (-25.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,850 \\ (-20.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,997 \\ (-40.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-3,330 \\ (-36.1 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-2,475 \\ & (-25 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline-1,808 \\ (-19.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -3,997 \\ (-40.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-3,330 \\ (-36.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -43 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -283 \\ (-3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -461 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -701 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -162 \\ (-2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -402 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -314 \\ (-4.5 \%) \end{gathered}$ | $\begin{gathered} -554 \\ (-7.7 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -314 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} -263 \\ (-4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -578 \\ (-9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -23 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-338 \\ (-5.3 \%) \end{array}$ | $\begin{gathered} -426 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -741 \\ (-11.7 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -205 \\ (-4.7 \%) \end{gathered}$ | $\begin{gathered} -386 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -438 \\ (-10.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -619 \\ (-13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -232 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -412 \\ (-9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -420 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -600 \\ (-13.3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -2,975 \\ (-30.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,385 \\ (-16.8 \%) \end{gathered}$ | $\begin{gathered} -3,747 \\ (-38.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,157 \\ (-26.1 \%) \end{gathered}$ | $\begin{gathered} -2,983 \\ (-30.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,393 \\ (-16.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -3,733 \\ (-37.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,143 \\ (-25.9 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} -1,453 \\ (-13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,509 \\ (-20.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,941 \\ (-26.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,998 \\ (-32.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,046 \\ (-9.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,103 \\ (-17.3 \%) \\ \hline \end{array}$ | $\begin{aligned} & -2,561 \\ & (-23 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -3,618 \\ (-29.7 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -92 \\ (-0.8 \%) \end{gathered}$ | $\begin{gathered} -891 \\ (-6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,019 \\ (-33.1 \%) \end{gathered}$ | $\begin{gathered} -4,818 \\ (-37.3 \%) \end{gathered}$ | $\begin{gathered} -941 \\ (-7.8 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,740 \\ (-13.5 \%) \end{array}$ | $\begin{gathered} -3,707 \\ (-30.6 \%) \end{gathered}$ | $\begin{gathered} -4,507 \\ (-34.9 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -3,031 \\ (-25.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,702 \\ (-23.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,466 \\ (-29.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,137 \\ (-27.6 \%) \end{gathered}$ | $\begin{gathered} -2,611 \\ (-22.3 \%) \\ \hline \end{gathered}$ | $\left.\begin{array}{\|c\|} -2,281 \\ (-20.1 \%) \end{array} \right\rvert\,$ | $\begin{gathered} -3,395 \\ (-29.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -3,066 \\ (-27 \%) \\ \hline \end{array}$ |
|  | D | $\begin{gathered} -3,165 \\ (-30.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,949 \\ (-28.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,750 \\ (-26.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,534 \\ (-24.6 \%) \end{gathered}$ | $\begin{gathered} -3,803 \\ (-36.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-3,586 \\ (-34.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -3,975 \\ (-37.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,759 \\ (-36.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -3,691 \\ (-47.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-2,551 \\ (-38.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,191 \\ (-41.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,051 \\ (-31.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,425 \\ (-44.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,285 \\ (-34.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -3,222 \\ (-41.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,082 \\ (-31.6 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -2,227 \\ (-20.7 \%) \end{gathered}$ | $\begin{gathered} -2,408 \\ (-22.1 \%) \end{gathered}$ | $\begin{gathered} -3,183 \\ (-29.6 \%) \end{gathered}$ | $\begin{gathered} -3,365 \\ (-30.8 \%) \end{gathered}$ | $\begin{aligned} & -2,251 \\ & (-21 \%) \end{aligned}$ | $\begin{array}{\|c\|} \hline-2,433 \\ (-22.3 \%) \end{array}$ | $\begin{gathered} -3,278 \\ (-30.5 \%) \end{gathered}$ | $\begin{gathered} -3,460 \\ (-31.7 \%) \end{gathered}$ |
| AUG | W | $\begin{gathered} -4,215 \\ (-49.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,358 \\ (-50.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,211 \\ (-49.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,354 \\ (-50.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,837 \\ (-45.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -3,980 \\ (-46 \%) \\ \hline \end{array}$ | $\begin{gathered} -4,106 \\ (-48.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -4,249 \\ (-49.1 \%) \\ \hline \end{array}$ |
|  | AN | $\begin{aligned} & -2,646 \\ & (-31 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -3,756 \\ (-38.9 \%) \end{gathered}$ | $\begin{gathered} -2,791 \\ (-32.7 \%) \end{gathered}$ | $\begin{gathered} -3,901 \\ (-40.4 \%) \end{gathered}$ | $\begin{gathered} -2,666 \\ (-31.2 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-3,776 \\ (-39.1 \%) \\ \hline \end{array}$ | $\begin{aligned} & -3,331 \\ & (-39 \%) \end{aligned}$ | $\begin{aligned} & -4,440 \\ & (-46 \%) \end{aligned}$ |
|  | BN | $\begin{gathered} -2,673 \\ (-31.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,055 \\ (-34.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,185 \\ (-26.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,567 \\ (-29.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,408 \\ (-28.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,790 \\ (-31.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -2,110 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,492 \\ (-28.5 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} \hline-4,296 \\ (-46.4 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-2,449 \\ & (-33 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -3,551 \\ (-38.3 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-1,704 \\ & (-23 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-4,473 \\ (-48.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,625 \\ (-35.4 \%) \end{array}$ | $\begin{gathered} -3,401 \\ (-36.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,553 \\ (-20.9 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -804 \\ (-18.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -29 \\ (-0.8 \%) \end{gathered}$ | $\begin{gathered} -825 \\ (-18.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -50 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} -1,082 \\ (-24.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -307 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -611 \\ (-13.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 164 \\ (4.5 \%) \end{gathered}$ |
|  | All | $\begin{gathered} \hline-3,241 \\ (-40.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,995 \\ (-38.4 \%) \end{gathered}$ | $\begin{gathered} \hline-3,017 \\ (-37.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,771 \\ (-35.5 \%) \end{gathered}$ | $\begin{gathered} -3,158 \\ (-39.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,912 \\ (-37.3 \%) \end{array}$ | $\begin{gathered} -2,986 \\ (-37.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,740 \\ (-35.1 \%) \\ \hline \end{gathered}$ |


| Alternative 4: In Delta-Sacramento River at Rio Vista |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITION S vs. H1 | $\begin{aligned} & \text { NAA vs. } \\ & \text { H1 } \end{aligned}$ | EXISTING CONDITION S vs. H2 | NAA vs. H2 | EXISTING CONDITION S vs. H3 | NAA vs. H3 | EXISTING CONDITION S vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{gathered} -7,479 \\ (-69.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-17,911 \\ (-84.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7,412 \\ (-68.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -17,844 \\ (-84.2 \%) \end{gathered}$ | $\begin{gathered} \hline 877 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-9,555 \\ (-45.1 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline 825 \\ (7.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -9,607 \\ (-45.3 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -2,942 \\ (-43.3 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -8,985 \\ & (-70 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -2,790 \\ (-41.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8,834 \\ (-68.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 85 \\ (1.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-5,959 \\ (-46.4 \%) \\ \hline \end{array}$ | $\begin{gathered} 107 \\ (1.6 \%) \end{gathered}$ | $\begin{gathered} -5,936 \\ (-46.3 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -3,029 \\ (-48.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,944 \\ (-47.5 \%) \end{gathered}$ | $\begin{gathered} -1,968 \\ (-31.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,882 \\ (-30.4 \%) \end{gathered}$ | $\begin{gathered} -2,681 \\ (-42.7 \%) \end{gathered}$ | $\left\lvert\, \begin{gathered} -2,595 \\ (-41.9 \%) \end{gathered}\right.$ | $\begin{gathered} -2,346 \\ (-37.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,260 \\ (-36.5 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -2,071 \\ (-33.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 401 \\ (11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,788 \\ (-29.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 685 \\ (18.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,252 \\ (-36.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 220 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,516 \\ (-24.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 956 \\ (26.2 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 198 \\ (5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 791 \\ (26.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 383 \\ (10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 976 \\ (32.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 195 \\ (5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 787 \\ (26.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 506 \\ (14.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,098 \\ (36.7 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{aligned} & \hline-3,744 \\ & (-51 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-7,293 \\ (-66.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,431 \\ (-46.7 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-6,979 \\ & (-64 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -633 \\ (-8.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-4,181 \\ (-38.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -382 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-3,930 \\ (-36.1 \%) \\ \hline \end{array}$ |
| OCT | W | $\begin{gathered} -2,327 \\ (-26.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,897 \\ (-22.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,005 \\ (-34.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,574 \\ (-31.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -2,787 \\ (-32 \%) \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline-2,356 \\ (-28.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -2,816 \\ (-32.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-2,385 \\ (-28.8 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 279 \\ (4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -745 \\ (-10.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-376 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,400 \\ (-19.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -219 \\ (-3.5 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,243 \\ (-17.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 490 \\ (7.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -534 \\ (-7.4 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 42 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -675 \\ (-9.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -936 \\ (-15 \%) \end{gathered}$ | $\begin{gathered} -1,654 \\ (-23.7 \%) \end{gathered}$ | $\begin{gathered} -350 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,068 \\ (-15.3 \%) \\ \hline \end{array}$ | $\begin{aligned} & -1,440 \\ & (-23 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -2,158 \\ (-30.9 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -185 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -600 \\ (-10.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -680 \\ (-12.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,095 \\ (-19.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -593 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,008 \\ (-17.6 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline-804 \\ (-15.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,219 \\ (-21.3 \%) \\ \hline \end{array}$ |
|  | C | $\begin{gathered} 502 \\ (9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 747 \\ (15 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,095 \\ (21 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,341 \\ (27 \%) \end{gathered}$ | $\begin{gathered} -237 \\ (-4.5 \%) \end{gathered}$ | $\begin{gathered} 9 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} -229 \\ (-4.4 \%) \end{gathered}$ | $\begin{gathered} 17 \\ (0.3 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -657 \\ (-9.9 \%) \end{gathered}$ | $\begin{gathered} -848 \\ (-12.4 \%) \end{gathered}$ | $\begin{gathered} -1,157 \\ (-17.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,348 \\ (-19.7 \%) \end{gathered}$ | $\begin{gathered} -1,140 \\ (-17.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,331 \\ (-19.4 \%) \end{array}$ | $\begin{gathered} -1,277 \\ (-19.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,468 \\ (-21.4 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} -4,984 \\ (-31.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,034 \\ (-31.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,883 \\ (-30.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,933 \\ (-31.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,085 \\ (-25.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,135 \\ (-26 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,062 \\ (-25.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,112 \\ (-25.9 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} \hline-4,451 \\ (-39.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,274 \\ (-43.4 \%) \end{gathered}$ | $\begin{gathered} -4,492 \\ (-39.6 \%) \end{gathered}$ | $\begin{gathered} -5,315 \\ (-43.7 \%) \end{gathered}$ | $\begin{gathered} -3,079 \\ (-27.2 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-3,902 \\ (-32.1 \%) \end{array}$ | $\begin{gathered} -2,799 \\ (-24.7 \%) \end{gathered}$ | $\begin{array}{\|c} -3,622 \\ (-29.8 \%) \end{array}$ |
|  | BN | $\begin{gathered} -3,329 \\ (-40.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,216 \\ (-46.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,225 \\ (-39.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,112 \\ (-45.3 \%) \end{gathered}$ | $\begin{gathered} -2,232 \\ (-27.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-3,119 \\ (-34.4 \%) \\ \hline \end{array}$ | $\begin{gathered} -2,164 \\ (-26.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-3,051 \\ (-33.6 \%) \\ \hline \end{array}$ |
|  | D | $\begin{gathered} -3,397 \\ (-38.9 \%) \end{gathered}$ | $\begin{gathered} -2,725 \\ (-33.8 \%) \end{gathered}$ | $\begin{gathered} -3,499 \\ (-40.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,827 \\ (-35.1 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -2,798 \\ & (-32 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline-2,126 \\ (-26.4 \%) \\ \hline \end{array}$ | $\begin{aligned} & -2,880 \\ & (-33 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -2,208 \\ (-27.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -1,404 \\ (-25.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,495 \\ (-26.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,365 \\ (-24.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,456 \\ (-26.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -866 \\ (-15.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-958 \\ (-17.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -791 \\ (-14.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-882 \\ (-15.9 \%) \\ \hline \end{array}$ |
|  | All | $\begin{gathered} \hline-3,751 \\ (-34.8 \%) \end{gathered}$ | $\begin{gathered} -3,905 \\ (-35.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,724 \\ (-34.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,878 \\ (-35.4 \%) \end{gathered}$ | $\begin{gathered} -2,868 \\ (-26.6 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-3,022 \\ (-27.6 \%) \end{array}$ | $\begin{gathered} -2,815 \\ (-26.1 \%) \end{gathered}$ | $\begin{gathered} -2,969 \\ (-27.1 \%) \end{gathered}$ |
| DEC | W | $\begin{array}{r} -3,511 \\ (-8.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -576 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} -1,821 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} 1,115 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} -5,803 \\ (-13.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|l} \hline-2,867 \\ (-7.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -4,820 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,884 \\ (-4.7 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -250 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} -1,145 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,574 \\ (-8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,469 \\ (-12.4 \%) \end{gathered}$ | $\begin{gathered} -515 \\ (-2.7 \%) \end{gathered}$ | $\begin{gathered} -1,411 \\ (-7.1 \%) \end{gathered}$ | $\begin{gathered} -1,281 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,176 \\ (-10.9 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 33 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} -29 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -737 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -799 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -751 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-812 \\ (-5.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -1,072 \\ (-7.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,133 \\ (-8.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -699 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -388 \\ (-3.3 \%) \end{gathered}$ | $\begin{gathered} -1,342 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-1,031 \\ & (-8.8 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -898 \\ (-7.5 \%) \end{gathered}$ | $\begin{gathered} -586 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} \hline-1,368 \\ (-11.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,056 \\ (-9 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -214 \\ (-2.6 \%) \end{gathered}$ | $\begin{gathered} 732 \\ (10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -834 \\ (-10.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 112 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -528 \\ (-6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 417 \\ (5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,089 \\ (-13.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -144 \\ (-2 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -1,329 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -333 \\ (-1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,350 \\ (-5.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -354 \\ (-1.6 \%) \end{gathered}$ | $\begin{gathered} \hline-2,318 \\ (-10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,322 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-2,358 \\ (-10.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,362 \\ (-6.3 \%) \\ \hline \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.4.2.4 Delta Outflow

Table 31. Mean Monthly Flows (cfs) for Model Scenarios at the Delta Outflow, Year-Round

| Alternative 4: In Delta-Delta Outflow |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 85,900 | 94,620 | 94,197 | 93,786 | 90,641 | 91,842 |
|  | AN | 49,448 | 51,100 | 50,632 | 50,566 | 48,151 | 48,071 |
|  | BN | 22,968 | 22,301 | 22,233 | 22,911 | 21,625 | 22,124 |
|  | D | 14,736 | 14,732 | 15,634 | 16,406 | 15,382 | 15,064 |
|  | C | 11,343 | 12,651 | 13,503 | 13,543 | 13,475 | 12,262 |
|  | All | 43,289 | 46,372 | 46,481 | 46,632 | 44,827 | 45,034 |
| FEB | W | 96,835 | 107,085 | 107,182 | 107,175 | 106,277 | 105,863 |
|  | AN | 62,321 | 65,873 | 65,940 | 66,792 | 64,056 | 64,680 |
|  | BN | 36,766 | 36,084 | 35,174 | 36,240 | 34,067 | 35,059 |
|  | D | 20,915 | 21,461 | 20,148 | 20,164 | 20,243 | 20,350 |
|  | C | 12,991 | 12,798 | 12,593 | 12,586 | 12,528 | 12,818 |
|  | All | 52,594 | 56,338 | 55,905 | 56,212 | 55,165 | 55,360 |
| MAR | W | 78,956 | 84,471 | 83,959 | 86,298 | 82,968 | 85,415 |
|  | AN | 54,171 | 56,737 | 56,524 | 57,210 | 55,231 | 56,124 |
|  | BN | 24,029 | 22,467 | 20,300 | 24,750 | 19,621 | 23,915 |
|  | D | 19,880 | 19,985 | 17,546 | 19,292 | 17,463 | 19,249 |
|  | C | 11,911 | 12,215 | 11,883 | 12,104 | 11,862 | 11,957 |
|  | All | 43,172 | 45,097 | 43,949 | 45,967 | 43,308 | 45,354 |
| APR | W | 54,394 | 54,562 | 49,209 | 54,424 | 48,976 | 54,124 |
|  | AN | 31,975 | 30,576 | 25,334 | 32,552 | 25,403 | 32,730 |
|  | BN | 21,928 | 20,641 | 18,543 | 24,720 | 18,412 | 24,384 |
|  | D | 14,142 | 13,413 | 12,706 | 13,817 | 12,615 | 13,822 |
|  | C | 9,053 | 9,294 | 8,949 | 8,950 | 8,887 | 9,029 |
|  | All | 30,099 | 29,603 | 26,575 | 30,583 | 26,460 | 30,470 |
| MAY | W | 41,040 | 32,880 | 29,306 | 33,100 | 29,273 | 33,155 |
|  | AN | 24,200 | 21,709 | 19,292 | 22,440 | 19,367 | 22,438 |
|  | BN | 16,299 | 13,596 | 13,706 | 15,504 | 13,853 | 15,221 |
|  | D | 10,487 | 10,375 | 11,003 | 11,038 | 11,035 | 10,955 |
|  | C | 6,000 | 6,286 | 6,323 | 6,428 | 6,271 | 6,414 |
|  | All | 22,517 | 19,121 | 17,796 | 19,790 | 17,821 | 19,738 |
| JUN | W | 23,451 | 15,640 | 15,779 | 15,553 | 15,740 | 15,400 |
|  | AN | 11,801 | 10,676 | 10,996 | 10,443 | 11,054 | 10,508 |
|  | BN | 8,004 | 8,943 | 9,885 | 9,925 | 9,653 | 9,927 |
|  | D | 6,636 | 7,689 | 7,896 | 7,756 | 7,816 | 7,772 |
|  | C | 5,322 | 5,632 | 5,356 | 5,335 | 5,320 | 5,333 |
|  | All | 12,765 | 10,560 | 10,817 | 10,637 | 10,751 | 10,602 |
| JUL | W | 11,441 | 11,407 | 9,497 | 9,171 | 9,598 | 9,458 |
|  | AN | 9,430 | 12,225 | 9,673 | 8,823 | 9,670 | 9,138 |
|  | BN | 7,151 | 7,668 | 6,619 | 6,467 | 6,872 | 6,748 |
|  | D | 5,024 | 6,448 | 5,574 | 5,726 | 5,494 | 5,608 |
|  | C | 4,238 | 5,832 | 5,177 | 5,329 | 5,319 | 5,313 |
|  | All | 7,951 | 8,984 | 7,538 | 7,340 | 7,616 | 7,497 |


| Alternative 4: In Delta-Delta Outflow |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 5,341 | 4,308 | 4,000 | 4,000 | 4,000 | 4,000 |
|  | AN | 4,000 | 4,713 | 4,143 | 4,011 | 4,152 | 4,000 |
|  | BN | 4,000 | 5,129 | 4,429 | 4,357 | 4,449 | 4,363 |
|  | D | 4,829 | 5,348 | 4,566 | 4,734 | 4,556 | 4,729 |
|  | C | 4,077 | 4,433 | 4,182 | 3,954 | 3,983 | 4,034 |
|  | All | 4,618 | 4,754 | 4,245 | 4,217 | 4,218 | 4,227 |
| SEP | W | 9,569 | 20,078 | 4,246 | 4,352 | 21,394 | 21,406 |
|  | AN | 3,672 | 11,581 | 3,279 | 3,559 | 12,634 | 12,895 |
|  | BN | 3,445 | 3,428 | 3,289 | 4,026 | 3,365 | 3,717 |
|  | D | 3,350 | 3,021 | 4,263 | 4,389 | 4,201 | 4,651 |
|  | C | 3,000 | 3,036 | 5,585 | 6,061 | 5,916 | 6,200 |
|  | All | 5,334 | 9,754 | 4,141 | 4,438 | 10,995 | 11,237 |
| OCT | W | 6,487 | 9,520 | 9,519 | 9,395 | 10,426 | 10,486 |
|  | AN | 4,021 | 8,982 | 9,189 | 9,344 | 9,706 | 10,114 |
|  | BN | 4,477 | 8,054 | 9,393 | 8,609 | 10,040 | 9,244 |
|  | D | 4,157 | 7,294 | 8,223 | 8,247 | 8,387 | 8,199 |
|  | C | 4,158 | 6,607 | 8,594 | 9,207 | 8,393 | 8,359 |
|  | All | 4,931 | 8,276 | 9,029 | 8,974 | 9,510 | 9,406 |
| NOV | W | 14,232 | 15,987 | 12,651 | 12,703 | 16,170 | 15,936 |
|  | AN | 9,683 | 11,529 | 7,298 | 7,476 | 11,000 | 11,214 |
|  | BN | 5,864 | 8,681 | 4,588 | 5,062 | 8,264 | 8,673 |
|  | D | 6,943 | 8,052 | 5,347 | 5,414 | 7,912 | 8,097 |
|  | C | 5,045 | 5,725 | 4,346 | 4,189 | 5,764 | 6,031 |
|  | All | 9,193 | 10,844 | 7,672 | 7,788 | 10,728 | 10,834 |
| DEC | W | 48,185 | 45,191 | 46,927 | 48,571 | 44,012 | 44,930 |
|  | AN | 18,014 | 19,119 | 19,935 | 18,497 | 19,129 | 18,426 |
|  | BN | 11,950 | 12,231 | 13,154 | 12,843 | 12,206 | 11,990 |
|  | D | 8,884 | 8,828 | 9,800 | 9,520 | 9,510 | 9,506 |
|  | C | 5,531 | 6,560 | 6,848 | 6,685 | 6,430 | 5,989 |
|  | All | 22,714 | 22,113 | 23,196 | 23,368 | 21,867 | 21,953 |

Table 32. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios at the Delta Outflow, Year-Round

| Alternative 4: In Delta-Delta Outflow |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| JAN | W | $\begin{gathered} \hline 8,297 \\ (9.7 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-423 \\ (-0.4 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline 7,887 \\ (9.2 \%) \end{gathered}$ | $\begin{gathered} -833 \\ (-0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4,741 \\ (5.5 \%) \end{gathered}$ | $\begin{gathered} -3,978 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} \hline 5,942 \\ (6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,778 \\ (-2.9 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 1,185 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-468 \\ (-0.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,119 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -533 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,297 \\ (-2.6 \%) \end{gathered}$ | $\begin{gathered} -2,949 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,377 \\ (-2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,029 \\ (-5.9 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -736 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline-68 \\ (-0.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -57 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 610 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,343 \\ (-5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -676 \\ (-3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -844 \\ (-3.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -177 \\ (-0.8 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 898 \\ (6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 901 \\ (6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,671 \\ (11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,674 \\ (11.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 646 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 649 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 329 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 332 \\ (2.3 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} \hline 2,160 \\ (19 \%) \end{gathered}$ | $\begin{gathered} 852 \\ (6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,200 \\ (19.4 \%) \end{gathered}$ | $\begin{gathered} 892 \\ (7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,132 \\ (18.8 \%) \end{gathered}$ | $\begin{gathered} 824 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 920 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -388 \\ (-3.1 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 3,192 \\ (7.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 108 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,343 \\ (7.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 260 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,538 \\ (3.6 \%) \end{gathered}$ | $\begin{gathered} -1,545 \\ (-3.3 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 1,745 \\ & (4 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -1,338 \\ (-2.9 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} 10,347 \\ (10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 97 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 10,340 \\ (10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 90 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 9,441 \\ (9.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -809 \\ (-0.8 \%) \end{gathered}$ | $\begin{gathered} 9,028 \\ (9.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,222 \\ (-1.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 3,618 \\ \text { (5.8\%) } \\ \hline \end{gathered}$ | $\begin{gathered} 66 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,471 \\ (7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 919 \\ (1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,735 \\ (2.8 \%) \end{gathered}$ | $\begin{gathered} -1,817 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} \hline 2,358 \\ (3.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,193 \\ (-1.8 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{aligned} & \hline-1,593 \\ & (-4.3 \%) \\ & \hline \end{aligned}$ | $\begin{array}{c\|} \hline-911 \\ (-2.5 \%) \end{array}$ | $\begin{gathered} -526 \\ (-1.4 \%) \end{gathered}$ | $\begin{gathered} 156 \\ (0.4 \%) \end{gathered}$ | $\begin{aligned} & -2,699 \\ & (-7.3 \%) \end{aligned}$ | $\begin{aligned} & -2,017 \\ & (-5.6 \%) \end{aligned}$ | $\begin{gathered} -1,708 \\ (-4.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,026 \\ (-2.8 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -767 \\ (-3.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,313 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -751 \\ (-3.6 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -1,297 \\ & (-6 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -673 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -1,218 \\ & (-5.7 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -565 \\ (-2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,111 \\ (-5.2 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -398 \\ (-3.1 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-205 \\ (-1.6 \%) \end{array}$ | $\begin{gathered} -405 \\ (-3.1 \%) \end{gathered}$ | $\begin{gathered} -212 \\ (-1.7 \%) \end{gathered}$ | $\begin{gathered} -463 \\ (-3.6 \%) \end{gathered}$ | $\begin{gathered} -270 \\ (-2.1 \%) \end{gathered}$ | $\begin{gathered} -173 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 20 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 3,312 \\ (6.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-433 \\ (-0.8 \%) \\ \hline \end{array}$ | $\begin{gathered} 3,619 \\ (6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -126 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,571 \\ (4.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,174 \\ (-2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,767 \\ (5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -978 \\ (-1.7 \%) \end{gathered}$ |
| MAR | W | $\begin{gathered} 5,003 \\ (6.3 \%) \end{gathered}$ | $\begin{array}{c\|} \hline-512 \\ (-0.6 \%) \end{array}$ | $\begin{gathered} 7,342 \\ (9.3 \%) \end{gathered}$ | $\begin{gathered} 1,826 \\ (2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,012 \\ (5.1 \%) \end{gathered}$ | $\begin{gathered} -1,504 \\ (-1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6,459 \\ (8.2 \%) \end{gathered}$ | $\begin{gathered} 944 \\ (1.1 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 2,353 \\ (4.3 \%) \end{gathered}$ | $\begin{gathered} -213 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,039 \\ (5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 472 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 1,060 \\ & (2 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -1,507 \\ (-2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,953 \\ (3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -613 \\ (-1.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -3,728 \\ (-15.5 \%) \end{gathered}$ | $\begin{gathered} -2,167 \\ (-9.6 \%) \end{gathered}$ | $\begin{gathered} 722 \\ (3 \%) \end{gathered}$ | $\begin{gathered} 2,283 \\ (10.2 \%) \end{gathered}$ | $\begin{gathered} -4,408 \\ (-18.3 \%) \end{gathered}$ | $\begin{gathered} -2,846 \\ (-12.7 \%) \end{gathered}$ | $\begin{gathered} -114 \\ (-0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,447 \\ (6.4 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -2,334 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,440 \\ (-12.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -588 \\ (-3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -693 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,418 \\ (-12.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,523 \\ (-12.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -632 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -737 \\ (-3.7 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -28 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-332 \\ (-2.7 \%) \end{array}$ | $\begin{gathered} 193 \\ (1.6 \%) \end{gathered}$ | $\begin{gathered} -111 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} -49 \\ (-0.4 \%) \end{gathered}$ | $\begin{gathered} -353 \\ (-2.9 \%) \end{gathered}$ | $\begin{gathered} 45 \\ (0.4 \%) \end{gathered}$ | $\begin{gathered} -258 \\ (-2.1 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 778 \\ (1.8 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,148 \\ (-2.5 \%) \\ \hline \end{array}$ | $\begin{gathered} 2,795 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 870 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 137 \\ (0.3 \%) \end{gathered}$ | $\begin{gathered} -1,789 \\ (-4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,182 \\ (5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 257 \\ (0.6 \%) \\ \hline \end{gathered}$ |
| APR | W | $\begin{aligned} & -5,185 \\ & (-9.5 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -5,353 \\ (-9.8 \%) \end{gathered}$ | $\begin{gathered} 30 \\ (0.1 \%) \end{gathered}$ | $\begin{gathered} -138 \\ (-0.3 \%) \end{gathered}$ | $\begin{aligned} & -5,418 \\ & (-10 \%) \end{aligned}$ | $\begin{gathered} -5,586 \\ (-10.2 \%) \end{gathered}$ | $\begin{gathered} -270 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} -438 \\ (-0.8 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} -6,641 \\ (-20.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-5,242 \\ (-17.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 577 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,976 \\ (6.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -6,572 \\ (-20.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,173 \\ (-16.9 \%) \end{gathered}$ | $\begin{gathered} 754 \\ (2.4 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 2,154 \\ & (7 \%) \\ & \hline \end{aligned}$ |
|  | BN | $\begin{gathered} -3,385 \\ (-15.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-2,098 \\ (-10.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 2,793 \\ (12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,079 \\ (19.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-3,516 \\ (-16 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,229 \\ (-10.8 \%) \end{gathered}$ | $\begin{gathered} 2,457 \\ (11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,743 \\ (18.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} \hline-1,435 \\ (-10.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-707 \\ (-5.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -325 \\ (-2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 404 \\ (3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,527 \\ (-10.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -798 \\ (-6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -319 \\ (-2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 409 \\ (3 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -104 \\ (-1.1 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-344 \\ (-3.7 \%) \end{array}$ | $\begin{gathered} -104 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -344 \\ (-3.7 \%) \end{gathered}$ | $\begin{gathered} -166 \\ (-1.8 \%) \end{gathered}$ | $\begin{gathered} -406 \\ (-4.4 \%) \end{gathered}$ | $\begin{gathered} -24 \\ (-0.3 \%) \end{gathered}$ | $\begin{gathered} -264 \\ (-2.8 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -3,524 \\ (-11.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,028 \\ (-10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 484 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 980 \\ (3.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,639 \\ (-12.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,143 \\ (-10.6 \%) \end{gathered}$ | $\begin{gathered} 371 \\ (1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 867 \\ (2.9 \%) \\ \hline \end{gathered}$ |


| Alternative 4: In Delta-Delta Outflow |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS <br> vs. H1 | $\begin{array}{\|c} \text { NAA vs. } \\ \text { H1 } \end{array}$ | EXISTING CONDITIONS vs. H2 | $\begin{array}{\|c} \hline \text { NAA vs. } \\ \text { H2 } \\ \hline \end{array}$ | EXISTING CONDITIONS vs. H3 | $\begin{array}{\|c} \hline \text { NAA vs. } \\ \text { H3 } \\ \hline \end{array}$ | EXISTING CONDITIONS <br> vs. H 4 | $\begin{gathered} \text { NAA vs. } \\ \text { H4 } \\ \hline \end{gathered}$ |
| MAY | W | $\begin{array}{r} -11,733 \\ (-28.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -3,574 \\ (-10.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7,940 \\ (-19.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 220 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -11,767 \\ (-28.7 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-3,608 \\ & (-11 \%) \end{aligned}$ | $\begin{gathered} -7,885 \\ (-19.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 274 \\ (0.8 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -4,908 \\ (-20.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,417 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -1,760 \\ (-7.3 \%) \\ \hline \end{array}$ | $\begin{gathered} 731 \\ (3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,833 \\ (-20 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,343 \\ (-10.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,762 \\ (-7.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 728 \\ (3.4 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -2,593 \\ (-15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 110 \\ (0.8 \%) \end{gathered}$ | $\begin{gathered} -795 \\ (-4.9 \%) \end{gathered}$ | $\begin{gathered} 1,908 \\ (14 \%) \end{gathered}$ | $\begin{aligned} & -2,446 \\ & (-15 \%) \end{aligned}$ | $\begin{gathered} 257 \\ (1.9 \%) \end{gathered}$ | $\begin{gathered} -1,078 \\ (-6.6 \%) \end{gathered}$ | $\begin{gathered} 1,625 \\ (12 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 515 \\ (4.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 628 \\ (6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 550 \\ (5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 663 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 547 \\ (5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 660 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 468 \\ (4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 580 \\ (5.6 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 324 \\ (5.4 \%) \end{gathered}$ | $\begin{gathered} 38 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 428 \\ (7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 142 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 271 \\ (4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -15 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 415 \\ (6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 128 \\ (2 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{aligned} & \hline-4,721 \\ & (-21 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -1,325 \\ (-6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,727 \\ (-12.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 669 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,696 \\ (-20.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,300 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,779 \\ (-12.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 617 \\ (3.2 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} -7,672 \\ (-32.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 139 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7,898 \\ (-33.7 \%) \end{gathered}$ | $\begin{gathered} -87 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7,710 \\ (-32.9 \%) \end{gathered}$ | $\begin{gathered} \hline 101 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-8,051 \\ (-34.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-240 \\ (-1.5 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -805 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 320 \\ (3 \%) \end{gathered}$ | $\begin{gathered} -1,358 \\ (-11.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -233 \\ (-2.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -747 \\ (-6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 378 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -1,293 \\ & (-11 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-168 \\ (-1.6 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 1,881 \\ (23.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 942 \\ (10.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,921 \\ (24 \%) \end{gathered}$ | $\begin{gathered} 982 \\ (11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,649 \\ (20.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 710 \\ (7.9 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 1,923 \\ & (24 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} 984 \\ (11 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{aligned} & 1,261 \\ & (19 \%) \end{aligned}$ | $\begin{gathered} 207 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,121 \\ (16.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 67 \\ (0.9 \%) \end{gathered}$ | $\begin{gathered} 1,181 \\ (17.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 127 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 1,136 \\ (17.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 83 \\ (1.1 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 34 \\ (0.6 \%) \end{gathered}$ | $\begin{gathered} -276 \\ (-4.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 13 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} -297 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -312 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} -298 \\ (-5.3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -1,948 \\ (-15.3 \%) \end{gathered}$ | $\begin{gathered} 257 \\ (2.4 \%) \end{gathered}$ | $\begin{gathered} -2,127 \\ (-16.7 \%) \end{gathered}$ | $\begin{gathered} 77 \\ (0.7 \%) \end{gathered}$ | $\begin{gathered} -2,014 \\ (-15.8 \%) \end{gathered}$ | $\begin{gathered} 191 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} -2,162 \\ (-16.9 \%) \end{gathered}$ | $\begin{gathered} 42 \\ (0.4 \%) \end{gathered}$ |
| JUL | W | $\begin{aligned} & -1,943 \\ & (-17 \%) \end{aligned}$ | $\begin{gathered} -1,909 \\ (-16.7 \%) \end{gathered}$ | $\begin{gathered} -2,270 \\ (-19.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,236 \\ (-19.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,842 \\ (-16.1 \%) \end{gathered}$ | $\begin{gathered} -1,808 \\ (-15.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,983 \\ (-17.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,949 \\ (-17.1 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 242 \\ (2.6 \%) \end{gathered}$ | $\left\|\begin{array}{c} -2,552 \\ (-20.9 \%) \end{array}\right\|$ | $\begin{gathered} -608 \\ (-6.4 \%) \end{gathered}$ | $\begin{gathered} -3,402 \\ (-27.8 \%) \end{gathered}$ | $\begin{gathered} 240 \\ (2.5 \%) \end{gathered}$ | $\begin{gathered} -2,554 \\ (-20.9 \%) \end{gathered}$ | $\begin{gathered} -292 \\ (-3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,086 \\ (-25.2 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -532 \\ (-7.4 \%) \\ \hline \end{gathered}$ | $\left\lvert\, \begin{gathered} -1,049 \\ (-13.7 \%) \end{gathered}\right.$ | $\begin{gathered} -684 \\ (-9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,201 \\ (-15.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -279 \\ (-3.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -796 \\ (-10.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -403 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -920 \\ (-12 \%) \end{gathered}$ |
|  | D | $\begin{gathered} 550 \\ (11 \%) \\ \hline \end{gathered}$ | $\left\lvert\, \begin{gathered} -875 \\ (-13.6 \%) \end{gathered}\right.$ | $\begin{gathered} 703 \\ (14 \%) \end{gathered}$ | $\begin{gathered} -722 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 470 \\ (9.4 \%) \end{gathered}$ | $\begin{gathered} -954 \\ (-14.8 \%) \end{gathered}$ | $\begin{gathered} 585 \\ (11.6 \%) \end{gathered}$ | $\begin{gathered} -840 \\ (-13 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 940 \\ (22.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -655 \\ (-11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,091 \\ (25.7 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-503 \\ (-8.6 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,081 \\ (25.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -514 \\ (-8.8 \%) \end{gathered}$ | $\begin{gathered} 1,076 \\ (25.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -519 \\ (-8.9 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -413 \\ (-5.2 \%) \end{gathered}$ | $\begin{gathered} -1,446 \\ (-16.1 \%) \end{gathered}$ | $\begin{gathered} -612 \\ (-7.7 \%) \end{gathered}$ | $\begin{gathered} -1,644 \\ (-18.3 \%) \end{gathered}$ | $\begin{gathered} -335 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} -1,368 \\ (-15.2 \%) \end{gathered}$ | $\begin{gathered} -455 \\ (-5.7 \%) \end{gathered}$ | $\begin{gathered} -1,487 \\ (-16.6 \%) \end{gathered}$ |
| AUG | W | $\begin{gathered} -1,341 \\ (-25.1 \%) \\ \hline \end{gathered}$ | $\left\lvert\, \begin{gathered} -308 \\ (-7.2 \%) \end{gathered}\right.$ | $\begin{gathered} -1,341 \\ (-25.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -308 \\ (-7.2 \%) \end{gathered}$ | $\begin{gathered} -1,341 \\ (-25.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -308 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,341 \\ (-25.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -308 \\ (-7.2 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 143 \\ (3.6 \%) \end{gathered}$ | $\left\lvert\, \begin{gathered} -570 \\ (-12.1 \%) \end{gathered}\right.$ | $\begin{gathered} 11 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -703 \\ (-14.9 \%) \end{gathered}$ | $\begin{gathered} 152 \\ (3.8 \%) \end{gathered}$ | $\begin{gathered} -561 \\ (-11.9 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -713 \\ (-15.1 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 429 \\ (10.7 \%) \\ \hline \end{gathered}$ | $\left\|\begin{array}{c} -700 \\ (-13.6 \%) \end{array}\right\|$ | $\begin{gathered} 357 \\ (8.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -772 \\ (-15.1 \%) \end{gathered}$ | $\begin{gathered} 449 \\ (11.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -681 \\ (-13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 363 \\ (9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -766 \\ (-14.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -263 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\left\|\begin{array}{c} -782 \\ (-14.6 \%) \end{array}\right\|$ | $\begin{gathered} -94 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} -613 \\ (-11.5 \%) \end{gathered}$ | $\begin{gathered} -273 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -792 \\ (-14.8 \%) \end{gathered}$ | $\begin{gathered} -99 \\ (-2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -618 \\ (-11.6 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 105 \\ (2.6 \%) \end{gathered}$ | $\begin{gathered} -251 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -123 \\ (-3 \%) \\ \hline \end{array}$ | $\begin{gathered} -479 \\ (-10.8 \%) \end{gathered}$ | $\begin{gathered} -95 \\ (-2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -451 \\ (-10.2 \%) \end{gathered}$ | $\begin{gathered} -43 \\ (-1.1 \%) \end{gathered}$ | $\begin{array}{r} -399 \\ (-9 \%) \\ \hline \end{array}$ |
|  | All | $\begin{gathered} -373 \\ (-8.1 \%) \\ \hline \end{gathered}$ | $\left[\begin{array}{c} -509 \\ (-10.7 \%) \end{array}\right.$ | $\begin{gathered} -401 \\ (-8.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-537 \\ (-11.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -400 \\ (-8.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -536 \\ (-11.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -391 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -527 \\ (-11.1 \%) \end{gathered}$ |


| Alternative 4: In Delta-Delta Outflow |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 |  | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{gathered} \hline-5,323 \\ (-55.6 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -15,832 \\ & (-78.9 \%) \end{aligned}$ | $\begin{gathered} \hline-5,217 \\ (-54.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-15,726 \\ (-78.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 11,825 \\ (123.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,316 \\ (6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 11,837 \\ (123.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,328 \\ (6.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} \hline-393 \\ (-10.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-8,302 \\ (-71.7 \%) \\ \hline \end{array}$ | $\begin{gathered} -113 \\ (-3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8,023 \\ (-69.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 8,962 \\ (244.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,053 \\ (9.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 9,223 \\ (251.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,314 \\ (11.3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -156 \\ (-4.5 \%) \end{gathered}$ | $\begin{gathered} -138 \\ (-4 \%) \end{gathered}$ | $\begin{gathered} 580 \\ (16.8 \%) \end{gathered}$ | $\begin{gathered} 598 \\ (17.4 \%) \end{gathered}$ | $\begin{gathered} -80 \\ (-2.3 \%) \end{gathered}$ | $\begin{gathered} -63 \\ (-1.8 \%) \end{gathered}$ | $\begin{gathered} 272 \\ (7.9 \%) \end{gathered}$ | $\begin{gathered} 289 \\ (8.4 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 913 \\ (27.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,242 \\ (41.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,039 \\ (31 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,368 \\ (45.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 851 \\ (25.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} 1,179 \\ (39 \%) \\ \hline \end{array}$ | $\begin{gathered} 1,301 \\ (38.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,630 \\ (53.9 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 2,585 \\ (86.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,549 \\ (84 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3,061 \\ (102 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 3,025 \\ (99.6 \%) \\ \hline \end{array}$ | $\begin{gathered} 2,916 \\ (97.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,881 \\ (94.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,200 \\ (106.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 3,164 \\ (104.2 \%) \\ \hline \end{array}$ |
|  | All | $\begin{gathered} -1,193 \\ (-22.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,613 \\ (-57.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -896 \\ (-16.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5,315 \\ (-54.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,661 \\ (106.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,241 \\ (12.7 \%) \end{gathered}$ | $\begin{gathered} 5,903 \\ (110.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,484 \\ (15.2 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} 3,032 \\ (46.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,908 \\ (44.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -125 \\ (-1.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,939 \\ (60.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 906 \\ (9.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,999 \\ (61.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 966 \\ (10.1 \%) \\ \hline \end{array}$ |
|  | AN | $\begin{gathered} 5,167 \\ (128.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 207 \\ (2.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,323 \\ (132.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 362 \\ (4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,685 \\ (141.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 724 \\ (8.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6,092 \\ (151.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,132 \\ (12.6 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} 4,916 \\ (109.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 1,339 \\ (16.6 \%) \\ \hline \end{array}$ | $\begin{gathered} 4,133 \\ (92.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 556 \\ (6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,563 \\ (124.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,986 \\ (24.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,768 \\ (106.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 1,190 \\ (14.8 \%) \\ \hline \end{array}$ |
|  | D | $\begin{gathered} 4,065 \\ (97.8 \%) \end{gathered}$ | $\begin{gathered} 929 \\ (12.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,090 \\ \text { (98.4\%) } \\ \hline \end{gathered}$ | $\begin{gathered} 953 \\ (13.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,230 \\ (101.7 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & 1,093 \\ & (15 \%) \end{aligned}$ | $\begin{gathered} 4,042 \\ (97.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 905 \\ (12.4 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} 4,436 \\ (106.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,987 \\ (30.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5,049 \\ (121.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2,600 \\ (39.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,235 \\ (101.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,787 \\ (27 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4,201 \\ (101 \%) \\ \hline \end{gathered}$ | $\begin{array}{c\|} \hline 1,752 \\ (26.5 \%) \\ \hline \end{array}$ |
|  | All | $\begin{gathered} 4,099 \\ (83.1 \%) \end{gathered}$ | $\begin{gathered} 753 \\ (9.1 \%) \end{gathered}$ | $\begin{gathered} 4,043 \\ (82 \%) \end{gathered}$ | $\begin{gathered} 698 \\ (8.4 \%) \end{gathered}$ | $\begin{gathered} 4,579 \\ (92.9 \%) \end{gathered}$ | $\begin{gathered} 1,234 \\ (14.9 \%) \end{gathered}$ | $\begin{gathered} 4,476 \\ (90.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,130 \\ (13.7 \%) \end{gathered}$ |
| NOV | W | $\begin{gathered} -1,581 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,336 \\ (-20.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,529 \\ (-10.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,284 \\ (-20.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,937 \\ (13.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 182 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,704 \\ (12 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -51 \\ (-0.3 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -2,386 \\ (-24.6 \%) \end{gathered}$ | $\begin{gathered} -4,231 \\ (-36.7 \%) \end{gathered}$ | $\begin{gathered} -2,208 \\ (-22.8 \%) \end{gathered}$ | $\begin{gathered} -4,053 \\ (-35.2 \%) \end{gathered}$ | $\begin{gathered} 1,317 \\ (13.6 \%) \end{gathered}$ | $\begin{gathered} -528 \\ (-4.6 \%) \end{gathered}$ | $\begin{gathered} 1,530 \\ (15.8 \%) \end{gathered}$ | $\begin{gathered} -315 \\ (-2.7 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -1,276 \\ (-21.8 \%) \\ \hline \end{gathered}$ | $\left\lvert\, \begin{gathered} -4,093 \\ (-47.1 \%) \end{gathered}\right.$ | $\begin{gathered} -803 \\ (-13.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,620 \\ (-41.7 \%) \end{gathered}$ | $\begin{gathered} 2,400 \\ (40.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -417 \\ (-4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2,808 \\ (47.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -9 \\ (-0.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{aligned} & \hline-1,596 \\ & (-23 \%) \\ & \hline \end{aligned}$ | $\begin{array}{\|c\|} \hline-2,706 \\ (-33.6 \%) \end{array}$ | $\begin{gathered} -1,528 \\ (-22 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2,638 \\ (-32.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 970 \\ (14 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -140 \\ (-1.7 \%) \end{gathered}$ | $\begin{gathered} 1,154 \\ (16.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 44 \\ (0.6 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -699 \\ (-13.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-1,379 \\ (-24.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -855 \\ (-17 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-1,536 \\ (-26.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 719 \\ (14.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 39 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 986 \\ (19.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 306 \\ (5.3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} \hline-1,521 \\ (-16.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline-3,171 \\ (-29.2 \%) \end{array}$ | $\begin{gathered} \hline-1,406 \\ (-15.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} -3,056 \\ (-28.2 \%) \end{array}$ | $\begin{gathered} 1,535 \\ (16.7 \%) \end{gathered}$ | $\begin{gathered} -116 \\ (-1.1 \%) \end{gathered}$ | $\begin{gathered} 1,641 \\ (17.9 \%) \end{gathered}$ | $\begin{gathered} -9 \\ (-0.1 \%) \end{gathered}$ |
| DEC | W | $\begin{gathered} -1,258 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,737 \\ (3.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 386 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3,380 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,172 \\ (-8.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,178 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{r} -3,255 \\ (-6.8 \%) \\ \hline \end{array}$ | $\begin{gathered} -261 \\ (-0.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 1,921 \\ (10.7 \%) \end{gathered}$ | $\begin{gathered} 817 \\ (4.3 \%) \end{gathered}$ | $\begin{gathered} 482 \\ (2.7 \%) \end{gathered}$ | $\begin{gathered} -622 \\ (-3.3 \%) \end{gathered}$ | $\begin{gathered} 1,115 \\ (6.2 \%) \end{gathered}$ | $\begin{gathered} 10 \\ (0.1 \%) \end{gathered}$ | $\begin{gathered} 412 \\ (2.3 \%) \end{gathered}$ | $\begin{gathered} -693 \\ (-3.6 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} 1,204 \\ (10.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 923 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 893 \\ (7.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 612 \\ (5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 255 \\ (2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -26 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -241 \\ (-2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 916 \\ (10.3 \%) \end{gathered}$ | $\begin{gathered} 972 \\ (11 \%) \end{gathered}$ | $\begin{gathered} 636 \\ (7.2 \%) \end{gathered}$ | $\begin{gathered} 692 \\ (7.8 \%) \end{gathered}$ | $\begin{gathered} 626 \\ (7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 682 \\ (7.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 622 \\ (7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 678 \\ (7.7 \%) \end{gathered}$ |
|  | C | $\begin{gathered} 1,317 \\ (23.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 288 \\ (4.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1,154 \\ (20.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 124 \\ (1.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 899 \\ (16.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -130 \\ (-2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 458 \\ (8.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -572 \\ (-8.7 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 482 \\ (2.1 \%) \end{gathered}$ | $\begin{gathered} \hline 1,083 \\ (4.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 654 \\ (2.9 \%) \end{gathered}$ | $\begin{aligned} & 1,255 \\ & (5.7 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -847 \\ (-3.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -246 \\ (-1.1 \%) \end{gathered}$ | $\begin{gathered} -762 \\ (-3.4 \%) \end{gathered}$ | $\begin{gathered} -160 \\ (-0.7 \%) \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.4.2.5 San Joaquin River at Vernalis

Table 33. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 4: In Delta-San Joaquin River at Vernalis |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | $\begin{gathered} \text { EXISTING } \\ \text { CONDITIONS } \end{gathered}$ | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 9,089 | 9,681 | 9,714 | 9,723 | 9,675 | 9,733 |
|  | AN | 5,447 | 6,011 | 5,997 | 6,012 | 6,037 | 6,058 |
|  | BN | 2,326 | 2,220 | 2,195 | 2,327 | 2,207 | 2,294 |
|  | D | 2,270 | 2,202 | 2,222 | 2,235 | 2,266 | 2,212 |
|  | C | 1,667 | 1,592 | 1,592 | 1,592 | 1,572 | 1,592 |
|  | All | 4,777 | 5,018 | 5,024 | 5,053 | 5,025 | 5,056 |
| FEB | W | 12,750 | 13,191 | 13,178 | 13,192 | 13,182 | 13,196 |
|  | AN | 6,965 | 6,721 | 6,677 | 6,765 | 6,701 | 6,731 |
|  | BN | 2,983 | 2,841 | 2,795 | 2,781 | 2,841 | 2,803 |
|  | D | 2,590 | 2,269 | 2,245 | 2,245 | 2,245 | 2,245 |
|  | C | 2,120 | 1,941 | 1,942 | 1,942 | 1,942 | 1,942 |
|  | All | 6,388 | 6,361 | 6,338 | 6,357 | 6,351 | 6,355 |
| MAR | W | 14,374 | 15,235 | 15,246 | 15,235 | 15,236 | 15,242 |
|  | AN | 6,284 | 6,364 | 6,365 | 6,365 | 6,365 | 6,365 |
|  | BN | 2,949 | 2,476 | 2,476 | 2,476 | 2,476 | 2,476 |
|  | D | 2,479 | 2,146 | 2,147 | 2,146 | 2,146 | 2,146 |
|  | C | 1,813 | 1,688 | 1,688 | 1,687 | 1,688 | 1,687 |
|  | All | 6,648 | 6,763 | 6,766 | 6,763 | 6,763 | 6,765 |
| APR | W | 11,955 | 12,457 | 12,450 | 12,459 | 12,460 | 12,448 |
|  | AN | 6,014 | 6,042 | 6,043 | 6,043 | 6,042 | 6,043 |
|  | BN | 4,490 | 3,922 | 3,924 | 3,924 | 3,923 | 3,923 |
|  | D | 3,656 | 3,112 | 3,113 | 3,112 | 3,112 | 3,110 |
|  | C | 1,983 | 1,796 | 1,796 | 1,795 | 1,796 | 1,794 |
|  | All | 6,351 | 6,291 | 6,289 | 6,291 | 6,291 | 6,287 |
| MAY | W | 12,109 | 12,632 | 12,634 | 12,633 | 12,633 | 12,637 |
|  | AN | 5,381 | 5,092 | 5,093 | 5,095 | 5,092 | 5,093 |
|  | BN | 4,074 | 3,657 | 3,661 | 3,660 | 3,659 | 3,658 |
|  | D | 3,308 | 2,823 | 2,825 | 2,824 | 2,823 | 2,821 |
|  | C | 1,965 | 1,798 | 1,799 | 1,798 | 1,797 | 1,796 |
|  | All | 6,148 | 6,069 | 6,071 | 6,070 | 6,069 | 6,070 |
| JUN | W | 11,058 | 6,820 | 6,822 | 6,825 | 6,820 | 6,824 |
|  | AN | 2,965 | 2,678 | 2,680 | 2,681 | 2,679 | 2,680 |
|  | BN | 2,051 | 1,870 | 1,876 | 1,874 | 1,873 | 1,871 |
|  | D | 1,537 | 1,291 | 1,295 | 1,294 | 1,292 | 1,290 |
|  | C | 1,020 | 956 | 957 | 953 | 956 | 952 |
|  | All | 4,583 | 3,206 | 3,209 | 3,209 | 3,207 | 3,207 |
| JUL | W | 7,654 | 4,345 | 4,350 | 4,349 | 4,347 | 4,347 |
|  | AN | 1,958 | 1,801 | 1,806 | 1,807 | 1,804 | 1,805 |
|  | BN | 1,491 | 1,381 | 1,392 | 1,389 | 1,386 | 1,384 |
|  | D | 1,296 | 1,100 | 1,107 | 1,104 | 1,101 | 1,097 |
|  | C | 898 | 858 | 861 | 857 | 858 | 854 |
|  | All | 3,239 | 2,184 | 2,190 | 2,188 | 2,186 | 2,184 |


| Alternative 4: In Delta-San Joaquin River at Vernalis |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 3,539 | 2,645 | 2,648 | 2,648 | 2,646 | 2,646 |
|  | AN | 2,000 | 1,699 | 1,703 | 1,703 | 1,702 | 1,702 |
|  | BN | 1,460 | 1,375 | 1,383 | 1,381 | 1,378 | 1,377 |
|  | D | 1,375 | 1,225 | 1,230 | 1,228 | 1,226 | 1,224 |
|  | C | 1,007 | 987 | 988 | 985 | 987 | 984 |
|  | All | 2,072 | 1,710 | 1,714 | 1,713 | 1,712 | 1,711 |
| SEP | W | 3,519 | 3,127 | 3,129 | 3,128 | 3,128 | 3,128 |
|  | AN | 2,355 | 2,164 | 2,166 | 2,166 | 2,166 | 2,166 |
|  | BN | 1,829 | 1,748 | 1,752 | 1,751 | 1,750 | 1,749 |
|  | D | 1,796 | 1,643 | 1,645 | 1,644 | 1,643 | 1,642 |
|  | C | 1,402 | 1,378 | 1,380 | 1,380 | 1,379 | 1,380 |
|  | All | 2,338 | 2,144 | 2,146 | 2,146 | 2,145 | 2,145 |
| OCT | W | 2,759 | 2,726 | 2,682 | 2,727 | 2,712 | 2,743 |
|  | AN | 2,745 | 2,595 | 2,596 | 2,596 | 2,595 | 2,595 |
|  | BN | 2,502 | 2,348 | 2,349 | 2,348 | 2,348 | 2,348 |
|  | D | 2,945 | 2,790 | 2,791 | 2,791 | 2,791 | 2,791 |
|  | C | 2,213 | 2,031 | 2,032 | 2,032 | 2,031 | 2,031 |
|  | All | 2,638 | 2,515 | 2,503 | 2,516 | 2,511 | 2,520 |
| NOV | W | 2,534 | 2,411 | 2,416 | 2,404 | 2,418 | 2,404 |
|  | AN | 3,182 | 3,193 | 3,170 | 3,154 | 3,123 | 3,203 |
|  | BN | 2,150 | 1,997 | 1,997 | 1,997 | 1,997 | 1,997 |
|  | D | 2,272 | 2,217 | 2,253 | 2,250 | 2,253 | 2,250 |
|  | C | 1,968 | 1,898 | 1,898 | 1,898 | 1,898 | 1,898 |
|  | All | 2,448 | 2,367 | 2,370 | 2,363 | 2,361 | 2,372 |
| DEC | W | 4,370 | 4,504 | 4,555 | 4,525 | 4,492 | 4,510 |
|  | AN | 4,711 | 4,567 | 4,642 | 4,593 | 4,643 | 4,582 |
|  | BN | 2,182 | 2,065 | 2,083 | 2,083 | 2,075 | 2,083 |
|  | D | 2,129 | 2,166 | 2,168 | 2,186 | 2,186 | 2,168 |
|  | C | 1,729 | 1,694 | 1,681 | 1,684 | 1,683 | 1,681 |
|  | All | 3,219 | 3,211 | 3,241 | 3,226 | 3,225 | 3,216 |
| a Water year type for this location was determined using the San Joaquin River Valley Index. |  |  |  |  |  |  |  |

Table 34. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the San Joaquin River at the Delta, Year-Round

| Alternative 4: In Delta-San Joaquin River at the Delta |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | $\qquad$ | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 |  | NAA vs. H4 |
| JAN | W | $\begin{gathered} 625 \\ (6.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 33 \\ (0.3 \%) \\ \hline \end{array}$ | $\begin{gathered} \hline 634 \\ (7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 42 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 586 \\ (6.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-7 \\ (-0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 644 \\ (7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 52 \\ (0.5 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 550 \\ (10.1 \%) \end{gathered}$ | $\begin{gathered} -14 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 565 \\ (10.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 590 \\ (10.8 \%) \end{gathered}$ | $\begin{array}{\|c} \hline 26 \\ (0.4 \%) \\ \hline \end{array}$ | $\begin{gathered} 611 \\ (11.2 \%) \end{gathered}$ | $\begin{gathered} 47 \\ (0.8 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -131 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -25 \\ (-1.1 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 107 \\ (4.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -119 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-13 \\ (-0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -32 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 74 \\ (3.3 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -48 \\ (-2.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 20 \\ (0.9 \%) \\ \hline \end{array}$ | $\begin{gathered} -36 \\ (-1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 33 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4 \\ (-0.2 \%) \end{gathered}$ | $\begin{gathered} 65 \\ (2.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-2.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 10 \\ (0.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -76 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -76 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -95 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -19 \\ (-1.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -76 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 247 \\ (5.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 6 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 276 \\ (5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 35 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 248 \\ (5.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 8 \\ (0.2 \%) \\ \hline \end{array}$ | $\begin{gathered} 279 \\ (5.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 38 \\ (0.8 \%) \\ \hline \end{gathered}$ |
| FEB | W | $\begin{gathered} 428 \\ (3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -13 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 442 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 432 \\ (3.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -9 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 446 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -288 \\ (-4.1 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-44 \\ (-0.7 \%) \end{array}$ | $\begin{gathered} -200 \\ (-2.9 \%) \end{gathered}$ | $\begin{gathered} 44 \\ (0.7 \%) \end{gathered}$ | $\begin{gathered} -264 \\ (-3.8 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-20 \\ (-0.3 \%) \end{array}$ | $\begin{gathered} -234 \\ (-3.4 \%) \end{gathered}$ | $\begin{gathered} 10 \\ (0.1 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -188 \\ (-6.3 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline-46 \\ (-1.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -201 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -59 \\ (-2.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -141 \\ (-4.7 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -179 \\ (-6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -37 \\ (-1.3 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -345 \\ (-13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -24 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -345 \\ (-13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -24 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -345 \\ (-13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -24 \\ (-1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -345 \\ (-13.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -24 \\ (-1.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -178 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 1 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -178 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -178 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -178 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -50 \\ (-0.8 \%) \end{gathered}$ | $\begin{gathered} -23 \\ (-0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -31 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} -4 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -37 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} -10 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -33 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} -6 \\ (-0.1 \%) \end{gathered}$ |
| MAR | W | $\begin{gathered} 872 \\ (6.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 10 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 861 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 861 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 868 \\ (6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} 81 \\ (1.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 81 \\ (1.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 80 \\ (1.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} 81 \\ (1.3 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -473 \\ (-16 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -473 \\ (-16 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -473 \\ (-16 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -473 \\ (-16 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -333 \\ (-13.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -333 \\ (-13.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -333 \\ (-13.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -333 \\ (-13.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -125 \\ (-6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -126 \\ (-6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -125 \\ (-6.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{aligned} & -126 \\ & (-7 \%) \\ & \hline \end{aligned}$ | $\begin{gathered} -1 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} 119 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 116 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 116 \\ (1.7 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 117 \\ (1.8 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0 \%) \\ \hline \end{gathered}$ |
| APR | W | $\begin{gathered} 495 \\ (4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 504 \\ (4.2 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 505 \\ (4.2 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 493 \\ (4.1 \%) \end{gathered}$ | $\begin{gathered} -9 \\ (-0.1 \%) \end{gathered}$ |
|  | AN | $\begin{gathered} 29 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 29 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 28 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 28 \\ (0.5 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -566 \\ (-12.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -567 \\ (-12.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -568 \\ (-12.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -568 \\ (-12.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -544 \\ (-14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -545 \\ (-14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -545 \\ (-14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -546 \\ (-14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (0 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -187 \\ (-9.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -188 \\ (-9.5 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -187 \\ (-9.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -189 \\ (-9.5 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (-0.1 \%) \end{gathered}$ |
|  | All | $\begin{gathered} -62 \\ (-1 \%) \end{gathered}$ | $\begin{gathered} -2 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -60 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -60 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -64 \\ (-1 \%) \end{gathered}$ | $\begin{gathered} -3 \\ (-0.1 \%) \end{gathered}$ |


| Alternative 4: In Delta-San Joaquin River at the Delta |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 |  | NAA vs. H4 |
| MAY | W | $\begin{gathered} 525 \\ (4.3 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 524 \\ (4.3 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 524 \\ (4.3 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 528 \\ (4.4 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -289 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -286 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -289 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -289 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -412 \\ (-10.1 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 5 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -414 \\ (-10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -415 \\ (-10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -416 \\ (-10.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -483 \\ (-14.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 3 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -484 \\ (-14.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -485 \\ (-14.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -487 \\ (-14.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -166 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 1 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -167 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -168 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -169 \\ (-8.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -77 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -77 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -78 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -78 \\ (-1.3 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ |
| JUN | W | $\begin{gathered} -4,236 \\ (-38.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,233 \\ (-38.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,238 \\ (-38.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -4,234 \\ (-38.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -284 \\ (-9.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 2 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -284 \\ (-9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -285 \\ (-9.6 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 2 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -284 \\ (-9.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -175 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 6 \\ (0.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -176 \\ (-8.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -178 \\ (-8.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -180 \\ (-8.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -242 \\ (-15.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 4 \\ (0.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -243 \\ (-15.8 \%) \end{gathered}$ | $\begin{gathered} \hline 3 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -246 \\ (-16 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -247 \\ (-16.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -63 \\ (-6.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -67 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -2 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -64 \\ (-6.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -68 \\ (-6.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.3 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{aligned} & -1,374 \\ & (-30 \%) \end{aligned}$ | $\begin{gathered} 3 \\ (0.1 \%) \end{gathered}$ | $\begin{aligned} & -1,374 \\ & (-30 \%) \end{aligned}$ | $\begin{gathered} 3 \\ (0.1 \%) \end{gathered}$ | $\begin{aligned} & -1,376 \\ & (-30 \%) \end{aligned}$ | $\begin{gathered} 1 \\ (0 \%) \end{gathered}$ | $\begin{aligned} & -1,376 \\ & (-30 \%) \end{aligned}$ | $\begin{gathered} 1 \\ (0 \%) \end{gathered}$ |
| JUL | W | $\begin{gathered} -3,304 \\ (-43.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,305 \\ (-43.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,307 \\ (-43.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3,307 \\ (-43.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -152 \\ (-7.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 5 \\ (0.3 \%) \\ \hline \end{array}$ | $\begin{gathered} -151 \\ (-7.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -153 \\ (-7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -152 \\ (-7.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -99 \\ (-6.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \\ (0.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -102 \\ (-6.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -105 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 5 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -107 \\ (-7.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -189 \\ (-14.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-191 \\ (-14.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -194 \\ (-15 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-198 \\ (-15.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.2 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -37 \\ (-4.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -41 \\ (-4.6 \%) \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \end{gathered}$ | $\begin{gathered} -40 \\ (-4.4 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -44 \\ (-5 \%) \end{gathered}$ | $\begin{gathered} -4 \\ (-0.5 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -1,050 \\ (-32.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,051 \\ (-32.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,053 \\ (-32.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1,055 \\ (-32.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
| AUG | W | $\begin{gathered} -891 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 3 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -891 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -892 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -893 \\ (-25.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -298 \\ (-14.9 \%) \end{gathered}$ | $\begin{gathered} \hline 3 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -297 \\ (-14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -299 \\ (-14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -298 \\ (-14.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -77 \\ (-5.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 8 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -79 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 6 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -81 \\ (-5.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -83 \\ (-5.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.2 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -145 \\ (-10.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 4 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -146 \\ (-10.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline-149 \\ (-10.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -151 \\ (-11 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -1 \\ (-0.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -19 \\ (-1.9 \%) \end{gathered}$ | $\begin{gathered} \hline 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -23 \\ (-2.3 \%) \end{gathered}$ | $\begin{gathered} -3 \\ (-0.3 \%) \end{gathered}$ | $\begin{gathered} -20 \\ (-2 \%) \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -24 \\ (-2.4 \%) \end{gathered}$ | $\begin{gathered} -4 \\ (-0.4 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -358 \\ (-17.3 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -359 \\ (-17.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -360 \\ (-17.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -361 \\ (-17.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |


| Alternative 4: In Delta-San Joaquin River at the Delta |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. H1 | NAA vs. H1 | EXISTING CONDITIONS vs. H2 | NAA vs. H2 | EXISTING CONDITIONS vs. H3 | NAA vs. H3 | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| SEP | W | $\begin{gathered} -390 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -390 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -391 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -391 \\ (-11.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -189 \\ (-8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -188 \\ (-8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -189 \\ (-8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -189 \\ (-8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -77 \\ (-4.2 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -78 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} 3 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} -79 \\ (-4.3 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \end{gathered}$ | $\begin{gathered} -80 \\ (-4.4 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0.1 \%) \end{gathered}$ |
|  | D | $\begin{gathered} -151 \\ (-8.4 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 2 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -152 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -153 \\ (-8.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ | $\begin{gathered} -154 \\ (-8.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \end{gathered}$ |
|  | C | $\begin{gathered} -22 \\ (-1.6 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline 3 \\ (0.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -22 \\ (-1.6 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0.2 \%) \end{gathered}$ | $\begin{gathered} -23 \\ (-1.7 \%) \end{gathered}$ | $\begin{array}{\|c} \hline 1 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -23 \\ (-1.6 \%) \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -192 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -192 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -193 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -193 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ |
| OCT | W | $\begin{gathered} -78 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} -44 \\ (-1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -33 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -47 \\ (-1.7 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-14 \\ (-0.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -17 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} 17 \\ (0.6 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -149 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -149 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -150 \\ (-5.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -150 \\ (-5.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -153 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -154 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -154 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -154 \\ (-6.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -153 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -154 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -153 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -154 \\ (-5.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -181 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -181 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -182 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -182 \\ (-8.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -136 \\ (-5.1 \%) \end{gathered}$ | $\begin{gathered} -12 \\ (-0.5 \%) \end{gathered}$ | $\begin{gathered} -123 \\ (-4.7 \%) \end{gathered}$ | $\begin{gathered} 1 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -127 \\ (-4.8 \%) \end{gathered}$ | $\begin{gathered} -4 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -118 \\ (-4.5 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (0.2 \%) \\ \hline \end{gathered}$ |
| NOV | W | $\begin{gathered} -118 \\ (-4.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 4 \\ (0.2 \%) \\ \hline \end{array}$ | $\begin{gathered} -130 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -8 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -116 \\ (-4.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -129 \\ (-5.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -7 \\ (-0.3 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -12 \\ (-0.4 \%) \end{gathered}$ | $\begin{array}{\|c\|} \hline-23 \\ (-0.7 \%) \end{array}$ | $\begin{gathered} -28 \\ (-0.9 \%) \end{gathered}$ | $\begin{gathered} -39 \\ (-1.2 \%) \end{gathered}$ | $\begin{gathered} -59 \\ (-1.8 \%) \end{gathered}$ | $\begin{gathered} -70 \\ (-2.2 \%) \end{gathered}$ | $\begin{gathered} 21 \\ (0.7 \%) \end{gathered}$ | $\begin{gathered} 10 \\ (0.3 \%) \end{gathered}$ |
|  | BN | $\begin{gathered} -153 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -154 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -154 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -154 \\ (-7.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} -19 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 36 \\ (1.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -22 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 33 \\ (1.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -19 \\ (-0.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 35 \\ (1.6 \%) \\ \hline \end{array}$ | $\begin{gathered} -22 \\ (-1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 33 \\ (1.5 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -70 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -70 \\ (-3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -70 \\ (-3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -70 \\ (-3.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 0 \\ (0 \%) \\ \hline \end{gathered}$ |
|  | All | $\begin{gathered} -78 \\ (-3.2 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 2 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} -85 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -5 \\ (-0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -86 \\ (-3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -6 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -75 \\ (-3.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.2 \%) \\ \hline \end{gathered}$ |
| DEC | W | $\begin{gathered} 185 \\ (4.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 51 \\ (1.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 155 \\ (3.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 21 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 122 \\ (2.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -12 \\ (-0.3 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 140 \\ (3.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | AN | $\begin{gathered} -69 \\ (-1.5 \%) \end{gathered}$ | $\begin{gathered} 75 \\ (1.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -118 \\ (-2.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 26 \\ (0.6 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -68 \\ (-1.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 76 \\ (1.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -129 \\ (-2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (0.3 \%) \\ \hline \end{gathered}$ |
|  | BN | $\begin{gathered} -99 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -99 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 18 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -107 \\ (-4.9 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 10 \\ (0.5 \%) \\ \hline \end{array}$ | $\begin{gathered} -99 \\ (-4.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 19 \\ (0.9 \%) \\ \hline \end{gathered}$ |
|  | D | $\begin{gathered} 39 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 2 \\ (0.1 \%) \\ \hline \end{array}$ | $\begin{gathered} 57 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 20 \\ (0.9 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 57 \\ (2.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 20 \\ (0.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 39 \\ (1.8 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ (0.1 \%) \\ \hline \end{gathered}$ |
|  | C | $\begin{gathered} -48 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} -13 \\ (-0.8 \%) \end{gathered}$ | $\begin{gathered} -45 \\ (-2.6 \%) \end{gathered}$ | $\begin{gathered} -10 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} -46 \\ (-2.7 \%) \end{gathered}$ | $\begin{gathered} -11 \\ (-0.6 \%) \end{gathered}$ | $\begin{gathered} -48 \\ (-2.8 \%) \end{gathered}$ | $\begin{gathered} -13 \\ (-0.8 \%) \end{gathered}$ |
|  | All | $\begin{gathered} 22 \\ (0.7 \%) \\ \hline \end{gathered}$ | $\begin{array}{\|c} \hline 30 \\ (0.9 \%) \\ \hline \end{array}$ | $\begin{gathered} 7 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 15 \\ (0.5 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ (0.2 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 14 \\ (0.4 \%) \\ \hline \end{gathered}$ | $\begin{gathered} -3 \\ (-0.1 \%) \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ (0.2 \%) \\ \hline \end{gathered}$ |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.4.2.6 Mokelumne River at the Delta

Table 35. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Month | Alternative 4: In Delta-Mokelumne River at the Delta |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | WYT $^{\text {a }}$ | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| JAN | W | 3,071 | 3,634 | 3,634 | 3,634 | 3,634 | 3,634 |
|  | AN | 1,707 | 1,876 | 1,876 | 1,876 | 1,876 | 1,876 |
|  | BN | 597 | 617 | 617 | 617 | 617 | 617 |
|  | D | 495 | 493 | 493 | 493 | 493 | 493 |
|  | C | 280 | 281 | 281 | 281 | 281 | 281 |
|  | All | 1,460 | 1,660 | 1,660 | 1,660 | 1,660 | 1,660 |
| FEB | W | 3,290 | 3,781 | 3,781 | 3,781 | 3,781 | 3,781 |
|  | AN | 2,525 | 2,913 | 2,913 | 2,913 | 2,913 | 2,913 |
|  | BN | 1,011 | 1,035 | 1,035 | 1,035 | 1,035 | 1,035 |
|  | D | 695 | 678 | 678 | 678 | 678 | 678 |
|  | C | 427 | 441 | 442 | 442 | 442 | 442 |
|  | All | 1,809 | 2,032 | 2,033 | 2,033 | 2,033 | 2,033 |
| MAR | W | 3,179 | 3,336 | 3,336 | 3,336 | 3,336 | 3,336 |
|  | AN | 1,582 | 1,639 | 1,639 | 1,639 | 1,639 | 1,639 |
|  | BN | 1,181 | 1,140 | 1,140 | 1,140 | 1,140 | 1,140 |
|  | D | 754 | 691 | 691 | 691 | 691 | 691 |
|  | C | 595 | 580 | 580 | 580 | 580 | 580 |
|  | All | 1,662 | 1,700 | 1,700 | 1,700 | 1,700 | 1,700 |
| APR | W | 2,819 | 2,694 | 2,694 | 2,694 | 2,694 | 2,694 |
|  | AN | 1,619 | 1,424 | 1,424 | 1,424 | 1,424 | 1,424 |
|  | BN | 1,243 | 1,068 | 1,068 | 1,068 | 1,068 | 1,068 |
|  | D | 623 | 550 | 550 | 550 | 550 | 550 |
|  | C | 340 | 311 | 311 | 311 | 311 | 311 |
|  | All | 1,503 | 1,384 | 1,384 | 1,384 | 1,384 | 1,384 |
| MAY | W | 3,170 | 2,885 | 2,885 | 2,885 | 2,885 | 2,885 |
|  | AN | 1,439 | 1,179 | 1,179 | 1,179 | 1,179 | 1,179 |
|  | BN | 976 | 812 | 812 | 812 | 812 | 812 |
|  | D | 406 | 333 | 333 | 333 | 333 | 333 |
|  | C | 181 | 170 | 170 | 170 | 170 | 170 |
|  | All | 1,463 | 1,289 | 1,289 | 1,289 | 1,289 | 1,289 |
| JUN | W | 1,755 | 1,415 | 1,415 | 1,415 | 1,415 | 1,415 |
|  | AN | 851 | 631 | 631 | 631 | 631 | 631 |
|  | BN | 471 | 366 | 366 | 366 | 366 | 366 |
|  | D | 93 | 76 | 76 | 76 | 76 | 76 |
|  | C | 52 | 44 | 44 | 44 | 44 | 44 |
|  | All | 779 | 616 | 616 | 616 | 616 | 616 |
| JUL | W | 772 | 469 | 469 | 469 | 469 | 469 |
|  | AN | 347 | 167 | 167 | 167 | 167 | 167 |
|  | BN | 123 | 70 | 70 | 70 | 70 | 70 |
|  | D | 7 | 6 | 6 | 6 | 6 | 6 |
|  | C | 3 | 3 | 3 | 3 | 3 | 3 |
|  | All | 315 | 183 | 183 | 183 | 183 | 183 |


| Alternative 4: In Delta-Mokelumne River at the Delta |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | $\mathrm{WYT}^{\text {a }}$ | EXISTINGCONDITIONS | NAA | A4_LLT |  |  |  |
|  |  |  |  | H1 | H2 | H3 | H4 |
| AUG | W | 703 | 346 | 346 | 346 | 346 | 346 |
|  | AN | 328 | 216 | 216 | 216 | 216 | 216 |
|  | BN | 112 | 71 | 71 | 71 | 71 | 71 |
|  | D | 4 | 4 | 4 | 4 | 4 | 4 |
|  | C | 2 | 2 | 2 | 2 | 2 | 2 |
|  | All | 289 | 156 | 156 | 156 | 156 | 156 |
| SEP | W | 702 | 497 | 497 | 497 | 497 | 497 |
|  | AN | 333 | 259 | 259 | 259 | 259 | 259 |
|  | BN | 114 | 91 | 91 | 91 | 91 | 91 |
|  | D | 10 | 9 | 9 | 9 | 9 | 9 |
|  | C | 5 | 5 | 5 | 5 | 5 | 5 |
|  | All | 291 | 213 | 213 | 213 | 213 | 213 |
| OCT | W | 161 | 147 | 147 | 147 | 147 | 147 |
|  | AN | 178 | 180 | 180 | 180 | 180 | 180 |
|  | BN | 154 | 144 | 144 | 144 | 144 | 144 |
|  | D | 180 | 160 | 160 | 160 | 160 | 160 |
|  | C | 117 | 123 | 123 | 123 | 123 | 123 |
|  | All | 158 | 150 | 150 | 150 | 150 | 150 |
| NOV | W | 487 | 431 | 431 | 431 | 431 | 431 |
|  | AN | 912 | 855 | 855 | 855 | 855 | 855 |
|  | BN | 347 | 301 | 301 | 301 | 301 | 301 |
|  | D | 380 | 327 | 327 | 327 | 327 | 327 |
|  | C | 195 | 186 | 186 | 186 | 186 | 186 |
|  | All | 474 | 429 | 429 | 429 | 429 | 429 |
| DEC | W | 1,504 | 1,732 | 1,732 | 1,732 | 1,732 | 1,732 |
|  | AN | 1,411 | 1,628 | 1,628 | 1,628 | 1,628 | 1,628 |
|  | BN | 447 | 472 | 472 | 472 | 472 | 472 |
|  | D | 383 | 374 | 374 | 374 | 374 | 374 |
|  | C | 204 | 209 | 209 | 209 | 209 | 209 |
|  | All | 887 | 999 | 999 | 999 | 999 | 999 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 36. Differences ${ }^{a}$ (Percent Differences) between Pairs of Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 4: In Delta-Mokelumne River at the Delta |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | $\begin{aligned} & \text { EXISTING } \\ & \text { CONDITIONS } \\ & \text { vs. H1 } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { NAA } \\ \text { vs. H1 } \end{gathered}$ | EXISTING CONDITIONS vs. H2 | $\begin{gathered} \text { NAA } \\ \text { vs. H2 } \end{gathered}$ | EXISTING CONDITIONS vs. H3 | $\begin{gathered} \text { NAA } \\ \text { vs. H3 } \end{gathered}$ | EXISTING CONDITIONS vs. H4 | NAA vs. H4 |
| JAN | W | 563 (18.3\%) | 0 (0\%) | 563 (18.3\%) | 0 (0\%) | 563 (18.3\%) | 0 (0\%) | 563 (18.3\%) | 0 (0\%) |
|  | AN | 169 (9.9\%) | 0 (0\%) | 169 (9.9\%) | 0 (0\%) | 169 (9.9\%) | 0 (0\%) | 169 (9.9\%) | 0 (0\%) |
|  | BN | 21 (3.4\%) | 0 (0\%) | 21 (3.4\%) | 0 (0\%) | 21 (3.4\%) | 0 (0\%) | 21 (3.4\%) | 0 (0\%) |
|  | D | -2 (-0.5\%) | 0 (0\%) | -2 (-0.5\%) | 0 (0\%) | -2 (-0.5\%) | 0 (0\%) | -2 (-0.5\%) | 0 (0\%) |
|  | C | 1 (0.3\%) | 0 (0\%) | 1 (0.3\%) | 0 (0\%) | 1 (0.3\%) | 0 (0\%) | 1 (0.3\%) | 0 (0\%) |
|  | All | 201 (13.8\%) | 0 (0\%) | 201 (13.8\%) | 0 (0\%) | 201 (13.8\%) | 0 (0\%) | 201 (13.8\%) | 0 (0\%) |
| FEB | W | 491 (14.9\%) | 0 (0\%) | 491 (14.9\%) | 0 (0\%) | 491 (14.9\%) | 0 (0\%) | 491 (14.9\%) | 0 (0\%) |
|  | AN | 388 (15.3\%) | 0 (0\%) | 388 (15.3\%) | 0 (0\%) | 388 (15.3\%) | 0 (0\%) | 388 (15.3\%) | 0 (0\%) |
|  | BN | 24 (2.4\%) | 0 (0\%) | 24 (2.4\%) | 0 (0\%) | 24 (2.4\%) | 0 (0\%) | 24 (2.4\%) | 0 (0\%) |
|  | D | -17 (-2.4\%) | 0 (0\%) | -17 (-2.4\%) | 0 (0\%) | -17 (-2.4\%) | 0 (0\%) | -17 (-2.4\%) | 0 (0\%) |
|  | C | 15 (3.5\%) | 0 (0\%) | 15 (3.5\%) | 0 (0\%) | 15 (3.5\%) | 0 (0\%) | 15 (3.5\%) | 0 (0\%) |
|  | All | 223 (12.3\%) | 0 (0\%) | 223 (12.3\%) | 0 (0\%) | 223 (12.3\%) | 0 (0\%) | 223 (12.3\%) | 0 (0\%) |
| MAR | W | 158 (5\%) | 0 (0\%) | 158 (5\%) | 0 (0\%) | 158 (5\%) | 0 (0\%) | 158 (5\%) | 0 (0\%) |
|  | AN | 57 (3.6\%) | 0 (0\%) | 57 (3.6\%) | 0 (0\%) | 57 (3.6\%) | 0 (0\%) | 57 (3.6\%) | 0 (0\%) |
|  | BN | -41 (-3.4\%) | 0 (0\%) | -41 (-3.4\%) | 0 (0\%) | -41 (-3.4\%) | 0 (0\%) | -41 (-3.4\%) | 0 (0\%) |
|  | D | -63 (-8.3\%) | 0 (0\%) | -63 (-8.3\%) | 0 (0\%) | -63 (-8.3\%) | 0 (0\%) | -63 (-8.3\%) | 0 (0\%) |
|  | C | -15 (-2.5\%) | 0 (0\%) | -15 (-2.5\%) | 0 (0\%) | -15 (-2.5\%) | 0 (0\%) | -15 (-2.5\%) | 0 (0\%) |
|  | All | 38 (2.3\%) | 0 (0\%) | 38 (2.3\%) | 0 (0\%) | 38 (2.3\%) | 0 (0\%) | 38 (2.3\%) | 0 (0\%) |
| APR | W | -125 (-4.4\%) | 0 (0\%) | -125 (-4.4\%) | 0 (0\%) | -125 (-4.4\%) | 0 (0\%) | -125 (-4.4\%) | 0 (0\%) |
|  | AN | -194 (-12\%) | 0 (0\%) | -194 (-12\%) | 0 (0\%) | -194 (-12\%) | 0 (0\%) | -194 (-12\%) | 0 (0\%) |
|  | BN | -175 (-14.1\%) | 0 (0\%) | $-175(-14.1 \%)$ | 0 (0\%) | -175 (-14.1\%) | 0 (0\%) | -175 (-14.1\%) | 0 (0\%) |
|  | D | -73 (-11.7\%) | 0 (0\%) | -73 (-11.7\%) | 0 (0\%) | -73 (-11.7\%) | 0 (0\%) | -73 (-11.7\%) | 0 (0\%) |
|  | C | -29 (-8.6\%) | 0 (0\%) | -29 (-8.6\%) | 0 (0\%) | -29 (-8.6\%) | 0 (0\%) | -29 (-8.6\%) | 0 (0\%) |
|  | All | -120 (-8\%) | 0 (0\%) | -120 (-8\%) | 0 (0\%) | -120 (-8\%) | 0 (0\%) | -120 (-8\%) | 0 (0\%) |
| MAY | W | -284 (-9\%) | 0 (0\%) | -284 (-9\%) | 0 (0\%) | -284 (-9\%) | 0 (0\%) | -284 (-9\%) | 0 (0\%) |
|  | AN | -260 (-18.1\%) | 0 (0\%) | -260 (-18.1\%) | 0 (0\%) | -260 (-18.1\%) | 0 (0\%) | -260 (-18.1\%) | 0 (0\%) |
|  | BN | -164 (-16.8\%) | 0 (0\%) | $-164(-16.8 \%)$ | 0 (0\%) | $-164(-16.8 \%)$ | 0 (0\%) | -164 (-16.8\%) | 0 (0\%) |
|  | D | -72 (-17.8\%) | 0 (0\%) | -72 (-17.8\%) | 0 (0\%) | -72 (-17.8\%) | 0 (0\%) | -72 (-17.8\%) | 0 (0\%) |
|  | C | -11 (-6.1\%) | 0 (0\%) | -11 (-6.1\%) | 0 (0\%) | -11 (-6.1\%) | 0 (0\%) | -11 (-6.1\%) | 0 (0\%) |
|  | All | -174 (-11.9\%) | 0 (0\%) | -174 (-11.9\%) | 0 (0\%) | $-174(-11.9 \%)$ | 0 (0\%) | -174 (-11.9\%) | 0 (0\%) |
| JUN | W | -339 (-19.3\%) | 0 (0\%) | -339 (-19.3\%) | 0 (0\%) | -339 (-19.3\%) | 0 (0\%) | -339 (-19.3\%) | 0 (0\%) |
|  | AN | -220 (-25.8\%) | 0 (0\%) | -220 (-25.8\%) | 0 (0\%) | -220 (-25.8\%) | 0 (0\%) | -220 (-25.8\%) | 0 (0\%) |
|  | BN | -105 (-22.3\%) | 0 (0\%) | $-105(-22.3 \%)$ | 0 (0\%) | $-105(-22.3 \%)$ | 0 (0\%) | $-105(-22.3 \%)$ | 0 (0\%) |
|  | D | -17 (-18.8\%) | 0 (0\%) | -17 (-18.8\%) | 0 (0\%) | -17 (-18.8\%) | 0 (0\%) | -17 (-18.8\%) | 0 (0\%) |
|  | C | -7 (-14.5\%) | 0 (0\%) | -7 (-14.5\%) | 0 (0\%) | -7 (-14.5\%) | 0 (0\%) | -7 (-14.5\%) | 0 (0\%) |
|  | All | -163 (-20.9\%) | 0 (0\%) | -163 (-20.9\%) | 0 (0\%) | -163 (-20.9\%) | 0 (0\%) | -163 (-20.9\%) | 0 (0\%) |


| Alternative 4: In Delta-Mokelumne River at the Delta |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYTb | EXISTING CONDITIONS vs. H1 | $\begin{gathered} \text { NAA } \\ \text { vs. H1 } \end{gathered}$ | EXISTING CONDITIONS vs. H2 | $\begin{gathered} \text { NAA } \\ \text { vs. H2 } \end{gathered}$ | EXISTING CONDITIONS vs. H3 | $\begin{gathered} \text { NAA } \\ \text { vs. H3 } \end{gathered}$ | $\qquad$ | NAA vs. H4 |
| JUL | W | -303 (-39.3\%) | 0 (0\%) | -303 (-39.3\%) | 0 (0\%) | -303 (-39.3\%) | 0 (0\%) | -303 (-39.3\%) | 0 (0\%) |
|  | AN | -180 (-51.8\%) | 0 (0\%) | -180 (-51.8\%) | 0 (0\%) | $-180(-51.8 \%)$ | 0 (0\%) | $-180(-51.8 \%)$ | 0 (0\%) |
|  | BN | -54 (-43.4\%) | 0 (0\%) | -54 (-43.4\%) | 0 (0\%) | -54 (-43.4\%) | 0 (0\%) | -54 (-43.4\%) | 0 (0\%) |
|  | D | 0 (-2.9\%) | 0 (0\%) | 0 (-2.9\%) | 0 (0\%) | 0 (-2.9\%) | 0 (0\%) | 0 (-2.9\%) | 0 (0\%) |
|  | C | 0 (-6.7\%) | 0 (0\%) | 0 (-6.7\%) | 0 (0\%) | 0 (-6.7\%) | 0 (0\%) | 0 (-6.7\%) | 0 (0\%) |
|  | All | -132 (-42\%) | 0 (0\%) | -132 (-42\%) | 0 (0\%) | -132 (-42\%) | 0 (0\%) | -132 (-42\%) | 0 (0\%) |
| AUG | W | -357 (-50.8\%) | 0 (0\%) | $-357(-50.8 \%)$ | 0 (0\%) | $-357(-50.8 \%)$ | 0 (0\%) | -357 (-50.8\%) | 0 (0\%) |
|  | AN | -113 (-34.3\%) | 0 (0\%) | -113 (-34.3\%) | 0 (0\%) | -113 (-34.3\%) | 0 (0\%) | -113 (-34.3\%) | 0 (0\%) |
|  | BN | -41 (-36.5\%) | 0 (0\%) | -41 (-36.5\%) | 0 (0\%) | -41 (-36.5\%) | 0 (0\%) | -41 (-36.5\%) | 0 (0\%) |
|  | D | 0 (-2.2\%) | 0 (0\%) | 0 (-2.2\%) | 0 (0\%) | 0 (-2.2\%) | 0 (0\%) | 0 (-2.2\%) | 0 (0\%) |
|  | C | 0 (-1.9\%) | 0 (0\%) | 0 (-1.9\%) | 0 (0\%) | 0 (-1.9\%) | 0 (0\%) | 0 (-1.9\%) | 0 (0\%) |
|  | All | -133 (-46.1\%) | 0 (0\%) | -133 (-46.1\%) | 0 (0\%) | -133 (-46.1\%) | 0 (0\%) | -133 (-46.1\%) | 0 (0\%) |
| SEP | W | -205 (-29.3\%) | 0 (0\%) | -205 (-29.3\%) | 0 (0\%) | -205 (-29.3\%) | 0 (0\%) | -205 (-29.3\%) | 0 (0\%) |
|  | AN | -74 (-22.3\%) | 0 (0\%) | -74 (-22.3\%) | 0 (0\%) | $-74(-22.3 \%)$ | 0 (0\%) | -74 (-22.3\%) | 0 (0\%) |
|  | BN | -24 (-20.7\%) | 0 (0\%) | -24 (-20.7\%) | 0 (0\%) | -24 (-20.7\%) | 0 (0\%) | -24 (-20.7\%) | 0 (0\%) |
|  | D | -1 (-9.4\%) | 0 (0\%) | -1 (-9.4\%) | 0 (0\%) | -1 (-9.4\%) | 0 (0\%) | -1 (-9.4\%) | 0 (0\%) |
|  | C | 0 (-0.1\%) | 0 (0\%) | 0 (-0.1\%) | 0 (0\%) | 0 (-0.1\%) | 0 (0\%) | 0 (-0.1\%) | 0 (0\%) |
|  | All | -78 (-27\%) | 0 (0\%) | -78 (-27\%) | 0 (0\%) | -78 (-27\%) | 0 (0\%) | -78 (-27\%) | 0 (0\%) |
| OCT | W | -14 (-8.7\%) | 0 (0\%) | -14 (-8.7\%) | 0 (0\%) | -14 (-8.7\%) | 0 (0\%) | -14 (-8.7\%) | 0 (0\%) |
|  | AN | 2 (1\%) | 0 (0\%) | 2 (1\%) | 0 (0\%) | 2 (1\%) | 0 (0\%) | 2 (1\%) | 0 (0\%) |
|  | BN | -10 (-6.6\%) | 0 (0\%) | -10 (-6.6\%) | 0 (0\%) | -10 (-6.6\%) | 0 (0\%) | -10 (-6.6\%) | 0 (0\%) |
|  | D | -20 (-11.2\%) | 0 (0\%) | -20 (-11.2\%) | 0 (0\%) | $-20(-11.2 \%)$ | 0 (0\%) | -20 (-11.2\%) | 0 (0\%) |
|  | C | 5 (4.6\%) | 0 (0\%) | 5 (4.6\%) | 0 (0\%) | 5 (4.6\%) | 0 (0\%) | 5 (4.6\%) | 0 (0\%) |
|  | All | -7 (-4.8\%) | 0 (0\%) | -7 (-4.8\%) | 0 (0\%) | -7 (-4.8\%) | 0 (0\%) | -7 (-4.8\%) | 0 (0\%) |
| NOV | W | -56 (-11.5\%) | 0 (0\%) | -56 (-11.5\%) | 0 (0\%) | -56 (-11.5\%) | 0 (0\%) | -56 (-11.5\%) | 0 (0\%) |
|  | AN | -57 (-6.3\%) | 0 (0\%) | -57 (-6.3\%) | 0 (0\%) | -57 (-6.3\%) | 0 (0\%) | -57 (-6.3\%) | 0 (0\%) |
|  | BN | -46 (-13.3\%) | 0 (0\%) | -46 (-13.3\%) | 0 (0\%) | -46 (-13.3\%) | 0 (0\%) | -46 (-13.3\%) | 0 (0\%) |
|  | D | -53 (-14\%) | 0 (0\%) | -53 (-14\%) | 0 (0\%) | -53 (-14\%) | 0 (0\%) | -53 (-14\%) | 0 (0\%) |
|  | C | -9 (-4.5\%) | 0 (0\%) | -9 (-4.5\%) | 0 (0\%) | -9 (-4.5\%) | 0 (0\%) | -9 (-4.5\%) | 0 (0\%) |
|  | All | -45 (-9.5\%) | 0 (0\%) | -45 (-9.5\%) | 0 (0\%) | -45 (-9.5\%) | 0 (0\%) | -45 (-9.5\%) | 0 (0\%) |
| DEC | W | 228 (15.1\%) | 0 (0\%) | 228 (15.1\%) | 0 (0\%) | 228 (15.1\%) | 0 (0\%) | 228 (15.1\%) | 0 (0\%) |
|  | AN | 217 (15.4\%) | 0 (0\%) | 217 (15.4\%) | 0 (0\%) | 217 (15.4\%) | 0 (0\%) | 217 (15.4\%) | 0 (0\%) |
|  | BN | 25 (5.5\%) | 0 (0\%) | 25 (5.5\%) | 0 (0\%) | 25 (5.5\%) | 0 (0\%) | 25 (5.5\%) | 0 (0\%) |
|  | D | -10 (-2.5\%) | 0 (0\%) | -10 (-2.5\%) | 0 (0\%) | -10 (-2.5\%) | 0 (0\%) | -10 (-2.5\%) | 0 (0\%) |
|  | C | 6 (2.9\%) | 0 (0\%) | 6 (2.9\%) | 0 (0\%) | 6 (2.9\%) | 0 (0\%) | 6 (2.9\%) | 0 (0\%) |
|  | All | 112 (12.7\%) | 0 (0\%) | 112 (12.7\%) | 0 (0\%) | 112 (12.7\%) | 0 (0\%) | 112 (12.7\%) | 0 (0\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.4.3 Comparison of BDCP Alternative 4 Operational Scenario H Series-Outflow Options

As described in Chapter 3, the Alternative 4 operational scenario will be selected based on the decision tree logic, during the period of construction of CM1. Four potential operational scenarios are compared in this section. The operational scenario may include higher spring outflow (higher outflow in March-May than the D-1641 February-June X2 and/or higher fall outflow (higher September-November outflow than D-1641 requirements). The four potential operations are abbreviated as H1, H2, H3, and H4 as illustrated in the matrix below:

| Spring Outflow: | D-1641 Feb-Jun X2 | Higher Mar-May Outflow |
| :--- | :---: | :---: |
| Fall Outflow: |  |  |
| D-1641 Outflow Limits | H1 | H2 |
| Higher Sep-Nov Outflow (in AN and W years) | H3 | H4 |

H1 would use D-1641 outflow (X2) objectives in the spring and the fall months. H2 would use increased March-May outflow in some years with D-1641 outflow in the fall months. H3 would use D-1641 outflow (X2) in the spring and higher September-November outflow requirements (Fall X2) in above normal and wet years. H4 would use increased March-May outflow objectives in some years and Fall X2 outflow requirements in above normal and wet years. The actual BDCP operations will be determined through the decision tree process during construction of the new conveyance facilities. Additional detail is provided in Chapter 3.2.3 Development of DWR Proposed Project in 2012.

This section compares the CALSIM results for BDCP Alternative 4 operational scenario H3 with the $\mathrm{H} 4, \mathrm{H} 1$ and H 2 variations for both the ELT and LLT timeframes. The CALSIM-simulated differences between the No Action and H3 for the other cases are described for Delta outflow, Delta exports, and for selected reservoirs and river locations. The results are summarized with monthly storage and monthly flow distribution tables (i.e., monthly storage and flow probabilities) and graphs. The changes in outflow are identified in specific months for the different cases; the outflow changes require a combination of export changes and upstream reservoir release (storage) changes. Flows and reservoir storage patterns at many locations are nearly identical for the different cases.

Compared to the H3, H1 is a reduction in the required Delta outflows in September, October and November following wet and above normal years (about 40\% of the years). This results in either reduced reservoir releases or increased Delta exports. A large fraction of the reduced Delta outflow requirements result in higher Delta exports compared to H3, although some of the water cannot be exported and therefore contributes to Delta outflow that is sometimes higher than required outflow.

H2 and H4 are both intended to achieve higher Delta outflow in March, April, and May in many years compared to the No Action Alternative, H1, and H3, to benefit longfin smelt. The development of the specific increased outflow goals are described in Chapter 3.6.4.2 North Delta and South Delta Water Conveyance Operational Criteria-Scenario H.

## 11C.4.3.1 Comparison of Delta Outflow and Export Changes

Table 1 provides an annual average summary of the Delta outflow (taf/yr) and the Delta exports (taf/yr) for the four operational cases. H1, H2, and H4 cases were compared to H3 for both the ELT and the LLT timeframe. The average annual outflow and exports for the No Action conditions are also given. The average outflow for the H3_ELT case was 15,590 taf/yr and the average exports for H3_ELTwas 5,265 taf/yr. The outflows were increased and the exports were decreased by about 550 taf/yr for H4_ELT compared to H3_ELT, because the increased outflow in March-May required reduced exports or reduced upstream storage. The spring outflow increased but the fall outflow decreased for H2_ELT compared to H3_ELT, so the annual average outflow was increased by about 200 taf/yr and the annual average exports were reduced by about 250 taf/yr compared to H3_ELT. The spring outflow for H1_ELT was similar, but the fall outflow decreased in wet and above normal years compared to H3_ELT. Consequently, the annual average outflow was reduced by about 350 taf/y and the annual average exports were increased by about 325 taf/yr for H1_ELT compared to H3_ELT. The largest change in Delta outflow for H4_ELT of 550 taf/yr was about $3.5 \%$ of the average H3_ELT Delta outflow. The largest change in Delta exports for H4_ELT of -560 taf/yr was a reduction of $10.5 \%$ of H3_ELT exports.

The average annual Delta outflow was 15,767 taf/yr for H3_ELT and the average annual exports were 4,945 taf/yr. The comparisons of H1-H4 for the LLT timeframe were similar to the ELT timeframe. The outflows were increased by 510 taf/yr and the exports were decreased by about 530 taf/yr for H4_LLTcompared to the H3_LLT, because the increased outflow in March-May required reduced exports or reduced upstream storage. The spring outflow increased but the fall outflow decreased for H2_LLT compared to H3_LLT, so the annual average outflow was increased by about 170 taf/yr and the annual average exports were reduced by about 235 taf/yr compared to H3_LLT. The spring outflow for H1_LLT was similar, but the fall outflow decreased in wet and above normal years compared to H3_LLT. Consequently, the annual average outflow was reduced by about 350 taf/y and the annual average exports were increased by about 310 taf/yr for H1_LLT compared to H3_LLT. The largest change in Delta outflow for the H4_LLT of 510 taf/yr was about 3\% of the average Delta outflow. The largest change in Delta exports for H4_LLT of -530 taf/yr was a reduction of $11 \%$ of H3_LLT.

Table 2 gives the annual summary of H3 Delta outflow (TAF) for the ELT and LLT timeframes. Because H2 and H3 change Delta outflow in the months of March-May of some years, the H3 average outflow (cfs) for March-May and the H4 and H2 increases for March-May are given. Because H1 changes outflow in the months of September-November, the H3 average outflow (cfs) for September-November and the H1 reductions for September-November are given. The H2 and H4 increases in outflow are generally in years with moderate outflow, but can be in any water year type. H 1 decreases in outflow are in the wet (1) and above normal (2) water years because these are the years with Fall X2 requirements under the 2008 USFWS BiOp.

Figure 1 shows the CALSIM-simulated average March-May outflow for WY 1922-2003 for H3 (purple line) and H4 (light blue line) for the LLT timeframe (2060). The No Action outflow in MarchMay was generally 1,000 cfs to 5,000 cfs higher than H 3 , because the OMR restrictions limit the No Action exports in these months. The average March-May outflow ranged from about 10,000 cfs to more than $100,000 \mathrm{cfs}$, with an average of $29,196 \mathrm{cfs}$ for H 3 and an average of $31,854 \mathrm{cfs}$ for H 4 . The changes in the average March-May outflow from H3 to H4 are shown at the bottom of the graph, and the changes in the Delta exports during these months are also shown at the bottom of the graph. H4 provided increased outflow of more than $1,500 \mathrm{cfs}$ (5\% of average outflow) in about 30 years ( $35 \%$
of the years). The majority (60\%) of the increased outflow was provided by reduced exports in these same months; the remainder of the increased outflow was provided by increased reservoir releases compared to H3. For the years with simulated increased March-May outflow, the increases were generally between $5,000 \mathrm{cfs}$ and $10,000 \mathrm{cfs}$, which is equivalent to a volume of 900 taf to 1,800 taf for the three-month period.

Figure 2 shows the CALSIM-simulated average March-May outflow for WY 1922-2003 for H3 (purple line) and H2 (light blue line) for the LLT timeframe (2060). The No Action outflow in September-November was generally about the same as H3, because the No Action and H3 include the Fall X2 outflow requirements in above normal and wet years. The average March-May outflow increased from 29,196 cfs for H3 to and an average of 32,113 cfs for H 4 . The changes in the average March-May outflow from H3 to H2 case are shown at the bottom of the graph, and the changes in the Delta exports during these months are also shown at the bottom of the graph. H2 provided increased outflow that was very similar to H 4 ; changes of more than 1,500 cfs were simulated in about 35 years ( $42 \%$ of the years). The majority ( $60 \%$ ) of the increased outflow was provided by reduced exports in these same months; the remainder of the increased outflow was provided by increased reservoir releases compared to H3.

Figure 3 shows the average September-November outflow for H1 and H3 for WY 1922-2003 for the LLT timeframe using the purple and light blue lines with the left axis. The average D-1641 required Delta outflow in these three months is about $5,000 \mathrm{cfs}$ for H 1 , but the Fall X2 requirements for H3 increased the average outflow to about $10,000 \mathrm{cfs}$ in above normal years and about $15,000 \mathrm{cfs}$ in wet years. The reduction in Delta outflow during these months and the corresponding increase in Delta exports are shown with the blue and red lines with the right axis. The reduction in the average September-November outflow for H1 was therefore about 5,000 cfs in above normal years, about 10,000 cfs in wet years, and there were no changes in Delta outflow for about $60 \%$ of the years (below normal, dry, and critical years). The changes in exports during these months were less than half of the changes in outflow; the remainder of the water remained in upstream storage, and was generally released for export in subsequent months.

Compared to H3, the annual outflow under H 4 was increased by more than 150 taf in about 50\% of the years, was increased by more than 500 taf in about $25 \%$ of the years, and was increased by more than 1,500 taf in about $15 \%$ of the years. The corresponding reductions in annual Delta exports were greater than 500 taf in about $50 \%$ of the years, were greater than 750 taf in about $25 \%$ of the years, and were greater than 1,000 taf in about $15 \%$ of the years. Overall, most of the increased Delta outflow for H4 was achieved with reduced Delta exports (i.e., 531 taf/yr reduced exports with 510 taf/yr increased outflow). Some of the increased outflow was obtained directly from reduced exports, while some of the increased outflow was obtained from increased reservoir releases which subsequently caused reduced exports when reservoir releases were reduced.

## 11C.4.3.2 Comparison of Upstream Reservoir Storage

Figure 4 shows the CALSIM-simulated Shasta Reservoir monthly storage for WY 1994-2003 as an example period and the cumulative distributions of Shasta Reservoir end-of-May and end-ofSeptember (carryover) storage for the No Action compared to the H3, H4, H2 and H1 cases for the LLT timeframe for WY 1922-2003. The H4 operational case did not cause any substantial changes in the Shasta Reservoir storage pattern compared to the H3. The end-of-May storage was full $(4,500$ taf) in about $20 \%$ of the years for each of the five cases. There were very few changes in the end-ofMay cumulative distribution (i.e., probability) of storage between the H3 and the H4, H2 or H1 cases for the LLT timeframe. The CALSIM-simulated monthly distribution of end-of-September Shasta Reservoir was slightly higher for the H 1 and H 2 cases, because of reduced releases for Fall X2 in wet and above normal years ( $40 \%$ of years). There were no other changes in carryover storage for the H4 or H2 cases.

Table 3 gives the CALSIM-simulated monthly distributions of Keswick Dam release flows for the H3 and the changes in the monthly distributions for the H4, H2 and H1 cases for the LLT (2060) timeframe. A review of the changes in the Keswick flows indicates that the H4, H2 and H1 flows were similar to the H3 case in most months. The Keswick flows for the H4 and H2 cases showed a small shift from May and June (reduced by 500 cfs to $1,000 \mathrm{cfs}$ ) to August for the H 2 case (increased by 750 cfs ) and to August and September for the H4 case (increased by 500 cfs to $1,000 \mathrm{cfs}$ ). Keswick releases were not increased in the March-May period and did not, therefore, contribute to increased Delta outflow in these months for the H4 and H2 cases. The Keswick flows for the H1 and H2 cases showed a major reduction in September flow in about 40\% of the years, with an average flow reduction of about $2,000 \mathrm{cfs}$ for the H 4 and H 2 cases. The October flows were about the same as the H3, and the November flows were reduced in about 40\% of the years, with an average reduction of about 500 cfs. The Keswick flows in December-February were increased in about $25 \%$ of the years for the H1 and H2 cases, likely because of increased flood control releases. The Keswick flow reductions in September-November accounted for about 25\% of the outflow reductions for the H1 and H2 cases.

Figure 5 shows the Oroville Reservoir storage for WY 1994-2003 as an example period and the cumulative distributions of Oroville Reservoir end-of-May and end-of-September (carryover) storage for the No Action compared to the H3, H4, H2 and H1 cases for the LLT timeframe for WY 1922-2003. There was a much greater range of Oroville Reservoir storage for the different cases than for Shasta storage. Because the Oroville Reservoir inflow (runoff) is high in many years, Oroville Reservoir was refilled to maximum storage in May or June in about 25\% of the years. About half of the water for the increased March-May Delta outflow for the H 4 and H 2 cases was released from Oroville, so that the end-of-May storage was about 500 taf lower for the about half of the years (middle range of storage distribution) for the H 4 and H 2 cases. The end-of-May storage was nearly identical for the No action, the H3 and the H1 cases. Oroville Reservoir releases for the H4 and H2 cases were reduced in the summer months to ensure end-of-September storage remained similar to the No Action and H3 storage. The carryover storage was actually higher than the No Action and H3 for the H 4 and H 2 cases, apparently because the summer releases were lower than necessary. The carryover storage for the H 1 and H 2 cases was higher because these cases do not include the Fall X2 outflow requirements.

Table 5 gives the CALSIM-simulated monthly distributions of Feather River flows (below Thermalito) for the H3 and the changes in the monthly distributions for the $\mathrm{H} 4, \mathrm{H} 2$ and H 1 for the LLT (2060) timeframe. The Feather River flows for the H4 and H2 cases showed a large increase in April and May (to provide the higher spring outflow), with a corresponding reduction in June, July and August. The April flows were increased at least 750 cfs in about $50 \%$ of the years and were increased more than $5,000 \mathrm{cfs}$ in about $25 \%$ of the years. The May flows were increased at least 500 cfs in about $50 \%$ of the years and were increased more than $2,500 \mathrm{cfs}$ in about $25 \%$ of the years. Feather River flows were increased by an average of 1,250 cfs for the March-May period, and contributed about half of the increased outflow for the H 4 and H 2 cases (the remainder of the increased outflow was achieved with export reductions). The Feather River flows for the H 4 and H2 cases were reduced in the summer months to maintain the No Action and H3 September carryover storage pattern in most years. The Feather River flows for the H1 and H2 cases were reduced in September by more than 3,000 cfs in about $40 \%$ of the years. This was about half of the reduced Delta outflow volume for the September-November period for the H1 and H2 cases.

Figure 6 shows the Folsom Reservoir storage for WY 1994-2003 as an example period and the cumulative distributions of Folsom Reservoir end-of-May and end-of-September (carryover) storage for the No Action compared to the H3, H4, H2 and H1 cases for the LLT timeframe for WY 19222003. Folsom Reservoir operations are generally constrained because of the relatively low storage volume ( 975 taf maximum) compared to the average annual runoff; very few adjustments in the BDCP operations could be made for the H3 or the H4, H2 or H1 cases. Because the Folsom Reservoir inflow (runoff) is high in many years, Folsom Reservoir was refilled to maximum storage in May or June in about $50 \%$ of the years. No additional releases were made from Folsom Reservoir in the March-May period for the H4 and H2 cases. The H1 and H2 cases allowed slightly higher carryover storage in a few years, because releases were reduced by about 1,000 cfs in about $25 \%$ of the years. Folsom Reservoir carryover storage was increased by about 50 taf in about $25 \%$ of the years for the H1 and H2 cases.

Table 6 gives the CALSIM-simulated monthly distributions of American River flows for the H3 case and the changes in the monthly distributions for the H4 and H1 cases for the LLT (2060) timeframe. The American River flows are remarkably constant from February through June, with median flows of $2,250 \mathrm{cfs}$ to $3,250 \mathrm{cfs}$. There are several upstream reservoirs that provide flow regulation, and Folsom is at flood control capacity in about $50 \%$ of the years. The lowest average flows for the February-June period are in May, when the maximum flood control storage increases from 800 taf to 975 taf (more inflow can be stored). A review of the changes in the American River flows indicates that the $\mathrm{H} 4, \mathrm{H} 2$ and H 1 flows were very similar to the H 3 flows in most months. The American River flows for the H 4 and H 2 cases showed a decrease of about 500 cfs in May and June for many of the years compared to the H3; therefore Folsom Reservoir did not contribute to increased March-May Delta outflow. The American River flows for the H1 and H2 cases were reduced in September by about 500 cfs to 1,500 cfs in about $25 \%$ of the years. This was about $10 \%$ of the reduced Delta outflow volume for the September-November period for the H1 and H2 cases.

| Operational Case | Outflow <br> (TAF/yr) | Outflow Difference <br> Compared to H3 <br> (TAF/yr) | Export <br> (TAF/yr) | Export Difference <br> Compared to H3 <br> (TAF/yr) |
| :---: | :---: | :---: | :---: | :---: |
| NAA_ELT | 16,157 | 567 | 4,728 | -537 |
| H1_ELT | 15,239 | -351 | 5,591 | 326 |
| H2_ELT | 15,803 | 213 | 5,005 | -260 |
| H3_ELT | 15,590 | 0 | 5,265 | 0 |
| H4_ELT | 16,138 | 548 | 4,705 | -560 |
| NAA_LLT | 16,282 | 515 | 4,441 | -504 |
| H1_LLT | 15,418 | -349 | 4,255 | 310 |
| H2_ELT | 15,937 | 170 | 4,945 | -235 |
| H3_LLT | 15,767 | 0 | 4,414 | 0 |
| H4_LLT | 16,277 | 510 |  | -531 |

The changes in Delta outflow for higher spring outflow or lower fall outflow were provided by changes in export and changes in upstream reservoir releases (storage). Although the increased spring outflow was often greater than 5,000 cfs and the changes in fall outflow were about 10,000 cfs in wet years, the overall seasonal pattern of Delta outflow was not substantially changed in most years, because the Delta outflow is controlled by the seasonal runoff patterns. These managed changes in Delta outflow are small relative to the large variations between dry years and wet years. The CALSIM model results indicate that outflow increases of less than 5,000 cfs were simulated with reduced exports, without any additional Freeport inflow. Outflow increases of 5,000 cfs to 10,000 cfs were simulated with reduced exports of about $5,000 \mathrm{cfs}$ and additional Freeport inflows of between 0 cfs and 5,000 cfs. Outflow increases of more than 10,000 cfs were simulated with about half of the outflow increase from reduced exports and about half of the increase from increased Freeport flow. Operational rules will be needed for the H 4 or H 2 cases (if adopted), to reduce the allowable exports and make additional releases from upstream reservoirs, under specified hydrologic conditions. These new rules would distinguish the higher spring outflows from the No Action D-1641 X2 outflow requirements in March-May. The operational rules for the H1 case (if adopted) would be the D-1641 required Delta outflows for September-November.

Table 1. Annual Average Delta Outflow and Delta Export for the BDCP Alternative 4 Operational Cases

Table 2. Annual Delta Outflow Summary for H3H3 and Changes for the H4H1H1, H2, and H4 Operational Cases for the ELT and LLT Timeframe

| YEAR | WY <br> Type | H3-ELT <br> Annual <br> Outflow <br> (TAF) | $\begin{gathered} \hline \text { H3-ELT } \\ \text { Mar- } \\ \text { May } \\ \text { Outflow } \\ \text { (cfs) } \end{gathered}$ | H2-ELT Increased Mar-May Outflow (cfs) | $\begin{gathered} \text { H4-ELT } \\ \text { Increased } \\ \text { Mar-May } \\ \text { Outflow } \\ \text { (cfs) } \end{gathered}$ | $\begin{aligned} & \text { H3-ELT } \\ & \text { Sep-Nov } \\ & \text { Outflow } \\ & \text { (cfs) } \end{aligned}$ | H1-ELT <br> Reduced <br> Sep-Nov <br> Outflow (cfs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1922 | 2 | 15,373 | 36,667 | -12 | -12 | 13,906 | 8,730 |
| 1923 | 3 | 10,147 | 15,731 | 1,383 | 1,814 | 5,286 | 62 |
| 1924 | 5 | 4,451 | 6,793 | 66 | 59 | 4,169 | 57 |
| 1925 | 4 | 9,703 | 18,167 | 7,889 | 8,392 | 4,987 | 16 |
| 1926 | 4 | 7,701 | 14,183 | -96 | -70 | 8,971 | 67 |
| 1927 | 1 | 19,604 | 32,726 | 5,407 | 5,407 | 9,087 | 3,747 |
| 1928 | 2 | 12,413 | 36,306 | 1,740 | 288 | 9,392 | 4,372 |
| 1929 | 5 | 5,109 | 7,987 | 104 | 162 | 4,203 | 7 |
| 1930 | 4 | 6,873 | 13,567 | 48 | 87 | 4,928 | -12 |
| 1931 | 5 | 4,083 | 6,451 | 25 | 75 | 4,331 | 1 |
| 1932 | 4 | 6,792 | 10,936 | 1,508 | 1,509 | 4,149 | 0 |
| 1933 | 5 | 5,365 | 9,924 | 12 | 11 | 4,192 | 1 |
| 1934 | 5 | 5,372 | 9,416 | -25 | -25 | 3,400 | 0 |
| 1935 | 3 | 9,465 | 28,588 | 385 | 470 | 5,037 | -1 |
| 1936 | 3 | 13,275 | 21,796 | 13,804 | 13,862 | 5,143 | -9 |
| 1937 | 3 | 11,294 | 30,045 | -11 | -24 | 10,249 | -36 |
| 1938 | 1 | 39,820 | 106,846 | 266 | 264 | 14,116 | 9,034 |
| 1939 | 4 | 5,900 | 9,405 | 984 | 84 | 4,788 | -273 |
| 1940 | 2 | 20,480 | 64,925 | 128 | 123 | 9,098 | 3,938 |
| 1941 | 1 | 31,839 | 67,039 | 1,711 | 855 | 14,525 | 9,497 |
| 1942 | 1 | 26,766 | 34,034 | 10,466 | 10,466 | 14,479 | 8,948 |
| 1943 | 1 | 20,053 | 40,935 | 101 | -1,021 | 13,787 | 8,593 |
| 1944 | 4 | 7,340 | 12,663 | 222 | 32 | 5,082 | 85 |
| 1945 | 3 | 9,473 | 17,896 | 11,230 | 9,737 | 5,338 | -5 |
| 1946 | 3 | 14,032 | 15,169 | 8,430 | 8,430 | 9,387 | 4,242 |
| 1947 | 4 | 6,018 | 11,395 | -4 | 8 | 5,013 | 1 |
| 1948 | 3 | 7,276 | 18,200 | 575 | 115 | 5,003 | 2 |


| H3-LLT <br> Annual <br> Outflow <br> (TAF) | H3-LLT <br> Mar- <br> May <br> Outflow <br> (cfs) | H2-LLT <br> Increased <br> Mar-May <br> Outflow <br> (cfs) | H4-LLT <br> Increased <br> Mar-May <br> Outflow <br> (cfs) | H3-LLT <br> Sep-Nov <br> Outflow <br> (cfs) | H1-LLT <br> Reduced <br> Sep-Nov <br> (cffs) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15,961 | 36,701 | -221 | 30 | 14,999 | 10,028 |
| 10,346 | 16,379 | 1,517 | 1,404 | 5,963 | -1 |
| 5,045 | 6,946 | -12 | -12 | 5,094 | 225 |
| 10,194 | 24,930 | 7,406 | 6,733 | 6,301 | 576 |
| 8,588 | 15,615 | -328 | -326 | 10,164 | 150 |
| 19,389 | 35,163 | 2,371 | 2,371 | 10,758 | 4,218 |
| 11,474 | 34,898 | 3,091 | 1,287 | 5,686 | -114 |
| 5,568 | 8,269 | 151 | 151 | 4,499 | 47 |
| 7,460 | 14,980 | -105 | -104 | 6,251 | -125 |
| 4,869 | 6,501 | 98 | 98 | 5,225 | -582 |
| 6,912 | 12,262 | 1,121 | 1,121 | 4,733 | -22 |
| 5,217 | 10,158 | 13 | 13 | 5,424 | 84 |
| 5,741 | 9,391 | -28 | -28 | 5,457 | -52 |
| 10,007 | 29,466 | 207 | 205 | 5,472 | -110 |
| 13,506 | 35,580 | 13,565 | 13,566 | 6,325 | -25 |
| 11,203 | 29,682 | 155 | 446 | 10,889 | 3 |
| 40,401 | 109,614 | 88 | 62 | 15,430 | 10,079 |
| 6,259 | 10,589 | 62 | 128 | 7,201 | -914 |
| 21,536 | 68,345 | 289 | 444 | 10,651 | 5,097 |
| 31,248 | 64,473 | 1,588 | 479 | 15,074 | 9,992 |
| 25,744 | 43,862 | 13,494 | 13,535 | 16,146 | 10,940 |
| 20,306 | 40,699 | 1,305 | -28 | 14,650 | 9,404 |
| 7,522 | 12,727 | 515 | -6 | 6,209 | -451 |
| 8,969 | 23,886 | 8,862 | 8,267 | 6,701 | -3 |
| 12,938 | 16,768 | 3,379 | 3,393 | 4,910 | 509 |
| 6,410 | 12,620 | -62 | -43 | 5,776 | -60 |
| 7,478 | 17,538 | 96 | 138 | 5,440 | 451 |
|  |  |  |  |  |  |
| 102 |  |  |  |  |  |


| YEAR | $\begin{gathered} \text { WY } \\ \text { Type } \end{gathered}$ | H3-ELT <br> Annual <br> Outflow <br> (TAF) | H3-ELT <br> Mar- <br> May Outflow (cfs) | H2-ELT <br> Increased <br> Mar-May <br> Outflow <br> (cfs) | H4-ELT <br> Increased <br> Mar-May <br> Outflow <br> (cfs) | H3-ELT <br> Sep-Nov <br> Outflow <br> (cfs) | H1-ELT <br> Reduced <br> Sep-Nov <br> Outflow <br> (cfs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1949 | 4 | 7,139 | 19,785 | -470 | 34 | 4,948 | -22 |
| 1950 | 3 | 7,609 | 13,736 | 5,345 | 5,584 | 19,340 | 1,299 |
| 1951 | 2 | 23,904 | 18,266 | 12,326 | 12,332 | 9,404 | 4,314 |
| 1952 | 1 | 29,198 | 66,753 | 2,098 | 37 | 14,398 | 7,703 |
| 1953 | 1 | 16,421 | 16,555 | 13,795 | 13,929 | 14,688 | 10,126 |
| 1954 | 2 | 13,197 | 28,624 | -2,083 | -3,571 | 9,175 | 4,220 |
| 1955 | 4 | 6,381 | 8,675 | 2,163 | 2,146 | 4,864 | -5 |
| 1956 | 1 | 30,815 | 29,011 | 14,270 | 14,287 | 14,792 | 10,053 |
| 1957 | 2 | 10,166 | 24,365 | -1,228 | -1,329 | 9,204 | 4,021 |
| 1958 | 1 | 31,988 | 88,211 | 567 | 471 | 13,818 | 8,753 |
| 1959 | 3 | 8,925 | 10,238 | 8,641 | 8,266 | 4,775 | 39 |
| 1960 | 4 | 6,204 | 11,068 | 2,635 | 2,947 | 4,840 | 7 |
| 1961 | 4 | 6,174 | 9,955 | 209 | 275 | 4,104 | -234 |
| 1962 | 3 | 9,267 | 15,349 | 9,119 | 9,112 | 11,582 | 43 |
| 1963 | 1 | 18,481 | 44,510 | 2,498 | 2,495 | 14,531 | 6,934 |
| 1964 | 4 | 6,424 | 8,299 | 1,938 | 1,224 | 5,338 | 10 |
| 1965 | 1 | 22,199 | 22,944 | 14,656 | 14,638 | 14,636 | 6,694 |
| 1966 | 3 | 8,580 | 12,513 | 1,149 | 838 | 5,405 | -142 |
| 1967 | 1 | 21,849 | 52,926 | 38 | 312 | 14,258 | 8,468 |
| 1968 | 3 | 9,829 | 14,320 | 8,868 | 7,484 | 4,709 | -288 |
| 1969 | 1 | 32,946 | 62,523 | -134 | 246 | 14,688 | 8,638 |
| 1970 | 1 | 29,476 | 19,673 | 10,261 | 9,932 | 14,531 | 8,294 |
| 1971 | 1 | 15,583 | 25,498 | 1,822 | 2,335 | 14,781 | 9,630 |
| 1972 | 3 | 7,284 | 12,135 | 3,583 | 2,190 | 7,161 | 246 |
| 1973 | 2 | 19,059 | 27,237 | 7,551 | 7,551 | 23,262 | 2,976 |
| 1974 | 1 | 31,271 | 60,890 | 8 | 4 | 14,397 | 9,513 |
| 1975 | 1 | 16,257 | 41,656 | 1,366 | 1,396 | 14,803 | 9,785 |
| 1976 | 5 | 5,569 | 9,028 | 809 | 652 | 4,672 | -205 |
| 1977 | 5 | 3,878 | 6,113 | 0 | 0 | 3,761 | 168 |
| 1978 | 2 | 18,857 | 46,188 | 1,523 | 1,294 | 8,976 | 2,252 |


$\left.$| H3-LLT |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Annual |
| Outflow |
| (TAF) | | H3-LLT |
| :---: |
| Mar- |
| May |
| Mutflow |
| (cfs) | | H2-LLT |
| :---: |
| Increased |
| Mar-May |
| Outflow |
| (cfs) | | H4-LLT |
| :---: |
| Increased |
| Mar-May |
| Outflow |
| (cfs) | | H3-LLT |
| :---: |
| Sep-Nov |
| Outflow |
| (cfs) | | Reduced |
| :---: |
| Sep-Nov |
| Outflow |
| (cfs) | \right\rvert\,


| YEAR | $\begin{gathered} \text { WY } \\ \text { Type } \end{gathered}$ | H3-ELT <br> Annual <br> Outflow <br> (TAF) | H3-ELT <br> Mar- <br> May <br> Outflow <br> (cfs) | H2-ELT <br> Increased <br> Mar-May Outflow (cfs) | H4-ELT <br> Increased <br> Mar-May <br> Outflow <br> (cfs) | H3-ELT <br> Sep-Nov <br> Outflow <br> (cfs) | H1-ELT <br> Reduced <br> Sep-Nov <br> Outflow <br> (cfs) | H3-LLT <br> Annual <br> Outflow <br> (TAF) | H3-LLT <br> Mar- <br> May <br> Outflow <br> (cfs) | H2-LLT <br> Increased Mar-May Outflow (cfs) | H4-LLT <br> Increased Mar-May Outflow (cfs) | H3-LLT <br> Sep-Nov <br> Outflow <br> (cfs) | H1-LLT <br> Reduced <br> Sep-Nov <br> Outflow <br> (cfs) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 | 3 | 9,321 | 19,972 | -593 | -565 | 5,274 | 0 | 9,167 | 18,830 | 1,254 | 540 | 8,019 | 996 |
| 1980 | 2 | 24,850 | 32,952 | 10,236 | 10,228 | 9,264 | 4,042 | 25,135 | 42,969 | 9,686 | 9,525 | 10,924 | 6,121 |
| 1981 | 4 | 6,960 | 11,728 | 680 | 378 | 12,730 | 266 | 7,431 | 12,314 | -225 | -302 | 12,059 | -224 |
| 1982 | 1 | 37,643 | 89,713 | -23 | 237 | 24,348 | 3,556 | 37,450 | 88,941 | -158 | -18 | 21,890 | 4,840 |
| 1983 | 1 | 60,200 | 147,982 | 40 | 32 | 38,469 | -4 | 58,899 | 147,567 | 676 | 90 | 34,969 | 811 |
| 1984 | 1 | 30,768 | 19,892 | 9,148 | 9,147 | 16,074 | 5,074 | 29,602 | 27,144 | 8,097 | 8,096 | 16,719 | 7,314 |
| 1985 | 4 | 7,611 | 11,175 | 239 | 74 | 5,003 | 453 | 7,708 | 11,253 | 348 | 336 | 5,666 | -175 |
| 1986 | 1 | 29,462 | 62,632 | 1,834 | 2,133 | 14,262 | 8,842 | 29,392 | 64,510 | 1,716 | 1,899 | 15,567 | 10,070 |
| 1987 | 4 | 6,681 | 12,156 | 458 | -1 | 4,572 | -364 | 7,164 | 13,944 | -6 | 10 | 6,272 | 21 |
| 1988 | 5 | 5,843 | 7,960 | 238 | 253 | 4,127 | 101 | 6,644 | 8,639 | 236 | 236 | 5,061 | -47 |
| 1989 | 4 | 7,596 | 24,653 | 838 | 373 | 4,506 | 9 | 8,032 | 26,566 | 2,261 | 1,774 | 6,977 | -87 |
| 1990 | 5 | 4,804 | 8,373 | 174 | 162 | 4,032 | 59 | 5,471 | 8,828 | 268 | 299 | 5,205 | 156 |
| 1991 | 5 | 5,212 | 14,080 | 61 | 54 | 3,939 | 25 | 5,749 | 14,225 | 118 | 199 | 4,646 | -21 |
| 1992 | 5 | 6,262 | 10,674 | -1 | -3 | 3,167 | 0 | 6,606 | 11,006 | 25 | 17 | 5,022 | 10 |
| 1993 | 2 | 15,119 | 28,965 | 5,559 | 5,600 | 8,976 | 4,063 | 16,074 | 36,189 | 3,849 | 3,849 | 10,729 | 5,064 |
| 1994 | 5 | 5,446 | 8,475 | 498 | 405 | 3,703 | -202 | 6,168 | 9,125 | 691 | 548 | 6,737 | 955 |
| 1995 | 1 | 37,748 | 123,561 | -296 | -251 | 13,622 | 6,675 | 37,164 | 120,059 | 78 | -162 | 14,568 | 8,197 |
| 1996 | 1 | 24,024 | 47,286 | 1,221 | -586 | 14,896 | 9,420 | 23,530 | 44,314 | 1,105 | -531 | 16,315 | 10,313 |
| 1997 | 1 | 36,348 | 16,029 | 12,919 | 12,589 | 14,583 | 9,435 | 35,887 | 26,899 | 11,462 | 11,227 | 15,964 | 10,836 |
| 1998 | 1 | 37,556 | 64,168 | 2,467 | 292 | 15,387 | 322 | 37,989 | 68,075 | 2,781 | 403 | 15,990 | 2,373 |
| 1999 | 1 | 20,699 | 32,996 | 4,854 | 4,854 | 14,792 | 9,697 | 21,190 | 35,425 | 1,927 | 1,927 | 15,605 | 10,679 |
| 2000 | 2 | 17,945 | 32,173 | 9,346 | 9,346 | 9,449 | 4,219 | 18,597 | 41,819 | 8,404 | 8,467 | 10,937 | 5,536 |
| 2001 | 4 | 6,590 | 11,763 | 87 | -12 | 4,308 | 81 | 7,010 | 12,961 | -182 | -153 | 6,678 | -246 |
| 2002 | 4 | 9,089 | 11,476 | 4,088 | 4,085 | 4,686 | 270 | 9,561 | 14,413 | 2,123 | 2,327 | 5,495 | -555 |
| 2003 | 2 | 13,670 | 23,303 | 5,927 | 5,865 |  |  | 13,033 | 25,509 | 6,277 | 6,285 |  |  |
| Min |  | 3,878 | 6,113 | -2,083 | -3,571 | 3,167 | -364 | 4,869 | 6,113 | -1,531 | -1,754 | 4,419 | -1,045 |
| Average |  | 15,590 | 29,256 | 3,166 | 2,962 | 9,581 | 3,091 | 15,767 | 31,854 | 2,917 | 2,658 | 10,503 | 3,464 |
| Max |  | 60,200 | 147,982 | 14,656 | 14,638 | 38,469 | 10,126 | 58,899 | 147,567 | 14,108 | 14,114 | 34,969 | 11,716 |



Figure 1. CALSIM-Simulated Average March-May Delta Outflow for H3 and H4 Cases for WY 1922-2003 at the LLT Timeframe (2060)


Figure 2. CALSIM-Simulated Average March-May Delta Outflow for H2 and H3 Cases for WY 1922-2003 at the LLT Timeframe (2060)


Figure 3. CALSIM-Simulated Average September-November Delta Outflow for H1 and H3 Cases for WY 1922-2003 at the LLT Timeframe (2060)

1 2

Table 3. CALSIM-Simulated Monthly Distributions of Keswick Dam Releases (cfs) for H 3 and Changes for the H4, H2 and H1 Cases for the LLT Timeframe for WY 1922-2003

| A. H3_LLT Keswick Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | 2,794 | 2,870 | 3,059 | 3,250 | 3,250 | 3,250 | 3,250 | 3,250 | 6,217 | 6,051 | 2,703 | 2,803 | 3,112 |
| 10\% | 4,000 | 3,489 | 3,250 | 3,250 | 3,250 | 3,250 | 3,720 | 5,232 | 8,503 | 10,451 | 7,563 | 3,771 | 4,126 |
| 20\% | 4,554 | 4,000 | 3,384 | 3,250 | 3,250 | 3,250 | 4,500 | 5,713 | 10,007 | 11,257 | 8,200 | 4,206 | 4,565 |
| 30\% | 5,501 | 4,000 | 3,667 | 3,292 | 3,250 | 3,422 | 4,500 | 6,237 | 10,861 | 12,541 | 8,928 | 4,721 | 5,009 |
| 40\% | 6,083 | 4,242 | 4,000 | 3,997 | 3,565 | 4,113 | 4,852 | 6,866 | 11,449 | 13,443 | 9,634 | 5,540 | 5,206 |
| 50\% | 6,605 | 4,482 | 4,000 | 4,482 | 4,500 | 4,500 | 5,657 | 7,553 | 12,235 | 14,092 | 10,004 | 7,107 | 5,669 |
| 60\% | 6,917 | 4,913 | 4,195 | 4,500 | 4,732 | 4,784 | 6,173 | 7,990 | 13,033 | 15,000 | 10,354 | 8,964 | 6,722 |
| 70\% | 7,552 | 5,136 | 4,488 | 8,258 | 10,115 | 7,007 | 7,156 | 8,987 | 13,654 | 15,000 | 10,647 | 11,417 | 7,290 |
| 80\% | 8,051 | 6,050 | 6,603 | 13,647 | 22,983 | 12,351 | 8,490 | 9,614 | 14,394 | 15,000 | 11,395 | 12,880 | 8,258 |
| 90\% | 8,726 | 7,472 | 15,302 | 20,808 | 30,081 | 20,167 | 10,549 | 11,627 | 14,977 | 15,155 | 12,459 | 14,741 | 9,356 |
| Max | 13,169 | 24,163 | 32,513 | 60,328 | 51,105 | 46,363 | 30,978 | 15,000 | 15,000 | 16,420 | 15,000 | 15,662 | 12,476 |
| Avg | 6,555 | 5,288 | 6,587 | 9,235 | 11,261 | 8,834 | 6,852 | 7,915 | 12,008 | 13,421 | 9,757 | 8,248 | 6,390 |
| B. H4_LLT Changes in Keswick Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | -56 | -1 | 150 | 0 | 0 | 0 | 0 | 0 | 10 | 3,101 | 0 | 0 | 70 |
| 10\% | 0 | -62 | 0 | 0 | 0 | 0 | -18 | -44 | -458 | 264 | 252 | 165 | -63 |
| 20\% | 198 | 0 | -79 | 0 | 0 | 0 | 0 | 1 | -782 | 190 | 356 | 150 | 17 |
| 30\% | 71 | 0 | -168 | -18 | 0 | -172 | 0 | -252 | -946 | 126 | 661 | 532 | -162 |
| 40\% | 77 | -37 | -170 | -50 | 144 | -555 | -48 | -483 | -856 | 121 | 344 | 721 | 66 |
| 50\% | -48 | -23 | 0 | -299 | 0 | 0 | -59 | -612 | -1,098 | -43 | 420 | 899 | 37 |
| 60\% | 10 | -99 | -195 | 0 | 8 | -284 | -114 | -586 | -1,481 | -58 | 595 | 1,264 | -120 |
| 70\% | 137 | 211 | -149 | -1,362 | -858 | 933 | -152 | -943 | -1,216 | 0 | 849 | 136 | 72 |
| 80\% | 340 | 458 | 152 | -2,094 | -857 | 0 | -867 | -855 | -1,146 | 0 | 1,002 | 885 | -140 |
| 90\% | 417 | 1,005 | 741 | 0 | 0 | 0 | -33 | -272 | -747 | -155 | 1,451 | 259 | 12 |
| Max | 824 | -2,245 | 0 | 0 | -30 | -3 | 0 | -609 | 0 | 4,003 | 0 | -13 | -139 |
| Avg | 206 | 101 | -37 | -190 | -21 | -55 | -146 | -456 | -869 | 100 | 758 | 489 | -7 |


| C. H1_LLT Changes in Keswick Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | -59 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1,232 | 0 | 0 | 0 | -2 |
| 10\% | -82 | 0 | 0 | 0 | 0 | 0 | 27 | -11 | -26 | -101 | 273 | 394 | 18 |
| 20\% | 36 | 0 | 86 | 0 | 0 | 0 | 0 | 27 | -93 | 278 | 305 | 367 | 187 |
| 30\% | -240 | 0 | 27 | 200 | 0 | 4 | 0 | 45 | 70 | 323 | 27 | 615 | -44 |
| 40\% | -325 | -242 | 0 | 182 | 436 | -65 | 116 | -23 | -3 | 336 | -115 | 312 | 214 |
| 50\% | -271 | -432 | 146 | 18 | 0 | 0 | -54 | -20 | 123 | 262 | 7 | -1,032 | 178 |
| 60\% | 115 | -609 | 672 | 1,504 | 1,826 | 474 | 124 | 83 | -106 | 0 | -11 | -2,708 | 62 |
| 70\% | -49 | -595 | 1,120 | 1,447 | 3,362 | 1,795 | -143 | 75 | 101 | 0 | 210 | -4,705 | -140 |
| 80\% | 250 | -1,191 | 3,588 | 1,742 | 541 | 130 | 25 | 409 | 345 | 0 | -182 | -5,905 | -272 |
| 90\% | 429 | -1,992 | 662 | 3,265 | 0 | 17 | -26 | 173 | 23 | 395 | 50 | -7,330 | -69 |
| Max | 1,831 | 4,720 | 1,809 | 0 | 123 | 0 | 0 | 0 | 0 | 76 | 0 | -3,867 | -123 |
| Avg | -27 | -510 | 666 | 814 | 464 | 208 | 43 | 45 | 51 | 105 | 100 | -2,252 | -15 |
| D. H2_LLT Changes in Keswick Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | -56 | 2 | 191 | 0 | 0 | 0 | 0 | 0 | -54 | 2,678 | 243 | 0 | 469 |
| 10\% | -11 | -6 | 0 | 0 | 0 | 0 | 2 | 94 | -408 | 333 | 224 | 367 | 8 |
| 20\% | 304 | -98 | -22 | 0 | 0 | 0 | 0 | -2 | -663 | 201 | 507 | 1,006 | 26 |
| 30\% | 5 | 0 | -142 | 396 | 0 | -172 | 0 | -191 | -795 | -346 | 665 | 942 | -66 |
| 40\% | 5 | -242 | -59 | 310 | 243 | -305 | 24 | -427 | -557 | -49 | 414 | 508 | 181 |
| 50\% | -113 | -269 | 0 | 104 | 0 | 0 | -110 | -620 | -926 | 338 | 409 | -759 | 151 |
| 60\% | -32 | -544 | 25 | 1,825 | 1,638 | -274 | 89 | -462 | $-1,267$ | 0 | 787 | -2,322 | -67 |
| 70\% | 64 | -563 | 86 | 1,678 | 2,936 | 1,988 | -240 | -892 | -1,376 | 0 | 1,001 | -4,499 | -167 |
| 80\% | 211 | -993 | 2,400 | 1,048 | -693 | 0 | -534 | -759 | -1,257 | 0 | 1,369 | -5,737 | -296 |
| 90\% | 927 | -1,515 | 2,013 | 1,482 | 0 | 17 | -36 | -71 | $-1,147$ | -155 | 1,225 | -6,503 | -149 |
| Max | 1,671 | 2,679 | 2,857 | 0 | 127 | -3 | 0 | -245 | 0 | 532 | 0 | -3,231 | -79 |
| Avg | 192 | -447 | 585 | 771 | 407 | 138 | -54 | -352 | -777 | 103 | 736 | -1,846 | -29 |

Table 4. CALSIM-Simulated Monthly Distributions of Feather River below Thermalito Flow (cfs) for H3 and Changes for the H4, H2 and H1 Cases for the LLT Timeframe for WY 1922-2003

| A. H3_LLT Feather River Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | 900 | 900 | 900 | 801 | 800 | 800 | 750 | 700 | 802 | 1,000 | 750 | 773 | 909 |
| 10\% | 1,200 | 930 | 1,200 | 900 | 900 | 824 | 1,000 | 1,000 | 2,216 | 2,121 | 1,372 | 1,000 | 1,496 |
| 20\% | 1,468 | 1,200 | 1,389 | 900 | 1,200 | 1,700 | 1,000 | 1,000 | 2,883 | 3,338 | 2,647 | 1,000 | 1,677 |
| 30\% | 1,906 | 1,700 | 1,700 | 1,582 | 1,700 | 1,700 | 1,000 | 1,411 | 3,147 | 5,042 | 3,218 | 1,344 | 1,959 |
| 40\% | 3,052 | 1,700 | 1,700 | 1,700 | 1,700 | 2,072 | 1,023 | 2,086 | 3,498 | 5,893 | 3,678 | 1,740 | 2,242 |
| 50\% | 4,000 | 1,703 | 1,700 | 1,700 | 2,132 | 3,020 | 1,671 | 2,643 | 4,665 | 6,724 | 4,253 | 2,955 | 2,808 |
| 60\% | 4,000 | 2,500 | 1,772 | 1,700 | 4,229 | 4,598 | 2,528 | 3,183 | 6,087 | 8,773 | 4,554 | 4,434 | 3,466 |
| 70\% | 4,000 | 2,500 | 2,423 | 2,152 | 8,648 | 8,322 | 3,248 | 3,695 | 7,216 | 9,832 | 4,795 | 5,943 | 4,147 |
| 80\% | 4,000 | 2,500 | 3,165 | 4,703 | 14,768 | 11,238 | 4,142 | 5,089 | 8,415 | 10,000 | 6,304 | 6,872 | 4,815 |
| 90\% | 4,000 | 2,500 | 4,883 | 14,463 | 21,959 | 16,426 | 8,573 | 6,829 | 9,502 | 10,000 | 8,908 | 7,494 | 5,712 |
| Max | 4,000 | 9,895 | 33,811 | 48,316 | 33,202 | 42,044 | 20,642 | 15,251 | 10,952 | 10,000 | 10,000 | 9,756 | 7,418 |
| Avg | 3,006 | 2,022 | 3,048 | 4,751 | 7,126 | 6,900 | 3,330 | 3,475 | 5,368 | 6,714 | 4,547 | 3,811 | 3,258 |
| B. H4_LLT Changes in Feather River Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | 0 | 0 | 0 | 2 | 100 | 0 | 0 | 50 | 198 | 0 | -89 | -23 | 197 |
| 10\% | 59 | 270 | -256 | 0 | 0 | 108 | 0 | 0 | -428 | -366 | -307 | -135 | -116 |
| 20\% | 232 | 41 | -182 | 60 | 0 | 0 | 0 | 214 | -649 | -427 | -806 | 65 | -5 |
| 30\% | -168 | 0 | 0 | -264 | 0 | 0 | 354 | 401 | -546 | -1,188 | -811 | 421 | -37 |
| 40\% | -601 | 0 | 0 | 0 | 0 | -372 | 862 | 387 | -619 | -707 | -427 | 385 | -119 |
| 50\% | -1,050 | -3 | 0 | 0 | 133 | 303 | 780 | 558 | -1,439 | $-1,154$ | -699 | -194 | -72 |
| 60\% | -312 | -588 | -72 | 0 | 75 | 678 | 795 | 945 | -2,397 | -2,681 | -514 | -446 | 52 |
| 70\% | 0 | 0 | -85 | -22 | 649 | -91 | 4,824 | 2,017 | -2,646 | -2,560 | -381 | -755 | -123 |
| 80\% | 0 | 0 | 380 | -124 | -1,387 | 759 | 8,716 | 1,836 | -1,857 | -2,167 | -1,538 | -369 | -40 |
| 90\% | 0 | 0 | -335 | 218 | -932 | -435 | 8,427 | 3,000 | -1,445 | -696 | -3,192 | -17 | 682 |
| Max | 0 | 3,303 | 0 | 0 | 0 | 6 | 0 | 1,749 | 5,079 | 0 | -3,479 | -267 | 470 |
| Avg | -191 | -7 | -65 | 355 | -154 | 154 | 2,516 | 1,102 | -1,238 | -1,219 | -1,095 | -191 | -3 |


| C. H1_LLT Changes in Feather River Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | -2 | 0 | 0 | 0 | 95 |
| 10\% | 170 | 270 | -34 | 0 | 0 | 176 | 0 | 0 | -152 | -41 | 148 | 0 | -41 |
| 20\% | 232 | 227 | -167 | 0 | 0 | 0 | 0 | 0 | -237 | 447 | 194 | 0 | 45 |
| 30\% | 190 | 0 | 0 | -380 | 0 | 0 | 0 | 2 | 22 | 92 | 210 | -344 | 12 |
| 40\% | 366 | 0 | 0 | 0 | 0 | 29 | 37 | -115 | -22 | -267 | 152 | -740 | 122 |
| 50\% | 0 | -3 | 0 | 0 | 272 | 596 | 324 | -52 | 155 | -166 | -94 | -1,799 | 189 |
| 60\% | 0 | 0 | 289 | 0 | 1,002 | 906 | 125 | -326 | -340 | -204 | -11 | -3,045 | 87 |
| 70\% | 0 | 0 | 519 | 1,242 | -1,055 | 0 | 9 | 24 | -478 | 96 | 422 | -4,342 | -165 |
| 80\% | 0 | 0 | 1,282 | 2,146 | 155 | 1,231 | 31 | 100 | -641 | 0 | 542 | -4,833 | -118 |
| 90\% | 0 | 0 | 1,027 | 3,283 | 0 | 648 | -122 | 4 | -132 | 0 | -8 | -4,611 | 287 |
| Max | 746 | 5,622 | 0 | 0 | 0 | 0 | 0 | 0 | 462 | 0 | 0 | -1,741 | -90 |
| Avg | 82 | 124 | 405 | 969 | 159 | 351 | 57 | -39 | -133 | 28 | 130 | -2,153 | 2 |
| D. H2_LLT Changes in Feather River Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | 0 | 0 | 0 | 2 | 100 | 0 | 0 | 50 | 198 | 0 | -50 | -42 | 194 |
| 10\% | 91 | 270 | -50 | 0 | 0 | 69 | 0 | 0 | -457 | -444 | 135 | -18 | -23 |
| 20\% | 135 | 157 | -189 | 0 | 0 | 0 | 0 | 239 | -848 | -474 | -383 | 0 | -42 |
| 30\% | -206 | 0 | 0 | -314 | 0 | 0 | 354 | 386 | -533 | -1,094 | -460 | -344 | 117 |
| 40\% | -838 | 0 | 0 | 0 | 0 | 193 | 898 | 385 | -649 | -1,143 | -321 | -740 | -67 |
| 50\% | -1,175 | -3 | 0 | 0 | 624 | 714 | 784 | 612 | -1,362 | -1,186 | -522 | -1,912 | -50 |
| 60\% | -9 | -714 | -72 | 128 | 1,973 | 888 | 647 | 1,178 | -2,164 | -2,403 | -401 | -3,127 | -147 |
| 70\% | 0 | -67 | -146 | 1,521 | 535 | 5 | 4,824 | 1,992 | -1,976 | -2,643 | -279 | -4,374 | -287 |
| 80\% | 0 | 0 | 220 | 4,809 | -1,068 | 877 | 8,716 | 1,889 | -2,224 | -2,212 | -1,484 | -4,888 | -109 |
| 90\% | 0 | 0 | 1,240 | 239 | 1 | 616 | 8,427 | 3,028 | -1,880 | -344 | -3,331 | -5,164 | 429 |
| Max | 746 | 5,622 | 0 | 0 | 0 | 6 | 0 | 1,749 | 4,272 | 0 | -3,235 | -2,543 | 610 |
| Avg | -200 | 42 | 355 | 1,029 | 251 | 400 | 2,502 | 1,173 | -1,212 | -1,217 | -875 | -2,325 | -3 |

Table 5. CALSIM-Simulated Monthly Distributions of American River Flow (cfs) for H3 and Changes for the H4, H1, and H2 Cases for the LLT Timeframe for WY 1922-2003

| A. H3_LLT American River Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | 500 | 500 | 500 | 425 | 63 | 260 | 250 | 294 | 250 | 255 | 259 | 334 | 395 |
| 10\% | 800 | 800 | 800 | 800 | 807 | 800 | 800 | 800 | 941 | 939 | 641 | 735 | 966 |
| 20\% | 870 | 800 | 800 | 1,131 | 1,445 | 827 | 1,209 | 1,289 | 1,588 | 2,305 | 862 | 805 | 1,227 |
| 30\% | 1,240 | 1,133 | 1,162 | 1,637 | 1,560 | 1,436 | 1,577 | 1,551 | 2,485 | 2,680 | 1,482 | 1,410 | 1,332 |
| 40\% | 1,500 | 1,425 | 1,750 | 1,700 | 1,914 | 1,750 | 1,805 | 1,798 | 2,863 | 3,203 | 1,750 | 1,533 | 1,636 |
| 50\% | 1,500 | 1,683 | 1,848 | 1,750 | 3,290 | 2,910 | 2,509 | 2,295 | 3,272 | 3,622 | 1,750 | 1,533 | 1,953 |
| 60\% | 1,500 | 1,817 | 2,000 | 2,557 | 5,186 | 4,246 | 3,017 | 2,561 | 3,847 | 4,471 | 1,753 | 1,533 | 2,455 |
| 70\% | 1,681 | 1,925 | 2,000 | 5,645 | 7,468 | 4,776 | 4,263 | 3,043 | 4,344 | 4,998 | 1,977 | 2,038 | 3,143 |
| 80\% | 2,184 | 1,925 | 2,501 | 8,535 | 11,228 | 6,070 | 4,982 | 3,722 | 4,935 | 5,000 | 2,280 | 2,847 | 3,695 |
| 90\% | 2,597 | 2,831 | 8,558 | 13,543 | 15,920 | 9,229 | 6,950 | 6,542 | 5,000 | 5,000 | 2,509 | 3,450 | 4,137 |
| Max | 5,000 | 15,826 | 23,686 | 38,305 | 39,261 | 20,206 | 16,572 | 10,928 | 7,739 | 5,337 | 3,984 | 4,489 | 6,167 |
| Avg | 1,613 | 1,965 | 3,288 | 5,184 | 6,155 | 4,160 | 3,336 | 2,886 | 3,311 | 3,496 | 1,685 | 1,827 | 2,338 |
| B. H4_LLT Changes for American River Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | 0 | 0 | 0 | -66 | 323 | 57 | 99 | 12 | 0 | -5 | -7 | -29 | -22 |
| 10\% | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | -4 | 247 | 159 | 32 | -39 |
| 20\% | -70 | 39 | 2 | 34 | -78 | 66 | -71 | -389 | -163 | -75 | 123 | 73 | -61 |
| 30\% | 4 | 88 | 67 | -150 | -80 | 2 | -40 | -168 | -735 | -7 | 246 | -22 | 39 |
| 40\% | -3 | 42 | 0 | 0 | 75 | 189 | -45 | -57 | -587 | -115 | 0 | 0 | 4 |
| 50\% | 0 | 0 | -40 | -25 | 133 | -64 | -3 | -408 | -450 | 5 | 0 | 0 | 18 |
| 60\% | 0 | -57 | 0 | 211 | 0 | -374 | 124 | -166 | -587 | -89 | 281 | 458 | -13 |
| 70\% | -181 | -4 | 0 | -401 | -1 | -26 | -2 | -236 | -719 | 2 | 403 | 690 | 35 |
| 80\% | -455 | 0 | 418 | 49 | 0 | 0 | 0 | -56 | -637 | 0 | 359 | 819 | -30 |
| 90\% | -360 | -136 | 0 | 0 | 7 | 454 | 0 | 0 | 0 | 0 | 457 | 670 | 112 |
| Max | -935 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -337 | 1,016 | 511 | 34 |
| Avg | -120 | 11 | 88 | 10 | 19 | -4 | -13 | -154 | -375 | -22 | 240 | 261 | -3 |


| C. H1_LLT Changes for American River Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | 0 | 0 | 0 | -67 | 374 | 57 | 100 | 12 | 107 | -5 | -7 | 0 | -8 |
| 10\% | 0 | 0 | 0 | 0 | -7 | 0 | 0 | 3 | 132 | 16 | 159 | -13 | -59 |
| 20\% | 27 | 66 | 64 | -55 | -3 | 3 | 106 | 36 | 418 | -266 | -10 | -5 | 14 |
| 30\% | -12 | -8 | 8 | 60 | -43 | -90 | 5 | -8 | 158 | -7 | -45 | -56 | 56 |
| 40\% | 0 | 33 | 0 | 0 | 687 | 0 | -4 | -13 | 230 | -156 | 0 | 0 | 53 |
| 50\% | 0 | 3 | 96 | 33 | 382 | -3 | -2 | -134 | 285 | -261 | 0 | 0 | -54 |
| 60\% | 0 | 71 | 0 | 193 | -9 | 22 | 45 | 29 | 70 | -335 | -3 | 0 | -18 |
| 70\% | 69 | 0 | 1 | 0 | -4 | 53 | -46 | -51 | 97 | -153 | -13 | -505 | -88 |
| 80\% | -52 | 0 | 756 | -602 | -278 | -4 | 1 | 0 | -66 | 0 | 36 | -1,314 | -45 |
| 90\% | -136 | -672 | 121 | 0 | 0 | 150 | 0 | 0 | 0 | 0 | -1 | -1,578 | -19 |
| Max | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 315 | -205 | -671 | 76 |
| Avg | 7 | -40 | 172 | 60 | 34 | 14 | 15 | -14 | 155 | -106 | 3 | -390 | -5 |
| D. H2_LLT Changes in American River Flow |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Total |
| Min | 0 | 0 | 0 | -64 | 323 | 57 | 97 | 12 | 107 | -5 | -7 | 0 | -13 |
| 10\% | 0 | 0 | 0 | 0 | 172 | 0 | 0 | 0 | -4 | 330 | 159 | -7 | -38 |
| 20\% | 97 | 174 | 96 | 192 | -116 | 97 | -22 | -164 | -88 | 27 | 32 | -5 | -20 |
| 30\% | 187 | 238 | 354 | 63 | 190 | -45 | -31 | -182 | -735 | 67 | 67 | -46 | 40 |
| 40\% | 0 | 189 | 0 | 0 | 850 | 189 | -45 | -48 | -499 | -23 | 0 | 0 | 18 |
| 50\% | 0 | 24 | 152 | 436 | 403 | -65 | -3 | -407 | -467 | 67 | 0 | 0 | 20 |
| 60\% | 0 | 108 | 0 | 301 | -10 | 0 | 303 | -94 | -736 | -330 | 277 | 0 | 0 |
| 70\% | 125 | 0 | 30 | 0 | -5 | 53 | -2 | -196 | -828 | 2 | 207 | -505 | -88 |
| 80\% | -94 | 0 | 808 | -16 | -235 | -4 | 0 | -56 | -787 | 0 | 335 | -1,314 | -55 |
| 90\% | -287 | -329 | 149 | 0 | 9 | 454 | -58 | 0 | 0 | 0 | 363 | -1,109 | 43 |
| Max | -213 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 592 | -584 | -525 | 144 |
| Avg | 7 | 83 | 280 | 127 | 84 | 33 | -5 | -153 | -421 | 25 | 148 | -340 | -7 |



Figure 4a. CALSIM-Simulated Shasta Reservoir Storage (taf) for H1 through H4 for WY 1994-2003


Figure 4b. Shasta Reservoir End-of-May Storage for H1 through H4 for WY 1922-2003


Figure 4c. Shasta Reservoir End-of-September Storage for H1 through H4 for WY 1922-2003


Figure 5a. CALSIM-Simulated Oroville Reservoir Storage (taf) for H1 through H4 for WY 1994-2003


Figure 5b. Oroville Reservoir End-of-May Storage for H1 through H4 for WY 1922-2003

Figure 5c. Oroville Reservoir End-of-September Storage for H1 through H4 for WY 1922-2003


Figure 6a. CALSIM-Simulated Folsom Reservoir Storage (taf) for H1 through H4 for WY 1994-2003

## 11C. 5 Alternative 5

## 11C.5.1 Upstream

11C.5.1.1 Sacramento River at Keswick
Table 1. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 5: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 16,526 | 18,233 | 18,577 |
|  | AN | 8,318 | 8,205 | 7,566 |
|  | BN | 4,502 | 4,184 | 4,626 |
|  | D | 3,996 | 4,096 | 3,729 |
|  | C | 3,490 | 4,238 | 4,041 |
|  | All | 8,614 | 9,215 | 9,197 |
| FEB | W | 18,577 | 20,853 | 20,878 |
|  | AN | 14,409 | 15,297 | 15,302 |
|  | BN | 5,981 | 5,544 | 5,432 |
|  | D | 3,684 | 3,410 | 3,490 |
|  | C | 3,599 | 3,372 | 3,370 |
|  | All | 10,355 | 11,039 | 11,046 |
| MAR | W | 16,200 | 17,065 | 17,126 |
|  | AN | 9,131 | 8,818 | 8,774 |
|  | BN | 5,200 | 4,318 | 4,249 |
|  | D | 3,903 | 3,814 | 3,615 |
|  | C | 3,487 | 3,583 | 3,800 |
|  | All | 8,728 | 8,800 | 8,789 |
| APR | W | 9,418 | 9,131 | 9,035 |
|  | AN | 6,182 | 5,536 | 5,811 |
|  | BN | 5,426 | 5,009 | 5,317 |
|  | D | 5,803 | 5,533 | 5,630 |
|  | C | 6,472 | 6,550 | 6,729 |
|  | All | 7,038 | 6,733 | 6,844 |
| MAY | W | 9,508 | 7,149 | 7,341 |
|  | AN | 7,709 | 7,783 | 8,670 |
|  | BN | 7,193 | 6,272 | 6,673 |
|  | D | 7,349 | 7,681 | 8,495 |
|  | C | 6,715 | 7,316 | 7,304 |
|  | All | 7,967 | 7,233 | 7,669 |
| JUN | W | 10,375 | 10,274 | 10,942 |
|  | AN | 11,147 | 12,032 | 12,484 |
|  | BN | 10,758 | 10,947 | 11,719 |
|  | D | 11,224 | 11,898 | 12,468 |
|  | C | 10,392 | 11,350 | 10,829 |
|  | All | 10,742 | 11,160 | 11,619 |


| Alternative 5: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JUL | W | 12,779 | 14,098 | 14,103 |
|  | AN | 14,056 | 15,098 | 15,168 |
|  | BN | 12,965 | 13,177 | 13,414 |
|  | D | 13,302 | 13,727 | 13,544 |
|  | C | 12,849 | 11,935 | 11,497 |
|  | All | 13,123 | 13,689 | 13,637 |
| AUG | W | 11,029 | 10,491 | 10,962 |
|  | AN | 10,449 | 11,641 | 11,315 |
|  | BN | 10,139 | 10,261 | 10,015 |
|  | D | 10,627 | 10,986 | 9,383 |
|  | C | 9,473 | 7,348 | 7,039 |
|  | All | 10,476 | 10,269 | 9,931 |
| SEP | W | 9,385 | 12,833 | 13,616 |
|  | AN | 5,862 | 9,898 | 9,905 |
|  | BN | 5,492 | 5,601 | 4,758 |
|  | D | 5,985 | 4,469 | 4,396 |
|  | C | 5,563 | 4,368 | 5,354 |
|  | All | 6,899 | 8,094 | 8,328 |
| OCT | W | 6,886 | 7,034 | 7,003 |
|  | AN | 7,145 | 7,152 | 7,739 |
|  | BN | 6,396 | 7,072 | 7,958 |
|  | D | 6,128 | 6,494 | 6,458 |
|  | C | 5,902 | 5,752 | 5,833 |
|  | All | 6,530 | 6,752 | 6,983 |
| NOV | W | 6,672 | 7,539 | 6,646 |
|  | AN | 6,224 | 7,134 | 5,629 |
|  | BN | 5,088 | 5,936 | 4,741 |
|  | D | 5,669 | 5,406 | 4,887 |
|  | C | 4,822 | 4,710 | 4,349 |
|  | All | 5,845 | 6,324 | 5,450 |
| DEC | W | 12,766 | 11,022 | 10,547 |
|  | AN | 5,531 | 5,377 | 5,297 |
|  | BN | 5,413 | 5,195 | 4,835 |
|  | D | 4,215 | 3,936 | 4,300 |
|  | C | 3,828 | 3,582 | 3,642 |
|  | All | 7,267 | 6,557 | 6,421 |

Table 2. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 5: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 2,051 (12.4\%) | 344 (1.9\%) |
|  | AN | -751 (-9\%) | -638 (-7.8\%) |
|  | BN | 124 (2.8\%) | 442 (10.6\%) |
|  | D | -266 (-6.7\%) | -367 (-9\%) |
|  | C | 551 (15.8\%) | -197 (-4.6\%) |
|  | All | 584 (6.8\%) | -18 (-0.2\%) |
| FEB | W | 2,300 (12.4\%) | 24 (0.1\%) |
|  | AN | 893 (6.2\%) | 5 (0\%) |
|  | BN | -549 (-9.2\%) | -112 (-2\%) |
|  | D | -194 (-5.3\%) | 80 (2.3\%) |
|  | C | -229 (-6.3\%) | -2 (-0.1\%) |
|  | All | 690 (6.7\%) | 7 (0.1\%) |
| MAR | W | 926 (5.7\%) | 61 (0.4\%) |
|  | AN | -357 (-3.9\%) | -44 (-0.5\%) |
|  | BN | -951 (-18.3\%) | -69 (-1.6\%) |
|  | D | -289 (-7.4\%) | -199 (-5.2\%) |
|  | C | 312 (9\%) | 216 (6\%) |
|  | All | 61 (0.7\%) | -11 (-0.1\%) |
| APR | W | -382 (-4.1\%) | -95 (-1\%) |
|  | AN | -371 (-6\%) | 275 (5\%) |
|  | BN | -109 (-2\%) | 308 (6.2\%) |
|  | D | -173 (-3\%) | 97 (1.7\%) |
|  | C | 257 (4\%) | 179 (2.7\%) |
|  | All | -195 (-2.8\%) | 110 (1.6\%) |
| MAY | W | -2,167 (-22.8\%) | 192 (2.7\%) |
|  | AN | 961 (12.5\%) | 887 (11.4\%) |
|  | BN | -520 (-7.2\%) | 402 (6.4\%) |
|  | D | 1,147 (15.6\%) | 814 (10.6\%) |
|  | C | 589 (8.8\%) | -12 (-0.2\%) |
|  | All | -297 (-3.7\%) | 436 (6\%) |
| JUN | W | 567 (5.5\%) | 668 (6.5\%) |
|  | AN | 1,337 (12\%) | 452 (3.8\%) |
|  | BN | 960 (8.9\%) | 771 (7\%) |
|  | D | 1,244 (11.1\%) | 570 (4.8\%) |
|  | C | 437 (4.2\%) | -521 (-4.6\%) |
|  | All | 876 (8.2\%) | 458 (4.1\%) |
| JUL | W | 1,324 (10.4\%) | 5 (0\%) |
|  | AN | 1,112 (7.9\%) | 70 (0.5\%) |
|  | BN | 449 (3.5\%) | 237 (1.8\%) |
|  | D | 242 (1.8\%) | -183 (-1.3\%) |
|  | C | -1,352 (-10.5\%) | -437 (-3.7\%) |
|  | All | 514 (3.9\%) | -52 (-0.4\%) |


| Alternative 5: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | -67 (-0.6\%) | 471 (4.5\%) |
|  | AN | 866 (8.3\%) | -326 (-2.8\%) |
|  | BN | -125 (-1.2\%) | -246 (-2.4\%) |
|  | D | -1,245 (-11.7\%) | -1,603 (-14.6\%) |
|  | C | -2,434 (-25.7\%) | -309 (-4.2\%) |
|  | All | -545 (-5.2\%) | -337 (-3.3\%) |
| SEP | W | 4,231 (45.1\%) | 783 (6.1\%) |
|  | AN | 4,042 (69\%) | 7 (0.1\%) |
|  | BN | -734 (-13.4\%) | -843 (-15\%) |
|  | D | -1,589 (-26.6\%) | -73 (-1.6\%) |
|  | C | -209 (-3.8\%) | 986 (22.6\%) |
|  | All | 1,428 (20.7\%) | 234 (2.9\%) |
| OCT | W | 118 (1.7\%) | -31 (-0.4\%) |
|  | AN | 594 (8.3\%) | 587 (8.2\%) |
|  | BN | 1,562 (24.4\%) | 886 (12.5\%) |
|  | D | 330 (5.4\%) | -37 (-0.6\%) |
|  | C | -70 (-1.2\%) | 81 (1.4\%) |
|  | All | 453 (6.9\%) | 231 (3.4\%) |
| NOV | W | -27 (-0.4\%) | -894 (-11.9\%) |
|  | AN | -594 (-9.6\%) | -1,504 (-21.1\%) |
|  | BN | -347 (-6.8\%) | -1,195 (-20.1\%) |
|  | D | -782 (-13.8\%) | -519 (-9.6\%) |
|  | C | -473 (-9.8\%) | -361 (-7.7\%) |
|  | All | -396 (-6.8\%) | -874 (-13.8\%) |
| DEC | W | -2,219 (-17.4\%) | -476 (-4.3\%) |
|  | AN | -234 (-4.2\%) | -81 (-1.5\%) |
|  | BN | -578 (-10.7\%) | -360 (-6.9\%) |
|  | D | 86 (2\%) | 364 (9.3\%) |
|  | C | -187 (-4.9\%) | 60 (1.7\%) |
|  | All | -845 (-11.6\%) | -135 (-2.1\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.5.1.2 Sacramento River Upstream of Red Bluff

Table 3. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 5: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 28,036 | 30,390 | 30,734 |
|  | AN | 16,725 | 16,885 | 16,244 |
|  | BN | 9,381 | 9,146 | 9,589 |
|  | D | 7,098 | 7,262 | 6,891 |
|  | C | 6,143 | 6,942 | 6,756 |
|  | All | 15,396 | 16,278 | 16,261 |
| FEB | W | 30,255 | 33,472 | 33,491 |
|  | AN | 23,492 | 24,828 | 24,835 |
|  | BN | 12,005 | 11,614 | 11,497 |
|  | D | 8,947 | 8,790 | 8,873 |
|  | C | 6,599 | 6,378 | 6,378 |
|  | All | 18,010 | 19,092 | 19,098 |
| MAR | W | 25,004 | 26,210 | 26,270 |
|  | AN | 16,599 | 16,428 | 16,382 |
|  | BN | 9,333 | 8,474 | 8,393 |
|  | D | 8,385 | 8,300 | 8,100 |
|  | C | 5,999 | 6,101 | 6,320 |
|  | All | 14,669 | 14,876 | 14,863 |
| APR | W | 15,172 | 14,842 | 14,746 |
|  | AN | 10,477 | 9,761 | 10,035 |
|  | BN | 8,711 | 8,282 | 8,592 |
|  | D | 7,948 | 7,661 | 7,758 |
|  | C | 7,742 | 7,829 | 8,008 |
|  | All | 10,709 | 10,376 | 10,486 |
| MAY | W | 12,541 | 10,073 | 10,264 |
|  | AN | 10,012 | 10,047 | 10,930 |
|  | BN | 8,781 | 7,875 | 8,274 |
|  | D | 8,677 | 9,012 | 9,823 |
|  | C | 7,746 | 8,348 | 8,336 |
|  | All | 9,979 | 9,208 | 9,643 |
| JUN | W | 11,905 | 11,720 | 12,385 |
|  | AN | 12,001 | 12,789 | 13,234 |
|  | BN | 11,464 | 11,651 | 12,420 |
|  | D | 11,777 | 12,441 | 13,003 |
|  | C | 10,885 | 11,881 | 11,361 |
|  | All | 11,666 | 12,046 | 12,501 |
| JUL | W | 13,255 | 14,525 | 14,527 |
|  | AN | 14,129 | 15,142 | 15,210 |
|  | BN | 13,011 | 13,258 | 13,494 |
|  | D | 13,368 | 13,826 | 13,639 |
|  | C | 13,005 | 12,149 | 11,748 |
|  | All | 13,329 | 13,898 | 13,849 |


| Alternative 5: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 11,284 | 10,735 | 11,208 |
|  | AN | 10,580 | 11,775 | 11,450 |
|  | BN | 10,202 | 10,364 | 10,120 |
|  | D | 10,747 | 11,143 | 9,540 |
|  | C | 9,590 | 7,665 | 7,372 |
|  | All | 10,630 | 10,464 | 10,130 |
| SEP | W | 9,856 | 13,312 | 14,093 |
|  | AN | 6,279 | 10,320 | 10,329 |
|  | BN | 5,821 | 5,963 | 5,125 |
|  | D | 6,391 | 4,911 | 4,849 |
|  | C | 5,887 | 4,838 | 5,797 |
|  | All | 7,302 | 8,535 | 8,768 |
| OCT | W | 8,020 | 8,188 | 8,158 |
|  | AN | 8,112 | 8,162 | 8,749 |
|  | BN | 7,094 | 7,778 | 8,659 |
|  | D | 6,903 | 7,287 | 7,234 |
|  | C | 6,670 | 6,537 | 6,630 |
|  | All | 7,432 | 7,675 | 7,904 |
| NOV | W | 9,876 | 10,821 | 9,929 |
|  | AN | 8,144 | 9,098 | 7,590 |
|  | BN | 6,791 | 7,682 | 6,482 |
|  | D | 7,548 | 7,347 | 6,830 |
|  | C | 5,811 | 5,703 | 5,356 |
|  | All | 7,990 | 8,521 | 7,649 |
| DEC | W | 21,015 | 19,613 | 19,143 |
|  | AN | 10,019 | 10,053 | 9,984 |
|  | BN | 8,408 | 8,228 | 7,880 |
|  | D | 7,292 | 7,091 | 7,461 |
|  | C | 5,628 | 5,433 | 5,498 |
|  | All | 11,989 | 11,446 | 11,319 |

Table 4. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 5: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 2,697 (9.6\%) | 344 (1.1\%) |
|  | AN | -480 (-2.9\%) | -641 (-3.8\%) |
|  | BN | 208 (2.2\%) | 443 (4.8\%) |
|  | D | -206 (-2.9\%) | -370 (-5.1\%) |
|  | C | 612 (10\%) | -186 (-2.7\%) |
|  | All | 865 (5.6\%) | -18 (-0.1\%) |
| FEB | W | 3,236 (10.7\%) | 20 (0.1\%) |
|  | AN | 1,343 (5.7\%) | 7 (0\%) |
|  | BN | -508 (-4.2\%) | -117 (-1\%) |
|  | D | -74 (-0.8\%) | 83 (0.9\%) |
|  | C | -221 (-3.3\%) | 0 (0\%) |
|  | All | 1,087 (6\%) | 5 (0\%) |
| MAR | W | 1,266 (5.1\%) | 60 (0.2\%) |
|  | AN | -216 (-1.3\%) | -46 (-0.3\%) |
|  | BN | -940 (-10.1\%) | -81 (-1\%) |
|  | D | -285 (-3.4\%) | -200 (-2.4\%) |
|  | C | 321 (5.3\%) | 218 (3.6\%) |
|  | All | 194 (1.3\%) | -14 (-0.1\%) |
| APR | W | -426 (-2.8\%) | -96 (-0.6\%) |
|  | AN | -442 (-4.2\%) | 274 (2.8\%) |
|  | BN | -119 (-1.4\%) | 309 (3.7\%) |
|  | D | -190 (-2.4\%) | 97 (1.3\%) |
|  | C | 266 (3.4\%) | 179 (2.3\%) |
|  | All | -223 (-2.1\%) | 110 (1.1\%) |
| MAY | W | -2,276 (-18.2\%) | 192 (1.9\%) |
|  | AN | 917 (9.2\%) | 883 (8.8\%) |
|  | BN | -507 (-5.8\%) | 400 (5.1\%) |
|  | D | 1,146 (13.2\%) | 811 (9\%) |
|  | C | 590 (7.6\%) | -12 (-0.1\%) |
|  | All | -336 (-3.4\%) | 435 (4.7\%) |
| JUN | W | 480 (4\%) | 665 (5.7\%) |
|  | AN | 1,233 (10.3\%) | 445 (3.5\%) |
|  | BN | 956 (8.3\%) | 769 (6.6\%) |
|  | D | 1,226 (10.4\%) | 562 (4.5\%) |
|  | C | 477 (4.4\%) | -520 (-4.4\%) |
|  | All | 835 (7.2\%) | 455 (3.8\%) |
| JUL | W | 1,272 (9.6\%) | 2 (0\%) |
|  | AN | 1,081 (7.6\%) | 68 (0.5\%) |
|  | BN | 483 (3.7\%) | 236 (1.8\%) |
|  | D | 271 (2\%) | -187 (-1.4\%) |
|  | C | -1,257 (-9.7\%) | -402 (-3.3\%) |
|  | All | 519 (3.9\%) | -49 (-0.4\%) |


| Alternative 5: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | -76 (-0.7\%) | 472 (4.4\%) |
|  | AN | 870 (8.2\%) | -325 (-2.8\%) |
|  | BN | -82 (-0.8\%) | -244 (-2.4\%) |
|  | D | -1,207 (-11.2\%) | -1,603 (-14.4\%) |
|  | C | -2,218 (-23.1\%) | -293 (-3.8\%) |
|  | All | -500 (-4.7\%) | -334 (-3.2\%) |
| SEP | W | 4,237 (43\%) | 781 (5.9\%) |
|  | AN | 4,050 (64.5\%) | 9 (0.1\%) |
|  | BN | -695 (-11.9\%) | -838 (-14\%) |
|  | D | -1,542 (-24.1\%) | -62 (-1.3\%) |
|  | C | -89 (-1.5\%) | 959 (19.8\%) |
|  | All | 1,466 (20.1\%) | 233 (2.7\%) |
| OCT | W | 139 (1.7\%) | -29 (-0.4\%) |
|  | AN | 637 (7.9\%) | 587 (7.2\%) |
|  | BN | 1,564 (22.1\%) | 881 (11.3\%) |
|  | D | 332 (4.8\%) | -52 (-0.7\%) |
|  | C | -40 (-0.6\%) | 93 (1.4\%) |
|  | All | 471 (6.3\%) | 229 (3\%) |
| NOV | W | 52 (0.5\%) | -892 (-8.2\%) |
|  | AN | -554 (-6.8\%) | -1,508 (-16.6\%) |
|  | BN | -309 (-4.6\%) | -1,201 (-15.6\%) |
|  | D | -718 (-9.5\%) | -516 (-7\%) |
|  | C | -456 (-7.8\%) | -347 (-6.1\%) |
|  | All | -341 (-4.3\%) | -873 (-10.2\%) |
| DEC | W | -1,872 (-8.9\%) | -470 (-2.4\%) |
|  | AN | -35 (-0.3\%) | -69 (-0.7\%) |
|  | BN | -528 (-6.3\%) | -348 (-4.2\%) |
|  | D | 169 (2.3\%) | 370 (5.2\%) |
|  | C | -130 (-2.3\%) | 65 (1.2\%) |
|  | All | -671 (-5.6\%) | -128 (-1.1\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.5.1.3 Sacramento River at Wilkins Slough

Table 5. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 5: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 19,145 | 19,320 | 19,365 |
|  | AN | 17,084 | 16,593 | 16,482 |
|  | BN | 12,521 | 12,143 | 12,598 |
|  | D | 8,896 | 9,189 | 8,781 |
|  | C | 7,858 | 8,586 | 8,428 |
|  | All | 13,811 | 13,901 | 13,864 |
| FEB | W | 19,887 | 20,044 | 20,036 |
|  | AN | 19,139 | 19,095 | 19,095 |
|  | BN | 14,528 | 14,328 | 14,261 |
|  | D | 11,520 | 11,473 | 11,572 |
|  | C | 8,499 | 8,158 | 8,163 |
|  | All | 15,359 | 15,309 | 15,317 |
| MAR | W | 18,223 | 18,323 | 18,325 |
|  | AN | 17,696 | 17,537 | 17,666 |
|  | BN | 12,208 | 11,534 | 11,480 |
|  | D | 11,364 | 11,191 | 11,190 |
|  | C | 8,101 | 8,166 | 8,382 |
|  | All | 14,132 | 13,997 | 14,038 |
| APR | W | 13,392 | 13,119 | 13,050 |
|  | AN | 10,264 | 9,783 | 10,054 |
|  | BN | 7,152 | 6,858 | 7,172 |
|  | D | 5,319 | 5,112 | 5,213 |
|  | C | 4,164 | 4,331 | 4,501 |
|  | All | 8,746 | 8,518 | 8,636 |
| MAY | W | 10,467 | 8,435 | 8,643 |
|  | AN | 7,318 | 7,500 | 8,363 |
|  | BN | 5,638 | 4,871 | 5,253 |
|  | D | 4,669 | 5,088 | 5,870 |
|  | C | 3,998 | 4,528 | 4,517 |
|  | All | 6,962 | 6,383 | 6,811 |
| JUN | W | 6,503 | 6,435 | 7,080 |
|  | AN | 5,781 | 6,530 | 6,932 |
|  | BN | 5,243 | 5,628 | 6,388 |
|  | D | 5,245 | 6,075 | 6,579 |
|  | C | 5,140 | 6,253 | 5,601 |
|  | All | 5,707 | 6,205 | 6,614 |
| JUL | W | 6,685 | 7,771 | 7,735 |
|  | AN | 6,971 | 7,892 | 7,940 |
|  | BN | 6,122 | 6,560 | 6,767 |
|  | D | 6,788 | 7,474 | 7,209 |
|  | C | 7,162 | 6,649 | 6,289 |
|  | All | 6,723 | 7,353 | 7,273 |


| Alternative 5: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 6,287 | 5,537 | 6,016 |
|  | AN | 5,498 | 6,610 | 6,308 |
|  | BN | 5,138 | 5,462 | 5,189 |
|  | D | 5,833 | 6,356 | 4,715 |
|  | C | 5,551 | 4,719 | 4,500 |
|  | All | 5,768 | 5,741 | 5,410 |
| SEP | W | 9,338 | 12,737 | 13,495 |
|  | AN | 5,631 | 9,546 | 9,583 |
|  | BN | 5,128 | 5,216 | 4,389 |
|  | D | 5,636 | 4,114 | 4,137 |
|  | C | 5,200 | 4,354 | 5,293 |
|  | All | 6,658 | 7,866 | 8,113 |
| OCT | W | 7,347 | 7,382 | 7,366 |
|  | AN | 6,799 | 6,927 | 7,505 |
|  | BN | 5,987 | 6,570 | 7,436 |
|  | D | 5,688 | 6,040 | 5,936 |
|  | C | 5,642 | 5,572 | 5,711 |
|  | All | 6,421 | 6,617 | 6,842 |
| NOV | W | 9,644 | 10,889 | 9,966 |
|  | AN | 8,210 | 9,141 | 7,614 |
|  | BN | 6,793 | 7,588 | 6,352 |
|  | D | 7,407 | 7,227 | 6,730 |
|  | C | 5,118 | 4,986 | 4,672 |
|  | All | 7,794 | 8,402 | 7,520 |
| DEC | W | 17,881 | 17,257 | 17,202 |
|  | AN | 10,809 | 10,755 | 11,018 |
|  | BN | 8,505 | 8,258 | 8,304 |
|  | D | 8,950 | 8,725 | 9,080 |
|  | C | 6,229 | 5,981 | 6,052 |
|  | All | 11,580 | 11,246 | 11,363 |

Table 6. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 5: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 221 (1.2\%) | 45 (0.2\%) |
|  | AN | -602 (-3.5\%) | -111 (-0.7\%) |
|  | BN | 77 (0.6\%) | 455 (3.7\%) |
|  | D | -115 (-1.3\%) | -408 (-4.4\%) |
|  | C | 570 (7.3\%) | -158 (-1.8\%) |
|  | All | 53 (0.4\%) | -37 (-0.3\%) |
| FEB | W | 149 (0.7\%) | -8 (0\%) |
|  | AN | -44 (-0.2\%) | 0 (0\%) |
|  | BN | -267 (-1.8\%) | -67 (-0.5\%) |
|  | D | 53 (0.5\%) | 99 (0.9\%) |
|  | C | -335 (-3.9\%) | 5 (0.1\%) |
|  | All | -42 (-0.3\%) | 8 (0.1\%) |
| MAR | W | 102 (0.6\%) | 2 (0\%) |
|  | AN | -29 (-0.2\%) | 130 (0.7\%) |
|  | BN | -728 (-6\%) | -54 (-0.5\%) |
|  | D | -174 (-1.5\%) | -1 (0\%) |
|  | C | 281 (3.5\%) | 216 (2.6\%) |
|  | All | -93 (-0.7\%) | 42 (0.3\%) |
| APR | W | -342 (-2.6\%) | -70 (-0.5\%) |
|  | AN | -210 (-2\%) | 271 (2.8\%) |
|  | BN | 19 (0.3\%) | 314 (4.6\%) |
|  | D | -107 (-2\%) | 100 (2\%) |
|  | C | 337 (8.1\%) | 170 (3.9\%) |
|  | All | -110 (-1.3\%) | 118 (1.4\%) |
| MAY | W | -1,824 (-17.4\%) | 207 (2.5\%) |
|  | AN | 1,045 (14.3\%) | 864 (11.5\%) |
|  | BN | -384 (-6.8\%) | 382 (7.8\%) |
|  | D | 1,201 (25.7\%) | 782 (15.4\%) |
|  | C | 519 (13\%) | -11 (-0.3\%) |
|  | All | -152 (-2.2\%) | 427 (6.7\%) |
| JUN | W | 577 (8.9\%) | 645 (10\%) |
|  | AN | 1,152 (19.9\%) | 403 (6.2\%) |
|  | BN | 1,145 (21.8\%) | 760 (13.5\%) |
|  | D | 1,334 (25.4\%) | 505 (8.3\%) |
|  | C | 461 (9\%) | -651 (-10.4\%) |
|  | All | 907 (15.9\%) | 409 (6.6\%) |
| JUL | W | 1,050 (15.7\%) | -36 (-0.5\%) |
|  | AN | 969 (13.9\%) | 48 (0.6\%) |
|  | BN | 645 (10.5\%) | 207 (3.2\%) |
|  | D | 421 (6.2\%) | -265 (-3.6\%) |
|  | C | -873 (-12.2\%) | -361 (-5.4\%) |
|  | All | 550 (8.2\%) | -80 (-1.1\%) |


| Alternative 5: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | -271 (-4.3\%) | 479 (8.7\%) |
|  | AN | 809 (14.7\%) | -303 (-4.6\%) |
|  | BN | 51 (1\%) | -274 (-5\%) |
|  | D | -1,118 (-19.2\%) | -1,641 (-25.8\%) |
|  | C | -1,052 (-18.9\%) | -220 (-4.7\%) |
|  | All | -358 (-6.2\%) | -331 (-5.8\%) |
| SEP | W | 4,157 (44.5\%) | 757 (5.9\%) |
|  | AN | 3,952 (70.2\%) | 37 (0.4\%) |
|  | BN | -739 (-14.4\%) | 827 (-15.9\%) |
|  | D | -1,498 (-26.6\%) | 23 (0.6\%) |
|  | C | 93 (1.8\%) | 939 (21.6\%) |
|  | All | 1,455 (21.9\%) | 247 (3.1\%) |
| OCT | W | 19 (0.3\%) | -16 (-0.2\%) |
|  | AN | 706 (10.4\%) | 578 (8.3\%) |
|  | BN | 1,449 (24.2\%) | 866 (13.2\%) |
|  | D | 248 (4.4\%) | -104 (-1.7\%) |
|  | C | 69 (1.2\%) | 139 (2.5\%) |
|  | All | 421 (6.6\%) | 225 (3.4\%) |
| NOV | W | 322 (3.3\%) | -923 (-8.5\%) |
|  | AN | -596 (-7.3\%) | -1,527 (-16.7\%) |
|  | BN | -441 (-6.5\%) | -1,236 (-16.3\%) |
|  | D | -678 (-9.1\%) | -497 (-6.9\%) |
|  | C | -446 (-8.7\%) | -313 (-6.3\%) |
|  | All | -274 (-3.5\%) | -882 (-10.5\%) |
| DEC | W | -680 (-3.8\%) | -55 (-0.3\%) |
|  | AN | 210 (1.9\%) | 263 (2.4\%) |
|  | BN | -201 (-2.4\%) | 46 (0.6\%) |
|  | D | 131 (1.5\%) | 356 (4.1\%) |
|  | C | -177 (-2.8\%) | 71 (1.2\%) |
|  | All | -216 (-1.9\%) | 117 (1\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.5.1.4 Sacramento River at Verona

Table 7. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 5: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 44,589 | 45,567 | 44,464 |
|  | AN | 34,120 | 33,671 | 31,474 |
|  | BN | 20,175 | 19,121 | 17,950 |
|  | D | 14,756 | 14,782 | 13,795 |
|  | C | 12,085 | 13,051 | 12,309 |
|  | All | 27,583 | 27,795 | 26,599 |
| FEB | W | 49,892 | 51,326 | 50,193 |
|  | AN | 39,162 | 39,749 | 38,217 |
|  | BN | 26,429 | 25,341 | 23,635 |
|  | D | 18,402 | 18,090 | 17,429 |
|  | C | 12,822 | 12,325 | 12,009 |
|  | All | 31,979 | 32,192 | 31,126 |
| MAR | W | 43,455 | 44,624 | 42,554 |
|  | AN | 39,477 | 39,687 | 38,110 |
|  | BN | 21,484 | 19,448 | 17,982 |
|  | D | 17,868 | 17,649 | 16,552 |
|  | C | 11,903 | 11,789 | 11,717 |
|  | All | 28,888 | 28,877 | 27,488 |
| APR | W | 32,219 | 31,636 | 29,428 |
|  | AN | 22,250 | 21,313 | 20,162 |
|  | BN | 14,459 | 13,857 | 14,075 |
|  | D | 11,113 | 10,903 | 11,301 |
|  | C | 9,420 | 9,489 | 9,883 |
|  | All | 19,759 | 19,298 | 18,611 |
| MAY | W | 26,193 | 20,229 | 20,317 |
|  | AN | 17,079 | 16,002 | 16,791 |
|  | BN | 11,451 | 10,534 | 11,033 |
|  | D | 9,283 | 9,841 | 10,713 |
|  | C | 7,125 | 7,611 | 7,459 |
|  | All | 15,840 | 13,828 | 14,226 |
| JUN | W | 18,367 | 15,304 | 17,174 |
|  | AN | 13,590 | 13,574 | 15,551 |
|  | BN | 11,062 | 11,320 | 13,478 |
|  | D | 10,429 | 10,780 | 11,609 |
|  | C | 8,911 | 9,827 | 9,084 |
|  | All | 13,295 | 12,576 | 13,900 |
| JUL | W | 16,253 | 17,965 | 18,565 |
|  | AN | 17,488 | 18,338 | 18,664 |
|  | BN | 16,698 | 16,598 | 17,726 |
|  | D | 16,352 | 16,465 | 14,735 |
|  | C | 14,476 | 12,457 | 10,529 |
|  | All | 16,271 | 16,651 | 16,420 |


| Alternative 5: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 12,464 | 14,016 | 13,217 |
|  | AN | 13,691 | 15,828 | 15,332 |
|  | BN | 13,389 | 14,074 | 13,368 |
|  | D | 14,688 | 13,018 | 9,638 |
|  | C | 9,207 | 8,085 | 7,431 |
|  | All | 12,813 | 13,204 | 11,920 |
| SEP | W | 14,279 | 23,592 | 21,341 |
|  | AN | 10,537 | 19,044 | 14,818 |
|  | BN | 9,961 | 10,576 | 7,836 |
|  | D | 10,542 | 7,664 | 7,503 |
|  | C | 7,764 | 6,832 | 7,845 |
|  | All | 11,220 | 14,755 | 13,068 |
| OCT | W | 11,503 | 11,232 | 11,254 |
|  | AN | 9,381 | 9,890 | 11,047 |
|  | BN | 9,867 | 10,146 | 11,255 |
|  | D | 8,681 | 8,989 | 9,170 |
|  | C | 8,543 | 8,104 | 9,137 |
|  | All | 9,861 | 9,900 | 10,457 |
| NOV | W | 15,307 | 15,754 | 14,677 |
|  | AN | 11,792 | 12,817 | 11,021 |
|  | BN | 9,852 | 10,437 | 9,111 |
|  | D | 10,157 | 9,731 | 9,182 |
|  | C | 7,341 | 7,223 | 6,709 |
|  | All | 11,565 | 11,846 | 10,819 |
| DEC | W | 33,840 | 31,254 | 29,320 |
|  | AN | 17,572 | 18,481 | 17,793 |
|  | BN | 13,099 | 13,028 | 12,844 |
|  | D | 12,685 | 12,532 | 12,753 |
|  | C | 9,770 | 8,627 | 9,067 |
|  | All | 19,752 | 18,852 | 18,220 |

Table 8. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 5: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | -125 (-0.3\%) | -1,103 (-2.4\%) |
|  | AN | -2,646 (-7.8\%) | -2,197 (-6.5\%) |
|  | BN | -2,226 (-11\%) | -1,171 (-6.1\%) |
|  | D | -961 (-6.5\%) | -987 (-6.7\%) |
|  | C | 224 (1.9\%) | -742 (-5.7\%) |
|  | All | -985 (-3.6\%) | -1,196 (-4.3\%) |
| FEB | W | 301 (0.6\%) | -1,133 (-2.2\%) |
|  | AN | -944 (-2.4\%) | -1,531 (-3.9\%) |
|  | BN | -2,794 (-10.6\%) | -1,706 (-6.7\%) |
|  | D | -973 (-5.3\%) | -661 (-3.7\%) |
|  | C | -813 (-6.3\%) | -316 (-2.6\%) |
|  | All | -852 (-2.7\%) | -1,066 (-3.3\%) |
| MAR | W | -901 (-2.1\%) | -2,070 (-4.6\%) |
|  | AN | -1,367 (-3.5\%) | -1,577 (-4\%) |
|  | BN | -3,502 (-16.3\%) | -1,466 (-7.5\%) |
|  | D | -1,317 (-7.4\%) | -1,097 (-6.2\%) |
|  | C | -186 (-1.6\%) | -72 (-0.6\%) |
|  | All | -1,400 (-4.8\%) | -1,389 (-4.8\%) |
| APR | W | -2,791 (-8.7\%) | -2,208 (-7\%) |
|  | AN | -2,088 (-9.4\%) | -1,151 (-5.4\%) |
|  | BN | -384 (-2.7\%) | 218 (1.6\%) |
|  | D | 187 (1.7\%) | 398 (3.6\%) |
|  | C | 462 (4.9\%) | 393 (4.1\%) |
|  | All | -1,148 (-5.8\%) | -686 (-3.6\%) |
| MAY | W | -5,876 (-22.4\%) | 89 (0.4\%) |
|  | AN | -289 (-1.7\%) | 789 (4.9\%) |
|  | BN | -418 (-3.7\%) | 499 (4.7\%) |
|  | D | 1,429 (15.4\%) | 872 (8.9\%) |
|  | C | 334 (4.7\%) | -152 (-2\%) |
|  | All | -1,614 (-10.2\%) | 398 (2.9\%) |
| JUN | W | -1,193 (-6.5\%) | 1,870 (12.2\%) |
|  | AN | 1,961 (14.4\%) | 1,977 (14.6\%) |
|  | BN | 2,416 (21.8\%) | 2,158 (19.1\%) |
|  | D | 1,180 (11.3\%) | 829 (7.7\%) |
|  | C | 173 (1.9\%) | -743 (-7.6\%) |
|  | All | 605 (4.6\%) | 1,324 (10.5\%) |
| JUL | W | 2,312 (14.2\%) | 600 (3.3\%) |
|  | AN | 1,176 (6.7\%) | 326 (1.8\%) |
|  | BN | 1,029 (6.2\%) | 1,128 (6.8\%) |
|  | D | -1,617 (-9.9\%) | -1,730 (-10.5\%) |
|  | C | -3,947 (-27.3\%) | -1,928 (-15.5\%) |
|  | All | 148 (0.9\%) | -231 (-1.4\%) |


| Alternative 5: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | 753 (6\%) | -799 (-5.7\%) |
|  | AN | 1,640 (12\%) | -497 (-3.1\%) |
|  | BN | -21 (-0.2\%) | -707 (-5\%) |
|  | D | -5,050 (-34.4\%) | -3,380 (-26\%) |
|  | C | -1,776 (-19.3\%) | -654 (-8.1\%) |
|  | All | -893 (-7\%) | -1,284 (-9.7\%) |
| SEP | W | 7,062 (49.5\%) | -2,251 (-9.5\%) |
|  | AN | 4,282 (40.6\%) | -4,225 (-22.2\%) |
|  | BN | -2,125 (-21.3\%) | -2,739 (-25.9\%) |
|  | D | -3,039 (-28.8\%) | -161 (-2.1\%) |
|  | C | 81 (1\%) | 1,014 (14.8\%) |
|  | All | 1,848 (16.5\%) | -1,687 (-11.4\%) |
| OCT | W | -249 (-2.2\%) | 23 (0.2\%) |
|  | AN | 1,666 (17.8\%) | 1,157 (11.7\%) |
|  | BN | 1,388 (14.1\%) | 1,109 (10.9\%) |
|  | D | 490 (5.6\%) | 181 (2\%) |
|  | C | 594 (6.9\%) | 1,033 (12.7\%) |
|  | All | 596 (6\%) | 557 (5.6\%) |
| NOV | W | -630 (-4.1\%) | -1,078 (-6.8\%) |
|  | AN | -772 (-6.5\%) | -1,796 (-14\%) |
|  | BN | -741 (-7.5\%) | -1,326 (-12.7\%) |
|  | D | -974 (-9.6\%) | -549 (-5.6\%) |
|  | C | -632 (-8.6\%) | -514 (-7.1\%) |
|  | All | -746 (-6.4\%) | -1,027 (-8.7\%) |
| DEC | W | -4,520 (-13.4\%) | -1,935 (-6.2\%) |
|  | AN | 221 (1.3\%) | -688 (-3.7\%) |
|  | BN | -255 (-1.9\%) | -184 (-1.4\%) |
|  | D | 68 (0.5\%) | 220 (1.8\%) |
|  | C | -703 (-7.2\%) | 440 (5.1\%) |
|  | All | -1,533 (-7.8\%) | -633 (-3.4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.5.1.5 Trinity River below Lewiston

Table 9. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 5: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 1,440 | 1,518 | 1,476 |
|  | AN | 300 | 300 | 300 |
|  | BN | 358 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 287 | 275 |
|  | All | 671 | 684 | 669 |
| FEB | W | 1,056 | 1,495 | 1,559 |
|  | AN | 689 | 784 | 701 |
|  | BN | 517 | 568 | 638 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 299 |
|  | All | 634 | 795 | 816 |
| MAR | W | 1,209 | 1,385 | 1,385 |
|  | AN | 436 | 519 | 519 |
|  | BN | 319 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 611 | 676 | 676 |
| APR | W | 721 | 844 | 844 |
|  | AN | 469 | 513 | 458 |
|  | BN | 507 | 504 | 504 |
|  | D | 529 | 529 | 529 |
|  | C | 575 | 580 | 580 |
|  | All | 584 | 630 | 622 |
| MAY | W | 4,636 | 4,620 | 4,620 |
|  | AN | 4,462 | 4,416 | 4,416 |
|  | BN | 3,774 | 3,865 | 3,865 |
|  | D | 3,216 | 3,216 | 3,216 |
|  | C | 2,092 | 1,973 | 1,973 |
|  | All | 3,779 | 3,766 | 3,766 |
| JUN | W | 3,371 | 3,560 | 3,560 |
|  | AN | 2,488 | 3,188 | 3,188 |
|  | BN | 1,672 | 1,767 | 1,767 |
|  | D | 1,251 | 1,251 | 1,251 |
|  | C | 783 | 783 | 783 |
|  | All | 2,108 | 2,286 | 2,286 |
| JUL | W | 1,289 | 1,103 | 1,103 |
|  | AN | 1,048 | 1,048 | 1,048 |
|  | BN | 869 | 916 | 916 |
|  | D | 667 | 667 | 667 |
|  | C | 450 | 413 | 438 |
|  | All | 923 | 866 | 870 |


| Alternative 5: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 338 | 338 |
|  | All | 450 | 434 | 434 |
| SEP | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 265 | 297 |
|  | All | 450 | 423 | 428 |
| OCT | W | 373 | 373 | 373 |
|  | AN | 373 | 311 | 320 |
|  | BN | 346 | 346 | 346 |
|  | D | 373 | 346 | 352 |
|  | C | 373 | 311 | 280 |
|  | All | 368 | 344 | 342 |
| NOV | W | 489 | 414 | 348 |
|  | AN | 300 | 275 | 275 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 283 | 283 |
|  | C | 300 | 225 | 225 |
|  | All | 360 | 318 | 297 |
| DEC | W | 1,072 | 837 | 890 |
|  | AN | 300 | 300 | 300 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 275 | 250 |
|  | All | 545 | 466 | 480 |

Table 10. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 5: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 36 (2.5\%) | -42 (-2.8\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | -58 (-16.3\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -25 (-8.3\%) | -12 (-4.3\%) |
|  | All | -2 (-0.3\%) | -15 (-2.2\%) |
| FEB | W | 503 (47.6\%) | 65 (4.3\%) |
|  | AN | 12 (1.7\%) | -83 (-10.5\%) |
|  | BN | 122 (23.6\%) | 70 (12.4\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -1 (-0.3\%) | -1 (-0.3\%) |
|  | All | 182 (28.7\%) | 20 (2.5\%) |
| MAR | W | 176 (14.6\%) | 0 (0\%) |
|  | AN | 83 (19.1\%) | 0 (0\%) |
|  | BN | -19 (-5.8\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 65 (10.6\%) | 0 (0\%) |
| APR | W | 122 (17\%) | 0 (0\%) |
|  | AN | -11 (-2.3\%) | -54 (-10.6\%) |
|  | BN | -3 (-0.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 5 (0.9\%) | 0 (0\%) |
|  | All | 37 (6.4\%) | -8 (-1.3\%) |
| MAY | W | -16 (-0.3\%) | 0 (0\%) |
|  | AN | -46 (-1\%) | 0 (0\%) |
|  | BN | 90 (2.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -119 (-5.7\%) | 0 (0\%) |
|  | All | -14 (-0.4\%) | 0 (0\%) |
| JUN | W | 189 (5.6\%) | 0 (0\%) |
|  | AN | 700 (28.1\%) | 0 (0\%) |
|  | BN | 96 (5.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 179 (8.5\%) | 0 (0\%) |
| JUL | W | -185 (-14.4\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 47 (5.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -12 (-2.7\%) | 25 (6.1\%) |
|  | All | -53 (-5.7\%) | 4 (0.4\%) |


| Alternative 5: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -112 (-25\%) | 0 (0\%) |
|  | All | -16 (-3.7\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -153 (-34\%) | 32 (12\%) |
|  | All | -22 (-5\%) | 5 (1.1\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | -53 (-14.3\%) | 9 (2.8\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -21 (-5.6\%) | 6 (1.9\%) |
|  | C | -93 (-25\%) | -31 (-10\%) |
|  | All | -26 (-7.1\%) | -2 (-0.5\%) |
| NOV | W | -140 (-28.8\%) | -66 (-15.9\%) |
|  | AN | -25 (-8.3\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -17 (-5.6\%) | 0 (0\%) |
|  | C | -75 (-25\%) | 0 (0\%) |
|  | All | -63 (-17.5\%) | -21 (-6.6\%) |
| DEC | W | -181 (-16.9\%) | 54 (6.4\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -50 (-16.7\%) | -25 (-9\%) |
|  | All | -65 (-11.9\%) | 13 (2.9\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.5.1.6 Clear Creek below Whiskeytown

Table 11. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 5: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 220 | 339 | 339 |
|  | AN | 192 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 159 | 171 |
|  | All | 193 | 233 | 235 |
| FEB | W | 220 | 257 | 257 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 168 | 168 |
|  | All | 194 | 209 | 209 |
| MAR | W | 200 | 259 | 258 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 202 | 189 |
|  | D | 186 | 192 | 192 |
|  | C | 155 | 168 | 171 |
|  | All | 188 | 212 | 210 |
| APR | W | 200 | 200 | 200 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 188 | 192 | 192 |
|  | C | 155 | 168 | 171 |
|  | All | 189 | 191 | 191 |
| MAY | W | 277 | 277 | 277 |
|  | AN | 277 | 277 | 277 |
|  | BN | 263 | 269 | 269 |
|  | D | 264 | 264 | 264 |
|  | C | 211 | 224 | 224 |
|  | All | 262 | 265 | 265 |
| JUN | W | 200 | 200 | 200 |
|  | AN | 200 | 200 | 200 |
|  | BN | 181 | 186 | 186 |
|  | D | 180 | 180 | 180 |
|  | C | 115 | 131 | 131 |
|  | All | 180 | 183 | 183 |
| JUL | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 85 | 85 | 85 |
|  | All | 85 | 85 | 85 |


| Alternative 5: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 94 | 71 | 78 |
|  | All | 86 | 83 | 84 |
| SEP | W | 150 | 150 | 150 |
|  | AN | 150 | 150 | 150 |
|  | BN | 150 | 150 | 150 |
|  | D | 144 | 150 | 150 |
|  | C | 133 | 96 | 96 |
|  | All | 146 | 142 | 142 |
| OCT | W | 198 | 198 | 198 |
|  | AN | 183 | 183 | 183 |
|  | BN | 189 | 182 | 179 |
|  | D | 175 | 183 | 175 |
|  | C | 150 | 142 | 140 |
|  | All | 182 | 182 | 179 |
| NOV | W | 198 | 198 | 198 |
|  | AN | 185 | 182 | 182 |
|  | BN | 184 | 189 | 189 |
|  | D | 177 | 177 | 177 |
|  | C | 155 | 145 | 158 |
|  | All | 183 | 182 | 184 |
| DEC | W | 198 | 198 | 198 |
|  | AN | 185 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 177 | 189 | 189 |
|  | C | 155 | 156 | 158 |
|  | All | 184 | 187 | 188 |

Table 12. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 5: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 118 (53.6\%) | 0 (-0.1\%) |
|  | AN | 0 (-0.1\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 16 (10.2\%) | 12 (7.4\%) |
|  | All | 41 (21.4\%) | 2 (0.7\%) |
| FEB | W | 38 (17.1\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 13 (8.7\%) | 0 (0.3\%) |
|  | All | 15 (7.9\%) | 0 (0\%) |
| MAR | W | 58 (29.2\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | -12 (-6.1\%) |
|  | D | 6 (3.2\%) | 0 (0\%) |
|  | C | 16 (10.2\%) | 3 (1.7\%) |
|  | All | 22 (11.7\%) | -2 (-0.8\%) |
| APR | W | 0 (0\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 3 (1.7\%) | 0 (0\%) |
|  | C | 16 (10.2\%) | 3 (1.7\%) |
|  | All | 3 (1.5\%) | 0 (0.2\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 6 (2.2\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 13 (6.2\%) | 0 (0\%) |
|  | All | 3 (1.1\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 5 (2.6\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 16 (14.1\%) | 0 (0\%) |
|  | All | 3 (1.8\%) | 0 (0\%) |
| JUL | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |


| Alternative 5: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -16 (-17.4\%) | 7 (10\%) |
|  | All | -2 (-2.8\%) | 1 (1.3\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 6 (3.8\%) | 0 (0\%) |
|  | C | -37 (-28.1\%) | 0 (0\%) |
|  | All | -4 (-2.9\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | -11 (-5.7\%) | -3 (-1.8\%) |
|  | D | 0 (0\%) | -8 (-4.5\%) |
|  | C | -10 (-6.8\%) | -2 (-1.3\%) |
|  | All | -3 (-1.8\%) | -3 (-1.5\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | -3 (-1.8\%) | 0 (0\%) |
|  | BN | 6 (3.1\%) | 0 (0\%) |
|  | D | -1 (-0.4\%) | 0 (0\%) |
|  | C | 3 (2.2\%) | 13 (8.8\%) |
|  | All | 1 (0.5\%) | 2 (1\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 7 (3.6\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 12 (6.6\%) | 0 (0\%) |
|  | C | 3 (2.2\%) | 3 (1.6\%) |
|  | All | 4 (2.2\%) | 0 (0.2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.5.1.7 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

Table 13. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 5: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| FEB | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| MAR | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| APR | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| MAY | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUN | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |


| Alternative 5: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JUL | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| AUG | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| SEP | W | 773 | 773 | 773 |
|  | AN | 773 | 773 | 773 |
|  | BN | 773 | 773 | 773 |
|  | D | 773 | 773 | 773 |
|  | C | 773 | 773 | 773 |
|  | All | 773 | 773 | 773 |
| OCT | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| NOV | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| DEC | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |

Table 14. Differences (Percent Differences) between Pairs of Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 5: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| FEB | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| MAR | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| APR | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| JUL | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |


| Alternative 5: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |

## 11C.5.1.8 Feather River High-Flow Channel (at Thermalito Afterbay)

Table 15. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 5: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 11,257 | 11,896 | 12,002 |
|  | AN | 4,434 | 2,838 | 2,756 |
|  | BN | 2,640 | 1,441 | 1,456 |
|  | D | 1,798 | 1,459 | 1,470 |
|  | C | 1,459 | 1,648 | 1,447 |
|  | All | 5,277 | 4,995 | 4,992 |
| FEB | W | 12,466 | 14,787 | 16,244 |
|  | AN | 7,411 | 5,809 | 6,807 |
|  | BN | 3,916 | 1,897 | 2,099 |
|  | D | 1,817 | 1,659 | 1,793 |
|  | C | 1,610 | 1,482 | 1,610 |
|  | All | 6,340 | 6,444 | 7,134 |
| MAR | W | 12,895 | 14,772 | 14,732 |
|  | AN | 7,733 | 8,568 | 10,097 |
|  | BN | 3,373 | 1,985 | 1,771 |
|  | D | 2,017 | 1,762 | 1,960 |
|  | C | 1,697 | 1,634 | 1,757 |
|  | All | 6,487 | 6,902 | 7,138 |
| APR | W | 6,472 | 6,408 | 6,403 |
|  | AN | 2,251 | 2,170 | 2,167 |
|  | BN | 1,205 | 1,203 | 1,613 |
|  | D | 1,286 | 1,470 | 1,951 |
|  | C | 1,389 | 1,407 | 1,728 |
|  | All | 3,073 | 3,084 | 3,304 |
| MAY | W | 7,528 | 4,740 | 4,712 |
|  | AN | 3,340 | 3,101 | 3,116 |
|  | BN | 1,205 | 1,749 | 1,956 |
|  | D | 1,591 | 2,223 | 2,410 |
|  | C | 1,574 | 1,790 | 1,760 |
|  | All | 3,661 | 3,005 | 3,071 |
| JUN | W | 5,062 | 4,211 | 5,525 |
|  | AN | 3,301 | 3,930 | 5,591 |
|  | BN | 2,707 | 3,552 | 5,039 |
|  | D | 3,134 | 3,284 | 3,707 |
|  | C | 2,695 | 2,666 | 2,674 |
|  | All | 3,632 | 3,628 | 4,635 |
| JUL | W | 6,490 | 8,577 | 9,161 |
|  | AN | 8,757 | 9,488 | 9,700 |
|  | BN | 8,981 | 8,833 | 9,752 |
|  | D | 8,294 | 8,099 | 6,599 |
|  | C | 6,703 | 5,217 | 3,554 |
|  | All | 7,674 | 8,157 | 7,958 |


| Alternative 5: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 3,308 | 6,228 | 4,995 |
|  | AN | 6,042 | 7,346 | 7,149 |
|  | BN | 6,295 | 6,868 | 6,417 |
|  | D | 7,036 | 4,990 | 3,270 |
|  | C | 2,613 | 2,163 | 1,733 |
|  | All | 4,935 | 5,634 | 4,697 |
| SEP | W | 2,280 | 8,327 | 5,484 |
|  | AN | 2,253 | 6,899 | 2,729 |
|  | BN | 2,466 | 3,068 | 1,205 |
|  | D | 2,366 | 1,052 | 959 |
|  | C | 1,421 | 1,345 | 1,451 |
|  | All | 2,201 | 4,601 | 2,767 |
| OCT | W | 3,456 | 3,051 | 3,163 |
|  | AN | 2,386 | 2,741 | 3,407 |
|  | BN | 3,183 | 2,862 | 3,188 |
|  | D | 2,688 | 2,652 | 3,010 |
|  | C | 2,472 | 2,102 | 3,088 |
|  | All | 2,940 | 2,747 | 3,159 |
| NOV | W | 3,292 | 2,470 | 2,338 |
|  | AN | 1,824 | 2,119 | 1,916 |
|  | BN | 2,101 | 1,900 | 1,905 |
|  | D | 1,859 | 1,664 | 1,702 |
|  | C | 1,854 | 1,876 | 1,792 |
|  | All | 2,349 | 2,058 | 1,983 |
| DEC | W | 7,157 | 3,948 | 4,792 |
|  | AN | 2,951 | 3,344 | 2,965 |
|  | BN | 2,176 | 2,102 | 2,259 |
|  | D | 2,364 | 2,229 | 2,428 |
|  | C | 2,609 | 1,694 | 2,182 |
|  | All | 3,973 | 2,837 | 3,191 |

Table 16. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 5: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 745 (6.6\%) | 107 (0.9\%) |
|  | AN | -1,677 (-37.8\%) | -82 (-2.9\%) |
|  | BN | -1,184 (-44.8\%) | 15 (1\%) |
|  | D | -328 (-18.2\%) | 12 (0.8\%) |
|  | C | -12 (-0.8\%) | -201 (-12.2\%) |
|  | All | -285 (-5.4\%) | -2 (0\%) |
| FEB | W | 3,778 (30.3\%) | 1,457 (9.9\%) |
|  | AN | -603 (-8.1\%) | 999 (17.2\%) |
|  | BN | -1,817 (-46.4\%) | 202 (10.7\%) |
|  | D | -24 (-1.3\%) | 133 (8\%) |
|  | C | -1 (0\%) | 128 (8.7\%) |
|  | All | 794 (12.5\%) | 691 (10.7\%) |
| MAR | W | 1,837 (14.2\%) | -40 (-0.3\%) |
|  | AN | 2,365 (30.6\%) | 1,529 (17.8\%) |
|  | BN | -1,602 (-47.5\%) | -214 (-10.8\%) |
|  | D | -57 (-2.8\%) | 198 (11.2\%) |
|  | C | 60 (3.5\%) | 123 (7.5\%) |
|  | All | 651 (10\%) | 236 (3.4\%) |
| APR | W | -69 (-1.1\%) | -5 (-0.1\%) |
|  | AN | -84 (-3.7\%) | -3 (-0.1\%) |
|  | BN | 409 (33.9\%) | 410 (34.1\%) |
|  | D | 665 (51.7\%) | 481 (32.7\%) |
|  | C | 339 (24.4\%) | 321 (22.8\%) |
|  | All | 231 (7.5\%) | 221 (7.2\%) |
| MAY | W | -2,816 (-37.4\%) | -28 (-0.6\%) |
|  | AN | -224 (-6.7\%) | 15 (0.5\%) |
|  | BN | 750 (62.3\%) | 207 (11.9\%) |
|  | D | 819 (51.5\%) | 187 (8.4\%) |
|  | C | 186 (11.8\%) | -30 (-1.7\%) |
|  | All | -590 (-16.1\%) | 66 (2.2\%) |
| JUN | W | 464 (9.2\%) | 1,315 (31.2\%) |
|  | AN | 2,290 (69.4\%) | 1,661 (42.3\%) |
|  | BN | 2,332 (86.2\%) | 1,487 (41.9\%) |
|  | D | 573 (18.3\%) | 423 (12.9\%) |
|  | C | -21 (-0.8\%) | 8 (0.3\%) |
|  | All | 1,003 (27.6\%) | 1,008 (27.8\%) |
| JUL | W | 2,670 (41.1\%) | 583 (6.8\%) |
|  | AN | 943 (10.8\%) | 212 (2.2\%) |
|  | BN | 771 (8.6\%) | 919 (10.4\%) |
|  | D | -1,695 (-20.4\%) | -1,499 (-18.5\%) |
|  | C | -3,149 (-47\%) | -1,663 (-31.9\%) |
|  | All | 284 (3.7\%) | -200 (-2.4\%) |


| Alternative 5: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | 1,687 (51\%) | -1,233 (-19.8\%) |
|  | AN | 1,106 (18.3\%) | -197 (-2.7\%) |
|  | BN | 122 (1.9\%) | -451 (-6.6\%) |
|  | D | -3,767 (-53.5\%) | -1,721 (-34.5\%) |
|  | C | -880 (-33.7\%) | -430 (-19.9\%) |
|  | All | -238 (-4.8\%) | -937 (-16.6\%) |
| SEP | W | 3,204 (140.5\%) | -2,843 (-34.1\%) |
|  | AN | 476 (21.1\%) | -4,170 (-60.4\%) |
|  | BN | -1,261 (-51.1\%) | -1,863 (-60.7\%) |
|  | D | -1,407 (-59.5\%) | -93 (-8.8\%) |
|  | C | 31 (2.2\%) | 107 (7.9\%) |
|  | All | 566 (25.7\%) | -1,835 (-39.9\%) |
| OCT | W | -293 (-8.5\%) | 112 (3.7\%) |
|  | AN | 1,021 (42.8\%) | 666 (24.3\%) |
|  | BN | 5 (0.2\%) | 326 (11.4\%) |
|  | D | 322 (12\%) | 358 (13.5\%) |
|  | C | 616 (24.9\%) | 986 (46.9\%) |
|  | All | 218 (7.4\%) | 412 (15\%) |
| NOV | W | -955 (-29\%) | -132 (-5.4\%) |
|  | AN | 92 (5\%) | -203 (-9.6\%) |
|  | BN | -196 (-9.3\%) | 5 (0.3\%) |
|  | D | -157 (-8.5\%) | 38 (2.3\%) |
|  | C | -62 (-3.3\%) | -83 (-4.4\%) |
|  | All | -366 (-15.6\%) | -75 (-3.6\%) |
| DEC | W | -2,365 (-33\%) | 844 (21.4\%) |
|  | AN | 14 (0.5\%) | -379 (-11.3\%) |
|  | BN | 83 (3.8\%) | 157 (7.5\%) |
|  | D | 64 (2.7\%) | 198 (8.9\%) |
|  | C | -427 (-16.4\%) | 488 (28.8\%) |
|  | All | -782 (-19.7\%) | 354 (12.5\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.5.1.9 Feather River at Confluence with Sacramento River

Table 17. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 5: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 23,533 | 26,106 | 26,217 |
|  | AN | 12,430 | 11,953 | 11,875 |
|  | BN | 6,499 | 5,575 | 5,592 |
|  | D | 4,621 | 4,412 | 4,422 |
|  | C | 3,646 | 3,837 | 3,648 |
|  | All | 11,938 | 12,509 | 12,510 |
| FEB | W | 27,039 | 31,065 | 32,522 |
|  | AN | 14,818 | 14,599 | 15,601 |
|  | BN | 9,153 | 7,892 | 8,098 |
|  | D | 4,402 | 4,436 | 4,574 |
|  | C | 3,237 | 3,096 | 3,230 |
|  | All | 13,744 | 14,761 | 15,454 |
| MAR | W | 24,172 | 26,784 | 26,750 |
|  | AN | 19,990 | 21,490 | 23,018 |
|  | BN | 8,136 | 6,882 | 6,671 |
|  | D | 5,073 | 4,940 | 5,120 |
|  | C | 2,933 | 2,756 | 2,871 |
|  | All | 13,521 | 14,300 | 14,533 |
| APR | W | 15,897 | 15,852 | 15,854 |
|  | AN | 9,832 | 9,585 | 9,578 |
|  | BN | 5,401 | 5,189 | 5,606 |
|  | D | 4,152 | 4,137 | 4,619 |
|  | C | 3,298 | 3,185 | 3,513 |
|  | All | 8,796 | 8,689 | 8,914 |
| MAY | W | 14,387 | 10,385 | 10,363 |
|  | AN | 8,068 | 6,884 | 6,903 |
|  | BN | 4,704 | 4,509 | 4,717 |
|  | D | 3,652 | 3,767 | 3,953 |
|  | C | 2,389 | 2,321 | 2,280 |
|  | All | 7,697 | 6,237 | 6,303 |
| JUN | W | 10,222 | 7,199 | 8,510 |
|  | AN | 6,391 | 5,598 | 7,263 |
|  | BN | 4,495 | 4,342 | 5,832 |
|  | D | 3,853 | 3,367 | 3,791 |
|  | C | 2,782 | 2,522 | 2,531 |
|  | All | 6,197 | 4,951 | 5,959 |
| JUL | W | 8,177 | 8,734 | 9,309 |
|  | AN | 9,322 | 9,223 | 9,434 |
|  | BN | 9,380 | 8,725 | 9,645 |
|  | D | 8,290 | 7,674 | 6,178 |
|  | C | 6,450 | 4,891 | 3,222 |
|  | All | 8,322 | 8,009 | 7,806 |


| Alternative 5: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 4,923 | 7,222 | 5,946 |
|  | AN | 7,080 | 8,089 | 7,893 |
|  | BN | 7,236 | 7,570 | 7,122 |
|  | D | 7,711 | 5,487 | 3,773 |
|  | C | 2,841 | 2,340 | 1,958 |
|  | All | 5,941 | 6,313 | 5,371 |
| SEP | W | 4,351 | 10,329 | 7,495 |
|  | AN | 4,194 | 8,773 | 4,607 |
|  | BN | 4,252 | 4,786 | 2,957 |
|  | D | 4,179 | 2,848 | 2,756 |
|  | C | 2,054 | 1,964 | 2,105 |
|  | All | 3,937 | 6,289 | 4,468 |
| OCT | W | 4,176 | 3,746 | 3,876 |
|  | AN | 2,630 | 2,988 | 3,657 |
|  | BN | 3,754 | 3,437 | 3,760 |
|  | D | 3,033 | 2,987 | 3,355 |
|  | C | 2,938 | 2,566 | 3,558 |
|  | All | 3,446 | 3,243 | 3,663 |
| NOV | W | 4,697 | 3,825 | 3,696 |
|  | AN | 3,065 | 3,186 | 2,980 |
|  | BN | 2,687 | 2,455 | 2,462 |
|  | D | 2,342 | 2,125 | 2,164 |
|  | C | 2,084 | 2,107 | 2,005 |
|  | All | 3,216 | 2,873 | 2,797 |
| DEC | W | 12,409 | 10,246 | 11,091 |
|  | AN | 5,193 | 6,000 | 5,623 |
|  | BN | 3,079 | 3,249 | 3,410 |
|  | D | 2,838 | 2,811 | 3,009 |
|  | C | 2,975 | 2,054 | 2,549 |
|  | All | 6,279 | 5,599 | 5,955 |

Table 18. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 5: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 2,684 (11.4\%) | 111 (0.4\%) |
|  | AN | -555 (-4.5\%) | -78 (-0.7\%) |
|  | BN | -907 (-14\%) | 17 (0.3\%) |
|  | D | -199 (-4.3\%) | 10 (0.2\%) |
|  | C | 2 (0.1\%) | -189 (-4.9\%) |
|  | All | 571 (4.8\%) | 1 (0\%) |
| FEB | W | 5,484 (20.3\%) | 1,458 (4.7\%) |
|  | AN | 783 (5.3\%) | 1,002 (6.9\%) |
|  | BN | -1,055 (-11.5\%) | 205 (2.6\%) |
|  | D | 172 (3.9\%) | 138 (3.1\%) |
|  | C | -7 (-0.2\%) | 134 (4.3\%) |
|  | All | 1,710 (12.4\%) | 694 (4.7\%) |
| MAR | W | 2,578 (10.7\%) | -34 (-0.1\%) |
|  | AN | 3,027 (15.1\%) | 1,528 (7.1\%) |
|  | BN | -1,464 (-18\%) | -210 (-3.1\%) |
|  | D | 47 (0.9\%) | 180 (3.6\%) |
|  | C | -62 (-2.1\%) | 115 (4.2\%) |
|  | All | 1,012 (7.5\%) | 233 (1.6\%) |
| APR | W | -43 (-0.3\%) | 2 (0\%) |
|  | AN | -255 (-2.6\%) | -7 (-0.1\%) |
|  | BN | 205 (3.8\%) | 417 (8\%) |
|  | D | 468 (11.3\%) | 483 (11.7\%) |
|  | C | 215 (6.5\%) | 328 (10.3\%) |
|  | All | 118 (1.3\%) | 225 (2.6\%) |
| MAY | W | -4,023 (-28\%) | -22 (-0.2\%) |
|  | AN | -1,165 (-14.4\%) | 20 (0.3\%) |
|  | BN | 13 (0.3\%) | 209 (4.6\%) |
|  | D | 301 (8.3\%) | 186 (4.9\%) |
|  | C | -109 (-4.5\%) | -41 (-1.8\%) |
|  | All | -1,394 (-18.1\%) | 66 (1.1\%) |
| JUN | W | -1,712 (-16.7\%) | 1,311 (18.2\%) |
|  | AN | 872 (13.6\%) | 1,666 (29.8\%) |
|  | BN | 1,337 (29.7\%) | 1,490 (34.3\%) |
|  | D | -62 (-1.6\%) | 424 (12.6\%) |
|  | C | -251 (-9\%) | 9 (0.3\%) |
|  | All | -237 (-3.8\%) | 1,008 (20.4\%) |
| JUL | W | 1,132 (13.8\%) | 574 (6.6\%) |
|  | AN | 112 (1.2\%) | 211 (2.3\%) |
|  | BN | 265 (2.8\%) | 920 (10.5\%) |
|  | D | -2,112 (-25.5\%) | -1,496 (-19.5\%) |
|  | C | -3,229 (-50.1\%) | -1,670 (-34.1\%) |
|  | All | -516 (-6.2\%) | -203 (-2.5\%) |


| Alternative 5: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | 1,023 (20.8\%) | -1,276 (-17.7\%) |
|  | AN | 813 (11.5\%) | -196 (-2.4\%) |
|  | BN | -113 (-1.6\%) | -448 (-5.9\%) |
|  | D | -3,939 (-51.1\%) | -1,715 (-31.3\%) |
|  | C | -883 (-31.1\%) | -382 (-16.3\%) |
|  | All | -570 (-9.6\%) | -942 (-14.9\%) |
| SEP | W | 3,144 (72.2\%) | -2,834 (-27.4\%) |
|  | AN | 413 (9.8\%) | -4,166 (-47.5\%) |
|  | BN | -1,295 (-30.5\%) | -1,829 (-38.2\%) |
|  | D | -1,423 (-34\%) | -92 (-3.2\%) |
|  | C | 50 (2.5\%) | 141 (7.2\%) |
|  | All | 531 (13.5\%) | -1,820 (-28.9\%) |
| OCT | W | -300 (-7.2\%) | 130 (3.5\%) |
|  | AN | 1,027 (39\%) | 669 (22.4\%) |
|  | BN | 6 (0.2\%) | 322 (9.4\%) |
|  | D | 322 (10.6\%) | 368 (12.3\%) |
|  | C | 620 (21.1\%) | 993 (38.7\%) |
|  | All | 218 (6.3\%) | 420 (13\%) |
| NOV | W | -1,001 (-21.3\%) | -129 (-3.4\%) |
|  | AN | -85 (-2.8\%) | -206 (-6.5\%) |
|  | BN | -225 (-8.4\%) | 7 (0.3\%) |
|  | D | -178 (-7.6\%) | 40 (1.9\%) |
|  | C | -79 (-3.8\%) | -102 (-4.8\%) |
|  | All | -419 (-13\%) | -76 (-2.7\%) |
| DEC | W | -1,318 (-10.6\%) | 845 (8.2\%) |
|  | AN | 430 (8.3\%) | -377 (-6.3\%) |
|  | BN | 330 (10.7\%) | 161 (4.9\%) |
|  | D | 172 (6\%) | 198 (7\%) |
|  | C | -426 (-14.3\%) | 495 (24.1\%) |
|  | All | -323 (-5.1\%) | 356 (6.4\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.5.1.10 American River at Nimbus Dam

Table 19. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 5: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 8,806 | 11,036 | 11,070 |
|  | AN | 4,833 | 5,805 | 5,705 |
|  | BN | 2,392 | 2,073 | 1,997 |
|  | D | 1,723 | 1,506 | 1,388 |
|  | C | 1,474 | 1,095 | 1,204 |
|  | All | 4,502 | 5,194 | 5,167 |
| FEB | W | 9,294 | 11,102 | 11,104 |
|  | AN | 6,469 | 8,153 | 8,242 |
|  | BN | 4,360 | 4,961 | 4,846 |
|  | D | 1,852 | 1,844 | 2,026 |
|  | C | 1,185 | 1,007 | 993 |
|  | All | 5,218 | 6,112 | 6,144 |
| MAR | W | 6,089 | 6,992 | 6,992 |
|  | AN | 5,454 | 5,790 | 5,800 |
|  | BN | 2,429 | 2,794 | 2,770 |
|  | D | 2,191 | 2,314 | 2,276 |
|  | C | 939 | 938 | 895 |
|  | All | 3,762 | 4,187 | 4,169 |
| APR | W | 5,300 | 5,508 | 5,507 |
|  | AN | 3,546 | 3,298 | 3,297 |
|  | BN | 3,126 | 2,970 | 2,957 |
|  | D | 1,837 | 1,888 | 1,947 |
|  | C | 1,156 | 1,255 | 1,300 |
|  | All | 3,305 | 3,334 | 3,351 |
| MAY | W | 6,157 | 4,592 | 4,632 |
|  | AN | 3,885 | 2,521 | 2,687 |
|  | BN | 2,930 | 1,969 | 2,267 |
|  | D | 1,790 | 1,686 | 1,943 |
|  | C | 1,182 | 992 | 1,006 |
|  | All | 3,587 | 2,676 | 2,823 |
| JUN | W | 6,003 | 3,694 | 4,223 |
|  | AN | 3,346 | 3,022 | 3,350 |
|  | BN | 2,863 | 2,883 | 3,417 |
|  | D | 2,506 | 2,596 | 2,828 |
|  | C | 1,824 | 1,025 | 1,471 |
|  | All | 3,699 | 2,825 | 3,249 |
| JUL | W | 4,108 | 3,860 | 3,896 |
|  | AN | 4,638 | 4,927 | 4,448 |
|  | BN | 4,744 | 4,328 | 4,237 |
|  | D | 3,577 | 3,143 | 3,237 |
|  | C | 1,784 | 2,022 | 2,380 |
|  | All | 3,838 | 3,670 | 3,668 |


| Alternative 5: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 3,520 | 2,132 | 2,019 |
|  | AN | 2,542 | 1,944 | 1,993 |
|  | BN | 2,495 | 2,324 | 1,911 |
|  | D | 2,613 | 1,620 | 1,284 |
|  | C | 1,500 | 1,100 | 717 |
|  | All | 2,707 | 1,874 | 1,645 |
| SEP | W | 4,025 | 3,622 | 3,336 |
|  | AN | 2,764 | 2,044 | 2,165 |
|  | BN | 2,370 | 1,605 | 1,378 |
|  | D | 1,856 | 1,182 | 1,170 |
|  | C | 1,164 | 594 | 691 |
|  | All | 2,663 | 2,068 | 1,968 |
| OCT | W | 1,723 | 1,634 | 1,486 |
|  | AN | 1,706 | 1,732 | 1,494 |
|  | BN | 1,602 | 1,767 | 2,037 |
|  | D | 1,468 | 1,258 | 1,332 |
|  | C | 1,461 | 1,655 | 1,472 |
|  | All | 1,605 | 1,592 | 1,545 |
| NOV | W | 3,527 | 2,612 | 2,501 |
|  | AN | 3,181 | 2,554 | 2,324 |
|  | BN | 2,067 | 1,716 | 1,570 |
|  | D | 2,176 | 1,424 | 1,496 |
|  | C | 1,994 | 1,608 | 1,576 |
|  | All | 2,706 | 2,043 | 1,960 |
| DEC | W | 6,302 | 6,171 | 6,009 |
|  | AN | 3,137 | 2,933 | 2,874 |
|  | BN | 2,676 | 2,527 | 2,444 |
|  | D | 1,741 | 1,351 | 1,368 |
|  | C | 1,524 | 1,251 | 1,227 |
|  | All | 3,519 | 3,297 | 3,223 |

Table 20. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 5: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 2,264 (25.7\%) | 34 (0.3\%) |
|  | AN | 873 (18.1\%) | -100 (-1.7\%) |
|  | BN | -395 (-16.5\%) | -76 (-3.6\%) |
|  | D | -335 (-19.5\%) | -118 (-7.9\%) |
|  | C | -270 (-18.3\%) | 109 (10\%) |
|  | All | 665 (14.8\%) | -27 (-0.5\%) |
| FEB | W | 1,810 (19.5\%) | 2 (0\%) |
|  | AN | 1,773 (27.4\%) | 90 (1.1\%) |
|  | BN | 487 (11.2\%) | -115 (-2.3\%) |
|  | D | 174 (9.4\%) | 182 (9.9\%) |
|  | C | -192 (-16.2\%) | -13 (-1.3\%) |
|  | All | 926 (17.8\%) | 32 (0.5\%) |
| MAR | W | 904 (14.8\%) | 0 (0\%) |
|  | AN | 346 (6.4\%) | 9 (0.2\%) |
|  | BN | 341 (14\%) | -24 (-0.9\%) |
|  | D | 85 (3.9\%) | -38 (-1.6\%) |
|  | C | -44 (-4.7\%) | -43 (-4.6\%) |
|  | All | 408 (10.8\%) | -17 (-0.4\%) |
| APR | W | 207 (3.9\%) | -2 (0\%) |
|  | AN | -249 (-7\%) | -2 (0\%) |
|  | BN | -168 (-5.4\%) | -12 (-0.4\%) |
|  | D | 110 (6\%) | 59 (3.1\%) |
|  | C | 144 (12.5\%) | 44 (3.5\%) |
|  | All | 46 (1.4\%) | 17 (0.5\%) |
| MAY | W | -1,524 (-24.8\%) | 40 (0.9\%) |
|  | AN | -1,198 (-30.8\%) | 166 (6.6\%) |
|  | BN | -663 (-22.6\%) | 298 (15.2\%) |
|  | D | 154 (8.6\%) | 257 (15.3\%) |
|  | C | -176 (-14.9\%) | 14 (1.4\%) |
|  | All | -764 (-21.3\%) | 147 (5.5\%) |
| JUN | W | -1,780 (-29.7\%) | 530 (14.3\%) |
|  | AN | 4 (0.1\%) | 328 (10.8\%) |
|  | BN | 553 (19.3\%) | 534 (18.5\%) |
|  | D | 322 (12.8\%) | 232 (8.9\%) |
|  | C | -353 (-19.3\%) | 447 (43.6\%) |
|  | All | -450 (-12.2\%) | 423 (15\%) |
| JUL | W | -213 (-5.2\%) | 35 (0.9\%) |
|  | AN | -190 (-4.1\%) | -479 (-9.7\%) |
|  | BN | -507 (-10.7\%) | -91 (-2.1\%) |
|  | D | -340 (-9.5\%) | 94 (3\%) |
|  | C | 596 (33.4\%) | 358 (17.7\%) |
|  | All | -169 (-4.4\%) | -1 (0\%) |


| Alternative 5: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | -1,501 (-42.7\%) | -113 (-5.3\%) |
|  | AN | -549 (-21.6\%) | 48 (2.5\%) |
|  | BN | -584 (-23.4\%) | -413 (-17.8\%) |
|  | D | -1,329 (-50.9\%) | -336 (-20.7\%) |
|  | C | -784 (-52.2\%) | -383 (-34.9\%) |
|  | All | -1,062 (-39.2\%) | -229 (-12.2\%) |
| SEP | W | -688 (-17.1\%) | -286 (-7.9\%) |
|  | AN | -600 (-21.7\%) | 121 (5.9\%) |
|  | BN | -992 (-41.9\%) | -227 (-14.1\%) |
|  | D | -686 (-36.9\%) | -11 (-1\%) |
|  | C | -474 (-40.7\%) | 97 (16.3\%) |
|  | All | -695 (-26.1\%) | -100 (-4.8\%) |
| ОСт | W | -237 (-13.7\%) | -148 (-9.1\%) |
|  | AN | -212 (-12.4\%) | -238 (-13.7\%) |
|  | BN | 435 (27.2\%) | 271 (15.3\%) |
|  | D | -136 (-9.3\%) | 74 (5.9\%) |
|  | C | 11 (0.8\%) | 183 (-11\%) |
|  | All | -60 (-3.7\%) | -46 (-2.9\%) |
| NOV | W | -1,026 (-29.1\%) | -112 (-4.3\%) |
|  | AN | -857 (-26.9\%) | -230 (-9\%) |
|  | BN | -497 (-24\%) | -146 (-8.5\%) |
|  | D | -681 (-31.3\%) | 72 (5\%) |
|  | C | -418(-21\%) | -32 (-2\%) |
|  | All | -746 (-27.6\%) | -83 (-4.1\%) |
| DEC | W | -292 (-4.6\%) | -162 (-2.6\%) |
|  | AN | -263 (-8.4\%) | -59 (-2\%) |
|  | BN | -231 (-8.6\%) | -82 (-3.3\%) |
|  | D | -372 (-21.4\%) | 17 (1.3\%) |
|  | C | -297 (-19.5\%) | -24 (-2\%) |
|  | All | -296(-8.4\%) | -74 (-2.2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.5.1.11 American River at Confluence with Sacramento River

Table 21. Mean Monthly Flows (cfs) for Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 5: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 8,748 | 10,960 | 10,995 |
|  | AN | 4,806 | 5,760 | 5,661 |
|  | BN | 2,326 | 1,988 | 1,913 |
|  | D | 1,654 | 1,424 | 1,306 |
|  | C | 1,403 | 1,008 | 1,125 |
|  | All | 4,443 | 5,118 | 5,093 |
| FEB | W | 9,183 | 10,947 | 10,948 |
|  | AN | 6,422 | 8,073 | 8,163 |
|  | BN | 4,309 | 4,888 | 4,774 |
|  | D | 1,781 | 1,756 | 1,939 |
|  | C | 1,119 | 921 | 918 |
|  | All | 5,142 | 6,007 | 6,041 |
| MAR | W | 5,979 | 6,837 | 6,837 |
|  | AN | 5,364 | 5,661 | 5,670 |
|  | BN | 2,340 | 2,672 | 2,650 |
|  | D | 2,121 | 2,224 | 2,184 |
|  | C | 864 | 836 | 806 |
|  | All | 3,672 | 4,063 | 4,047 |
| APR | W | 5,156 | 5,300 | 5,298 |
|  | AN | 3,383 | 3,079 | 3,078 |
|  | BN | 2,984 | 2,778 | 2,766 |
|  | D | 1,672 | 1,677 | 1,735 |
|  | C | 996 | 1,059 | 1,104 |
|  | All | 3,152 | 3,128 | 3,145 |
| MAY | W | 5,959 | 4,332 | 4,373 |
|  | AN | 3,700 | 2,285 | 2,451 |
|  | BN | 2,733 | 1,726 | 2,025 |
|  | D | 1,605 | 1,454 | 1,711 |
|  | C | 1,014 | 790 | 804 |
|  | All | 3,398 | 2,438 | 2,584 |
| JUN | W | 5,743 | 3,388 | 3,918 |
|  | AN | 3,103 | 2,736 | 3,062 |
|  | BN | 2,631 | 2,603 | 3,134 |
|  | D | 2,282 | 2,320 | 2,549 |
|  | C | 1,621 | 793 | 1,240 |
|  | All | 3,462 | 2,545 | 2,966 |
| JUL | W | 3,844 | 3,560 | 3,591 |
|  | AN | 4,399 | 4,635 | 4,153 |
|  | BN | 4,509 | 4,038 | 3,943 |
|  | D | 3,347 | 2,858 | 2,950 |
|  | C | 1,568 | 1,784 | 2,137 |
|  | All | 3,597 | 3,385 | 3,380 |


| Alternative 5: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 3,295 | 1,858 | 1,744 |
|  | AN | 2,313 | 1,663 | 1,716 |
|  | BN | 2,265 | 2,048 | 1,636 |
|  | D | 2,395 | 1,357 | 1,023 |
|  | C | 1,314 | 899 | 516 |
|  | All | 2,488 | 1,612 | 1,384 |
| SEP | W | 3,846 | 3,415 | 3,130 |
|  | AN | 2,594 | 1,838 | 1,958 |
|  | BN | 2,205 | 1,402 | 1,179 |
|  | D | 1,691 | 987 | 979 |
|  | C | 1,011 | 427 | 529 |
|  | All | 2,495 | 1,870 | 1,773 |
| OCT | W | 1,607 | 1,499 | 1,351 |
|  | AN | 1,597 | 1,613 | 1,368 |
|  | BN | 1,472 | 1,617 | 1,897 |
|  | D | 1,344 | 1,114 | 1,189 |
|  | C | 1,342 | 1,517 | 1,335 |
|  | All | 1,486 | 1,454 | 1,409 |
| NOV | W | 3,472 | 2,540 | 2,430 |
|  | AN | 3,100 | 2,455 | 2,227 |
|  | BN | 1,990 | 1,618 | 1,470 |
|  | D | 2,094 | 1,326 | 1,397 |
|  | C | 1,897 | 1,489 | 1,459 |
|  | All | 2,632 | 1,950 | 1,867 |
| DEC | W | 6,255 | 6,115 | 5,954 |
|  | AN | 3,072 | 2,856 | 2,799 |
|  | BN | 2,609 | 2,445 | 2,364 |
|  | D | 1,675 | 1,275 | 1,292 |
|  | C | 1,443 | 1,158 | 1,140 |
|  | All | 3,457 | 3,224 | 3,152 |

Table 22. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 5: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 2,248 (25.7\%) | 35 (0.3\%) |
|  | AN | 856 (17.8\%) | -99 (-1.7\%) |
|  | BN | -413 (-17.7\%) | -75 (-3.8\%) |
|  | D | -348 (-21.1\%) | -118 (-8.3\%) |
|  | C | -278 (-19.8\%) | 117 (11.7\%) |
|  | All | 650 (14.6\%) | -25 (-0.5\%) |
| FEB | W | 1,766 (19.2\%) | 1 (0\%) |
|  | AN | 1,740 (27.1\%) | 90 (1.1\%) |
|  | BN | 465 (10.8\%) | -114 (-2.3\%) |
|  | D | 159 (8.9\%) | 183 (10.4\%) |
|  | C | -201 (-18\%) | -3 (-0.4\%) |
|  | All | 899 (17.5\%) | 34 (0.6\%) |
| MAR | W | 857 (14.3\%) | 0 (0\%) |
|  | AN | 305 (5.7\%) | 9 (0.2\%) |
|  | BN | 310 (13.3\%) | -23 (-0.9\%) |
|  | D | 63 (3\%) | -40 (-1.8\%) |
|  | C | -59 (-6.8\%) | -31 (-3.7\%) |
|  | All | 375 (10.2\%) | -16 (-0.4\%) |
| APR | W | 142 (2.8\%) | -2 (0\%) |
|  | AN | -305 (-9\%) | -1 (0\%) |
|  | BN | -218 (-7.3\%) | -12 (-0.4\%) |
|  | D | 63 (3.8\%) | 59 (3.5\%) |
|  | C | 108 (10.9\%) | 45 (4.2\%) |
|  | All | -7 (-0.2\%) | 17 (0.5\%) |
| MAY | W | -1,586 (-26.6\%) | 40 (0.9\%) |
|  | AN | -1,248 (-33.7\%) | 166 (7.3\%) |
|  | BN | -709 (-25.9\%) | 298 (17.3\%) |
|  | D | 106 (6.6\%) | 257 (17.7\%) |
|  | C | -209 (-20.6\%) | 14 (1.8\%) |
|  | All | -814 (-24\%) | 147 (6\%) |
| JUN | W | -1,825 (-31.8\%) | 529 (15.6\%) |
|  | AN | -41 (-1.3\%) | 326 (11.9\%) |
|  | BN | 503 (19.1\%) | 531 (20.4\%) |
|  | D | 267 (11.7\%) | 229 (9.9\%) |
|  | C | -382 (-23.6\%) | 447 (56.3\%) |
|  | All | -496 (-14.3\%) | 422 (16.6\%) |
| JUL | W | -253 (-6.6\%) | 31 (0.9\%) |
|  | AN | -245 (-5.6\%) | -482 (-10.4\%) |
|  | BN | -566 (-12.6\%) | -96 (-2.4\%) |
|  | D | -397 (-11.9\%) | 92 (3.2\%) |
|  | C | 569 (36.3\%) | 354 (19.8\%) |
|  | All | -217 (-6\%) | -5 (-0.2\%) |


| Alternative 5: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | -1,550 (-47.1\%) | -114 (-6.1\%) |
|  | AN | -597 (-25.8\%) | 53 (3.2\%) |
|  | BN | -629 (-27.8\%) | -412 (-20.1\%) |
|  | D | -1,371 (-57.3\%) | -333 (-24.6\%) |
|  | C | -798 (-60.8\%) | -384 (-42.7\%) |
|  | All | -1,104 (-44.4\%) | -228 (-14.1\%) |
| SEP | W | -716 (-18.6\%) | -285 (-8.3\%) |
|  | AN | -636 (-24.5\%) | 121 (6.6\%) |
|  | BN | -1,026 (-46.5\%) | -223 (-15.9\%) |
|  | D | -712 (-42.1\%) | -8 (-0.8\%) |
|  | C | -482 (-47.7\%) | 102 (23.8\%) |
|  | All | -722 (-28.9\%) | -98 (-5.2\%) |
| OCT | W | -256 (-15.9\%) | -147 (-9.8\%) |
|  | AN | -228 (-14.3\%) | -244 (-15.1\%) |
|  | BN | 425 (28.8\%) | 280 (17.3\%) |
|  | D | -155 (-11.5\%) | 75 (6.7\%) |
|  | C | -7 (-0.5\%) | -182 (-12\%) |
|  | All | -77 (-5.2\%) | -45 (-3.1\%) |
| NOV | W | -1,042 (-30\%) | -110 (-4.3\%) |
|  | AN | -873 (-28.2\%) | -228 (-9.3\%) |
|  | BN | -520 (-26.1\%) | -148 (-9.2\%) |
|  | D | -697 (-33.3\%) | 71 (5.4\%) |
|  | C | -438 (-23.1\%) | -30 (-2\%) |
|  | All | -764 (-29\%) | -82 (-4.2\%) |
| DEC | W | -301 (-4.8\%) | -160 (-2.6\%) |
|  | AN | -272 (-8.9\%) | -57 (-2\%) |
|  | BN | -245 (-9.4\%) | -81 (-3.3\%) |
|  | D | -383 (-22.9\%) | 17 (1.3\%) |
|  | C | -303 (-21\%) | -18 (-1.6\%) |
|  | All | -305 (-8.8\%) | -72 (-2.2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.5.1.12 Stanislaus River at the Confluence with the San Joaquin River

Table 23. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 5: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | $\mathbf{W Y T}^{\text {a }}$ | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 956 | 885 | 885 |
|  | AN | 843 | 963 | 963 |
|  | BN | 416 | 369 | 369 |
|  | D | 403 | 366 | 366 |
|  | C | 314 | 265 | 265 |
|  | All | 635 | 615 | 615 |
| FEB | W | 1,285 | 1,236 | 1,239 |
|  | AN | 917 | 858 | 858 |
|  | BN | 551 | 438 | 438 |
|  | D | 562 | 359 | 359 |
|  | C | 490 | 348 | 348 |
|  | All | 827 | 723 | 724 |
| MAR | W | 2,063 | 2,217 | 2,217 |
|  | AN | 1,295 | 956 | 956 |
|  | BN | 732 | 548 | 548 |
|  | D | 559 | 390 | 390 |
|  | C | 541 | 444 | 444 |
|  | All | 1,167 | 1,071 | 1,071 |
| APR | W | 2,054 | 1,965 | 1,965 |
|  | AN | 1,719 | 1,535 | 1,535 |
|  | BN | 1,494 | 1,211 | 1,211 |
|  | D | 1,438 | 1,199 | 1,198 |
|  | C | 823 | 670 | 670 |
|  | All | 1,562 | 1,387 | 1,387 |
| MAY | W | 1,653 | 1,613 | 1,614 |
|  | AN | 1,389 | 1,243 | 1,243 |
|  | BN | 1,238 | 898 | 898 |
|  | D | 1,140 | 916 | 916 |
|  | C | 715 | 627 | 626 |
|  | All | 1,271 | 1,125 | 1,124 |
| JUN | W | 1,608 | 1,763 | 1,761 |
|  | AN | 1,134 | 985 | 984 |
|  | BN | 663 | 568 | 567 |
|  | D | 447 | 364 | 365 |
|  | C | 332 | 296 | 292 |
|  | All | 932 | 914 | 912 |
| JUL | W | 1,064 | 1,080 | 1,080 |
|  | AN | 489 | 454 | 454 |
|  | BN | 450 | 425 | 425 |
|  | D | 398 | 359 | 360 |
|  | C | 337 | 310 | 311 |
|  | All | 607 | 590 | 590 |


| Alternative 5: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 930 | 717 | 717 |
|  | AN | 476 | 454 | 454 |
|  | BN | 423 | 418 | 418 |
|  | D | 387 | 382 | 382 |
|  | C | 341 | 338 | 338 |
|  | All | 560 | 491 | 491 |
| SEP | W | 1,040 | 863 | 863 |
|  | AN | 502 | 474 | 474 |
|  | BN | 417 | 407 | 407 |
|  | D | 395 | 390 | 390 |
|  | C | 324 | 317 | 330 |
|  | All | 595 | 533 | 536 |
| OCT | W | 897 | 845 | 846 |
|  | AN | 873 | 822 | 825 |
|  | BN | 903 | 844 | 844 |
|  | D | 984 | 925 | 925 |
|  | C | 689 | 612 | 613 |
|  | All | 867 | 808 | 808 |
| NOV | W | 426 | 408 | 408 |
|  | AN | 580 | 524 | 524 |
|  | BN | 341 | 334 | 334 |
|  | D | 345 | 321 | 321 |
|  | C | 325 | 308 | 308 |
|  | All | 410 | 386 | 386 |
| DEC | W | 512 | 429 | 418 |
|  | AN | 722 | 697 | 697 |
|  | BN | 331 | 353 | 353 |
|  | D | 317 | 294 | 294 |
|  | C | 289 | 272 | 272 |
|  | All | 450 | 417 | 414 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

## 1

Table 24. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 5: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | $\mathbf{W Y T}^{\text {b }}$ | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | -71 (-7.4\%) | 0 (0\%) |
|  | AN | 120 (14.3\%) | 0 (0\%) |
|  | BN | -47 (-11.3\%) | 0 (0\%) |
|  | D | -37 (-9.1\%) | 0 (0\%) |
|  | C | -49 (-15.5\%) | 0 (0\%) |
|  | All | -20 (-3.2\%) | 0 (0\%) |
| FEB | W | -46 (-3.6\%) | 3 (0.2\%) |
|  | AN | -59 (-6.4\%) | 0 (0\%) |
|  | BN | -113 (-20.6\%) | 0 (-0.1\%) |
|  | D | -203 (-36.1\%) | 0 (0\%) |
|  | C | -142 (-29\%) | 0 (0\%) |
|  | All | -103 (-12.4\%) | 1 (0.1\%) |
| MAR | W | 154 (7.5\%) | 0 (0\%) |
|  | AN | -339 (-26.2\%) | 0 (0\%) |
|  | BN | -185 (-25.2\%) | 0 (0\%) |
|  | D | -169 (-30.2\%) | 0 (0\%) |
|  | C | -97 (-17.9\%) | 0 (0\%) |
|  | All | -96 (-8.2\%) | 0 (0\%) |
| APR | W | -89 (-4.3\%) | 0 (0\%) |
|  | AN | -185 (-10.7\%) | 0 (0\%) |
|  | BN | -283 (-18.9\%) | 0 (0\%) |
|  | D | -240 (-16.7\%) | 0 (0\%) |
|  | C | -153 (-18.6\%) | 0 (0\%) |
|  | All | -175 (-11.2\%) | 0 (0\%) |
| MAY | W | -39 (-2.4\%) | 0 (0\%) |
|  | AN | -146 (-10.5\%) | 0 (0\%) |
|  | BN | -340 (-27.5\%) | 0 (0\%) |
|  | D | -225 (-19.7\%) | 0 (0\%) |
|  | C | -89 (-12.5\%) | -1 (-0.2\%) |
|  | All | -147 (-11.6\%) | 0 (0\%) |
| JUN | W | 154 (9.6\%) | -1 (-0.1\%) |
|  | AN | -150 (-13.2\%) | -1 (-0.1\%) |
|  | BN | -96 (-14.4\%) | -1 (-0.2\%) |
|  | D | -82 (-18.4\%) | 0 (0\%) |
|  | C | -39 (-11.9\%) | -3 (-1.1\%) |
|  | All | -20 (-2.2\%) | -1 (-0.1\%) |
| JUL | W | 16 (1.5\%) | 0 (0\%) |
|  | AN | -35 (-7.2\%) | 0 (0\%) |
|  | BN | -25 (-5.5\%) | 0 (0\%) |
|  | D | -38 (-9.6\%) | 0 (0.1\%) |
|  | C | -25 (-7.5\%) | 1 (0.3\%) |
|  | All | -17 (-2.8\%) | 0 (0\%) |


| Alternative 5: Upstream-Stanislaus River at the Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | -212 (-22.8\%) | 0 (0\%) |
|  | AN | -22 (-4.6\%) | 0 (0\%) |
|  | BN | -4 (-1\%) | 0 (0\%) |
|  | D | -5 (-1.2\%) | 0 (0\%) |
|  | C | -3 (-1\%) | 0 (0\%) |
|  | All | -68 (-12.2\%) | 0 (0\%) |
| SEP | W | -177 (-17\%) | 0 (0\%) |
|  | AN | -28 (-5.6\%) | 0 (0\%) |
|  | BN | -10 (-2.4\%) | 0 (0\%) |
|  | D | -5 (-1.3\%) | 0 (0\%) |
|  | C | 6 (1.9\%) | 14 (4.3\%) |
|  | All | -59 (-9.9\%) | 3 (0.5\%) |
| OCT | W | -52 (-5.8\%) | 0 (0.1\%) |
|  | AN | -49 (-5.6\%) | 2 (0.3\%) |
|  | BN | -59 (-6.5\%) | 0 (0\%) |
|  | D | -59 (-6\%) | 0 (0\%) |
|  | C | -76 (-11\%) | 0 (0.1\%) |
|  | All | -58 (-6.7\%) | 1 (0.1\%) |
| NOV | W | -18 (-4.3\%) | 0 (0\%) |
|  | AN | -56 (-9.7\%) | 0 (0\%) |
|  | BN | -8 (-2.3\%) | 0 (0\%) |
|  | D | -23 (-6.7\%) | 0 (0\%) |
|  | C | -16 (-5.1\%) | 0 (0\%) |
|  | All | -24 (-5.9\%) | 0 (0\%) |
| DEC | W | -94 (-18.4\%) | -11 (-2.5\%) |
|  | AN | -25 (-3.5\%) | 0 (0\%) |
|  | BN | 23 (6.8\%) | 0 (0\%) |
|  | D | -23 (-7.3\%) | 0 (0\%) |
|  | C | -16 (-5.7\%) | 0 (0\%) |
|  | All | -36 (-8\%) | -3 (-0.8\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
${ }^{\mathrm{b}}$ Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.5.2 In Delta

## 11C.5.2.1 OMR Flow (Old and Middle Rivers)

Table 25. Mean Monthly Flows (cfs) for Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 5: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | -1,820 | -1,606 | -1,023 |
|  | AN | -3,553 | -3,446 | -3,090 |
|  | BN | -4,240 | -3,803 | -3,734 |
|  | D | -4,664 | -4,675 | -3,865 |
|  | C | -4,130 | -3,684 | -2,540 |
|  | All | -3,449 | -3,228 | -2,634 |
| FEB | W | -2,365 | -2,293 | -1,070 |
|  | AN | -3,274 | -3,147 | -2,437 |
|  | BN | -3,437 | -3,290 | -2,698 |
|  | D | -3,986 | -3,502 | -3,338 |
|  | C | -3,191 | -3,047 | -3,157 |
|  | All | -3,158 | -2,964 | -2,351 |
| MAR | W | -1,600 | -1,454 | -272 |
|  | AN | -4,251 | -3,815 | -3,011 |
|  | BN | -4,147 | -3,834 | -3,387 |
|  | D | -2,852 | -2,614 | -2,412 |
|  | C | -2,010 | -1,636 | -1,639 |
|  | All | -2,758 | -2,487 | -1,874 |
| APR | W | 2,431 | 2,415 | 2,478 |
|  | AN | 1,058 | 787 | 794 |
|  | BN | 677 | 214 | -7 |
|  | D | -268 | -615 | -954 |
|  | C | -950 | -845 | -984 |
|  | All | 843 | 659 | 547 |
| MAY | W | 1,651 | 1,555 | 1,839 |
|  | AN | 509 | 396 | 415 |
|  | BN | 272 | -237 | -273 |
|  | D | -647 | -1,010 | -1,005 |
|  | C | -1,020 | -911 | -742 |
|  | All | 353 | 155 | 268 |
| JUN | W | -4,164 | -4,369 | -4,285 |
|  | AN | -4,761 | -4,454 | -4,250 |
|  | BN | -4,154 | -3,420 | -3,518 |
|  | D | -3,301 | -2,592 | -2,376 |
|  | C | -2,250 | -2,143 | -1,912 |
|  | All | -3,780 | -3,504 | -3,383 |


| Alternative 5: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JUL | W | -8,959 | -8,699 | -8,459 |
|  | AN | -9,919 | -7,962 | -8,381 |
|  | BN | -10,853 | -9,942 | -9,443 |
|  | D | -10,891 | -9,505 | -6,872 |
|  | C | -8,058 | -5,234 | -3,270 |
|  | All | -9,715 | -8,473 | -7,508 |
| AUG | W | -10,062 | -10,518 | -7,231 |
|  | AN | -10,348 | -10,985 | -8,718 |
|  | BN | -10,044 | -9,374 | -7,020 |
|  | D | -10,122 | -7,259 | -3,956 |
|  | C | -4,384 | -3,192 | -2,764 |
|  | All | -9,283 | -8,604 | -6,040 |
| SEP | W | -9,317 | -7,580 | -1,729 |
|  | AN | -9,163 | -9,002 | -2,100 |
|  | BN | -8,575 | -8,392 | -4,621 |
|  | D | -8,081 | -5,165 | -3,574 |
|  | C | -4,807 | -3,966 | -2,259 |
|  | All | -8,236 | -6,868 | -2,760 |
| OCT | W | -8,347 | -5,049 | -3,334 |
|  | AN | -7,643 | -3,648 | -2,779 |
|  | BN | -7,804 | -4,793 | -2,599 |
|  | D | -6,961 | -4,103 | -2,913 |
|  | C | -6,440 | -3,920 | -2,796 |
|  | All | -7,568 | -4,427 | -2,956 |
| NOV | W | -8,902 | -6,527 | -3,557 |
|  | AN | -7,264 | -6,003 | -3,685 |
|  | BN | -7,997 | -5,542 | -3,227 |
|  | D | -7,136 | -5,007 | -3,148 |
|  | C | -5,294 | -4,389 | -3,053 |
|  | All | -7,592 | -5,636 | -3,356 |
| DEC | W | -5,542 | -5,591 | -5,304 |
|  | AN | -6,987 | -7,050 | -6,790 |
|  | BN | -7,304 | -7,040 | -6,966 |
|  | D | -7,214 | -7,006 | -7,764 |
|  | C | -6,166 | -4,173 | -4,995 |
|  | All | -6,513 | -6,155 | -6,300 |

Table 26. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 5: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 796 (43.8\%) | 582 (36.3\%) |
|  | AN | 463 (13\%) | 356 (10.3\%) |
|  | BN | 506 (11.9\%) | 68 (1.8\%) |
|  | D | 799 (17.1\%) | 811 (17.3\%) |
|  | C | 1,590 (38.5\%) | 1,144 (31.1\%) |
|  | All | 814 (23.6\%) | 594 (18.4\%) |
| FEB | W | 1,295 (54.8\%) | 1,223 (53.3\%) |
|  | AN | 837 (25.6\%) | 710 (22.5\%) |
|  | BN | 739 (21.5\%) | 592 (18\%) |
|  | D | 648 (16.3\%) | 164 (4.7\%) |
|  | C | 34 (1.1\%) | -110 (-3.6\%) |
|  | All | 807 (25.5\%) | 613 (20.7\%) |
| MAR | W | 1,329 (83\%) | 1,182 (81.3\%) |
|  | AN | 1,240 (29.2\%) | 804 (21.1\%) |
|  | BN | 760 (18.3\%) | 447 (11.7\%) |
|  | D | 441 (15.5\%) | 202 (7.7\%) |
|  | C | 371 (18.5\%) | -3 (-0.2\%) |
|  | All | 884 (32\%) | 613 (24.6\%) |
| APR | W | 47 (1.9\%) | 63 (2.6\%) |
|  | AN | -264 (-25\%) | 7 (0.9\%) |
|  | BN | -684 (-101.1\%) | -221 (-103.3\%) |
|  | D | -686 (-256\%) | -339 (-55\%) |
|  | C | -34 (-3.5\%) | -139 (-16.4\%) |
|  | All | -296 (-35.1\%) | -111 (-16.9\%) |
| MAY | W | 188 (11.4\%) | 284 (18.2\%) |
|  | AN | -94 (-18.4\%) | 20 (5\%) |
|  | BN | -544 (-200.4\%) | -35 (-14.8\%) |
|  | D | -358 (-55.4\%) | 5 (0.5\%) |
|  | C | 278 (27.2\%) | 170 (18.6\%) |
|  | All | -85 (-24.1\%) | 113 (72.6\%) |
| JUN | W | -121 (-2.9\%) | 84 (1.9\%) |
|  | AN | 511 (10.7\%) | 204 (4.6\%) |
|  | BN | 636 (15.3\%) | -98 (-2.9\%) |
|  | D | 924 (28\%) | 215 (8.3\%) |
|  | C | 338 (15\%) | 231 (10.8\%) |
|  | All | 397 (10.5\%) | 121 (3.4\%) |
| JUL | W | 500 (5.6\%) | 240 (2.8\%) |
|  | AN | 1,538 (15.5\%) | -419 (-5.3\%) |
|  | BN | 1,410 (13\%) | 500 (5\%) |
|  | D | 4,019 (36.9\%) | 2,633 (27.7\%) |
|  | C | 4,787 (59.4\%) | 1,963 (37.5\%) |
|  | All | 2,207 (22.7\%) | 965 (11.4\%) |


| Alternative 5: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5 LLT | NAA vs. A5_LLT |
| AUG | W | 2,831 (28.1\%) | 3,287 (31.3\%) |
|  | AN | 1,630 (15.8\%) | 2,266 (20.6\%) |
|  | BN | 3,024 (30.1\%) | 2,354 (25.1\%) |
|  | D | 6,166 (60.9\%) | 3,303 (45.5\%) |
|  | C | 1,621 (37\%) | 428 (13.4\%) |
|  | All | 3,243 (34.9\%) | 2,564 (29.8\%) |
| SEP | W | 7,587 (81.4\%) | 5,851 (77.2\%) |
|  | AN | 7,063 (77.1\%) | 6,902 (76.7\%) |
|  | BN | 3,954 (46.1\%) | 3,771 (44.9\%) |
|  | D | 4,507 (55.8\%) | 1,591 (30.8\%) |
|  | C | 2,548 (53\%) | 1,707 (43\%) |
|  | All | 5,477 (66.5\%) | 4,108 (59.8\%) |
| OCT | W | 5,013 (60.1\%) | 1,715 (34\%) |
|  | AN | 4,864 (63.6\%) | 869 (23.8\%) |
|  | BN | 5,205 (66.7\%) | 2,194 (45.8\%) |
|  | D | 4,048 (58.1\%) | 1,190 (29\%) |
|  | C | 3,644 (56.6\%) | 1,124 (28.7\%) |
|  | All | 4,612 (60.9\%) | 1,471 (33.2\%) |
| NOV | W | 5,345 (60\%) | 2,970 (45.5\%) |
|  | AN | 3,580 (49.3\%) | 2,319 (38.6\%) |
|  | BN | 4,770 (59.6\%) | 2,315 (41.8\%) |
|  | D | 3,988 (55.9\%) | 1,858 (37.1\%) |
|  | C | 2,241 (42.3\%) | 1,336 (30.4\%) |
|  | All | 4,236 (55.8\%) | 2,280 (40.5\%) |
| DEC | W | 237 (4.3\%) | 287 (5.1\%) |
|  | AN | 198 (2.8\%) | 260 (3.7\%) |
|  | BN | 338 (4.6\%) | 75 (1.1\%) |
|  | D | -550 (-7.6\%) | -758 (-10.8\%) |
|  | C | 1,171 (19\%) | -822 (-19.7\%) |
|  | All | 212 (3.3\%) | -145 (-2.4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.5.2.2 Sacramento River Downstream of North Delta Diversion Facility

Table 27. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 5: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 50,961 | 52,878 | 49,145 |
|  | AN | 39,863 | 40,484 | 36,016 |
|  | BN | 23,781 | 22,653 | 20,282 |
|  | D | 17,444 | 17,451 | 15,591 |
|  | C | 14,281 | 15,073 | 13,962 |
|  | All | 31,971 | 32,595 | 29,782 |
| FEB | W | 57,314 | 59,847 | 55,715 |
|  | AN | 45,676 | 47,786 | 43,788 |
|  | BN | 31,934 | 31,592 | 27,821 |
|  | D | 21,202 | 21,107 | 19,346 |
|  | C | 14,708 | 14,291 | 13,500 |
|  | All | 37,116 | 38,087 | 35,046 |
| MAR | W | 49,416 | 50,993 | 45,934 |
|  | AN | 44,495 | 45,088 | 40,636 |
|  | BN | 24,489 | 22,915 | 19,149 |
|  | D | 20,656 | 20,650 | 17,944 |
|  | C | 13,245 | 13,137 | 12,499 |
|  | All | 32,834 | 33,134 | 29,549 |
| APR | W | 37,809 | 37,543 | 32,697 |
|  | AN | 25,979 | 24,931 | 21,217 |
|  | BN | 17,752 | 17,128 | 15,607 |
|  | D | 12,990 | 12,904 | 12,406 |
|  | C | 10,229 | 10,365 | 10,469 |
|  | All | 23,169 | 22,826 | 20,392 |
| MAY | W | 31,948 | 24,500 | 22,146 |
|  | AN | 21,021 | 18,657 | 17,335 |
|  | BN | 14,227 | 12,394 | 11,993 |
|  | D | 10,959 | 11,427 | 11,775 |
|  | C | 7,749 | 8,011 | 7,608 |
|  | All | 19,175 | 16,295 | 15,304 |
| JUN | W | 23,900 | 18,603 | 18,047 |
|  | AN | 16,309 | 16,051 | 15,515 |
|  | BN | 13,576 | 13,898 | 14,335 |
|  | D | 12,222 | 12,656 | 12,430 |
|  | C | 9,884 | 10,123 | 9,541 |
|  | All | 16,412 | 14,880 | 14,565 |
| JUL | W | 19,876 | 21,425 | 19,907 |
|  | AN | 21,574 | 22,727 | 20,932 |
|  | BN | 20,953 | 20,513 | 19,596 |
|  | D | 19,272 | 18,957 | 15,476 |
|  | C | 15,397 | 13,767 | 11,440 |
|  | All | 19,520 | 19,797 | 17,792 |


| Alternative 5: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 15,816 | 16,064 | 12,305 |
|  | AN | 15,877 | 17,491 | 14,430 |
|  | BN | 15,643 | 16,232 | 13,100 |
|  | D | 16,965 | 14,351 | 9,655 |
|  | C | 10,095 | 8,996 | 7,954 |
|  | All | 15,210 | 14,891 | 11,533 |
| SEP | W | 18,254 | 27,212 | 21,999 |
|  | AN | 13,198 | 21,006 | 14,678 |
|  | BN | 12,427 | 12,306 | 8,230 |
|  | D | 12,155 | 8,620 | 7,705 |
|  | C | 8,485 | 7,292 | 8,144 |
|  | All | 13,751 | 16,763 | 13,412 |
| OCT | W | 13,505 | 13,277 | 11,391 |
|  | AN | 11,118 | 11,864 | 11,581 |
|  | BN | 11,557 | 12,124 | 12,374 |
|  | D | 10,279 | 10,487 | 9,765 |
|  | C | 10,073 | 9,964 | 10,341 |
|  | All | 11,613 | 11,776 | 11,076 |
| NOV | W | 19,447 | 19,285 | 16,257 |
|  | AN | 15,309 | 15,925 | 12,551 |
|  | BN | 12,574 | 13,037 | 10,073 |
|  | D | 12,868 | 11,914 | 10,387 |
|  | C | 9,633 | 9,295 | 8,183 |
|  | All | 14,788 | 14,647 | 12,189 |
| DEC | W | 39,708 | 37,022 | 33,322 |
|  | AN | 21,663 | 22,629 | 21,261 |
|  | BN | 16,678 | 16,692 | 15,769 |
|  | D | 15,442 | 15,159 | 14,862 |
|  | C | 11,816 | 10,632 | 10,796 |
|  | All | 23,727 | 22,784 | 21,211 |

Table 28. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios for the Sacramento
River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 5: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | -1,816 (-3.6\%) | -3,733 (-7.1\%) |
|  | AN | -3,847 (-9.6\%) | -4,468 (-11\%) |
|  | BN | -3,499 (-14.7\%) | -2,370 (-10.5\%) |
|  | D | -1,852 (-10.6\%) | -1,859 (-10.7\%) |
|  | C | -319 (-2.2\%) | -1,111 (-7.4\%) |
|  | All | -2,189 (-6.8\%) | -2,813 (-8.6\%) |
| FEB | W | -1,599 (-2.8\%) | -4,132 (-6.9\%) |
|  | AN | -1,888 (-4.1\%) | -3,998 (-8.4\%) |
|  | BN | -4,113 (-12.9\%) | -3,771 (-11.9\%) |
|  | D | -1,855 (-8.8\%) | -1,761 (-8.3\%) |
|  | C | -1,207 (-8.2\%) | -790 (-5.5\%) |
|  | All | -2,070 (-5.6\%) | -3,041 (-8\%) |
| MAR | W | -3,482 (-7\%) | -5,059 (-9.9\%) |
|  | AN | -3,860 (-8.7\%) | -4,453 (-9.9\%) |
|  | BN | -5,339 (-21.8\%) | -3,765 (-16.4\%) |
|  | D | -2,712 (-13.1\%) | -2,706 (-13.1\%) |
|  | C | -746 (-5.6\%) | -638 (-4.9\%) |
|  | All | -3,285 (-10\%) | -3,586 (-10.8\%) |
| APR | W | -5,112 (-13.5\%) | -4,846 (-12.9\%) |
|  | AN | -4,761 (-18.3\%) | -3,714 (-14.9\%) |
|  | BN | -2,144 (-12.1\%) | -1,521 (-8.9\%) |
|  | D | -584 (-4.5\%) | -498 (-3.9\%) |
|  | C | 240 (2.3\%) | 104 (1\%) |
|  | All | -2,777 (-12\%) | -2,434 (-10.7\%) |
| MAY | W | -9,802 (-30.7\%) | -2,355 (-9.6\%) |
|  | AN | -3,685 (-17.5\%) | -1,321 (-7.1\%) |
|  | BN | -2,234 (-15.7\%) | -401 (-3.2\%) |
|  | D | 816 (7.4\%) | 349 (3.1\%) |
|  | C | -141 (-1.8\%) | -403 (-5\%) |
|  | All | -3,870 (-20.2\%) | -991 (-6.1\%) |
| JUN | W | -5,853 (-24.5\%) | -556 (-3\%) |
|  | AN | -794 (-4.9\%) | -537 (-3.3\%) |
|  | BN | 760 (5.6\%) | 438 (3.1\%) |
|  | D | 207 (1.7\%) | -226 (-1.8\%) |
|  | C | -343 (-3.5\%) | -582 (-5.7\%) |
|  | All | -1,847 (-11.3\%) | -315 (-2.1\%) |
| JUL | W | 31 (0.2\%) | -1,519 (-7.1\%) |
|  | AN | -642 (-3\%) | -1,795 (-7.9\%) |
|  | BN | -1,357 (-6.5\%) | -917 (-4.5\%) |
|  | D | -3,796 (-19.7\%) | -3,481 (-18.4\%) |
|  | C | -3,957 (-25.7\%) | -2,327 (-16.9\%) |
|  | All | -1,728 (-8.9\%) | -2,005 (-10.1\%) |


| Alternative 5: In Delta一Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{c}\text { EXISTING CONDITIONS } \\ \text { vs. A5_LLT }\end{array}$ | NAA vs. A5_LLT |
|  | W | $-3,510(-22.2 \%)$ | $-3,758(-23.4 \%)$ |
|  | AN | $-1,447(-9.1 \%)$ | $-3,061(-17.5 \%)$ |
|  | BN | $-2,542(-16.3 \%)$ | $-3,132(-19.3 \%)$ |
|  | D | $-7,310(-43.1 \%)$ | $-4,696(-32.7 \%)$ |
|  | C | $-2,141(-21.2 \%)$ | $-1,042(-11.6 \%)$ |
|  | All | W | $-3,677(-24.2 \%)$ |$]-3,358(-22.5 \%)$

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.5.2.3 Sacramento River at Rio Vista

Table 29. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 5: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 71,111 | 78,551 | 76,732 |
|  | AN | 41,963 | 42,919 | 40,528 |
|  | BN | 20,943 | 19,991 | 19,579 |
|  | D | 14,895 | 14,927 | 13,900 |
|  | C | 11,853 | 12,601 | 12,041 |
|  | All | 37,268 | 39,721 | 38,417 |
| FEB | W | 80,958 | 89,989 | 89,015 |
|  | AN | 52,542 | 55,363 | 54,425 |
|  | BN | 30,159 | 29,442 | 27,886 |
|  | D | 19,320 | 19,422 | 18,796 |
|  | C | 12,247 | 11,956 | 11,737 |
|  | All | 44,541 | 47,675 | 46,794 |
| MAR | W | 63,763 | 68,663 | 66,357 |
|  | AN | 46,750 | 48,513 | 47,699 |
|  | BN | 20,980 | 19,562 | 17,492 |
|  | D | 17,656 | 17,679 | 16,414 |
|  | C | 10,710 | 10,684 | 10,532 |
|  | All | 36,084 | 37,655 | 36,151 |
| APR | W | 38,214 | 38,422 | 36,318 |
|  | AN | 22,726 | 21,855 | 20,085 |
|  | BN | 14,652 | 14,207 | 13,401 |
|  | D | 10,331 | 10,299 | 10,056 |
|  | C | 7,665 | 7,816 | 8,017 |
|  | All | 21,333 | 21,211 | 20,123 |
| MAY | W | 26,933 | 20,046 | 18,097 |
|  | AN | 17,008 | 14,948 | 13,904 |
|  | BN | 10,924 | 9,355 | 9,094 |
|  | D | 8,135 | 8,564 | 8,956 |
|  | C | 5,305 | 5,554 | 5,307 |
|  | All | 15,456 | 12,833 | 12,068 |
| JUN | W | 16,557 | 11,418 | 10,893 |
|  | AN | 9,887 | 9,220 | 8,881 |
|  | BN | 7,001 | 7,241 | 7,638 |
|  | D | 6,020 | 6,335 | 6,239 |
|  | C | 4,333 | 4,513 | 4,192 |
|  | All | 9,847 | 8,257 | 8,041 |
| JUL | W | 11,125 | 12,181 | 10,898 |
|  | AN | 12,128 | 12,927 | 11,648 |
|  | BN | 11,686 | 11,357 | 10,706 |
|  | D | 10,523 | 10,307 | 7,872 |
|  | C | 7,736 | 6,596 | 5,024 |
|  | All | 10,739 | 10,921 | 9,451 |


| Alternative 5: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 8,507 | 8,650 | 5,994 |
|  | AN | 8,538 | 9,648 | 7,473 |
|  | BN | 8,371 | 8,753 | 6,548 |
|  | D | 9,264 | 7,417 | 4,182 |
|  | C | 4,390 | 3,615 | 3,108 |
|  | All | 8,052 | 7,806 | 5,485 |
| SEP | W | 10,767 | 21,199 | 14,068 |
|  | AN | 6,788 | 12,832 | 7,920 |
|  | BN | 6,283 | 6,197 | 3,397 |
|  | D | 6,116 | 3,644 | 3,038 |
|  | C | 3,588 | 2,996 | 3,496 |
|  | All | 7,348 | 10,896 | 7,378 |
| OCT | W | 8,718 | 8,287 | 6,855 |
|  | AN | 6,183 | 7,207 | 7,148 |
|  | BN | 6,258 | 6,976 | 7,564 |
|  | D | 5,312 | 5,727 | 5,220 |
|  | C | 5,215 | 4,969 | 5,410 |
|  | All | 6,667 | 6,858 | 6,448 |
| NOV | W | 15,829 | 15,879 | 13,205 |
|  | AN | 11,333 | 12,156 | 9,112 |
|  | BN | 8,184 | 9,071 | 6,423 |
|  | D | 8,733 | 8,061 | 6,736 |
|  | C | 5,473 | 5,565 | 4,600 |
|  | All | 10,793 | 10,946 | 8,769 |
| DEC | W | 43,367 | 40,431 | 39,535 |
|  | AN | 19,040 | 19,936 | 18,938 |
|  | BN | 13,987 | 14,049 | 13,308 |
|  | D | 11,999 | 11,687 | 11,724 |
|  | C | 8,131 | 7,186 | 7,461 |
|  | All | 22,749 | 21,753 | 21,244 |

Table 30. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Rio Vista, Year-Round

\left.| Alternative 5: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | EXISTING CONDITIONS |  |  |
|  |  |  |  |$\right)$


| Alternative 5: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | -2,513 (-29.5\%) | -2,656 (-30.7\%) |
|  | AN | -1,064 (-12.5\%) | -2,175 (-22.5\%) |
|  | BN | -1,823 (-21.8\%) | -2,205 (-25.2\%) |
|  | D | -5,082 (-54.9\%) | -3,234 (-43.6\%) |
|  | C | -1,282 (-29.2\%) | -507 (-14\%) |
|  | All | -2,567 (-31.9\%) | -2,321 (-29.7\%) |
| SEP | W | 3,301 (30.7\%) | -7,131 (-33.6\%) |
|  | AN | 1,132 (16.7\%) | -4,912 (-38.3\%) |
|  | BN | -2,886 (-45.9\%) | -2,800 (-45.2\%) |
|  | D | -3,078 (-50.3\%) | -606 (-16.6\%) |
|  | C | -92 (-2.6\%) | 500 (16.7\%) |
|  | All | 30 (0.4\%) | -3,518 (-32.3\%) |
| OCT | W | -1,863 (-21.4\%) | -1,432 (-17.3\%) |
|  | AN | 965 (15.6\%) | -60 (-0.8\%) |
|  | BN | 1,305 (20.9\%) | 588 (8.4\%) |
|  | D | -92 (-1.7\%) | -507 (-8.9\%) |
|  | C | 195 (3.7\%) | 441 (8.9\%) |
|  | All | -218 (-3.3\%) | -409 (-6\%) |
| NOV | W | -2,624 (-16.6\%) | -2,674 (-16.8\%) |
|  | AN | -2,221 (-19.6\%) | -3,044 (-25\%) |
|  | BN | -1,761 (-21.5\%) | -2,647 (-29.2\%) |
|  | D | -1,997 (-22.9\%) | -1,325 (-16.4\%) |
|  | C | -873 (-16\%) | -965 (-17.3\%) |
|  | All | -2,024 (-18.8\%) | -2,177 (-19.9\%) |
| DEC | W | -3,832 (-8.8\%) | -897 (-2.2\%) |
|  | AN | -102 (-0.5\%) | -998 (-5\%) |
|  | BN | -680 (-4.9\%) | -742 (-5.3\%) |
|  | D | -275 (-2.3\%) | 37 (0.3\%) |
|  | C | -670 (-8.2\%) | 276 (3.8\%) |
|  | All | -1,504 (-6.6\%) | -509 (-2.3\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.5.2.4 Delta Outflow

Table 31. Mean Monthly Flows (cfs) for Model Scenarios at the Delta Outflow, Year-Round

| Alternative 5: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 85,900 | 94,620 | 92,918 |
|  | AN | 49,448 | 51,100 | 48,498 |
|  | BN | 22,968 | 22,301 | 21,633 |
|  | D | 14,736 | 14,732 | 14,337 |
|  | C | 11,343 | 12,651 | 13,186 |
|  | All | 43,289 | 46,372 | 45,329 |
| FEB | W | 96,835 | 107,085 | 106,883 |
|  | AN | 62,321 | 65,873 | 65,157 |
|  | BN | 36,766 | 36,084 | 34,621 |
|  | D | 20,915 | 21,461 | 20,803 |
|  | C | 12,991 | 12,798 | 12,302 |
|  | All | 52,594 | 56,338 | 55,703 |
| MAR | W | 78,956 | 84,471 | 82,780 |
|  | AN | 54,171 | 56,737 | 56,211 |
|  | BN | 24,029 | 22,467 | 20,387 |
|  | D | 19,880 | 19,985 | 18,580 |
|  | C | 11,911 | 12,215 | 11,991 |
|  | All | 43,172 | 45,097 | 43,787 |
| APR | W | 54,394 | 54,562 | 51,869 |
|  | AN | 31,975 | 30,576 | 28,304 |
|  | BN | 21,928 | 20,641 | 19,390 |
|  | D | 14,142 | 13,413 | 12,737 |
|  | C | 9,053 | 9,294 | 9,293 |
|  | All | 30,099 | 29,603 | 28,055 |
| MAY | W | 41,040 | 32,880 | 30,921 |
|  | AN | 24,200 | 21,709 | 20,477 |
|  | BN | 16,299 | 13,596 | 13,223 |
|  | D | 10,487 | 10,375 | 10,742 |
|  | C | 6,000 | 6,286 | 6,113 |
|  | All | 22,517 | 19,121 | 18,311 |
| JUN | W | 23,451 | 15,640 | 15,255 |
|  | AN | 11,801 | 10,676 | 10,452 |
|  | BN | 8,004 | 8,943 | 9,354 |
|  | D | 6,636 | 7,689 | 7,785 |
|  | C | 5,322 | 5,632 | 5,373 |
|  | All | 12,765 | 10,560 | 10,459 |
| JUL | W | 11,441 | 11,407 | 10,126 |
|  | AN | 9,430 | 12,225 | 9,951 |
|  | BN | 7,151 | 7,668 | 7,272 |
|  | D | 5,024 | 6,448 | 5,888 |
|  | C | 4,238 | 5,832 | 5,552 |
|  | All | 7,951 | 8,984 | 8,014 |


| Alternative 5: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 5,341 | 4,308 | 4,083 |
|  | AN | 4,000 | 4,713 | 4,107 |
|  | BN | 4,000 | 5,129 | 4,576 |
|  | D | 4,829 | 5,348 | 4,230 |
|  | C | 4,077 | 4,433 | 3,871 |
|  | All | 4,618 | 4,754 | 4,172 |
| SEP | W | 9,569 | 20,078 | 21,214 |
|  | AN | 3,672 | 11,581 | 12,809 |
|  | BN | 3,445 | 3,428 | 3,513 |
|  | D | 3,350 | 3,021 | 3,885 |
|  | C | 3,000 | 3,036 | 5,691 |
|  | All | 5,334 | 9,754 | 10,886 |
| OCT | W | 6,487 | 9,520 | 9,497 |
|  | AN | 4,021 | 8,982 | 9,662 |
|  | BN | 4,477 | 8,054 | 10,743 |
|  | D | 4,157 | 7,294 | 7,940 |
|  | C | 4,158 | 6,607 | 8,289 |
|  | All | 4,931 | 8,276 | 9,215 |
| NOV | W | 14,232 | 15,987 | 16,183 |
|  | AN | 9,683 | 11,529 | 10,711 |
|  | BN | 5,864 | 8,681 | 8,337 |
|  | D | 6,943 | 8,052 | 8,615 |
|  | C | 5,045 | 5,725 | 6,083 |
|  | All | 9,193 | 10,844 | 10,903 |
| DEC | W | 48,185 | 45,191 | 44,095 |
|  | AN | 18,014 | 19,119 | 18,315 |
|  | BN | 11,950 | 12,231 | 11,411 |
|  | D | 8,884 | 8,828 | 8,014 |
|  | C | 5,531 | 6,560 | 5,944 |
|  | All | 22,714 | 22,113 | 21,239 |

Table 32. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios at the Delta Outflow, Year-Round

| Alternative 5: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 7,018 (8.2\%) | -1,702 (-1.8\%) |
|  | AN | -949 (-1.9\%) | -2,602 (-5.1\%) |
|  | BN | -1,335 (-5.8\%) | -668 (-3\%) |
|  | D | -398 (-2.7\%) | -395 (-2.7\%) |
|  | C | 1,843 (16.3\%) | 535 (4.2\%) |
|  | All | 2,041 (4.7\%) | -1,043 (-2.2\%) |
| FEB | W | 10,048 (10.4\%) | -203 (-0.2\%) |
|  | AN | 2,836 (4.6\%) | -716 (-1.1\%) |
|  | BN | -2,145 (-5.8\%) | -1,463 (-4.1\%) |
|  | D | -112 (-0.5\%) | -658 (-3.1\%) |
|  | C | -689 (-5.3\%) | -496 (-3.9\%) |
|  | All | 3,109 (5.9\%) | -636 (-1.1\%) |
| MAR | W | 3,824 (4.8\%) | -1,692 (-2\%) |
|  | AN | 2,040 (3.8\%) | -527 (-0.9\%) |
|  | BN | -3,642 (-15.2\%) | -2,080 (-9.3\%) |
|  | D | -1,301 (-6.5\%) | -1,406 (-7\%) |
|  | C | 80 (0.7\%) | -224 (-1.8\%) |
|  | All | 615 (1.4\%) | -1,310 (-2.9\%) |
| APR | W | -2,525 (-4.6\%) | -2,693 (-4.9\%) |
|  | AN | -3,671 (-11.5\%) | -2,272 (-7.4\%) |
|  | BN | -2,538 (-11.6\%) | -1,251 (-6.1\%) |
|  | D | -1,405 (-9.9\%) | -676 (-5\%) |
|  | C | 239 (2.6\%) | -1 (0\%) |
|  | All | -2,044 (-6.8\%) | -1,548 (-5.2\%) |
| MAY | W | -10,118 (-24.7\%) | -1,959 (-6\%) |
|  | AN | -3,722 (-15.4\%) | -1,232 (-5.7\%) |
|  | BN | -3,076 (-18.9\%) | -373 (-2.7\%) |
|  | D | 255 (2.4\%) | 367 (3.5\%) |
|  | C | 114 (1.9\%) | -172 (-2.7\%) |
|  | All | -4,206 (-18.7\%) | -810 (-4.2\%) |
| JUN | W | -8,196 (-34.9\%) | -385 (-2.5\%) |
|  | AN | -1,349 (-11.4\%) | -224 (-2.1\%) |
|  | BN | 1,350 (16.9\%) | 411 (4.6\%) |
|  | D | 1,149 (17.3\%) | 96 (1.2\%) |
|  | C | 51 (1\%) | -259 (-4.6\%) |
|  | All | -2,306 (-18.1\%) | -101 (-1\%) |
| JUL | W | -1,315 (-11.5\%) | -1,281 (-11.2\%) |
|  | AN | 521 (5.5\%) | -2,273 (-18.6\%) |
|  | BN | 122 (1.7\%) | -395 (-5.2\%) |
|  | D | 864 (17.2\%) | -560 (-8.7\%) |
|  | C | 1,314 (31\%) | -280 (-4.8\%) |
|  | All | 62 (0.8\%) | -970 (-10.8\%) |


| Alternative 5: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | -1,257 (-23.5\%) | -225 (-5.2\%) |
|  | AN | 107 (2.7\%) | -607 (-12.9\%) |
|  | BN | 576 (14.4\%) | -553 (-10.8\%) |
|  | D | -599 (-12.4\%) | -1,118 (-20.9\%) |
|  | C | -206 (-5.1\%) | -562 (-12.7\%) |
|  | All | -446 (-9.7\%) | -582 (-12.2\%) |
| SEP | W | 11,645 (121.7\%) | 1,136 (5.7\%) |
|  | AN | 9,137 (248.8\%) | 1,227 (10.6\%) |
|  | BN | 68 (2\%) | 85 (2.5\%) |
|  | D | 535 (16\%) | 864 (28.6\%) |
|  | C | 2,691 (89.7\%) | 2,655 (87.5\%) |
|  | All | 5,552 (104.1\%) | 1,133 (11.6\%) |
| OCT | W | 3,010 (46.4\%) | -23 (-0.2\%) |
|  | AN | 5,641 (140.3\%) | 680 (7.6\%) |
|  | BN | 6,266 (140\%) | 2,689 (33.4\%) |
|  | D | 3,783 (91\%) | 646 (8.9\%) |
|  | C | 4,131 (99.4\%) | 1,682 (25.5\%) |
|  | All | 4,285 (86.9\%) | 939 (11.4\%) |
| NOV | W | 1,951 (13.7\%) | 195 (1.2\%) |
|  | AN | 1,028 (10.6\%) | -817 (-7.1\%) |
|  | BN | 2,472 (42.2\%) | -345 (-4\%) |
|  | D | 1,672 (24.1\%) | 563 (7\%) |
|  | C | 1,039 (20.6\%) | 358 (6.3\%) |
|  | All | 1,710 (18.6\%) | 59 (0.5\%) |
| DEC | W | -4,090 (-8.5\%) | -1,096 (-2.4\%) |
|  | AN | 301 (1.7\%) | -804 (-4.2\%) |
|  | BN | -539 (-4.5\%) | -820 (-6.7\%) |
|  | D | -871 (-9.8\%) | -814 (-9.2\%) |
|  | C | 413 (7.5\%) | -616 (-9.4\%) |
|  | All | -1,476 (-6.5\%) | -874 (-4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.5.2.5 San Joaquin River at Vernalis

Table 33. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 5: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 9,089 | 9,681 | 9,742 |
|  | AN | 5,447 | 6,011 | 5,991 |
|  | BN | 2,326 | 2,220 | 2,238 |
|  | D | 2,270 | 2,202 | 2,224 |
|  | C | 1,667 | 1,592 | 1,592 |
|  | All | 4,777 | 5,018 | 5,038 |
| FEB | W | 12,750 | 13,191 | 13,199 |
|  | AN | 6,965 | 6,721 | 6,683 |
|  | BN | 2,983 | 2,841 | 2,832 |
|  | D | 2,590 | 2,269 | 2,269 |
|  | C | 2,120 | 1,941 | 1,942 |
|  | All | 6,388 | 6,361 | 6,355 |
| MAR | W | 14,374 | 15,235 | 15,234 |
|  | AN | 6,284 | 6,364 | 6,365 |
|  | BN | 2,949 | 2,476 | 2,476 |
|  | D | 2,479 | 2,146 | 2,146 |
|  | C | 1,813 | 1,688 | 1,688 |
|  | All | 6,648 | 6,763 | 6,763 |
| APR | W | 11,955 | 12,457 | 12,458 |
|  | AN | 6,014 | 6,042 | 6,043 |
|  | BN | 4,490 | 3,922 | 3,924 |
|  | D | 3,656 | 3,112 | 3,112 |
|  | C | 1,983 | 1,796 | 1,796 |
|  | All | 6,351 | 6,291 | 6,291 |
| MAY | W | 12,109 | 12,632 | 12,634 |
|  | AN | 5,381 | 5,092 | 5,093 |
|  | BN | 4,074 | 3,657 | 3,659 |
|  | D | 3,308 | 2,823 | 2,824 |
|  | C | 1,964 | 1,798 | 1,797 |
|  | All | 6,148 | 6,069 | 6,070 |
| JUN | W | 11,058 | 6,820 | 6,819 |
|  | AN | 2,965 | 2,678 | 2,680 |
|  | BN | 2,051 | 1,870 | 1,873 |
|  | D | 1,537 | 1,291 | 1,292 |
|  | C | 1,020 | 956 | 956 |
|  | All | 4,583 | 3,206 | 3,207 |
| JUL | W | 7,654 | 4,345 | 4,347 |
|  | AN | 1,958 | 1,801 | 1,805 |
|  | BN | 1,491 | 1,381 | 1,387 |
|  | D | 1,295 | 1,100 | 1,102 |
|  | C | 898 | 858 | 858 |
|  | All | 3,239 | 2,184 | 2,186 |


| Alternative 5: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 3,539 | 2,645 | 2,646 |
|  | AN | 2,000 | 1,699 | 1,702 |
|  | BN | 1,460 | 1,375 | 1,379 |
|  | D | 1,375 | 1,225 | 1,226 |
|  | C | 1,007 | 987 | 987 |
|  | All | 2,072 | 1,710 | 1,712 |
| SEP | W | 3,519 | 3,127 | 3,128 |
|  | AN | 2,355 | 2,164 | 2,166 |
|  | BN | 1,829 | 1,748 | 1,750 |
|  | D | 1,796 | 1,643 | 1,643 |
|  | C | 1,402 | 1,378 | 1,380 |
|  | All | 2,338 | 2,144 | 2,145 |
| OCT | W | 2,760 | 2,726 | 2,712 |
|  | AN | 2,745 | 2,595 | 2,585 |
|  | BN | 2,502 | 2,348 | 2,348 |
|  | D | 2,945 | 2,790 | 2,792 |
|  | C | 2,213 | 2,031 | 2,031 |
|  | All | 2,639 | 2,515 | 2,509 |
| NOV | W | 2,534 | 2,411 | 2,418 |
|  | AN | 3,182 | 3,193 | 3,132 |
|  | BN | 2,150 | 1,997 | 2,029 |
|  | D | 2,272 | 2,217 | 2,252 |
|  | C | 1,968 | 1,898 | 1,898 |
|  | All | 2,448 | 2,367 | 2,368 |
| DEC | W | 4,370 | 4,504 | 4,559 |
|  | AN | 4,711 | 4,567 | 4,594 |
|  | BN | 2,182 | 2,065 | 2,072 |
|  | D | 2,129 | 2,166 | 2,179 |
|  | C | 1,729 | 1,694 | 1,694 |
|  | All | 3,219 | 3,211 | 3,235 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

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Table 34. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 5: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 653 (7.2\%) | 61 (0.6\%) |
|  | AN | 544 (10\%) | -19 (-0.3\%) |
|  | BN | -88 (-3.8\%) | 18 (0.8\%) |
|  | D | -46 (-2\%) | 22 (1\%) |
|  | C | -75 (-4.5\%) | 0 (0\%) |
|  | All | 261 (5.5\%) | 20 (0.4\%) |
| FEB | W | 449 (3.5\%) | 8 (0.1\%) |
|  | AN | -282 (-4\%) | -38 (-0.6\%) |
|  | BN | -150 (-5\%) | -8 (-0.3\%) |
|  | D | -321 (-12.4\%) | 0 (0\%) |
|  | C | -178 (-8.4\%) | 1 (0\%) |
|  | All | -33 (-0.5\%) | -6 (-0.1\%) |
| MAR | W | 860 (6\%) | -1 (0\%) |
|  | AN | 81 (1.3\%) | 0 (0\%) |
|  | BN | -473 (-16\%) | 0 (0\%) |
|  | D | -333 (-13.4\%) | 0 (0\%) |
|  | C | -125 (-6.9\%) | 0 (0\%) |
|  | All | 115 (1.7\%) | 0 (0\%) |
| APR | W | 504 (4.2\%) | 1 (0\%) |
|  | AN | 29 (0.5\%) | 1 (0\%) |
|  | BN | -567 (-12.6\%) | 1 (0\%) |
|  | D | -545 (-14.9\%) | 0 (0\%) |
|  | C | -187 (-9.4\%) | 0 (0\%) |
|  | All | -60 (-0.9\%) | 1 (0\%) |
| MAY | W | 525 (4.3\%) | 2 (0\%) |
|  | AN | -289 (-5.4\%) | 0 (0\%) |
|  | BN | -414 (-10.2\%) | 3 (0.1\%) |
|  | D | -485 (-14.6\%) | 1 (0\%) |
|  | C | -168 (-8.5\%) | -1 (-0.1\%) |
|  | All | -78 (-1.3\%) | 1 (0\%) |
| JUN | W | -4,238 (-38.3\%) | -1 (0\%) |
|  | AN | -285 (-9.6\%) | 2 (0.1\%) |
|  | BN | -178 (-8.7\%) | 3 (0.2\%) |
|  | D | -245 (-15.9\%) | 1 (0.1\%) |
|  | C | -65 (-6.3\%) | 0 (0\%) |
|  | All | -1,376 (-30\%) | 1 (0\%) |
| JUL | W | -3,307 (-43.2\%) | 1 (0\%) |
|  | AN | -153 (-7.8\%) | 4 (0.2\%) |
|  | BN | -104 (-7\%) | 6 (0.5\%) |
|  | D | -193 (-14.9\%) | 2 (0.2\%) |
|  | C | -40 (-4.5\%) | 0 (0\%) |
|  | All | -1,053 (-32.5\%) | 2 (0.1\%) |


| Alternative 5: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | $\mathbf{W Y T}^{\text {b }}$ | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | -893 (-25.2\%) | 1 (0\%) |
|  | AN | -299 (-14.9\%) | 3 (0.2\%) |
|  | BN | -81 (-5.5\%) | 4 (0.3\%) |
|  | D | -148 (-10.8\%) | 1 (0.1\%) |
|  | C | -20 (-2\%) | 0 (0\%) |
|  | All | -360 (-17.4\%) | 2 (0.1\%) |
| SEP | W | -391 (-11.1\%) | 1 (0\%) |
|  | AN | -189 (-8\%) | 1 (0.1\%) |
|  | BN | -79 (-4.3\%) | 2 (0.1\%) |
|  | D | -153 (-8.5\%) | 1 (0\%) |
|  | C | -23 (-1.6\%) | 2 (0.1\%) |
|  | All | -193 (-8.2\%) | 1 (0.1\%) |
| OCT | W | -47 (-1.7\%) | -14 (-0.5\%) |
|  | AN | -160 (-5.8\%) | -10 (-0.4\%) |
|  | BN | -154 (-6.1\%) | 1 (0\%) |
|  | D | -153 (-5.2\%) | 1 (0\%) |
|  | C | -182 (-8.2\%) | 0 (0\%) |
|  | All | -129 (-4.9\%) | -6 (-0.2\%) |
| NOV | W | -115 (-4.6\%) | 7 (0.3\%) |
|  | AN | -51 (-1.6\%) | -62 (-1.9\%) |
|  | BN | -121 (-5.6\%) | 33 (1.6\%) |
|  | D | -20 (-0.9\%) | 35 (1.6\%) |
|  | C | -70 (-3.6\%) | 0 (0\%) |
|  | All | -80 (-3.3\%) | 1 (0\%) |
| DEC | W | 189 (4.3\%) | 55 (1.2\%) |
|  | AN | -117 (-2.5\%) | 27 (0.6\%) |
|  | BN | -109 (-5\%) | 8 (0.4\%) |
|  | D | 50 (2.4\%) | 13 (0.6\%) |
|  | C | -35 (-2\%) | 0 (0\%) |
|  | All | 16 (0.5\%) | 25 (0.8\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.5.2.6 Mokelumne River at the Delta

Table 35. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 5: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A5_LLT |
| JAN | W | 3,071 | 3,634 | 3,634 |
|  | AN | 1,707 | 1,876 | 1,876 |
|  | BN | 597 | 617 | 617 |
|  | D | 495 | 493 | 493 |
|  | C | 280 | 281 | 281 |
|  | All | 1,460 | 1,660 | 1,660 |
| FEB | W | 3,290 | 3,781 | 3,781 |
|  | AN | 2,525 | 2,913 | 2,913 |
|  | BN | 1,011 | 1,035 | 1,035 |
|  | D | 695 | 678 | 678 |
|  | C | 426 | 442 | 442 |
|  | All | 1,809 | 2,033 | 2,033 |
| MAR | W | 3,179 | 3,336 | 3,336 |
|  | AN | 1,582 | 1,639 | 1,639 |
|  | BN | 1,181 | 1,140 | 1,140 |
|  | D | 754 | 691 | 691 |
|  | C | 595 | 580 | 580 |
|  | All | 1,662 | 1,700 | 1,700 |
| APR | W | 2,819 | 2,694 | 2,694 |
|  | AN | 1,619 | 1,424 | 1,424 |
|  | BN | 1,243 | 1,068 | 1,068 |
|  | D | 623 | 550 | 550 |
|  | C | 340 | 311 | 311 |
|  | All | 1,503 | 1,384 | 1,384 |
| MAY | W | 3,170 | 2,885 | 2,885 |
|  | AN | 1,439 | 1,179 | 1,179 |
|  | BN | 976 | 812 | 812 |
|  | D | 406 | 333 | 333 |
|  | C | 181 | 170 | 170 |
|  | All | 1,463 | 1,289 | 1,289 |
| JUN | W | 1,755 | 1,415 | 1,415 |
|  | AN | 851 | 631 | 631 |
|  | BN | 471 | 366 | 366 |
|  | D | 93 | 76 | 76 |
|  | C | 52 | 44 | 44 |
|  | All | 779 | 616 | 616 |
| JUL | W | 772 | 469 | 469 |
|  | AN | 347 | 167 | 167 |
|  | BN | 123 | 70 | 70 |
|  | D | 7 | 6 | 6 |
|  | C | 3 | 3 | 3 |
|  | All | 315 | 183 | 183 |


| Alternative 5: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A5_LLT |
| AUG | W | 703 | 346 | 346 |
|  | AN | 328 | 216 | 216 |
|  | BN | 112 | 71 | 71 |
|  | D | 4 | 4 | 4 |
|  | C | 2 | 2 | 2 |
|  | All | 289 | 156 | 156 |
| SEP | W | 702 | 497 | 497 |
|  | AN | 333 | 259 | 259 |
|  | BN | 114 | 91 | 91 |
|  | D | 9 | 9 | 9 |
|  | C | 5 | 5 | 5 |
|  | All | 291 | 213 | 213 |
| OCT | W | 161 | 147 | 147 |
|  | AN | 178 | 180 | 180 |
|  | BN | 154 | 144 | 144 |
|  | D | 180 | 160 | 160 |
|  | C | 117 | 123 | 123 |
|  | All | 158 | 150 | 150 |
| NOV | W | 487 | 431 | 431 |
|  | AN | 912 | 855 | 855 |
|  | BN | 347 | 301 | 301 |
|  | D | 380 | 327 | 327 |
|  | C | 195 | 186 | 186 |
|  | All | 474 | 429 | 429 |
| DEC | W | 1,504 | 1,732 | 1,732 |
|  | AN | 1,411 | 1,628 | 1,628 |
|  | BN | 447 | 472 | 472 |
|  | D | 384 | 374 | 374 |
|  | C | 204 | 209 | 209 |
|  | All | 887 | 999 | 999 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 36. Differences ${ }^{a}$ (Percent Differences) between Pairs of Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 5: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| JAN | W | 563 (18.3\%) | 0 (0\%) |
|  | AN | 169 (9.9\%) | 0 (0\%) |
|  | BN | 21 (3.4\%) | 0 (0\%) |
|  | D | -2 (-0.5\%) | 0 (0\%) |
|  | C | 1 (0.3\%) | 0 (0\%) |
|  | All | 201 (13.8\%) | 0 (0\%) |
| FEB | W | 491 (14.9\%) | 0 (0\%) |
|  | AN | 388 (15.4\%) | 0 (0\%) |
|  | BN | 24 (2.4\%) | 0 (0\%) |
|  | D | -17 (-2.4\%) | 0 (0\%) |
|  | C | 15 (3.5\%) | 0 (0\%) |
|  | All | 223 (12.3\%) | 0 (0\%) |
| MAR | W | 158 (5\%) | 0 (0\%) |
|  | AN | 57 (3.6\%) | 0 (0\%) |
|  | BN | -41 (-3.4\%) | 0 (0\%) |
|  | D | -63 (-8.3\%) | 0 (0\%) |
|  | C | -15 (-2.5\%) | 0 (0\%) |
|  | All | 38 (2.3\%) | 0 (0\%) |
| APR | W | -125 (-4.4\%) | 0 (0\%) |
|  | AN | -194 (-12\%) | 0 (0\%) |
|  | BN | -175 (-14.1\%) | 0 (0\%) |
|  | D | -73 (-11.7\%) | 0 (0\%) |
|  | C | -29 (-8.7\%) | 0 (0\%) |
|  | All | -120 (-8\%) | 0 (0\%) |
| MAY | W | -284 (-9\%) | 0 (0\%) |
|  | AN | -260 (-18.1\%) | 0 (0\%) |
|  | BN | -164 (-16.8\%) | 0 (0\%) |
|  | D | -72 (-17.8\%) | 0 (0\%) |
|  | C | -11 (-6.1\%) | 0 (0\%) |
|  | All | -174 (-11.9\%) | 0 (0\%) |
| JUN | W | -339 (-19.3\%) | 0 (0\%) |
|  | AN | -220 (-25.8\%) | 0 (0\%) |
|  | BN | -105 (-22.3\%) | 0 (0\%) |
|  | D | -17 (-18.8\%) | 0 (0\%) |
|  | C | -8 (-14.7\%) | 0 (0\%) |
|  | All | -163 (-20.9\%) | 0 (0\%) |
| JUL | W | -303 (-39.3\%) | 0 (0\%) |
|  | AN | -180 (-51.8\%) | 0 (0\%) |
|  | BN | -54 (-43.4\%) | 0 (0\%) |
|  | D | 0 (-3.1\%) | 0 (0\%) |
|  | C | 0 (-4.4\%) | 0 (0\%) |
|  | All | -132 (-42\%) | 0 (0\%) |


| Alternative 5: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A5_LLT | NAA vs. A5_LLT |
| AUG | W | -357 (-50.8\%) | 0 (0\%) |
|  | AN | -113 (-34.3\%) | 0 (0\%) |
|  | BN | -41 (-36.5\%) | 0 (0\%) |
|  | D | 0 (-0.5\%) | 0 (0\%) |
|  | C | 0 (-3.1\%) | 0 (0\%) |
|  | All | -133 (-46.1\%) | 0 (0\%) |
| SEP | W | -205 (-29.3\%) | 0 (0\%) |
|  | AN | -74 (-22.2\%) | 0 (0\%) |
|  | BN | -23 (-20.5\%) | 0 (0\%) |
|  | D | -1 (-5.9\%) | 0 (0\%) |
|  | C | 0 (4.6\%) | 0 (0\%) |
|  | All | -78 (-26.9\%) | 0 (0\%) |
| OCT | W | -14 (-8.7\%) | 0 (0\%) |
|  | AN | 2 (1.1\%) | 0 (0\%) |
|  | BN | -10 (-6.6\%) | 0 (0\%) |
|  | D | -20 (-11.1\%) | 0 (0\%) |
|  | C | 6 (4.7\%) | 0 (0\%) |
|  | All | -7 (-4.7\%) | 0 (0\%) |
| NOV | W | -56 (-11.5\%) | 0 (0\%) |
|  | AN | -57 (-6.3\%) | 0 (0\%) |
|  | BN | -46 (-13.2\%) | 0 (0\%) |
|  | D | -53 (-13.9\%) | 0 (0\%) |
|  | C | -9 (-4.6\%) | 0 (0\%) |
|  | All | -45 (-9.5\%) | 0 (0\%) |
| DEC | W | 228 (15.2\%) | 0 (0\%) |
|  | AN | 217 (15.4\%) | 0 (0\%) |
|  | BN | 25 (5.5\%) | 0 (0\%) |
|  | D | -10 (-2.6\%) | 0 (0\%) |
|  | C | 6 (2.9\%) | 0 (0\%) |
|  | All | 113 (12.7\%) | 0 (0\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
${ }^{\text {b }}$ Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C. 6 Alternative 6A

## 11C.6.1 Upstream

## 11C.6.1.1 Sacramento River at Keswick

Table 1. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 6A: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 16,526 | 18,233 | 19,556 |
|  | AN | 8,318 | 8,205 | 9,144 |
|  | BN | 4,502 | 4,184 | 4,301 |
|  | D | 3,996 | 4,096 | 3,896 |
|  | C | 3,490 | 4,238 | 3,452 |
|  | All | 8,614 | 9,215 | 9,634 |
| FEB | W | 18,577 | 20,853 | 21,084 |
|  | AN | 14,409 | 15,297 | 16,435 |
|  | BN | 5,981 | 5,544 | 6,764 |
|  | D | 3,684 | 3,410 | 3,437 |
|  | C | 3,599 | 3,372 | 3,799 |
|  | All | 10,355 | 11,039 | 11,556 |
| MAR | W | 16,200 | 17,065 | 17,167 |
|  | AN | 9,131 | 8,818 | 9,011 |
|  | BN | 5,200 | 4,318 | 4,165 |
|  | D | 3,903 | 3,814 | 3,865 |
|  | C | 3,487 | 3,583 | 3,446 |
|  | All | 8,728 | 8,800 | 8,826 |
| APR | W | 9,418 | 9,131 | 9,106 |
|  | AN | 6,182 | 5,536 | 5,846 |
|  | BN | 5,426 | 5,009 | 4,809 |
|  | D | 5,803 | 5,533 | 5,483 |
|  | C | 6,472 | 6,550 | 6,160 |
|  | All | 7,038 | 6,733 | 6,669 |
| MAY | W | 9,508 | 7,149 | 7,663 |
|  | AN | 7,709 | 7,783 | 8,333 |
|  | BN | 7,193 | 6,272 | 6,249 |
|  | D | 7,349 | 7,681 | 7,750 |
|  | C | 6,715 | 7,316 | 7,405 |
|  | All | 7,967 | 7,233 | 7,501 |
| JUN | W | 10,375 | 10,274 | 10,622 |
|  | AN | 11,147 | 12,032 | 12,007 |
|  | BN | 10,758 | 10,947 | 10,751 |
|  | D | 11,224 | 11,898 | 11,628 |
|  | C | 10,392 | 11,350 | 11,301 |
|  | All | 10,742 | 11,160 | 11,167 |


| Alternative 6A: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JUL | W | 12,779 | 14,098 | 14,544 |
|  | AN | 14,056 | 15,098 | 14,632 |
|  | BN | 12,965 | 13,177 | 13,219 |
|  | D | 13,302 | 13,727 | 14,005 |
|  | C | 12,849 | 11,935 | 12,425 |
|  | All | 13,123 | 13,689 | 13,902 |
| AUG | W | 11,029 | 10,491 | 11,296 |
|  | AN | 10,449 | 11,641 | 10,530 |
|  | BN | 10,139 | 10,261 | 9,578 |
|  | D | 10,627 | 10,986 | 9,892 |
|  | C | 9,473 | 7,348 | 7,320 |
|  | All | 10,476 | 10,269 | 10,001 |
| SEP | W | 9,385 | 12,833 | 11,366 |
|  | AN | 5,862 | 9,898 | 8,227 |
|  | BN | 5,492 | 5,601 | 4,795 |
|  | D | 5,985 | 4,469 | 4,593 |
|  | C | 5,563 | 4,368 | 4,824 |
|  | All | 6,899 | 8,094 | 7,341 |
| OCT | W | 6,886 | 7,034 | 6,773 |
|  | AN | 7,145 | 7,152 | 6,397 |
|  | BN | 6,396 | 7,072 | 6,780 |
|  | D | 6,128 | 6,494 | 6,707 |
|  | C | 5,902 | 5,752 | 5,250 |
|  | All | 6,530 | 6,752 | 6,482 |
| NOV | W | 6,672 | 7,539 | 6,625 |
|  | AN | 6,224 | 7,134 | 5,972 |
|  | BN | 5,088 | 5,936 | 5,244 |
|  | D | 5,669 | 5,406 | 5,281 |
|  | C | 4,822 | 4,710 | 4,930 |
|  | All | 5,845 | 6,324 | 5,751 |
| DEC | W | 12,766 | 11,022 | 11,977 |
|  | AN | 5,531 | 5,377 | 5,537 |
|  | BN | 5,413 | 5,195 | 4,815 |
|  | D | 4,215 | 3,936 | 3,711 |
|  | C | 3,828 | 3,582 | 3,588 |
|  | All | 7,267 | 6,557 | 6,770 |

Table 2. Differences ${ }^{a}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 6A: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 3,030 (18.3\%) | 1,323 (7.3\%) |
|  | AN | 826 (9.9\%) | 939 (11.4\%) |
|  | BN | -201 (-4.5\%) | 118 (2.8\%) |
|  | D | -99 (-2.5\%) | -199 (-4.9\%) |
|  | C | -38 (-1.1\%) | -786 (-18.5\%) |
|  | All | 1,020 (11.8\%) | 418 (4.5\%) |
| FEB | W | 2,507 (13.5\%) | 231 (1.1\%) |
|  | AN | 2,025 (14.1\%) | 1,138 (7.4\%) |
|  | BN | 782 (13.1\%) | 1,220 (22\%) |
|  | D | -246 (-6.7\%) | 28 (0.8\%) |
|  | C | 200 (5.6\%) | 426 (12.6\%) |
|  | All | 1,200 (11.6\%) | 516 (4.7\%) |
| MAR | W | 967 (6\%) | 101 (0.6\%) |
|  | AN | -120 (-1.3\%) | 193 (2.2\%) |
|  | BN | -1,034 (-19.9\%) | -153 (-3.5\%) |
|  | D | -38 (-1\%) | 51 (1.3\%) |
|  | C | -42 (-1.2\%) | -138 (-3.8\%) |
|  | All | 98 (1.1\%) | 26 (0.3\%) |
| APR | W | -312 (-3.3\%) | -25 (-0.3\%) |
|  | AN | -336 (-5.4\%) | 310 (5.6\%) |
|  | BN | -617 (-11.4\%) | -200 (-4\%) |
|  | D | -319 (-5.5\%) | -50 (-0.9\%) |
|  | C | -312 (-4.8\%) | -390 (-6\%) |
|  | All | -369 (-5.2\%) | -65 (-1\%) |
| MAY | W | -1,845 (-19.4\%) | 514 (7.2\%) |
|  | AN | 624 (8.1\%) | 550 (7.1\%) |
|  | BN | -944 (-13.1\%) | -23 (-0.4\%) |
|  | D | 401 (5.5\%) | 68 (0.9\%) |
|  | C | 690 (10.3\%) | 90 (1.2\%) |
|  | All | -466 (-5.8\%) | 268 (3.7\%) |
| JUN | W | 246 (2.4\%) | 347 (3.4\%) |
|  | AN | 860 (7.7\%) | -25 (-0.2\%) |
|  | BN | -7 (-0.1\%) | -196 (-1.8\%) |
|  | D | 404 (3.6\%) | -270 (-2.3\%) |
|  | C | 909 (8.7\%) | -49 (-0.4\%) |
|  | All | 425 (4\%) | 7 (0.1\%) |
| JUL | W | 1,765 (13.8\%) | 446 (3.2\%) |
|  | AN | 576 (4.1\%) | -466 (-3.1\%) |
|  | BN | 253 (2\%) | 42 (0.3\%) |
|  | D | 703 (5.3\%) | 278 (2\%) |
|  | C | -425 (-3.3\%) | 490 (4.1\%) |
|  | All | 779 (5.9\%) | 213 (1.6\%) |


| Alternative 6A: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | 267 (2.4\%) | 805 (7.7\%) |
|  | AN | 81 (0.8\%) | -1,111 (-9.5\%) |
|  | BN | -561 (-5.5\%) | -683 (-6.7\%) |
|  | D | -735 (-6.9\%) | -1,094 (-10\%) |
|  | C | -2,152 (-22.7\%) | -27 (-0.4\%) |
|  | All | -476 (-4.5\%) | -268 (-2.6\%) |
| SEP | W | 1,981 (21.1\%) | -1,468 (-11.4\%) |
|  | AN | 2,365 (40.3\%) | -1,671 (-16.9\%) |
|  | BN | -697 (-12.7\%) | -806 (-14.4\%) |
|  | D | -1,392 (-23.3\%) | 125 (2.8\%) |
|  | C | -739 (-13.3\%) | 456 (10.4\%) |
|  | All | 441 (6.4\%) | -753 (-9.3\%) |
| OCT | W | -112 (-1.6\%) | -261 (-3.7\%) |
|  | AN | -747 (-10.5\%) | -754 (-10.5\%) |
|  | BN | 384 (6\%) | -292 (-4.1\%) |
|  | D | 579 (9.4\%) | 213 (3.3\%) |
|  | C | -652 (-11.1\%) | -501 (-8.7\%) |
|  | All | -48 (-0.7\%) | -270 (-4\%) |
| NOV | W | -48 (-0.7\%) | -9,14 (-12.1\%) |
|  | AN | -252 (-4\%) | -1,162 (-16.3\%) |
|  | BN | 157 (3.1\%) | -691 (-11.6\%) |
|  | D | -388 (-6.8\%) | -125 (-2.3\%) |
|  | C | 108 (2.2\%) | 220 (4.7\%) |
|  | All | -95 (-1.6\%) | -573 (-9.1\%) |
| DEC | W | -789 (-6.2\%) | 955 (8.7\%) |
|  | AN | 6 (0.1\%) | 160 (3\%) |
|  | BN | -598 (-11\%) | -379 (-7.3\%) |
|  | D | -503 (-11.9\%) | -225 (-5.7\%) |
|  | C | -241 (-6.3\%) | 5 (0.2\%) |
|  | All | -497 (-6.8\%) | 213 (3.2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.6.1.2 Sacramento River Upstream of Red Bluff

Table 3. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 6A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 28,036 | 30,390 | 31,703 |
|  | AN | 16,725 | 16,885 | 17,821 |
|  | BN | 9,381 | 9,146 | 9,263 |
|  | D | 7,098 | 7,262 | 7,064 |
|  | C | 6,143 | 6,942 | 6,151 |
|  | All | 15,396 | 16,278 | 16,692 |
| FEB | W | 30,255 | 33,472 | 33,692 |
|  | AN | 23,492 | 24,828 | 25,957 |
|  | BN | 12,005 | 11,614 | 12,830 |
|  | D | 8,947 | 8,790 | 8,818 |
|  | C | 6,599 | 6,378 | 6,810 |
|  | All | 18,010 | 19,092 | 19,604 |
| MAR | W | 25,004 | 26,210 | 26,311 |
|  | AN | 16,599 | 16,428 | 16,615 |
|  | BN | 9,333 | 8,474 | 8,300 |
|  | D | 8,385 | 8,300 | 8,350 |
|  | C | 5,999 | 6,101 | 5,957 |
|  | All | 14,669 | 14,876 | 14,896 |
| APR | W | 15,172 | 14,842 | 14,819 |
|  | AN | 10,477 | 9,761 | 10,073 |
|  | BN | 8,711 | 8,282 | 8,092 |
|  | D | 7,948 | 7,661 | 7,612 |
|  | C | 7,742 | 7,829 | 7,442 |
|  | All | 10,709 | 10,376 | 10,314 |
| MAY | W | 12,541 | 10,073 | 10,591 |
|  | AN | 10,012 | 10,047 | 10,598 |
|  | BN | 8,781 | 7,875 | 7,866 |
|  | D | 8,677 | 9,012 | 9,083 |
|  | C | 7,746 | 8,348 | 8,443 |
|  | All | 9,979 | 9,208 | 9,481 |
| JUN | W | 11,905 | 11,720 | 12,068 |
|  | AN | 12,001 | 12,789 | 12,768 |
|  | BN | 11,464 | 11,651 | 11,468 |
|  | D | 11,777 | 12,441 | 12,174 |
|  | C | 10,885 | 11,881 | 11,784 |
|  | All | 11,666 | 12,046 | 12,050 |
| JUL | W | 13,255 | 14,525 | 14,976 |
|  | AN | 14,129 | 15,142 | 14,684 |
|  | BN | 13,011 | 13,258 | 13,318 |
|  | D | 13,368 | 13,826 | 14,111 |
|  | C | 13,005 | 12,149 | 12,673 |
|  | All | 13,329 | 13,898 | 14,123 |


| Alternative 6A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 11,284 | 10,735 | 11,544 |
|  | AN | 10,580 | 11,775 | 10,673 |
|  | BN | 10,202 | 10,364 | 9,695 |
|  | D | 10,747 | 11,143 | 10,052 |
|  | C | 9,590 | 7,665 | 7,671 |
|  | All | 10,630 | 10,464 | 10,207 |
| SEP | W | 9,856 | 13,312 | 11,846 |
|  | AN | 6,279 | 10,320 | 8,658 |
|  | BN | 5,821 | 5,963 | 5,172 |
|  | D | 6,391 | 4,911 | 5,045 |
|  | C | 5,887 | 4,838 | 5,289 |
|  | All | 7,302 | 8,535 | 7,787 |
| OCT | W | 8,020 | 8,188 | 7,935 |
|  | AN | 8,112 | 8,162 | 7,410 |
|  | BN | 7,094 | 7,778 | 7,487 |
|  | D | 6,903 | 7,287 | 7,489 |
|  | C | 6,670 | 6,537 | 6,050 |
|  | All | 7,432 | 7,675 | 7,408 |
| NOV | W | 9,876 | 10,821 | 9,904 |
|  | AN | 8,144 | 9,098 | 7,940 |
|  | BN | 6,791 | 7,682 | 6,992 |
|  | D | 7,548 | 7,347 | 7,227 |
|  | C | 5,811 | 5,703 | 5,925 |
|  | All | 7,990 | 8,521 | 7,949 |
| DEC | W | 21,015 | 19,613 | 20,570 |
|  | AN | 10,019 | 10,053 | 10,218 |
|  | BN | 8,408 | 8,228 | 7,853 |
|  | D | 7,292 | 7,091 | 6,868 |
|  | C | 5,628 | 5,433 | 5,433 |
|  | All | 11,989 | 11,446 | 11,661 |

Table 4. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 6A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 3,667 (13.1\%) | 1,313 (4.3\%) |
|  | AN | 1,096 (6.6\%) | 935 (5.5\%) |
|  | BN | -118 (-1.3\%) | 117 (1.3\%) |
|  | D | -34 (-0.5\%) | -198 (-2.7\%) |
|  | C | 8 (0.1\%) | -791 (-11.4\%) |
|  | All | 1,296 (8.4\%) | 414 (2.5\%) |
| FEB | W | 3,437 (11.4\%) | 221 (0.7\%) |
|  | AN | 2,466 (10.5\%) | 1,129 (4.5\%) |
|  | BN | 825 (6.9\%) | 1,215 (10.5\%) |
|  | D | -129 (-1.4\%) | 28 (0.3\%) |
|  | C | 211 (3.2\%) | 431 (6.8\%) |
|  | All | 1,594 (8.9\%) | 512 (2.7\%) |
| MAR | W | 1,307 (5.2\%) | 100 (0.4\%) |
|  | AN | 16 (0.1\%) | 187 (1.1\%) |
|  | BN | -1,032 (-11.1\%) | -173 (-2\%) |
|  | D | -35 (-0.4\%) | 50 (0.6\%) |
|  | C | -42 (-0.7\%) | -145 (-2.4\%) |
|  | All | 227 (1.5\%) | 19 (0.1\%) |
| APR | W | -353 (-2.3\%) | -23 (-0.2\%) |
|  | AN | -404 (-3.9\%) | 312 (3.2\%) |
|  | BN | -619 (-7.1\%) | -190 (-2.3\%) |
|  | D | -336 (-4.2\%) | -49 (-0.6\%) |
|  | C | -300 (-3.9\%) | -387 (-4.9\%) |
|  | All | -394 (-3.7\%) | -62 (-0.6\%) |
| MAY | W | -1,950 (-15.5\%) | 518 (5.1\%) |
|  | AN | 586 (5.8\%) | 551 (5.5\%) |
|  | BN | -916 (-10.4\%) | -9 (-0.1\%) |
|  | D | 406 (4.7\%) | 71 (0.8\%) |
|  | C | 697 (9\%) | 95 (1.1\%) |
|  | All | -498 (-5\%) | 273 (3\%) |
| JUN | W | 163 (1.4\%) | 349 (3\%) |
|  | AN | 767 (6.4\%) | -21 (-0.2\%) |
|  | BN | 4 (0\%) | -182 (-1.6\%) |
|  | D | 397 (3.4\%) | -267 (-2.1\%) |
|  | C | 900 (8.3\%) | -96 (-0.8\%) |
|  | All | 383 (3.3\%) | 4 (0\%) |
| JUL | W | 1,721 (13\%) | 451 (3.1\%) |
|  | AN | 554 (3.9\%) | -458 (-3\%) |
|  | BN | 307 (2.4\%) | 60 (0.5\%) |
|  | D | 743 (5.6\%) | 285 (2.1\%) |
|  | C | -332 (-2.6\%) | 523 (4.3\%) |
|  | All | 794 (6\%) | 225 (1.6\%) |


| Alternative 6A: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | 261 (2.3\%) | 809 (7.5\%) |
|  | AN | 93 (0.9\%) | -1,102 (-9.4\%) |
|  | BN | -507 (-5\%) | -669 (-6.5\%) |
|  | D | -695 (-6.5\%) | -1,091 (-9.8\%) |
|  | C | -1,919 (-20\%) | 6 (0.1\%) |
|  | All | -424 (-4\%) | -258 (-2.5\%) |
| SEP | W | 1,990 (20.2\%) | -1,467 (-11\%) |
|  | AN | 2,378 (37.9\%) | -1,663 (-16.1\%) |
|  | BN | -649 (-11.1\%) | -791 (-13.3\%) |
|  | D | -1,346 (-21.1\%) | 134 (2.7\%) |
|  | C | -598 (-10.2\%) | 451 (9.3\%) |
|  | All | 485 (6.6\%) | -748 (-8.8\%) |
| OCT | W | -84 (-1\%) | -252 (-3.1\%) |
|  | AN | -702 (-8.7\%) | -752 (-9.2\%) |
|  | BN | 393 (5.5\%) | -291 (-3.7\%) |
|  | D | 587 (8.5\%) | 203 (2.8\%) |
|  | C | -621 (-9.3\%) | -487 (-7.5\%) |
|  | All | -24 (-0.3\%) | -267 (-3.5\%) |
| NOV | W | 28 (0.3\%) | -917 (-8.5\%) |
|  | AN | -204 (-2.5\%) | -1,158 (-12.7\%) |
|  | BN | 201 (3\%) | -690 (-9\%) |
|  | D | -321 (-4.3\%) | -119 (-1.6\%) |
|  | C | 113 (1.9\%) | 221 (3.9\%) |
|  | All | -41 (-0.5\%) | -572 (-6.7\%) |
| DEC | W | -445 (-2.1\%) | 958 (4.9\%) |
|  | AN | 198 (2\%) | 164 (1.6\%) |
|  | BN | -555 (-6.6\%) | -375 (-4.6\%) |
|  | D | -424 (-5.8\%) | -224 (-3.2\%) |
|  | C | -195 (-3.5\%) | 0 (0\%) |
|  | All | -329 (-2.7\%) | 215 (1.9\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.6.1.3 Sacramento River at Wilkins Slough

Table 5. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 6A: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 19,145 | 19,320 | 19,382 |
|  | AN | 17,084 | 16,593 | 16,676 |
|  | BN | 12,521 | 12,143 | 12,248 |
|  | D | 8,896 | 9,189 | 8,811 |
|  | C | 7,858 | 8,586 | 7,799 |
|  | All | 13,811 | 13,901 | 13,753 |
| FEB | W | 19,887 | 20,044 | 20,043 |
|  | AN | 19,139 | 19,095 | 19,163 |
|  | BN | 14,528 | 14,328 | 14,632 |
|  | D | 11,520 | 11,473 | 11,475 |
|  | C | 8,499 | 8,158 | 8,637 |
|  | All | 15,359 | 15,309 | 15,441 |
| MAR | W | 18,223 | 18,323 | 18,338 |
|  | AN | 17,696 | 17,537 | 17,704 |
|  | BN | 12,208 | 11,534 | 11,364 |
|  | D | 11,364 | 11,191 | 11,403 |
|  | C | 8,101 | 8,166 | 7,993 |
|  | All | 14,132 | 13,997 | 14,018 |
| APR | W | 13,392 | 13,119 | 13,085 |
|  | AN | 10,264 | 9,783 | 10,118 |
|  | BN | 7,152 | 6,858 | 6,673 |
|  | D | 5,319 | 5,112 | 5,081 |
|  | C | 4,164 | 4,331 | 3,984 |
|  | All | 8,746 | 8,518 | 8,467 |
| MAY | W | 10,467 | 8,435 | 9,014 |
|  | AN | 7,318 | 7,500 | 8,073 |
|  | BN | 5,638 | 4,871 | 4,930 |
|  | D | 4,669 | 5,088 | 5,182 |
|  | C | 3,998 | 4,528 | 4,673 |
|  | All | 6,962 | 6,383 | 6,703 |
| JUN | W | 6,503 | 6,435 | 6,801 |
|  | AN | 5,781 | 6,530 | 6,553 |
|  | BN | 5,243 | 5,628 | 5,555 |
|  | D | 5,245 | 6,075 | 5,847 |
|  | C | 5,140 | 6,253 | 6,006 |
|  | All | 5,707 | 6,205 | 6,226 |
| JUL | W | 6,685 | 7,771 | 8,265 |
|  | AN | 6,971 | 7,892 | 7,499 |
|  | BN | 6,122 | 6,560 | 6,750 |
|  | D | 6,788 | 7,474 | 7,772 |
|  | C | 7,162 | 6,649 | 6,935 |
|  | All | 6,723 | 7,353 | 7,591 |


| Alternative 6A: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 6,287 | 5,537 | 6,320 |
|  | AN | 5,498 | 6,610 | 5,541 |
|  | BN | 5,138 | 5,462 | 4,841 |
|  | D | 5,833 | 6,356 | 5,230 |
|  | C | 5,551 | 4,719 | 4,612 |
|  | All | 5,768 | 5,741 | 5,464 |
| SEP | W | 9,338 | 12,737 | 11,260 |
|  | AN | 5,631 | 9,546 | 7,962 |
|  | BN | 5,128 | 5,216 | 4,456 |
|  | D | 5,636 | 4,114 | 4,297 |
|  | C | 5,200 | 4,354 | 4,794 |
|  | All | 6,658 | 7,866 | 7,141 |
| OCT | W | 7,347 | 7,382 | 7,202 |
|  | AN | 6,799 | 6,927 | 6,117 |
|  | BN | 5,987 | 6,570 | 6,317 |
|  | D | 5,688 | 6,040 | 6,249 |
|  | C | 5,642 | 5,572 | 5,140 |
|  | All | 6,421 | 6,617 | 6,381 |
| NOV | W | 9,644 | 10,889 | 9,842 |
|  | AN | 8,210 | 9,141 | 8,014 |
|  | BN | 6,793 | 7,588 | 6,923 |
|  | D | 7,407 | 7,227 | 7,111 |
|  | C | 5,118 | 4,986 | 5,191 |
|  | All | 7,794 | 8,402 | 7,796 |
| DEC | W | 17,881 | 17,257 | 17,528 |
|  | AN | 10,809 | 10,755 | 10,856 |
|  | BN | 8,505 | 8,258 | 8,220 |
|  | D | 8,950 | 8,725 | 8,518 |
|  | C | 6,229 | 5,981 | 5,935 |
|  | All | 11,580 | 11,246 | 11,288 |

Table 6. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 6A: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 238 (1.2\%) | 62 (0.3\%) |
|  | AN | -408 (-2.4\%) | 82 (0.5\%) |
|  | BN | -273 (-2.2\%) | 105 (0.9\%) |
|  | D | -84 (-0.9\%) | -377 (-4.1\%) |
|  | C | -59 (-0.7\%) | -787 (-9.2\%) |
|  | All | -58 (-0.4\%) | -148 (-1.1\%) |
| FEB | W | 156 (0.8\%) | -1 (0\%) |
|  | AN | 24 (0.1\%) | 68 (0.4\%) |
|  | BN | 104 (0.7\%) | 304 (2.1\%) |
|  | D | -45 (-0.4\%) | 2 (0\%) |
|  | C | 139 (1.6\%) | 479 (5.9\%) |
|  | All | 81 (0.5\%) | 132 (0.9\%) |
| MAR | W | 115 (0.6\%) | 15 (0.1\%) |
|  | AN | 9 (0\%) | 167 (1\%) |
|  | BN | -844 (-6.9\%) | -170 (-1.5\%) |
|  | D | 39 (0.3\%) | 212 (1.9\%) |
|  | C | -108 (-1.3\%) | -173 (-2.1\%) |
|  | All | -114 (-0.8\%) | 21 (0.2\%) |
| APR | W | -307 (-2.3\%) | -34 (-0.3\%) |
|  | AN | -146 (-1.4\%) | 335 (3.4\%) |
|  | BN | -479 (-6.7\%) | -185 (-2.7\%) |
|  | D | -239 (-4.5\%) | -32 (-0.6\%) |
|  | C | -180 (-4.3\%) | -347 (-8\%) |
|  | All | -279 (-3.2\%) | -51 (-0.6\%) |
| MAY | W | -1,453 (-13.9\%) | 579 (6.9\%) |
|  | AN | 755 (10.3\%) | 573 (7.6\%) |
|  | BN | -708 (-12.6\%) | 59 (1.2\%) |
|  | D | 513 (11\%) | 95 (1.9\%) |
|  | C | 675 (16.9\%) | 145 (3.2\%) |
|  | All | -260 (-3.7\%) | 319 (5\%) |
| JUN | W | 297 (4.6\%) | 366 (5.7\%) |
|  | AN | 772 (13.4\%) | 23 (0.3\%) |
|  | BN | 313 (6\%) | -73 (-1.3\%) |
|  | D | 601 (11.5\%) | -228 (-3.8\%) |
|  | C | 865 (16.8\%) | -247 (-4\%) |
|  | All | 519 (9.1\%) | 21 (0.3\%) |
| JUL | W | 1,580 (23.6\%) | 494 (6.4\%) |
|  | AN | 529 (7.6\%) | -392 (-5\%) |
|  | BN | 628 (10.3\%) | 190 (2.9\%) |
|  | D | 984 (14.5\%) | 297 (4\%) |
|  | C | -227 (-3.2\%) | 286 (4.3\%) |
|  | All | 869 (12.9\%) | 239 (3.2\%) |


| Alternative 6A: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | 33 (0.5\%) | 783 (14.2\%) |
|  | AN | 43 (0.8\%) | -1,069 (-16.2\%) |
|  | BN | -296 (-5.8\%) | -621 (-11.4\%) |
|  | D | -603 (-10.3\%) | -1,126 (-17.7\%) |
|  | C | -939 (-16.9\%) | -107 (-2.3\%) |
|  | All | -304 (-5.3\%) | -277 (-4.8\%) |
| SEP | W | 1,922 (20.6\%) | -1,478 (-11.6\%) |
|  | AN | 2,331 (41.4\%) | -1,584 (-16.6\%) |
|  | BN | -672 (-13.1\%) | -760 (-14.6\%) |
|  | D | -1,338 (-23.7\%) | 184 (4.5\%) |
|  | C | -406 (-7.8\%) | 440 (10.1\%) |
|  | All | 483 (7.3\%) | -725 (-9.2\%) |
| OCT | W | -145 (-2\%) | -180 (-2.4\%) |
|  | AN | -683 (-10\%) | -811 (-11.7\%) |
|  | BN | 330 (5.5\%) | -253 (-3.9\%) |
|  | D | 561 (9.9\%) | 209 (3.5\%) |
|  | C | -501 (-8.9\%) | -432 (-7.8\%) |
|  | All | -40 (-0.6\%) | -236 (-3.6\%) |
| NOV | W | 198 (2\%) | -1,048 (-9.6\%) |
|  | AN | -195 (-2.4\%) | -1,126 (-12.3\%) |
|  | BN | 131 (1.9\%) | -665 (-8.8\%) |
|  | D | -297 (-4\%) | -116 (-1.6\%) |
|  | C | 73 (1.4\%) | 205 (4.1\%) |
|  | All | 2 (0\%) | -606 (-7.2\%) |
| DEC | W | -353 (-2\%) | 272 (1.6\%) |
|  | AN | 47 (0.4\%) | 101 (0.9\%) |
|  | BN | -285 (-3.4\%) | -39 (-0.5\%) |
|  | D | -432 (-4.8\%) | -207 (-2.4\%) |
|  | C | -294 (-4.7\%) | -46 (-0.8\%) |
|  | All | -291 (-2.5\%) | 42 (0.4\%) |

## 11C.6.1.4 Sacramento River at Verona

Table 7. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 6A: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 44,589 | 45,567 | 45,059 |
|  | AN | 34,120 | 33,671 | 32,351 |
|  | BN | 20,175 | 19,121 | 17,635 |
|  | D | 14,756 | 14,782 | 13,908 |
|  | C | 12,085 | 13,051 | 11,483 |
|  | All | 27,583 | 27,795 | 26,766 |
| FEB | W | 49,892 | 51,326 | 50,191 |
|  | AN | 39,162 | 39,749 | 39,502 |
|  | BN | 26,429 | 25,341 | 24,189 |
|  | D | 18,402 | 18,090 | 17,162 |
|  | C | 12,822 | 12,325 | 12,517 |
|  | All | 31,979 | 32,192 | 31,424 |
| MAR | W | 43,455 | 44,624 | 42,697 |
|  | AN | 39,477 | 39,687 | 38,817 |
|  | BN | 21,484 | 19,448 | 18,116 |
|  | D | 17,868 | 17,649 | 16,738 |
|  | C | 11,903 | 11,789 | 11,141 |
|  | All | 28,888 | 28,877 | 27,616 |
| APR | W | 32,219 | 31,636 | 29,424 |
|  | AN | 22,250 | 21,313 | 20,190 |
|  | BN | 14,459 | 13,857 | 13,197 |
|  | D | 11,113 | 10,903 | 10,732 |
|  | C | 9,420 | 9,489 | 8,941 |
|  | All | 19,759 | 19,298 | 18,202 |
| MAY | W | 26,193 | 20,229 | 21,128 |
|  | AN | 17,079 | 16,002 | 16,448 |
|  | BN | 11,451 | 10,534 | 10,495 |
|  | D | 9,283 | 9,841 | 9,297 |
|  | C | 7,125 | 7,611 | 7,451 |
|  | All | 15,840 | 13,828 | 14,029 |
| JUN | W | 18,367 | 15,304 | 15,833 |
|  | AN | 13,590 | 13,574 | 14,325 |
|  | BN | 11,062 | 11,320 | 11,428 |
|  | D | 10,429 | 10,780 | 9,396 |
|  | C | 8,911 | 9,827 | 9,179 |
|  | All | 13,295 | 12,576 | 12,474 |
| JUL | W | 16,253 | 17,965 | 16,419 |
|  | AN | 17,488 | 18,338 | 16,087 |
|  | BN | 16,698 | 16,598 | 15,813 |
|  | D | 16,352 | 16,465 | 12,976 |
|  | C | 14,476 | 12,457 | 11,454 |
|  | All | 16,271 | 16,651 | 14,785 |


| Alternative 6A: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 12,464 | 14,016 | 13,472 |
|  | AN | 13,691 | 15,828 | 13,642 |
|  | BN | 13,389 | 14,074 | 13,315 |
|  | D | 14,688 | 13,018 | 11,451 |
|  | C | 9,207 | 8,085 | 9,091 |
|  | All | 12,813 | 13,204 | 12,385 |
| SEP | W | 14,279 | 23,592 | 19,645 |
|  | AN | 10,537 | 19,044 | 15,446 |
|  | BN | 9,961 | 10,576 | 11,672 |
|  | D | 10,542 | 7,664 | 10,423 |
|  | C | 7,764 | 6,832 | 7,435 |
|  | All | 11,220 | 14,755 | 13,858 |
| OCT | W | 11,503 | 11,232 | 10,817 |
|  | AN | 9,381 | 9,890 | 8,721 |
|  | BN | 9,867 | 10,146 | 9,748 |
|  | D | 8,681 | 8,989 | 8,938 |
|  | C | 8,543 | 8,104 | 7,796 |
|  | All | 9,861 | 9,900 | 9,473 |
| NOV | W | 15,307 | 15,754 | 14,570 |
|  | AN | 11,792 | 12,817 | 11,323 |
|  | BN | 9,852 | 10,437 | 9,680 |
|  | D | 10,157 | 9,731 | 9,521 |
|  | C | 7,341 | 7,223 | 7,244 |
|  | All | 11,565 | 11,846 | 11,079 |
| DEC | W | 33,840 | 31,254 | 30,540 |
|  | AN | 17,572 | 18,481 | 17,119 |
|  | BN | 13,099 | 13,028 | 12,034 |
|  | D | 12,685 | 12,532 | 11,572 |
|  | C | 9,770 | 8,627 | 8,304 |
|  | All | 19,752 | 18,852 | 17,999 |

Table 8. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 6A: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 470 (1.1\%) | -508 (-1.1\%) |
|  | AN | -1,770 (-5.2\%) | -1,320 (-3.9\%) |
|  | BN | -2,540 (-12.6\%) | -1,485 (-7.8\%) |
|  | D | -848 (-5.7\%) | -874 (-5.9\%) |
|  | C | -603 (-5\%) | -1,568 (-12\%) |
|  | All | -818 (-3\%) | -1,029 (-3.7\%) |
| FEB | W | 299 (0.6\%) | -1,135 (-2.2\%) |
|  | AN | 340 (0.9\%) | -246 (-0.6\%) |
|  | BN | -2,240 (-8.5\%) | -1,152 (-4.5\%) |
|  | D | -1,240 (-6.7\%) | -928 (-5.1\%) |
|  | C | -305 (-2.4\%) | 191 (1.6\%) |
|  | All | -555 (-1.7\%) | -768 (-2.4\%) |
| MAR | W | -758 (-1.7\%) | -1,927 (-4.3\%) |
|  | AN | -660 (-1.7\%) | -870 (-2.2\%) |
|  | BN | -3,368 (-15.7\%) | -1,332 (-6.8\%) |
|  | D | -1,130 (-6.3\%) | -911 (-5.2\%) |
|  | C | -763 (-6.4\%) | -649 (-5.5\%) |
|  | All | -1,272 (-4.4\%) | -1,261 (-4.4\%) |
| APR | W | -2,795 (-8.7\%) | -2,212 (-7\%) |
|  | AN | -2,060 (-9.3\%) | -1,123 (-5.3\%) |
|  | BN | -1,261 (-8.7\%) | -660 (-4.8\%) |
|  | D | -381 (-3.4\%) | -171 (-1.6\%) |
|  | C | -480 (-5.1\%) | -549 (-5.8\%) |
|  | All | -1,557 (-7.9\%) | -1,096 (-5.7\%) |
| MAY | W | -5,065 (-19.3\%) | 899 (4.4\%) |
|  | AN | -631 (-3.7\%) | 446 (2.8\%) |
|  | BN | -956 (-8.4\%) | -39 (-0.4\%) |
|  | D | 13 (0.1\%) | -544 (-5.5\%) |
|  | C | 327 (4.6\%) | -160 (-2.1\%) |
|  | All | -1,811 (-11.4\%) | 201 (1.5\%) |
| JUN | W | -2,535 (-13.8\%) | 529 (3.5\%) |
|  | AN | 735 (5.4\%) | 750 (5.5\%) |
|  | BN | 366 (3.3\%) | 108 (1\%) |
|  | D | -1,032 (-9.9\%) | -1,384 (-12.8\%) |
|  | C | 268 (3\%) | -647 (-6.6\%) |
|  | All | -821 (-6.2\%) | -102 (-0.8\%) |
| JUL | W | 166 (1\%) | -1,547 (-8.6\%) |
|  | AN | -1,401 (-8\%) | -2,251 (-12.3\%) |
|  | BN | -884 (-5.3\%) | -785 (-4.7\%) |
|  | D | -3,376 (-20.6\%) | -3,489 (-21.2\%) |
|  | C | -3,021 (-20.9\%) | -1,003 (-8.1\%) |
|  | All | -1,487 (-9.1\%) | -1,866 (-11.2\%) |


| Alternative 6A: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | 1,008 (8.1\%) | -544 (-3.9\%) |
|  | AN | -50 (-0.4\%) | -2,187 (-13.8\%) |
|  | BN | -74 (-0.6\%) | -759 (-5.4\%) |
|  | D | -3,237 (-22\%) | -1,567 (-12\%) |
|  | C | -117 (-1.3\%) | 1,005 (12.4\%) |
|  | All | -428 (-3.3\%) | -819 (-6.2\%) |
| SEP | W | 5,366 (37.6\%) | -3,947 (-16.7\%) |
|  | AN | 4,910 (46.6\%) | -3,597 (-18.9\%) |
|  | BN | 1,711 (17.2\%) | 1,096 (10.4\%) |
|  | D | -119 (-1.1\%) | 2,759 (36\%) |
|  | C | -329 (-4.2\%) | 604 (8.8\%) |
|  | All | 2,638 (23.5\%) | -897 (-6.1\%) |
| OCT | W | -686 (-6\%) | -414 (-3.7\%) |
|  | AN | -660 (-7\%) | -1,169 (-11.8\%) |
|  | BN | -119 (-1.2\%) | -398 (-3.9\%) |
|  | D | 257 (3\%) | -51 (-0.6\%) |
|  | C | -747 (-8.7\%) | -307 (-3.8\%) |
|  | All | -387 (-3.9\%) | -427 (-4.3\%) |
| NOV | W | -737 (-4.8\%) | -1,184 (-7.5\%) |
|  | AN | -470 (-4\%) | -1,494 (-11.7\%) |
|  | BN | -172 (-1.7\%) | -758 (-7.3\%) |
|  | D | -636 (-6.3\%) | -210 (-2.2\%) |
|  | C | -97 (-1.3\%) | 21 (0.3\%) |
|  | All | -486 (-4.2\%) | -767 (-6.5\%) |
| DEC | W | -3,300 (-9.8\%) | -714 (-2.3\%) |
|  | AN | -454 (-2.6\%) | -1,362 (-7.4\%) |
|  | BN | -1,065 (-8.1\%) | -994 (-7.6\%) |
|  | D | -1,113 (-8.8\%) | -960 (-7.7\%) |
|  | C | -1,466 (-15\%) | -323 (-3.7\%) |
|  | All | -1,754 (-8.9\%) | -854 (-4.5\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.6.1.5 Trinity River below Lewiston

Table 9. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 6A: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 1,440 | 1,518 | 1,637 |
|  | AN | 300 | 300 | 300 |
|  | BN | 358 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 287 | 286 |
|  | All | 671 | 684 | 722 |
| FEB | W | 1,056 | 1,495 | 1,626 |
|  | AN | 689 | 784 | 962 |
|  | BN | 517 | 568 | 662 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 634 | 795 | 879 |
| MAR | W | 1,209 | 1,385 | 1,477 |
|  | AN | 436 | 519 | 519 |
|  | BN | 319 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 611 | 676 | 705 |
| APR | W | 721 | 844 | 882 |
|  | AN | 469 | 513 | 514 |
|  | BN | 507 | 504 | 504 |
|  | D | 529 | 529 | 529 |
|  | C | 575 | 580 | 580 |
|  | All | 584 | 630 | 642 |
| MAY | W | 4,636 | 4,620 | 4,620 |
|  | AN | 4,462 | 4,416 | 4,416 |
|  | BN | 3,774 | 3,865 | 3,865 |
|  | D | 3,216 | 3,216 | 3,216 |
|  | C | 2,092 | 1,973 | 1,973 |
|  | All | 3,779 | 3,766 | 3,766 |
| JUN | W | 3,371 | 3,560 | 3,560 |
|  | AN | 2,488 | 3,188 | 3,188 |
|  | BN | 1,672 | 1,767 | 1,767 |
|  | D | 1,251 | 1,251 | 1,251 |
|  | C | 783 | 783 | 783 |
|  | All | 2,108 | 2,286 | 2,286 |
| JUL | W | 1,289 | 1,103 | 1,103 |
|  | AN | 1,048 | 1,048 | 1,048 |
|  | BN | 869 | 916 | 916 |
|  | D | 667 | 667 | 667 |
|  | C | 450 | 413 | 450 |
|  | All | 923 | 866 | 872 |


| Alternative 6A: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 338 | 338 |
|  | All | 450 | 434 | 434 |
| SEP | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 265 | 283 |
|  | All | 450 | 423 | 426 |
| OCT | W | 373 | 373 | 373 |
|  | AN | 373 | 311 | 332 |
|  | BN | 346 | 346 | 346 |
|  | D | 373 | 346 | 352 |
|  | C | 373 | 311 | 280 |
|  | All | 368 | 344 | 344 |
| NOV | W | 489 | 414 | 385 |
|  | AN | 300 | 275 | 275 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 283 | 283 |
|  | C | 300 | 225 | 225 |
|  | All | 360 | 318 | 309 |
| DEC | W | 1,072 | 837 | 972 |
|  | AN | 300 | 300 | 300 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 275 | 275 |
|  | All | 545 | 466 | 509 |

Table 10. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 6A: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 197 (13.7\%) | 118 (7.8\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | -58 (-16.3\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -14 (-4.5\%) | -1 (-0.3\%) |
|  | All | 50 (7.5\%) | 37 (5.5\%) |
| FEB | W | 570 (53.9\%) | 131 (8.8\%) |
|  | AN | 272 (39.5\%) | 178 (22.7\%) |
|  | BN | 145 (28.1\%) | 94 (16.5\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 245 (38.7\%) | 84 (10.5\%) |
| MAR | W | 268 (22.2\%) | 92 (6.6\%) |
|  | AN | 83 (19.1\%) | 0 (0\%) |
|  | BN | -19 (-5.8\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 94 (15.4\%) | 29 (4.3\%) |
| APR | W | 161 (22.3\%) | 38 (4.5\%) |
|  | AN | 44 (9.4\%) | 1 (0.2\%) |
|  | BN | -3 (-0.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 5 (0.9\%) | 0 (0\%) |
|  | All | 58 (9.9\%) | 12 (2\%) |
| MAY | W | -16 (-0.3\%) | 0 (0\%) |
|  | AN | -46 (-1\%) | 0 (0\%) |
|  | BN | 90 (2.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -119 (-5.7\%) | 0 (0\%) |
|  | All | -14 (-0.4\%) | 0 (0\%) |
| JUN | W | 189 (5.6\%) | 0 (0\%) |
|  | AN | 700 (28.1\%) | 0 (0\%) |
|  | BN | 96 (5.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 179 (8.5\%) | 0 (0\%) |
| JUL | W | -185 (-14.4\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 47 (5.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 37 (9.1\%) |
|  | All | -51 (-5.5\%) | 5 (0.6\%) |


| Alternative 6A: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -112 (-25\%) | 0 (0\%) |
|  | All | -16 (-3.7\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -167 (-37\%) | 18 (6.9\%) |
|  | All | -24 (-5.4\%) | 3 (0.6\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | -41 (-11.1\%) | 21 (6.7\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -21 (-5.6\%) | 6 (1.9\%) |
|  | C | -93 (-25\%) | -31 (-10\%) |
|  | All | -24 (-6.6\%) | 0 (0\%) |
| NOV | W | -104 (-21.3\%) | -29 (-7.1\%) |
|  | AN | -25 (-8.3\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -17 (-5.6\%) | 0 (0\%) |
|  | C | -75 (-25\%) | 0 (0\%) |
|  | All | -51 (-14.2\%) | -9 (-2.9\%) |
| DEC | W | -100 (-9.3\%) | 135 (16.1\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -25 (-8.3\%) | 0 (0.1\%) |
|  | All | -35 (-6.5\%) | 43 (9.2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.6.1.6 Clear Creek below Whiskeytown

Table 11. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 6A: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 220 | 339 | 339 |
|  | AN | 192 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 159 | 156 |
|  | All | 193 | 233 | 233 |
| FEB | W | 220 | 257 | 257 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 168 | 168 |
|  | All | 194 | 209 | 209 |
| MAR | W | 200 | 259 | 258 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 202 | 189 |
|  | D | 186 | 192 | 192 |
|  | C | 155 | 168 | 168 |
|  | All | 188 | 212 | 210 |
| APR | W | 200 | 200 | 200 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 188 | 192 | 192 |
|  | C | 155 | 168 | 168 |
|  | All | 189 | 191 | 191 |
| MAY | W | 277 | 277 | 277 |
|  | AN | 277 | 277 | 277 |
|  | BN | 263 | 269 | 269 |
|  | D | 264 | 264 | 264 |
|  | C | 211 | 224 | 224 |
|  | All | 262 | 265 | 265 |
| JUN | W | 200 | 200 | 200 |
|  | AN | 200 | 200 | 200 |
|  | BN | 181 | 186 | 186 |
|  | D | 180 | 180 | 180 |
|  | C | 115 | 131 | 120 |
|  | All | 180 | 183 | 181 |
| JUL | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 85 | 85 | 98 |
|  | All | 85 | 85 | 87 |


| Alternative 6A: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 94 | 71 | 78 |
|  | All | 86 | 83 | 84 |
| SEP | W | 150 | 150 | 150 |
|  | AN | 150 | 150 | 150 |
|  | BN | 150 | 150 | 150 |
|  | D | 144 | 150 | 150 |
|  | C | 133 | 96 | 96 |
|  | All | 146 | 142 | 142 |
| OCT | W | 198 | 198 | 198 |
|  | AN | 183 | 183 | 183 |
|  | BN | 189 | 182 | 179 |
|  | D | 175 | 183 | 175 |
|  | C | 150 | 142 | 142 |
|  | All | 182 | 182 | 179 |
| NOV | W | 198 | 198 | 198 |
|  | AN | 185 | 182 | 182 |
|  | BN | 184 | 189 | 189 |
|  | D | 177 | 177 | 184 |
|  | C | 155 | 145 | 145 |
|  | All | 183 | 182 | 183 |
| DEC | W | 198 | 198 | 198 |
|  | AN | 185 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 177 | 189 | 189 |
|  | C | 155 | 156 | 156 |
|  | All | 184 | 187 | 187 |

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Table 12. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 6A: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 118 (53.6\%) | 0 (-0.1\%) |
|  | AN | 0 (-0.1\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 1 (0.7\%) | -3 (-1.9\%) |
|  | All | 39 (20.3\%) | -1 (-0.2\%) |
| FEB | W | 38 (17.1\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 13 (8.4\%) | 0 (0\%) |
|  | All | 15 (7.9\%) | 0 (0\%) |
| MAR | W | 58 (29.2\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | -12 (-6.1\%) |
|  | D | 6 (3.2\%) | 0 (0\%) |
|  | C | 13 (8.4\%) | 0 (0\%) |
|  | All | 22 (11.5\%) | -2 (-1\%) |
| APR | W | 0 (0\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 3 (1.7\%) | 0 (0\%) |
|  | C | 13 (8.4\%) | 0 (0\%) |
|  | All | 2 (1.3\%) | 0 (0\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 6 (2.2\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 13 (6.2\%) | 0 (0\%) |
|  | All | 3 (1.1\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 5 (2.6\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 5 (4.7\%) | -11 (-8.2\%) |
|  | All | 2 (0.9\%) | -2 (-0.9\%) |
| JUL | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 13 (15.5\%) | 13 (15.5\%) |
|  | All | 2 (2.3\%) | 2 (2.3\%) |


| Alternative 6A: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -16 (-17.4\%) | 7 (10\%) |
|  | All | -2 (-2.8\%) | 1 (1.2\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 6 (3.8\%) | 0 (0\%) |
|  | C | -37 (-28.1\%) | 0 (0\%) |
|  | All | -4 (-2.9\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | -11 (-5.7\%) | -3 (-1.8\%) |
|  | D | 0 (0\%) | -8 (-4.5\%) |
|  | C | -8 (-5.6\%) | 0 (0\%) |
|  | All | -3 (-1.7\%) | -2 (-1.3\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | -3 (-1.8\%) | 0 (0\%) |
|  | BN | 6 (3.1\%) | 0 (0\%) |
|  | D | 7 (4.1\%) | 8 (4.5\%) |
|  | C | -10 (-6.1\%) | 0 (0\%) |
|  | All | 1 (0.4\%) | 2 (1\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 7 (3.6\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 12 (6.6\%) | 0 (0\%) |
|  | C | 1 (0.3\%) | 0 (-0.2\%) |
|  | All | 4 (2\%) | 0 (0\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.6.1.7 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

Table 13. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 6A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| FEB | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| MAR | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| APR | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| MAY | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUN | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUL | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |


| Alternative 6A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| SEP | W | 773 | 773 | 773 |
|  | AN | 773 | 773 | 773 |
|  | BN | 773 | 773 | 773 |
|  | D | 773 | 773 | 773 |
|  | C | 773 | 773 | 773 |
|  | All | 773 | 773 | 773 |
| OCT | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| NOV | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| DEC | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |

Table 14. Differences (Percent Differences) between Pairs of Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 6A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| FEB | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| MAR | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| APR | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| JUL | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |


| Alternative 6A: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |

## 11C.6.1.8 Feather River High-Flow Channel (at Thermalito Afterbay)

Table 15. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 6A: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 11,257 | 11,896 | 14,106 |
|  | AN | 4,434 | 2,838 | 3,389 |
|  | BN | 2,640 | 1,441 | 1,497 |
|  | D | 1,798 | 1,459 | 1,437 |
|  | C | 1,459 | 1,648 | 1,253 |
|  | All | 5,277 | 4,995 | 5,723 |
| FEB | W | 12,466 | 14,787 | 16,041 |
|  | AN | 7,411 | 5,809 | 8,154 |
|  | BN | 3,916 | 1,897 | 2,108 |
|  | D | 1,817 | 1,659 | 1,592 |
|  | C | 1,610 | 1,482 | 1,678 |
|  | All | 6,340 | 6,444 | 7,235 |
| MAR | W | 12,895 | 14,772 | 14,991 |
|  | AN | 7,733 | 8,568 | 10,819 |
|  | BN | 3,373 | 1,985 | 2,062 |
|  | D | 2,017 | 1,762 | 1,980 |
|  | C | 1,697 | 1,634 | 1,573 |
|  | All | 6,487 | 6,902 | 7,353 |
| APR | W | 6,472 | 6,408 | 6,400 |
|  | AN | 2,251 | 2,170 | 2,165 |
|  | BN | 1,205 | 1,203 | 1,237 |
|  | D | 1,286 | 1,470 | 1,520 |
|  | C | 1,389 | 1,407 | 1,312 |
|  | All | 3,073 | 3,084 | 3,083 |
| MAY | W | 7,528 | 4,740 | 5,140 |
|  | AN | 3,340 | 3,101 | 3,069 |
|  | BN | 1,205 | 1,749 | 1,745 |
|  | D | 1,591 | 2,223 | 1,687 |
|  | C | 1,574 | 1,790 | 1,597 |
|  | All | 3,661 | 3,005 | 2,981 |
| JUN | W | 5,062 | 4,211 | 4,489 |
|  | AN | 3,301 | 3,930 | 4,879 |
|  | BN | 2,707 | 3,552 | 3,851 |
|  | D | 3,134 | 3,284 | 2,280 |
|  | C | 2,695 | 2,666 | 2,573 |
|  | All | 3,632 | 3,628 | 3,672 |
| JUL | W | 6,490 | 8,577 | 6,793 |
|  | AN | 8,757 | 9,488 | 7,971 |
|  | BN | 8,981 | 8,833 | 8,230 |
|  | D | 8,294 | 8,099 | 4,600 |
|  | C | 6,703 | 5,217 | 4,048 |
|  | All | 7,674 | 8,157 | 6,328 |


| Alternative 6A: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 3,308 | 6,228 | 5,332 |
|  | AN | 6,042 | 7,346 | 6,532 |
|  | BN | 6,295 | 6,868 | 7,160 |
|  | D | 7,036 | 4,990 | 4,885 |
|  | C | 2,613 | 2,163 | 3,583 |
|  | All | 4,935 | 5,634 | 5,466 |
| SEP | W | 2,280 | 8,327 | 5,961 |
|  | AN | 2,253 | 6,899 | 4,994 |
|  | BN | 2,466 | 3,068 | 5,098 |
|  | D | 2,366 | 1,052 | 3,990 |
|  | C | 1,421 | 1,345 | 1,862 |
|  | All | 2,201 | 4,601 | 4,640 |
| OCT | W | 3,456 | 3,051 | 2,931 |
|  | AN | 2,386 | 2,741 | 2,514 |
|  | BN | 3,183 | 2,862 | 2,829 |
|  | D | 2,688 | 2,652 | 2,491 |
|  | C | 2,472 | 2,102 | 2,360 |
|  | All | 2,940 | 2,747 | 2,672 |
| NOV | W | 3,292 | 2,470 | 2,332 |
|  | AN | 1,824 | 2,119 | 1,833 |
|  | BN | 2,101 | 1,900 | 1,906 |
|  | D | 1,859 | 1,664 | 1,671 |
|  | C | 1,854 | 1,876 | 1,803 |
|  | All | 2,349 | 2,058 | 1,964 |
| DEC | W | 7,157 | 3,948 | 5,759 |
|  | AN | 2,951 | 3,344 | 2,430 |
|  | BN | 2,176 | 2,102 | 1,527 |
|  | D | 2,364 | 2,229 | 1,822 |
|  | C | 2,609 | 1,694 | 1,552 |
|  | All | 3,973 | 2,837 | 3,069 |

Table 16. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 6A: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 2,848 (25.3\%) | 2,210 (18.6\%) |
|  | AN | -1,045 (-23.6\%) | 551 (19.4\%) |
|  | BN | -1,143 (-43.3\%) | 56 (3.9\%) |
|  | D | -361 (-20.1\%) | -21 (-1.5\%) |
|  | C | -207 (-14.2\%) | -395 (-24\%) |
|  | All | 446 (8.4\%) | 728 (14.6\%) |
| FEB | W | 3,575 (28.7\%) | 1,254 (8.5\%) |
|  | AN | 744 (10\%) | 2,346 (40.4\%) |
|  | BN | -1,808 (-46.2\%) | 212 (11.2\%) |
|  | D | -225 (-12.4\%) | -68 (-4.1\%) |
|  | C | 67 (4.2\%) | 196 (13.2\%) |
|  | All | 894 (14.1\%) | 791 (12.3\%) |
| MAR | W | 2,096 (16.3\%) | 219 (1.5\%) |
|  | AN | 3,086 (39.9\%) | 2,251 (26.3\%) |
|  | BN | -1,311 (-38.9\%) | 77 (3.9\%) |
|  | D | -36 (-1.8\%) | 218 (12.4\%) |
|  | C | -124 (-7.3\%) | -61 (-3.7\%) |
|  | All | 866 (13.4\%) | 451 (6.5\%) |
| APR | W | -72 (-1.1\%) | -8 (-0.1\%) |
|  | AN | -87 (-3.9\%) | -6 (-0.3\%) |
|  | BN | 32 (2.7\%) | 34 (2.8\%) |
|  | D | 234 (18.2\%) | 50 (3.4\%) |
|  | C | -77 (-5.5\%) | -95 (-6.7\%) |
|  | All | 10 (0.3\%) | -1 (0\%) |
| MAY | W | -2,388 (-31.7\%) | 400 (8.4\%) |
|  | AN | -271 (-8.1\%) | -32 (-1\%) |
|  | BN | 540 (44.8\%) | -3 (-0.2\%) |
|  | D | 96 (6\%) | -536 (-24.1\%) |
|  | C | 22 (1.4\%) | -193 (-10.8\%) |
|  | All | -680 (-18.6\%) | -25 (-0.8\%) |
| JUN | W | -573 (-11.3\%) | 278 (6.6\%) |
|  | AN | 1,578 (47.8\%) | 949 (24.2\%) |
|  | BN | 1,145 (42.3\%) | 300 (8.4\%) |
|  | D | -854 (-27.3\%) | -1,004 (-30.6\%) |
|  | C | -122 (-4.5\%) | -93 (-3.5\%) |
|  | All | 39 (1.1\%) | 44 (1.2\%) |
| JUL | W | 303 (4.7\%) | -1,784 (-20.8\%) |
|  | AN | -785 (-9\%) | -1,517 (-16\%) |
|  | BN | -751 (-8.4\%) | -603 (-6.8\%) |
|  | D | -3,694 (-44.5\%) | -3,499 (-43.2\%) |
|  | C | -2,654 (-39.6\%) | -1,169 (-22.4\%) |
|  | All | -1,347 (-17.5\%) | -1,830 (-22.4\%) |


| Alternative 6A: Upstream—Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS <br> vs. A6A_LLT | NAA vs. A6A_LLT |$|-2,896(-14.4 \%)$

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.6.1.9 Feather River at Confluence with Sacramento River

Table 17. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 6A: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 23,533 | 26,106 | 28,308 |
|  | AN | 12,430 | 11,953 | 12,511 |
|  | BN | 6,499 | 5,575 | 5,632 |
|  | D | 4,621 | 4,412 | 4,389 |
|  | C | 3,646 | 3,837 | 3,439 |
|  | All | 11,938 | 12,509 | 13,235 |
| FEB | W | 27,039 | 31,065 | 32,315 |
|  | AN | 14,818 | 14,599 | 16,946 |
|  | BN | 9,153 | 7,892 | 8,102 |
|  | D | 4,402 | 4,436 | 4,367 |
|  | C | 3,237 | 3,096 | 3,293 |
|  | All | 13,744 | 14,761 | 15,550 |
| MAR | W | 24,172 | 26,784 | 27,012 |
|  | AN | 19,990 | 21,490 | 23,737 |
|  | BN | 8,136 | 6,882 | 6,954 |
|  | D | 5,073 | 4,940 | 5,131 |
|  | C | 2,933 | 2,756 | 2,689 |
|  | All | 13,521 | 14,300 | 14,746 |
| APR | W | 15,897 | 15,852 | 15,854 |
|  | AN | 9,832 | 9,585 | 9,576 |
|  | BN | 5,401 | 5,189 | 5,224 |
|  | D | 4,152 | 4,137 | 4,182 |
|  | C | 3,298 | 3,185 | 3,092 |
|  | All | 8,796 | 8,689 | 8,691 |
| MAY | W | 14,387 | 10,385 | 10,796 |
|  | AN | 8,068 | 6,884 | 6,859 |
|  | BN | 4,704 | 4,509 | 4,507 |
|  | D | 3,652 | 3,767 | 3,228 |
|  | C | 2,389 | 2,321 | 2,117 |
|  | All | 7,697 | 6,237 | 6,215 |
| JUN | W | 10,222 | 7,199 | 7,449 |
|  | AN | 6,391 | 5,598 | 6,394 |
|  | BN | 4,495 | 4,342 | 4,618 |
|  | D | 3,853 | 3,367 | 2,313 |
|  | C | 2,782 | 2,522 | 2,262 |
|  | All | 6,197 | 4,951 | 4,925 |
| JUL | W | 8,177 | 8,734 | 6,702 |
|  | AN | 9,322 | 9,223 | 7,415 |
|  | BN | 9,380 | 8,725 | 7,858 |
|  | D | 8,290 | 7,674 | 3,917 |
|  | C | 6,450 | 4,891 | 3,511 |
|  | All | 8,322 | 8,009 | 5,925 |


| Alternative 6A: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 4,923 | 7,222 | 5,842 |
|  | AN | 7,080 | 8,089 | 6,940 |
|  | BN | 7,236 | 7,570 | 7,425 |
|  | D | 7,711 | 5,487 | 5,064 |
|  | C | 2,841 | 2,340 | 3,559 |
|  | All | 5,941 | 6,313 | 5,768 |
| SEP | W | 4,351 | 10,329 | 7,950 |
|  | AN | 4,194 | 8,773 | 6,856 |
|  | BN | 4,252 | 4,786 | 6,771 |
|  | D | 4,179 | 2,848 | 5,552 |
|  | C | 2,054 | 1,964 | 2,241 |
|  | All | 3,937 | 6,289 | 6,227 |
| OCT | W | 4,176 | 3,746 | 3,635 |
|  | AN | 2,630 | 2,988 | 2,743 |
|  | BN | 3,754 | 3,437 | 3,397 |
|  | D | 3,033 | 2,987 | 2,831 |
|  | C | 2,938 | 2,566 | 2,807 |
|  | All | 3,446 | 3,243 | 3,166 |
| NOV | W | 4,697 | 3,825 | 3,689 |
|  | AN | 3,065 | 3,186 | 2,900 |
|  | BN | 2,687 | 2,455 | 2,462 |
|  | D | 2,342 | 2,125 | 2,132 |
|  | C | 2,084 | 2,107 | 2,024 |
|  | All | 3,216 | 2,873 | 2,779 |
| DEC | W | 12,409 | 10,246 | 12,055 |
|  | AN | 5,193 | 6,000 | 5,090 |
|  | BN | 3,079 | 3,249 | 2,676 |
|  | D | 2,838 | 2,811 | 2,399 |
|  | C | 2,975 | 2,054 | 1,911 |
|  | All | 6,279 | 5,599 | 5,830 |

Table 18. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 6A: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 4,775 (20.3\%) | 2,202 (8.4\%) |
|  | AN | 82 (0.7\%) | 558 (4.7\%) |
|  | BN | -867 (-13.3\%) | 57 (1\%) |
|  | D | -232 (-5\%) | -23 (-0.5\%) |
|  | C | -207 (-5.7\%) | -397 (-10.4\%) |
|  | All | 1,297 (10.9\%) | 726 (5.8\%) |
| FEB | W | 5,276 (19.5\%) | 1,250 (4\%) |
|  | AN | 2,128 (14.4\%) | 2,347 (16.1\%) |
|  | BN | -1,051 (-11.5\%) | 209 (2.7\%) |
|  | D | -35 (-0.8\%) | -69 (-1.6\%) |
|  | C | 56 (1.7\%) | 197 (6.4\%) |
|  | All | 1,805 (13.1\%) | 789 (5.3\%) |
| MAR | W | 2,840 (11.7\%) | 228 (0.9\%) |
|  | AN | 3,747 (18.7\%) | 2,247 (10.5\%) |
|  | BN | -1,181 (-14.5\%) | 73 (1.1\%) |
|  | D | 59 (1.2\%) | 191 (3.9\%) |
|  | C | -244 (-8.3\%) | -67 (-2.4\%) |
|  | All | 1,224 (9.1\%) | 446 (3.1\%) |
| APR | W | -43 (-0.3\%) | 3 (0\%) |
|  | AN | -256 (-2.6\%) | -9 (-0.1\%) |
|  | BN | -177 (-3.3\%) | 35 (0.7\%) |
|  | D | 31 (0.7\%) | 46 (1.1\%) |
|  | C | -206 (-6.3\%) | -93 (-2.9\%) |
|  | All | -105 (-1.2\%) | 2 (0\%) |
| MAY | W | -3,591 (-25\%) | 411 (4\%) |
|  | AN | -1,209 (-15\%) | -24 (-0.4\%) |
|  | BN | -197 (-4.2\%) | -1 (0\%) |
|  | D | -424 (-11.6\%) | -539 (-14.3\%) |
|  | C | -272 (-11.4\%) | -204 (-8.8\%) |
|  | All | -1,482 (-19.3\%) | -22 (-0.3\%) |
| JUN | W | -2,773 (-27.1\%) | 250 (3.5\%) |
|  | AN | 3 (0\%) | 796 (14.2\%) |
|  | BN | 123 (2.7\%) | 277 (6.4\%) |
|  | D | -1,540 (-40\%) | -1,053 (-31.3\%) |
|  | C | -520 (-18.7\%) | -260 (-10.3\%) |
|  | All | -1,272 (-20.5\%) | -26 (-0.5\%) |
| JUL | W | -1,475 (-18\%) | -2,033 (-23.3\%) |
|  | AN | -1,908 (-20.5\%) | -1,808 (-19.6\%) |
|  | BN | -1,522 (-16.2\%) | -867 (-9.9\%) |
|  | D | -4,372 (-52.7\%) | -3,757 (-49\%) |
|  | C | -2,939 (-45.6\%) | -1,380 (-28.2\%) |
|  | All | -2,397 (-28.8\%) | -2,084 (-26\%) |


| Alternative 6A: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | 919 (18.7\%) | -1,380 (-19.1\%) |
|  | AN | -140 (-2\%) | -1,149 (-14.2\%) |
|  | BN | 190 (2.6\%) | -144 (-1.9\%) |
|  | D | -2,647 (-34.3\%) | -423 (-7.7\%) |
|  | C | 718 (25.3\%) | 1,219 (52.1\%) |
|  | All | -173 (-2.9\%) | -545 (-8.6\%) |
| SEP | W | 3,599 (82.7\%) | -2,379 (-23\%) |
|  | AN | 2,662 (63.5\%) | -1,918 (-21.9\%) |
|  | BN | 2,520 (59.3\%) | 1,986 (41.5\%) |
|  | D | 1,373 (32.9\%) | 2,704 (95\%) |
|  | C | 187 (9.1\%) | 277 (14.1\%) |
|  | All | 2,290 (58.2\%) | -62 (-1\%) |
| OCT | W | -541 (-13\%) | -111 (-3\%) |
|  | AN | 112 (4.3\%) | -246 (-8.2\%) |
|  | BN | -357 (-9.5\%) | -40 (-1.2\%) |
|  | D | -201 (-6.6\%) | -155 (-5.2\%) |
|  | C | -131 (-4.5\%) | 241 (9.4\%) |
|  | All | -279 (-8.1\%) | -77 (-2.4\%) |
| NOV | W | -1,008 (-21.5\%) | -136 (-3.6\%) |
|  | AN | -165 (-5.4\%) | -287 (-9\%) |
|  | BN | -225 (-8.4\%) | 8 (0.3\%) |
|  | D | -210 (-9\%) | 7 (0.3\%) |
|  | C | -60 (-2.9\%) | -83 (-3.9\%) |
|  | All | -437 (-13.6\%) | -94 (-3.3\%) |
| DEC | W | -354 (-2.9\%) | 1,809 (17.7\%) |
|  | AN | -103 (-2\%) | -910 (-15.2\%) |
|  | BN | -403 (-13.1\%) | -573 (-17.6\%) |
|  | D | -439 (-15.5\%) | -413 (-14.7\%) |
|  | C | -1,064 (-35.8\%) | -144 (-7\%) |
|  | All | -448 (-7.1\%) | 231 (4.1\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.6.1.10 American River at Nimbus Dam

Table 19. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 6A: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 8,806 | 11,036 | 11,187 |
|  | AN | 4,833 | 5,805 | 6,127 |
|  | BN | 2,392 | 2,073 | 2,028 |
|  | D | 1,723 | 1,506 | 1,579 |
|  | C | 1,474 | 1,095 | 1,088 |
|  | All | 4,502 | 5,194 | 5,296 |
| FEB | W | 9,294 | 11,102 | 11,105 |
|  | AN | 6,469 | 8,153 | 8,250 |
|  | BN | 4,360 | 4,961 | 5,106 |
|  | D | 1,852 | 1,844 | 1,897 |
|  | C | 1,185 | 1,007 | 1,117 |
|  | All | 5,218 | 6,112 | 6,180 |
| MAR | W | 6,089 | 6,992 | 6,997 |
|  | AN | 5,454 | 5,790 | 5,818 |
|  | BN | 2,429 | 2,794 | 2,811 |
|  | D | 2,191 | 2,314 | 2,314 |
|  | C | 939 | 938 | 739 |
|  | All | 3,762 | 4,187 | 4,166 |
| APR | W | 5,300 | 5,508 | 5,516 |
|  | AN | 3,546 | 3,298 | 3,316 |
|  | BN | 3,126 | 2,970 | 2,894 |
|  | D | 1,837 | 1,888 | 1,645 |
|  | C | 1,156 | 1,255 | 1,190 |
|  | All | 3,305 | 3,334 | 3,264 |
| MAY | W | 6,157 | 4,592 | 4,682 |
|  | AN | 3,885 | 2,521 | 2,662 |
|  | BN | 2,930 | 1,969 | 2,155 |
|  | D | 1,790 | 1,686 | 1,785 |
|  | C | 1,182 | 992 | 1,022 |
|  | All | 3,587 | 2,676 | 2,783 |
| JUN | W | 6,003 | 3,694 | 3,994 |
|  | AN | 3,346 | 3,022 | 3,050 |
|  | BN | 2,863 | 2,883 | 2,801 |
|  | D | 2,506 | 2,596 | 2,414 |
|  | C | 1,824 | 1,025 | 1,003 |
|  | All | 3,699 | 2,825 | 2,868 |
| JUL | W | 4,108 | 3,860 | 3,991 |
|  | AN | 4,638 | 4,927 | 4,447 |
|  | BN | 4,744 | 4,328 | 3,762 |
|  | D | 3,577 | 3,143 | 2,940 |
|  | C | 1,784 | 2,022 | 2,312 |
|  | All | 3,838 | 3,670 | 3,542 |


| Alternative 6A: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| AUG | W | 3,520 | 2,132 | 2,401 |
|  | AN | 2,542 | 1,944 | 1,997 |
|  | BN | 2,495 | 2,324 | 2,337 |
|  | D | 2,613 | 1,620 | 1,587 |
|  | C | 1,500 | 1,100 | 961 |
|  | All | 2,707 | 1,874 | 1,942 |
| SEP | W | 4,025 | 3,622 | 2,549 |
|  | AN | 2,764 | 2,044 | 1,883 |
|  | BN | 2,370 | 1,605 | 1,595 |
|  | D | 1,856 | 1,182 | 1,189 |
|  | C | 1,164 | 594 | 605 |
|  | All | 2,663 | 2,068 | 1,705 |
| OCT | W | 1,723 | 1,634 | 1,750 |
|  | AN | 1,706 | 1,732 | 1,682 |
|  | BN | 1,602 | 1,767 | 1,755 |
|  | D | 1,468 | 1,258 | 1,447 |
|  | C | 1,461 | 1,655 | 1,886 |
|  | All | 1,605 | 1,592 | 1,694 |
| NOV | W | 3,527 | 2,612 | 2,718 |
|  | AN | 3,181 | 2,554 | 2,505 |
|  | BN | 2,067 | 1,716 | 1,599 |
|  | D | 2,176 | 1,424 | 1,492 |
|  | C | 1,994 | 1,608 | 1,588 |
|  | All | 2,706 | 2,043 | 2,061 |
| DEC | W | 6,302 | 6,171 | 6,397 |
|  | AN | 3,137 | 2,933 | 3,025 |
|  | BN | 2,676 | 2,527 | 2,533 |
|  | D | 1,741 | 1,351 | 1,503 |
|  | C | 1,524 | 1,251 | 1,225 |
|  | All | 3,519 | 3,297 | 3,413 |

Table 20. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 6A: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 2,381 (27\%) | 151 (1.4\%) |
|  | AN | 1,294 (26.8\%) | 322 (5.6\%) |
|  | BN | -364 (-15.2\%) | -45 (-2.2\%) |
|  | D | -144 (-8.3\%) | 73 (4.9\%) |
|  | C | -386 (-26.2\%) | -7 (-0.6\%) |
|  | All | 794 (17.6\%) | 102 (2\%) |
| FEB | W | 1,812 (19.5\%) | 3 (0\%) |
|  | AN | 1,781 (27.5\%) | 97 (1.2\%) |
|  | BN | 746 (17.1\%) | 145 (2.9\%) |
|  | D | 45 (2.4\%) | 53 (2.9\%) |
|  | C | -68 (-5.8\%) | 110 (11\%) |
|  | All | 962 (18.4\%) | 68 (1.1\%) |
| MAR | W | 909 (14.9\%) | 5 (0.1\%) |
|  | AN | 365 (6.7\%) | 28 (0.5\%) |
|  | BN | 381 (15.7\%) | 16 (0.6\%) |
|  | D | 123 (5.6\%) | 0 (0\%) |
|  | C | -200 (-21.3\%) | -199 (-21.2\%) |
|  | All | 404 (10.7\%) | -21 (-0.5\%) |
| APR | W | 216 (4.1\%) | 8 (0.1\%) |
|  | AN | -230 (-6.5\%) | 17 (0.5\%) |
|  | BN | -232 (-7.4\%) | -76 (-2.6\%) |
|  | D | -193 (-10.5\%) | -244 (-12.9\%) |
|  | C | 35 (3\%) | -65 (-5.2\%) |
|  | All | -42 (-1.3\%) | -71 (-2.1\%) |
| MAY | W | -1,475 (-24\%) | 90 (2\%) |
|  | AN | -1,222 (-31.5\%) | 142 (5.6\%) |
|  | BN | -775 (-26.4\%) | 186 (9.5\%) |
|  | D | -4 (-0.2\%) | 99 (5.9\%) |
|  | C | -160 (-13.5\%) | 30 (3\%) |
|  | All | -803 (-22.4\%) | 107 (4\%) |
| JUN | W | -2,009 (-33.5\%) | 300 (8.1\%) |
|  | AN | -296 (-8.8\%) | 27 (0.9\%) |
|  | BN | -62 (-2.2\%) | -81 (-2.8\%) |
|  | D | -92 (-3.7\%) | -182 (-7\%) |
|  | C | -821 (-45\%) | -21 (-2.1\%) |
|  | All | -831 (-22.5\%) | 42 (1.5\%) |
| JUL | W | -118 (-2.9\%) | 130 (3.4\%) |
|  | AN | -191 (-4.1\%) | -480 (-9.7\%) |
|  | BN | -983 (-20.7\%) | -566 (-13.1\%) |
|  | D | -637 (-17.8\%) | -204 (-6.5\%) |
|  | C | 528 (29.6\%) | 290 (14.3\%) |
|  | All | -296 (-7.7\%) | -128 (-3.5\%) |


| Alternative 6A: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | -1,119 (-31.8\%) | 269 (12.6\%) |
|  | AN | -545 (-21.4\%) | 53 (2.7\%) |
|  | BN | -157 (-6.3\%) | 13 (0.6\%) |
|  | D | -1,025 (-39.2\%) | -32 (-2\%) |
|  | C | -539 (-35.9\%) | -139 (-12.6\%) |
|  | All | -765 (-28.3\%) | 68 (3.6\%) |
| SEP | W | -1,476 (-36.7\%) | -1,074 (-29.6\%) |
|  | AN | -881 (-31.9\%) | -161 (-7.9\%) |
|  | BN | -775 (-32.7\%) | -10 (-0.6\%) |
|  | D | -667 (-36\%) | 7 (0.6\%) |
|  | C | -559 (-48\%) | 11 (1.9\%) |
|  | All | -958 (-36\%) | -363 (-17.5\%) |
| OCT | W | 27 (1.6\%) | 115 (7.1\%) |
|  | AN | -24 (-1.4\%) | -49 (-2.9\%) |
|  | BN | 153 (9.5\%) | -12 (-0.7\%) |
|  | D | -21 (-1.5\%) | 188 (15\%) |
|  | C | 426 (29.1\%) | 232 (14\%) |
|  | All | 89 (5.5\%) | 103 (6.4\%) |
| NOV | W | -809 (-22.9\%) | 106 (4\%) |
|  | AN | -676 (-21.2\%) | -49 (-1.9\%) |
|  | BN | -468 (-22.7\%) | -117 (-6.8\%) |
|  | D | -684 (-31.4\%) | 68 (4.7\%) |
|  | C | -406 (-20.4\%) | -20 (-1.2\%) |
|  | All | -645 (-23.8\%) | 18 (0.9\%) |
| DEC | W | 96 (1.5\%) | 227 (3.7\%) |
|  | AN | -112 (-3.6\%) | 92 (3.1\%) |
|  | BN | -143 (-5.3\%) | 6 (0.2\%) |
|  | D | -237 (-13.6\%) | 152 (11.3\%) |
|  | C | -300 (-19.7\%) | -27 (-2.1\%) |
|  | All | -106 (-3\%) | 116 (3.5\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.6.1.11 American River at Confluence with Sacramento River

Table 21. Mean Monthly Flows (cfs) for Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 6A: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 8,748 | 10,960 | 11,109 |
|  | AN | 4,806 | 5,760 | 6,082 |
|  | BN | 2,326 | 1,988 | 1,944 |
|  | D | 1,654 | 1,424 | 1,496 |
|  | C | 1,403 | 1,008 | 1,001 |
|  | All | 4,443 | 5,118 | 5,219 |
| FEB | W | 9,183 | 10,947 | 10,949 |
|  | AN | 6,422 | 8,073 | 8,167 |
|  | BN | 4,309 | 4,888 | 5,033 |
|  | D | 1,781 | 1,756 | 1,808 |
|  | C | 1,119 | 921 | 1,032 |
|  | All | 5,142 | 6,007 | 6,074 |
| MAR | W | 5,979 | 6,837 | 6,842 |
|  | AN | 5,364 | 5,661 | 5,688 |
|  | BN | 2,340 | 2,672 | 2,687 |
|  | D | 2,121 | 2,224 | 2,223 |
|  | C | 864 | 836 | 645 |
|  | All | 3,672 | 4,063 | 4,043 |
| APR | W | 5,156 | 5,300 | 5,308 |
|  | AN | 3,383 | 3,079 | 3,096 |
|  | BN | 2,984 | 2,778 | 2,702 |
|  | D | 1,672 | 1,677 | 1,432 |
|  | C | 996 | 1,059 | 992 |
|  | All | 3,152 | 3,128 | 3,057 |
| MAY | W | 5,959 | 4,332 | 4,422 |
|  | AN | 3,700 | 2,285 | 2,427 |
|  | BN | 2,733 | 1,726 | 1,913 |
|  | D | 1,605 | 1,454 | 1,556 |
|  | C | 1,014 | 790 | 820 |
|  | All | 3,398 | 2,438 | 2,545 |
| JUN | W | 5,743 | 3,388 | 3,688 |
|  | AN | 3,103 | 2,736 | 2,762 |
|  | BN | 2,631 | 2,603 | 2,520 |
|  | D | 2,282 | 2,320 | 2,137 |
|  | C | 1,621 | 793 | 771 |
|  | All | 3,462 | 2,545 | 2,586 |
| JUL | W | 3,844 | 3,560 | 3,688 |
|  | AN | 4,399 | 4,635 | 4,155 |
|  | BN | 4,509 | 4,038 | 3,473 |
|  | D | 3,347 | 2,858 | 2,657 |
|  | C | 1,568 | 1,784 | 2,071 |
|  | All | 3,597 | 3,385 | 3,256 |


| Alternative 6A: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 3,295 | 1,858 | 2,126 |
|  | AN | 2,313 | 1,663 | 1,720 |
|  | BN | 2,265 | 2,048 | 2,066 |
|  | D | 2,395 | 1,357 | 1,328 |
|  | C | 1,314 | 899 | 752 |
|  | All | 2,488 | 1,612 | 1,680 |
| SEP | W | 3,846 | 3,415 | 2,339 |
|  | AN | 2,594 | 1,838 | 1,677 |
|  | BN | 2,205 | 1,402 | 1,391 |
|  | D | 1,691 | 987 | 994 |
|  | C | 1,011 | 427 | 437 |
|  | All | 2,495 | 1,870 | 1,507 |
| OCT | W | 1,607 | 1,499 | 1,619 |
|  | AN | 1,597 | 1,613 | 1,559 |
|  | BN | 1,472 | 1,617 | 1,609 |
|  | D | 1,344 | 1,114 | 1,305 |
|  | C | 1,342 | 1,517 | 1,749 |
|  | All | 1,486 | 1,454 | 1,559 |
| NOV | W | 3,472 | 2,540 | 2,644 |
|  | AN | 3,100 | 2,455 | 2,406 |
|  | BN | 1,990 | 1,618 | 1,501 |
|  | D | 2,094 | 1,326 | 1,392 |
|  | C | 1,897 | 1,489 | 1,467 |
|  | All | 2,632 | 1,950 | 1,967 |
| DEC | W | 6,255 | 6,115 | 6,340 |
|  | AN | 3,072 | 2,856 | 2,949 |
|  | BN | 2,609 | 2,445 | 2,452 |
|  | D | 1,675 | 1,275 | 1,426 |
|  | C | 1,443 | 1,158 | 1,131 |
|  | All | 3,457 | 3,224 | 3,339 |

Table 22. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 6A: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 2,361 (27\%) | 149 (1.4\%) |
|  | AN | 1,276 (26.6\%) | 321 (5.6\%) |
|  | BN | -383 (-16.5\%) | -45 (-2.2\%) |
|  | D | -158 (-9.6\%) | 72 (5\%) |
|  | C | -402 (-28.7\%) | -7 (-0.6\%) |
|  | All | 776 (17.5\%) | 101 (2\%) |
| FEB | W | 1,766 (19.2\%) | 2 (0\%) |
|  | AN | 1,744 (27.2\%) | 94 (1.2\%) |
|  | BN | 724 (16.8\%) | 145 (3\%) |
|  | D | 28 (1.6\%) | 52 (3\%) |
|  | C | -86 (-7.7\%) | 111 (12.1\%) |
|  | All | 932 (18.1\%) | 67 (1.1\%) |
| MAR | W | 862 (14.4\%) | 5 (0.1\%) |
|  | AN | 323 (6\%) | 27 (0.5\%) |
|  | BN | 348 (14.9\%) | 15 (0.6\%) |
|  | D | 103 (4.8\%) | 0 (0\%) |
|  | C | -219 (-25.3\%) | -191 (-22.8\%) |
|  | All | 371 (10.1\%) | -20 (-0.5\%) |
| APR | W | 152 (2.9\%) | 8 (0.2\%) |
|  | AN | -287 (-8.5\%) | 17 (0.6\%) |
|  | BN | -282 (-9.5\%) | -76 (-2.7\%) |
|  | D | -240 (-14.4\%) | -245 (-14.6\%) |
|  | C | -3 (-0.3\%) | -67 (-6.3\%) |
|  | All | -95 (-3\%) | -71 (-2.3\%) |
| MAY | W | -1,537 (-25.8\%) | 90 (2.1\%) |
|  | AN | -1,273 (-34.4\%) | 141 (6.2\%) |
|  | BN | -820 (-30\%) | 187 (10.8\%) |
|  | D | -49 (-3.1\%) | 102 (7\%) |
|  | C | -194 (-19.1\%) | 30 (3.8\%) |
|  | All | -853 (-25.1\%) | 108 (4.4\%) |
| JUN | W | -2,055 (-35.8\%) | 300 (8.8\%) |
|  | AN | -341 (-11\%) | 26 (1\%) |
|  | BN | -111 (-4.2\%) | -83 (-3.2\%) |
|  | D | -145 (-6.3\%) | -183 (-7.9\%) |
|  | C | -850 (-52.4\%) | -22 (-2.7\%) |
|  | All | -877 (-25.3\%) | 41 (1.6\%) |
| JUL | W | -156 (-4.1\%) | 128 (3.6\%) |
|  | AN | -244 (-5.5\%) | -480 (-10.4\%) |
|  | BN | -1,036 (-23\%) | -566 (-14\%) |
|  | D | -690 (-20.6\%) | -202 (-7.1\%) |
|  | C | 503 (32.1\%) | 287 (16.1\%) |
|  | All | -340 (-9.5\%) | -129 (-3.8\%) |


| Alternative 6A: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | -1,169 (-35.5\%) | 268 (14.4\%) |
|  | AN | -593 (-25.6\%) | 57 (3.4\%) |
|  | BN | -199 (-8.8\%) | 18 (0.9\%) |
|  | D | -1,067 (-44.5\%) | -28 (-2.1\%) |
|  | C | -562 (-42.8\%) | -147 (-16.4\%) |
|  | All | -808 (-32.5\%) | 69 (4.3\%) |
| SEP | W | -1,507 (-39.2\%) | -1,076 (-31.5\%) |
|  | AN | -917 (-35.4\%) | -161 (-8.8\%) |
|  | BN | -814 (-36.9\%) | -11 (-0.8\%) |
|  | D | -697 (-41.2\%) | 7 (0.7\%) |
|  | C | -574 (-56.8\%) | 10 (2.4\%) |
|  | All | -988 (-39.6\%) | -364 (-19.4\%) |
| OCT | W | 11 (0.7\%) | 120 (8\%) |
|  | AN | -38 (-2.4\%) | -54 (-3.3\%) |
|  | BN | 137 (9.3\%) | -8 (-0.5\%) |
|  | D | -39 (-2.9\%) | 191 (17.2\%) |
|  | C | 407 (30.4\%) | 232 (15.3\%) |
|  | All | 73 (4.9\%) | 105 (7.2\%) |
| NOV | W | -828 (-23.9\%) | 104 (4.1\%) |
|  | AN | -693 (-22.4\%) | -48 (-2\%) |
|  | BN | -489 (-24.6\%) | -117 (-7.2\%) |
|  | D | -703 (-33.5\%) | 66 (5\%) |
|  | C | -430 (-22.6\%) | -22 (-1.5\%) |
|  | All | -665 (-25.3\%) | 17 (0.9\%) |
| DEC | W | 85 (1.4\%) | 225 (3.7\%) |
|  | AN | -123 (-4\%) | 93 (3.2\%) |
|  | BN | -157 (-6\%) | 7 (0.3\%) |
|  | D | -248 (-14.8\%) | 151 (11.9\%) |
|  | C | -312 (-21.6\%) | -27 (-2.3\%) |
|  | All | -118 (-3.4\%) | 115 (3.6\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.6.1.12 Stanislaus River at Confluence with the San Joaquin River

Table 23. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 6A: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 956 | 885 | 885 |
|  | AN | 843 | 963 | 963 |
|  | BN | 416 | 369 | 368 |
|  | D | 403 | 366 | 366 |
|  | C | 314 | 265 | 265 |
|  | All | 635 | 615 | 615 |
| FEB | W | 1,285 | 1,236 | 1,234 |
|  | AN | 917 | 858 | 858 |
|  | BN | 551 | 438 | 439 |
|  | D | 562 | 359 | 362 |
|  | C | 490 | 348 | 348 |
|  | All | 827 | 723 | 723 |
| MAR | W | 2,063 | 2,217 | 2,216 |
|  | AN | 1,295 | 956 | 956 |
|  | BN | 732 | 548 | 548 |
|  | D | 559 | 390 | 394 |
|  | C | 541 | 444 | 447 |
|  | All | 1,167 | 1,071 | 1,072 |
| APR | W | 2,054 | 1,965 | 1,965 |
|  | AN | 1,719 | 1,535 | 1,517 |
|  | BN | 1,494 | 1,211 | 1,211 |
|  | D | 1,438 | 1,199 | 1,197 |
|  | C | 823 | 670 | 663 |
|  | All | 1,562 | 1,387 | 1,382 |
| MAY | W | 1,653 | 1,613 | 1,601 |
|  | AN | 1,389 | 1,243 | 1,230 |
|  | BN | 1,238 | 898 | 901 |
|  | D | 1,140 | 916 | 921 |
|  | C | 715 | 627 | 616 |
|  | All | 1,271 | 1,125 | 1,118 |
| JUN | W | 1,608 | 1,763 | 1,762 |
|  | AN | 1,134 | 985 | 981 |
|  | BN | 663 | 568 | 591 |
|  | D | 447 | 364 | 433 |
|  | C | 332 | 296 | 342 |
|  | All | 932 | 914 | 936 |
| JUL | W | 1,064 | 1,080 | 1,076 |
|  | AN | 489 | 454 | 454 |
|  | BN | 450 | 425 | 423 |
|  | D | 398 | 359 | 348 |
|  | C | 337 | 310 | 305 |
|  | All | 607 | 590 | 585 |


| Alternative 6A: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 930 | 717 | 717 |
|  | AN | 476 | 454 | 454 |
|  | BN | 423 | 418 | 418 |
|  | D | 387 | 382 | 382 |
|  | C | 341 | 338 | 333 |
|  | All | 560 | 491 | 490 |
| SEP | W | 1,040 | 863 | 863 |
|  | AN | 502 | 474 | 474 |
|  | BN | 417 | 407 | 407 |
|  | D | 395 | 390 | 393 |
|  | C | 324 | 317 | 323 |
|  | All | 595 | 533 | 535 |
| OCT | W | 897 | 845 | 847 |
|  | AN | 873 | 822 | 826 |
|  | BN | 903 | 844 | 841 |
|  | D | 984 | 925 | 925 |
|  | C | 689 | 612 | 616 |
|  | All | 867 | 808 | 809 |
| NOV | W | 426 | 408 | 408 |
|  | AN | 580 | 524 | 524 |
|  | BN | 341 | 334 | 334 |
|  | D | 345 | 321 | 321 |
|  | C | 325 | 308 | 309 |
|  | All | 410 | 386 | 386 |
| DEC | W | 512 | 429 | 435 |
|  | AN | 722 | 697 | 697 |
|  | BN | 331 | 353 | 353 |
|  | D | 317 | 294 | 294 |
|  | C | 289 | 272 | 272 |
|  | All | 450 | 417 | 419 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 24. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 6A: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYTb | EXISTING CONDITIONS <br> vs. A6A_LLT | NAA vs. A6A_LLT |


| Alternative 6A: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| AUG | W | -212 (-22.8\%) | 0 (0\%) |
|  | AN | -22 (-4.6\%) | 0 (0\%) |
|  | BN | -4 (-1\%) | 0 (0\%) |
|  | D | -5 (-1.2\%) | 0 (0\%) |
|  | C | -8 (-2.5\%) | -5 (-1.5\%) |
|  | All | -69 (-12.4\%) | -1 (-0.2\%) |
| SEP | W | -177 (-17\%) | 0 (0\%) |
|  | AN | -28 (-5.6\%) | 0 (0\%) |
|  | BN | -10 (-2.4\%) | 0 (0\%) |
|  | D | -2 (-0.5\%) | 3 (0.8\%) |
|  | C | -1 (-0.4\%) | 6 (2\%) |
|  | All | -59 (-10\%) | 2 (0.3\%) |
| OCT | W | -51 (-5.6\%) | 1 (0.2\%) |
|  | AN | -47 (-5.4\%) | 3 (0.4\%) |
|  | BN | -62 (-6.9\%) | -4 (-0.4\%) |
|  | D | -59 (-6\%) | 0 (0\%) |
|  | C | -72 (-10.5\%) | 4 (0.7\%) |
|  | All | -57 (-6.6\%) | 1 (0.2\%) |
| NOV | W | -18 (-4.2\%) | 1 (0.1\%) |
|  | AN | -56 (-9.7\%) | 0 (0\%) |
|  | BN | -8 (-2.3\%) | 0 (0\%) |
|  | D | -23 (-6.7\%) | 0 (0\%) |
|  | C | -16 (-4.8\%) | 1 (0.2\%) |
|  | All | -24 (-5.9\%) | 0 (0.1\%) |
| DEC | W | -77 (-15.1\%) | 6 (1.4\%) |
|  | AN | -26 (-3.5\%) | 0 (0\%) |
|  | BN | 23 (6.8\%) | 0 (0\%) |
|  | D | -23 (-7.3\%) | 0 (0\%) |
|  | C | -17 (-5.8\%) | 0 (-0.1\%) |
|  | All | -31 (-6.9\%) | 2 (0.4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.6.2 In Delta

## 11C.6.2.1 OMR Flow (Old and Middle Rivers)

Table 25. Mean Monthly Flows (cfs) for Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 6A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | -1,820 | -1,606 | 5,690 |
|  | AN | -3,553 | -3,446 | 2,631 |
|  | BN | -4,240 | -3,803 | 1,477 |
|  | D | -4,664 | -4,675 | 1,108 |
|  | C | -4,130 | -3,684 | 850 |
|  | All | -3,449 | -3,228 | 2,809 |
| FEB | W | -2,365 | -2,293 | 6,242 |
|  | AN | -3,274 | -3,147 | 3,367 |
|  | BN | -3,437 | -3,290 | 2,514 |
|  | D | -3,986 | -3,502 | 1,173 |
|  | C | -3,191 | -3,047 | 935 |
|  | All | -3,158 | -2,964 | 3,296 |
| MAR | W | -1,600 | -1,454 | 7,130 |
|  | AN | -4,251 | -3,815 | 3,148 |
|  | BN | -4,147 | -3,834 | 1,956 |
|  | D | -2,852 | -2,614 | 889 |
|  | C | -2,010 | -1,636 | 501 |
|  | All | -2,758 | -2,487 | 3,324 |
| APR | W | 2,431 | 2,415 | 5,096 |
|  | AN | 1,058 | 787 | 2,617 |
|  | BN | 677 | 214 | 2,020 |
|  | D | -268 | -615 | 1,031 |
|  | C | -950 | -845 | 433 |
|  | All | 843 | 659 | 2,633 |
| MAY | W | 509 | 396 | 2,092 |
|  | AN | 272 | -237 | 1,553 |
|  | BN | -647 | -1,010 | 673 |
|  | D | -1,020 | -911 | 322 |
|  | C | 353 | 155 | 2,249 |
|  | All | -4,164 | -4,369 | 1,336 |
| JUN | W | -4,761 | -4,454 | 215 |
|  | AN | -4,154 | -3,420 | -162 |
|  | BN | -3,301 | -2,592 | -493 |
|  | D | -2,250 | -2,143 | -594 |
|  | C | -3,780 | -3,504 | 232 |
|  | All | -8,959 | -8,699 | 468 |


| Alternative 6A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JUL | W | -9,919 | -7,962 | -294 |
|  | AN | -10,853 | -9,942 | -534 |
|  | BN | -10,891 | -9,505 | -612 |
|  | D | -8,058 | -5,234 | -690 |
|  | C | -9,715 | -8,473 | -221 |
|  | All | -10,062 | -10,518 | 255 |
| AUG | W | -10,348 | -10,985 | 71 |
|  | AN | -10,044 | -9,374 | -90 |
|  | BN | -10,122 | -7,259 | -151 |
|  | D | -4,384 | -3,192 | -297 |
|  | C | -9,283 | -8,604 | -1 |
|  | All | -9,317 | -7,580 | 630 |
| SEP | W | -9,163 | -9,002 | 401 |
|  | AN | -8,575 | -8,392 | 349 |
|  | BN | -8,081 | -5,165 | 271 |
|  | D | -4,807 | -3,966 | 114 |
|  | C | -8,236 | -6,868 | 394 |
|  | All | -8,347 | -5,049 | 393 |
| OCT | W | -7,643 | -3,648 | 197 |
|  | AN | -7,804 | -4,793 | 251 |
|  | BN | -6,961 | -4,103 | 280 |
|  | D | -6,440 | -3,920 | 142 |
|  | C | -7,568 | -4,427 | 279 |
|  | All | -8,902 | -6,527 | 483 |
| NOV | W | -7,264 | -6,003 | 219 |
|  | AN | -7,997 | -5,542 | 297 |
|  | BN | -7,136 | -5,007 | 267 |
|  | D | -5,294 | -4,389 | 200 |
|  | C | -7,592 | -5,636 | 324 |
|  | All | -5,542 | -5,591 | 2,727 |
| DEC | W | -6,987 | -7,050 | 1,271 |
|  | AN | -7,304 | -7,040 | 1,130 |
|  | BN | -7,214 | -7,006 | 911 |
|  | D | -6,166 | -4,173 | 714 |
|  | C | -6,513 | -6,155 | 1,548 |
|  | All | -6,513 | -6,155 | 1,548 |

Table 26. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 6A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 7,509 (412.7\%) | 7,296 (454.3\%) |
|  | AN | 6,183 (174\%) | 6,077 (176.3\%) |
|  | BN | 5,717 (134.8\%) | 5,280 (138.8\%) |
|  | D | 5,771 (123.7\%) | 5,783 (123.7\%) |
|  | C | 4,980 (120.6\%) | 4,535 (123.1\%) |
|  | All | 6,258 (181.4\%) | 6,037 (187\%) |
| FEB | W | 8,608 (363.9\%) | 8,535 (372.3\%) |
|  | AN | 6,642 (202.8\%) | 6,514 (207\%) |
|  | BN | 5,951 (173.1\%) | 5,804 (176.4\%) |
|  | D | 5,158 (129.4\%) | 4,675 (133.5\%) |
|  | C | 4,126 (129.3\%) | 3,982 (130.7\%) |
|  | All | 6,453 (204.4\%) | 6,259 (211.2\%) |
| MAR | W | 8,730 (545.5\%) | 8,583 (590.5\%) |
|  | AN | 7,399 (174\%) | 6,962 (182.5\%) |
|  | BN | 6,102 (147.2\%) | 5,790 (151\%) |
|  | D | 3,741 (131.2\%) | 3,503 (134\%) |
|  | C | 2,511 (124.9\%) | 2,137 (130.6\%) |
|  | All | 6,081 (220.5\%) | 5,811 (233.6\%) |
| APR | W | 2,665 (109.6\%) | 2,681 (111\%) |
|  | AN | 1,559 (147.3\%) | 1,830 (232.4\%) |
|  | BN | 1,343 (198.4\%) | 1,806 (844.1\%) |
|  | D | 1,299 (484.8\%) | 1,646 (267.5\%) |
|  | C | 1,383 (145.5\%) | 1,278 (151.2\%) |
|  | All | 1,790 (212.2\%) | 1,975 (299.7\%) |
| MAY | W | 1,582 (310.6\%) | 1,696 (428.5\%) |
|  | AN | 1,281 (471.6\%) | 1,791 (754\%) |
|  | BN | 1,320 (204.1\%) | 1,683 (166.7\%) |
|  | D | 1,342 (131.6\%) | 1,234 (135.4\%) |
|  | C | 1,895 (536.6\%) | 2,093 (1,346.6\%) |
|  | All | 5,500 (132.1\%) | 5,705 (130.6\%) |
| JUN | W | 4,976 (104.5\%) | 4,669 (104.8\%) |
|  | AN | 3,992 (96.1\%) | 3,258 (95.3\%) |
|  | BN | 2,808 (85.1\%) | 2,099 (81\%) |
|  | D | 1,655 (73.6\%) | 1,548 (72.3\%) |
|  | C | 4,012 (106.1\%) | 3,736 (106.6\%) |
|  | All | 9,427 (105.2\%) | 9,168 (105.4\%) |
| JUL | W | 9,625 (97\%) | 7,668 (96.3\%) |
|  | AN | 10,319 (95.1\%) | 9,408 (94.6\%) |
|  | BN | 10,279 (94.4\%) | 8,893 (93.6\%) |
|  | D | 7,368 (91.4\%) | 4,544 (86.8\%) |
|  | C | 9,494 (97.7\%) | 8,252 (97.4\%) |
|  | All | 10,317 (102.5\%) | 10,773 (102.4\%) |


| Alternative 6A: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | 10,420 (100.7\%) | 11,056 (100.6\%) |
|  | AN | 9,954 (99.1\%) | 9,284 (99\%) |
|  | BN | 9,971 (98.5\%) | 7,108 (97.9\%) |
|  | D | 4,087 (93.2\%) | 2,894 (90.7\%) |
|  | C | 9,283 (100\%) | 8,603 (100\%) |
|  | All | 9,947 (106.8\%) | 8,210 (108.3\%) |
| SEP | W | 9,563 (104.4\%) | 9,403 (104.5\%) |
|  | AN | 8,925 (104.1\%) | 8,742 (104.2\%) |
|  | BN | 8,352 (103.4\%) | 5,436 (105.2\%) |
|  | D | 4,920 (102.4\%) | 4,079 (102.9\%) |
|  | C | 8,631 (104.8\%) | 7,262 (105.7\%) |
|  | All | 8,740 (104.7\%) | 5,442 (107.8\%) |
| OCT | W | 7,839 (102.6\%) | 3,845 (105.4\%) |
|  | AN | 8,055 (103.2\%) | 5,044 (105.2\%) |
|  | BN | 7,241 (104\%) | 4,384 (106.8\%) |
|  | D | 6,582 (102.2\%) | 4,062 (103.6\%) |
|  | C | 7,846 (103.7\%) | 4,706 (106.3\%) |
|  | All | 9,385 (105.4\%) | 7,010 (107.4\%) |
| NOV | W | 7,483 (103\%) | 6,222 (103.6\%) |
|  | AN | 8,293 (103.7\%) | 5,839 (105.4\%) |
|  | BN | 7,404 (103.7\%) | 5,274 (105.3\%) |
|  | D | 5,493 (103.8\%) | 4,589 (104.6\%) |
|  | C | 7,916 (104.3\%) | 5,959 (105.7\%) |
|  | All | 8,269 (149.2\%) | 8,318 (148.8\%) |
| DEC | W | 8,258 (118.2\%) | 8,321 (118\%) |
|  | AN | 8,433 (115.5\%) | 8,170 (116\%) |
|  | BN | 8,125 (112.6\%) | 7,917 (113\%) |
|  | D | 6,880 (111.6\%) | 4,888 (117.1\%) |
|  | C | 8,061 (123.8\%) | 7,703 (125.1\%) |
|  | All | 8,061 (123.8\%) | 7,703 (125.1\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.6.2.2 Sacramento River Downstream of North Delta Diversion Facility

Table 27. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 6A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 50,961 | 52,878 | 40,766 |
|  | AN | 39,863 | 40,484 | 31,058 |
|  | BN | 23,781 | 22,653 | 17,958 |
|  | D | 17,444 | 17,451 | 14,651 |
|  | C | 14,281 | 15,073 | 12,282 |
|  | All | 31,971 | 32,595 | 25,550 |
| FEB | W | 57,314 | 59,847 | 45,420 |
|  | AN | 45,676 | 47,786 | 35,943 |
|  | BN | 31,934 | 31,592 | 23,861 |
|  | D | 21,202 | 21,107 | 17,172 |
|  | C | 14,708 | 14,291 | 13,552 |
|  | All | 37,116 | 38,087 | 29,488 |
| MAR | W | 49,416 | 50,993 | 38,019 |
|  | AN | 44,495 | 45,088 | 32,872 |
|  | BN | 24,489 | 22,915 | 15,850 |
|  | D | 20,656 | 20,650 | 16,122 |
|  | C | 13,245 | 13,137 | 11,173 |
|  | All | 32,834 | 33,134 | 24,745 |
| APR | W | 37,809 | 37,543 | 26,595 |
|  | AN | 25,979 | 24,931 | 16,544 |
|  | BN | 17,752 | 17,128 | 13,066 |
|  | D | 12,990 | 12,904 | 11,066 |
|  | C | 10,229 | 10,365 | 9,147 |
|  | All | 23,169 | 22,826 | 16,852 |
| MAY | W | 31,948 | 24,500 | 17,319 |
|  | AN | 21,021 | 18,657 | 14,270 |
|  | BN | 14,227 | 12,394 | 10,720 |
|  | D | 10,959 | 11,427 | 9,892 |
|  | C | 7,749 | 8,011 | 6,908 |
|  | All | 19,175 | 16,295 | 12,592 |
| JUN | W | 23,900 | 18,603 | 12,574 |
|  | AN | 16,309 | 16,051 | 11,144 |
|  | BN | 13,576 | 13,898 | 11,376 |
|  | D | 12,222 | 12,656 | 10,314 |
|  | C | 9,884 | 10,123 | 8,686 |
|  | All | 16,412 | 14,880 | 11,095 |
| JUL | W | 19,876 | 21,425 | 10,821 |
|  | AN | 21,574 | 22,727 | 10,512 |
|  | BN | 20,953 | 20,513 | 8,811 |
|  | D | 19,272 | 18,957 | 8,302 |
|  | C | 15,397 | 13,767 | 8,181 |
|  | All | 19,520 | 19,797 | 9,493 |


| Alternative 6A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 15,816 | 16,064 | 7,958 |
|  | AN | 15,877 | 17,491 | 8,050 |
|  | BN | 15,643 | 16,232 | 7,844 |
|  | D | 16,965 | 14,351 | 7,776 |
|  | C | 10,095 | 8,996 | 7,417 |
|  | All | 15,210 | 14,891 | 7,833 |
| SEP | W | 18,254 | 27,212 | 16,245 |
|  | AN | 13,198 | 21,006 | 10,687 |
|  | BN | 12,427 | 12,306 | 7,482 |
|  | D | 12,155 | 8,620 | 7,397 |
|  | C | 8,485 | 7,292 | 6,233 |
|  | All | 13,751 | 16,763 | 10,528 |
| OCT | W | 13,505 | 13,277 | 8,932 |
|  | AN | 11,118 | 11,864 | 7,628 |
|  | BN | 11,557 | 12,124 | 8,366 |
|  | D | 10,279 | 10,487 | 7,297 |
|  | C | 10,073 | 9,964 | 7,014 |
|  | All | 11,613 | 11,776 | 8,005 |
| NOV | W | 19,447 | 19,285 | 13,820 |
|  | AN | 15,309 | 15,925 | 11,310 |
|  | BN | 12,574 | 13,037 | 8,993 |
|  | D | 12,868 | 11,914 | 8,725 |
|  | C | 9,633 | 9,295 | 7,666 |
|  | All | 14,788 | 14,647 | 10,610 |
| DEC | W | 39,708 | 37,022 | 30,748 |
|  | AN | 21,663 | 22,629 | 19,124 |
|  | BN | 16,678 | 16,692 | 14,382 |
|  | D | 15,442 | 15,159 | 13,199 |
|  | C | 11,816 | 10,632 | 9,627 |
|  | All | 23,727 | 22,784 | 19,310 |

Table 28. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 6A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | -10,195 (-20\%) | -12,111 (-22.9\%) |
|  | AN | -8,805 (-22.1\%) | -9,427 (-23.3\%) |
|  | BN | -5,823 (-24.5\%) | -4,695 (-20.7\%) |
|  | D | -2,793 (-16\%) | -2,800 (-16\%) |
|  | C | -2,000 (-14\%) | -2,791 (-18.5\%) |
|  | All | -6,421 (-20.1\%) | -7,044 (-21.6\%) |
| FEB | W | -11,894 (-20.8\%) | -14,427 (-24.1\%) |
|  | AN | -9,734 (-21.3\%) | -11,843 (-24.8\%) |
|  | BN | -8,072 (-25.3\%) | -7,731 (-24.5\%) |
|  | D | -4,030 (-19\%) | -3,935 (-18.6\%) |
|  | C | -1,156 (-7.9\%) | -739 (-5.2\%) |
|  | All | -7,628 (-20.6\%) | -8,599 (-22.6\%) |
| MAR | W | -11,397 (-23.1\%) | -12,974 (-25.4\%) |
|  | AN | -11,624 (-26.1\%) | -12,217 (-27.1\%) |
|  | BN | -8,639 (-35.3\%) | -7,064 (-30.8\%) |
|  | D | -4,535 (-22\%) | -4,528 (-21.9\%) |
|  | C | -2,073 (-15.6\%) | -1,964 (-15\%) |
|  | All | -8,088 (-24.6\%) | -8,389 (-25.3\%) |
| APR | W | -11,214 (-29.7\%) | -10,949 (-29.2\%) |
|  | AN | -9,435 (-36.3\%) | -8,387 (-33.6\%) |
|  | BN | -4,685 (-26.4\%) | -4,062 (-23.7\%) |
|  | D | -1,924 (-14.8\%) | -1,837 (-14.2\%) |
|  | C | -1,081 (-10.6\%) | -1,218 (-11.8\%) |
|  | All | -6,317 (-27.3\%) | -5,974 (-26.2\%) |
| MAY | W | -14,629 (-45.8\%) | -7,182 (-29.3\%) |
|  | AN | -6,751 (-32.1\%) | -4,387 (-23.5\%) |
|  | BN | -3,507 (-24.7\%) | -1,674 (-13.5\%) |
|  | D | -1,067 (-9.7\%) | -1,535 (-13.4\%) |
|  | C | -841 (-10.9\%) | -1,103 (-13.8\%) |
|  | All | -6,583 (-34.3\%) | -3,703 (-22.7\%) |
| JUN | W | -11,326 (-47.4\%) | -6,029 (-32.4\%) |
|  | AN | -5,165 (-31.7\%) | -4,907 (-30.6\%) |
|  | BN | -2,199 (-16.2\%) | -2,521 (-18.1\%) |
|  | D | -1,909 (-15.6\%) | -2,342 (-18.5\%) |
|  | C | -1,198 (-12.1\%) | -1,437 (-14.2\%) |
|  | All | -5,317 (-32.4\%) | -3,785 (-25.4\%) |
| JUL | W | -9,055 (-45.6\%) | -10,604 (-49.5\%) |
|  | AN | -11,062 (-51.3\%) | -12,216 (-53.7\%) |
|  | BN | -12,142 (-57.9\%) | -11,701 (-57\%) |
|  | D | -10,970 (-56.9\%) | -10,655 (-56.2\%) |
|  | C | -7,216 (-46.9\%) | -5,586 (-40.6\%) |
|  | All | -10,027 (-51.4\%) | -10,304 (-52\%) |


| Alternative 6A: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | -7,858 (-49.7\%) | -8,106 (-50.5\%) |
|  | AN | -7,826 (-49.3\%) | -9,441 (-54\%) |
|  | BN | -7,798 (-49.9\%) | -8,388 (-51.7\%) |
|  | D | -9,190 (-54.2\%) | -6,575 (-45.8\%) |
|  | C | -2,678 (-26.5\%) | -1,580 (-17.6\%) |
|  | All | -7,377 (-48.5\%) | -7,058 (-47.4\%) |
| SEP | W | -2,008 (-11\%) | -10,967 (-40.3\%) |
|  | AN | -2,511 (-19\%) | -10,319 (-49.1\%) |
|  | BN | -4,945 (-39.8\%) | -4,824 (-39.2\%) |
|  | D | -4,758 (-39.1\%) | -1,223 (-14.2\%) |
|  | C | -2,252 (-26.5\%) | -1,059 (-14.5\%) |
|  | All | -3,223 (-23.4\%) | -6,235 (-37.2\%) |
| OCT | W | -4,572 (-33.9\%) | -4,345 (-32.7\%) |
|  | AN | -3,490 (-31.4\%) | -4,236 (-35.7\%) |
|  | BN | -3,191 (-27.6\%) | -3,758 (-31\%) |
|  | D | -2,982 (-29\%) | -3,190 (-30.4\%) |
|  | C | -3,059 (-30.4\%) | -2,951 (-29.6\%) |
|  | All | -3,608 (-31.1\%) | -3,771 (-32\%) |
| NOV | W | -5,627 (-28.9\%) | -5,465 (-28.3\%) |
|  | AN | -3,998 (-26.1\%) | -4,615 (-29\%) |
|  | BN | -3,580 (-28.5\%) | -4,043 (-31\%) |
|  | D | -4,143 (-32.2\%) | -3,189 (-26.8\%) |
|  | C | -1,967 (-20.4\%) | -1,630 (-17.5\%) |
|  | All | -4,178 (-28.3\%) | -4,037 (-27.6\%) |
| DEC | W | -8,960 (-22.6\%) | -6,274 (-16.9\%) |
|  | AN | -2,539 (-11.7\%) | -3,504 (-15.5\%) |
|  | BN | -2,296 (-13.8\%) | -2,310 (-13.8\%) |
|  | D | -2,244 (-14.5\%) | -1,960 (-12.9\%) |
|  | C | -2,189 (-18.5\%) | -1,005 (-9.5\%) |
|  | All | -4,417 (-18.6\%) | -3,474 (-15.2\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.6.2.3 Sacramento River at Rio Vista

Table 29. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 6A: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 71,111 | 78,551 | 72,289 |
|  | AN | 41,963 | 42,919 | 37,678 |
|  | BN | 20,943 | 19,991 | 17,570 |
|  | D | 14,895 | 14,927 | 13,169 |
|  | C | 11,853 | 12,601 | 10,563 |
|  | All | 37,268 | 39,721 | 35,871 |
| FEB | W | 80,958 | 89,989 | 80,103 |
|  | AN | 52,542 | 55,363 | 48,851 |
|  | BN | 30,159 | 29,442 | 25,293 |
|  | D | 19,320 | 19,422 | 16,931 |
|  | C | 12,247 | 11,956 | 11,797 |
|  | All | 44,541 | 47,675 | 42,309 |
| MAR | W | 63,763 | 68,663 | 59,682 |
|  | AN | 46,750 | 48,513 | 41,236 |
|  | BN | 20,980 | 19,562 | 14,675 |
|  | D | 17,656 | 17,679 | 14,890 |
|  | C | 10,710 | 10,684 | 9,355 |
|  | All | 36,084 | 37,655 | 32,101 |
| APR | W | 38,214 | 38,422 | 31,115 |
|  | AN | 22,726 | 21,855 | 16,048 |
|  | BN | 14,652 | 14,207 | 11,204 |
|  | D | 10,331 | 10,299 | 8,895 |
|  | C | 7,665 | 7,816 | 6,854 |
|  | All | 21,333 | 21,211 | 17,083 |
| MAY | W | 26,933 | 20,046 | 13,924 |
|  | AN | 17,008 | 14,948 | 11,239 |
|  | BN | 10,924 | 9,355 | 8,001 |
|  | D | 8,135 | 8,564 | 7,346 |
|  | C | 5,305 | 5,554 | 4,707 |
|  | All | 15,456 | 12,833 | 9,727 |
| JUN | W | 16,557 | 11,418 | 6,673 |
|  | AN | 9,887 | 9,220 | 5,314 |
|  | BN | 7,001 | 7,241 | 5,489 |
|  | D | 6,020 | 6,335 | 4,754 |
|  | C | 4,333 | 4,513 | 3,606 |
|  | All | 9,847 | 8,257 | 5,402 |
| JUL | W | 11,125 | 12,181 | 4,467 |
|  | AN | 12,128 | 12,927 | 4,273 |
|  | BN | 11,686 | 11,357 | 3,305 |
|  | D | 10,523 | 10,307 | 3,056 |
|  | C | 7,736 | 6,596 | 3,000 |
|  | All | 10,739 | 10,921 | 3,716 |


| Alternative 6A: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 8,507 | 8,650 | 3,000 |
|  | AN | 8,538 | 9,648 | 3,000 |
|  | BN | 8,371 | 8,753 | 3,000 |
|  | D | 9,264 | 7,417 | 3,000 |
|  | C | 4,390 | 3,615 | 2,965 |
|  | All | 8,052 | 7,806 | 2,995 |
| SEP | W | 10,767 | 21,199 | 9,062 |
|  | AN | 6,788 | 12,832 | 5,100 |
|  | BN | 6,283 | 6,197 | 3,000 |
|  | D | 6,116 | 3,644 | 3,000 |
|  | C | 3,588 | 2,996 | 2,325 |
|  | All | 7,348 | 10,896 | 5,131 |
| OCT | W | 8,718 | 8,287 | 5,503 |
|  | AN | 6,183 | 7,207 | 4,053 |
|  | BN | 6,258 | 6,976 | 4,508 |
|  | D | 5,312 | 5,727 | 3,931 |
|  | C | 5,215 | 4,969 | 3,389 |
|  | All | 6,667 | 6,858 | 4,467 |
| NOV | W | 15,829 | 15,879 | 11,184 |
|  | AN | 11,333 | 12,156 | 8,295 |
|  | BN | 8,184 | 9,071 | 5,714 |
|  | D | 8,733 | 8,061 | 5,579 |
|  | C | 5,473 | 5,565 | 4,323 |
|  | All | 10,793 | 10,946 | 7,593 |
| DEC | W | 43,367 | 40,431 | 38,657 |
|  | AN | 19,040 | 19,936 | 17,635 |
|  | BN | 13,987 | 14,049 | 12,222 |
|  | D | 11,999 | 11,687 | 10,366 |
|  | C | 8,131 | 7,186 | 6,552 |
|  | All | 22,749 | 21,753 | 20,159 |

Table 30. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 6A: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 1,177 (1.7\%) | -6,263 (-8\%) |
|  | AN | -4,284 (-10.2\%) | -5,241 (-12.2\%) |
|  | BN | -3,373 (-16.1\%) | -2,421 (-12.1\%) |
|  | D | -1,726 (-11.6\%) | -1,758 (-11.8\%) |
|  | C | -1,290 (-10.9\%) | -2,039 (-16.2\%) |
|  | All | -1,397 (-3.7\%) | -3,850 (-9.7\%) |
| FEB | W | -855 (-1.1\%) | -9,886 (-11\%) |
|  | AN | -3,691 (-7\%) | -6,511 (-11.8\%) |
|  | BN | -4,866 (-16.1\%) | -4,150 (-14.1\%) |
|  | D | -2,389 (-12.4\%) | -2,492 (-12.8\%) |
|  | C | -450 (-3.7\%) | -159 (-1.3\%) |
|  | All | -2,232 (-5\%) | -5,366 (-11.3\%) |
| MAR | W | -4,081 (-6.4\%) | -8,981 (-13.1\%) |
|  | AN | -5,514 (-11.8\%) | -7,277 (-15\%) |
|  | BN | -6,305 (-30.1\%) | -4,887 (-25\%) |
|  | D | -2,766 (-15.7\%) | -2,789 (-15.8\%) |
|  | C | -1,356 (-12.7\%) | -1,329 (-12.4\%) |
|  | All | -3,983 (-11\%) | -5,554 (-14.7\%) |
| APR | W | -7,098 (-18.6\%) | -7,307 (-19\%) |
|  | AN | -6,679 (-29.4\%) | -5,807 (-26.6\%) |
|  | BN | -3,449 (-23.5\%) | -3,003 (-21.1\%) |
|  | D | -1,436 (-13.9\%) | -1,404 (-13.6\%) |
|  | C | -811 (-10.6\%) | -963 (-12.3\%) |
|  | All | -4,251 (-19.9\%) | -4,129 (-19.5\%) |
| MAY | W | -13,009 (-48.3\%) | -6,122 (-30.5\%) |
|  | AN | -5,768 (-33.9\%) | -3,709 (-24.8\%) |
|  | BN | -2,923 (-26.8\%) | -1,354 (-14.5\%) |
|  | D | -789 (-9.7\%) | -1,218 (-14.2\%) |
|  | C | -598 (-11.3\%) | -847 (-15.3\%) |
|  | All | -5,729 (-37.1\%) | -3,106 (-24.2\%) |
| JUN | W | -9,884 (-59.7\%) | -4,745 (-41.6\%) |
|  | AN | -4,573 (-46.3\%) | -3,906 (-42.4\%) |
|  | BN | -1,511 (-21.6\%) | -1,751 (-24.2\%) |
|  | D | -1,266 (-21\%) | -1,581 (-25\%) |
|  | C | -727 (-16.8\%) | -908 (-20.1\%) |
|  | All | -4,445 (-45.1\%) | -2,855 (-34.6\%) |
| JUL | W | -6,658 (-59.8\%) | -7,715 (-63.3\%) |
|  | AN | -7,855 (-64.8\%) | -8,654 (-66.9\%) |
|  | BN | -8,381 (-71.7\%) | -8,052 (-70.9\%) |
|  | D | -7,467 (-71\%) | -7,251 (-70.3\%) |
|  | C | -4,736 (-61.2\%) | -3,596 (-54.5\%) |
|  | All | -7,024 (-65.4\%) | -7,205 (-66\%) |


| Alternative 6A: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | -5,507 (-64.7\%) | -5,650 (-65.3\%) |
|  | AN | -5,538 (-64.9\%) | -6,648 (-68.9\%) |
|  | BN | -5,371 (-64.2\%) | -5,753 (-65.7\%) |
|  | D | -6,264 (-67.6\%) | -4,417 (-59.6\%) |
|  | C | -1,425 (-32.5\%) | -650 (-18\%) |
|  | All | -5,057 (-62.8\%) | -4,811 (-61.6\%) |
| SEP | W | -1,705 (-15.8\%) | -12,137 (-57.3\%) |
|  | AN | -1,688 (-24.9\%) | -7,732 (-60.3\%) |
|  | BN | -3,283 (-52.3\%) | -3,197 (-51.6\%) |
|  | D | -3,116 (-50.9\%) | -644 (-17.7\%) |
|  | C | -1,263 (-35.2\%) | -671 (-22.4\%) |
|  | All | -2,217 (-30.2\%) | -5,765 (-52.9\%) |
| OCT | W | -3,215 (-36.9\%) | -2,784 (-33.6\%) |
|  | AN | -2,130 (-34.4\%) | -3,154 (-43.8\%) |
|  | BN | -1,750 (-28\%) | -2,468 (-35.4\%) |
|  | D | -1,380 (-26\%) | -1,795 (-31.4\%) |
|  | C | -1,826 (-35\%) | -1,580 (-31.8\%) |
|  | All | -2,200 (-33\%) | -2,391 (-34.9\%) |
| NOV | W | -4,645 (-29.3\%) | -4,695 (-29.6\%) |
|  | AN | -3,037 (-26.8\%) | -3,860 (-31.8\%) |
|  | BN | -2,470 (-30.2\%) | -3,357 (-37\%) |
|  | D | -3,153 (-36.1\%) | -2,482 (-30.8\%) |
|  | C | -1,150 (-21\%) | -1,242 (-22.3\%) |
|  | All | -3,200 (-29.6\%) | -3,353 (-30.6\%) |
| DEC | W | -4,710 (-10.9\%) | -1,775 (-4.4\%) |
|  | AN | -1,406 (-7.4\%) | -2,301 (-11.5\%) |
|  | BN | -1,765 (-12.6\%) | -1,827 (-13\%) |
|  | D | -1,633 (-13.6\%) | -1,321 (-11.3\%) |
|  | C | -1,579 (-19.4\%) | -634 (-8.8\%) |
|  | All | $-2,590$ (-11.4\%) | -1,594(-7.3\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.6.2.4 Delta Outflow

Table 31. Mean Monthly Flows (cfs) for Model Scenarios at the Delta Outflow, Year-Round

| Alternative 6A: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 85,900 | 94,620 | 94,769 |
|  | AN | 49,448 | 51,100 | 51,251 |
|  | BN | 22,968 | 22,301 | 25,038 |
|  | D | 14,736 | 14,732 | 18,876 |
|  | C | 11,343 | 12,651 | 15,092 |
|  | All | 43,289 | 46,372 | 48,176 |
| FEB | W | 96,835 | 107,085 | 104,601 |
|  | AN | 62,321 | 65,873 | 64,997 |
|  | BN | 36,766 | 36,084 | 37,249 |
|  | D | 20,915 | 21,461 | 23,616 |
|  | C | 12,991 | 12,798 | 16,845 |
|  | All | 52,594 | 56,338 | 56,687 |
| MAR | W | 78,956 | 84,471 | 83,139 |
|  | AN | 54,171 | 56,737 | 55,557 |
|  | BN | 24,029 | 22,467 | 23,090 |
|  | D | 19,880 | 19,985 | 20,583 |
|  | C | 11,911 | 12,215 | 13,148 |
|  | All | 43,172 | 45,097 | 44,876 |
| APR | W | 54,394 | 54,562 | 48,717 |
|  | AN | 31,975 | 30,576 | 25,657 |
|  | BN | 21,928 | 20,641 | 19,096 |
|  | D | 14,142 | 13,413 | 13,573 |
|  | C | 9,053 | 9,294 | 9,507 |
|  | All | 30,099 | 29,603 | 26,832 |
| MAY | W | 41,040 | 32,880 | 29,229 |
|  | AN | 24,200 | 21,709 | 19,228 |
|  | BN | 16,299 | 13,596 | 13,955 |
|  | D | 10,487 | 10,375 | 10,822 |
|  | C | 6,000 | 6,286 | 6,672 |
|  | All | 22,517 | 19,121 | 17,816 |
| JUN | W | 23,451 | 15,640 | 15,955 |
|  | AN | 11,801 | 10,676 | 10,916 |
|  | BN | 8,004 | 8,943 | 9,954 |
|  | D | 6,636 | 7,689 | 7,695 |
|  | C | 5,322 | 5,632 | 5,846 |
|  | All | 12,765 | 10,560 | 10,901 |
| JUL | W | 11,441 | 11,407 | 10,646 |
|  | AN | 9,430 | 12,225 | 8,256 |
|  | BN | 7,151 | 7,668 | 6,206 |
|  | D | 5,024 | 6,448 | 5,376 |
|  | C | 4,238 | 5,832 | 4,898 |
|  | All | 7,951 | 8,984 | 7,540 |


| Alternative 6A: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 5,341 | 4,308 | 7,832 |
|  | AN | 4,000 | 4,713 | 7,063 |
|  | BN | 4,000 | 5,129 | 6,607 |
|  | D | 4,829 | 5,348 | 6,286 |
|  | C | 4,077 | 4,433 | 5,876 |
|  | All | 4,618 | 4,754 | 6,885 |
| SEP | W | 9,569 | 20,078 | 17,912 |
|  | AN | 3,672 | 11,581 | 11,296 |
|  | BN | 3,445 | 3,428 | 7,953 |
|  | D | 3,350 | 3,021 | 7,570 |
|  | C | 3,000 | 3,036 | 6,108 |
|  | All | 5,334 | 9,754 | 11,246 |
| OCT | W | 6,487 | 9,520 | 11,074 |
|  | AN | 4,021 | 8,982 | 8,845 |
|  | BN | 4,477 | 8,054 | 9,725 |
|  | D | 4,157 | 7,294 | 8,812 |
|  | C | 4,158 | 6,607 | 8,006 |
|  | All | 4,931 | 8,276 | 9,572 |
| NOV | W | 14,232 | 15,987 | 18,182 |
|  | AN | 9,683 | 11,529 | 13,690 |
|  | BN | 5,864 | 8,681 | 11,016 |
|  | D | 6,943 | 8,052 | 10,576 |
|  | C | 5,045 | 5,725 | 8,995 |
|  | All | 9,193 | 10,844 | 13,287 |
| DEC | W | 48,185 | 45,191 | 51,686 |
|  | AN | 18,014 | 19,119 | 25,345 |
|  | BN | 11,950 | 12,231 | 18,894 |
|  | D | 8,884 | 8,828 | 15,734 |
|  | C | 5,531 | 6,560 | 10,890 |
|  | All | 22,714 | 22,113 | 28,371 |

Table 32. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios at the Delta Outflow, Year-Round

| Alternative 6A: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 8,869 (10.3\%) | 149 (0.2\%) |
|  | AN | 1,803 (3.6\%) | 151 (0.3\%) |
|  | BN | 2,070 (9\%) | 2,737 (12.3\%) |
|  | D | 4,140 (28.1\%) | 4,144 (28.1\%) |
|  | C | 3,749 (33.1\%) | 2,441 (19.3\%) |
|  | All | 4,887 (11.3\%) | 1,804 (3.9\%) |
| FEB | W | 7,766 (8\%) | -2,484 (-2.3\%) |
|  | AN | 2,676 (4.3\%) | -876 (-1.3\%) |
|  | BN | 483 (1.3\%) | 1,165 (3.2\%) |
|  | D | 2,700 (12.9\%) | 2,154 (10\%) |
|  | C | 3,854 (29.7\%) | 4,048 (31.6\%) |
|  | All | 4,093 (7.8\%) | 348 (0.6\%) |
| MAR | W | 4,183 (5.3\%) | -1,332 (-1.6\%) |
|  | AN | 1,386 (2.6\%) | -1,180 (-2.1\%) |
|  | BN | -939 (-3.9\%) | 623 (2.8\%) |
|  | D | 703 (3.5\%) | 598 (3\%) |
|  | C | 1,237 (10.4\%) | 933 (7.6\%) |
|  | All | 1,704 (3.9\%) | -221 (-0.5\%) |
| APR | W | -5,677 (-10.4\%) | -5,845 (-10.7\%) |
|  | AN | -6,318 (-19.8\%) | -4,919 (-16.1\%) |
|  | BN | -2,832 (-12.9\%) | -1,545 (-7.5\%) |
|  | D | -569 (-4\%) | 159 (1.2\%) |
|  | C | 454 (5\%) | 213 (2.3\%) |
|  | All | -3,267 (-10.9\%) | -2,771 (-9.4\%) |
| MAY | W | -11,811 (-28.8\%) | -3,651 (-11.1\%) |
|  | AN | -4,972 (-20.5\%) | -2,481 (-11.4\%) |
|  | BN | -2,343 (-14.4\%) | 360 (2.6\%) |
|  | D | 335 (3.2\%) | 447 (4.3\%) |
|  | C | 673 (11.2\%) | 387 (6.2\%) |
|  | All | -4,701 (-20.9\%) | -1,305 (-6.8\%) |
| JUN | W | -7,495 (-32\%) | 316 (2\%) |
|  | AN | -885 (-7.5\%) | 240 (2.2\%) |
|  | BN | 1,950 (24.4\%) | 1,011 (11.3\%) |
|  | D | 1,059 (16\%) | 6 (0.1\%) |
|  | C | 524 (9.8\%) | 214 (3.8\%) |
|  | All | -1,864 (-14.6\%) | 340 (3.2\%) |
| JUL | W | -794 (-6.9\%) | -760 (-6.7\%) |
|  | AN | -1,174 (-12.5\%) | -3,968 (-32.5\%) |
|  | BN | -945 (-13.2\%) | -1,462 (-19.1\%) |
|  | D | 352 (7\%) | -1,073 (-16.6\%) |
|  | C | 660 (15.6\%) | -934 (-16\%) |
|  | All | -411 (-5.2\%) | -1,444 (-16.1\%) |


| Alternative 6A: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | 2,491 (46.6\%) | 3,524 (81.8\%) |
|  | AN | 3,063 (76.6\%) | 2,350 (49.9\%) |
|  | BN | 2,607 (65.2\%) | 1,478 (28.8\%) |
|  | D | 1,457 (30.2\%) | 938 (17.5\%) |
|  | C | 1,798 (44.1\%) | 1,443 (32.5\%) |
|  | All | 2,266 (49.1\%) | 2,130 (44.8\%) |
| SEP | W | 8,343 (87.2\%) | -2,166 (-10.8\%) |
|  | AN | 7,624 (207.6\%) | -285 (-2.5\%) |
|  | BN | 4,508 (130.8\%) | 4,525 (132\%) |
|  | D | 4,220 (126\%) | 4,549 (150.6\%) |
|  | C | 3,108 (103.6\%) | 3,072 (101.2\%) |
|  | All | 5,912 (110.8\%) | 1,492 (15.3\%) |
| OCT | W | 4,587 (70.7\%) | 1,554 (16.3\%) |
|  | AN | 4,824 (120\%) | -137 (-1.5\%) |
|  | BN | 5,248 (117.2\%) | 1,671 (20.7\%) |
|  | D | 4,655 (112\%) | 1,518 (20.8\%) |
|  | C | 3,848 (92.5\%) | 1,399 (21.2\%) |
|  | All | 4,641 (94.1\%) | 1,296 (15.7\%) |
| NOV | W | 3,949 (27.7\%) | 2,194 (13.7\%) |
|  | AN | 4,007 (41.4\%) | 2,161 (18.7\%) |
|  | BN | 5,151 (87.8\%) | 2,334 (26.9\%) |
|  | D | 3,634 (52.3\%) | 2,524 (31.3\%) |
|  | C | 3,951 (78.3\%) | 3,270 (57.1\%) |
|  | All | 4,094 (44.5\%) | 2,443 (22.5\%) |
| DEC | W | 3,501 (7.3\%) | 6,496 (14.4\%) |
|  | AN | 7,331 (40.7\%) | 6,226 (32.6\%) |
|  | BN | 6,944 (58.1\%) | 6,663 (54.5\%) |
|  | D | 6,849 (77.1\%) | 6,906 (78.2\%) |
|  | C | 5,359 (96.9\%) | 4,330 (66\%) |
|  | All | 5,656 (24.9\%) | 6,258 (28.3\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.6.2.5 San Joaquin River at Vernalis

Table 33. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 6A: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 9,089 | 9,681 | 9,768 |
|  | AN | 5,447 | 6,011 | 6,067 |
|  | BN | 2,326 | 2,220 | 2,300 |
|  | D | 2,270 | 2,202 | 2,216 |
|  | C | 1,667 | 1,592 | 1,591 |
|  | All | 4,777 | 5,018 | 5,069 |
| FEB | W | 12,750 | 13,191 | 13,199 |
|  | AN | 6,965 | 6,721 | 6,745 |
|  | BN | 2,983 | 2,841 | 2,777 |
|  | D | 2,590 | 2,269 | 2,245 |
|  | C | 2,120 | 1,941 | 1,942 |
|  | All | 6,388 | 6,361 | 6,354 |
| MAR | W | 14,374 | 15,235 | 15,240 |
|  | AN | 6,284 | 6,364 | 6,336 |
|  | BN | 2,949 | 2,476 | 2,475 |
|  | D | 2,479 | 2,146 | 2,145 |
|  | C | 1,813 | 1,688 | 1,687 |
|  | All | 6,648 | 6,763 | 6,758 |
| APR | W | 11,955 | 12,457 | 12,392 |
|  | AN | 6,014 | 6,042 | 6,025 |
|  | BN | 4,490 | 3,922 | 3,921 |
|  | D | 3,656 | 3,112 | 3,109 |
|  | C | 1,983 | 1,796 | 1,791 |
|  | All | 6,351 | 6,291 | 6,267 |
| MAY | W | 12,109 | 12,632 | 12,597 |
|  | AN | 5,381 | 5,092 | 5,085 |
|  | BN | 4,074 | 3,657 | 3,654 |
|  | D | 3,308 | 2,823 | 2,815 |
|  | C | 1,964 | 1,798 | 1,790 |
|  | All | 6,148 | 6,069 | 6,054 |
| JUN | W | 11,058 | 6,820 | 6,857 |
|  | AN | 2,965 | 2,678 | 2,658 |
|  | BN | 2,051 | 1,870 | 1,866 |
|  | D | 1,537 | 1,291 | 1,285 |
|  | C | 1,020 | 956 | 950 |
|  | All | 4,583 | 3,206 | 3,210 |
| JUL | W | 7,654 | 4,345 | 4,339 |
|  | AN | 1,958 | 1,801 | 1,798 |
|  | BN | 1,491 | 1,381 | 1,374 |
|  | D | 1,295 | 1,100 | 1,080 |
|  | C | 898 | 858 | 851 |
|  | All | 3,239 | 2,184 | 2,176 |


| Alternative 6A: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 3,539 | 2,645 | 2,643 |
|  | AN | 2,000 | 1,699 | 1,697 |
|  | BN | 1,460 | 1,375 | 1,371 |
|  | D | 1,375 | 1,225 | 1,219 |
|  | C | 1,007 | 987 | 981 |
|  | All | 2,072 | 1,710 | 1,707 |
| SEP | W | 3,519 | 3,127 | 3,126 |
|  | AN | 2,355 | 2,164 | 2,163 |
|  | BN | 1,829 | 1,748 | 1,746 |
|  | D | 1,796 | 1,643 | 1,640 |
|  | C | 1,402 | 1,378 | 1,366 |
|  | All | 2,338 | 2,144 | 2,141 |
| OCT | W | 2,760 | 2,726 | 2,739 |
|  | AN | 2,745 | 2,595 | 2,594 |
|  | BN | 2,502 | 2,348 | 2,343 |
|  | D | 2,945 | 2,790 | 2,791 |
|  | C | 2,213 | 2,031 | 2,031 |
|  | All | 2,639 | 2,515 | 2,518 |
| NOV | W | 2,534 | 2,411 | 2,418 |
|  | AN | 3,182 | 3,193 | 3,202 |
|  | BN | 2,150 | 1,997 | 2,053 |
|  | D | 2,272 | 2,217 | 2,244 |
|  | C | 1,968 | 1,898 | 1,898 |
|  | All | 2,448 | 2,367 | 2,384 |
| DEC | W | 4,370 | 4,504 | 4,550 |
|  | AN | 4,711 | 4,567 | 4,655 |
|  | BN | 2,182 | 2,065 | 2,072 |
|  | D | 2,129 | 2,166 | 2,099 |
|  | C | 1,729 | 1,694 | 1,680 |
|  | All | 3,219 | 3,211 | 3,229 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

1 2

Table 34. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 6A: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 679 (7.5\%) | 86 (0.9\%) |
|  | AN | 620 (11.4\%) | 57 (0.9\%) |
|  | BN | -26 (-1.1\%) | 79 (3.6\%) |
|  | D | -54 (-2.4\%) | 15 (0.7\%) |
|  | C | -76 (-4.5\%) | 0 (0\%) |
|  | All | 292 (6.1\%) | 51 (1\%) |
| FEB | W | 449 (3.5\%) | 8 (0.1\%) |
|  | AN | -220 (-3.2\%) | 24 (0.4\%) |
|  | BN | -205 (-6.9\%) | -63 (-2.2\%) |
|  | D | -345 (-13.3\%) | -24 (-1.1\%) |
|  | C | -178 (-8.4\%) | 1 (0.1\%) |
|  | All | -33 (-0.5\%) | -7 (-0.1\%) |
| MAR | W | 865 (6\%) | 4 (0\%) |
|  | AN | 52 (0.8\%) | -29 (-0.4\%) |
|  | BN | -473 (-16.1\%) | 0 (0\%) |
|  | D | -334 (-13.5\%) | -1 (-0.1\%) |
|  | C | -126 (-7\%) | -1 (-0.1\%) |
|  | All | 111 (1.7\%) | -5 (-0.1\%) |
| APR | W | 438 (3.7\%) | -65 (-0.5\%) |
|  | AN | 11 (0.2\%) | -17 (-0.3\%) |
|  | BN | -569 (-12.7\%) | -1 (0\%) |
|  | D | -547 (-15\%) | -2 (-0.1\%) |
|  | C | -192 (-9.7\%) | -5 (-0.3\%) |
|  | All | -84 (-1.3\%) | -24 (-0.4\%) |
| MAY | W | 488 (4\%) | -35 (-0.3\%) |
|  | AN | -297 (-5.5\%) | -7 (-0.1\%) |
|  | BN | -419 (-10.3\%) | -2 (-0.1\%) |
|  | D | -494 (-14.9\%) | -8 (-0.3\%) |
|  | C | -174 (-8.9\%) | -7 (-0.4\%) |
|  | All | -94 (-1.5\%) | -15 (-0.2\%) |
| JUN | W | -4,201 (-38\%) | 37 (0.5\%) |
|  | AN | -306 (-10.3\%) | -20 (-0.7\%) |
|  | BN | -185 (-9\%) | -4 (-0.2\%) |
|  | D | -253 (-16.4\%) | -6 (-0.5\%) |
|  | C | -71 (-6.9\%) | -6 (-0.6\%) |
|  | All | -1,372 (-29.9\%) | 4 (0.1\%) |
| JUL | W | -3,315 (-43.3\%) | -7 (-0.2\%) |
|  | AN | -160 (-8.2\%) | -3 (-0.2\%) |
|  | BN | -117 (-7.8\%) | -6 (-0.5\%) |
|  | D | -215 (-16.6\%) | -19 (-1.8\%) |
|  | C | -48 (-5.3\%) | -7 (-0.9\%) |
|  | All | -1,063 (-32.8\%) | -8 (-0.4\%) |


| Alternative 6A: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{c}\text { EXISTING CONDITIONS } \\ \text { vs. A6A_LLT }\end{array}$ | NAA vs. A6A_LLT |$]-2(-0.1 \%)$

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
${ }^{\text {b }}$ Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.6.2.6 Mokelumne River at the Delta

Table 35. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 6A: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A6A_LLT |
| JAN | W | 3,071 | 3,634 | 3,634 |
|  | AN | 1,707 | 1,876 | 1,876 |
|  | BN | 597 | 617 | 617 |
|  | D | 495 | 493 | 493 |
|  | C | 280 | 281 | 281 |
|  | All | 1,460 | 1,660 | 1,660 |
| FEB | W | 3,290 | 3,781 | 3,781 |
|  | AN | 2,525 | 2,913 | 2,913 |
|  | BN | 1,011 | 1,035 | 1,035 |
|  | D | 695 | 678 | 678 |
|  | C | 426 | 442 | 442 |
|  | All | 1,809 | 2,033 | 2,033 |
| MAR | W | 3,179 | 3,336 | 3,336 |
|  | AN | 1,582 | 1,639 | 1,639 |
|  | BN | 1,181 | 1,140 | 1,140 |
|  | D | 754 | 691 | 691 |
|  | C | 595 | 580 | 580 |
|  | All | 1,662 | 1,700 | 1,700 |
| APR | W | 2,819 | 2,694 | 2,694 |
|  | AN | 1,619 | 1,424 | 1,424 |
|  | BN | 1,243 | 1,068 | 1,068 |
|  | D | 623 | 550 | 550 |
|  | C | 340 | 311 | 311 |
|  | All | 1,503 | 1,384 | 1,384 |
| MAY | W | 3,170 | 2,885 | 2,885 |
|  | AN | 1,439 | 1,179 | 1,179 |
|  | BN | 976 | 812 | 812 |
|  | D | 406 | 333 | 333 |
|  | C | 181 | 170 | 170 |
|  | All | 1,463 | 1,289 | 1,289 |
| JUN | W | 1,755 | 1,415 | 1,415 |
|  | AN | 851 | 631 | 631 |
|  | BN | 471 | 366 | 366 |
|  | D | 93 | 76 | 76 |
|  | C | 52 | 44 | 44 |
|  | All | 779 | 616 | 616 |
| JUL | W | 772 | 469 | 469 |
|  | AN | 347 | 167 | 167 |
|  | BN | 123 | 70 | 70 |
|  | D | 7 | 6 | 6 |
|  | C | 3 | 3 | 3 |
|  | All | 315 | 183 | 183 |


| Alternative 6A: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A6A_LLT |
| AUG | W | 703 | 346 | 346 |
|  | AN | 328 | 216 | 216 |
|  | BN | 112 | 71 | 71 |
|  | D | 4 | 4 | 4 |
|  | C | 2 | 2 | 2 |
|  | All | 289 | 156 | 156 |
| SEP | W | 702 | 497 | 497 |
|  | AN | 333 | 259 | 259 |
|  | BN | 114 | 91 | 91 |
|  | D | 9 | 9 | 9 |
|  | C | 5 | 5 | 5 |
|  | All | 291 | 213 | 213 |
| OCT | W | 161 | 147 | 147 |
|  | AN | 178 | 180 | 180 |
|  | BN | 154 | 144 | 144 |
|  | D | 180 | 160 | 160 |
|  | C | 117 | 123 | 123 |
|  | All | 158 | 150 | 150 |
| NOV | W | 487 | 431 | 431 |
|  | AN | 912 | 855 | 855 |
|  | BN | 347 | 301 | 301 |
|  | D | 380 | 327 | 327 |
|  | C | 195 | 186 | 186 |
|  | All | 474 | 429 | 429 |
| DEC | W | 1,504 | 1,732 | 1,732 |
|  | AN | 1,411 | 1,628 | 1,628 |
|  | BN | 447 | 472 | 472 |
|  | D | 384 | 374 | 374 |
|  | C | 204 | 209 | 209 |
|  | All | 887 | 999 | 999 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

## 1

Table 36. Differences ${ }^{a}$ (Percent Differences) between Pairs of Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 6A: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| JAN | W | 563 (18.3\%) | 0 (0\%) |
|  | AN | 169 (9.9\%) | 0 (0\%) |
|  | BN | 21 (3.4\%) | 0 (0\%) |
|  | D | -2 (-0.5\%) | 0 (0\%) |
|  | C | 1 (0.3\%) | 0 (0\%) |
|  | All | 201 (13.8\%) | 0 (0\%) |
| FEB | W | 491 (14.9\%) | 0 (0\%) |
|  | AN | 388 (15.4\%) | 0 (0\%) |
|  | BN | 24 (2.4\%) | 0 (0\%) |
|  | D | -17 (-2.4\%) | 0 (0\%) |
|  | C | 15 (3.5\%) | 0 (0\%) |
|  | All | 223 (12.3\%) | 0 (0\%) |
| MAR | W | 158 (5\%) | 0 (0\%) |
|  | AN | 57 (3.6\%) | 0 (0\%) |
|  | BN | -41 (-3.4\%) | 0 (0\%) |
|  | D | -63 (-8.3\%) | 0 (0\%) |
|  | C | -15 (-2.5\%) | 0 (0\%) |
|  | All | 38 (2.3\%) | 0 (0\%) |
| APR | W | -125 (-4.4\%) | 0 (0\%) |
|  | AN | -194 (-12\%) | 0 (0\%) |
|  | BN | -175 (-14.1\%) | 0 (0\%) |
|  | D | -73 (-11.7\%) | 0 (0\%) |
|  | C | -29 (-8.7\%) | 0 (0\%) |
|  | All | -120 (-8\%) | 0 (0\%) |
| MAY | W | -284 (-9\%) | 0 (0\%) |
|  | AN | -260 (-18.1\%) | 0 (0\%) |
|  | BN | -164 (-16.8\%) | 0 (0\%) |
|  | D | -72 (-17.8\%) | 0 (0\%) |
|  | C | -11 (-6.1\%) | 0 (0\%) |
|  | All | -174 (-11.9\%) | 0 (0\%) |
| JUN | W | -339 (-19.3\%) | 0 (0\%) |
|  | AN | -220 (-25.8\%) | 0 (0\%) |
|  | BN | -105 (-22.3\%) | 0 (0\%) |
|  | D | -17 (-18.8\%) | 0 (0\%) |
|  | C | -8 (-14.7\%) | 0 (0\%) |
|  | All | -163 (-20.9\%) | 0 (0\%) |
| JUL | W | -303 (-39.3\%) | 0 (0\%) |
|  | AN | -180 (-51.8\%) | 0 (0\%) |
|  | BN | -54 (-43.4\%) | 0 (0\%) |
|  | D | 0 (-3.1\%) | 0 (0\%) |
|  | C | 0 (-4.4\%) | 0 (0\%) |
|  | All | -132 (-42\%) | 0 (0\%) |


| Alternative 6A: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A6A_LLT | NAA vs. A6A_LLT |
| AUG | W | -357 (-50.8\%) | 0 (0\%) |
|  | AN | -113 (-34.3\%) | 0 (0\%) |
|  | BN | -41 (-36.5\%) | 0 (0\%) |
|  | D | 0 (-0.5\%) | 0 (0\%) |
|  | C | 0 (-3.1\%) | 0 (0\%) |
|  | All | -133 (-46.1\%) | 0 (0\%) |
| SEP | W | -205 (-29.3\%) | 0 (0\%) |
|  | AN | -74 (-22.2\%) | 0 (0\%) |
|  | BN | -23 (-20.5\%) | 0 (0\%) |
|  | D | -1 (-5.9\%) | 0 (0\%) |
|  | C | 0 (4.6\%) | 0 (0\%) |
|  | All | -78 (-26.9\%) | 0 (0\%) |
| OCT | W | -14 (-8.7\%) | 0 (0\%) |
|  | AN | 2 (1.1\%) | 0 (0\%) |
|  | BN | -10 (-6.6\%) | 0 (0\%) |
|  | D | -20 (-11.1\%) | 0 (0\%) |
|  | C | 6 (4.7\%) | 0 (0\%) |
|  | All | -7 (-4.7\%) | 0 (0\%) |
| NOV | W | -56 (-11.5\%) | 0 (0\%) |
|  | AN | -57 (-6.3\%) | 0 (0\%) |
|  | BN | -46 (-13.2\%) | 0 (0\%) |
|  | D | -53 (-13.9\%) | 0 (0\%) |
|  | C | -9 (-4.6\%) | 0 (0\%) |
|  | All | -45 (-9.5\%) | 0 (0\%) |
| DEC | W | 228 (15.2\%) | 0 (0\%) |
|  | AN | 217 (15.4\%) | 0 (0\%) |
|  | BN | 25 (5.5\%) | 0 (0\%) |
|  | D | -10 (-2.6\%) | 0 (0\%) |
|  | C | 6 (2.9\%) | 0 (0\%) |
|  | All | 113 (12.7\%) | 0 (0\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
${ }^{\text {b }}$ Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C. 7 Alternative 7

## 11C.7.1 Upstream

11C.7.1.1 Sacramento River at Keswick
Table 1. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 7: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 16,526 | 18,233 | 18,994 |
|  | AN | 8,318 | 8,205 | 8,430 |
|  | BN | 4,502 | 4,184 | 4,377 |
|  | D | 3,996 | 4,096 | 3,592 |
|  | C | 3,490 | 4,238 | 3,460 |
|  | All | 8,614 | 9,215 | 9,298 |
| FEB | W | 18,577 | 20,853 | 20,836 |
|  | AN | 14,409 | 15,297 | 16,423 |
|  | BN | 5,981 | 5,544 | 6,811 |
|  | D | 3,684 | 3,410 | 3,377 |
|  | C | 3,599 | 3,372 | 3,937 |
|  | All | 10,355 | 11,039 | 11,490 |
| MAR | W | 16,200 | 17,065 | 17,138 |
|  | AN | 9,131 | 8,818 | 8,871 |
|  | BN | 5,200 | 4,318 | 4,165 |
|  | D | 3,903 | 3,814 | 3,834 |
|  | C | 3,487 | 3,583 | 3,450 |
|  | All | 8,728 | 8,800 | 8,790 |
| APR | W | 9,418 | 9,131 | 9,088 |
|  | AN | 6,182 | 5,536 | 5,828 |
|  | BN | 5,426 | 5,009 | 4,676 |
|  | D | 5,803 | 5,533 | 5,306 |
|  | C | 6,472 | 6,550 | 6,162 |
|  | All | 7,038 | 6,733 | 6,599 |
| MAY | W | 9,508 | 7,149 | 7,388 |
|  | AN | 7,709 | 7,783 | 8,500 |
|  | BN | 7,193 | 6,272 | 6,217 |
|  | D | 7,349 | 7,681 | 7,448 |
|  | C | 6,715 | 7,316 | 7,785 |
|  | All | 7,967 | 7,233 | 7,422 |
| JUN | W | 10,375 | 10,274 | 11,204 |
|  | AN | 11,147 | 12,032 | 12,590 |
|  | BN | 10,758 | 10,947 | 10,922 |
|  | D | 11,224 | 11,898 | 11,610 |
|  | C | 10,392 | 11,350 | 11,481 |
|  | All | 10,742 | 11,160 | 11,488 |


| Alternative 7: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JUL | W | 12,779 | 14,098 | 14,266 |
|  | AN | 14,056 | 15,098 | 15,444 |
|  | BN | 12,965 | 13,177 | 13,766 |
|  | D | 13,302 | 13,727 | 14,281 |
|  | C | 12,849 | 11,935 | 11,806 |
|  | All | 13,123 | 13,689 | 13,996 |
| AUG | W | 11,029 | 10,491 | 10,386 |
|  | AN | 10,449 | 11,641 | 11,057 |
|  | BN | 10,139 | 10,261 | 10,448 |
|  | D | 10,627 | 10,986 | 10,593 |
|  | C | 9,473 | 7,348 | 7,150 |
|  | All | 10,476 | 10,269 | 10,067 |
| SEP | W | 9,385 | 12,833 | 13,164 |
|  | AN | 5,862 | 9,898 | 9,125 |
|  | BN | 5,492 | 5,601 | 4,502 |
|  | D | 5,985 | 4,469 | 4,782 |
|  | C | 5,563 | 4,368 | 4,279 |
|  | All | 6,899 | 8,094 | 7,954 |
| OCT | W | 6,886 | 7,034 | 6,948 |
|  | AN | 7,145 | 7,152 | 7,270 |
|  | BN | 6,396 | 7,072 | 6,579 |
|  | D | 6,128 | 6,494 | 6,910 |
|  | C | 5,902 | 5,752 | 5,585 |
|  | All | 6,530 | 6,752 | 6,724 |
| NOV | W | 6,672 | 7,539 | 6,551 |
|  | AN | 6,224 | 7,134 | 5,900 |
|  | BN | 5,088 | 5,936 | 5,157 |
|  | D | 5,669 | 5,406 | 5,103 |
|  | C | 4,822 | 4,710 | 4,854 |
|  | All | 5,845 | 6,324 | 5,651 |
| DEC | W | 12,766 | 11,022 | 11,092 |
|  | AN | 5,531 | 5,377 | 4,856 |
|  | BN | 5,413 | 5,195 | 4,879 |
|  | D | 4,215 | 3,936 | 3,713 |
|  | C | 3,828 | 3,582 | 3,589 |
|  | All | 7,267 | 6,557 | 6,401 |

Table 2. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 7: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 2,468 (14.9\%) | 761 (4.2\%) |
|  | AN | 113 (1.4\%) | 226 (2.7\%) |
|  | BN | -125 (-2.8\%) | 194 (4.6\%) |
|  | D | -404 (-10.1\%) | -504 (-12.3\%) |
|  | C | -31 (-0.9\%) | -778 (-18.4\%) |
|  | All | 685 (7.9\%) | 83 (0.9\%) |
| FEB | W | 2,259 (12.2\%) | -17 (-0.1\%) |
|  | AN | 2,014 (14\%) | 1,126 (7.4\%) |
|  | BN | 830 (13.9\%) | 1,267 (22.8\%) |
|  | D | -306 (-8.3\%) | -33 (-1\%) |
|  | C | 339 (9.4\%) | 565 (16.8\%) |
|  | All | 1,135 (11\%) | 451 (4.1\%) |
| MAR | W | 938 (5.8\%) | 73 (0.4\%) |
|  | AN | -260 (-2.8\%) | 53 (0.6\%) |
|  | BN | -1,034 (-19.9\%) | -153 (-3.5\%) |
|  | D | -69 (-1.8\%) | 20 (0.5\%) |
|  | C | -37 (-1.1\%) | -133 (-3.7\%) |
|  | All | 62 (0.7\%) | -10 (-0.1\%) |
| APR | W | -330 (-3.5\%) | -43 (-0.5\%) |
|  | AN | -354 (-5.7\%) | 292 (5.3\%) |
|  | BN | -751 (-13.8\%) | -333 (-6.7\%) |
|  | D | -496 (-8.6\%) | -227 (-4.1\%) |
|  | C | -310 (-4.8\%) | -388 (-5.9\%) |
|  | All | -439 (-6.2\%) | -134 (-2\%) |
| MAY | W | -2,120 (-22.3\%) | 239 (3.3\%) |
|  | AN | 791 (10.3\%) | 717 (9.2\%) |
|  | BN | -976 (-13.6\%) | -55 (-0.9\%) |
|  | D | 100 (1.4\%) | -233 (-3\%) |
|  | C | 1,070 (15.9\%) | 470 (6.4\%) |
|  | All | -545 (-6.8\%) | 189 (2.6\%) |
| JUN | W | 829 (8\%) | 930 (9\%) |
|  | AN | 1,443 (12.9\%) | 559 (4.6\%) |
|  | BN | 163 (1.5\%) | -26 (-0.2\%) |
|  | D | 387 (3.4\%) | -288 (-2.4\%) |
|  | C | 1,089 (10.5\%) | 130 (1.1\%) |
|  | All | 746 (6.9\%) | 328 (2.9\%) |
| JUL | W | 1,487 (11.6\%) | 168 (1.2\%) |
|  | AN | 1,388 (9.9\%) | 347 (2.3\%) |
|  | BN | 801 (6.2\%) | 589 (4.5\%) |
|  | D | 979 (7.4\%) | 554 (4\%) |
|  | C | -1,043 (-8.1\%) | -128 (-1.1\%) |
|  | All | 873 (6.7\%) | 308 (2.2\%) |

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| Alternative 7: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | -643 (-5.8\%) | -105 (-1\%) |
|  | AN | 608 (5.8\%) | -584 (-5\%) |
|  | BN | 309 (3\%) | 187 (1.8\%) |
|  | D | -35 (-0.3\%) | -393 (-3.6\%) |
|  | C | -2,322 (-24.5\%) | -197 (-2.7\%) |
|  | All | -410 (-3.9\%) | -202 (-2\%) |
| SEP | W | 3,779 (40.3\%) | 331 (2.6\%) |
|  | AN | 3,263 (55.7\%) | -772 (-7.8\%) |
|  | BN | -990 (-18\%) | -1,099 (-19.6\%) |
|  | D | -1,204 (-20.1\%) | 313 (7\%) |
|  | C | -1,284 (-23.1\%) | -90 (-2.1\%) |
|  | All | 1,055 (15.3\%) | -140 (-1.7\%) |
| OCT | W | 62 (0.9\%) | -87 (-1.2\%) |
|  | AN | 125 (1.8\%) | 118 (1.7\%) |
|  | BN | 183 (2.9\%) | -493 (-7\%) |
|  | D | 782 (12.8\%) | 415 (6.4\%) |
|  | C | -318 (-5.4\%) | -167 (-2.9\%) |
|  | All | 194 (3\%) | -28 (-0.4\%) |
| NOV | W | -121 (-1.8\%) | -988 (-13.1\%) |
|  | AN | -324 (-5.2\%) | -1,234 (-17.3\%) |
|  | BN | 69 (1.4\%) | -779 (-13.1\%) |
|  | D | -566 (-10\%) | -303 (-5.6\%) |
|  | C | 32 (0.7\%) | 145 (3.1\%) |
|  | All | -194 (-3.3\%) | -672 (-10.6\%) |
| DEC | W | -1,673 (-13.1\%) | 70 (0.6\%) |
|  | AN | -675 (-12.2\%) | -522 (-9.7\%) |
|  | BN | -534 (-9.9\%) | -316 (-6.1\%) |
|  | D | -501 (-11.9\%) | -223 (-5.7\%) |
|  | C | -239 (-6.3\%) | 7 (0.2\%) |
|  | All | -866 (-11.9\%) | -156 (-2.4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.7.1.2 Sacramento River Upstream of Red Bluff

Table 3. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 7: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 28,036 | 30,390 | 31,146 |
|  | AN | 16,725 | 16,885 | 17,111 |
|  | BN | 9,381 | 9,146 | 9,338 |
|  | D | 7,098 | 7,262 | 6,759 |
|  | C | 6,143 | 6,942 | 6,171 |
|  | All | 15,396 | 16,278 | 16,361 |
| FEB | W | 30,255 | 33,472 | 33,446 |
|  | AN | 23,492 | 24,828 | 25,949 |
|  | BN | 12,005 | 11,614 | 12,876 |
|  | D | 8,947 | 8,790 | 8,759 |
|  | C | 6,599 | 6,378 | 6,948 |
|  | All | 18,010 | 19,092 | 19,540 |
| MAR | W | 25,004 | 26,210 | 26,282 |
|  | AN | 16,599 | 16,428 | 16,473 |
|  | BN | 9,333 | 8,474 | 8,300 |
|  | D | 8,385 | 8,300 | 8,318 |
|  | C | 5,999 | 6,101 | 5,961 |
|  | All | 14,669 | 14,876 | 14,859 |
| APR | W | 15,172 | 14,842 | 14,800 |
|  | AN | 10,477 | 9,761 | 10,055 |
|  | BN | 8,711 | 8,282 | 7,960 |
|  | D | 7,948 | 7,661 | 7,436 |
|  | C | 7,742 | 7,829 | 7,444 |
|  | All | 10,709 | 10,376 | 10,245 |
| MAY | W | 12,541 | 10,073 | 10,316 |
|  | AN | 10,012 | 10,047 | 10,766 |
|  | BN | 8,781 | 7,875 | 7,835 |
|  | D | 8,677 | 9,012 | 8,785 |
|  | C | 7,746 | 8,348 | 8,823 |
|  | All | 9,979 | 9,208 | 9,404 |
| JUN | W | 11,905 | 11,720 | 12,654 |
|  | AN | 12,001 | 12,789 | 13,353 |
|  | BN | 11,464 | 11,651 | 11,640 |
|  | D | 11,777 | 12,441 | 12,160 |
|  | C | 10,885 | 11,881 | 11,972 |
|  | All | 11,666 | 12,046 | 12,375 |
| JUL | W | 13,255 | 14,525 | 14,696 |
|  | AN | 14,129 | 15,142 | 15,497 |
|  | BN | 13,011 | 13,258 | 13,866 |
|  | D | 13,368 | 13,826 | 14,390 |
|  | C | 13,005 | 12,149 | 12,056 |
|  | All | 13,329 | 13,898 | 14,218 |


| Alternative 7: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 11,284 | 10,735 | 10,638 |
|  | AN | 10,580 | 11,775 | 11,200 |
|  | BN | 10,202 | 10,364 | 10,564 |
|  | D | 10,747 | 11,143 | 10,754 |
|  | C | 9,590 | 7,665 | 7,555 |
|  | All | 10,630 | 10,464 | 10,282 |
| SEP | W | 9,856 | 13,312 | 13,650 |
|  | AN | 6,279 | 10,320 | 9,557 |
|  | BN | 5,821 | 5,963 | 4,875 |
|  | D | 6,391 | 4,911 | 5,231 |
|  | C | 5,887 | 4,838 | 4,775 |
|  | All | 7,302 | 8,535 | 8,406 |
| OCT | W | 8,020 | 8,188 | 8,104 |
|  | AN | 8,112 | 8,162 | 8,284 |
|  | BN | 7,094 | 7,778 | 7,283 |
|  | D | 6,903 | 7,287 | 7,691 |
|  | C | 6,670 | 6,537 | 6,398 |
|  | All | 7,432 | 7,675 | 7,650 |
| NOV | W | 9,876 | 10,821 | 9,831 |
|  | AN | 8,144 | 9,098 | 7,860 |
|  | BN | 6,791 | 7,682 | 6,907 |
|  | D | 7,548 | 7,347 | 7,040 |
|  | C | 5,811 | 5,703 | 5,851 |
|  | All | 7,990 | 8,521 | 7,848 |
| DEC | W | 21,015 | 19,613 | 19,688 |
|  | AN | 10,019 | 10,053 | 9,538 |
|  | BN | 8,408 | 8,228 | 7,917 |
|  | D | 7,292 | 7,091 | 6,872 |
|  | C | 5,628 | 5,433 | 5,438 |
|  | All | 11,989 | 11,446 | 11,294 |

Table 4. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 7: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 3,109 (11.1\%) | 756 (2.5\%) |
|  | AN | 386 (2.3\%) | 225 (1.3\%) |
|  | BN | -43 (-0.5\%) | 192 (2.1\%) |
|  | D | -339 (-4.8\%) | -503 (-6.9\%) |
|  | C | 27 (0.4\%) | -771 (-11.1\%) |
|  | All | 965 (6.3\%) | 82 (0.5\%) |
| FEB | W | 3,192 (10.5\%) | -25 (-0.1\%) |
|  | AN | 2,457 (10.5\%) | 1,121 (4.5\%) |
|  | BN | 872 (7.3\%) | 1,262 (10.9\%) |
|  | D | -188 (-2.1\%) | -31 (-0.4\%) |
|  | C | 350 (5.3\%) | 570 (8.9\%) |
|  | All | 1,530 (8.5\%) | 448 (2.3\%) |
| MAR | W | 1,278 (5.1\%) | 71 (0.3\%) |
|  | AN | -126 (-0.8\%) | 45 (0.3\%) |
|  | BN | -1,033 (-11.1\%) | -174 (-2.1\%) |
|  | D | -66 (-0.8\%) | 19 (0.2\%) |
|  | C | -38 (-0.6\%) | -141 (-2.3\%) |
|  | All | 190 (1.3\%) | -17 (-0.1\%) |
| APR | W | -372 (-2.5\%) | -42 (-0.3\%) |
|  | AN | -422 (-4\%) | 294 (3\%) |
|  | BN | -751 (-8.6\%) | -323 (-3.9\%) |
|  | D | -512 (-6.4\%) | -225 (-2.9\%) |
|  | C | -298 (-3.8\%) | -385 (-4.9\%) |
|  | All | -464 (-4.3\%) | -131 (-1.3\%) |
| MAY | W | -2,225 (-17.7\%) | 243 (2.4\%) |
|  | AN | 754 (7.5\%) | 719 (7.2\%) |
|  | BN | -946 (-10.8\%) | -40 (-0.5\%) |
|  | D | 108 (1.2\%) | -227 (-2.5\%) |
|  | C | 1,077 (13.9\%) | 475 (5.7\%) |
|  | All | -575 (-5.8\%) | 195 (2.1\%) |
| JUN | W | 749 (6.3\%) | 934 (8\%) |
|  | AN | 1,352 (11.3\%) | 564 (4.4\%) |
|  | BN | 176 (1.5\%) | -10 (-0.1\%) |
|  | D | 383 (3.3\%) | -280 (-2.3\%) |
|  | C | 1,087 (10\%) | 91 (0.8\%) |
|  | All | 709 (6.1\%) | 329 (2.7\%) |
| JUL | W | 1,442 (10.9\%) | 172 (1.2\%) |
|  | AN | 1,367 (9.7\%) | 355 (2.3\%) |
|  | BN | 855 (6.6\%) | 608 (4.6\%) |
|  | D | 1,021 (7.6\%) | 563 (4.1\%) |
|  | C | -949 (-7.3\%) | -94 (-0.8\%) |
|  | All | 888 (6.7\%) | 320 (2.3\%) |



| Alternative 7: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | -646 (-5.7\%) | -98 (-0.9\%) |
|  | AN | 619 (5.9\%) | -576 (-4.9\%) |
|  | BN | 362 (3.5\%) | 200 (1.9\%) |
|  | D | 7 (0.1\%) | -389 (-3.5\%) |
|  | C | -2,035 (-21.2\%) | -110 (-1.4\%) |
|  | All | -349 (-3.3\%) | -183 (-1.7\%) |
| SEP | W | 3,794 (38.5\%) | 338 (2.5\%) |
|  | AN | 3,278 (52.2\%) | -763 (-7.4\%) |
|  | BN | -945 (-16.2\%) | -1,088 (-18.2\%) |
|  | D | -1,160 (-18.2\%) | 320 (6.5\%) |
|  | C | -1,111 (-18.9\%) | -62 (-1.3\%) |
|  | All | 1,104 (15.1\%) | -129 (-1.5\%) |
| OCT | W | 84 (1\%) | -84 (-1\%) |
|  | AN | 172 (2.1\%) | 122 (1.5\%) |
|  | BN | 189 (2.7\%) | -495 (-6.4\%) |
|  | D | 788 (11.4\%) | 404 (5.5\%) |
|  | C | -272 (-4.1\%) | -139 (-2.1\%) |
|  | All | 217 (2.9\%) | -25 (-0.3\%) |
| NOV | W | -45 (-0.5\%) | -990 (-9.1\%) |
|  | AN | -283 (-3.5\%) | -1,237 (-13.6\%) |
|  | BN | 117 (1.7\%) | -775 (-10.1\%) |
|  | D | -508 (-6.7\%) | -307 (-4.2\%) |
|  | C | 39 (0.7\%) | 147 (2.6\%) |
|  | All | -142 (-1.8\%) | -673 (-7.9\%) |
| DEC | W | -1,327 (-6.3\%) | 75 (0.4\%) |
|  | AN | -482 (-4.8\%) | -515 (-5.1\%) |
|  | BN | -491 (-5.8\%) | -311 (-3.8\%) |
|  | D | -420 (-5.8\%) | -220 (-3.1\%) |
|  | C | -190 (-3.4\%) | 5 (0.1\%) |
|  | All | -695 (-5.8\%) | -152 (-1.3\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.7.1.3 Sacramento River at Wilkins Slough

Table 5. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 7: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 19,145 | 19,320 | 19,364 |
|  | AN | 17,084 | 16,593 | 16,644 |
|  | BN | 12,521 | 12,143 | 12,319 |
|  | D | 8,896 | 9,189 | 8,745 |
|  | C | 7,858 | 8,586 | 7,814 |
|  | All | 13,811 | 13,901 | 13,742 |
| FEB | W | 19,887 | 20,044 | 20,031 |
|  | AN | 19,139 | 19,095 | 19,147 |
|  | BN | 14,528 | 14,328 | 14,689 |
|  | D | 11,520 | 11,473 | 11,453 |
|  | C | 8,499 | 8,158 | 8,766 |
|  | All | 15,359 | 15,309 | 15,458 |
| MAR | W | 18,223 | 18,323 | 18,327 |
|  | AN | 17,696 | 17,537 | 17,685 |
|  | BN | 12,208 | 11,534 | 11,358 |
|  | D | 11,364 | 11,191 | 11,357 |
|  | C | 8,101 | 8,166 | 7,987 |
|  | All | 14,132 | 13,997 | 14,000 |
| APR | W | 13,392 | 13,119 | 13,065 |
|  | AN | 10,264 | 9,783 | 10,035 |
|  | BN | 7,152 | 6,858 | 6,552 |
|  | D | 5,319 | 5,112 | 4,908 |
|  | C | 4,164 | 4,331 | 3,984 |
|  | All | 8,746 | 8,518 | 8,390 |
| MAY | W | 10,467 | 8,435 | 8,750 |
|  | AN | 7,318 | 7,500 | 8,269 |
|  | BN | 5,638 | 4,871 | 4,892 |
|  | D | 4,669 | 5,088 | 4,908 |
|  | C | 3,998 | 4,528 | 5,047 |
|  | All | 6,962 | 6,383 | 6,636 |
| JUN | W | 6,503 | 6,435 | 7,407 |
|  | AN | 5,781 | 6,530 | 7,143 |
|  | BN | 5,243 | 5,628 | 5,738 |
|  | D | 5,245 | 6,075 | 5,862 |
|  | C | 5,140 | 6,253 | 6,175 |
|  | All | 5,707 | 6,205 | 6,564 |
| JUL | W | 6,685 | 7,771 | 7,967 |
|  | AN | 6,971 | 7,892 | 8,316 |
|  | BN | 6,122 | 6,560 | 7,310 |
|  | D | 6,788 | 7,474 | 8,065 |
|  | C | 7,162 | 6,649 | 6,757 |
|  | All | 6,723 | 7,353 | 7,750 |


| Alternative 7: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AU | W | 6,287 | 5,537 | 5,488 |
|  | AN | 5,498 | 6,610 | 6,081 |
|  | BN | 5,138 | 5,462 | 5,697 |
|  | D | 5,833 | 6,356 | 5,933 |
|  | C | 5,551 | 4,719 | 5,077 |
|  | All | 5,768 | 5,741 | 5,648 |
| SEP | W | 9,338 | 12,737 | 13,107 |
|  | AN | 5,631 | 9,546 | 8,844 |
|  | BN | 5,128 | 5,216 | 4,125 |
|  | D | 5,636 | 4,114 | 4,457 |
|  | C | 5,200 | 4,354 | 4,295 |
|  | All | 6,658 | 7,866 | 7,761 |
| OCT | W | 7,347 | 7,382 | 7,340 |
|  | AN | 6,799 | 6,927 | 7,028 |
|  | BN | 5,987 | 6,570 | 6,092 |
|  | D | 5,688 | 6,040 | 6,445 |
|  | C | 5,642 | 5,572 | 5,511 |
|  | All | 6,421 | 6,617 | 6,617 |
| NOV | W | 9,644 | 10,889 | 9,861 |
|  | AN | 8,210 | 9,141 | 7,913 |
|  | BN | 6,793 | 7,588 | 6,859 |
|  | D | 7,407 | 7,227 | 6,915 |
|  | C | 5,118 | 4,986 | 5,135 |
|  | All | 7,794 | 8,402 | 7,725 |
| DEC | W | 17,881 | 17,257 | 17,408 |
|  | AN | 10,809 | 10,755 | 10,516 |
|  | BN | 8,505 | 8,258 | 8,222 |
|  | D | 8,950 | 8,725 | 8,533 |
|  | C | 6,229 | 5,981 | 5,951 |
|  | All | 11,580 | 11,246 | 11,206 |

Table 6. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 7: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 219 (1.1\%) | 44 (0.2\%) |
|  | AN | -439 (-2.6\%) | 51 (0.3\%) |
|  | BN | -202 (-1.6\%) | 175 (1.4\%) |
|  | D | -150 (-1.7\%) | -443 (-4.8\%) |
|  | C | -44 (-0.6\%) | -772 (-9\%) |
|  | All | -69 (-0.5\%) | -159 (-1.1\%) |
| FEB | W | 144 (0.7\%) | -13 (-0.1\%) |
|  | AN | 8 (0\%) | 52 (0.3\%) |
|  | BN | 161 (1.1\%) | 362 (2.5\%) |
|  | D | -67 (-0.6\%) | -21 (-0.2\%) |
|  | C | 267 (3.1\%) | 608 (7.4\%) |
|  | All | 99 (0.6\%) | 150 (1\%) |
| MAR | W | 105 (0.6\%) | 5 (0\%) |
|  | AN | -10 (-0.1\%) | 149 (0.8\%) |
|  | BN | -850 (-7\%) | -176 (-1.5\%) |
|  | D | -7 (-0.1\%) | 166 (1.5\%) |
|  | C | -114 (-1.4\%) | -179 (-2.2\%) |
|  | All | -132 (-0.9\%) | 3 (0\%) |
| APR | W | -327 (-2.4\%) | -54 (-0.4\%) |
|  | AN | -228 (-2.2\%) | 253 (2.6\%) |
|  | BN | -600 (-8.4\%) | -306 (-4.5\%) |
|  | D | -412 (-7.7\%) | -204 (-4\%) |
|  | C | -180 (-4.3\%) | -347 (-8\%) |
|  | All | -356 (-4.1\%) | -128 (-1.5\%) |
| MAY | W | -1,717 (-16.4\%) | 314 (3.7\%) |
|  | AN | 951 (13\%) | 770 (10.3\%) |
|  | BN | -746 (-13.2\%) | 21 (0.4\%) |
|  | D | 238 (5.1\%) | -180 (-3.5\%) |
|  | C | 1,049 (26.2\%) | 519 (11.5\%) |
|  | All | -327 (-4.7\%) | 252 (4\%) |
| JUN | W | 903 (13.9\%) | 971 (15.1\%) |
|  | AN | 1,362 (23.6\%) | 613 (9.4\%) |
|  | BN | 495 (9.4\%) | 110 (2\%) |
|  | D | 617 (11.8\%) | -213 (-3.5\%) |
|  | C | 1,035 (20.1\%) | -78 (-1.2\%) |
|  | All | 857 (15\%) | 358 (5.8\%) |
| JUL | W | 1,283 (19.2\%) | 197 (2.5\%) |
|  | AN | 1,345 (19.3\%) | 424 (5.4\%) |
|  | BN | 1,188 (19.4\%) | 750 (11.4\%) |
|  | D | 1,277 (18.8\%) | 590 (7.9\%) |
|  | C | -404 (-5.6\%) | 108 (1.6\%) |
|  | All | 1,028 (15.3\%) | 398 (5.4\%) |


| Alternative 7: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | -799 (-12.7\%) | -49 (-0.9\%) |
|  | AN | 583 (10.6\%) | -529 (-8\%) |
|  | BN | 560 (10.9\%) | 235 (4.3\%) |
|  | D | 100 (1.7\%) | -423 (-6.6\%) |
|  | C | -475 (-8.5\%) | 358 (7.6\%) |
|  | All | -120 (-2.1\%) | -93 (-1.6\%) |
| SEP | W | 3,769 (40.4\%) | 369 (2.9\%) |
|  | AN | 3,212 (57\%) | -702 (-7.4\%) |
|  | BN | -1,003 (-19.6\%) | -1,091 (-20.9\%) |
|  | D | -1,179 (-20.9\%) | 343 (8.3\%) |
|  | C | -905 (-17.4\%) | -59 (-1.4\%) |
|  | All | 1,103 (16.6\%) | -105 (-1.3\%) |
| OCT | W | -7 (-0.1\%) | -42 (-0.6\%) |
|  | AN | 229 (3.4\%) | 101 (1.5\%) |
|  | BN | 105 (1.8\%) | -478 (-7.3\%) |
|  | D | 757 (13.3\%) | 405 (6.7\%) |
|  | C | -131 (-2.3\%) | -61 (-1.1\%) |
|  | All | 196 (3.1\%) | 0 (0\%) |
| NOV | W | 217 (2.3\%) | -1,028 (-9.4\%) |
|  | AN | -297 (-3.6\%) | -1,228 (-13.4\%) |
|  | BN | 66 (1\%) | -729 (-9.6\%) |
|  | D | -492 (-6.6\%) | -312 (-4.3\%) |
|  | C | 17 (0.3\%) | 150 (3\%) |
|  | All | -69 (-0.9\%) | -677 (-8.1\%) |
| DEC | W | -473 (-2.6\%) | 151 (0.9\%) |
|  | AN | -293 (-2.7\%) | -239 (-2.2\%) |
|  | BN | -283 (-3.3\%) | -36 (-0.4\%) |
|  | D | -417 (-4.7\%) | -192 (-2.2\%) |
|  | C | -278 (-4.5\%) | -30 (-0.5\%) |
|  | All | -373 (-3.2\%) | -40 (-0.4\%) |

## 11C.7.1.4 Sacramento River at Verona

Table 7. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 7: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 44,589 | 45,567 | 44,193 |
|  | AN | 34,120 | 33,671 | 31,826 |
|  | BN | 20,175 | 19,121 | 17,431 |
|  | D | 14,756 | 14,782 | 13,646 |
|  | C | 12,085 | 13,051 | 11,541 |
|  | All | 27,583 | 27,795 | 26,330 |
| FEB | W | 49,892 | 51,326 | 49,753 |
|  | AN | 39,162 | 39,749 | 38,633 |
|  | BN | 26,429 | 25,341 | 23,802 |
|  | D | 18,402 | 18,090 | 17,006 |
|  | C | 12,822 | 12,325 | 12,617 |
|  | All | 31,979 | 32,192 | 31,072 |
| MAR | W | 43,455 | 44,624 | 41,950 |
|  | AN | 39,477 | 39,687 | 37,245 |
|  | BN | 21,484 | 19,448 | 18,407 |
|  | D | 17,868 | 17,649 | 16,486 |
|  | C | 11,903 | 11,789 | 11,175 |
|  | All | 28,888 | 28,877 | 27,149 |
| APR | W | 32,219 | 31,636 | 30,499 |
|  | AN | 22,250 | 21,313 | 20,511 |
|  | BN | 14,459 | 13,857 | 13,252 |
|  | D | 11,113 | 10,903 | 10,623 |
|  | C | 9,420 | 9,489 | 9,037 |
|  | All | 19,759 | 19,298 | 18,589 |
| MAY | W | 26,193 | 20,229 | 20,707 |
|  | AN | 17,079 | 16,002 | 17,086 |
|  | BN | 11,451 | 10,534 | 10,228 |
|  | D | 9,283 | 9,841 | 9,072 |
|  | C | 7,125 | 7,611 | 8,431 |
|  | All | 15,840 | 13,828 | 14,037 |
| JUN | W | 18,367 | 15,304 | 16,679 |
|  | AN | 13,590 | 13,574 | 15,511 |
|  | BN | 11,062 | 11,320 | 11,384 |
|  | D | 10,429 | 10,780 | 9,919 |
|  | C | 8,911 | 9,827 | 10,998 |
|  | All | 13,295 | 12,576 | 13,289 |
| JUL | W | 16,253 | 17,965 | 17,385 |
|  | AN | 17,488 | 18,338 | 18,214 |
|  | BN | 16,698 | 16,598 | 16,835 |
|  | D | 16,352 | 16,465 | 14,218 |
|  | C | 14,476 | 12,457 | 10,783 |
|  | All | 16,271 | 16,651 | 15,751 |


| Alternative 7: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 12,464 | 14,016 | 12,651 |
|  | AN | 13,691 | 15,828 | 14,233 |
|  | BN | 13,389 | 14,074 | 13,909 |
|  | D | 14,688 | 13,018 | 10,784 |
|  | C | 9,207 | 8,085 | 10,120 |
|  | All | 12,813 | 13,204 | 12,317 |
| SEP | W | 14,279 | 23,592 | 22,515 |
|  | AN | 10,537 | 19,044 | 16,168 |
|  | BN | 9,961 | 10,576 | 8,662 |
|  | D | 10,542 | 7,664 | 7,932 |
|  | C | 7,764 | 6,832 | 7,096 |
|  | All | 11,220 | 14,755 | 13,763 |
| OCT | W | 11,503 | 11,232 | 11,362 |
|  | AN | 9,381 | 9,890 | 10,068 |
|  | BN | 9,867 | 10,146 | 10,001 |
|  | D | 8,681 | 8,989 | 9,756 |
|  | C | 8,543 | 8,104 | 8,779 |
|  | All | 9,861 | 9,900 | 10,210 |
| NOV | W | 15,307 | 15,754 | 14,756 |
|  | AN | 11,792 | 12,817 | 11,368 |
|  | BN | 9,852 | 10,437 | 9,711 |
|  | D | 10,157 | 9,731 | 9,521 |
|  | C | 7,341 | 7,223 | 7,370 |
|  | All | 11,565 | 11,846 | 11,169 |
| DEC | W | 33,840 | 31,254 | 29,536 |
|  | AN | 17,572 | 18,481 | 16,640 |
|  | BN | 13,099 | 13,028 | 12,122 |
|  | D | 12,685 | 12,532 | 11,572 |
|  | C | 9,770 | 8,627 | 8,470 |
|  | All | 19,752 | 18,852 | 17,650 |

Table 8. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 7: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | -396 (-0.9\%) | -1,374 (-3\%) |
|  | AN | -2,294 (-6.7\%) | -1,845 (-5.5\%) |
|  | BN | -2,744 (-13.6\%) | -1,690 (-8.8\%) |
|  | D | -1,110 (-7.5\%) | -1,136 (-7.7\%) |
|  | C | -544 (-4.5\%) | -1,510 (-11.6\%) |
|  | All | -1,253 (-4.5\%) | -1,465 (-5.3\%) |
| FEB | W | -139 (-0.3\%) | -1,573 (-3.1\%) |
|  | AN | -529 (-1.4\%) | -1,116 (-2.8\%) |
|  | BN | -2,627 (-9.9\%) | -1,539 (-6.1\%) |
|  | D | -1,396 (-7.6\%) | -1,084 (-6\%) |
|  | C | -205 (-1.6\%) | 292 (2.4\%) |
|  | All | -906 (-2.8\%) | -1,120 (-3.5\%) |
| MAR | W | -1,505 (-3.5\%) | -2,674 (-6\%) |
|  | AN | -2,232 (-5.7\%) | -2,442 (-6.2\%) |
|  | BN | -3,077 (-14.3\%) | -1,041 (-5.4\%) |
|  | D | -1,382 (-7.7\%) | -1,163 (-6.6\%) |
|  | C | -729 (-6.1\%) | -615 (-5.2\%) |
|  | All | -1,739 (-6\%) | -1,728 (-6\%) |
| APR | W | $-1,720$ (-5.3\%) | -1,137 (-3.6\%) |
|  | AN | -1,740 (-7.8\%) | -802 (-3.8\%) |
|  | BN | -1,206 (-8.3\%) | -605 (-4.4\%) |
|  | D | -491 (-4.4\%) | -280 (-2.6\%) |
|  | C | -383 (-4.1\%) | -452 (-4.8\%) |
|  | All | -1,170 (-5.9\%) | -709 (-3.7\%) |
| MAY | W | -5,486 (-20.9\%) | 479 (2.4\%) |
|  | AN | 7 (0\%) | 1,084 (6.8\%) |
|  | BN | -1,224 (-10.7\%) | -307 (-2.9\%) |
|  | D | -212 (-2.3\%) | -769 (-7.8\%) |
|  | C | 1,306 (18.3\%) | 820 (10.8\%) |
|  | All | -1,803 (-11.4\%) | 209 (1.5\%) |
| JUN | W | -1,688 (-9.2\%) | 1,376 (9\%) |
|  | AN | 1,921 (14.1\%) | 1,937 (14.3\%) |
|  | BN | 322 (2.9\%) | 64 (0.6\%) |
|  | D | -510 (-4.9\%) | -862 (-8\%) |
|  | C | 2,087 (23.4\%) | 1,171 (11.9\%) |
|  | All | -6 (0\%) | 713 (5.7\%) |
| JUL | W | 1,132 (7\%) | -580 (-3.2\%) |
|  | AN | 726 (4.1\%) | -124 (-0.7\%) |
|  | BN | 137 (0.8\%) | 236 (1.4\%) |
|  | D | -2,134 (-13.1\%) | -2,247 (-13.6\%) |
|  | C | -3,693 (-25.5\%) | -1,675 (-13.4\%) |
|  | All | -520 (-3.2\%) | -900 (-5.4\%) |


| Alternative 7: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | 187 (1.5\%) | -1,365 (-9.7\%) |
|  | AN | 541 (4\%) | -1,596 (-10.1\%) |
|  | BN | 520 (3.9\%) | -165 (-1.2\%) |
|  | D | -3,904 (-26.6\%) | -2,234 (-17.2\%) |
|  | C | 913 (9.9\%) | 2,035 (25.2\%) |
|  | All | -496 (-3.9\%) | -887 (-6.7\%) |
| SEP | W | 8,235 (57.7\%) | -1,077 (-4.6\%) |
|  | AN | 5,631 (53.4\%) | -2,876 (-15.1\%) |
|  | BN | -1,298 (-13\%) | -1,913 (-18.1\%) |
|  | D | -2,609 (-24.8\%) | 269 (3.5\%) |
|  | C | -669 (-8.6\%) | 264 (3.9\%) |
|  | All | 2,543 (22.7\%) | -992 (-6.7\%) |
| OCT | W | -142 (-1.2\%) | 130 (1.2\%) |
|  | AN | 688 (7.3\%) | 178 (1.8\%) |
|  | BN | 135 (1.4\%) | -145 (-1.4\%) |
|  | D | 1,075 (12.4\%) | 767 (8.5\%) |
|  | C | 236 (2.8\%) | 675 (8.3\%) |
|  | All | 349 (3.5\%) | 310 (3.1\%) |
| NOV | W | -551 (-3.6\%) | -999 (-6.3\%) |
|  | AN | -424 (-3.6\%) | -1,449 (-11.3\%) |
|  | BN | -141 (-1.4\%) | -726 (-7\%) |
|  | D | -636 (-6.3\%) | -210 (-2.2\%) |
|  | C | 29 (0.4\%) | 147 (2\%) |
|  | All | -396 (-3.4\%) | -677 (-5.7\%) |
| DEC | W | -4,304 (-12.7\%) | -1,718 (-5.5\%) |
|  | AN | -932 (-5.3\%) | -1,840 (-10\%) |
|  | BN | -977 (-7.5\%) | -906 (-7\%) |
|  | D | -1,113 (-8.8\%) | -960 (-7.7\%) |
|  | C | -1,300 (-13.3\%) | -157 (-1.8\%) |
|  | All | -2,103 (-10.6\%) | -1,203 (-6.4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.7.1.5 Trinity River below Lewiston

Table 9. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 7: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 1,440 | 1,518 | 1,477 |
|  | AN | 300 | 300 | 300 |
|  | BN | 358 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 287 | 278 |
|  | All | 671 | 684 | 670 |
| FEB | W | 1,056 | 1,495 | 1,550 |
|  | AN | 689 | 784 | 821 |
|  | BN | 517 | 568 | 662 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 634 | 795 | 834 |
| MAR | W | 1,209 | 1,385 | 1,436 |
|  | AN | 436 | 519 | 519 |
|  | BN | 319 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 611 | 676 | 692 |
| APR | W | 721 | 844 | 844 |
|  | AN | 469 | 513 | 458 |
|  | BN | 507 | 504 | 504 |
|  | D | 529 | 529 | 529 |
|  | C | 575 | 580 | 580 |
|  | All | 584 | 630 | 622 |
| MAY | W | 4,636 | 4,620 | 4,620 |
|  | AN | 4,462 | 4,416 | 4,416 |
|  | BN | 3,774 | 3,865 | 3,865 |
|  | D | 3,216 | 3,216 | 3,216 |
|  | C | 2,092 | 1,973 | 1,973 |
|  | All | 3,779 | 3,766 | 3,766 |
| JUN | W | 3,371 | 3,560 | 3,560 |
|  | AN | 2,488 | 3,188 | 3,188 |
|  | BN | 1,672 | 1,767 | 1,767 |
|  | D | 1,251 | 1,251 | 1,251 |
|  | C | 783 | 783 | 783 |
|  | All | 2,108 | 2,286 | 2,286 |
| JUL | W | 1,289 | 1,103 | 1,103 |
|  | AN | 1,048 | 1,048 | 1,048 |
|  | BN | 869 | 916 | 916 |
|  | D | 667 | 667 | 667 |
|  | C | 450 | 413 | 450 |
|  | All | 923 | 866 | 872 |


| Alternative 7: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 338 | 300 |
|  | All | 450 | 434 | 428 |
| SEP | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 265 | 228 |
|  | All | 450 | 423 | 417 |
| OCT | W | 373 | 373 | 373 |
|  | AN | 373 | 311 | 329 |
|  | BN | 346 | 346 | 346 |
|  | D | 373 | 346 | 352 |
|  | C | 373 | 311 | 280 |
|  | All | 368 | 344 | 344 |
| NOV | W | 489 | 414 | 385 |
|  | AN | 300 | 275 | 250 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 283 | 283 |
|  | C | 300 | 225 | 225 |
|  | All | 360 | 318 | 305 |
| DEC | W | 1,072 | 837 | 905 |
|  | AN | 300 | 300 | 300 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 275 | 273 |
|  | All | 545 | 466 | 488 |

Table 10. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 7: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{c}\text { EXISTING CONDITIONS } \\ \text { vs. A7_LLT }\end{array}$ | NAA vs. A7_LLT |  |
|  | WAN | $37(2.6 \%)$ | $-41(-2.7 \%)$ |  |
|  | AN | $0(0 \%)$ | $0(0 \%)$ |  |
|  | FEB | BN | $-58(-16.3 \%)$ |  |$] 0(0 \%)$


| Alternative 7: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -150 (-33.3\%) | -38 (-11.1\%) |
|  | All | -22 (-4.9\%) | -5 (-1.3\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -222 (-49.4\%) | -37 (-14.1\%) |
|  | All | -33 (-7.2\%) | -5 (-1.3\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | -44 (-11.9\%) | 18 (5.7\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -21 (-5.6\%) | 6 (1.9\%) |
|  | C | -93 (-25\%) | -31 (-10\%) |
|  | All | -25 (-6.7\%) | -1 (-0.2\%) |
| NOV | W | -104 (-21.3\%) | -29 (-7.1\%) |
|  | AN | -50 (-16.7\%) | -25 (-9.1\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -17 (-5.6\%) | 0 (0\%) |
|  | C | -75 (-25\%) | 0 (0\%) |
|  | All | -55 (-15.3\%) | -13 (-4.1\%) |
| DEC | W | -167 (-15.6\%) | 68 (8.1\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -27 (-9.1\%) | -2 (-0.7\%) |
|  | All | -57 (-10.4\%) | 21 (4.6\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.7.1.6 Clear Creek below Whiskeytown

Table 11. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 7: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 220 | 339 | 339 |
|  | AN | 192 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 159 | 168 |
|  | All | 193 | 233 | 234 |
| FEB | W | 220 | 257 | 257 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 168 | 168 |
|  | All | 194 | 209 | 209 |
| MAR | W | 200 | 259 | 258 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 202 | 189 |
|  | D | 186 | 192 | 192 |
|  | C | 155 | 168 | 168 |
|  | All | 188 | 212 | 210 |
| APR | W | 200 | 200 | 200 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 188 | 192 | 192 |
|  | C | 155 | 168 | 168 |
|  | All | 189 | 191 | 191 |
| MAY | W | 277 | 277 | 277 |
|  | AN | 277 | 277 | 277 |
|  | BN | 263 | 269 | 269 |
|  | D | 264 | 264 | 264 |
|  | C | 211 | 224 | 224 |
|  | All | 262 | 265 | 265 |
| JUN | W | 200 | 200 | 200 |
|  | AN | 200 | 200 | 200 |
|  | BN | 181 | 186 | 186 |
|  | D | 180 | 180 | 180 |
|  | C | 115 | 131 | 131 |
|  | All | 180 | 183 | 183 |
| JUL | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 85 | 85 | 85 |
|  | All | 85 | 85 | 85 |


| Alternative 7: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 94 | 71 | 78 |
|  | All | 86 | 83 | 84 |
| SEP | W | 150 | 150 | 150 |
|  | AN | 150 | 150 | 150 |
|  | BN | 150 | 150 | 150 |
|  | D | 144 | 150 | 150 |
|  | C | 133 | 96 | 83 |
|  | All | 146 | 142 | 140 |
| OCT | W | 198 | 198 | 198 |
|  | AN | 183 | 183 | 183 |
|  | BN | 189 | 182 | 179 |
|  | D | 175 | 183 | 175 |
|  | C | 150 | 142 | 154 |
|  | All | 182 | 182 | 181 |
| NOV | W | 198 | 198 | 198 |
|  | AN | 185 | 182 | 182 |
|  | BN | 184 | 189 | 189 |
|  | D | 177 | 177 | 176 |
|  | C | 155 | 145 | 149 |
|  | All | 183 | 182 | 182 |
| DEC | W | 198 | 198 | 198 |
|  | AN | 185 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 177 | 189 | 189 |
|  | C | 155 | 156 | 158 |
|  | All | 184 | 187 | 188 |

Table 12. Differences ${ }^{\mathrm{a}}$ (Percent Differences) between Pairs of Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 7: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 118 (53.6\%) | 0 (-0.1\%) |
|  | AN | 0 (-0.1\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 13 (8.4\%) | 9 (5.6\%) |
|  | All | 41 (21.2\%) | 1 (0.5\%) |
| FEB | W | 38 (17.1\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 13 (8.4\%) | 0 (0\%) |
|  | All | 15 (7.9\%) | 0 (0\%) |
| MAR | W | 58 (29.2\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | -12 (-6.1\%) |
|  | D | 6 (3.2\%) | 0 (0\%) |
|  | C | 13 (8.4\%) | 0 (0\%) |
|  | All | 22 (11.5\%) | -2 (-1\%) |
| APR | W | 0 (0\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 3 (1.7\%) | 0 (0\%) |
|  | C | 13 (8.4\%) | 0 (0\%) |
|  | All | 2 (1.3\%) | 0 (0\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 6 (2.2\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 13 (6.2\%) | 0 (0\%) |
|  | All | 3 (1.1\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 5 (2.6\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 16 (14.1\%) | 0 (0\%) |
|  | All | 3 (1.8\%) | 0 (0\%) |
| JUL | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |


| Alternative 7: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -16 (-17.4\%) | 7 (10\%) |
|  | All | -2 (-2.8\%) | 1 (1.2\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 6 (3.8\%) | 0 (0\%) |
|  | C | -50 (-37.5\%) | -13 (-13\%) |
|  | All | -6 (-4.2\%) | -2 (-1.3\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | -11 (-5.7\%) | -3 (-1.8\%) |
|  | D | 0 (0\%) | -8 (-4.5\%) |
|  | C | 4 (2.8\%) | 12 (8.8\%) |
|  | All | -1 (-0.7\%) | -1 (-0.3\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | -3 (-1.8\%) | 0 (0\%) |
|  | BN | 6 (3.1\%) | 0 (0\%) |
|  | D | -1 (-0.6\%) | 0 (-0.2\%) |
|  | C | -6 (-3.7\%) | 4 (2.6\%) |
|  | All | -1 (-0.3\%) | 0 (0.3\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 7 (3.6\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 12 (6.6\%) | 0 (0\%) |
|  | C | 3 (1.8\%) | 2 (1.3\%) |
|  | All | 4 (2.1\%) | 0 (0.2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.7.1.7 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

Table 13. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 7: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| FEB | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| MAR | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| APR | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| MAY | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUN | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUL | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |


| Alternative 7: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| SEP | W | 773 | 773 | 773 |
|  | AN | 773 | 773 | 773 |
|  | BN | 773 | 773 | 773 |
|  | D | 773 | 773 | 773 |
|  | C | 773 | 773 | 773 |
|  | All | 773 | 773 | 773 |
| OCT | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| NOV | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| DEC | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |

Table 14. Differences (Percent Differences) between Pairs of Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 7: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{c}\text { EXISTING CONDITIONS } \\ \text { vs. A7_LLT }\end{array}$ | NAA vs. A7_LLT |  |  |  |$]$


| Alternative 7: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |

## 11C.7.1.8 Feather River High-Flow Channel (at Thermalito Afterbay)

Table 15. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 7: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 11,257 | 11,896 | 13,052 |
|  | AN | 4,434 | 2,838 | 3,867 |
|  | BN | 2,640 | 1,441 | 1,496 |
|  | D | 1,798 | 1,459 | 1,419 |
|  | C | 1,459 | 1,648 | 1,255 |
|  | All | 5,277 | 4,995 | 5,455 |
| FEB | W | 12,466 | 14,787 | 16,549 |
|  | AN | 7,411 | 5,809 | 7,513 |
|  | BN | 3,916 | 1,897 | 2,106 |
|  | D | 1,817 | 1,659 | 1,573 |
|  | C | 1,610 | 1,482 | 1,676 |
|  | All | 6,340 | 6,444 | 7,297 |
| MAR | W | 12,895 | 14,772 | 14,548 |
|  | AN | 7,733 | 8,568 | 9,566 |
|  | BN | 3,373 | 1,985 | 2,573 |
|  | D | 2,017 | 1,762 | 1,805 |
|  | C | 1,697 | 1,634 | 1,575 |
|  | All | 6,487 | 6,902 | 7,079 |
| APR | W | 6,472 | 6,408 | 6,403 |
|  | AN | 2,251 | 2,170 | 2,164 |
|  | BN | 1,205 | 1,203 | 1,160 |
|  | D | 1,286 | 1,470 | 1,496 |
|  | C | 1,389 | 1,407 | 1,312 |
|  | All | 3,073 | 3,084 | 3,065 |
| MAY | W | 7,528 | 4,740 | 4,889 |
|  | AN | 3,340 | 3,101 | 3,405 |
|  | BN | 1,205 | 1,749 | 1,415 |
|  | D | 1,591 | 2,223 | 1,638 |
|  | C | 1,574 | 1,790 | 2,092 |
|  | All | 3,661 | 3,005 | 2,956 |
| JUN | W | 5,062 | 4,211 | 4,629 |
|  | AN | 3,301 | 3,930 | 5,282 |
|  | BN | 2,707 | 3,552 | 3,550 |
|  | D | 3,134 | 3,284 | 2,687 |
|  | C | 2,695 | 2,666 | 4,091 |
|  | All | 3,632 | 3,628 | 4,035 |
| JUL | W | 6,490 | 8,577 | 8,000 |
|  | AN | 8,757 | 9,488 | 9,111 |
|  | BN | 8,981 | 8,833 | 8,619 |
|  | D | 8,294 | 8,099 | 5,541 |
|  | C | 6,703 | 5,217 | 3,538 |
|  | All | 7,674 | 8,157 | 7,076 |


| Alternative 7: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 3,308 | 6,228 | 5,398 |
|  | AN | 6,042 | 7,346 | 6,520 |
|  | BN | 6,295 | 6,868 | 6,870 |
|  | D | 7,036 | 4,990 | 3,501 |
|  | C | 2,613 | 2,163 | 4,063 |
|  | All | 4,935 | 5,634 | 5,202 |
| SEP | W | 2,280 | 8,327 | 6,955 |
|  | AN | 2,253 | 6,899 | 4,732 |
|  | BN | 2,466 | 3,068 | 2,281 |
|  | D | 2,366 | 1,052 | 1,196 |
|  | C | 1,421 | 1,345 | 1,832 |
|  | All | 2,201 | 4,601 | 3,818 |
| OCT | W | 3,456 | 3,051 | 3,219 |
|  | AN | 2,386 | 2,741 | 2,840 |
|  | BN | 3,183 | 2,862 | 3,207 |
|  | D | 2,688 | 2,652 | 3,012 |
|  | C | 2,472 | 2,102 | 2,840 |
|  | All | 2,940 | 2,747 | 3,061 |
| NOV | W | 3,292 | 2,470 | 2,505 |
|  | AN | 1,824 | 2,119 | 1,877 |
|  | BN | 2,101 | 1,900 | 1,904 |
|  | D | 1,859 | 1,664 | 1,764 |
|  | C | 1,854 | 1,876 | 1,901 |
|  | All | 2,349 | 2,058 | 2,059 |
| DEC | W | 7,157 | 3,948 | 5,527 |
|  | AN | 2,951 | 3,344 | 3,010 |
|  | BN | 2,176 | 2,102 | 1,525 |
|  | D | 2,364 | 2,229 | 1,754 |
|  | C | 2,609 | 1,694 | 1,611 |
|  | All | 3,973 | 2,837 | 3,074 |

Table 16. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 7: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 1,794 (15.9\%) | 1,156 (9.7\%) |
|  | AN | -566 (-12.8\%) | 1,029 (36.3\%) |
|  | BN | -1,144 (-43.3\%) | 55 (3.8\%) |
|  | D | -379 (-21.1\%) | -40 (-2.7\%) |
|  | C | -204 (-14\%) | -393 (-23.8\%) |
|  | All | 178 (3.4\%) | 460 (9.2\%) |
| FEB | W | 4,083 (32.8\%) | 1,762 (11.9\%) |
|  | AN | 103 (1.4\%) | 1,705 (29.3\%) |
|  | BN | -1,810 (-46.2\%) | 210 (11.1\%) |
|  | D | -244 (-13.4\%) | -86 (-5.2\%) |
|  | C | 66 (4.1\%) | 195 (13.1\%) |
|  | All | 957 (15.1\%) | 854 (13.2\%) |
| MAR | W | 1,654 (12.8\%) | -224 (-1.5\%) |
|  | AN | 1,834 (23.7\%) | 999 (11.7\%) |
|  | BN | -800 (-23.7\%) | 588 (29.6\%) |
|  | D | -212 (-10.5\%) | 43 (2.4\%) |
|  | C | -122 (-7.2\%) | -59 (-3.6\%) |
|  | All | 592 (9.1\%) | 176 (2.6\%) |
| APR | W | -70 (-1.1\%) | -6 (-0.1\%) |
|  | AN | -87 (-3.9\%) | -6 (-0.3\%) |
|  | BN | -45 (-3.7\%) | -43 (-3.6\%) |
|  | D | 210 (16.4\%) | 26 (1.8\%) |
|  | C | -77 (-5.5\%) | -95 (-6.8\%) |
|  | All | -8 (-0.2\%) | -18 (-0.6\%) |
| MAY | W | -2,639 (-35.1\%) | 149 (3.1\%) |
|  | AN | 65 (1.9\%) | 303 (9.8\%) |
|  | BN | 209 (17.4\%) | -334 (-19.1\%) |
|  | D | 47 (3\%) | -585 (-26.3\%) |
|  | C | 518 (32.9\%) | 302 (16.9\%) |
|  | All | -706 (-19.3\%) | -50 (-1.7\%) |
| JUN | W | -433 (-8.5\%) | 418 (9.9\%) |
|  | AN | 1,981 (60\%) | 1,352 (34.4\%) |
|  | BN | 843 (31.1\%) | -2 (-0.1\%) |
|  | D | -446 (-14.2\%) | -597 (-18.2\%) |
|  | C | 1,396 (51.8\%) | 1,425 (53.4\%) |
|  | All | 403 (11.1\%) | 408 (11.2\%) |
| JUL | W | 1,510 (23.3\%) | -577 (-6.7\%) |
|  | AN | 354 (4\%) | -377 (-4\%) |
|  | BN | -361 (-4\%) | -213 (-2.4\%) |
|  | D | -2,753 (-33.2\%) | -2,557 (-31.6\%) |
|  | C | -3,165 (-47.2\%) | -1,679 (-32.2\%) |
|  | All | -599 (-7.8\%) | -1,082 (-13.3\%) |


| Alternative 7: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | 2,089 (63.2\%) | -830 (-13.3\%) |
|  | AN | 478 (7.9\%) | -825 (-11.2\%) |
|  | BN | 576 (9.1\%) | 2 (0\%) |
|  | D | -3,535 (-50.2\%) | -1,489 (-29.8\%) |
|  | C | 1,450 (55.5\%) | 1,900 (87.8\%) |
|  | All | 267 (5.4\%) | -433 (-7.7\%) |
| SEP | W | 4,675 (205\%) | -1,372 (-16.5\%) |
|  | AN | 2,479 (110\%) | -2,168 (-31.4\%) |
|  | BN | -185 (-7.5\%) | -788 (-25.7\%) |
|  | D | -1,170 (-49.5\%) | 144 (13.7\%) |
|  | C | 411 (28.9\%) | 487 (36.2\%) |
|  | All | 1,617 (73.5\%) | -784 (-17\%) |
| OCT | W | -237 (-6.9\%) | 168 (5.5\%) |
|  | AN | 454 (19\%) | 99 (3.6\%) |
|  | BN | 24 (0.7\%) | 345 (12.1\%) |
|  | D | 324 (12.1\%) | 360 (13.6\%) |
|  | C | 368 (14.9\%) | 737 (35.1\%) |
|  | All | 120 (4.1\%) | 314 (11.4\%) |
| NOV | W | -787 (-23.9\%) | 35 (1.4\%) |
|  | AN | 53 (2.9\%) | -242 (-11.4\%) |
|  | BN | -197 (-9.4\%) | 4 (0.2\%) |
|  | D | -96 (-5.2\%) | 99 (6\%) |
|  | C | 47 (2.5\%) | 25 (1.3\%) |
|  | All | -290 (-12.3\%) | 2 (0.1\%) |
| DEC | W | -1,630 (-22.8\%) | 1,580 (40\%) |
|  | AN | 59 (2\%) | -334 (-10\%) |
|  | BN | -650 (-29.9\%) | -577 (-27.4\%) |
|  | D | -610 (-25.8\%) | -475 (-21.3\%) |
|  | C | -998 (-38.2\%) | -83 (-4.9\%) |
|  | All | -899 (-22.6\%) | 237 (8.4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.7.1.9 Feather River at Confluence with Sacramento River

Table 17. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 7: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 23,533 | 26,106 | 27,253 |
|  | AN | 12,430 | 11,953 | 12,984 |
|  | BN | 6,499 | 5,575 | 5,628 |
|  | D | 4,621 | 4,412 | 4,370 |
|  | C | 3,646 | 3,837 | 3,440 |
|  | All | 11,938 | 12,509 | 12,965 |
| FEB | W | 27,039 | 31,065 | 32,825 |
|  | AN | 14,818 | 14,599 | 16,300 |
|  | BN | 9,153 | 7,892 | 8,097 |
|  | D | 4,402 | 4,436 | 4,347 |
|  | C | 3,237 | 3,096 | 3,290 |
|  | All | 13,744 | 14,761 | 15,611 |
| MAR | W | 24,172 | 26,784 | 26,562 |
|  | AN | 19,990 | 21,490 | 22,487 |
|  | BN | 8,136 | 6,882 | 7,460 |
|  | D | 5,073 | 4,940 | 4,963 |
|  | C | 2,933 | 2,756 | 2,689 |
|  | All | 13,521 | 14,300 | 14,470 |
| APR | W | 15,897 | 15,852 | 15,854 |
|  | AN | 9,832 | 9,585 | 9,581 |
|  | BN | 5,401 | 5,189 | 5,143 |
|  | D | 4,152 | 4,137 | 4,158 |
|  | C | 3,298 | 3,185 | 3,089 |
|  | All | 8,796 | 8,689 | 8,672 |
| MAY | W | 14,387 | 10,385 | 10,538 |
|  | AN | 8,068 | 6,884 | 7,193 |
|  | BN | 4,704 | 4,509 | 4,176 |
|  | D | 3,652 | 3,767 | 3,178 |
|  | C | 2,389 | 2,321 | 2,611 |
|  | All | 7,697 | 6,237 | 6,187 |
| JUN | W | 10,222 | 7,199 | 7,587 |
|  | AN | 6,391 | 5,598 | 6,913 |
|  | BN | 4,495 | 4,342 | 4,290 |
|  | D | 3,853 | 3,367 | 2,720 |
|  | C | 2,782 | 2,522 | 3,776 |
|  | All | 6,197 | 4,951 | 5,299 |
| JUL | W | 8,177 | 8,734 | 7,940 |
|  | AN | 9,322 | 9,223 | 8,639 |
|  | BN | 9,380 | 8,725 | 8,292 |
|  | D | 8,290 | 7,674 | 4,866 |
|  | C | 6,450 | 4,891 | 3,015 |
|  | All | 8,322 | 8,009 | 6,707 |


| Alternative 7: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 4,923 | 7,222 | 5,899 |
|  | AN | 7,080 | 8,089 | 7,007 |
|  | BN | 7,236 | 7,570 | 7,156 |
|  | D | 7,711 | 5,487 | 3,696 |
|  | C | 2,841 | 2,340 | 4,067 |
|  | All | 5,941 | 6,313 | 5,524 |
| SEP | W | 4,351 | 10,329 | 8,954 |
|  | AN | 4,194 | 8,773 | 6,593 |
|  | BN | 4,252 | 4,786 | 3,964 |
|  | D | 4,179 | 2,848 | 2,787 |
|  | C | 2,054 | 1,964 | 2,265 |
|  | All | 3,937 | 6,289 | 5,424 |
| OCT | W | 4,176 | 3,746 | 3,921 |
|  | AN | 2,630 | 2,988 | 3,079 |
|  | BN | 3,754 | 3,437 | 3,767 |
|  | D | 3,033 | 2,987 | 3,348 |
|  | C | 2,938 | 2,566 | 3,306 |
|  | All | 3,446 | 3,243 | 3,556 |
| NOV | W | 4,697 | 3,825 | 3,860 |
|  | AN | 3,065 | 3,186 | 2,938 |
|  | BN | 2,687 | 2,455 | 2,458 |
|  | D | 2,342 | 2,125 | 2,226 |
|  | C | 2,084 | 2,107 | 2,105 |
|  | All | 3,216 | 2,873 | 2,870 |
| DEC | W | 12,409 | 10,246 | 11,822 |
|  | AN | 5,193 | 6,000 | 5,667 |
|  | BN | 3,079 | 3,249 | 2,673 |
|  | D | 2,838 | 2,811 | 2,329 |
|  | C | 2,975 | 2,054 | 1,967 |
|  | All | 6,279 | 5,599 | 5,833 |

Table 18. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 7: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{c}\text { EXISTING CONDITIONS } \\ \text { vs. A7_LLT }\end{array}$ | NAA vs. A7_LLT |\(| \begin{array}{cc}JAN \& W <br>

\)\cline { 2 - 4 } \& AN <br>
\cline { 2 - 4 } \& A,720 (15.8\%)\end{array}$]$

| Alternative 7: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | 976 (19.8\%) | -1,323 (-18.3\%) |
|  | AN | -73 (-1\%) | -1,082 (-13.4\%) |
|  | BN | -79 (-1.1\%) | -413 (-5.5\%) |
|  | D | -4,016 (-52.1\%) | -1,792 (-32.6\%) |
|  | C | 1,226 (43.2\%) | 1,727 (73.8\%) |
|  | All | -417 (-7\%) | -789 (-12.5\%) |
| SEP | W | 4,602 (105.8\%) | -1,375 (-13.3\%) |
|  | AN | 2,399 (57.2\%) | -2,180 (-24.9\%) |
|  | BN | -288 (-6.8\%) | -822 (-17.2\%) |
|  | D | -1,392 (-33.3\%) | -61 (-2.1\%) |
|  | C | 211 (10.3\%) | 301 (15.3\%) |
|  | All | 1,487 (37.8\%) | -865 (-13.8\%) |
| OCT | W | -255 (-6.1\%) | 175 (4.7\%) |
|  | AN | 449 (17.1\%) | 91 (3\%) |
|  | BN | 13 (0.4\%) | 330 (9.6\%) |
|  | D | 315 (10.4\%) | 361 (12.1\%) |
|  | C | 367 (12.5\%) | 740 (28.8\%) |
|  | All | 110 (3.2\%) | 313 (9.6\%) |
| NOV | W | -837 (-17.8\%) | 35 (0.9\%) |
|  | AN | -126 (-4.1\%) | -248 (-7.8\%) |
|  | BN | -230 (-8.5\%) | 3 (0.1\%) |
|  | D | -117 (-5\%) | 101 (4.8\%) |
|  | C | 21 (1\%) | -2 (-0.1\%) |
|  | All | -346 (-10.7\%) | -3 (-0.1\%) |
| DEC | W | -587 (-4.7\%) | 1,576 (15.4\%) |
|  | AN | 474 (9.1\%) | -333 (-5.6\%) |
|  | BN | -406 (-13.2\%) | -576 (-17.7\%) |
|  | D | -508 (-17.9\%) | -482 (-17.1\%) |
|  | C | -1,008 (-33.9\%) | -87 (-4.2\%) |
|  | All | -445 (-7.1\%) | 234 (4.2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.7.1.10 American River at Nimbus Dam

Table 19. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 7: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 8,806 | 11,036 | 11,133 |
|  | AN | 4,833 | 5,805 | 5,826 |
|  | BN | 2,392 | 2,073 | 2,060 |
|  | D | 1,723 | 1,506 | 1,444 |
|  | C | 1,474 | 1,095 | 1,049 |
|  | All | 4,502 | 5,194 | 5,205 |
| FEB | W | 9,294 | 11,102 | 11,102 |
|  | AN | 6,469 | 8,153 | 8,251 |
|  | BN | 4,360 | 4,961 | 5,039 |
|  | D | 1,852 | 1,844 | 1,922 |
|  | C | 1,185 | 1,007 | 939 |
|  | All | 5,218 | 6,112 | 6,147 |
| MAR | W | 6,089 | 6,992 | 7,000 |
|  | AN | 5,454 | 5,790 | 5,857 |
|  | BN | 2,429 | 2,794 | 2,802 |
|  | D | 2,191 | 2,314 | 2,187 |
|  | C | 939 | 938 | 787 |
|  | All | 3,762 | 4,187 | 4,150 |
| APR | W | 5,300 | 5,508 | 5,518 |
|  | AN | 3,546 | 3,298 | 3,310 |
|  | BN | 3,126 | 2,970 | 2,861 |
|  | D | 1,837 | 1,888 | 1,641 |
|  | C | 1,156 | 1,255 | 1,158 |
|  | All | 3,305 | 3,334 | 3,252 |
| MAY | W | 6,157 | 4,592 | 4,660 |
|  | AN | 3,885 | 2,521 | 2,713 |
|  | BN | 2,930 | 1,969 | 2,122 |
|  | D | 1,790 | 1,686 | 1,798 |
|  | C | 1,182 | 992 | 1,147 |
|  | All | 3,587 | 2,676 | 2,799 |
| JUN | W | 6,003 | 3,694 | 4,342 |
|  | AN | 3,346 | 3,022 | 3,543 |
|  | BN | 2,863 | 2,883 | 3,374 |
|  | D | 2,506 | 2,596 | 2,558 |
|  | C | 1,824 | 1,025 | 1,139 |
|  | All | 3,699 | 2,825 | 3,199 |
| JUL | W | 4,108 | 3,860 | 3,704 |
|  | AN | 4,638 | 4,927 | 4,623 |
|  | BN | 4,744 | 4,328 | 4,433 |
|  | D | 3,577 | 3,143 | 3,352 |
|  | C | 1,784 | 2,022 | 2,311 |
|  | All | 3,838 | 3,670 | 3,682 |


| Alternative 7: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 3,520 | 2,132 | 2,124 |
|  | AN | 2,542 | 1,944 | 1,900 |
|  | BN | 2,495 | 2,324 | 2,277 |
|  | D | 2,613 | 1,620 | 1,663 |
|  | C | 1,500 | 1,100 | 655 |
|  | All | 2,707 | 1,874 | 1,801 |
| SEP | W | 4,025 | 3,622 | 3,100 |
|  | AN | 2,764 | 2,044 | 1,870 |
|  | BN | 2,370 | 1,605 | 1,397 |
|  | D | 1,856 | 1,182 | 1,330 |
|  | C | 1,164 | 594 | 706 |
|  | All | 2,663 | 2,068 | 1,890 |
| OCT | W | 1,723 | 1,634 | 1,663 |
|  | AN | 1,706 | 1,732 | 1,524 |
|  | BN | 1,602 | 1,767 | 1,572 |
|  | D | 1,468 | 1,258 | 1,340 |
|  | C | 1,461 | 1,655 | 1,573 |
|  | All | 1,605 | 1,592 | 1,543 |
| NOV | W | 3,527 | 2,612 | 2,608 |
|  | AN | 3,181 | 2,554 | 2,485 |
|  | BN | 2,067 | 1,716 | 1,686 |
|  | D | 2,176 | 1,424 | 1,506 |
|  | C | 1,994 | 1,608 | 1,524 |
|  | All | 2,706 | 2,043 | 2,032 |
| DEC | W | 6,302 | 6,171 | 6,187 |
|  | AN | 3,137 | 2,933 | 2,951 |
|  | BN | 2,676 | 2,527 | 2,404 |
|  | D | 1,741 | 1,351 | 1,359 |
|  | C | 1,524 | 1,251 | 1,194 |
|  | All | 3,519 | 3,297 | 3,277 |

Table 20. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 7: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 2,326 (26.4\%) | 96 (0.9\%) |
|  | AN | 993 (20.5\%) | 21 (0.4\%) |
|  | BN | -332 (-13.9\%) | -13 (-0.6\%) |
|  | D | -279 (-16.2\%) | -62 (-4.1\%) |
|  | C | -425 (-28.9\%) | -46 (-4.2\%) |
|  | All | 703 (15.6\%) | 11 (0.2\%) |
| FEB | W | 1,809 (19.5\%) | 1 (0\%) |
|  | AN | 1,782 (27.5\%) | 98 (1.2\%) |
|  | BN | 679 (15.6\%) | 77 (1.6\%) |
|  | D | 70 (3.8\%) | 78 (4.2\%) |
|  | C | -246 (-20.8\%) | -68 (-6.7\%) |
|  | All | 930 (17.8\%) | 35 (0.6\%) |
| MAR | W | 911 (15\%) | 7 (0.1\%) |
|  | AN | 404 (7.4\%) | 67 (1.2\%) |
|  | BN | 373 (15.4\%) | 8 (0.3\%) |
|  | D | -5 (-0.2\%) | -128 (-5.5\%) |
|  | C | -152 (-16.2\%) | -151 (-16.1\%) |
|  | All | 388 (10.3\%) | -37 (-0.9\%) |
| APR | W | 218 (4.1\%) | 10 (0.2\%) |
|  | AN | -235 (-6.6\%) | 12 (0.4\%) |
|  | BN | -265 (-8.5\%) | -108 (-3.7\%) |
|  | D | -196 (-10.7\%) | -247 (-13.1\%) |
|  | C | 3 (0.2\%) | -97 (-7.7\%) |
|  | All | -53 (-1.6\%) | -82 (-2.5\%) |
| MAY | W | -1,497 (-24.3\%) | 68 (1.5\%) |
|  | AN | -1,172 (-30.2\%) | 192 (7.6\%) |
|  | BN | -808 (-27.6\%) | 153 (7.8\%) |
|  | D | 8 (0.5\%) | 112 (6.6\%) |
|  | C | -35 (-3\%) | 155 (15.6\%) |
|  | All | -788 (-22\%) | 123 (4.6\%) |
| JUN | W | -1,661 (-27.7\%) | 648 (17.6\%) |
|  | AN | 197 (5.9\%) | 520 (17.2\%) |
|  | BN | 510 (17.8\%) | 491 (17\%) |
|  | D | 52 (2.1\%) | -38 (-1.5\%) |
|  | C | -685 (-37.5\%) | 115 (11.2\%) |
|  | All | -499 (-13.5\%) | 374 (13.2\%) |
| JUL | W | -405 (-9.9\%) | -157 (-4.1\%) |
|  | AN | -15 (-0.3\%) | -304 (-6.2\%) |
|  | BN | -311 (-6.6\%) | 105 (2.4\%) |
|  | D | -225 (-6.3\%) | 209 (6.6\%) |
|  | C | 527 (29.5\%) | 289 (14.3\%) |
|  | All | -156 (-4.1\%) | 12 (0.3\%) |


| Alternative 7: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | -1,396 (-39.7\%) | -8 (-0.4\%) |
|  | AN | -641 (-25.2\%) | -44 (-2.3\%) |
|  | BN | -218 (-8.7\%) | -47 (-2\%) |
|  | D | -949 (-36.3\%) | 44 (2.7\%) |
|  | C | -845 (-56.3\%) | -445 (-40.5\%) |
|  | All | -906 (-33.5\%) | -73 (-3.9\%) |
| SEP | W | -924 (-23\%) | -522 (-14.4\%) |
|  | AN | -894 (-32.3\%) | -173 (-8.5\%) |
|  | BN | -974 (-41.1\%) | -208 (-13\%) |
|  | D | -526 (-28.4\%) | 148 (12.5\%) |
|  | C | -459 (-39.4\%) | 112 (18.9\%) |
|  | All | -773 (-29\%) | -178 (-8.6\%) |
| OCT | W | -59 (-3.4\%) | 29 (1.8\%) |
|  | AN | -182 (-10.6\%) | -207 (-12\%) |
|  | BN | -30 (-1.9\%) | -195 (-11\%) |
|  | D | -128 (-8.8\%) | 81 (6.5\%) |
|  | C | 113 (7.7\%) | -81 (-4.9\%) |
|  | All | -62 (-3.9\%) | -49 (-3.1\%) |
| NOV | W | -919 (-26.1\%) | -4 (-0.2\%) |
|  | AN | -695 (-21.9\%) | -69 (-2.7\%) |
|  | BN | -381 (-18.4\%) | -30 (-1.8\%) |
|  | D | -670 (-30.8\%) | 82 (5.8\%) |
|  | C | -471 (-23.6\%) | -84 (-5.2\%) |
|  | All | -674 (-24.9\%) | -11 (-0.5\%) |
| DEC | W | -115 (-1.8\%) | 16 (0.3\%) |
|  | AN | -186 (-5.9\%) | 18 (0.6\%) |
|  | BN | -271 (-10.1\%) | -122 (-4.8\%) |
|  | D | -382 (-21.9\%) | 8 (0.6\%) |
|  | C | -330 (-21.7\%) | -57 (-4.6\%) |
|  | All | -242 (-6.9\%) | -20 (-0.6\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.7.1.11 American River at Confluence with Sacramento River

Table 21. Mean Monthly Flows (cfs) for Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 7: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 8,748 | 10,960 | 11,056 |
|  | AN | 4,806 | 5,760 | 5,781 |
|  | BN | 2,326 | 1,988 | 1,977 |
|  | D | 1,654 | 1,424 | 1,362 |
|  | C | 1,403 | 1,008 | 962 |
|  | All | 4,443 | 5,118 | 5,129 |
| FEB | W | 9,183 | 10,947 | 10,947 |
|  | AN | 6,422 | 8,073 | 8,171 |
|  | BN | 4,309 | 4,888 | 4,966 |
|  | D | 1,781 | 1,756 | 1,835 |
|  | C | 1,119 | 921 | 854 |
|  | All | 5,142 | 6,007 | 6,042 |
| MAR | W | 5,979 | 6,837 | 6,844 |
|  | AN | 5,364 | 5,661 | 5,727 |
|  | BN | 2,340 | 2,672 | 2,680 |
|  | D | 2,121 | 2,224 | 2,096 |
|  | C | 864 | 836 | 695 |
|  | All | 3,672 | 4,063 | 4,027 |
| APR | W | 5,156 | 5,300 | 5,309 |
|  | AN | 3,383 | 3,079 | 3,090 |
|  | BN | 2,984 | 2,778 | 2,669 |
|  | D | 1,672 | 1,677 | 1,430 |
|  | C | 996 | 1,059 | 964 |
|  | All | 3,152 | 3,128 | 3,047 |
| MAY | W | 5,959 | 4,332 | 4,400 |
|  | AN | 3,700 | 2,285 | 2,477 |
|  | BN | 2,733 | 1,726 | 1,880 |
|  | D | 1,605 | 1,454 | 1,569 |
|  | C | 1,014 | 790 | 946 |
|  | All | 3,398 | 2,438 | 2,561 |
| JUN | W | 5,743 | 3,388 | 4,036 |
|  | AN | 3,103 | 2,736 | 3,254 |
|  | BN | 2,631 | 2,603 | 3,093 |
|  | D | 2,282 | 2,320 | 2,281 |
|  | C | 1,621 | 793 | 906 |
|  | All | 3,462 | 2,545 | 2,917 |
| JUL | W | 3,844 | 3,560 | 3,398 |
|  | AN | 4,399 | 4,635 | 4,326 |
|  | BN | 4,509 | 4,038 | 4,139 |
|  | D | 3,347 | 2,858 | 3,068 |
|  | C | 1,568 | 1,784 | 2,071 |
|  | All | 3,597 | 3,385 | 3,394 |


| Alternative 7: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 3,295 | 1,858 | 1,851 |
|  | AN | 2,313 | 1,663 | 1,622 |
|  | BN | 2,265 | 2,048 | 2,000 |
|  | D | 2,395 | 1,357 | 1,401 |
|  | C | 1,314 | 899 | 448 |
|  | All | 2,488 | 1,612 | 1,539 |
| SEP | W | 3,846 | 3,415 | 2,893 |
|  | AN | 2,594 | 1,838 | 1,665 |
|  | BN | 2,205 | 1,402 | 1,194 |
|  | D | 1,691 | 987 | 1,135 |
|  | C | 1,011 | 427 | 544 |
|  | All | 2,495 | 1,870 | 1,693 |
| OCT | W | 1,607 | 1,499 | 1,529 |
|  | AN | 1,597 | 1,613 | 1,400 |
|  | BN | 1,472 | 1,617 | 1,423 |
|  | D | 1,344 | 1,114 | 1,198 |
|  | C | 1,342 | 1,517 | 1,442 |
|  | All | 1,486 | 1,454 | 1,407 |
| NOV | W | 3,472 | 2,540 | 2,535 |
|  | AN | 3,100 | 2,455 | 2,388 |
|  | BN | 1,990 | 1,618 | 1,590 |
|  | D | 2,094 | 1,326 | 1,407 |
|  | C | 1,897 | 1,489 | 1,406 |
|  | All | 2,632 | 1,950 | 1,939 |
| DEC | W | 6,255 | 6,115 | 6,131 |
|  | AN | 3,072 | 2,856 | 2,874 |
|  | BN | 2,609 | 2,445 | 2,323 |
|  | D | 1,675 | 1,275 | 1,282 |
|  | C | 1,443 | 1,158 | 1,101 |
|  | All | 3,457 | 3,224 | 3,204 |

Table 22. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 7: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 2,308 (26.4\%) | 96 (0.9\%) |
|  | AN | 975 (20.3\%) | 21 (0.4\%) |
|  | BN | -350 (-15\%) | -12 (-0.6\%) |
|  | D | -292 (-17.7\%) | -62 (-4.4\%) |
|  | C | -441 (-31.4\%) | -45 (-4.5\%) |
|  | All | 686 (15.4\%) | 11 (0.2\%) |
| FEB | W | 1,764 (19.2\%) | 0 (0\%) |
|  | AN | 1,748 (27.2\%) | 98 (1.2\%) |
|  | BN | 657 (15.2\%) | 77 (1.6\%) |
|  | D | 54 (3.1\%) | 79 (4.5\%) |
|  | C | -265 (-23.7\%) | -67 (-7.3\%) |
|  | All | 900 (17.5\%) | 35 (0.6\%) |
| MAR | W | 865 (14.5\%) | 7 (0.1\%) |
|  | AN | 363 (6.8\%) | 66 (1.2\%) |
|  | BN | 340 (14.5\%) | 7 (0.3\%) |
|  | D | -25 (-1.2\%) | -128 (-5.8\%) |
|  | C | -169 (-19.6\%) | -141 (-16.9\%) |
|  | All | 355 (9.7\%) | -36 (-0.9\%) |
| APR | W | 154 (3\%) | 10 (0.2\%) |
|  | AN | -292 (-8.6\%) | 11 (0.4\%) |
|  | BN | -314 (-10.5\%) | -109 (-3.9\%) |
|  | D | -242 (-14.5\%) | -246 (-14.7\%) |
|  | C | -31 (-3.1\%) | -95 (-9\%) |
|  | All | -105 (-3.3\%) | -82 (-2.6\%) |
| MAY | W | -1,559 (-26.2\%) | 68 (1.6\%) |
|  | AN | -1,222 (-33\%) | 192 (8.4\%) |
|  | BN | -854 (-31.2\%) | 154 (8.9\%) |
|  | D | -36 (-2.3\%) | 114 (7.9\%) |
|  | C | -68 (-6.7\%) | 156 (19.7\%) |
|  | All | -837 (-24.6\%) | 124 (5.1\%) |
| JUN | W | -1,706 (-29.7\%) | 648 (19.1\%) |
|  | AN | 151 (4.9\%) | 519 (19\%) |
|  | BN | 462 (17.5\%) | 490 (18.8\%) |
|  | D | 0 (0\%) | -39 (-1.7\%) |
|  | C | -716 (-44.1\%) | 113 (14.2\%) |
|  | All | -545 (-15.7\%) | 373 (14.7\%) |
| JUL | W | -446 (-11.6\%) | -162 (-4.6\%) |
|  | AN | -72 (-1.6\%) | -309 (-6.7\%) |
|  | BN | -370 (-8.2\%) | 101 (2.5\%) |
|  | D | -279 (-8.3\%) | 210 (7.3\%) |
|  | C | 503 (32.1\%) | 288 (16.1\%) |
|  | All | -203 (-5.6\%) | 9 (0.3\%) |


| Alternative 7: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | -1,443 (-43.8\%) | -6 (-0.3\%) |
|  | AN | -691 (-29.9\%) | -41 (-2.5\%) |
|  | BN | -265 (-11.7\%) | -48 (-2.3\%) |
|  | D | -994 (-41.5\%) | 44 (3.3\%) |
|  | C | -866 (-65.9\%) | -452 (-50.2\%) |
|  | All | -949 (-38.1\%) | -73 (-4.5\%) |
| SEP | W | -953 (-24.8\%) | -522 (-15.3\%) |
|  | AN | -929 (-35.8\%) | -173 (-9.4\%) |
|  | BN | -1,011 (-45.9\%) | -208 (-14.8\%) |
|  | D | -556 (-32.9\%) | 147 (14.9\%) |
|  | C | -467 (-46.2\%) | 117 (27.4\%) |
|  | All | -801 (-32.1\%) | -177 (-9.5\%) |
| OCT | W | -78 (-4.9\%) | 31 (2\%) |
|  | AN | -196 (-12.3\%) | -212 (-13.2\%) |
|  | BN | -49 (-3.4\%) | -194 (-12\%) |
|  | D | -145 (-10.8\%) | 84 (7.6\%) |
|  | C | 100 (7.5\%) | -75 (-4.9\%) |
|  | All | -79 (-5.3\%) | -47 (-3.2\%) |
| NOV | W | -938 (-27\%) | -5 (-0.2\%) |
|  | AN | -712 (-23\%) | -67 (-2.7\%) |
|  | BN | -400 (-20.1\%) | -28 (-1.8\%) |
|  | D | -687 (-32.8\%) | 81 (6.1\%) |
|  | C | -491 (-25.9\%) | -83 (-5.6\%) |
|  | All | -692 (-26.3\%) | -11 (-0.5\%) |
| DEC | W | -124 (-2\%) | 16 (0.3\%) |
|  | AN | -197 (-6.4\%) | 18 (0.6\%) |
|  | BN | -286 (-11\%) | -122 (-5\%) |
|  | D | -393 (-23.5\%) | 7 (0.5\%) |
|  | C | -342 (-23.7\%) | -57 (-4.9\%) |
|  | All | -253 (-7.3\%) | -20 (-0.6\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.7.1.12 Stanislaus River at Confluence with the San Joaquin River

Table 23. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 7: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 956 | 885 | 885 |
|  | AN | 843 | 963 | 962 |
|  | BN | 416 | 369 | 369 |
|  | D | 403 | 366 | 366 |
|  | C | 314 | 265 | 265 |
|  | All | 635 | 615 | 615 |
| FEB | W | 1,285 | 1,236 | 1,210 |
|  | AN | 917 | 858 | 858 |
|  | BN | 551 | 438 | 436 |
|  | D | 562 | 359 | 359 |
|  | C | 490 | 348 | 347 |
|  | All | 827 | 723 | 715 |
| MAR | W | 2,063 | 2,217 | 2,214 |
|  | AN | 1,295 | 956 | 956 |
|  | BN | 732 | 548 | 548 |
|  | D | 559 | 390 | 400 |
|  | C | 541 | 444 | 450 |
|  | All | 1,167 | 1,071 | 1,073 |
| APR | W | 2,054 | 1,965 | 1,965 |
|  | AN | 1,719 | 1,535 | 1,518 |
|  | BN | 1,494 | 1,211 | 1,211 |
|  | D | 1,438 | 1,199 | 1,198 |
|  | C | 823 | 670 | 667 |
|  | All | 1,562 | 1,387 | 1,383 |
| MAY | W | 1,653 | 1,613 | 1,595 |
|  | AN | 1,389 | 1,243 | 1,229 |
|  | BN | 1,238 | 898 | 902 |
|  | D | 1,140 | 916 | 925 |
|  | C | 715 | 627 | 631 |
|  | All | 1,271 | 1,125 | 1,119 |
| JUN | W | 1,608 | 1,763 | 1,781 |
|  | AN | 1,134 | 985 | 974 |
|  | BN | 663 | 568 | 607 |
|  | D | 447 | 364 | 455 |
|  | C | 332 | 296 | 354 |
|  | All | 932 | 914 | 949 |
| JUL | W | 1,064 | 1,080 | 1,075 |
|  | AN | 489 | 454 | 454 |
|  | BN | 450 | 425 | 425 |
|  | D | 398 | 359 | 351 |
|  | C | 337 | 310 | 305 |
|  | All | 607 | 590 | 586 |


| Alternative 7: Upstream-Stanislaus River at Confluence with the San Joaquin Rive |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 930 | 717 | 717 |
|  | AN | 476 | 454 | 454 |
|  | BN | 423 | 418 | 418 |
|  | D | 387 | 382 | 382 |
|  | C | 341 | 338 | 330 |
|  | All | 560 | 491 | 490 |
| SEP | W | 1,040 | 863 | 863 |
|  | AN | 502 | 474 | 474 |
|  | BN | 417 | 407 | 407 |
|  | D | 395 | 390 | 391 |
|  | C | 324 | 317 | 316 |
|  | All | 595 | 533 | 533 |
| OCT | W | 897 | 845 | 847 |
|  | AN | 873 | 822 | 826 |
|  | BN | 903 | 844 | 844 |
|  | D | 984 | 925 | 925 |
|  | C | 689 | 612 | 615 |
|  | All | 867 | 808 | 810 |
| NOV | W | 426 | 408 | 409 |
|  | AN | 580 | 524 | 523 |
|  | BN | 341 | 334 | 334 |
|  | D | 345 | 321 | 321 |
|  | C | 325 | 308 | 309 |
|  | All | 410 | 386 | 386 |
| DEC | W | 512 | 429 | 418 |
|  | AN | 722 | 697 | 696 |
|  | BN | 331 | 353 | 353 |
|  | D | 317 | 294 | 294 |
|  | C | 289 | 272 | 272 |
|  | All | 450 | 417 | 414 |

${ }^{\text {a }}$ Water year type for this location was determined using the San Joaquin River Valley Index.

Table 24. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 7: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYTb | EXISTING CONDITIONS <br> vs. A7_LLT | NAA vs. A7_LLT |
|  | W | $-71(-7.5 \%)$ | $0(0 \%)$ |
|  | AN | $120(14.2 \%)$ | $0(-0.1 \%)$ |
|  | BN | $-47(-11.3 \%)$ | $0(0 \%)$ |
|  | D | $-37(-9.1 \%)$ | $0(0 \%)$ |
|  | CEB | All | $-49(-15.6 \%)$ |


| Alternative 7: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | -212 (-22.8\%) | 0 (0\%) |
|  | AN | -22 (-4.6\%) | 0 (0\%) |
|  | BN | -4 (-1\%) | 0 (0\%) |
|  | D | -5 (-1.2\%) | 0 (0\%) |
|  | C | -11 (-3.2\%) | -8 (-2.3\%) |
|  | All | -70 (-12.5\%) | -2 (-0.3\%) |
| SEP | W | -177 (-17\%) | 0 (0\%) |
|  | AN | -28 (-5.6\%) | 0 (0\%) |
|  | BN | -10 (-2.4\%) | 0 (0\%) |
|  | D | -5 (-1.2\%) | 1 (0.1\%) |
|  | C | -9 (-2.6\%) | -1 (-0.3\%) |
|  | All | -61 (-10.3\%) | 0 (0\%) |
| OCT | W | -51 (-5.6\%) | 1 (0.2\%) |
|  | AN | -47 (-5.4\%) | 4 (0.5\%) |
|  | BN | -59 (-6.5\%) | 0 (0\%) |
|  | D | -59 (-6\%) | 0 (0\%) |
|  | C | -74 (-10.7\%) | 3 (0.5\%) |
|  | All | -57 (-6.6\%) | 2 (0.2\%) |
| NOV | W | -17 (-4\%) | 1 (0.3\%) |
|  | AN | -57 (-9.8\%) | -1 (-0.2\%) |
|  | BN | -8 (-2.3\%) | 0 (0\%) |
|  | D | -23 (-6.7\%) | 0 (0\%) |
|  | C | -16 (-4.8\%) | 1 (0.3\%) |
|  | All | -24 (-5.9\%) | 0 (0.1\%) |
| DEC | W | -95 (-18.4\%) | -11 (-2.6\%) |
|  | AN | -26 (-3.6\%) | -1 (-0.1\%) |
|  | BN | 23 (6.8\%) | 0 (0\%) |
|  | D | -23 (-7.3\%) | 0 (0\%) |
|  | C | -17 (-5.8\%) | 0 (-0.2\%) |
|  | All | -36 (-8\%) | -4 (-0.8\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
${ }^{\mathrm{b}}$ Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.7.2 In Delta

## 11C.7.2.1 OMR Flow (Old and Middle Rivers)

Table 25. Mean Monthly Flows (cfs) for Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 7: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | -1,820 | -1,606 | 3,634 |
|  | AN | -3,553 | -3,446 | 1,221 |
|  | BN | -4,240 | -3,803 | 960 |
|  | D | -4,664 | -4,675 | 968 |
|  | C | -4,130 | -3,684 | 851 |
|  | All | -3,449 | -3,228 | 1,832 |
| FEB | W | -2,365 | -2,293 | 3,586 |
|  | AN | -3,274 | -3,147 | 1,546 |
|  | BN | -3,437 | -3,290 | 1,046 |
|  | D | -3,986 | -3,502 | 972 |
|  | C | -3,191 | -3,047 | 891 |
|  | All | -3,158 | -2,964 | 1,886 |
| MAR | W | -1,600 | -1,454 | 4,496 |
|  | AN | -4,251 | -3,815 | 1,772 |
|  | BN | -4,147 | -3,834 | 909 |
|  | D | -2,852 | -2,614 | 842 |
|  | C | -2,010 | -1,636 | 534 |
|  | All | -2,758 | -2,487 | 2,103 |
| APR | W | 2,431 | 2,415 | 5,117 |
|  | AN | 1,058 | 787 | 2,646 |
|  | BN | 677 | 214 | 2,046 |
|  | D | -268 | -615 | 1,034 |
|  | C | -950 | -845 | 461 |
|  | All | 843 | 659 | 2,654 |
| MAY | W | 1,651 | 1,555 | 4,664 |
|  | AN | 509 | 396 | 2,118 |
|  | BN | 272 | -237 | 1,561 |
|  | D | -647 | -1,010 | 661 |
|  | C | -1,020 | -911 | 309 |
|  | All | 353 | 155 | 2,246 |
| JUN | W | -4,164 | -4,369 | 1,034 |
|  | AN | -4,761 | -4,454 | 235 |
|  | BN | -4,154 | -3,420 | -129 |
|  | D | -3,301 | -2,592 | -494 |
|  | C | -2,250 | -2,143 | -594 |
|  | All | -3,780 | -3,504 | 145 |


| Alternative 7: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JUL | W | -8,959 | -8,699 | -9,140 |
|  | AN | -9,919 | -7,962 | -9,622 |
|  | BN | -10,853 | -9,942 | -10,419 |
|  | D | -10,891 | -9,505 | -7,584 |
|  | C | -8,058 | -5,234 | -4,447 |
|  | All | -9,715 | -8,473 | -8,401 |
| AUG | W | -10,062 | -10,518 | -7,613 |
|  | AN | -10,348 | -10,985 | -8,020 |
|  | BN | -10,044 | -9,374 | -8,610 |
|  | D | -10,122 | -7,259 | -5,477 |
|  | C | -4,384 | -3,192 | -4,108 |
|  | All | -9,283 | -8,604 | -6,861 |
| SEP | W | -9,317 | -7,580 | 251 |
|  | AN | -9,163 | -9,002 | -818 |
|  | BN | -8,575 | -8,392 | -5,280 |
|  | D | -8,081 | -5,165 | -4,374 |
|  | C | -4,807 | -3,966 | -2,807 |
|  | All | -8,236 | -6,868 | -2,312 |
| OCT | W | -8,347 | -5,049 | 336 |
|  | AN | -7,643 | -3,648 | 119 |
|  | BN | -7,804 | -4,793 | 149 |
|  | D | -6,961 | -4,103 | 158 |
|  | C | -6,440 | -3,920 | 15 |
|  | All | -7,568 | -4,427 | 186 |
| NOV | W | -8,902 | -6,527 | 517 |
|  | AN | -7,264 | -6,003 | 244 |
|  | BN | -7,997 | -5,542 | 303 |
|  | D | -7,136 | -5,007 | 309 |
|  | C | -5,294 | -4,389 | 227 |
|  | All | -7,592 | -5,636 | 352 |
| DEC | W | -5,542 | -5,591 | 1,549 |
|  | AN | -6,987 | -7,050 | 857 |
|  | BN | -7,304 | -7,040 | 901 |
|  | D | -7,214 | -7,006 | 872 |
|  | C | -6,166 | -4,173 | 722 |
|  | All | -6,513 | -6,155 | 1,067 |

Table 26. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 7: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 5,453 (299.7\%) | 5,240 (326.3\%) |
|  | AN | 4,774 (134.4\%) | 4,668 (135.4\%) |
|  | BN | 5,200 (122.7\%) | 4,763 (125.3\%) |
|  | D | 5,632 (120.8\%) | 5,643 (120.7\%) |
|  | C | 4,981 (120.6\%) | 4,536 (123.1\%) |
|  | All | 5,281 (153.1\%) | 5,060 (156.8\%) |
| FEB | W | 5,951 (251.6\%) | 5,879 (256.4\%) |
|  | AN | 4,820 (147.2\%) | 4,692 (149.1\%) |
|  | BN | 4,483 (130.4\%) | 4,336 (131.8\%) |
|  | D | 4,957 (124.4\%) | 4,474 (127.7\%) |
|  | C | 4,082 (127.9\%) | 3,938 (129.2\%) |
|  | All | 5,043 (159.7\%) | 4,850 (163.6\%) |
| MAR | W | 6,096 (381\%) | 5,950 (409.3\%) |
|  | AN | 6,023 (141.7\%) | 5,587 (146.5\%) |
|  | BN | 5,056 (121.9\%) | 4,744 (123.7\%) |
|  | D | 3,694 (129.5\%) | 3,456 (132.2\%) |
|  | C | 2,545 (126.6\%) | 2,170 (132.6\%) |
|  | All | 4,861 (176.3\%) | 4,590 (184.6\%) |
| APR | W | 2,686 (110.5\%) | 2,702 (111.9\%) |
|  | AN | 1,588 (150.1\%) | 1,859 (236.2\%) |
|  | BN | 1,370 (202.3\%) | 1,833 (856.5\%) |
|  | D | 1,302 (486\%) | 1,649 (268.1\%) |
|  | C | 1,412 (148.5\%) | 1,307 (154.6\%) |
|  | All | 1,810 (214.6\%) | 1,995 (302.8\%) |
| MAY | W | 3,013 (182.5\%) | 3,109 (199.9\%) |
|  | AN | 1,609 (315.8\%) | 1,723 (435.2\%) |
|  | BN | 1,289 (474.6\%) | 1,799 (757.4\%) |
|  | D | 1,308 (202.2\%) | 1,671 (165.5\%) |
|  | C | 1,329 (130.3\%) | 1,221 (133.9\%) |
|  | All | 1,893 (535.8\%) | 2,090 (1,344.8\%) |
| JUN | W | 5,198 (124.8\%) | 5,403 (123.7\%) |
|  | AN | 4,996 (104.9\%) | 4,689 (105.3\%) |
|  | BN | 4,026 (96.9\%) | 3,291 (96.2\%) |
|  | D | 2,806 (85\%) | 2,097 (80.9\%) |
|  | C | 1,655 (73.6\%) | 1,548 (72.3\%) |
|  | All | 3,925 (103.8\%) | 3,648 (104.1\%) |
| JUL | W | -181 (-2\%) | -441 (-5.1\%) |
|  | AN | 297 (3\%) | -1,660 (-20.8\%) |
|  | BN | 434 (4\%) | -477 (-4.8\%) |
|  | D | 3,307 (30.4\%) | 1,921 (20.2\%) |
|  | C | 3,610 (44.8\%) | 786 (15\%) |
|  | All | 1,314 (13.5\%) | 73 (0.9\%) |


| Alternative 7: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | 2,449 (24.3\%) | 2,905 (27.6\%) |
|  | AN | 2,329 (22.5\%) | 2,965 (27\%) |
|  | BN | 1,434 (14.3\%) | 764 (8.2\%) |
|  | D | 4,645 (45.9\%) | 1,782 (24.5\%) |
|  | C | 276 (6.3\%) | -916 (-28.7\%) |
|  | All | 2,422 (26.1\%) | 1,743 (20.3\%) |
| SEP | W | 9,568 (102.7\%) | 7,832 (103.3\%) |
|  | AN | 8,344 (91.1\%) | 8,184 (90.9\%) |
|  | BN | 3,295 (38.4\%) | 3,112 (37.1\%) |
|  | D | 3,707 (45.9\%) | 790 (15.3\%) |
|  | C | 2,000 (41.6\%) | 1,159 (29.2\%) |
|  | All | 5,924 (71.9\%) | 4,555 (66.3\%) |
| OCT | W | 8,683 (104\%) | 5,385 (106.7\%) |
|  | AN | 7,762 (101.6\%) | 3,768 (103.3\%) |
|  | BN | 7,953 (101.9\%) | 4,942 (103.1\%) |
|  | D | 7,118 (102.3\%) | 4,261 (103.8\%) |
|  | C | 6,455 (100.2\%) | 3,935 (100.4\%) |
|  | All | 7,754 (102.5\%) | 4,614 (104.2\%) |
| NOV | W | 9,419 (105.8\%) | 7,044 (107.9\%) |
|  | AN | 7,508 (103.4\%) | 6,247 (104.1\%) |
|  | BN | 8,299 (103.8\%) | 5,845 (105.5\%) |
|  | D | 7,445 (104.3\%) | 5,316 (106.2\%) |
|  | C | 5,521 (104.3\%) | 4,616 (105.2\%) |
|  | All | 7,944 (104.6\%) | 5,988 (106.3\%) |
| DEC | W | 7,091 (127.9\%) | 7,140 (127.7\%) |
|  | AN | 7,844 (112.3\%) | 7,907 (112.2\%) |
|  | BN | 8,205 (112.3\%) | 7,942 (112.8\%) |
|  | D | 8,086 (112.1\%) | 7,877 (112.4\%) |
|  | C | 6,888 (111.7\%) | 4,896 (117.3\%) |
|  | All | 7,580 (116.4\%) | 7,223 (117.3\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.7.2.2 Sacramento River Downstream of North Delta Diversion Facility

Table 27. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 7: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 50,961 | 52,878 | 44,047 |
|  | AN | 39,863 | 40,484 | 33,074 |
|  | BN | 23,781 | 22,653 | 18,521 |
|  | D | 17,444 | 17,451 | 14,692 |
|  | C | 14,281 | 15,073 | 12,460 |
|  | All | 31,971 | 32,595 | 27,017 |
| FEB | W | 57,314 | 59,847 | 49,513 |
|  | AN | 45,676 | 47,786 | 39,436 |
|  | BN | 31,934 | 31,592 | 25,509 |
|  | D | 21,202 | 21,107 | 17,730 |
|  | C | 14,708 | 14,291 | 13,611 |
|  | All | 37,116 | 38,087 | 31,710 |
| MAR | W | 49,416 | 50,993 | 39,986 |
|  | AN | 44,495 | 45,088 | 34,531 |
|  | BN | 24,489 | 22,915 | 17,736 |
|  | D | 20,656 | 20,650 | 16,744 |
|  | C | 13,245 | 13,137 | 11,437 |
|  | All | 32,834 | 33,134 | 26,109 |
| APR | W | 37,809 | 37,543 | 29,218 |
|  | AN | 25,979 | 24,931 | 18,265 |
|  | BN | 17,752 | 17,128 | 13,846 |
|  | D | 12,990 | 12,904 | 11,395 |
|  | C | 10,229 | 10,365 | 9,308 |
|  | All | 23,169 | 22,826 | 18,164 |
| MAY | W | 31,948 | 24,500 | 18,659 |
|  | AN | 21,021 | 18,657 | 15,353 |
|  | BN | 14,227 | 12,394 | 10,832 |
|  | D | 10,959 | 11,427 | 9,910 |
|  | C | 7,749 | 8,011 | 7,810 |
|  | All | 19,175 | 16,295 | 13,330 |
| JUN | W | 23,900 | 18,603 | 13,919 |
|  | AN | 16,309 | 16,051 | 12,391 |
|  | BN | 13,576 | 13,898 | 12,154 |
|  | D | 12,222 | 12,656 | 11,054 |
|  | C | 9,884 | 10,123 | 10,605 |
|  | All | 16,412 | 14,880 | 12,280 |
| JUL | W | 19,876 | 21,425 | 19,462 |
|  | AN | 21,574 | 22,727 | 21,352 |
|  | BN | 20,953 | 20,513 | 19,692 |
|  | D | 19,272 | 18,957 | 15,601 |
|  | C | 15,397 | 13,767 | 11,279 |
|  | All | 19,520 | 19,797 | 17,733 |


| Alternative 7: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 15,816 | 16,064 | 12,756 |
|  | AN | 15,877 | 17,491 | 13,856 |
|  | BN | 15,643 | 16,232 | 15,330 |
|  | D | 16,965 | 14,351 | 11,934 |
|  | C | 10,095 | 8,996 | 10,505 |
|  | All | 15,210 | 14,891 | 12,847 |
| SEP | W | 18,254 | 27,212 | 20,019 |
|  | AN | 13,198 | 21,006 | 13,212 |
|  | BN | 12,427 | 12,306 | 8,913 |
|  | D | 12,155 | 8,620 | 8,397 |
|  | C | 8,485 | 7,292 | 7,570 |
|  | All | 13,751 | 16,763 | 12,754 |
| OCT | W | 13,505 | 13,277 | 9,252 |
|  | AN | 11,118 | 11,864 | 8,774 |
|  | BN | 11,557 | 12,124 | 8,404 |
|  | D | 10,279 | 10,487 | 7,840 |
|  | C | 10,073 | 9,964 | 7,662 |
|  | All | 11,613 | 11,776 | 8,495 |
| NOV | W | 19,447 | 19,285 | 14,617 |
|  | AN | 15,309 | 15,925 | 11,767 |
|  | BN | 12,574 | 13,037 | 9,192 |
|  | D | 12,868 | 11,914 | 8,936 |
|  | C | 9,633 | 9,295 | 7,824 |
|  | All | 14,788 | 14,647 | 11,033 |
| DEC | W | 39,708 | 37,022 | 31,205 |
|  | AN | 21,663 | 22,629 | 19,328 |
|  | BN | 16,678 | 16,692 | 14,563 |
|  | D | 15,442 | 15,159 | 13,237 |
|  | C | 11,816 | 10,632 | 9,864 |
|  | All | 23,727 | 22,784 | 19,558 |

Table 28. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 7: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | -6,914 (-13.6\%) | -8,830 (-16.7\%) |
|  | AN | -6,789 (-17\%) | -7,410 (-18.3\%) |
|  | BN | -5,260 (-22.1\%) | -4,132 (-18.2\%) |
|  | D | -2,752 (-15.8\%) | -2,759 (-15.8\%) |
|  | C | -1,821 (-12.8\%) | -2,613 (-17.3\%) |
|  | All | -4,954 (-15.5\%) | -5,578 (-17.1\%) |
| FEB | W | -7,801 (-13.6\%) | -10,333 (-17.3\%) |
|  | AN | -6,240 (-13.7\%) | -8,350 (-17.5\%) |
|  | BN | -6,425 (-20.1\%) | -6,083 (-19.3\%) |
|  | D | -3,472 (-16.4\%) | -3,377 (-16\%) |
|  | C | -1,097 (-7.5\%) | -679 (-4.8\%) |
|  | All | -5,406 (-14.6\%) | -6,378 (-16.7\%) |
| MAR | W | -9,430 (-19.1\%) | -11,007 (-21.6\%) |
|  | AN | -9,964 (-22.4\%) | -10,557 (-23.4\%) |
|  | BN | -6,753 (-27.6\%) | -5,178 (-22.6\%) |
|  | D | -3,913 (-18.9\%) | -3,906 (-18.9\%) |
|  | C | -1,808 (-13.7\%) | -1,700 (-12.9\%) |
|  | All | -6,725 (-20.5\%) | -7,025 (-21.2\%) |
| APR | W | -8,590 (-22.7\%) | -8,325 (-22.2\%) |
|  | AN | -7,714 (-29.7\%) | -6,667 (-26.7\%) |
|  | BN | -3,906 (-22\%) | -3,283 (-19.2\%) |
|  | D | -1,595 (-12.3\%) | -1,509 (-11.7\%) |
|  | C | -921 (-9\%) | -1,057 (-10.2\%) |
|  | All | -5,005 (-21.6\%) | -4,662 (-20.4\%) |
| MAY | W | -13,289 (-41.6\%) | -5,842 (-23.8\%) |
|  | AN | -5,668 (-27\%) | -3,304 (-17.7\%) |
|  | BN | -3,395 (-23.9\%) | -1,563 (-12.6\%) |
|  | D | -1,050 (-9.6\%) | -1,517 (-13.3\%) |
|  | C | 61 (0.8\%) | -201 (-2.5\%) |
|  | All | -5,844 (-30.5\%) | -2,965 (-18.2\%) |
| JUN | W | -9,981 (-41.8\%) | -4,685 (-25.2\%) |
|  | AN | -3,918 (-24\%) | -3,661 (-22.8\%) |
|  | BN | -1,421 (-10.5\%) | -1,743 (-12.5\%) |
|  | D | -1,169 (-9.6\%) | -1,602 (-12.7\%) |
|  | C | 721 (7.3\%) | 482 (4.8\%) |
|  | All | -4,132 (-25.2\%) | -2,600 (-17.5\%) |
| JUL | W | -414 (-2.1\%) | -1,963 (-9.2\%) |
|  | AN | -222 (-1\%) | -1,375 (-6.1\%) |
|  | BN | -1,261 (-6\%) | -820 (-4\%) |
|  | D | -3,670 (-19\%) | -3,356 (-17.7\%) |
|  | C | -4,118 (-26.7\%) | -2,488 (-18.1\%) |
|  | All | -1,787 (-9.2\%) | -2,065 (-10.4\%) |


| Alternative 7: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS <br> vs. A7_LLT | NAA vs. A7_LLT |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.7.2.3 Sacramento River at Rio Vista

Table 29. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 7: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 71,111 | 78,551 | 74,255 |
|  | AN | 41,963 | 42,919 | 39,676 |
|  | BN | 20,943 | 19,991 | 18,325 |
|  | D | 14,895 | 14,927 | 13,134 |
|  | C | 11,853 | 12,601 | 10,682 |
|  | All | 37,268 | 39,721 | 36,926 |
| FEB | W | 80,958 | 89,989 | 84,368 |
|  | AN | 52,542 | 55,363 | 52,079 |
|  | BN | 30,159 | 29,442 | 27,133 |
|  | D | 19,320 | 19,422 | 17,486 |
|  | C | 12,247 | 11,956 | 11,873 |
|  | All | 44,541 | 47,675 | 44,580 |
| MAR | W | 63,763 | 68,663 | 61,636 |
|  | AN | 46,750 | 48,513 | 42,813 |
|  | BN | 20,980 | 19,562 | 16,514 |
|  | D | 17,656 | 17,679 | 15,466 |
|  | C | 10,710 | 10,684 | 9,556 |
|  | All | 36,084 | 37,655 | 33,421 |
| APR | W | 38,214 | 38,422 | 32,283 |
|  | AN | 22,726 | 21,855 | 17,176 |
|  | BN | 14,652 | 14,207 | 11,613 |
|  | D | 10,331 | 10,299 | 9,086 |
|  | C | 7,665 | 7,816 | 6,894 |
|  | All | 21,333 | 21,211 | 17,736 |
| MAY | W | 26,933 | 20,046 | 14,983 |
|  | AN | 17,008 | 14,948 | 12,082 |
|  | BN | 10,924 | 9,355 | 7,990 |
|  | D | 8,135 | 8,564 | 7,258 |
|  | C | 5,305 | 5,554 | 5,415 |
|  | All | 15,456 | 12,833 | 10,269 |
| JUN | W | 16,557 | 11,418 | 7,592 |
|  | AN | 9,887 | 9,220 | 6,127 |
|  | BN | 7,001 | 7,241 | 5,967 |
|  | D | 6,020 | 6,335 | 5,195 |
|  | C | 4,333 | 4,513 | 4,929 |
|  | All | 9,847 | 8,257 | 6,184 |
| JUL | W | 11,125 | 12,181 | 11,421 |
|  | AN | 12,128 | 12,927 | 12,825 |
|  | BN | 11,686 | 11,357 | 10,821 |
|  | D | 10,523 | 10,307 | 7,989 |
|  | C | 7,736 | 6,596 | 5,209 |
|  | All | 10,739 | 10,921 | 9,862 |


| Alternative 7: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 8,507 | 8,650 | 6,334 |
|  | AN | 8,538 | 9,648 | 7,082 |
|  | BN | 8,371 | 8,753 | 8,151 |
|  | D | 9,264 | 7,417 | 5,823 |
|  | C | 4,390 | 3,615 | 5,017 |
|  | All | 8,052 | 7,806 | 6,449 |
| SEP | W | 10,767 | 21,199 | 11,682 |
|  | AN | 6,788 | 12,832 | 6,801 |
|  | BN | 6,283 | 6,197 | 3,826 |
|  | D | 6,116 | 3,644 | 3,503 |
|  | C | 3,588 | 2,996 | 3,162 |
|  | All | 7,348 | 10,896 | 6,584 |
| OCT | W | 8,718 | 8,287 | 5,504 |
|  | AN | 6,183 | 7,207 | 4,998 |
|  | BN | 6,258 | 6,976 | 4,093 |
|  | D | 5,312 | 5,727 | 4,250 |
|  | C | 5,215 | 4,969 | 3,658 |
|  | All | 6,667 | 6,858 | 4,644 |
| NOV | W | 8,717.812 | 8,287.041 | 5,504 |
|  | AN | 6,183.042 | 7,207.265 | 4,998 |
|  | BN | 6,258.306 | 6,975.914 | 4,093 |
|  | D | 5,311.941 | 5,726.963 | 4,250 |
|  | C | 5,215.113 | 4,969.472 | 3,658 |
|  | All | 6,666.734 | 6,857.708 | 4,644 |
| DEC | W | 43,367 | 40,431 | 38,891 |
|  | AN | 19,040 | 19,936 | 18,258 |
|  | BN | 13,987 | 14,049 | 12,336 |
|  | D | 11,999 | 11,687 | 10,367 |
|  | C | 8,131 | 7,186 | 6,622 |
|  | All | 22,749 | 21,753 | 20,354 |

## 1

Table 30. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 7: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 3,144 (4.4\%) | -4,296 (-5.5\%) |
|  | AN | -2,287 (-5.5\%) | -3,243 (-7.6\%) |
|  | BN | -2,617 (-12.5\%) | -1,665 (-8.3\%) |
|  | D | -1,760 (-11.8\%) | -1,793 (-12\%) |
|  | C | -1,171 (-9.9\%) | -1,919 (-15.2\%) |
|  | All | -343 (-0.9\%) | -2,796 (-7\%) |
| FEB | W | 3,409 (4.2\%) | -5,621 (-6.2\%) |
|  | AN | -463 (-0.9\%) | -3,284 (-5.9\%) |
|  | BN | -3,026 (-10\%) | -2,310 (-7.8\%) |
|  | D | -1,834 (-9.5\%) | -1,936 (-10\%) |
|  | C | -374 (-3.1\%) | -83 (-0.7\%) |
|  | All | 39 (0.1\%) | -3,094 (-6.5\%) |
| MAR | W | -2,127 (-3.3\%) | -7,027 (-10.2\%) |
|  | AN | -3,937 (-8.4\%) | -5,699 (-11.7\%) |
|  | BN | -4,466 (-21.3\%) | -3,048 (-15.6\%) |
|  | D | -2,190 (-12.4\%) | -2,213 (-12.5\%) |
|  | C | -1,154 (-10.8\%) | -1,128 (-10.6\%) |
|  | All | -2,663 (-7.4\%) | -4,233 (-11.2\%) |
| APR | W | -5,931 (-15.5\%) | -6,139 (-16\%) |
|  | AN | -5,550 (-24.4\%) | -4,679 (-21.4\%) |
|  | BN | -3,039 (-20.7\%) | -2,594 (-18.3\%) |
|  | D | -1,245 (-12.1\%) | -1,212 (-11.8\%) |
|  | C | -771 (-10.1\%) | -923 (-11.8\%) |
|  | All | -3,598 (-16.9\%) | -3,475 (-16.4\%) |
| MAY | W | -11,950 (-44.4\%) | -5,063 (-25.3\%) |
|  | AN | -4,926 (-29\%) | -2,866 (-19.2\%) |
|  | BN | -2,934 (-26.9\%) | -1,365 (-14.6\%) |
|  | D | -876 (-10.8\%) | -1,305 (-15.2\%) |
|  | C | 110 (2.1\%) | -139 (-2.5\%) |
|  | All | -5,187 (-33.6\%) | -2,565 (-20\%) |
| JUN | W | -8,965 (-54.1\%) | -3,826 (-33.5\%) |
|  | AN | -3,760 (-38\%) | -3,093 (-33.6\%) |
|  | BN | -1,033 (-14.8\%) | -1,274 (-17.6\%) |
|  | D | -825 (-13.7\%) | -1,140 (-18\%) |
|  | C | 597 (13.8\%) | 416 (9.2\%) |
|  | All | -3,663 (-37.2\%) | -2,073 (-25.1\%) |
| JUL | W | 296 (2.7\%) | -760 (-6.2\%) |
|  | AN | 697 (5.7\%) | -102 (-0.8\%) |
|  | BN | -865 (-7.4\%) | -536 (-4.7\%) |
|  | D | -2,534 (-24.1\%) | -2,318 (-22.5\%) |
|  | C | -2,527 (-32.7\%) | -1,387 (-21\%) |
|  | All | -878 (-8.2\%) | -1,059 (-9.7\%) |

एe

| Alternative 7: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | -2,173 (-25.5\%) | -2,316 (-26.8\%) |
|  | AN | -1,456 (-17.1\%) | -2,566 (-26.6\%) |
|  | BN | -220 (-2.6\%) | -602 (-6.9\%) |
|  | D | -3,441 (-37.1\%) | -1,593 (-21.5\%) |
|  | C | 626 (14.3\%) | 1,401 (38.8\%) |
|  | All | -1,603 (-19.9\%) | -1,357 (-17.4\%) |
| SEP | W | 915 (8.5\%) | -9,517 (-44.9\%) |
|  | AN | 13 (0.2\%) | -6,031 (-47\%) |
|  | BN | -2,458 (-39.1\%) | -2,372 (-38.3\%) |
|  | D | -2,613 (-42.7\%) | -141 (-3.9\%) |
|  | C | -427 (-11.9\%) | 166 (5.5\%) |
|  | All | -764 (-10.4\%) | -4,312 (-39.6\%) |
| OCT | W | -3,213 (-36.9\%) | -2,783 (-33.6\%) |
|  | AN | -1,185 (-19.2\%) | -2,209 (-30.6\%) |
|  | BN | -2,165 (-34.6\%) | -2,883 (-41.3\%) |
|  | D | -1,062 (-20\%) | -1,477 (-25.8\%) |
|  | C | -1,557 (-29.8\%) | -1,311 (-26.4\%) |
|  | All | -2,023 (-30.3\%) | -2,214 (-32.3\%) |
| NOV | W | -3,213 (-36.9\%) | -2,783 (-33.6\%) |
|  | AN | -1,185 (-19.2\%) | -2,209 (-30.6\%) |
|  | BN | -2,165 (-34.6\%) | -2,883 (-41.3\%) |
|  | D | -1,062 (-20\%) | -1,477 (-25.8\%) |
|  | C | -1,557 (-29.8\%) | -1,311 (-26.4\%) |
|  | All | -2,023 (-30.3\%) | $-2,214(-32.3 \%)$ |
| DEC | W | -4,476 (-10.3\%) | -1,541 (-3.8\%) |
|  | AN | -782 (-4.1\%) | -1,678 (-8.4\%) |
|  | BN | -1,652 (-11.8\%) | -1,714 (-12.2\%) |
|  | D | -1,632 (-13.6\%) | -1,320 (-11.3\%) |
|  | C | -1,510 (-18.6\%) | -564 (-7.8\%) |
|  | All | -2,395 (-10.5\%) | -1,399 (-6.4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.7.2.4 Delta Outflow

Table 31. Mean Monthly Flows (cfs) for Model Scenarios at the Delta Outflow, Year-Round

| Alternative 7: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 85,900 | 94,620 | 94,893 |
|  | AN | 49,448 | 51,100 | 52,008 |
|  | BN | 22,968 | 22,301 | 25,257 |
|  | D | 14,736 | 14,732 | 18,681 |
|  | C | 11,343 | 12,651 | 15,233 |
|  | All | 43,289 | 46,372 | 48,341 |
| FEB | W | 96,835 | 107,085 | 106,490 |
|  | AN | 62,321 | 65,873 | 66,637 |
|  | BN | 36,766 | 36,084 | 37,697 |
|  | D | 20,915 | 21,461 | 24,038 |
|  | C | 12,991 | 12,798 | 16,881 |
|  | All | 52,594 | 56,338 | 57,700 |
| MAR | W | 78,956 | 84,471 | 82,488 |
|  | AN | 54,171 | 56,737 | 55,835 |
|  | BN | 24,029 | 22,467 | 24,012 |
|  | D | 19,880 | 19,985 | 21,177 |
|  | C | 11,911 | 12,215 | 13,406 |
|  | All | 43,172 | 45,097 | 45,036 |
| APR | W | 54,394 | 54,562 | 50,278 |
|  | AN | 31,975 | 30,576 | 27,043 |
|  | BN | 21,928 | 20,641 | 19,625 |
|  | D | 14,142 | 13,413 | 13,822 |
|  | C | 9,053 | 9,294 | 9,600 |
|  | All | 30,099 | 29,603 | 27,689 |
| MAY | W | 41,040 | 32,880 | 30,448 |
|  | AN | 24,200 | 21,709 | 20,300 |
|  | BN | 16,299 | 13,596 | 13,961 |
|  | D | 10,487 | 10,375 | 10,739 |
|  | C | 6,000 | 6,286 | 7,502 |
|  | All | 22,517 | 19,121 | 18,464 |
| JUN | W | 23,451 | 15,640 | 16,851 |
|  | AN | 11,801 | 10,676 | 12,100 |
|  | BN | 8,004 | 8,943 | 10,672 |
|  | D | 6,636 | 7,689 | 8,353 |
|  | C | 5,322 | 5,632 | 7,699 |
|  | All | 12,765 | 10,560 | 11,896 |
| JUL | W | 11,441 | 11,407 | 8,901 |
|  | AN | 9,430 | 12,225 | 9,030 |
|  | BN | 7,151 | 7,668 | 6,491 |
|  | D | 5,024 | 6,448 | 5,318 |
|  | C | 4,238 | 5,832 | 4,083 |
|  | All | 7,951 | 8,984 | 7,017 |


| Alternative 7: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 5,341 | 4,308 | 4,094 |
|  | AN | 4,000 | 4,713 | 4,261 |
|  | BN | 4,000 | 5,129 | 5,172 |
|  | D | 4,829 | 5,348 | 5,004 |
|  | C | 4,077 | 4,433 | 5,028 |
|  | All | 4,618 | 4,754 | 4,639 |
| SEP | W | 9,569 | 20,078 | 21,382 |
|  | AN | 3,672 | 11,581 | 12,678 |
|  | BN | 3,445 | 3,428 | 3,449 |
|  | D | 3,350 | 3,021 | 3,749 |
|  | C | 3,000 | 3,036 | 4,490 |
|  | All | 5,334 | 9,754 | 10,704 |
| OCT | W | 6,487 | 9,520 | 11,283 |
|  | AN | 4,021 | 8,982 | 9,951 |
|  | BN | 4,477 | 8,054 | 9,712 |
|  | D | 4,157 | 7,294 | 9,269 |
|  | C | 4,158 | 6,607 | 8,596 |
|  | All | 4,931 | 8,276 | 9,985 |
| NOV | W | 14,232 | 15,987 | 18,896 |
|  | AN | 9,683 | 11,529 | 14,044 |
|  | BN | 5,864 | 8,681 | 11,086 |
|  | D | 6,943 | 8,052 | 10,699 |
|  | C | 5,045 | 5,725 | 9,072 |
|  | All | 9,193 | 10,844 | 13,615 |
| DEC | W | 48,185 | 45,191 | 50,675 |
|  | AN | 18,014 | 19,119 | 25,485 |
|  | BN | 11,950 | 12,231 | 18,729 |
|  | D | 8,884 | 8,828 | 15,677 |
|  | C | 5,531 | 6,560 | 11,033 |
|  | All | 22,714 | 22,113 | 28,051 |

Table 32. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios at the Delta Outflow, Year-Round

| Alternative 7: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 8,994 (10.5\%) | 274 (0.3\%) |
|  | AN | 2,561 (5.2\%) | 908 (1.8\%) |
|  | BN | 2,289 (10\%) | 2,956 (13.3\%) |
|  | D | 3,946 (26.8\%) | 3,949 (26.8\%) |
|  | C | 3,890 (34.3\%) | 2,582 (20.4\%) |
|  | All | 5,053 (11.7\%) | 1,969 (4.2\%) |
| FEB | W | 9,655 (10\%) | -595 (-0.6\%) |
|  | AN | 4,315 (6.9\%) | 763 (1.2\%) |
|  | BN | 931 (2.5\%) | 1,613 (4.5\%) |
|  | D | 3,122 (14.9\%) | 2,576 (12\%) |
|  | C | 3,891 (29.9\%) | 4,084 (31.9\%) |
|  | All | 5,106 (9.7\%) | 1,362 (2.4\%) |
| MAR | W | 3,532 (4.5\%) | -1,983 (-2.3\%) |
|  | AN | 1,664 (3.1\%) | -903 (-1.6\%) |
|  | BN | -17 (-0.1\%) | 1,545 (6.9\%) |
|  | D | 1,297 (6.5\%) | 1,192 (6\%) |
|  | C | 1,495 (12.5\%) | 1,191 (9.8\%) |
|  | All | 1,864 (4.3\%) | -61 (-0.1\%) |
| APR | W | -4,116 (-7.6\%) | -4,284 (-7.9\%) |
|  | AN | -4,932 (-15.4\%) | -3,533 (-11.6\%) |
|  | BN | -2,303 (-10.5\%) | -1,016 (-4.9\%) |
|  | D | -320 (-2.3\%) | 409 (3\%) |
|  | C | 547 (6\%) | 306 (3.3\%) |
|  | All | -2,410 (-8\%) | -1,914 (-6.5\%) |
| MAY | W | -10,592 (-25.8\%) | -2,433 (-7.4\%) |
|  | AN | -3,900 (-16.1\%) | -1,409 (-6.5\%) |
|  | BN | -2,338 (-14.3\%) | 365 (2.7\%) |
|  | D | 251 (2.4\%) | 363 (3.5\%) |
|  | C | 1,502 (25\%) | 1,216 (19.3\%) |
|  | All | -4,053 (-18\%) | -657 (-3.4\%) |
| JUN | W | -6,600 (-28.1\%) | 1,211 (7.7\%) |
|  | AN | 299 (2.5\%) | 1,424 (13.3\%) |
|  | BN | 2,668 (33.3\%) | 1,729 (19.3\%) |
|  | D | 1,717 (25.9\%) | 664 (8.6\%) |
|  | C | 2,377 (44.7\%) | 2,067 (36.7\%) |
|  | All | -869 (-6.8\%) | 1,336 (12.6\%) |
| JUL | W | -2,539 (-22.2\%) | -2,505 (-22\%) |
|  | AN | -400 (-4.2\%) | -3,194 (-26.1\%) |
|  | BN | -660 (-9.2\%) | -1,177 (-15.4\%) |
|  | D | 294 (5.9\%) | -1,131 (-17.5\%) |
|  | C | -154 (-3.6\%) | -1,749 (-30\%) |
|  | All | -934 (-11.8\%) | $-1,967(-21.9 \%)$ |


| Alternative 7: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | -1,247 (-23.3\%) | -214 (-5\%) |
|  | AN | 261 (6.5\%) | -453 (-9.6\%) |
|  | BN | 1,172 (29.3\%) | 43 (0.8\%) |
|  | D | 176 (3.6\%) | -343 (-6.4\%) |
|  | C | 951 (23.3\%) | 595 (13.4\%) |
|  | All | 21 (0.4\%) | -115 (-2.4\%) |
| SEP | W | 11,813 (123.5\%) | 1,304 (6.5\%) |
|  | AN | 9,006 (245.3\%) | 1,097 (9.5\%) |
|  | BN | 4 (0.1\%) | 21 (0.6\%) |
|  | D | 399 (11.9\%) | 727 (24.1\%) |
|  | C | 1,490 (49.7\%) | 1,455 (47.9\%) |
|  | All | 5,370 (100.7\%) | 950 (9.7\%) |
| OCT | W | 4,797 (73.9\%) | 1,763 (18.5\%) |
|  | AN | 5,930 (147.5\%) | 969 (10.8\%) |
|  | BN | 5,236 (117\%) | 1,658 (20.6\%) |
|  | D | 5,112 (123\%) | 1,975 (27.1\%) |
|  | C | 4,438 (106.7\%) | 1,989 (30.1\%) |
|  | All | 5,054 (102.5\%) | 1,709 (20.6\%) |
| NOV | W | 4,663 (32.8\%) | 2,908 (18.2\%) |
|  | AN | 4,360 (45\%) | 2,515 (21.8\%) |
|  | BN | 5,222 (89\%) | 2,405 (27.7\%) |
|  | D | 3,756 (54.1\%) | 2,646 (32.9\%) |
|  | C | 4,027 (79.8\%) | 3,347 (58.5\%) |
|  | All | 4,422 (48.1\%) | 2,772 (25.6\%) |
| DEC | W | 2,490 (5.2\%) | 5,484 (12.1\%) |
|  | AN | 7,471 (41.5\%) | 6,366 (33.3\%) |
|  | BN | 6,779 (56.7\%) | 6,498 (53.1\%) |
|  | D | 6,793 (76.5\%) | 6,849 (77.6\%) |
|  | C | 5,502 (99.5\%) | 4,473 (68.2\%) |
|  | All | 5,337 (23.5\%) | 5,938 (26.9\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.7.2.5 San Joaquin River at Vernalis

Table 33. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 7: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 9,089 | 9,681 | 9,754 |
|  | AN | 5,447 | 6,011 | 6,015 |
|  | BN | 2,326 | 2,220 | 2,256 |
|  | D | 2,270 | 2,202 | 2,226 |
|  | C | 1,667 | 1,592 | 1,591 |
|  | All | 4,777 | 5,018 | 5,049 |
| FEB | W | 12,750 | 13,191 | 13,169 |
|  | AN | 6,965 | 6,721 | 6,674 |
|  | BN | 2,983 | 2,841 | 2,824 |
|  | D | 2,590 | 2,269 | 2,245 |
|  | C | 2,120 | 1,941 | 1,941 |
|  | All | 6,388 | 6,361 | 6,339 |
| MAR | W | 14,374 | 15,235 | 15,243 |
|  | AN | 6,284 | 6,364 | 6,363 |
|  | BN | 2,949 | 2,476 | 2,476 |
|  | D | 2,479 | 2,146 | 2,145 |
|  | C | 1,813 | 1,688 | 1,687 |
|  | All | 6,648 | 6,763 | 6,765 |
| APR | W | 11,955 | 12,457 | 12,452 |
|  | AN | 6,014 | 6,042 | 6,024 |
|  | BN | 4,490 | 3,922 | 3,921 |
|  | D | 3,656 | 3,112 | 3,106 |
|  | C | 1,983 | 1,796 | 1,792 |
|  | All | 6,351 | 6,291 | 6,284 |
| MAY | W | 12,109 | 12,632 | 12,620 |
|  | AN | 5,381 | 5,092 | 5,084 |
|  | BN | 4,074 | 3,657 | 3,655 |
|  | D | 3,308 | 2,823 | 2,816 |
|  | C | 1,964 | 1,798 | 1,791 |
|  | All | 6,148 | 6,069 | 6,061 |
| JUN | W | 11,058 | 6,820 | 6,837 |
|  | AN | 2,965 | 2,678 | 2,658 |
|  | BN | 2,051 | 1,870 | 1,867 |
|  | D | 1,537 | 1,291 | 1,284 |
|  | C | 1,020 | 956 | 951 |
|  | All | 4,583 | 3,206 | 3,205 |
| JUL | W | 7,654 | 4,345 | 4,338 |
|  | AN | 1,958 | 1,801 | 1,798 |
|  | BN | 1,491 | 1,381 | 1,376 |
|  | D | 1,295 | 1,100 | 1,083 |
|  | C | 898 | 858 | 852 |
|  | All | 3,239 | 2,184 | 2,177 |


| Alternative 7: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 3,539 | 2,645 | 2,643 |
|  | AN | 2,000 | 1,699 | 1,697 |
|  | BN | 1,460 | 1,375 | 1,372 |
|  | D | 1,375 | 1,225 | 1,219 |
|  | C | 1,007 | 987 | 977 |
|  | All | 2,072 | 1,710 | 1,706 |
| SEP | W | 3,519 | 3,127 | 3,126 |
|  | AN | 2,355 | 2,164 | 2,163 |
|  | BN | 1,829 | 1,748 | 1,746 |
|  | D | 1,796 | 1,643 | 1,640 |
|  | C | 1,402 | 1,378 | 1,367 |
|  | All | 2,338 | 2,144 | 2,141 |
| OCT | W | 2,760 | 2,726 | 2,709 |
|  | AN | 2,745 | 2,595 | 2,594 |
|  | BN | 2,502 | 2,348 | 2,347 |
|  | D | 2,945 | 2,790 | 2,791 |
|  | C | 2,213 | 2,031 | 2,027 |
|  | All | 2,639 | 2,515 | 2,509 |
| NOV | W | 2,534 | 2,411 | 2,418 |
|  | AN | 3,182 | 3,193 | 3,194 |
|  | BN | 2,150 | 1,997 | 2,029 |
|  | D | 2,272 | 2,217 | 2,251 |
|  | C | 1,968 | 1,898 | 1,898 |
|  | All | 2,448 | 2,367 | 2,380 |
| DEC | W | 4,370 | 4,504 | 4,536 |
|  | AN | 4,711 | 4,567 | 4,605 |
|  | BN | 2,182 | 2,065 | 2,061 |
|  | D | 2,129 | 2,166 | 2,187 |
|  | C | 1,729 | 1,694 | 1,693 |
|  | All | 3,219 | 3,211 | 3,230 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 34. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 7: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 665 (7.3\%) | 72 (0.7\%) |
|  | AN | 568 (10.4\%) | 4 (0.1\%) |
|  | BN | -70 (-3\%) | 36 (1.6\%) |
|  | D | -44 (-2\%) | 24 (1.1\%) |
|  | C | -76 (-4.5\%) | 0 (0\%) |
|  | All | 273 (5.7\%) | 32 (0.6\%) |
| FEB | W | 419 (3.3\%) | -22 (-0.2\%) |
|  | AN | -291 (-4.2\%) | -47 (-0.7\%) |
|  | BN | -158 (-5.3\%) | -16 (-0.6\%) |
|  | D | -345 (-13.3\%) | -24 (-1.1\%) |
|  | C | -178 (-8.4\%) | 0 (0\%) |
|  | All | -49 (-0.8\%) | -22 (-0.3\%) |
| MAR | W | 869 (6\%) | 8 (0.1\%) |
|  | AN | 79 (1.3\%) | -1 (0\%) |
|  | BN | -473 (-16\%) | 0 (0\%) |
|  | D | -334 (-13.5\%) | -1 (0\%) |
|  | C | -126 (-7\%) | -1 (0\%) |
|  | All | 117 (1.8\%) | 2 (0\%) |
| APR | W | 497 (4.2\%) | -5 (0\%) |
|  | AN | 10 (0.2\%) | -18 (-0.3\%) |
|  | BN | -569 (-12.7\%) | -1 (0\%) |
|  | D | -550 (-15\%) | -5 (-0.2\%) |
|  | C | -191 (-9.6\%) | -4 (-0.2\%) |
|  | All | -67 (-1.1\%) | -7 (-0.1\%) |
| MAY | W | 511 (4.2\%) | -12 (-0.1\%) |
|  | AN | -297 (-5.5\%) | -8 (-0.1\%) |
|  | BN | -419 (-10.3\%) | -2 (0\%) |
|  | D | -492 (-14.9\%) | -7 (-0.2\%) |
|  | C | -174 (-8.8\%) | -7 (-0.4\%) |
|  | All | -87 (-1.4\%) | -8 (-0.1\%) |
| JUN | W | -4,221 (-38.2\%) | 17 (0.2\%) |
|  | AN | -307 (-10.3\%) | -20 (-0.7\%) |
|  | BN | -184 (-9\%) | -3 (-0.2\%) |
|  | D | -253 (-16.5\%) | -7 (-0.5\%) |
|  | C | -70 (-6.8\%) | -5 (-0.5\%) |
|  | All | -1,378 (-30.1\%) | -1 (0\%) |
| JUL | W | -3,316 (-43.3\%) | -7 (-0.2\%) |
|  | AN | -160 (-8.2\%) | -3 (-0.2\%) |
|  | BN | -115 (-7.7\%) | -5 (-0.3\%) |
|  | D | -212 (-16.4\%) | -17 (-1.5\%) |
|  | C | -47 (-5.2\%) | -6 (-0.7\%) |
|  | All | -1,063 (-32.8\%) | -7 (-0.3\%) |


| Alternative 7: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{c}\text { EXISTING CONDITIONS } \\ \text { vs. A7_LLT }\end{array}$ | NAA vs. A7_LLT |$]-2(-0.1 \%)$

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
${ }^{\text {b }}$ Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.7.2.6 Mokelumne River at the Delta

Table 35. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 7: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A7_LLT |
| JAN | W | 3,071 | 3,634 | 3,634 |
|  | AN | 1,707 | 1,876 | 1,876 |
|  | BN | 597 | 617 | 617 |
|  | D | 495 | 493 | 493 |
|  | C | 280 | 281 | 281 |
|  | All | 1,460 | 1,660 | 1,660 |
| FEB | W | 3,290 | 3,781 | 3,781 |
|  | AN | 2,525 | 2,913 | 2,913 |
|  | BN | 1,011 | 1,035 | 1,035 |
|  | D | 695 | 678 | 678 |
|  | C | 426 | 442 | 442 |
|  | All | 1,809 | 2,033 | 2,033 |
| MAR | W | 3,179 | 3,336 | 3,336 |
|  | AN | 1,582 | 1,639 | 1,639 |
|  | BN | 1,181 | 1,140 | 1,140 |
|  | D | 754 | 691 | 691 |
|  | C | 595 | 580 | 580 |
|  | All | 1,662 | 1,700 | 1,700 |
| APR | W | 2,819 | 2,694 | 2,694 |
|  | AN | 1,619 | 1,424 | 1,424 |
|  | BN | 1,243 | 1,068 | 1,068 |
|  | D | 623 | 550 | 550 |
|  | C | 340 | 311 | 311 |
|  | All | 1,503 | 1,384 | 1,384 |
| MAY | W | 3,170 | 2,885 | 2,885 |
|  | AN | 1,439 | 1,179 | 1,179 |
|  | BN | 976 | 812 | 812 |
|  | D | 406 | 333 | 333 |
|  | C | 181 | 170 | 170 |
|  | All | 1,463 | 1,289 | 1,289 |
| JUN | W | 1,755 | 1,415 | 1,415 |
|  | AN | 851 | 631 | 631 |
|  | BN | 471 | 366 | 366 |
|  | D | 93 | 76 | 76 |
|  | C | 52 | 44 | 44 |
|  | All | 779 | 616 | 616 |
| JUL | W | 772 | 469 | 469 |
|  | AN | 347 | 167 | 167 |
|  | BN | 123 | 70 | 70 |
|  | D | 7 | 6 | 6 |
|  | C | 3 | 3 | 3 |
|  | All | 315 | 183 | 183 |


| Alternative 7: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A7_LLT |
| AUG | W | 703 | 346 | 346 |
|  | AN | 328 | 216 | 216 |
|  | BN | 112 | 71 | 71 |
|  | D | 4 | 4 | 4 |
|  | C | 2 | 2 | 2 |
|  | All | 289 | 156 | 156 |
| SEP | W | 702 | 497 | 497 |
|  | AN | 333 | 259 | 259 |
|  | BN | 114 | 91 | 91 |
|  | D | 9 | 9 | 9 |
|  | C | 5 | 5 | 5 |
|  | All | 291 | 213 | 213 |
| OCT | W | 161 | 147 | 147 |
|  | AN | 178 | 180 | 180 |
|  | BN | 154 | 144 | 144 |
|  | D | 180 | 160 | 160 |
|  | C | 117 | 123 | 123 |
|  | All | 158 | 150 | 150 |
| NOV | W | 487 | 431 | 431 |
|  | AN | 912 | 855 | 855 |
|  | BN | 347 | 301 | 301 |
|  | D | 380 | 327 | 327 |
|  | C | 195 | 186 | 186 |
|  | All | 474 | 429 | 429 |
| DEC | W | 1,504 | 1,732 | 1,732 |
|  | AN | 1,411 | 1,628 | 1,628 |
|  | BN | 447 | 472 | 472 |
|  | D | 384 | 374 | 374 |
|  | C | 204 | 209 | 209 |
|  | All | 887 | 999 | 999 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 36. Differences ${ }^{a}$ (Percent Differences) between Pairs of Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 7: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| JAN | W | 563 (18.3\%) | 0 (0\%) |
|  | AN | 169 (9.9\%) | 0 (0\%) |
|  | BN | 21 (3.4\%) | 0 (0\%) |
|  | D | -2 (-0.5\%) | 0 (0\%) |
|  | C | 1 (0.3\%) | 0 (0\%) |
|  | All | 201 (13.8\%) | 0 (0\%) |
| FEB | W | 491 (14.9\%) | 0 (0\%) |
|  | AN | 388 (15.4\%) | 0 (0\%) |
|  | BN | 24 (2.4\%) | 0 (0\%) |
|  | D | -17 (-2.4\%) | 0 (0\%) |
|  | C | 15 (3.5\%) | 0 (0\%) |
|  | All | 223 (12.3\%) | 0 (0\%) |
| MAR | W | 158 (5\%) | 0 (0\%) |
|  | AN | 57 (3.6\%) | 0 (0\%) |
|  | BN | -41 (-3.4\%) | 0 (0\%) |
|  | D | -63 (-8.3\%) | 0 (0\%) |
|  | C | -15 (-2.5\%) | 0 (0\%) |
|  | All | 38 (2.3\%) | 0 (0\%) |
| APR | W | -125 (-4.4\%) | 0 (0\%) |
|  | AN | -194 (-12\%) | 0 (0\%) |
|  | BN | -175 (-14.1\%) | 0 (0\%) |
|  | D | -73 (-11.7\%) | 0 (0\%) |
|  | C | -29 (-8.7\%) | 0 (0\%) |
|  | All | -120 (-8\%) | 0 (0\%) |
| MAY | W | -284 (-9\%) | 0 (0\%) |
|  | AN | -260 (-18.1\%) | 0 (0\%) |
|  | BN | -164 (-16.8\%) | 0 (0\%) |
|  | D | -72 (-17.8\%) | 0 (0\%) |
|  | C | -11 (-6.1\%) | 0 (0\%) |
|  | All | -174 (-11.9\%) | 0 (0\%) |
| JUN | W | -339 (-19.3\%) | 0 (0\%) |
|  | AN | -220 (-25.8\%) | 0 (0\%) |
|  | BN | -105 (-22.3\%) | 0 (0\%) |
|  | D | -17 (-18.8\%) | 0 (0\%) |
|  | C | -8 (-14.7\%) | 0 (0\%) |
|  | All | -163 (-20.9\%) | 0 (0\%) |
| JUL | W | -303 (-39.3\%) | 0 (0\%) |
|  | AN | -180 (-51.8\%) | 0 (0\%) |
|  | BN | -54 (-43.4\%) | 0 (0\%) |
|  | D | 0 (-3.1\%) | 0 (0\%) |
|  | C | 0 (-4.4\%) | 0 (0\%) |
|  | All | -132 (-42\%) | 0 (0\%) |


| Alternative 7: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A7_LLT | NAA vs. A7_LLT |
| AUG | W | -357 (-50.8\%) | 0 (0\%) |
|  | AN | -113 (-34.3\%) | 0 (0\%) |
|  | BN | -41 (-36.5\%) | 0 (0\%) |
|  | D | 0 (-0.5\%) | 0 (0\%) |
|  | C | 0 (-3.1\%) | 0 (0\%) |
|  | All | -133 (-46.1\%) | 0 (0\%) |
| SEP | W | -205 (-29.3\%) | 0 (0\%) |
|  | AN | -74 (-22.2\%) | 0 (0\%) |
|  | BN | -23 (-20.5\%) | 0 (0\%) |
|  | D | -1 (-5.9\%) | 0 (0\%) |
|  | C | 0 (4.6\%) | 0 (0\%) |
|  | All | -78 (-26.9\%) | 0 (0\%) |
| OCT | W | -14 (-8.7\%) | 0 (0\%) |
|  | AN | 2 (1.1\%) | 0 (0\%) |
|  | BN | -10 (-6.6\%) | 0 (0\%) |
|  | D | -20 (-11.1\%) | 0 (0\%) |
|  | C | 6 (4.7\%) | 0 (0\%) |
|  | All | -7 (-4.7\%) | 0 (0\%) |
| NOV | W | -56 (-11.5\%) | 0 (0\%) |
|  | AN | -57 (-6.3\%) | 0 (0\%) |
|  | BN | -46 (-13.2\%) | 0 (0\%) |
|  | D | -53 (-13.9\%) | 0 (0\%) |
|  | C | -9 (-4.6\%) | 0 (0\%) |
|  | All | -45 (-9.5\%) | 0 (0\%) |
| DEC | W | 228 (15.2\%) | 0 (0\%) |
|  | AN | 217 (15.4\%) | 0 (0\%) |
|  | BN | 25 (5.5\%) | 0 (0\%) |
|  | D | -10 (-2.6\%) | 0 (0\%) |
|  | C | 6 (2.9\%) | 0 (0\%) |
|  | All | 113 (12.7\%) | 0 (0\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C. 8 Alternative 8

## 11C.8.1 Upstream

## 11C.8.1.1 Sacramento River at Keswick

Table 1. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 8: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 16,526 | 18,233 | 19,896 |
|  | AN | 8,318 | 8,205 | 9,021 |
|  | BN | 4,502 | 4,184 | 5,290 |
|  | D | 3,996 | 4,096 | 3,596 |
|  | C | 3,490 | 4,238 | 3,460 |
|  | All | 8,614 | 9,215 | 9,827 |
| FEB | W | 18,577 | 20,853 | 21,267 |
|  | AN | 14,409 | 15,297 | 15,609 |
|  | BN | 5,981 | 5,544 | 6,120 |
|  | D | 3,684 | 3,410 | 4,167 |
|  | C | 3,599 | 3,372 | 4,012 |
|  | All | 10,355 | 11,039 | 11,574 |
| MAR | W | 16,200 | 17,065 | 17,194 |
|  | AN | 9,131 | 8,818 | 9,084 |
|  | BN | 5,200 | 4,318 | 5,006 |
|  | D | 3,903 | 3,814 | 5,479 |
|  | C | 3,487 | 3,583 | 3,868 |
|  | All | 8,728 | 8,800 | 9,404 |
| APR | W | 9,418 | 9,131 | 9,585 |
|  | AN | 6,182 | 5,536 | 7,440 |
|  | BN | 5,426 | 5,009 | 7,981 |
|  | D | 5,803 | 5,533 | 7,335 |
|  | C | 6,472 | 6,550 | 6,320 |
|  | All | 7,038 | 6,733 | 8,026 |
| MAY | W | 9,508 | 7,149 | 8,580 |
|  | AN | 7,709 | 7,783 | 10,326 |
|  | BN | 7,193 | 6,272 | 8,253 |
|  | D | 7,349 | 7,681 | 7,651 |
|  | C | 6,715 | 7,316 | 7,708 |
|  | All | 7,967 | 7,233 | 8,448 |
| JUN | W | 10,375 | 10,274 | 11,990 |
|  | AN | 11,147 | 12,032 | 13,183 |
|  | BN | 10,758 | 10,947 | 10,957 |
|  | D | 11,224 | 11,898 | 10,804 |
|  | C | 10,392 | 11,350 | 12,247 |
|  | All | 10,742 | 11,160 | 11,766 |


| Alternative 8: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JUL | W | 12,779 | 14,098 | 13,504 |
|  | AN | 14,056 | 15,098 | 13,510 |
|  | BN | 12,965 | 13,177 | 11,458 |
|  | D | 13,302 | 13,727 | 12,777 |
|  | C | 12,849 | 11,935 | 11,399 |
|  | All | 13,123 | 13,689 | 12,688 |
| AUG | W | 11,029 | 10,491 | 10,059 |
|  | AN | 10,449 | 11,641 | 9,528 |
|  | BN | 10,139 | 10,261 | 8,606 |
|  | D | 10,627 | 10,986 | 10,264 |
|  | C | 9,473 | 7,348 | 7,379 |
|  | All | 10,476 | 10,269 | 9,386 |
| SEP | W | 9,385 | 12,833 | 11,785 |
|  | AN | 5,862 | 9,898 | 8,117 |
|  | BN | 5,492 | 5,601 | 4,023 |
|  | D | 5,985 | 4,469 | 3,997 |
|  | C | 5,563 | 4,368 | 4,421 |
|  | All | 6,899 | 8,094 | 7,136 |
| OCT | W | 6,886 | 7,034 | 5,906 |
|  | AN | 7,145 | 7,152 | 6,243 |
|  | BN | 6,396 | 7,072 | 5,225 |
|  | D | 6,128 | 6,494 | 5,721 |
|  | C | 5,902 | 5,752 | 4,317 |
|  | All | 6,530 | 6,752 | 5,566 |
| NOV | W | 6,672 | 7,539 | 6,317 |
|  | AN | 6,224 | 7,134 | 5,554 |
|  | BN | 5,088 | 5,936 | 4,756 |
|  | D | 5,669 | 5,406 | 4,658 |
|  | C | 4,822 | 4,710 | 4,421 |
|  | All | 5,845 | 6,324 | 5,297 |
| DEC | W | 12,766 | 11,022 | 11,788 |
|  | AN | 5,531 | 5,377 | 4,495 |
|  | BN | 5,413 | 5,195 | 5,211 |
|  | D | 4,215 | 3,936 | 3,709 |
|  | C | 3,828 | 3,582 | 3,766 |
|  | All | 7,267 | 6,557 | 6,651 |

Table 2. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 8: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 3,370 (20.4\%) | 1,663 (9.1\%) |
|  | AN | 703 (8.5\%) | 816 (9.9\%) |
|  | BN | 788 (17.5\%) | 1,106 (26.4\%) |
|  | D | -400 (-10\%) | -500 (-12.2\%) |
|  | C | -31 (-0.9\%) | -778 (-18.4\%) |
|  | All | 1,214 (14.1\%) | 612 (6.6\%) |
| FEB | W | 2,689 (14.5\%) | 413 (2\%) |
|  | AN | 1,200 (8.3\%) | 312 (2\%) |
|  | BN | 138 (2.3\%) | 575 (10.4\%) |
|  | D | 484 (13.1\%) | 758 (22.2\%) |
|  | C | 413 (11.5\%) | 640 (19\%) |
|  | All | 1,219 (11.8\%) | 535 (4.8\%) |
| MAR | W | 994 (6.1\%) | 128 (0.8\%) |
|  | AN | -47 (-0.5\%) | 266 (3\%) |
|  | BN | -193 (-3.7\%) | 688 (15.9\%) |
|  | D | 1,575 (40.4\%) | 1,665 (43.7\%) |
|  | C | 381 (10.9\%) | 285 (7.9\%) |
|  | All | 677 (7.8\%) | 604 (6.9\%) |
| APR | W | 167 (1.8\%) | 454 (5\%) |
|  | AN | 1,258 (20.3\%) | 1,904 (34.4\%) |
|  | BN | 2,555 (47.1\%) | 2,973 (59.4\%) |
|  | D | 1,533 (26.4\%) | 1,802 (32.6\%) |
|  | C | -152 (-2.3\%) | -230 (-3.5\%) |
|  | All | 987 (14\%) | 1,292 (19.2\%) |
| MAY | W | -928 (-9.8\%) | 1,431 (20\%) |
|  | AN | 2,618 (34\%) | 2,543 (32.7\%) |
|  | BN | 1,060 (14.7\%) | 1,982 (31.6\%) |
|  | D | 302 (4.1\%) | -30 (-0.4\%) |
|  | C | 993 (14.8\%) | 392 (5.4\%) |
|  | All | 482 (6\%) | 1,215 (16.8\%) |
| JUN | W | 1,615 (15.6\%) | 1,716 (16.7\%) |
|  | AN | 2,036 (18.3\%) | 1,151 (9.6\%) |
|  | BN | 199 (1.8\%) | 10 (0.1\%) |
|  | D | -420 (-3.7\%) | -1,094 (-9.2\%) |
|  | C | 1,855 (17.8\%) | 897 (7.9\%) |
|  | All | 1,023 (9.5\%) | 605 (5.4\%) |
| JUL | W | 724 (5.7\%) | -594 (-4.2\%) |
|  | AN | -547 (-3.9\%) | -1,588 (-10.5\%) |
|  | BN | -1,507 (-11.6\%) | -1,718 (-13\%) |
|  | D | -525 (-3.9\%) | -950 (-6.9\%) |
|  | C | -1,450 (-11.3\%) | -535 (-4.5\%) |
|  | All | -435 (-3.3\%) | -1,001 (-7.3\%) |


| Alternative 8: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -970 (-8.8\%) | -432 (-4.1\%) |
|  | AN | -921 (-8.8\%) | -2,113 (-18.2\%) |
|  | BN | -1,533 (-15.1\%) | -1,654 (-16.1\%) |
|  | D | -363 (-3.4\%) | -722 (-6.6\%) |
|  | C | -2,093 (-22.1\%) | 32 (0.4\%) |
|  | All | -1,090 (-10.4\%) | -882 (-8.6\%) |
| SEP | W | 2,400 (25.6\%) | -1,048 (-8.2\%) |
|  | AN | 2,254 (38.5\%) | -1,781 (-18\%) |
|  | BN | -1,469 (-26.8\%) | -1,578 (-28.2\%) |
|  | D | -1,988 (-33.2\%) | -471 (-10.5\%) |
|  | C | -1,142 (-20.5\%) | 53 (1.2\%) |
|  | All | 237 (3.4\%) | -958 (-11.8\%) |
| OCT | W | -980 (-14.2\%) | -1,129 (-16\%) |
|  | AN | -902 (-12.6\%) | -909 (-12.7\%) |
|  | BN | -1,172 (-18.3\%) | -1,847 (-26.1\%) |
|  | D | -407 (-6.6\%) | -773 (-11.9\%) |
|  | C | -1,585 (-26.9\%) | -1,435 (-24.9\%) |
|  | All | -964 (-14.8\%) | -1,186 (-17.6\%) |
| NOV | W | -355 (-5.3\%) | -1,222 (-16.2\%) |
|  | AN | -670 (-10.8\%) | -1,580 (-22.1\%) |
|  | BN | -331 (-6.5\%) | -1,179 (-19.9\%) |
|  | D | -1,011 (-17.8\%) | -748 (-13.8\%) |
|  | C | -401 (-8.3\%) | -289 (-6.1\%) |
|  | All | -548 (-9.4\%) | -1,026 (-16.2\%) |
| DEC | W | -977 (-7.7\%) | 766 (7\%) |
|  | AN | -1,036 (-18.7\%) | -882 (-16.4\%) |
|  | BN | -202 (-3.7\%) | 16 (0.3\%) |
|  | D | -505 (-12\%) | -227 (-5.8\%) |
|  | C | -62 (-1.6\%) | 184 (5.1\%) |
|  | All | -616 (-8.5\%) | 94 (1.4\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.8.1.2 Sacramento River Upstream of Red Bluff

Table 3. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 8: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 28,036 | 30,390 | 32,040 |
|  | AN | 16,725 | 16,885 | 17,699 |
|  | BN | 9,381 | 9,146 | 10,244 |
|  | D | 7,098 | 7,262 | 6,758 |
|  | C | 6,143 | 6,942 | 6,165 |
|  | All | 15,396 | 16,278 | 16,884 |
| FEB | W | 30,255 | 33,472 | 33,851 |
|  | AN | 23,492 | 24,828 | 25,128 |
|  | BN | 12,005 | 11,614 | 12,175 |
|  | D | 8,947 | 8,790 | 9,545 |
|  | C | 6,599 | 6,378 | 7,015 |
|  | All | 18,010 | 19,092 | 19,611 |
| MAR | W | 25,004 | 26,210 | 26,335 |
|  | AN | 16,599 | 16,428 | 16,688 |
|  | BN | 9,333 | 8,474 | 9,142 |
|  | D | 8,385 | 8,300 | 9,955 |
|  | C | 5,999 | 6,101 | 6,363 |
|  | All | 14,669 | 14,876 | 15,469 |
| APR | W | 15,172 | 14,842 | 15,296 |
|  | AN | 10,477 | 9,761 | 11,665 |
|  | BN | 8,711 | 8,282 | 11,258 |
|  | D | 7,948 | 7,661 | 9,456 |
|  | C | 7,742 | 7,829 | 7,583 |
|  | All | 10,709 | 10,376 | 11,665 |
| MAY | W | 12,541 | 10,073 | 11,505 |
|  | AN | 10,012 | 10,047 | 12,582 |
|  | BN | 8,781 | 7,875 | 9,851 |
|  | D | 8,677 | 9,012 | 8,978 |
|  | C | 7,746 | 8,348 | 8,741 |
|  | All | 9,979 | 9,208 | 10,421 |
| JUN | W | 11,905 | 11,720 | 13,435 |
|  | AN | 12,001 | 12,789 | 13,967 |
|  | BN | 11,464 | 11,651 | 11,670 |
|  | D | 11,777 | 12,441 | 11,363 |
|  | C | 10,885 | 11,881 | 12,727 |
|  | All | 11,666 | 12,046 | 12,653 |
| JUL | W | 13,255 | 14,525 | 13,955 |
|  | AN | 14,129 | 15,142 | 13,566 |
|  | BN | 13,011 | 13,258 | 11,568 |
|  | D | 13,368 | 13,826 | 12,899 |
|  | C | 13,005 | 12,149 | 11,757 |
|  | All | 13,329 | 13,898 | 12,937 |


| Alternative 8: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 11,284 | 10,735 | 10,324 |
|  | AN | 10,580 | 11,775 | 9,685 |
|  | BN | 10,202 | 10,364 | 8,741 |
|  | D | 10,747 | 11,143 | 10,438 |
|  | C | 9,590 | 7,665 | 7,762 |
|  | All | 10,630 | 10,464 | 9,610 |
| SEP | W | 9,856 | 13,312 | 12,276 |
|  | AN | 6,279 | 10,320 | 8,559 |
|  | BN | 5,821 | 5,963 | 4,409 |
|  | D | 6,391 | 4,911 | 4,450 |
|  | C | 5,887 | 4,838 | 4,903 |
|  | All | 7,302 | 8,535 | 7,592 |
| OCT | W | 8,020 | 8,188 | 7,066 |
|  | AN | 8,112 | 8,162 | 7,262 |
|  | BN | 7,094 | 7,778 | 5,946 |
|  | D | 6,903 | 7,287 | 6,507 |
|  | C | 6,670 | 6,537 | 5,142 |
|  | All | 7,432 | 7,675 | 6,499 |
| NOV | W | 9,876 | 10,821 | 9,604 |
|  | AN | 8,144 | 9,098 | 7,521 |
|  | BN | 6,791 | 7,682 | 6,516 |
|  | D | 7,548 | 7,347 | 6,603 |
|  | C | 5,811 | 5,703 | 5,444 |
|  | All | 7,990 | 8,521 | 7,504 |
| DEC | W | 21,015 | 19,613 | 20,384 |
|  | AN | 10,019 | 10,053 | 9,176 |
|  | BN | 8,408 | 8,228 | 8,247 |
|  | D | 7,292 | 7,091 | 6,866 |
|  | C | 5,628 | 5,433 | 5,605 |
|  | All | 11,989 | 11,446 | 11,541 |

Table 4. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 8: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{gathered} \hline \text { EXISTING CONDITIONS } \\ \text { vs. A8_LLT } \end{gathered}$ | NAA vs. A8_LLT |
| JAN | W | 4,004 (14.3\%) | 1,650 (5.4\%) |
|  | AN | 975 (5.8\%) | 814 (4.8\%) |
|  | BN | 863 (9.2\%) | 1,098 (12\%) |
|  | D | -340 (-4.8\%) | -504 (-6.9\%) |
|  | C | 21 (0.3\%) | -777 (-11.2\%) |
|  | All | 1,488 (9.7\%) | 605 (3.7\%) |
| FEB | W | 3,596 (11.9\%) | 380 (1.1\%) |
|  | AN | 1,636 (7\%) | 300 (1.2\%) |
|  | BN | 171 (1.4\%) | 561 (4.8\%) |
|  | D | 598 (6.7\%) | 755 (8.6\%) |
|  | C | 416 (6.3\%) | 636 (10\%) |
|  | All | 1,601 (8.9\%) | 519 (2.7\%) |
| MAR | W | 1,331 (5.3\%) | 124 (0.5\%) |
|  | AN | 89 (0.5\%) | 259 (1.6\%) |
|  | BN | -191 (-2\%) | 668 (7.9\%) |
|  | D | 1,570 (18.7\%) | 1,655 (19.9\%) |
|  | C | 364 (6.1\%) | 261 (4.3\%) |
|  | All | 800 (5.5\%) | 593 (4\%) |
| APR | W | 125 (0.8\%) | 454 (3.1\%) |
|  | AN | 1,187 (11.3\%) | 1,903 (19.5\%) |
|  | BN | 2,548 (29.2\%) | 2,976 (35.9\%) |
|  | D | 1,507 (19\%) | 1,794 (23.4\%) |
|  | C | -159 (-2.1\%) | -246 (-3.1\%) |
|  | All | 956 (8.9\%) | 1,288 (12.4\%) |
| MAY | W | -1,035 (-8.3\%) | 1,433 (14.2\%) |
|  | AN | 2,570 (25.7\%) | 2,535 (25.2\%) |
|  | BN | 1,070 (12.2\%) | 1,977 (25.1\%) |
|  | D | 301 (3.5\%) | -34 (-0.4\%) |
|  | C | 995 (12.8\%) | 393 (4.7\%) |
|  | All | 442 (4.4\%) | 1,213 (13.2\%) |
| JUN | W | 1,530 (12.8\%) | 1,715 (14.6\%) |
|  | AN | 1,965 (16.4\%) | 1,177 (9.2\%) |
|  | BN | 207 (1.8\%) | 20 (0.2\%) |
|  | D | -414 (-3.5\%) | -1,078 (-8.7\%) |
|  | C | 1,842 (16.9\%) | 846 (7.1\%) |
|  | All | 987 (8.5\%) | 607 (5\%) |
| JUL | W | 701 (5.3\%) | -570 (-3.9\%) |
|  | AN | -563 (-4\%) | -1,576 (-10.4\%) |
|  | BN | -1,443 (-11.1\%) | -1,690 (-12.8\%) |
|  | D | -469 (-3.5\%) | -927 (-6.7\%) |
|  | C | -1,247 (-9.6\%) | -392 (-3.2\%) |
|  | All | -392 (-2.9\%) | -961 (-6.9\%) |

ت

| Alternative 8: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -959 (-8.5\%) | -411 (-3.8\%) |
|  | AN | -895 (-8.5\%) | -2,090 (-17.8\%) |
|  | BN | -1,461 (-14.3\%) | -1,623 (-15.7\%) |
|  | D | -309 (-2.9\%) | -705 (-6.3\%) |
|  | C | -1,828 (-19.1\%) | 97 (1.3\%) |
|  | All | -1,020 (-9.6\%) | -854 (-8.2\%) |
| SEP | W | 2,420 (24.5\%) | -1,037 (-7.8\%) |
|  | AN | 2,280 (36.3\%) | -1,761 (-17.1\%) |
|  | BN | -1,412 (-24.3\%) | -1,554 (-26.1\%) |
|  | D | -1,941 (-30.4\%) | -461 (-9.4\%) |
|  | C | -984 (-16.7\%) | 65 (1.3\%) |
|  | All | 290 (4\%) | -943 (-11.1\%) |
| OCT | W | -954 (-11.9\%) | -1,122 (-13.7\%) |
|  | AN | -850 (-10.5\%) | -900 (-11\%) |
|  | BN | -1,149 (-16.2\%) | -1,833 (-23.6\%) |
|  | D | -395 (-5.7\%) | -779 (-10.7\%) |
|  | C | -1,528 (-22.9\%) | -1,394 (-21.3\%) |
|  | All | -933 (-12.6\%) | -1,175 (-15.3\%) |
| NOV | W | -273 (-2.8\%) | -1,217 (-11.3\%) |
|  | AN | -623 (-7.6\%) | -1,577 (-17.3\%) |
|  | BN | -275 (-4\%) | -1,166 (-15.2\%) |
|  | D | -945 (-12.5\%) | -744 (-10.1\%) |
|  | C | -368 (-6.3\%) | -260 (-4.6\%) |
|  | All | -486 (-6.1\%) | -1,017 (-11.9\%) |
| DEC | W | -631 (-3\%) | 771 (3.9\%) |
|  | AN | -843 (-8.4\%) | -877 (-8.7\%) |
|  | BN | -161 (-1.9\%) | 19 (0.2\%) |
|  | D | -426 (-5.8\%) | -225 (-3.2\%) |
|  | C | -23 (-0.4\%) | 172 (3.2\%) |
|  | All | -448 (-3.7\%) | 95 (0.8\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.8.1.3 Sacramento River at Wilkins Slough

Table 5. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 8: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 19,145 | 19,320 | 19,354 |
|  | AN | 17,084 | 16,593 | 17,068 |
|  | BN | 12,521 | 12,143 | 12,867 |
|  | D | 8,896 | 9,189 | 8,684 |
|  | C | 7,858 | 8,586 | 7,745 |
|  | All | 13,811 | 13,901 | 13,871 |
| FEB | W | 19,887 | 20,044 | 20,018 |
|  | AN | 19,139 | 19,095 | 19,501 |
|  | BN | 14,528 | 14,328 | 14,662 |
|  | D | 11,520 | 11,473 | 11,935 |
|  | C | 8,499 | 8,158 | 8,783 |
|  | All | 15,359 | 15,309 | 15,609 |
| MAR | W | 18,223 | 18,323 | 18,359 |
|  | AN | 17,696 | 17,537 | 17,722 |
|  | BN | 12,208 | 11,534 | 12,109 |
|  | D | 11,364 | 11,191 | 12,705 |
|  | C | 8,101 | 8,166 | 8,345 |
|  | All | 14,132 | 13,997 | 14,492 |
| APR | W | 13,392 | 13,119 | 13,525 |
|  | AN | 10,264 | 9,783 | 11,611 |
|  | BN | 7,152 | 6,858 | 9,518 |
|  | D | 5,319 | 5,112 | 6,845 |
|  | C | 4,164 | 4,331 | 4,064 |
|  | All | 8,746 | 8,518 | 9,710 |
| MAY | W | 10,467 | 8,435 | 9,872 |
|  | AN | 7,318 | 7,500 | 10,170 |
|  | BN | 5,638 | 4,871 | 6,754 |
|  | D | 4,669 | 5,088 | 4,985 |
|  | C | 3,998 | 4,528 | 4,942 |
|  | All | 6,962 | 6,383 | 7,589 |
| JUN | W | 6,503 | 6,435 | 8,116 |
|  | AN | 5,781 | 6,530 | 7,682 |
|  | BN | 5,243 | 5,628 | 5,727 |
|  | D | 5,245 | 6,075 | 5,095 |
|  | C | 5,140 | 6,253 | 6,898 |
|  | All | 5,707 | 6,205 | 6,803 |
| JUL | W | 6,685 | 7,771 | 7,182 |
|  | AN | 6,971 | 7,892 | 6,373 |
|  | BN | 6,122 | 6,560 | 5,020 |
|  | D | 6,788 | 7,474 | 6,628 |
|  | C | 7,162 | 6,649 | 6,710 |
|  | All | 6,723 | 7,353 | 6,504 |


| Alternative 8: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AU | W | 6,287 | 5,537 | 5,219 |
|  | AN | 5,498 | 6,610 | 4,684 |
|  | BN | 5,138 | 5,462 | 3,981 |
|  | D | 5,833 | 6,356 | 5,667 |
|  | C | 5,551 | 4,719 | 5,650 |
|  | All | 5,768 | 5,741 | 5,091 |
| SEP | W | 9,338 | 12,737 | 11,701 |
|  | AN | 5,631 | 9,546 | 7,878 |
|  | BN | 5,128 | 5,216 | 3,738 |
|  | D | 5,636 | 4,114 | 3,657 |
|  | C | 5,200 | 4,354 | 4,383 |
|  | All | 6,658 | 7,866 | 6,945 |
| OCT | W | 7,347 | 7,382 | 6,255 |
|  | AN | 6,799 | 6,927 | 5,983 |
|  | BN | 5,987 | 6,570 | 4,743 |
|  | D | 5,688 | 6,040 | 5,223 |
|  | C | 5,642 | 5,572 | 4,183 |
|  | All | 6,421 | 6,617 | 5,428 |
| NOV | W | 9,644 | 10,889 | 9,486 |
|  | AN | 8,210 | 9,141 | 7,572 |
|  | BN | 6,793 | 7,588 | 6,450 |
|  | D | 7,407 | 7,227 | 6,477 |
|  | C | 5,118 | 4,986 | 4,820 |
|  | All | 7,794 | 8,402 | 7,344 |
| DEC | W | 17,881 | 17,257 | 17,382 |
|  | AN | 10,809 | 10,755 | 10,438 |
|  | BN | 8,505 | 8,258 | 8,159 |
|  | D | 8,950 | 8,725 | 8,463 |
|  | C | 6,229 | 5,981 | 6,077 |
|  | All | 11,580 | 11,246 | 11,179 |

Table 6. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 8: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 209 (1.1\%) | 33 (0.2\%) |
|  | AN | -16 (-0.1\%) | 475 (2.9\%) |
|  | BN | 346 (2.8\%) | 724 (6\%) |
|  | D | -212 (-2.4\%) | -505 (-5.5\%) |
|  | C | -112 (-1.4\%) | -840 (-9.8\%) |
|  | All | 60 (0.4\%) | -30 (-0.2\%) |
| FEB | W | 130 (0.7\%) | -27 (-0.1\%) |
|  | AN | 362 (1.9\%) | 406 (2.1\%) |
|  | BN | 134 (0.9\%) | 334 (2.3\%) |
|  | D | 416 (3.6\%) | 462 (4\%) |
|  | C | 285 (3.3\%) | 625 (7.7\%) |
|  | All | 250 (1.6\%) | 301 (2\%) |
| MAR | W | 137 (0.8\%) | 37 (0.2\%) |
|  | AN | 27 (0.2\%) | 186 (1.1\%) |
|  | BN | -99 (-0.8\%) | 575 (5\%) |
|  | D | 1,342 (11.8\%) | 1,515 (13.5\%) |
|  | C | 245 (3\%) | 180 (2.2\%) |
|  | All | 361 (2.6\%) | 496 (3.5\%) |
| APR | W | 133 (1\%) | 406 (3.1\%) |
|  | AN | 1,347 (13.1\%) | 1,828 (18.7\%) |
|  | BN | 2,365 (33.1\%) | 2,660 (38.8\%) |
|  | D | 1,525 (28.7\%) | 1,733 (33.9\%) |
|  | C | -99 (-2.4\%) | -266 (-6.1\%) |
|  | All | 964 (11\%) | 1,192 (14\%) |
| MAY | W | -595 (-5.7\%) | 1,436 (17\%) |
|  | AN | 2,852 (39\%) | 2,670 (35.6\%) |
|  | BN | 1,116 (19.8\%) | 1,883 (38.7\%) |
|  | D | 316 (6.8\%) | -103 (-2\%) |
|  | C | 943 (23.6\%) | 413 (9.1\%) |
|  | All | 627 (9\%) | 1,206 (18.9\%) |
| JUN | W | 1,612 (24.8\%) | 1,681 (26.1\%) |
|  | AN | 1,901 (32.9\%) | 1,152 (17.6\%) |
|  | BN | 485 (9.2\%) | 99 (1.8\%) |
|  | D | -150 (-2.9\%) | -980 (-16.1\%) |
|  | C | 1,757 (34.2\%) | 645 (10.3\%) |
|  | All | 1,096 (19.2\%) | 598 (9.6\%) |
| JUL | W | 497 (7.4\%) | -589 (-7.6\%) |
|  | AN | -598 (-8.6\%) | -1,519 (-19.2\%) |
|  | BN | -1,102 (-18\%) | -1,540 (-23.5\%) |
|  | D | -160 (-2.4\%) | -847 (-11.3\%) |
|  | C | -452 (-6.3\%) | 60 (0.9\%) |
|  | All | -219 (-3.3\%) | -849 (-11.5\%) |


| Alternative 8: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -1,068 (-17\%) | -318 (-5.7\%) |
|  | AN | -815 (-14.8\%) | -1,927 (-29.1\%) |
|  | BN | -1,156 (-22.5\%) | -1,481 (-27.1\%) |
|  | D | -166 (-2.8\%) | -689 (-10.8\%) |
|  | C | 98 (1.8\%) | 930 (19.7\%) |
|  | All | -677 (-11.7\%) | -650 (-11.3\%) |
| SEP | W | 2,363 (25.3\%) | -1,036 (-8.1\%) |
|  | AN | 2,246 (39.9\%) | -1,668 (-17.5\%) |
|  | BN | -1,389 (-27.1\%) | -1,477 (-28.3\%) |
|  | D | -1,979 (-35.1\%) | -457 (-11.1\%) |
|  | C | -817 (-15.7\%) | 29 (0.7\%) |
|  | All | 287 (4.3\%) | -921 (-11.7\%) |
| OCT | W | -1,091 (-14.9\%) | -1,126 (-15.3\%) |
|  | AN | -816 (-12\%) | -944 (-13.6\%) |
|  | BN | -1,244 (-20.8\%) | -1,827 (-27.8\%) |
|  | D | -465 (-8.2\%) | -817 (-13.5\%) |
|  | C | -1,458 (-25.9\%) | -1,389 (-24.9\%) |
|  | All | -993 (-15.5\%) | -1,190 (-18\%) |
| NOV | W | -158 (-1.6\%) | -1,403 (-12.9\%) |
|  | AN | -638 (-7.8\%) | -1,569 (-17.2\%) |
|  | BN | -342 (-5\%) | -1,138 (-15\%) |
|  | D | -930 (-12.6\%) | -750 (-10.4\%) |
|  | C | -298 (-5.8\%) | -166 (-3.3\%) |
|  | All | -450 (-5.8\%) | -1,058 (-12.6\%) |
| DEC | W | -499 (-2.8\%) | 125 (0.7\%) |
|  | AN | -371 (-3.4\%) | -317 (-2.9\%) |
|  | BN | -346 (-4.1\%) | -99 (-1.2\%) |
|  | D | -487 (-5.4\%) | -262 (-3\%) |
|  | C | -151 (-2.4\%) | 96 (1.6\%) |
|  | All | -401 (-3.5\%) | -67 (-0.6\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.8.1.4 Sacramento River at Verona

Table 7. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 8: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 44,589 | 45,567 | 45,486 |
|  | AN | 34,120 | 33,671 | 34,145 |
|  | BN | 20,175 | 19,121 | 19,745 |
|  | D | 14,756 | 14,782 | 14,534 |
|  | C | 12,085 | 13,051 | 11,774 |
|  | All | 27,583 | 27,795 | 27,704 |
| FEB | W | 49,892 | 51,326 | 49,945 |
|  | AN | 39,162 | 39,749 | 40,478 |
|  | BN | 26,429 | 25,341 | 26,177 |
|  | D | 18,402 | 18,090 | 20,375 |
|  | C | 12,822 | 12,325 | 13,627 |
|  | All | 31,979 | 32,192 | 32,696 |
| MAR | W | 43,455 | 44,624 | 42,619 |
|  | AN | 39,477 | 39,687 | 38,706 |
|  | BN | 21,484 | 19,448 | 21,736 |
|  | D | 17,868 | 17,649 | 21,381 |
|  | C | 11,903 | 11,789 | 13,404 |
|  | All | 28,888 | 28,877 | 29,544 |
| APR | W | 32,219 | 31,636 | 34,666 |
|  | AN | 22,250 | 21,313 | 27,482 |
|  | BN | 14,459 | 13,857 | 21,969 |
|  | D | 11,113 | 10,903 | 16,125 |
|  | C | 9,420 | 9,489 | 10,345 |
|  | All | 19,759 | 19,298 | 23,818 |
| MAY | W | 26,193 | 20,229 | 26,022 |
|  | AN | 17,079 | 16,002 | 21,783 |
|  | BN | 11,451 | 10,534 | 15,829 |
|  | D | 9,283 | 9,841 | 11,177 |
|  | C | 7,125 | 7,611 | 8,816 |
|  | All | 15,840 | 13,828 | 17,885 |
| JUN | W | 18,367 | 15,304 | 17,196 |
|  | AN | 13,590 | 13,574 | 13,497 |
|  | BN | 11,062 | 11,320 | 10,488 |
|  | D | 10,429 | 10,780 | 8,835 |
|  | C | 8,911 | 9,827 | 10,219 |
|  | All | 13,295 | 12,576 | 12,653 |
| JUL | W | 16,253 | 17,965 | 11,831 |
|  | AN | 17,488 | 18,338 | 10,123 |
|  | BN | 16,698 | 16,598 | 8,367 |
|  | D | 16,352 | 16,465 | 9,540 |
|  | C | 14,476 | 12,457 | 10,478 |
|  | All | 16,271 | 16,651 | 10,289 |


| Alternative 8: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 12,464 | 14,016 | 9,152 |
|  | AN | 13,691 | 15,828 | 8,840 |
|  | BN | 13,389 | 14,074 | 7,561 |
|  | D | 14,688 | 13,018 | 9,061 |
|  | C | 9,207 | 8,085 | 8,744 |
|  | All | 12,813 | 13,204 | 8,755 |
| SEP | W | 14,279 | 23,592 | 17,947 |
|  | AN | 10,537 | 19,044 | 12,403 |
|  | BN | 9,961 | 10,576 | 7,037 |
|  | D | 10,542 | 7,664 | 6,970 |
|  | C | 7,764 | 6,832 | 6,800 |
|  | All | 11,220 | 14,755 | 11,232 |
| OCT | W | 11,503 | 11,232 | 9,087 |
|  | AN | 9,381 | 9,890 | 8,314 |
|  | BN | 9,867 | 10,146 | 7,336 |
|  | D | 8,681 | 8,989 | 7,362 |
|  | C | 8,543 | 8,104 | 5,983 |
|  | All | 9,861 | 9,900 | 7,842 |
| NOV | W | 15,307 | 15,754 | 14,069 |
|  | AN | 11,792 | 12,817 | 10,883 |
|  | BN | 9,852 | 10,437 | 8,905 |
|  | D | 10,157 | 9,731 | 8,928 |
|  | C | 7,341 | 7,223 | 6,616 |
|  | All | 11,565 | 11,846 | 10,502 |
| DEC | W | 33,840 | 31,254 | 29,865 |
|  | AN | 17,572 | 18,481 | 15,611 |
|  | BN | 13,099 | 13,028 | 12,040 |
|  | D | 12,685 | 12,532 | 11,294 |
|  | C | 9,770 | 8,627 | 8,293 |
|  | All | 19,752 | 18,852 | 17,502 |

Table 8. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 8: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 897 (2\%) | -81 (-0.2\%) |
|  | AN | 24 (0.1\%) | 473 (1.4\%) |
|  | BN | -430 (-2.1\%) | 625 (3.3\%) |
|  | D | -222 (-1.5\%) | -248 (-1.7\%) |
|  | C | -311 (-2.6\%) | -1,277 (-9.8\%) |
|  | All | 120 (0.4\%) | -91 (-0.3\%) |
| FEB | W | 53 (0.1\%) | -1,381 (-2.7\%) |
|  | AN | 1,316 (3.4\%) | 729 (1.8\%) |
|  | BN | -252 (-1\%) | 837 (3.3\%) |
|  | D | 1,973 (10.7\%) | 2,285 (12.6\%) |
|  | C | 806 (6.3\%) | 1,302 (10.6\%) |
|  | All | 717 (2.2\%) | 504 (1.6\%) |
| MAR | W | -836 (-1.9\%) | -2,005 (-4.5\%) |
|  | AN | -771 (-2\%) | -981 (-2.5\%) |
|  | BN | 252 (1.2\%) | 2,288 (11.8\%) |
|  | D | 3,513 (19.7\%) | 3,732 (21.1\%) |
|  | C | 1,501 (12.6\%) | 1,615 (13.7\%) |
|  | All | 656 (2.3\%) | 667 (2.3\%) |
| APR | W | 2,447 (7.6\%) | 3,030 (9.6\%) |
|  | AN | 5,232 (23.5\%) | 6,169 (28.9\%) |
|  | BN | 7,510 (51.9\%) | 8,112 (58.5\%) |
|  | D | 5,012 (45.1\%) | 5,222 (47.9\%) |
|  | C | 924 (9.8\%) | 855 (9\%) |
|  | All | 4,059 (20.5\%) | 4,520 (23.4\%) |
| MAY | W | -172 (-0.7\%) | 5,793 (28.6\%) |
|  | AN | 4,703 (27.5\%) | 5,781 (36.1\%) |
|  | BN | 4,377 (38.2\%) | 5,294 (50.3\%) |
|  | D | 1,894 (20.4\%) | 1,336 (13.6\%) |
|  | C | 1,691 (23.7\%) | 1,205 (15.8\%) |
|  | All | 2,044 (12.9\%) | 4,056 (29.3\%) |
| JUN | W | -1,171 (-6.4\%) | 1,892 (12.4\%) |
|  | AN | -93 (-0.7\%) | -77 (-0.6\%) |
|  | BN | -575 (-5.2\%) | -833 (-7.4\%) |
|  | D | -1,593 (-15.3\%) | -1,945 (-18\%) |
|  | C | 1,308 (14.7\%) | 392 (4\%) |
|  | All | -641 (-4.8\%) | 77 (0.6\%) |
| JUL | W | -4,421 (-27.2\%) | -6,134 (-34.1\%) |
|  | AN | -7,365 (-42.1\%) | -8,215 (-44.8\%) |
|  | BN | -8,331 (-49.9\%) | -8,231 (-49.6\%) |
|  | D | -6,813 (-41.7\%) | -6,926 (-42.1\%) |
|  | C | -3,997 (-27.6\%) | -1,979 (-15.9\%) |
|  | All | -5,982 (-36.8\%) | -6,362 (-38.2\%) |


| Alternative 8: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8 LLT | NAA vs. A8_LLT |
| AUG | W | -3,312 (-26.6\%) | -4,864 (-34.7\%) |
|  | AN | -4,851 (-35.4\%) | -6,988 (-44.1\%) |
|  | BN | -5,828 (-43.5\%) | -6,513 (-46.3\%) |
|  | D | -5,626 (-38.3\%) | -3,956 (-30.4\%) |
|  | C | -463 (-5\%) | 659 (8.2\%) |
|  | All | -4,058 (-31.7\%) | -4,449 (-33.7\%) |
| SEP | W | 3,668 (25.7\%) | -5,645 (-23.9\%) |
|  | AN | 1,867 (17.7\%) | -6,640 (-34.9\%) |
|  | BN | -2,924 (-29.4\%) | -3,539 (-33.5\%) |
|  | D | -3,572 (-33.9\%) | -694 (-9\%) |
|  | C | -964 (-12.4\%) | -32 (-0.5\%) |
|  | All | 12 (0.1\%) | -3,523 (-23.9\%) |
| OCT | W | -2,417 (-21\%) | -2,145 (-19.1\%) |
|  | AN | -1,067 (-11.4\%) | -1,576 (-15.9\%) |
|  | BN | -2,531 (-25.7\%) | -2,810 (-27.7\%) |
|  | D | -1,319 (-15.2\%) | -1,627 (-18.1\%) |
|  | C | -2,561 (-30\%) | -2,121 (-26.2\%) |
|  | All | -2,019 (-20.5\%) | -2,058 (-20.8\%) |
| NOV | W | -1,237 (-8.1\%) | -1,685 (-10.7\%) |
|  | AN | -909 (-7.7\%) | -1,934 (-15.1\%) |
|  | BN | -947 (-9.6\%) | -1,533 (-14.7\%) |
|  | D | -1,228 (-12.1\%) | -803 (-8.2\%) |
|  | C | -725 (-9.9\%) | -607 (-8.4\%) |
|  | All | -1,063 (-9.2\%) | -1,344 (-11.3\%) |
| DEC | W | -3,976 (-11.7\%) | -1,390 (-4.4\%) |
|  | AN | -1,961 (-11.2\%) | -2,870 (-15.5\%) |
|  | BN | -1,059 (-8.1\%) | -987 (-7.6\%) |
|  | D | -1,391 (-11\%) | -1,238 (-9.9\%) |
|  | C | -1,477 (-15.1\%) | -334 (-3.9\%) |
|  | All | -2,250 (-11.4\%) | -1,350 (-7.2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.8.1.5 Trinity River below Lewiston

Table 9. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 8: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 1,440 | 1,518 | 1,641 |
|  | AN | 300 | 300 | 300 |
|  | BN | 358 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 287 | 277 |
|  | All | 671 | 684 | 722 |
| FEB | W | 1,056 | 1,495 | 1,765 |
|  | AN | 689 | 784 | 748 |
|  | BN | 517 | 568 | 563 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 634 | 795 | 875 |
| MAR | W | 1,209 | 1,385 | 1,585 |
|  | AN | 436 | 519 | 519 |
|  | BN | 319 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 611 | 676 | 740 |
| APR | W | 721 | 844 | 844 |
|  | AN | 469 | 513 | 458 |
|  | BN | 507 | 504 | 504 |
|  | D | 529 | 529 | 529 |
|  | C | 575 | 580 | 580 |
|  | All | 584 | 630 | 622 |
| MAY | W | 4,636 | 4,620 | 4,620 |
|  | AN | 4,462 | 4,416 | 4,416 |
|  | BN | 3,774 | 3,865 | 3,865 |
|  | D | 3,216 | 3,216 | 3,216 |
|  | C | 2,092 | 1,973 | 1,973 |
|  | All | 3,779 | 3,766 | 3,766 |
| JUN | W | 3,371 | 3,560 | 3,560 |
|  | AN | 2,488 | 3,188 | 3,188 |
|  | BN | 1,672 | 1,767 | 1,767 |
|  | D | 1,251 | 1,251 | 1,251 |
|  | C | 783 | 783 | 783 |
|  | All | 2,108 | 2,286 | 2,286 |
| JUL | W | 1,289 | 1,103 | 1,103 |
|  | AN | 1,048 | 1,048 | 1,048 |
|  | BN | 869 | 916 | 916 |
|  | D | 667 | 667 | 667 |
|  | C | 450 | 413 | 450 |
|  | All | 923 | 866 | 872 |


| Alternative 8: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 338 | 263 |
|  | All | 450 | 434 | 423 |
| SEP | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 265 | 267 |
|  | All | 450 | 423 | 423 |
| OCT | W | 373 | 373 | 373 |
|  | AN | 373 | 311 | 314 |
|  | BN | 346 | 346 | 346 |
|  | D | 373 | 346 | 352 |
|  | C | 373 | 311 | 280 |
|  | All | 368 | 344 | 342 |
| NOV | W | 489 | 414 | 300 |
|  | AN | 300 | 275 | 275 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 283 | 283 |
|  | C | 300 | 225 | 216 |
|  | All | 360 | 318 | 280 |
| DEC | W | 1,072 | 837 | 923 |
|  | AN | 300 | 300 | 300 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 300 | 297 |
|  | C | 300 | 275 | 247 |
|  | All | 545 | 466 | 489 |

Table 10. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 8: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 201 (14\%) | 122 (8.1\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | -58 (-16.3\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -23 (-7.6\%) | -10 (-3.5\%) |
|  | All | 50 (7.5\%) | 37 (5.5\%) |
| FEB | W | 709 (67.1\%) | 270 (18.1\%) |
|  | AN | 59 (8.6\%) | -35 (-4.5\%) |
|  | BN | 46 (8.9\%) | -5 (-1\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 241 (38.1\%) | 80 (10\%) |
| MAR | W | 376 (31.1\%) | 200 (14.4\%) |
|  | AN | 83 (19.1\%) | 0 (0\%) |
|  | BN | -19 (-5.8\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 128 (21\%) | 63 (9.4\%) |
| APR | W | 122 (17\%) | 0 (0\%) |
|  | AN | -11 (-2.3\%) | -54 (-10.6\%) |
|  | BN | -3 (-0.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 5 (0.9\%) | 0 (0\%) |
|  | All | 37 (6.4\%) | -8 (-1.3\%) |
| MAY | W | -16 (-0.3\%) | 0 (0\%) |
|  | AN | -46 (-1\%) | 0 (0\%) |
|  | BN | 90 (2.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -119 (-5.7\%) | 0 (0\%) |
|  | All | -14 (-0.4\%) | 0 (0\%) |
| JUN | W | 189 (5.6\%) | 0 (0\%) |
|  | AN | 700 (28.1\%) | 0 (0\%) |
|  | BN | 96 (5.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 179 (8.5\%) | 0 (0\%) |
| JUL | W | -185 (-14.4\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 47 (5.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 37 (9.1\%) |
|  | All | -51 (-5.5\%) | 5 (0.6\%) |


| Alternative 8: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -187 (-41.7\%) | -75 (-22.2\%) |
|  | All | -27 (-6.1\%) | -11 (-2.5\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -183 (-40.7\%) | 2 (0.7\%) |
|  | All | -27 (-5.9\%) | 0 (0.1\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | -59 (-15.9\%) | 3 (1\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -21 (-5.6\%) | 6 (1.9\%) |
|  | C | -93 (-25\%) | -31 (-10\%) |
|  | All | -27 (-7.3\%) | -3 (-0.8\%) |
| NOV | W | -189 (-38.6\%) | -114 (-27.5\%) |
|  | AN | -25 (-8.3\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -17 (-5.6\%) | 0 (0\%) |
|  | C | -84 (-28\%) | -9 (-3.9\%) |
|  | All | -79 (-22.1\%) | -37 (-11.8\%) |
| DEC | W | -149 (-13.9\%) | 86 (10.3\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -3 (-1.1\%) | -3 (-1.1\%) |
|  | C | -53 (-17.8\%) | -28 (-10.2\%) |
|  | All | -56 (-10.2\%) | 22 (4.8\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.8.1.6 Clear Creek below Whiskeytown

Table 11. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 8: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 220 | 339 | 339 |
|  | AN | 192 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 159 | 167 |
|  | All | 193 | 233 | 234 |
| FEB | W | 220 | 257 | 239 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 168 | 162 |
|  | All | 194 | 209 | 203 |
| MAR | W | 200 | 259 | 258 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 202 | 189 |
|  | D | 186 | 192 | 192 |
|  | C | 155 | 168 | 154 |
|  | All | 188 | 212 | 208 |
| APR | W | 200 | 200 | 200 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 188 | 192 | 192 |
|  | C | 155 | 168 | 154 |
|  | All | 189 | 191 | 189 |
| MAY | W | 277 | 277 | 277 |
|  | AN | 277 | 277 | 277 |
|  | BN | 263 | 269 | 269 |
|  | D | 264 | 264 | 264 |
|  | C | 211 | 224 | 220 |
|  | All | 262 | 265 | 265 |
| JUN | W | 200 | 200 | 200 |
|  | AN | 200 | 200 | 228 |
|  | BN | 181 | 186 | 186 |
|  | D | 180 | 180 | 180 |
|  | C | 115 | 131 | 120 |
|  | All | 180 | 183 | 186 |
| JUL | W | 85 | 85 | 106 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 85 | 85 | 85 |
|  | All | 85 | 85 | 92 |


| Alternative 8: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 85 | 85 | 91 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 94 | 71 | 78 |
|  | All | 86 | 83 | 86 |
| SEP | W | 150 | 150 | 151 |
|  | AN | 150 | 150 | 150 |
|  | BN | 150 | 150 | 150 |
|  | D | 144 | 150 | 150 |
|  | C | 133 | 96 | 108 |
|  | All | 146 | 142 | 144 |
| OCT | W | 198 | 198 | 198 |
|  | AN | 183 | 183 | 183 |
|  | BN | 189 | 182 | 189 |
|  | D | 175 | 183 | 175 |
|  | C | 150 | 142 | 167 |
|  | All | 182 | 182 | 185 |
| NOV | W | 198 | 198 | 198 |
|  | AN | 185 | 182 | 182 |
|  | BN | 184 | 189 | 189 |
|  | D | 177 | 177 | 176 |
|  | C | 155 | 145 | 162 |
|  | All | 183 | 182 | 184 |
| DEC | W | 198 | 198 | 201 |
|  | AN | 185 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 177 | 189 | 189 |
|  | C | 155 | 156 | 148 |
|  | All | 184 | 187 | 187 |

Table 12. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 8: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{gathered} \text { EXISTING CONDITIONS } \\ \text { vs. A8_LLT } \end{gathered}$ | NAA vs. A8_LLT |
| JAN | W | 118 (53.7\%) | 0 (0\%) |
|  | AN | 0 (-0.1\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 12 (7.4\%) | 7 (4.7\%) |
|  | All | 41 (21.1\%) | 1 (0.4\%) |
| FEB | W | 20 (8.9\%) | -18 (-7.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 7 (4.8\%) | -6 (-3.4\%) |
|  | All | 9 (4.5\%) | -7 (-3.1\%) |
| MAR | W | 58 (29.2\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | -12 (-6.1\%) |
|  | D | 6 (3.2\%) | 0 (0\%) |
|  | C | -1 (-0.6\%) | -14 (-8.3\%) |
|  | All | 20 (10.4\%) | -4 (-2\%) |
| APR | W | 0 (0\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 3 (1.7\%) | 0 (0\%) |
|  | C | -1 (-0.6\%) | -14 (-8.3\%) |
|  | All | 0 (0.2\%) | -2 (-1.1\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 6 (2.2\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 10 (4.5\%) | -4 (-1.6\%) |
|  | All | 2 (0.9\%) | -1 (-0.2\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 28 (14.2\%) | 28 (14.2\%) |
|  | BN | 5 (2.6\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 5 (4.7\%) | -11 (-8.2\%) |
|  | All | 6 (3.2\%) | 3 (1.4\%) |
| JUL | W | 21 (24.9\%) | 21 (24.9\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 7 (7.9\%) | 7 (7.9\%) |


| Alternative 8: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | 6 (7.4\%) | 6 (7.4\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -16 (-17.4\%) | 7 (10\%) |
|  | All | 0 (-0.5\%) | 3 (3.7\%) |
| SEP | W | 1 (0.4\%) | 1 (0.4\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 6 (3.8\%) | 0 (0\%) |
|  | C | -25 (-18.7\%) | 12 (13\%) |
|  | All | -2 (-1.5\%) | 2 (1.4\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 7 (4.1\%) |
|  | D | 0 (0\%) | -8 (-4.5\%) |
|  | C | 17 (11.1\%) | 25 (17.6\%) |
|  | All | 2 (1.3\%) | 3 (1.7\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | -3 (-1.8\%) | 0 (0\%) |
|  | BN | 6 (3.1\%) | 0 (0\%) |
|  | D | -1 (-0.6\%) | 0 (-0.2\%) |
|  | C | 7 (4.6\%) | 17 (11.5\%) |
|  | All | 1 (0.7\%) | 2 (1.3\%) |
| DEC | W | 3 (1.6\%) | 3 (1.6\%) |
|  | AN | 7 (3.6\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 12 (6.6\%) | 0 (0\%) |
|  | C | -7 (-4.7\%) | -8 (-5.2\%) |
|  | All | 3 (1.9\%) | 0 (-0.1\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.8.1.7 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

Table 13. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 8: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| FEB | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| MAR | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| APR | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| MAY | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUN | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUL | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |


| Alternative 8: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| SEP | W | 773 | 773 | 773 |
|  | AN | 773 | 773 | 773 |
|  | BN | 773 | 773 | 773 |
|  | D | 773 | 773 | 772 |
|  | C | 773 | 773 | 773 |
|  | All | 773 | 773 | 773 |
| OCT | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| NOV | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| DEC | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |

Table 14. Differences (Percent Differences) between Pairs of Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 8: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{c}\text { EXISTING CONDITIONS } \\ \text { vs. A8_LLT }\end{array}$ | NAA vs. A8_LLT |  |  |  |$]$


| Alternative 8: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | -1 (0.2\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |

## 11C.8.1.8 Feather River High-Flow Channel (at Thermalito Afterbay)

Table 15. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 8: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 11,257 | 11,896 | 15,693 |
|  | AN | 4,434 | 2,838 | 6,555 |
|  | BN | 2,640 | 1,441 | 3,568 |
|  | D | 1,798 | 1,459 | 2,626 |
|  | C | 1,459 | 1,648 | 1,711 |
|  | All | 5,277 | 4,995 | 7,371 |
| FEB | W | 12,466 | 14,787 | 15,609 |
|  | AN | 7,411 | 5,809 | 10,262 |
|  | BN | 3,916 | 1,897 | 5,745 |
|  | D | 1,817 | 1,659 | 5,295 |
|  | C | 1,610 | 1,482 | 2,733 |
|  | All | 6,340 | 6,444 | 8,994 |
| MAR | W | 12,895 | 14,772 | 15,495 |
|  | AN | 7,733 | 8,568 | 10,896 |
|  | BN | 3,373 | 1,985 | 6,571 |
|  | D | 2,017 | 1,762 | 6,545 |
|  | C | 1,697 | 1,634 | 3,365 |
|  | All | 6,487 | 6,902 | 9,559 |
| APR | W | 6,472 | 6,408 | 10,993 |
|  | AN | 2,251 | 2,170 | 9,113 |
|  | BN | 1,205 | 1,203 | 8,015 |
|  | D | 1,286 | 1,470 | 5,647 |
|  | C | 1,389 | 1,407 | 2,630 |
|  | All | 3,073 | 3,084 | 7,812 |
| MAY | W | 7,528 | 4,740 | 9,237 |
|  | AN | 3,340 | 3,101 | 6,578 |
|  | BN | 1,205 | 1,749 | 5,348 |
|  | D | 1,591 | 2,223 | 3,539 |
|  | C | 1,574 | 1,790 | 2,332 |
|  | All | 3,661 | 3,005 | 5,922 |
| JUN | W | 5,062 | 4,211 | 4,456 |
|  | AN | 3,301 | 3,930 | 2,808 |
|  | BN | 2,707 | 3,552 | 2,456 |
|  | D | 3,134 | 3,284 | 2,032 |
|  | C | 2,695 | 2,666 | 2,232 |
|  | All | 3,632 | 3,628 | 3,016 |
| JUL | W | 6,490 | 8,577 | 3,245 |
|  | AN | 8,757 | 9,488 | 2,910 |
|  | BN | 8,981 | 8,833 | 2,168 |
|  | D | 8,294 | 8,099 | 1,931 |
|  | C | 6,703 | 5,217 | 2,948 |
|  | All | 7,674 | 8,157 | 2,680 |


| Alternative 8: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 3,308 | 6,228 | 2,046 |
|  | AN | 6,042 | 7,346 | 2,367 |
|  | BN | 6,295 | 6,868 | 1,994 |
|  | D | 7,036 | 4,990 | 1,724 |
|  | C | 2,613 | 2,163 | 1,668 |
|  | All | 4,935 | 5,634 | 1,958 |
| SEP | W | 2,280 | 8,327 | 3,680 |
|  | AN | 2,253 | 6,899 | 1,922 |
|  | BN | 2,466 | 3,068 | 1,044 |
|  | D | 2,366 | 1,052 | 984 |
|  | C | 1,421 | 1,345 | 1,193 |
|  | All | 2,201 | 4,601 | 2,017 |
| OCT | W | 3,456 | 3,051 | 2,021 |
|  | AN | 2,386 | 2,741 | 2,106 |
|  | BN | 3,183 | 2,862 | 1,899 |
|  | D | 2,688 | 2,652 | 1,834 |
|  | C | 2,472 | 2,102 | 1,355 |
|  | All | 2,940 | 2,747 | 1,874 |
| NOV | W | 3,292 | 2,470 | 1,934 |
|  | AN | 1,824 | 2,119 | 1,711 |
|  | BN | 2,101 | 1,900 | 1,496 |
|  | D | 1,859 | 1,664 | 1,580 |
|  | C | 1,854 | 1,876 | 1,405 |
|  | All | 2,349 | 2,058 | 1,671 |
| DEC | W | 7,157 | 3,948 | 5,338 |
|  | AN | 2,951 | 3,344 | 1,655 |
|  | BN | 2,176 | 2,102 | 1,429 |
|  | D | 2,364 | 2,229 | 1,567 |
|  | C | 2,609 | 1,694 | 1,299 |
|  | All | 3,973 | 2,837 | 2,713 |

Table 16. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 8: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 4,436 (39.4\%) | 3,798 (31.9\%) |
|  | AN | 2,121 (47.8\%) | 3,717 (131\%) |
|  | BN | 928 (35.2\%) | 2,127 (147.6\%) |
|  | D | 827 (46\%) | 1,167 (80\%) |
|  | C | 251 (17.2\%) | 63 (3.8\%) |
|  | All | 2,094 (39.7\%) | 2,376 (47.6\%) |
| FEB | W | 3,143 (25.2\%) | 822 (5.6\%) |
|  | AN | 2,851 (38.5\%) | 4,453 (76.7\%) |
|  | BN | 1,829 (46.7\%) | 3,848 (202.9\%) |
|  | D | 3,479 (191.5\%) | 3,636 (219.1\%) |
|  | C | 1,122 (69.7\%) | 1,251 (84.4\%) |
|  | All | 2,654 (41.9\%) | 2,551 (39.6\%) |
| MAR | W | 2,601 (20.2\%) | 723 (4.9\%) |
|  | AN | 3,163 (40.9\%) | 2,328 (27.2\%) |
|  | BN | 3,198 (94.8\%) | 4,587 (231.1\%) |
|  | D | 4,528 (224.5\%) | 4,783 (271.5\%) |
|  | C | 1,668 (98.3\%) | 1,731 (106\%) |
|  | All | 3,071 (47.3\%) | 2,656 (38.5\%) |
| APR | W | 4,520 (69.8\%) | 4,584 (71.5\%) |
|  | AN | 6,862 (304.8\%) | 6,943 (319.9\%) |
|  | BN | 6,810 (565.3\%) | 6,811 (566.1\%) |
|  | D | 4,361 (339.1\%) | 4,177 (284.1\%) |
|  | C | 1,241 (89.4\%) | 1,223 (86.9\%) |
|  | All | 4,739 (154.2\%) | 4,728 (153.3\%) |
| MAY | W | 1,709 (22.7\%) | 4,497 (94.9\%) |
|  | AN | 3,238 (96.9\%) | 3,476 (112.1\%) |
|  | BN | 4,142 (343.7\%) | 3,599 (205.8\%) |
|  | D | 1,947 (122.4\%) | 1,315 (59.2\%) |
|  | C | 758 (48.2\%) | 543 (30.3\%) |
|  | All | 2,261 (61.8\%) | 2,917 (97.1\%) |
| JUN | W | -605 (-12\%) | 246 (5.8\%) |
|  | AN | -493 (-14.9\%) | -1,122 (-28.5\%) |
|  | BN | -250 (-9.2\%) | -1,095 (-30.8\%) |
|  | D | -1,101 (-35.1\%) | -1,251 (-38.1\%) |
|  | C | -463 (-17.2\%) | -434 (-16.3\%) |
|  | All | -616 (-17\%) | -612 (-16.9\%) |
| JUL | W | -3,246 (-50\%) | -5,333 (-62.2\%) |
|  | AN | -5,847 (-66.8\%) | -6,578 (-69.3\%) |
|  | BN | -6,813 (-75.9\%) | -6,664 (-75.5\%) |
|  | D | -6,363 (-76.7\%) | -6,168 (-76.2\%) |
|  | C | -3,755 (-56\%) | -2,269 (-43.5\%) |
|  | All | -4,994 (-65.1\%) | -5,477 (-67.1\%) |


| Alternative 8: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -1,262 (-38.2\%) | -4,182 (-67.2\%) |
|  | AN | -3,675 (-60.8\%) | -4,978 (-67.8\%) |
|  | BN | -4,301 (-68.3\%) | -4,874 (-71\%) |
|  | D | -5,313 (-75.5\%) | -3,267 (-65.5\%) |
|  | C | -945 (-36.2\%) | -495 (-22.9\%) |
|  | All | -2,977 (-60.3\%) | -3,676 (-65.2\%) |
| SEP | W | 1,400 (61.4\%) | -4,647 (-55.8\%) |
|  | AN | -330 (-14.7\%) | -4,977 (-72.1\%) |
|  | BN | -1,422 (-57.7\%) | -2,024 (-66\%) |
|  | D | -1,382 (-58.4\%) | -68 (-6.5\%) |
|  | C | -228 (-16\%) | -152 (-11.3\%) |
|  | All | -184 (-8.4\%) | -2,584 (-56.2\%) |
| OCT | W | -1,435 (-41.5\%) | -1,030 (-33.8\%) |
|  | AN | -280 (-11.7\%) | -635 (-23.2\%) |
|  | BN | -1,284 (-40.3\%) | -963 (-33.6\%) |
|  | D | -855 (-31.8\%) | -819 (-30.9\%) |
|  | C | -1,116 (-45.2\%) | -747 (-35.5\%) |
|  | All | -1,066 (-36.3\%) | -873 (-31.8\%) |
| NOV | W | -1,358 (-41.3\%) | -536 (-21.7\%) |
|  | AN | -113 (-6.2\%) | -409 (-19.3\%) |
|  | BN | -606 (-28.8\%) | -405 (-21.3\%) |
|  | D | -279 (-15\%) | -84 (-5\%) |
|  | C | -449 (-24.2\%) | -470 (-25.1\%) |
|  | All | -678 (-28.8\%) | -386 (-18.8\%) |
| DEC | W | -1,819 (-25.4\%) | 1,390 (35.2\%) |
|  | AN | -1,295 (-43.9\%) | -1,688 (-50.5\%) |
|  | BN | -747 (-34.3\%) | -673 (-32\%) |
|  | D | -796 (-33.7\%) | -662 (-29.7\%) |
|  | C | -1,309 (-50.2\%) | -395 (-23.3\%) |
|  | All | -1,260 (-31.7\%) | -124 (-4.4\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.8.1.9 Feather River at Confluence with Sacramento River

Table 17. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 8: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 23,533 | 26,106 | 29,850 |
|  | AN | 12,430 | 11,953 | 15,646 |
|  | BN | 6,499 | 5,575 | 7,683 |
|  | D | 4,621 | 4,412 | 5,543 |
|  | C | 3,646 | 3,837 | 3,873 |
|  | All | 11,938 | 12,509 | 14,850 |
| FEB | W | 27,039 | 31,065 | 31,814 |
|  | AN | 14,818 | 14,599 | 18,989 |
|  | BN | 9,153 | 7,892 | 11,663 |
|  | D | 4,402 | 4,436 | 8,022 |
|  | C | 3,237 | 3,096 | 4,341 |
|  | All | 13,744 | 14,761 | 17,254 |
| MAR | W | 24,172 | 26,784 | 27,442 |
|  | AN | 19,990 | 21,490 | 23,746 |
|  | BN | 8,136 | 6,882 | 11,360 |
|  | D | 5,073 | 4,940 | 9,655 |
|  | C | 2,933 | 2,756 | 4,490 |
|  | All | 13,521 | 14,300 | 16,892 |
| APR | W | 15,897 | 15,852 | 20,381 |
|  | AN | 9,832 | 9,585 | 16,479 |
|  | BN | 5,401 | 5,189 | 11,910 |
|  | D | 4,152 | 4,137 | 8,251 |
|  | C | 3,298 | 3,185 | 4,358 |
|  | All | 8,796 | 8,689 | 13,356 |
| MAY | W | 14,387 | 10,385 | 14,811 |
|  | AN | 8,068 | 6,884 | 10,294 |
|  | BN | 4,704 | 4,509 | 8,010 |
|  | D | 3,652 | 3,767 | 5,028 |
|  | C | 2,389 | 2,321 | 2,837 |
|  | All | 7,697 | 6,237 | 9,089 |
| JUN | W | 10,222 | 7,199 | 7,350 |
|  | AN | 6,391 | 5,598 | 4,274 |
|  | BN | 4,495 | 4,342 | 3,133 |
|  | D | 3,853 | 3,367 | 2,037 |
|  | C | 2,782 | 2,522 | 1,907 |
|  | All | 6,197 | 4,951 | 4,217 |
| JUL | W | 8,177 | 8,734 | 3,091 |
|  | AN | 9,322 | 9,223 | 2,345 |
|  | BN | 9,380 | 8,725 | 1,787 |
|  | D | 8,290 | 7,674 | 1,260 |
|  | C | 6,450 | 4,891 | 2,460 |
|  | All | 8,322 | 8,009 | 2,265 |


| Alternative 8: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 4,923 | 7,222 | 2,529 |
|  | AN | 7,080 | 8,089 | 2,785 |
|  | BN | 7,236 | 7,570 | 2,256 |
|  | D | 7,711 | 5,487 | 1,966 |
|  | C | 2,841 | 2,340 | 1,872 |
|  | All | 5,941 | 6,313 | 2,300 |
| SEP | W | 4,351 | 10,329 | 5,652 |
|  | AN | 4,194 | 8,773 | 3,783 |
|  | BN | 4,252 | 4,786 | 2,755 |
|  | D | 4,179 | 2,848 | 2,619 |
|  | C | 2,054 | 1,964 | 1,847 |
|  | All | 3,937 | 6,289 | 3,661 |
| OCT | W | 4,176 | 3,746 | 2,746 |
|  | AN | 2,630 | 2,988 | 2,381 |
|  | BN | 3,754 | 3,437 | 2,491 |
|  | D | 3,033 | 2,987 | 2,195 |
|  | C | 2,938 | 2,566 | 1,848 |
|  | All | 3,446 | 3,243 | 2,397 |
| NOV | W | 4,697 | 3,825 | 3,286 |
|  | AN | 3,065 | 3,186 | 2,797 |
|  | BN | 2,687 | 2,455 | 2,079 |
|  | D | 2,342 | 2,125 | 2,073 |
|  | C | 2,084 | 2,107 | 1,674 |
|  | All | 3,216 | 2,873 | 2,506 |
| DEC | W | 12,409 | 10,246 | 11,595 |
|  | AN | 5,193 | 6,000 | 4,299 |
|  | BN | 3,079 | 3,249 | 2,534 |
|  | D | 2,838 | 2,811 | 2,110 |
|  | C | 2,975 | 2,054 | 1,657 |
|  | All | 6,279 | 5,599 | 5,444 |

Table 18. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 8: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 6,317 (26.8\%) | 3,744 (14.3\%) |
|  | AN | 3,216 (25.9\%) | 3,693 (30.9\%) |
|  | BN | 1,184 (18.2\%) | 2,108 (37.8\%) |
|  | D | 922 (19.9\%) | 1,131 (25.6\%) |
|  | C | 227 (6.2\%) | 37 (1\%) |
|  | All | 2,911 (24.4\%) | 2,341 (18.7\%) |
| FEB | W | 4,775 (17.7\%) | 749 (2.4\%) |
|  | AN | 4,170 (28.1\%) | 4,389 (30.1\%) |
|  | BN | 2,511 (27.4\%) | 3,771 (47.8\%) |
|  | D | 3,621 (82.3\%) | 3,586 (80.8\%) |
|  | C | 1,104 (34.1\%) | 1,245 (40.2\%) |
|  | All | 3,509 (25.5\%) | 2,493 (16.9\%) |
| MAR | W | 3,270 (13.5\%) | 659 (2.5\%) |
|  | AN | 3,756 (18.8\%) | 2,256 (10.5\%) |
|  | BN | 3,224 (39.6\%) | 4,478 (65.1\%) |
|  | D | 4,582 (90.3\%) | 4,715 (95.5\%) |
|  | C | 1,557 (53.1\%) | 1,733 (62.9\%) |
|  | All | 3,371 (24.9\%) | 2,592 (18.1\%) |
| APR | W | 4,484 (28.2\%) | 4,529 (28.6\%) |
|  | AN | 6,646 (67.6\%) | 6,894 (71.9\%) |
|  | BN | 6,509 (120.5\%) | 6,721 (129.5\%) |
|  | D | 4,100 (98.8\%) | 4,115 (99.5\%) |
|  | C | 1,059 (32.1\%) | 1,173 (36.8\%) |
|  | All | 4,561 (51.9\%) | 4,667 (53.7\%) |
| MAY | W | 425 (3\%) | 4,426 (42.6\%) |
|  | AN | 2,225 (27.6\%) | 3,410 (49.5\%) |
|  | BN | 3,305 (70.3\%) | 3,501 (77.7\%) |
|  | D | 1,376 (37.7\%) | 1,261 (33.5\%) |
|  | C | 448 (18.8\%) | 516 (22.2\%) |
|  | All | 1,392 (18.1\%) | 2,852 (45.7\%) |
| JUN | W | -2,872 (-28.1\%) | 151 (2.1\%) |
|  | AN | -2,118 (-33.1\%) | -1,324 (-23.7\%) |
|  | BN | -1,362 (-30.3\%) | -1,209 (-27.8\%) |
|  | D | -1,816 (-47.1\%) | -1,330 (-39.5\%) |
|  | C | -876 (-31.5\%) | -616 (-24.4\%) |
|  | All | -1,980 (-31.9\%) | -734 (-14.8\%) |
| JUL | W | -5,086 (-62.2\%) | -5,643 (-64.6\%) |
|  | AN | -6,977 (-74.8\%) | -6,878 (-74.6\%) |
|  | BN | -7,594 (-81\%) | -6,938 (-79.5\%) |
|  | D | -7,030 (-84.8\%) | -6,415 (-83.6\%) |
|  | C | -3,991 (-61.9\%) | -2,432 (-49.7\%) |
|  | All | -6,057 (-72.8\%) | -5,744 (-71.7\%) |


| Alternative 8: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -2,394 (-48.6\%) | -4,693 (-65\%) |
|  | AN | -4,295 (-60.7\%) | -5,304 (-65.6\%) |
|  | BN | -4,979 (-68.8\%) | -5,313 (-70.2\%) |
|  | D | -5,746 (-74.5\%) | -3,522 (-64.2\%) |
|  | C | -969 (-34.1\%) | -468 (-20\%) |
|  | All | -3,641 (-61.3\%) | -4,013 (-63.6\%) |
| SEP | W | 1,300 (29.9\%) | -4,678 (-45.3\%) |
|  | AN | -411 (-9.8\%) | -4,991 (-56.9\%) |
|  | BN | -1,497 (-35.2\%) | -2,031 (-42.4\%) |
|  | D | -1,559 (-37.3\%) | -228 (-8\%) |
|  | C | -207 (-10.1\%) | -117 (-6\%) |
|  | All | -276 (-7\%) | -2,628 (-41.8\%) |
| OCT | W | -1,430 (-34.2\%) | -999 (-26.7\%) |
|  | AN | -249 (-9.5\%) | -608 (-20.3\%) |
|  | BN | -1,263 (-33.6\%) | -947 (-27.5\%) |
|  | D | -838 (-27.6\%) | -792 (-26.5\%) |
|  | C | -1,090 (-37.1\%) | -718 (-28\%) |
|  | All | -1,049 (-30.4\%) | -846 (-26.1\%) |
| NOV | W | -1,411 (-30\%) | -539 (-14.1\%) |
|  | AN | -268 (-8.7\%) | -390 (-12.2\%) |
|  | BN | -608 (-22.6\%) | -376 (-15.3\%) |
|  | D | -269 (-11.5\%) | -51 (-2.4\%) |
|  | C | -410 (-19.7\%) | -433 (-20.5\%) |
|  | All | -709 (-22.1\%) | -367 (-12.8\%) |
| DEC | W | -814 (-6.6\%) | 1,350 (13.2\%) |
|  | AN | -894 (-17.2\%) | -1,701 (-28.3\%) |
|  | BN | -546 (-17.7\%) | -715 (-22\%) |
|  | D | -728 (-25.7\%) | -702 (-25\%) |
|  | C | -1,318 (-44.3\%) | -398 (-19.4\%) |
|  | All | -835 (-13.3\%) | -155 (-2.8\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.8.1.10 American River at Nimbus Dam

Table 19. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 8: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 8,806 | 11,036 | 11,121 |
|  | AN | 4,833 | 5,805 | 6,235 |
|  | BN | 2,392 | 2,073 | 2,259 |
|  | D | 1,723 | 1,506 | 1,429 |
|  | C | 1,474 | 1,095 | 1,003 |
|  | All | 4,502 | 5,194 | 5,285 |
| FEB | W | 9,294 | 11,102 | 11,074 |
|  | AN | 6,469 | 8,153 | 8,304 |
|  | BN | 4,360 | 4,961 | 5,087 |
|  | D | 1,852 | 1,844 | 1,950 |
|  | C | 1,185 | 1,007 | 907 |
|  | All | 5,218 | 6,112 | 6,156 |
| MAR | W | 6,089 | 6,992 | 6,996 |
|  | AN | 5,454 | 5,790 | 5,452 |
|  | BN | 2,429 | 2,794 | 2,801 |
|  | D | 2,191 | 2,314 | 2,058 |
|  | C | 939 | 938 | 807 |
|  | All | 3,762 | 4,187 | 4,064 |
| APR | W | 5,300 | 5,508 | 5,597 |
|  | AN | 3,546 | 3,298 | 3,240 |
|  | BN | 3,126 | 2,970 | 3,384 |
|  | D | 1,837 | 1,888 | 2,366 |
|  | C | 1,156 | 1,255 | 1,717 |
|  | All | 3,305 | 3,334 | 3,597 |
| MAY | W | 6,157 | 4,592 | 4,863 |
|  | AN | 3,885 | 2,521 | 2,744 |
|  | BN | 2,930 | 1,969 | 3,385 |
|  | D | 1,790 | 1,686 | 2,888 |
|  | C | 1,182 | 992 | 2,031 |
|  | All | 3,587 | 2,676 | 3,453 |
| JUN | W | 6,003 | 3,694 | 3,987 |
|  | AN | 3,346 | 3,022 | 3,339 |
|  | BN | 2,863 | 2,883 | 2,910 |
|  | D | 2,506 | 2,596 | 2,788 |
|  | C | 1,824 | 1,025 | 1,522 |
|  | All | 3,699 | 2,825 | 3,084 |
| JUL | W | 4,108 | 3,860 | 2,927 |
|  | AN | 4,638 | 4,927 | 2,928 |
|  | BN | 4,744 | 4,328 | 3,237 |
|  | D | 3,577 | 3,143 | 2,604 |
|  | C | 1,784 | 2,022 | 1,041 |
|  | All | 3,838 | 3,670 | 2,633 |


| Alternative 8: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 3,520 | 2,132 | 2,007 |
|  | AN | 2,542 | 1,944 | 2,042 |
|  | BN | 2,495 | 2,324 | 2,460 |
|  | D | 2,613 | 1,620 | 1,576 |
|  | C | 1,500 | 1,100 | 955 |
|  | All | 2,707 | 1,874 | 1,841 |
| SEP | W | 4,025 | 3,622 | 3,559 |
|  | AN | 2,764 | 2,044 | 2,649 |
|  | BN | 2,370 | 1,605 | 1,383 |
|  | D | 1,856 | 1,182 | 1,150 |
|  | C | 1,164 | 594 | 548 |
|  | All | 2,663 | 2,068 | 2,085 |
| OCT | W | 1,723 | 1,634 | 1,598 |
|  | AN | 1,706 | 1,732 | 1,953 |
|  | BN | 1,602 | 1,767 | 1,610 |
|  | D | 1,468 | 1,258 | 1,233 |
|  | C | 1,461 | 1,655 | 1,629 |
|  | All | 1,605 | 1,592 | 1,576 |
| NOV | W | 3,527 | 2,612 | 2,560 |
|  | AN | 3,181 | 2,554 | 2,175 |
|  | BN | 2,067 | 1,716 | 1,427 |
|  | D | 2,176 | 1,424 | 1,494 |
|  | C | 1,994 | 1,608 | 1,336 |
|  | All | 2,706 | 2,043 | 1,897 |
| DEC | W | 6,302 | 6,171 | 6,407 |
|  | AN | 3,137 | 2,933 | 2,947 |
|  | BN | 2,676 | 2,527 | 2,461 |
|  | D | 1,741 | 1,351 | 1,399 |
|  | C | 1,524 | 1,251 | 1,117 |
|  | All | 3,519 | 3,297 | 3,354 |

Table 20. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 8: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 2,315 (26.3\%) | 85 (0.8\%) |
|  | AN | 1,402 (29\%) | 430 (7.4\%) |
|  | BN | -133 (-5.6\%) | 186 (9\%) |
|  | D | -294 (-17\%) | -77 (-5.1\%) |
|  | C | -471 (-32\%) | -92 (-8.4\%) |
|  | All | 783 (17.4\%) | 91 (1.8\%) |
| FEB | W | 1,781 (19.2\%) | -28 (-0.3\%) |
|  | AN | 1,835 (28.4\%) | 151 (1.9\%) |
|  | BN | 727 (16.7\%) | 126 (2.5\%) |
|  | D | 98 (5.3\%) | 107 (5.8\%) |
|  | C | -278 (-23.5\%) | -100 (-9.9\%) |
|  | All | 938 (18\%) | 44 (0.7\%) |
| MAR | W | 907 (14.9\%) | 3 (0\%) |
|  | AN | -2 (0\%) | -339 (-5.9\%) |
|  | BN | 372 (15.3\%) | 7 (0.2\%) |
|  | D | -133 (-6.1\%) | -256 (-11.1\%) |
|  | C | -132 (-14.1\%) | -131 (-13.9\%) |
|  | All | 302 (8\%) | -123 (-2.9\%) |
| APR | W | 296 (5.6\%) | 88 (1.6\%) |
|  | AN | -306 (-8.6\%) | -59 (-1.8\%) |
|  | BN | 258 (8.3\%) | 415 (14\%) |
|  | D | 529 (28.8\%) | 478 (25.3\%) |
|  | C | 562 (48.6\%) | 462 (36.8\%) |
|  | All | 292 (8.8\%) | 263 (7.9\%) |
| MAY | W | -1,294 (-21\%) | 271 (5.9\%) |
|  | AN | -1,141 (-29.4\%) | 223 (8.9\%) |
|  | BN | 455 (15.5\%) | 1,416 (71.9\%) |
|  | D | 1,098 (61.4\%) | 1,202 (71.3\%) |
|  | C | 850 (71.9\%) | 1,040 (104.9\%) |
|  | All | -134 (-3.7\%) | 777 (29\%) |
| JUN | W | -2,016 (-33.6\%) | 293 (7.9\%) |
|  | AN | -6 (-0.2\%) | 317 (10.5\%) |
|  | BN | 46 (1.6\%) | 27 (0.9\%) |
|  | D | 283 (11.3\%) | 192 (7.4\%) |
|  | C | -302 (-16.6\%) | 498 (48.6\%) |
|  | All | -615 (-16.6\%) | 259 (9.2\%) |
| JUL | W | -1,182 (-28.8\%) | -934 (-24.2\%) |
|  | AN | -1,710 (-36.9\%) | -1,999 (-40.6\%) |
|  | BN | -1,507 (-31.8\%) | -1,091 (-25.2\%) |
|  | D | -973 (-27.2\%) | -540 (-17.2\%) |
|  | C | -744 (-41.7\%) | -982 (-48.5\%) |
|  | All | -1,205 (-31.4\%) | -1,037 (-28.3\%) |


| Alternative 8: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -1,513 (-43\%) | -125 (-5.9\%) |
|  | AN | -500 (-19.7\%) | 98 (5\%) |
|  | BN | -34 (-1.4\%) | 136 (5.9\%) |
|  | D | -1,037 (-39.7\%) | -44 (-2.7\%) |
|  | C | -545 (-36.3\%) | -145 (-13.2\%) |
|  | All | -866 (-32\%) | -33 (-1.8\%) |
| SEP | W | -465 (-11.6\%) | -63 (-1.7\%) |
|  | AN | -115 (-4.2\%) | 605 (29.6\%) |
|  | BN | -988 (-41.7\%) | -222 (-13.8\%) |
|  | D | -706 (-38\%) | -31 (-2.6\%) |
|  | C | -616 (-52.9\%) | -45 (-7.7\%) |
|  | All | -578 (-21.7\%) | 17 (0.8\%) |
| OCT | W | -124 (-7.2\%) | -36 (-2.2\%) |
|  | AN | 247 (14.5\%) | 221 (12.8\%) |
|  | BN | 8 (0.5\%) | -157 (-8.9\%) |
|  | D | -235 (-16\%) | -26 (-2\%) |
|  | C | 168 (11.5\%) | -26 (-1.5\%) |
|  | All | -29 (-1.8\%) | -15 (-1\%) |
| NOV | W | -967 (-27.4\%) | -52 (-2\%) |
|  | AN | -1,005 (-31.6\%) | -379 (-14.8\%) |
|  | BN | -640 (-31\%) | -289 (-16.8\%) |
|  | D | -682 (-31.3\%) | 70 (4.9\%) |
|  | C | -658 (-33\%) | -272 (-16.9\%) |
|  | All | -809 (-29.9\%) | -146 (-7.1\%) |
| DEC | W | 105 (1.7\%) | 236 (3.8\%) |
|  | AN | -190 (-6.1\%) | 14 (0.5\%) |
|  | BN | -215 (-8\%) | -66 (-2.6\%) |
|  | D | -341 (-19.6\%) | 48 (3.6\%) |
|  | C | -407 (-26.7\%) | -134 (-10.7\%) |
|  | All | -165 (-4.7\%) | 57 (1.7\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.8.1.11 American River at Confluence with Sacramento River

Table 21. Mean Monthly Flows (cfs) for Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 8: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 8,748 | 10,960 | 11,043 |
|  | AN | 4,806 | 5,760 | 6,190 |
|  | BN | 2,326 | 1,988 | 2,176 |
|  | D | 1,654 | 1,424 | 1,347 |
|  | C | 1,403 | 1,008 | 917 |
|  | All | 4,443 | 5,118 | 5,209 |
| FEB | W | 9,183 | 10,947 | 10,919 |
|  | AN | 6,422 | 8,073 | 8,219 |
|  | BN | 4,309 | 4,888 | 5,012 |
|  | D | 1,781 | 1,756 | 1,863 |
|  | C | 1,119 | 921 | 823 |
|  | All | 5,142 | 6,007 | 6,050 |
| MAR | W | 5,979 | 6,837 | 6,840 |
|  | AN | 5,364 | 5,661 | 5,321 |
|  | BN | 2,340 | 2,672 | 2,678 |
|  | D | 2,121 | 2,224 | 1,967 |
|  | C | 864 | 836 | 716 |
|  | All | 3,672 | 4,063 | 3,941 |
| APR | W | 5,156 | 5,300 | 5,388 |
|  | AN | 3,383 | 3,079 | 3,024 |
|  | BN | 2,984 | 2,778 | 3,192 |
|  | D | 1,672 | 1,677 | 2,156 |
|  | C | 996 | 1,059 | 1,524 |
|  | All | 3,152 | 3,128 | 3,392 |
| MAY | W | 5,959 | 4,332 | 4,603 |
|  | AN | 3,700 | 2,285 | 2,509 |
|  | BN | 2,733 | 1,726 | 3,139 |
|  | D | 1,605 | 1,454 | 2,652 |
|  | C | 1,014 | 790 | 1,826 |
|  | All | 3,398 | 2,438 | 3,212 |
| JUN | W | 5,743 | 3,388 | 3,679 |
|  | AN | 3,103 | 2,736 | 3,051 |
|  | BN | 2,631 | 2,603 | 2,617 |
|  | D | 2,282 | 2,320 | 2,501 |
|  | C | 1,621 | 793 | 1,280 |
|  | All | 3,462 | 2,545 | 2,796 |
| JUL | W | 3,844 | 3,560 | 2,624 |
|  | AN | 4,399 | 4,635 | 2,634 |
|  | BN | 4,509 | 4,038 | 2,948 |
|  | D | 3,347 | 2,858 | 2,318 |
|  | C | 1,568 | 1,784 | 828 |
|  | All | 3,597 | 3,385 | 2,351 |


| Alternative 8: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 3,295 | 1,858 | 1,741 |
|  | AN | 2,313 | 1,663 | 1,778 |
|  | BN | 2,265 | 2,048 | 2,194 |
|  | D | 2,395 | 1,357 | 1,318 |
|  | C | 1,314 | 899 | 764 |
|  | All | 2,488 | 1,612 | 1,588 |
| SEP | W | 3,846 | 3,415 | 3,353 |
|  | AN | 2,594 | 1,838 | 2,442 |
|  | BN | 2,205 | 1,402 | 1,178 |
|  | D | 1,691 | 987 | 956 |
|  | C | 1,011 | 427 | 385 |
|  | All | 2,495 | 1,870 | 1,888 |
| OCT | W | 1,607 | 1,499 | 1,462 |
|  | AN | 1,597 | 1,613 | 1,824 |
|  | BN | 1,472 | 1,617 | 1,462 |
|  | D | 1,344 | 1,114 | 1,090 |
|  | C | 1,342 | 1,517 | 1,492 |
|  | All | 1,486 | 1,454 | 1,438 |
| NOV | W | 3,472 | 2,540 | 2,488 |
|  | AN | 3,100 | 2,455 | 2,077 |
|  | BN | 1,990 | 1,618 | 1,336 |
|  | D | 2,094 | 1,326 | 1,396 |
|  | C | 1,897 | 1,489 | 1,218 |
|  | All | 2,632 | 1,950 | 1,806 |
| DEC | W | 6,255 | 6,115 | 6,351 |
|  | AN | 3,072 | 2,856 | 2,877 |
|  | BN | 2,609 | 2,445 | 2,386 |
|  | D | 1,675 | 1,275 | 1,322 |
|  | C | 1,443 | 1,158 | 1,026 |
|  | All | 3,457 | 3,224 | 3,283 |

Table 22. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 8: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 2,295 (26.2\%) | 83 (0.8\%) |
|  | AN | 1,384 (28.8\%) | 429 (7.5\%) |
|  | BN | -151 (-6.5\%) | 187 (9.4\%) |
|  | D | -307 (-18.6\%) | -77 (-5.4\%) |
|  | C | -486 (-34.6\%) | -90 (-9\%) |
|  | All | 766 (17.2\%) | 91 (1.8\%) |
| FEB | W | 1,736 (18.9\%) | -28 (-0.3\%) |
|  | AN | 1,797 (28\%) | 147 (1.8\%) |
|  | BN | 704 (16.3\%) | 124 (2.5\%) |
|  | D | 83 (4.6\%) | 108 (6.1\%) |
|  | C | -296 (-26.5\%) | -98 (-10.7\%) |
|  | All | 908 (17.7\%) | 43 (0.7\%) |
| MAR | W | 861 (14.4\%) | 4 (0.1\%) |
|  | AN | -44 (-0.8\%) | -340 (-6\%) |
|  | BN | 338 (14.5\%) | 6 (0.2\%) |
|  | D | -154 (-7.2\%) | -257 (-11.5\%) |
|  | C | -149 (-17.2\%) | -121 (-14.4\%) |
|  | All | 269 (7.3\%) | -122 (-3\%) |
| APR | W | 232 (4.5\%) | 88 (1.7\%) |
|  | AN | -359 (-10.6\%) | -55 (-1.8\%) |
|  | BN | 209 (7\%) | 414 (14.9\%) |
|  | D | 484 (28.9\%) | 479 (28.6\%) |
|  | C | 528 (53\%) | 464 (43.8\%) |
|  | All | 240 (7.6\%) | 264 (8.4\%) |
| MAY | W | -1,356 (-22.8\%) | 270 (6.2\%) |
|  | AN | -1,190 (-32.2\%) | 224 (9.8\%) |
|  | BN | 406 (14.8\%) | 1,413 (81.8\%) |
|  | D | 1,047 (65.2\%) | 1,198 (82.4\%) |
|  | C | 812 (80.1\%) | 1,036 (131\%) |
|  | All | -186 (-5.5\%) | 774 (31.8\%) |
| JUN | W | -2,064 (-35.9\%) | 291 (8.6\%) |
|  | AN | -52 (-1.7\%) | 315 (11.5\%) |
|  | BN | -14 (-0.5\%) | 14 (0.5\%) |
|  | D | 219 (9.6\%) | 181 (7.8\%) |
|  | C | -342 (-21.1\%) | 487 (61.4\%) |
|  | All | -666 (-19.2\%) | 252 (9.9\%) |
| JUL | W | -1,220 (-31.7\%) | -936 (-26.3\%) |
|  | AN | -1,765 (-40.1\%) | -2,002 (-43.2\%) |
|  | BN | -1,562 (-34.6\%) | -1,091 (-27\%) |
|  | D | -1,029 (-30.7\%) | -540 (-18.9\%) |
|  | C | -740 (-47.2\%) | -955 (-53.6\%) |
|  | All | -1,246 (-34.6\%) | -1,034 (-30.6\%) |


| Alternative 8: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS <br> vs. A8_LLT | NAA vs. A8_LLT |$|-117(-6.3 \%)$

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.8.1.12 Stanislaus River at Confluence with the San Joaquin River

Table 23. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 8: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 956 | 885 | 885 |
|  | AN | 843 | 963 | 963 |
|  | BN | 416 | 369 | 367 |
|  | D | 403 | 366 | 366 |
|  | C | 314 | 265 | 265 |
|  | All | 635 | 615 | 615 |
| FEB | W | 1,285 | 1,236 | 1,203 |
|  | AN | 917 | 858 | 858 |
|  | BN | 551 | 438 | 436 |
|  | D | 562 | 359 | 359 |
|  | C | 490 | 348 | 348 |
|  | All | 827 | 723 | 714 |
| MAR | W | 2,063 | 2,217 | 2,212 |
|  | AN | 1,295 | 956 | 956 |
|  | BN | 732 | 548 | 548 |
|  | D | 559 | 390 | 393 |
|  | C | 541 | 444 | 450 |
|  | All | 1,167 | 1,071 | 1,071 |
| APR | W | 2,054 | 1,965 | 1,965 |
|  | AN | 1,719 | 1,535 | 1,517 |
|  | BN | 1,494 | 1,211 | 1,210 |
|  | D | 1,438 | 1,199 | 1,195 |
|  | C | 823 | 670 | 662 |
|  | All | 1,562 | 1,387 | 1,382 |
| MAY | W | 1,653 | 1,613 | 1,600 |
|  | AN | 1,389 | 1,243 | 1,228 |
|  | BN | 1,238 | 898 | 901 |
|  | D | 1,140 | 916 | 925 |
|  | C | 715 | 627 | 620 |
|  | All | 1,271 | 1,125 | 1,118 |
| JUN | W | 1,608 | 1,763 | 1,787 |
|  | AN | 1,134 | 985 | 977 |
|  | BN | 663 | 568 | 611 |
|  | D | 447 | 364 | 463 |
|  | C | 332 | 296 | 364 |
|  | All | 932 | 914 | 955 |
| JUL | W | 1,064 | 1,080 | 1,074 |
|  | AN | 489 | 454 | 457 |
|  | BN | 450 | 425 | 427 |
|  | D | 398 | 359 | 359 |
|  | C | 337 | 310 | 305 |
|  | All | 607 | 590 | 588 |


| Alternative 8: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 930 | 717 | 717 |
|  | AN | 476 | 454 | 454 |
|  | BN | 423 | 418 | 418 |
|  | D | 387 | 382 | 382 |
|  | C | 341 | 338 | 323 |
|  | All | 560 | 491 | 489 |
| SEP | W | 1,040 | 863 | 866 |
|  | AN | 502 | 474 | 479 |
|  | BN | 417 | 407 | 408 |
|  | D | 395 | 390 | 391 |
|  | C | 324 | 317 | 306 |
|  | All | 595 | 533 | 533 |
| OCT | W | 897 | 845 | 849 |
|  | AN | 873 | 822 | 831 |
|  | BN | 903 | 844 | 842 |
|  | D | 984 | 925 | 931 |
|  | C | 689 | 612 | 632 |
|  | All | 867 | 808 | 815 |
| NOV | W | 426 | 408 | 409 |
|  | AN | 580 | 524 | 524 |
|  | BN | 341 | 334 | 334 |
|  | D | 345 | 321 | 322 |
|  | C | 325 | 308 | 310 |
|  | All | 410 | 386 | 386 |
| DEC | W | 512 | 429 | 418 |
|  | AN | 722 | 697 | 696 |
|  | BN | 331 | 353 | 323 |
|  | D | 317 | 294 | 294 |
|  | C | 289 | 272 | 272 |
|  | All | 450 | 417 | 409 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 24. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 8: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | -72 (-7.5\%) | 0 (0\%) |
|  | AN | 120 (14.3\%) | 0 (0\%) |
|  | BN | -49 (-11.8\%) | -2 (-0.5\%) |
|  | D | -37 (-9.1\%) | 0 (0\%) |
|  | C | -49 (-15.7\%) | 0 (-0.2\%) |
|  | All | -21 (-3.3\%) | -1 (-0.1\%) |
| FEB | W | -82 (-6.4\%) | -33 (-2.6\%) |
|  | AN | -59 (-6.5\%) | 0 (0\%) |
|  | BN | -115 (-20.9\%) | -2 (-0.5\%) |
|  | D | -203 (-36.1\%) | 0 (0.1\%) |
|  | C | -141 (-28.9\%) | 1 (0.2\%) |
|  | All | -113 (-13.7\%) | -10 (-1.4\%) |
| MAR | W | 149 (7.2\%) | -4 (-0.2\%) |
|  | AN | -339 (-26.2\%) | 0 (0\%) |
|  | BN | -184 (-25.2\%) | 0 (0\%) |
|  | D | -165 (-29.6\%) | 3 (0.8\%) |
|  | C | -90 (-16.7\%) | 7 (1.5\%) |
|  | All | -95 (-8.2\%) | 1 (0\%) |
| APR | W | -89 (-4.3\%) | 0 (0\%) |
|  | AN | -202 (-11.7\%) | -17 (-1.1\%) |
|  | BN | -284 (-19\%) | -1 (-0.1\%) |
|  | D | -243 (-16.9\%) | -3 (-0.3\%) |
|  | C | -160 (-19.5\%) | -7 (-1.1\%) |
|  | All | -180 (-11.5\%) | -5 (-0.4\%) |
| MAY | W | -53 (-3.2\%) | -14 (-0.8\%) |
|  | AN | -160 (-11.5\%) | -14 (-1.2\%) |
|  | BN | -338 (-27.3\%) | 2 (0.3\%) |
|  | D | -216 (-18.9\%) | 9 (1\%) |
|  | C | -95 (-13.3\%) | -7 (-1.2\%) |
|  | All | -153 (-12\%) | -6 (-0.6\%) |
| JUN | W | 179 (11.1\%) | 24 (1.3\%) |
|  | AN | -157 (-13.8\%) | -8 (-0.8\%) |
|  | BN | -52 (-7.8\%) | 43 (7.6\%) |
|  | D | 16 (3.6\%) | 98 (27\%) |
|  | C | 32 (9.6\%) | 68 (23\%) |
|  | All | 22 (2.4\%) | 41 (4.5\%) |
| JUL | W | 10 (0.9\%) | -7 (-0.6\%) |
|  | AN | -32 (-6.6\%) | 3 (0.7\%) |
|  | BN | -23 (-5.1\%) | 2 (0.4\%) |
|  | D | -39 (-9.9\%) | -1 (-0.2\%) |
|  | C | -31 (-9.3\%) | -5 (-1.6\%) |
|  | All | -19 (-3.2\%) | -2 (-0.3\%) |


| Alternative 8: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -212 (-22.8\%) | 0 (0\%) |
|  | AN | -22 (-4.6\%) | 0 (0\%) |
|  | BN | -4 (-1\%) | 0 (0\%) |
|  | D | -5 (-1.2\%) | 0 (0\%) |
|  | C | -18 (-5.3\%) | -15 (-4.4\%) |
|  | All | -71 (-12.7\%) | -3 (-0.6\%) |
| SEP | W | -175 (-16.8\%) | 3 (0.3\%) |
|  | AN | -23 (-4.7\%) | 5 (1\%) |
|  | BN | -9 (-2.1\%) | 1 (0.3\%) |
|  | D | -5 (-1.2\%) | 0 (0.1\%) |
|  | C | -18 (-5.6\%) | -10 (-3.3\%) |
|  | All | -61 (-10.3\%) | 0 (0\%) |
| OCT | W | -48 (-5.4\%) | 4 (0.5\%) |
|  | AN | -42 (-4.9\%) | 8 (1\%) |
|  | BN | -61 (-6.8\%) | -3 (-0.3\%) |
|  | D | -54 (-5.4\%) | 6 (0.6\%) |
|  | C | -57 (-8.3\%) | 19 (3.1\%) |
|  | All | -52 (-6\%) | 7 (0.9\%) |
| NOV | W | -17 (-4.1\%) | 1 (0.2\%) |
|  | AN | -56 (-9.7\%) | 0 (0\%) |
|  | BN | -7 (-2.2\%) | 0 (0.1\%) |
|  | D | -22 (-6.5\%) | 1 (0.2\%) |
|  | C | -15 (-4.5\%) | 2 (0.6\%) |
|  | All | -24 (-5.8\%) | 1 (0.2\%) |
| DEC | W | -95 (-18.4\%) | -11 (-2.6\%) |
|  | AN | -26 (-3.6\%) | 0 (-0.1\%) |
|  | BN | -8 (-2.3\%) | -30 (-8.6\%) |
|  | D | -23 (-7.3\%) | 0 (0\%) |
|  | C | -17 (-5.9\%) | -1 (-0.2\%) |
|  | All | -41 (-9.1\%) | -8 (-2\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
${ }^{\mathrm{b}}$ Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.8.2 In Delta

## 11C.8.2.1 OMR Flow (Old and Middle Rivers)

Table 25. Mean Monthly Flows (cfs) for Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 8: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | -1,820 | -1,606 | 3,539 |
|  | AN | -3,553 | -3,446 | 1,211 |
|  | BN | -4,240 | -3,803 | 961 |
|  | D | -4,664 | -4,675 | 968 |
|  | C | -4,130 | -3,684 | 838 |
|  | All | -3,449 | -3,228 | 1,798 |
| FEB | W | -2,365 | -2,293 | 3,300 |
|  | AN | -3,274 | -3,147 | 1,645 |
|  | BN | -3,437 | -3,290 | 1,186 |
|  | D | -3,986 | -3,502 | 972 |
|  | C | -3,191 | -3,047 | 891 |
|  | All | -3,158 | -2,964 | 1,833 |
| MAR | W | -1,600 | -1,454 | 4,320 |
|  | AN | -4,251 | -3,815 | 1,840 |
|  | BN | -4,147 | -3,834 | 909 |
|  | D | -2,852 | -2,614 | 845 |
|  | C | -2,010 | -1,636 | 526 |
|  | All | -2,758 | -2,487 | 2,057 |
| APR | W | 2,431 | 2,415 | 5,117 |
|  | AN | 1,058 | 787 | 2,653 |
|  | BN | 677 | 214 | 2,070 |
|  | D | -268 | -615 | 1,026 |
|  | C | -950 | -845 | 482 |
|  | All | 843 | 659 | 2,660 |
| MAY | W | 1,651 | 1,555 | 4,665 |
|  | AN | 509 | 396 | 2,134 |
|  | BN | 272 | -237 | 1,578 |
|  | D | -647 | -1,010 | 686 |
|  | C | -1,020 | -911 | 348 |
|  | All | 353 | 155 | 2,263 |
| JUN | W | -4,164 | -4,369 | 1,034 |
|  | AN | -4,761 | -4,454 | 233 |
|  | BN | -4,154 | -3,420 | -132 |
|  | D | -3,301 | -2,592 | -495 |
|  | C | -2,250 | -2,143 | -597 |
|  | All | -3,780 | -3,504 | 144 |


| Alternative 8: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JUL | W | -8,959 | -8,699 | -3,169 |
|  | AN | -9,919 | -7,962 | -1,752 |
|  | BN | -10,853 | -9,942 | -2,648 |
|  | D | -10,891 | -9,505 | -3,552 |
|  | C | -8,058 | -5,234 | -4,072 |
|  | All | -9,715 | -8,473 | -3,089 |
| AUG | W | -10,062 | -10,518 | -5,938 |
|  | AN | -10,348 | -10,985 | -5,296 |
|  | BN | -10,044 | -9,374 | -4,644 |
|  | D | -10,122 | -7,259 | -4,424 |
|  | C | -4,384 | -3,192 | -3,154 |
|  | All | -9,283 | -8,604 | -4,883 |
| SEP | W | -9,317 | -7,580 | 654 |
|  | AN | -9,163 | -9,002 | -354 |
|  | BN | -8,575 | -8,392 | -4,392 |
|  | D | -8,081 | -5,165 | -3,745 |
|  | C | -4,807 | -3,966 | -2,245 |
|  | All | -8,236 | -6,868 | -1,745 |
| OCT | W | -8,347 | -5,049 | 298 |
|  | AN | -7,643 | -3,648 | 98 |
|  | BN | -7,804 | -4,793 | 134 |
|  | D | -6,961 | -4,103 | 96 |
|  | C | -6,440 | -3,920 | 4 |
|  | All | -7,568 | -4,427 | 153 |
| NOV | W | -8,902 | -6,527 | 501 |
|  | AN | -7,264 | -6,003 | 260 |
|  | BN | -7,997 | -5,542 | 300 |
|  | D | -7,136 | -5,007 | 309 |
|  | C | -5,294 | -4,389 | 227 |
|  | All | -7,592 | -5,636 | 349 |
| DEC | W | -5,542 | -5,591 | 1,402 |
|  | AN | -6,987 | -7,050 | 859 |
|  | BN | -7,304 | -7,040 | 901 |
|  | D | -7,214 | -7,006 | 866 |
|  | C | -6,166 | -4,173 | 714 |
|  | All | -6,513 | -6,155 | 1,019 |

Table 26. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 8: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 5,358 (294.5\%) | 5,144 (320.4\%) |
|  | AN | 4,764 (134.1\%) | 4,658 (135.1\%) |
|  | BN | 5,200 (122.7\%) | 4,763 (125.3\%) |
|  | D | 5,632 (120.8\%) | 5,643 (120.7\%) |
|  | C | 4,968 (120.3\%) | 4,522 (122.7\%) |
|  | All | 5,247 (152.1\%) | 5,027 (155.7\%) |
| FEB | W | 5,665 (239.5\%) | 5,593 (243.9\%) |
|  | AN | 4,919 (150.2\%) | 4,792 (152.3\%) |
|  | BN | 4,623 (134.5\%) | 4,477 (136.1\%) |
|  | D | 4,957 (124.4\%) | 4,474 (127.7\%) |
|  | C | 4,082 (127.9\%) | 3,938 (129.2\%) |
|  | All | 4,991 (158.1\%) | 4,797 (161.9\%) |
| MAR | W | 5,920 (369.9\%) | 5,773 (397.2\%) |
|  | AN | 6,091 (143.3\%) | 5,654 (148.2\%) |
|  | BN | 5,056 (121.9\%) | 4,744 (123.7\%) |
|  | D | 3,698 (129.6\%) | 3,459 (132.3\%) |
|  | C | 2,536 (126.2\%) | 2,162 (132.1\%) |
|  | All | 4,815 (174.6\%) | 4,544 (182.7\%) |
| APR | W | 2,686 (110.5\%) | 2,702 (111.9\%) |
|  | AN | 1,595 (150.7\%) | 1,866 (237.1\%) |
|  | BN | 1,393 (205.8\%) | 1,856 (867.6\%) |
|  | D | 1,294 (483.1\%) | 1,642 (266.8\%) |
|  | C | 1,433 (150.8\%) | 1,328 (157.1\%) |
|  | All | 1,817 (215.4\%) | 2,002 (303.8\%) |
| MAY | W | 3,014 (182.6\%) | 3,110 (200\%) |
|  | AN | 1,625 (319\%) | 1,739 (439.2\%) |
|  | BN | 1,307 (480.9\%) | 1,816 (764.6\%) |
|  | D | 1,333 (206.1\%) | 1,696 (168\%) |
|  | C | 1,367 (134.1\%) | 1,259 (138.2\%) |
|  | All | 1,909 (540.5\%) | 2,107 (1,355.6\%) |
| JUN | W | 5,198 (124.8\%) | 5,404 (123.7\%) |
|  | AN | 4,994 (104.9\%) | 4,687 (105.2\%) |
|  | BN | 4,023 (96.8\%) | 3,288 (96.1\%) |
|  | D | 2,805 (85\%) | 2,096 (80.9\%) |
|  | C | 1,653 (73.5\%) | 1,546 (72.1\%) |
|  | All | 3,924 (103.8\%) | 3,647 (104.1\%) |
| JUL | W | 5,789 (64.6\%) | 5,530 (63.6\%) |
|  | AN | 8,167 (82.3\%) | 6,211 (78\%) |
|  | BN | 8,204 (75.6\%) | 7,294 (73.4\%) |
|  | D | 7,339 (67.4\%) | 5,953 (62.6\%) |
|  | C | 3,986 (49.5\%) | 1,162 (22.2\%) |
|  | All | 6,626 (68.2\%) | 5,384 (63.5\%) |


| Alternative 8: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | 4,124 (41\%) | 4,580 (43.5\%) |
|  | AN | 5,052 (48.8\%) | 5,688 (51.8\%) |
|  | BN | 5,400 (53.8\%) | 4,730 (50.5\%) |
|  | D | 5,698 (56.3\%) | 2,835 (39.1\%) |
|  | C | 1,230 (28.1\%) | 38 (1.2\%) |
|  | All | 4,400 (47.4\%) | 3,720 (43.2\%) |
| SEP | W | 9,971 (107\%) | 8,234 (108.6\%) |
|  | AN | 8,809 (96.1\%) | 8,648 (96.1\%) |
|  | BN | 4,183 (48.8\%) | 4,000 (47.7\%) |
|  | D | 4,336 (53.7\%) | 1,420 (27.5\%) |
|  | C | 2,562 (53.3\%) | 1,721 (43.4\%) |
|  | All | 6,491 (78.8\%) | 5,123 (74.6\%) |
| OCT | W | 8,644 (103.6\%) | 5,346 (105.9\%) |
|  | AN | 7,741 (101.3\%) | 3,746 (102.7\%) |
|  | BN | 7,938 (101.7\%) | 4,927 (102.8\%) |
|  | D | 7,057 (101.4\%) | 4,199 (102.3\%) |
|  | C | 6,445 (100.1\%) | 3,925 (100.1\%) |
|  | All | 7,721 (102\%) | 4,581 (103.5\%) |
| NOV | W | 9,403 (105.6\%) | 7,028 (107.7\%) |
|  | AN | 7,524 (103.6\%) | 6,263 (104.3\%) |
|  | BN | 8,296 (103.7\%) | 5,842 (105.4\%) |
|  | D | 7,446 (104.3\%) | 5,316 (106.2\%) |
|  | C | 5,521 (104.3\%) | 4,616 (105.2\%) |
|  | All | 7,941 (104.6\%) | 5,985 (106.2\%) |
| DEC | W | 6,944 (125.3\%) | 6,993 (125.1\%) |
|  | AN | 7,846 (112.3\%) | 7,909 (112.2\%) |
|  | BN | 8,205 (112.3\%) | 7,942 (112.8\%) |
|  | D | 8,079 (112\%) | 7,871 (112.4\%) |
|  | C | 6,880 (111.6\%) | 4,887 (117.1\%) |
|  | All | 7,531 (115.6\%) | 7,174 (116.5\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.8.2.2 Sacramento River Downstream of North Delta Diversion Facility

Table 27. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 8: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 50,961 | 52,878 | 45,128 |
|  | AN | 39,863 | 40,484 | 35,427 |
|  | BN | 23,781 | 22,653 | 20,596 |
|  | D | 17,444 | 17,451 | 15,365 |
|  | C | 14,281 | 15,073 | 12,556 |
|  | All | 31,971 | 32,595 | 28,220 |
| FEB | W | 57,314 | 59,847 | 49,638 |
|  | AN | 45,676 | 47,786 | 41,167 |
|  | BN | 31,934 | 31,592 | 27,639 |
|  | D | 21,202 | 21,107 | 20,251 |
|  | C | 14,708 | 14,291 | 14,534 |
|  | All | 37,116 | 38,087 | 33,054 |
| MAR | W | 49,416 | 50,993 | 40,489 |
|  | AN | 44,495 | 45,088 | 35,489 |
|  | BN | 24,489 | 22,915 | 19,686 |
|  | D | 20,656 | 20,650 | 20,361 |
|  | C | 13,245 | 13,137 | 13,466 |
|  | All | 32,834 | 33,134 | 27,833 |
| APR | W | 37,809 | 37,543 | 32,507 |
|  | AN | 25,979 | 24,931 | 23,452 |
|  | BN | 17,752 | 17,128 | 20,076 |
|  | D | 12,990 | 12,904 | 16,150 |
|  | C | 10,229 | 10,365 | 11,011 |
|  | All | 23,169 | 22,826 | 22,323 |
| MAY | W | 31,948 | 24,500 | 22,834 |
|  | AN | 21,021 | 18,657 | 18,114 |
|  | BN | 14,227 | 12,394 | 15,228 |
|  | D | 10,959 | 11,427 | 12,587 |
|  | C | 7,749 | 8,011 | 9,114 |
|  | All | 19,175 | 16,295 | 16,588 |
| JUN | W | 23,900 | 18,603 | 14,671 |
|  | AN | 16,309 | 16,051 | 12,425 |
|  | BN | 13,576 | 13,898 | 11,369 |
|  | D | 12,222 | 12,656 | 10,356 |
|  | C | 9,884 | 10,123 | 10,316 |
|  | All | 16,412 | 14,880 | 12,194 |
| JUL | W | 19,876 | 21,425 | 12,814 |
|  | AN | 21,574 | 22,727 | 11,657 |
|  | BN | 20,953 | 20,513 | 10,312 |
|  | D | 19,272 | 18,957 | 10,829 |
|  | C | 15,397 | 13,767 | 10,587 |
|  | All | 19,520 | 19,797 | 11,456 |


| Alternative 8: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 15,816 | 16,064 | 10,818 |
|  | AN | 15,877 | 17,491 | 10,574 |
|  | BN | 15,643 | 16,232 | 9,820 |
|  | D | 16,965 | 14,351 | 10,283 |
|  | C | 10,095 | 8,996 | 9,203 |
|  | All | 15,210 | 14,891 | 10,258 |
| SEP | W | 18,254 | 27,212 | 19,758 |
|  | AN | 13,198 | 21,006 | 12,835 |
|  | BN | 12,427 | 12,306 | 7,697 |
|  | D | 12,155 | 8,620 | 7,464 |
|  | C | 8,485 | 7,292 | 6,696 |
|  | All | 13,751 | 16,763 | 12,075 |
| OCT | W | 13,505 | 13,277 | 8,576 |
|  | AN | 11,118 | 11,864 | 8,673 |
|  | BN | 11,557 | 12,124 | 7,898 |
|  | D | 10,279 | 10,487 | 7,558 |
|  | C | 10,073 | 9,964 | 6,955 |
|  | All | 11,613 | 11,776 | 8,014 |
| NOV | W | 19,447 | 19,285 | 14,687 |
|  | AN | 15,309 | 15,925 | 11,148 |
|  | BN | 12,574 | 13,037 | 9,318 |
|  | D | 12,868 | 11,914 | 9,334 |
|  | C | 9,633 | 9,295 | 7,750 |
|  | All | 14,788 | 14,647 | 11,062 |
| DEC | W | 39,708 | 37,022 | 31,790 |
|  | AN | 21,663 | 22,629 | 18,460 |
|  | BN | 16,678 | 16,692 | 14,285 |
|  | D | 15,442 | 15,159 | 13,025 |
|  | C | 11,816 | 10,632 | 9,644 |
|  | All | 23,727 | 22,784 | 19,491 |

Table 28. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios for the Sacramento
River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 8: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | -5,834 (-11.4\%) | -7,750 (-14.7\%) |
|  | AN | -4,436 (-11.1\%) | -5,057 (-12.5\%) |
|  | BN | -3,185 (-13.4\%) | -2,057 (-9.1\%) |
|  | D | -2,079 (-11.9\%) | -2,086 (-12\%) |
|  | C | -1,725 (-12.1\%) | -2,517 (-16.7\%) |
|  | All | -3,751 (-11.7\%) | -4,375 (-13.4\%) |
| FEB | W | -7,676 (-13.4\%) | -10,209 (-17.1\%) |
|  | AN | -4,509 (-9.9\%) | -6,619 (-13.9\%) |
|  | BN | -4,294 (-13.4\%) | -3,953 (-12.5\%) |
|  | D | -951 (-4.5\%) | -856 (-4.1\%) |
|  | C | -174 (-1.2\%) | 243 (1.7\%) |
|  | All | -4,061 (-10.9\%) | -5,033 (-13.2\%) |
| MAR | W | -8,927 (-18.1\%) | -10,504 (-20.6\%) |
|  | AN | -9,006 (-20.2\%) | -9,599 (-21.3\%) |
|  | BN | -4,803 (-19.6\%) | -3,229 (-14.1\%) |
|  | D | -296 (-1.4\%) | -289 (-1.4\%) |
|  | C | 221 (1.7\%) | 329 (2.5\%) |
|  | All | -5,001 (-15.2\%) | -5,302 (-16\%) |
| APR | W | -5,302 (-14\%) | -5,037 (-13.4\%) |
|  | AN | -2,527 (-9.7\%) | -1,479 (-5.9\%) |
|  | BN | 2,324 (13.1\%) | 2,948 (17.2\%) |
|  | D | 3,160 (24.3\%) | 3,246 (25.2\%) |
|  | C | 783 (7.7\%) | 646 (6.2\%) |
|  | All | -846 (-3.7\%) | -503 (-2.2\%) |
| MAY | W | -9,114 (-28.5\%) | -1,666 (-6.8\%) |
|  | AN | -2,906 (-13.8\%) | -542 (-2.9\%) |
|  | BN | 1,001 (7\%) | 2,834 (22.9\%) |
|  | D | 1,628 (14.9\%) | 1,160 (10.2\%) |
|  | C | 1,365 (17.6\%) | 1,103 (13.8\%) |
|  | All | -2,587 (-13.5\%) | 292 (1.8\%) |
| JUN | W | -9,229 (-38.6\%) | -3,933 (-21.1\%) |
|  | AN | -3,883 (-23.8\%) | -3,626 (-22.6\%) |
|  | BN | -2,207 (-16.3\%) | -2,529 (-18.2\%) |
|  | D | -1,867 (-15.3\%) | -2,300 (-18.2\%) |
|  | C | 433 (4.4\%) | 194 (1.9\%) |
|  | All | -4,218 (-25.7\%) | -2,686 (-18.1\%) |
| JUL | W | -7,062 (-35.5\%) | -8,611 (-40.2\%) |
|  | AN | -9,917 (-46\%) | -11,070 (-48.7\%) |
|  | BN | -10,641 (-50.8\%) | -10,200 (-49.7\%) |
|  | D | -8,443 (-43.8\%) | -8,129 (-42.9\%) |
|  | C | -4,810 (-31.2\%) | -3,180 (-23.1\%) |
|  | All | -8,065 (-41.3\%) | -8,342 (-42.1\%) |


| Alternative 8: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -4,998 (-31.6\%) | -5,246 (-32.7\%) |
|  | AN | -5,303 (-33.4\%) | -6,917 (-39.5\%) |
|  | BN | -5,822 (-37.2\%) | -6,412 (-39.5\%) |
|  | D | -6,683 (-39.4\%) | -4,068 (-28.3\%) |
|  | C | -892 (-8.8\%) | 206 (2.3\%) |
|  | All | -4,952 (-32.6\%) | -4,633 (-31.1\%) |
| SEP | W | 1,504 (8.2\%) | -7,455 (-27.4\%) |
|  | AN | -363 (-2.8\%) | -8,171 (-38.9\%) |
|  | BN | -4,730 (-38.1\%) | -4,609 (-37.5\%) |
|  | D | -4,691 (-38.6\%) | -1,157 (-13.4\%) |
|  | C | -1,789 (-21.1\%) | -597 (-8.2\%) |
|  | All | -1,675 (-12.2\%) | -4,688 (-28\%) |
| OCT | W | -4,928 (-36.5\%) | -4,701 (-35.4\%) |
|  | AN | -2,446 (-22\%) | -3,191 (-26.9\%) |
|  | BN | -3,660 (-31.7\%) | -4,226 (-34.9\%) |
|  | D | -2,721 (-26.5\%) | -2,929 (-27.9\%) |
|  | C | -3,119 (-31\%) | -3,010 (-30.2\%) |
|  | All | -3,599 (-31\%) | -3,762 (-31.9\%) |
| NOV | W | -4,760 (-24.5\%) | -4,597 (-23.8\%) |
|  | AN | -4,161 (-27.2\%) | -4,777 (-30\%) |
|  | BN | -3,256 (-25.9\%) | -3,719 (-28.5\%) |
|  | D | -3,534 (-27.5\%) | -2,580 (-21.7\%) |
|  | C | -1,883 (-19.5\%) | -1,546 (-16.6\%) |
|  | All | -3,725 (-25.2\%) | -3,584 (-24.5\%) |
| DEC | W | -7,918 (-19.9\%) | -5,232 (-14.1\%) |
|  | AN | -3,203 (-14.8\%) | -4,168 (-18.4\%) |
|  | BN | -2,392 (-14.3\%) | -2,407 (-14.4\%) |
|  | D | -2,418 (-15.7\%) | -2,134 (-14.1\%) |
|  | C | -2,172 (-18.4\%) | -988 (-9.3\%) |
|  | All | -4,236 (-17.9\%) | -3,293 (-14.5\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.8.2.3 Sacramento River at Rio Vista

Table 29. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 8: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 71,111 | 78,551 | 77,391 |
|  | AN | 41,963 | 42,919 | 42,656 |
|  | BN | 20,943 | 19,991 | 20,710 |
|  | D | 14,895 | 14,927 | 13,940 |
|  | C | 11,853 | 12,601 | 10,881 |
|  | All | 37,268 | 39,721 | 38,969 |
| FEB | W | 80,958 | 89,989 | 83,554 |
|  | AN | 52,542 | 55,363 | 53,430 |
|  | BN | 30,159 | 29,442 | 29,463 |
|  | D | 19,320 | 19,422 | 20,680 |
|  | C | 12,247 | 11,956 | 12,742 |
|  | All | 44,541 | 47,675 | 45,746 |
| MAR | W | 63,763 | 68,663 | 62,296 |
|  | AN | 46,750 | 48,513 | 43,620 |
|  | BN | 20,980 | 19,562 | 19,557 |
|  | D | 17,656 | 17,679 | 19,980 |
|  | C | 10,710 | 10,684 | 11,250 |
|  | All | 36,084 | 37,655 | 35,507 |
| APR | W | 38,214 | 38,422 | 35,961 |
|  | AN | 22,726 | 21,855 | 23,221 |
|  | BN | 14,652 | 14,207 | 18,332 |
|  | D | 10,331 | 10,299 | 13,788 |
|  | C | 7,665 | 7,816 | 8,436 |
|  | All | 21,333 | 21,211 | 22,192 |
| MAY | W | 26,933 | 20,046 | 18,687 |
|  | AN | 17,008 | 14,948 | 14,545 |
|  | BN | 10,924 | 9,355 | 11,936 |
|  | D | 8,135 | 8,564 | 9,609 |
|  | C | 5,305 | 5,554 | 6,564 |
|  | All | 15,456 | 12,833 | 13,162 |
| JUN | W | 16,557 | 11,418 | 8,177 |
|  | AN | 9,887 | 9,220 | 6,292 |
|  | BN | 7,001 | 7,241 | 5,544 |
|  | D | 6,020 | 6,335 | 5,083 |
|  | C | 4,333 | 4,513 | 4,901 |
|  | All | 9,847 | 8,257 | 6,293 |
| JUL | W | 11,125 | 12,181 | 5,946 |
|  | AN | 12,128 | 12,927 | 5,258 |
|  | BN | 11,686 | 11,357 | 4,883 |
|  | D | 10,523 | 10,307 | 5,000 |
|  | C | 7,736 | 6,596 | 4,969 |
|  | All | 10,739 | 10,921 | 5,313 |


| Alternative 8: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 8,507 | 8,650 | 5,100 |
|  | AN | 8,538 | 9,648 | 5,000 |
|  | BN | 8,371 | 8,753 | 4,591 |
|  | D | 9,264 | 7,417 | 4,838 |
|  | C | 4,390 | 3,615 | 4,119 |
|  | All | 8,052 | 7,806 | 4,798 |
| SEP | W | 10,767 | 21,199 | 11,566 |
|  | AN | 6,788 | 12,832 | 6,642 |
|  | BN | 6,283 | 6,197 | 3,000 |
|  | D | 6,116 | 3,644 | 3,000 |
|  | C | 3,588 | 2,996 | 2,576 |
|  | All | 7,348 | 10,896 | 6,187 |
| OCT | W | 8,718 | 8,287 | 4,431 |
|  | AN | 6,183 | 7,207 | 4,343 |
|  | BN | 6,258 | 6,976 | 3,298 |
|  | D | 5,312 | 5,727 | 3,486 |
|  | C | 5,215 | 4,969 | 2,635 |
|  | All | 6,667 | 6,858 | 3,754 |
| NOV | W | 15,829 | 15,879 | 11,584 |
|  | AN | 11,333 | 12,156 | 7,860 |
|  | BN | 8,184 | 9,071 | 5,626 |
|  | D | 8,733 | 8,061 | 5,718 |
|  | C | 5,473 | 5,565 | 4,180 |
|  | All | 10,793 | 10,946 | 7,651 |
| DEC | W | 43,367 | 40,431 | 39,460 |
|  | AN | 19,040 | 19,936 | 16,539 |
|  | BN | 13,987 | 14,049 | 12,283 |
|  | D | 11,999 | 11,687 | 10,114 |
|  | C | 8,131 | 7,186 | 6,427 |
|  | All | 22,749 | 21,753 | 20,190 |

Table 30. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 8: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 6,279 (8.8\%) | -1,161 (-1.5\%) |
|  | AN | 693 (1.7\%) | -263 (-0.6\%) |
|  | BN | -232 (-1.1\%) | 719 (3.6\%) |
|  | D | -954 (-6.4\%) | -987 (-6.6\%) |
|  | C | -972 (-8.2\%) | -1,721 (-13.7\%) |
|  | All | 1,701 (4.6\%) | -752 (-1.9\%) |
| FEB | W | 2,596 (3.2\%) | -6,435 (-7.2\%) |
|  | AN | 888 (1.7\%) | -1,932 (-3.5\%) |
|  | BN | -695 (-2.3\%) | 21 (0.1\%) |
|  | D | 1,361 (7\%) | 1,258 (6.5\%) |
|  | C | 496 (4\%) | 787 (6.6\%) |
|  | All | 1,206 (2.7\%) | -1,928 (-4\%) |
| MAR | W | -1,468 (-2.3\%) | -6,367 (-9.3\%) |
|  | AN | -3,130 (-6.7\%) | -4,893 (-10.1\%) |
|  | BN | -1,423 (-6.8\%) | -5 (0\%) |
|  | D | 2,324 (13.2\%) | 2,301 (13\%) |
|  | C | 540 (5\%) | 567 (5.3\%) |
|  | All | -577 (-1.6\%) | -2,148 (-5.7\%) |
| APR | W | -2,252 (-5.9\%) | -2,461 (-6.4\%) |
|  | AN | 495 (2.2\%) | 1,366 (6.3\%) |
|  | BN | 3,680 (25.1\%) | 4,125 (29\%) |
|  | D | 3,457 (33.5\%) | 3,490 (33.9\%) |
|  | C | 771 (10.1\%) | 619 (7.9\%) |
|  | All | 858 (4\%) | 980 (4.6\%) |
| MAY | W | -8,245 (-30.6\%) | -1,359 (-6.8\%) |
|  | AN | -2,463 (-14.5\%) | -403 (-2.7\%) |
|  | BN | 1,012 (9.3\%) | 2,581 (27.6\%) |
|  | D | 1,475 (18.1\%) | 1,046 (12.2\%) |
|  | C | 1,259 (23.7\%) | 1,010 (18.2\%) |
|  | All | -2,294 (-14.8\%) | 328 (2.6\%) |
| JUN | W | -8,380 (-50.6\%) | -3,241 (-28.4\%) |
|  | AN | -3,595 (-36.4\%) | -2,928 (-31.8\%) |
|  | BN | -1,456 (-20.8\%) | -1,696 (-23.4\%) |
|  | D | -937 (-15.6\%) | -1,252 (-19.8\%) |
|  | C | 568 (13.1\%) | 388 (8.6\%) |
|  | All | -3,554 (-36.1\%) | -1,964 (-23.8\%) |
| JUL | W | -5,179 (-46.6\%) | -6,236 (-51.2\%) |
|  | AN | -6,870 (-56.6\%) | -7,669 (-59.3\%) |
|  | BN | -6,803 (-58.2\%) | -6,474 (-57\%) |
|  | D | -5,523 (-52.5\%) | -5,307 (-51.5\%) |
|  | C | -2,767 (-35.8\%) | -1,627 (-24.7\%) |
|  | All | -5,426 (-50.5\%) | -5,608 (-51.3\%) |


| Alternative 8: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -3,407 (-40\%) | -3,550 (-41\%) |
|  | AN | -3,538 (-41.4\%) | -4,648 (-48.2\%) |
|  | BN | -3,779 (-45.1\%) | -4,161 (-47.5\%) |
|  | D | -4,426 (-47.8\%) | -2,579 (-34.8\%) |
|  | C | -271 (-6.2\%) | 504 (13.9\%) |
|  | All | -3,254 (-40.4\%) | -3,008 (-38.5\%) |
| SEP | W | 799 (7.4\%) | -9,633 (-45.4\%) |
|  | AN | -146 (-2.2\%) | -6,190 (-48.2\%) |
|  | BN | -3,283 (-52.3\%) | -3,197 (-51.6\%) |
|  | D | -3,116 (-50.9\%) | -644 (-17.7\%) |
|  | C | -1,013 (-28.2\%) | -420 (-14\%) |
|  | All | -1,161 (-15.8\%) | -4,709 (-43.2\%) |
| OCT | W | -4,287 (-49.2\%) | -3,856 (-46.5\%) |
|  | AN | -1,840 (-29.8\%) | -2,864 (-39.7\%) |
|  | BN | -2,960 (-47.3\%) | -3,678 (-52.7\%) |
|  | D | -1,826 (-34.4\%) | -2,241 (-39.1\%) |
|  | C | -2,580 (-49.5\%) | -2,334 (-47\%) |
|  | All | -2,912 (-43.7\%) | -3,103 (-45.3\%) |
| NOV | W | -4,245 (-26.8\%) | -4,295 (-27.1\%) |
|  | AN | -3,473 (-30.6\%) | -4,296 (-35.3\%) |
|  | BN | -2,558 (-31.3\%) | -3,444 (-38\%) |
|  | D | -3,014 (-34.5\%) | -2,343 (-29.1\%) |
|  | C | -1,293 (-23.6\%) | -1,385 (-24.9\%) |
|  | All | -3,142 (-29.1\%) | -3,296 (-30.1\%) |
| DEC | W | -3,907 (-9\%) | -971 (-2.4\%) |
|  | AN | -2,502 (-13.1\%) | -3,397 (-17\%) |
|  | BN | -1,704 (-12.2\%) | -1,766 (-12.6\%) |
|  | D | -1,885 (-15.7\%) | -1,573 (-13.5\%) |
|  | C | -1,705 (-21\%) | -759 (-10.6\%) |
|  | All | -2,559 (-11.2\%) | -1,563 (-7.2\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.8.2.4 Delta Outflow

Table 31. Mean Monthly Flows (cfs) for Model Scenarios at the Delta Outflow, Year-Round

| Alternative 8: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 85,900 | 94,620 | 98,110 |
|  | AN | 49,448 | 51,100 | 55,237 |
|  | BN | 22,968 | 22,301 | 27,942 |
|  | D | 14,736 | 14,732 | 19,582 |
|  | C | 11,343 | 12,651 | 15,420 |
|  | All | 43,289 | 46,372 | 50,517 |
| FEB | W | 96,835 | 107,085 | 105,369 |
|  | AN | 62,321 | 65,873 | 68,322 |
|  | BN | 36,766 | 36,084 | 40,504 |
|  | D | 20,915 | 21,461 | 27,556 |
|  | C | 12,991 | 12,798 | 17,874 |
|  | All | 52,594 | 56,338 | 58,988 |
| MAR | W | 78,956 | 84,471 | 83,030 |
|  | AN | 54,171 | 56,737 | 56,840 |
|  | BN | 24,029 | 22,467 | 27,303 |
|  | D | 19,880 | 19,985 | 26,181 |
|  | C | 11,911 | 12,215 | 15,362 |
|  | All | 43,172 | 45,097 | 47,301 |
| APR | W | 54,394 | 54,562 | 54,395 |
|  | AN | 31,975 | 30,576 | 33,786 |
|  | BN | 21,928 | 20,641 | 27,172 |
|  | D | 14,142 | 13,413 | 19,140 |
|  | C | 9,053 | 9,294 | 11,354 |
|  | All | 30,099 | 29,603 | 32,694 |
| MAY | W | 41,040 | 32,880 | 34,707 |
|  | AN | 24,200 | 21,709 | 23,131 |
|  | BN | 16,299 | 13,596 | 18,491 |
|  | D | 10,487 | 10,375 | 13,443 |
|  | C | 6,000 | 6,286 | 8,826 |
|  | All | 22,517 | 19,121 | 21,789 |
| JUN | W | 23,451 | 15,640 | 17,629 |
|  | AN | 11,801 | 10,676 | 12,272 |
|  | BN | 8,004 | 8,943 | 10,036 |
|  | D | 6,636 | 7,689 | 8,039 |
|  | C | 5,322 | 5,632 | 7,590 |
|  | All | 12,765 | 10,560 | 11,975 |
| JUL | W | 11,441 | 11,407 | 8,782 |
|  | AN | 9,430 | 12,225 | 8,017 |
|  | BN | 7,151 | 7,668 | 5,908 |
|  | D | 5,024 | 6,448 | 5,072 |
|  | C | 4,238 | 5,832 | 4,083 |
|  | All | 7,951 | 8,984 | 6,677 |


| Alternative 8: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 5,341 | 4,308 | 4,000 |
|  | AN | 4,000 | 4,713 | 4,003 |
|  | BN | 4,000 | 5,129 | 3,995 |
|  | D | 4,829 | 5,348 | 4,539 |
|  | C | 4,077 | 4,433 | 4,746 |
|  | All | 4,618 | 4,754 | 4,227 |
| SEP | W | 9,569 | 20,078 | 21,436 |
|  | AN | 3,672 | 11,581 | 12,805 |
|  | BN | 3,445 | 3,428 | 3,246 |
|  | D | 3,350 | 3,021 | 3,557 |
|  | C | 3,000 | 3,036 | 4,225 |
|  | All | 5,334 | 9,754 | 10,624 |
| OCT | W | 6,487 | 9,520 | 10,698 |
|  | AN | 4,021 | 8,982 | 9,923 |
|  | BN | 4,477 | 8,054 | 9,301 |
|  | D | 4,157 | 7,294 | 9,005 |
|  | C | 4,158 | 6,607 | 7,917 |
|  | All | 4,931 | 8,276 | 9,567 |
| NOV | W | 14,232 | 15,987 | 18,783 |
|  | AN | 9,683 | 11,529 | 13,443 |
|  | BN | 5,864 | 8,681 | 11,211 |
|  | D | 6,943 | 8,052 | 11,112 |
|  | C | 5,045 | 5,725 | 8,995 |
|  | All | 9,193 | 10,844 | 13,593 |
| DEC | W | 48,185 | 45,191 | 51,194 |
|  | AN | 18,014 | 19,119 | 23,702 |
|  | BN | 11,950 | 12,231 | 18,694 |
|  | D | 8,884 | 8,828 | 15,420 |
|  | C | 5,531 | 6,560 | 10,783 |
|  | All | 22,714 | 22,113 | 27,855 |

Table 32. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios at the Delta Outflow, Year-Round

| Alternative 8: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 12,210 (14.2\%) | 3,490 (3.7\%) |
|  | AN | 5,790 (11.7\%) | 4,137 (8.1\%) |
|  | BN | 4,974 (21.7\%) | 5,641 (25.3\%) |
|  | D | 4,846 (32.9\%) | 4,850 (32.9\%) |
|  | C | 4,077 (35.9\%) | 2,769 (21.9\%) |
|  | All | 7,228 (16.7\%) | 4,145 (8.9\%) |
| FEB | W | 8,534 (8.8\%) | -1,716 (-1.6\%) |
|  | AN | 6,000 (9.6\%) | 2,449 (3.7\%) |
|  | BN | 3,737 (10.2\%) | 4,419 (12.2\%) |
|  | D | 6,641 (31.7\%) | 6,095 (28.4\%) |
|  | C | 4,883 (37.6\%) | 5,076 (39.7\%) |
|  | All | 6,394 (12.2\%) | 2,649 (4.7\%) |
| MAR | W | 4,075 (5.2\%) | -1,441 (-1.7\%) |
|  | AN | 2,669 (4.9\%) | 103 (0.2\%) |
|  | BN | 3,274 (13.6\%) | 4,836 (21.5\%) |
|  | D | 6,300 (31.7\%) | 6,195 (31\%) |
|  | C | 3,451 (29\%) | 3,147 (25.8\%) |
|  | All | 4,130 (9.6\%) | 2,204 (4.9\%) |
| APR | W | 1 (0\%) | -167 (-0.3\%) |
|  | AN | 1,811 (5.7\%) | 3,210 (10.5\%) |
|  | BN | 5,244 (23.9\%) | 6,531 (31.6\%) |
|  | D | 4,998 (35.3\%) | 5,726 (42.7\%) |
|  | C | 2,301 (25.4\%) | 2,060 (22.2\%) |
|  | All | 2,595 (8.6\%) | 3,090 (10.4\%) |
| MAY | W | -6,332 (-15.4\%) | 1,827 (5.6\%) |
|  | AN | -1,068 (-4.4\%) | 1,422 (6.6\%) |
|  | BN | 2,192 (13.4\%) | 4,895 (36\%) |
|  | D | 2,955 (28.2\%) | 3,067 (29.6\%) |
|  | C | 2,826 (47.1\%) | 2,540 (40.4\%) |
|  | All | -728 (-3.2\%) | 2,668 (14\%) |
| JUN | W | -5,821 (-24.8\%) | 1,990 (12.7\%) |
|  | AN | 471 (4\%) | 1,596 (15\%) |
|  | BN | 2,032 (25.4\%) | 1,093 (12.2\%) |
|  | D | 1,404 (21.2\%) | 350 (4.6\%) |
|  | C | 2,268 (42.6\%) | 1,958 (34.8\%) |
|  | All | -790 (-6.2\%) | 1,414 (13.4\%) |
| JUL | W | -2,659 (-23.2\%) | -2,624 (-23\%) |
|  | AN | -1,414 (-15\%) | -4,208 (-34.4\%) |
|  | BN | -1,243 (-17.4\%) | -1,760 (-23\%) |
|  | D | 49 (1\%) | -1,376 (-21.3\%) |
|  | C | -154 (-3.6\%) | -1,749 (-30\%) |
|  | All | -1,274 (-16\%) | -2,306 (-25.7\%) |


| Alternative 8: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -1,341 (-25.1\%) | -308 (-7.2\%) |
|  | AN | 3 (0.1\%) | -711 (-15.1\%) |
|  | BN | -5 (-0.1\%) | -1,134 (-22.1\%) |
|  | D | -290 (-6\%) | -809 (-15.1\%) |
|  | C | 669 (16.4\%) | 313 (7.1\%) |
|  | All | -391 (-8.5\%) | -527 (-11.1\%) |
| SEP | W | 11,867 (124\%) | 1,358 (6.8\%) |
|  | AN | 9,133 (248.7\%) | 1,224 (10.6\%) |
|  | BN | -199 (-5.8\%) | -182 (-5.3\%) |
|  | D | 207 (6.2\%) | 535 (17.7\%) |
|  | C | 1,225 (40.8\%) | 1,189 (39.2\%) |
|  | All | 5,290 (99.2\%) | 870 (8.9\%) |
| OCT | W | 4,211 (64.9\%) | 1,178 (12.4\%) |
|  | AN | 5,902 (146.8\%) | 941 (10.5\%) |
|  | BN | 4,825 (107.8\%) | 1,247 (15.5\%) |
|  | D | 4,847 (116.6\%) | 1,711 (23.5\%) |
|  | C | 3,759 (90.4\%) | 1,310 (19.8\%) |
|  | All | 4,637 (94\%) | 1,291 (15.6\%) |
| NOV | W | 4,551 (32\%) | 2,796 (17.5\%) |
|  | AN | 3,760 (38.8\%) | 1,915 (16.6\%) |
|  | BN | 5,346 (91.2\%) | 2,529 (29.1\%) |
|  | D | 4,169 (60.1\%) | 3,059 (38\%) |
|  | C | 3,951 (78.3\%) | 3,270 (57.1\%) |
|  | All | 4,399 (47.9\%) | 2,749 (25.3\%) |
| DEC | W | 3,009 (6.2\%) | 6,003 (13.3\%) |
|  | AN | 5,688 (31.6\%) | 4,583 (24\%) |
|  | BN | 6,743 (56.4\%) | 6,462 (52.8\%) |
|  | D | 6,536 (73.6\%) | 6,592 (74.7\%) |
|  | C | 5,252 (94.9\%) | 4,222 (64.4\%) |
|  | All | 5,141 (22.6\%) | 5,742 (26\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.8.2.5 San Joaquin River at Vernalis

Table 33. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 8: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 9,089 | 9,681 | 9,785 |
|  | AN | 5,447 | 6,011 | 6,077 |
|  | BN | 2,326 | 2,220 | 2,226 |
|  | D | 2,270 | 2,202 | 2,239 |
|  | C | 1,667 | 1,592 | 1,572 |
|  | All | 4,777 | 5,018 | 5,064 |
| FEB | W | 12,750 | 13,191 | 13,161 |
|  | AN | 6,965 | 6,721 | 6,704 |
|  | BN | 2,983 | 2,841 | 2,837 |
|  | D | 2,590 | 2,269 | 2,270 |
|  | C | 2,120 | 1,941 | 1,942 |
|  | All | 6,388 | 6,361 | 6,348 |
| MAR | W | 14,374 | 15,235 | 15,244 |
|  | AN | 6,284 | 6,364 | 6,335 |
|  | BN | 2,949 | 2,476 | 2,476 |
|  | D | 2,479 | 2,146 | 2,145 |
|  | C | 1,813 | 1,688 | 1,686 |
|  | All | 6,648 | 6,763 | 6,759 |
| APR | W | 11,955 | 12,457 | 12,455 |
|  | AN | 6,014 | 6,042 | 6,024 |
|  | BN | 4,490 | 3,922 | 3,919 |
|  | D | 3,656 | 3,112 | 3,106 |
|  | C | 1,983 | 1,796 | 1,790 |
|  | All | 6,351 | 6,291 | 6,284 |
| MAY | W | 12,109 | 12,632 | 12,621 |
|  | AN | 5,381 | 5,092 | 5,085 |
|  | BN | 4,074 | 3,657 | 3,653 |
|  | D | 3,308 | 2,823 | 2,817 |
|  | C | 1,964 | 1,798 | 1,791 |
|  | All | 6,148 | 6,069 | 6,061 |
| JUN | W | 11,058 | 6,820 | 6,843 |
|  | AN | 2,965 | 2,678 | 2,658 |
|  | BN | 2,051 | 1,870 | 1,864 |
|  | D | 1,537 | 1,291 | 1,284 |
|  | C | 1,020 | 956 | 950 |
|  | All | 4,583 | 3,206 | 3,206 |
| JUL | W | 7,654 | 4,345 | 4,337 |
|  | AN | 1,958 | 1,801 | 1,798 |
|  | BN | 1,491 | 1,381 | 1,371 |
|  | D | 1,295 | 1,100 | 1,089 |
|  | C | 898 | 858 | 851 |
|  | All | 3,239 | 2,184 | 2,176 |


| Alternative 8: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 3,539 | 2,645 | 2,643 |
|  | AN | 2,000 | 1,699 | 1,697 |
|  | BN | 1,460 | 1,375 | 1,368 |
|  | D | 1,375 | 1,225 | 1,219 |
|  | C | 1,007 | 987 | 970 |
|  | All | 2,072 | 1,710 | 1,704 |
| SEP | W | 3,519 | 3,127 | 3,126 |
|  | AN | 2,355 | 2,164 | 2,163 |
|  | BN | 1,829 | 1,748 | 1,745 |
|  | D | 1,796 | 1,643 | 1,640 |
|  | C | 1,402 | 1,378 | 1,366 |
|  | All | 2,338 | 2,144 | 2,140 |
| OCT | W | 2,760 | 2,726 | 2,722 |
|  | AN | 2,745 | 2,595 | 2,584 |
|  | BN | 2,502 | 2,348 | 2,343 |
|  | D | 2,945 | 2,790 | 2,790 |
|  | C | 2,213 | 2,031 | 2,030 |
|  | All | 2,639 | 2,515 | 2,511 |
| NOV | W | 2,534 | 2,411 | 2,418 |
|  | AN | 3,182 | 3,193 | 3,083 |
|  | BN | 2,150 | 1,997 | 2,064 |
|  | D | 2,272 | 2,217 | 2,253 |
|  | C | 1,968 | 1,898 | 1,897 |
|  | All | 2,448 | 2,367 | 2,364 |
| DEC | W | 4,370 | 4,504 | 4,584 |
|  | AN | 4,711 | 4,567 | 4,654 |
|  | BN | 2,182 | 2,065 | 2,079 |
|  | D | 2,129 | 2,166 | 2,169 |
|  | C | 1,729 | 1,694 | 1,680 |
|  | All | 3,219 | 3,211 | 3,251 |

${ }^{\text {a }}$ Water year type for this location was determined using the San Joaquin River Valley Index.

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Table 34. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 8: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 696 (7.7\%) | 104 (1.1\%) |
|  | AN | 630 (11.6\%) | 66 (1.1\%) |
|  | BN | -100 (-4.3\%) | 5 (0.2\%) |
|  | D | -31 (-1.4\%) | 38 (1.7\%) |
|  | C | -95 (-5.7\%) | -20 (-1.3\%) |
|  | All | 287 (6\%) | 46 (0.9\%) |
| FEB | W | 411 (3.2\%) | -30 (-0.2\%) |
|  | AN | -261 (-3.8\%) | -17 (-0.3\%) |
|  | BN | -145 (-4.9\%) | -3 (-0.1\%) |
|  | D | -321 (-12.4\%) | 0 (0\%) |
|  | C | -178 (-8.4\%) | 1 (0\%) |
|  | All | -39 (-0.6\%) | -13 (-0.2\%) |
| MAR | W | 869 (6\%) | 8 (0.1\%) |
|  | AN | 51 (0.8\%) | -29 (-0.5\%) |
|  | BN | -473 (-16\%) | 0 (0\%) |
|  | D | -334 (-13.5\%) | -1 (0\%) |
|  | C | -127 (-7\%) | -1 (-0.1\%) |
|  | All | 112 (1.7\%) | -4 (-0.1\%) |
| APR | W | 501 (4.2\%) | -2 (0\%) |
|  | AN | 10 (0.2\%) | -18 (-0.3\%) |
|  | BN | -571 (-12.7\%) | -3 (-0.1\%) |
|  | D | -550 (-15\%) | -5 (-0.2\%) |
|  | C | -193 (-9.7\%) | -6 (-0.3\%) |
|  | All | -67 (-1.1\%) | -6 (-0.1\%) |
| MAY | W | 512 (4.2\%) | -11 (-0.1\%) |
|  | AN | -297 (-5.5\%) | -7 (-0.1\%) |
|  | BN | -420 (-10.3\%) | -4 (-0.1\%) |
|  | D | -491 (-14.8\%) | -6 (-0.2\%) |
|  | C | -174 (-8.9\%) | -7 (-0.4\%) |
|  | All | -86 (-1.4\%) | -7 (-0.1\%) |
| JUN | W | -4,215 (-38.1\%) | 23 (0.3\%) |
|  | AN | -306 (-10.3\%) | -20 (-0.7\%) |
|  | BN | -187 (-9.1\%) | -6 (-0.3\%) |
|  | D | -253 (-16.5\%) | -7 (-0.5\%) |
|  | C | -70 (-6.9\%) | -6 (-0.6\%) |
|  | All | -1,377 (-30\%) | 0 (0\%) |
| JUL | W | -3,317 (-43.3\%) | -8 (-0.2\%) |
|  | AN | -160 (-8.2\%) | -3 (-0.2\%) |
|  | BN | -120 (-8\%) | -9 (-0.7\%) |
|  | D | -206 (-15.9\%) | -11 (-1\%) |
|  | C | -48 (-5.3\%) | -7 (-0.9\%) |
|  | All | -1,063 (-32.8\%) | -8 (-0.4\%) |


| Alternative 8: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | $\mathbf{W Y T}^{\text {b }}$ | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -896 (-25.3\%) | -2 (-0.1\%) |
|  | AN | -304 (-15.2\%) | -2 (-0.1\%) |
|  | BN | -92 (-6.3\%) | -6 (-0.5\%) |
|  | D | -155 (-11.3\%) | -6 (-0.5\%) |
|  | C | -37 (-3.7\%) | -17 (-1.7\%) |
|  | All | -368 (-17.8\%) | -6 (-0.4\%) |
| SEP | W | -393 (-11.2\%) | -1 (0\%) |
|  | AN | -191 (-8.1\%) | -1 (-0.1\%) |
|  | BN | -84 (-4.6\%) | -3 (-0.2\%) |
|  | D | -156 (-8.7\%) | -3 (-0.2\%) |
|  | C | -36 (-2.6\%) | -12 (-0.8\%) |
|  | All | -197 (-8.4\%) | -4 (-0.2\%) |
| OCT | W | -37 (-1.3\%) | -3 (-0.1\%) |
|  | AN | -161 (-5.9\%) | -11 (-0.4\%) |
|  | BN | -159 (-6.4\%) | -5 (-0.2\%) |
|  | D | -155 (-5.2\%) | 0 (0\%) |
|  | C | -182 (-8.2\%) | -1 (0\%) |
|  | All | -128 (-4.8\%) | -4 (-0.2\%) |
| NOV | W | -116 (-4.6\%) | 6 (0.3\%) |
|  | AN | -99 (-3.1\%) | -110 (-3.4\%) |
|  | BN | -86 (-4\%) | 67 (3.4\%) |
|  | D | -19 (-0.9\%) | 35 (1.6\%) |
|  | C | -71 (-3.6\%) | -1 (0\%) |
|  | All | -84 (-3.4\%) | -3 (-0.1\%) |
| DEC | W | 214 (4.9\%) | 80 (1.8\%) |
|  | AN | -57 (-1.2\%) | 87 (1.9\%) |
|  | BN | -103 (-4.7\%) | 14 (0.7\%) |
|  | D | 40 (1.9\%) | 3 (0.1\%) |
|  | C | -49 (-2.8\%) | -14 (-0.8\%) |
|  | All | 32 (1\%) | 40 (1.3\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.8.2.6 Mokelumne River at the Delta

Table 35. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 8: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {a }}$ | EXISTING CONDITIONS | NAA | A8_LLT |
| JAN | W | 3,071 | 3,634 | 3,634 |
|  | AN | 1,707 | 1,876 | 1,876 |
|  | BN | 597 | 617 | 617 |
|  | D | 495 | 493 | 493 |
|  | C | 280 | 281 | 281 |
|  | All | 1,460 | 1,660 | 1,660 |
| FEB | W | 3,290 | 3,781 | 3,781 |
|  | AN | 2,525 | 2,913 | 2,913 |
|  | BN | 1,011 | 1,035 | 1,035 |
|  | D | 695 | 678 | 678 |
|  | C | 426 | 442 | 442 |
|  | All | 1,809 | 2,033 | 2,033 |
| MAR | W | 3,179 | 3,336 | 3,336 |
|  | AN | 1,582 | 1,639 | 1,639 |
|  | BN | 1,181 | 1,140 | 1,140 |
|  | D | 754 | 691 | 691 |
|  | C | 595 | 580 | 580 |
|  | All | 1,662 | 1,700 | 1,700 |
| APR | W | 2,819 | 2,694 | 2,694 |
|  | AN | 1,619 | 1,424 | 1,424 |
|  | BN | 1,243 | 1,068 | 1,068 |
|  | D | 623 | 550 | 550 |
|  | C | 340 | 311 | 311 |
|  | All | 1,503 | 1,384 | 1,384 |
| MAY | W | 3,170 | 2,885 | 2,885 |
|  | AN | 1,439 | 1,179 | 1,179 |
|  | BN | 976 | 812 | 812 |
|  | D | 406 | 333 | 333 |
|  | C | 181 | 170 | 170 |
|  | All | 1,463 | 1,289 | 1,289 |
| JUN | W | 1,755 | 1,415 | 1,415 |
|  | AN | 851 | 631 | 631 |
|  | BN | 471 | 366 | 366 |
|  | D | 93 | 76 | 76 |
|  | C | 52 | 44 | 44 |
|  | All | 779 | 616 | 616 |
| JUL | W | 772 | 469 | 469 |
|  | AN | 347 | 167 | 167 |
|  | BN | 123 | 70 | 70 |
|  | D | 7 | 6 | 6 |
|  | C | 3 | 3 | 3 |
|  | All | 315 | 183 | 183 |


| Alternative 8: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A8_LLT |
| AUG | W | 703 | 346 | 346 |
|  | AN | 328 | 216 | 216 |
|  | BN | 112 | 71 | 71 |
|  | D | 4 | 4 | 4 |
|  | C | 2 | 2 | 2 |
|  | All | 289 | 156 | 156 |
| SEP | W | 702 | 497 | 497 |
|  | AN | 333 | 259 | 259 |
|  | BN | 114 | 91 | 91 |
|  | D | 9 | 9 | 9 |
|  | C | 5 | 5 | 5 |
|  | All | 291 | 213 | 213 |
| OCT | W | 161 | 147 | 147 |
|  | AN | 178 | 180 | 180 |
|  | BN | 154 | 144 | 144 |
|  | D | 180 | 160 | 160 |
|  | C | 117 | 123 | 123 |
|  | All | 158 | 150 | 150 |
| NOV | W | 487 | 431 | 431 |
|  | AN | 912 | 855 | 855 |
|  | BN | 347 | 301 | 301 |
|  | D | 380 | 327 | 327 |
|  | C | 195 | 186 | 186 |
|  | All | 474 | 429 | 429 |
| DEC | W | 1,504 | 1,732 | 1,732 |
|  | AN | 1,411 | 1,628 | 1,628 |
|  | BN | 447 | 472 | 472 |
|  | D | 384 | 374 | 374 |
|  | C | 204 | 209 | 209 |
|  | All | 887 | 999 | 999 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 36. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 8: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| JAN | W | 563 (18.3\%) | 0 (0\%) |
|  | AN | 169 (9.9\%) | 0 (0\%) |
|  | BN | 21 (3.4\%) | 0 (0\%) |
|  | D | -2 (-0.5\%) | 0 (0\%) |
|  | C | 1 (0.3\%) | 0 (0\%) |
|  | All | 201 (13.8\%) | 0 (0\%) |
| FEB | W | 491 (14.9\%) | 0 (0\%) |
|  | AN | 388 (15.4\%) | 0 (0\%) |
|  | BN | 24 (2.4\%) | 0 (0\%) |
|  | D | -17 (-2.4\%) | 0 (0\%) |
|  | C | 15 (3.5\%) | 0 (0\%) |
|  | All | 223 (12.3\%) | 0 (0\%) |
| MAR | W | 158 (5\%) | 0 (0\%) |
|  | AN | 57 (3.6\%) | 0 (0\%) |
|  | BN | -41 (-3.4\%) | 0 (0\%) |
|  | D | -63 (-8.3\%) | 0 (0\%) |
|  | C | -15 (-2.5\%) | 0 (0\%) |
|  | All | 38 (2.3\%) | 0 (0\%) |
| APR | W | -125 (-4.4\%) | 0 (0\%) |
|  | AN | -194 (-12\%) | 0 (0\%) |
|  | BN | -175 (-14.1\%) | 0 (0\%) |
|  | D | -73 (-11.7\%) | 0 (0\%) |
|  | C | -29 (-8.7\%) | 0 (0\%) |
|  | All | -120 (-8\%) | 0 (0\%) |
| MAY | W | -284 (-9\%) | 0 (0\%) |
|  | AN | -260 (-18.1\%) | 0 (0\%) |
|  | BN | -164 (-16.8\%) | 0 (0\%) |
|  | D | -72 (-17.8\%) | 0 (0\%) |
|  | C | -11 (-6.1\%) | 0 (0\%) |
|  | All | -174 (-11.9\%) | 0 (0\%) |
| JUN | W | -339 (-19.3\%) | 0 (0\%) |
|  | AN | -220 (-25.8\%) | 0 (0\%) |
|  | BN | -105 (-22.3\%) | 0 (0\%) |
|  | D | -17 (-18.8\%) | 0 (0\%) |
|  | C | -8 (-14.7\%) | 0 (0\%) |
|  | All | -163 (-20.9\%) | 0 (0\%) |
| JUL | W | -303 (-39.3\%) | 0 (0\%) |
|  | AN | -180 (-51.8\%) | 0 (0\%) |
|  | BN | -54 (-43.4\%) | 0 (0\%) |
|  | D | 0 (-3.1\%) | 0 (0\%) |
|  | C | 0 (-4.4\%) | 0 (0\%) |
|  | All | -132 (-42\%) | 0 (0\%) |


| Alternative 8: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A8_LLT | NAA vs. A8_LLT |
| AUG | W | -357 (-50.8\%) | 0 (0\%) |
|  | AN | -113 (-34.3\%) | 0 (0\%) |
|  | BN | -41 (-36.5\%) | 0 (0\%) |
|  | D | 0 (-0.5\%) | 0 (0\%) |
|  | C | 0 (-3.1\%) | 0 (0\%) |
|  | All | -133 (-46.1\%) | 0 (0\%) |
| SEP | W | -205 (-29.3\%) | 0 (0\%) |
|  | AN | -74 (-22.2\%) | 0 (0\%) |
|  | BN | -23 (-20.5\%) | 0 (0\%) |
|  | D | -1 (-5.9\%) | 0 (0\%) |
|  | C | 0 (4.6\%) | 0 (0\%) |
|  | All | -78 (-26.9\%) | 0 (0\%) |
| OCT | W | -14 (-8.7\%) | 0 (0\%) |
|  | AN | 2 (1.1\%) | 0 (0\%) |
|  | BN | -10 (-6.6\%) | 0 (0\%) |
|  | D | -20 (-11.1\%) | 0 (0\%) |
|  | C | 6 (4.7\%) | 0 (0\%) |
|  | All | -7 (-4.7\%) | 0 (0\%) |
| NOV | W | -56 (-11.5\%) | 0 (0\%) |
|  | AN | -57 (-6.3\%) | 0 (0\%) |
|  | BN | -46 (-13.2\%) | 0 (0\%) |
|  | D | -53 (-13.9\%) | 0 (0\%) |
|  | C | -9 (-4.6\%) | 0 (0\%) |
|  | All | -45 (-9.5\%) | 0 (0\%) |
| DEC | W | 228 (15.2\%) | 0 (0\%) |
|  | AN | 217 (15.4\%) | 0 (0\%) |
|  | BN | 25 (5.5\%) | 0 (0\%) |
|  | D | -10 (-2.6\%) | 0 (0\%) |
|  | C | 6 (2.9\%) | 0 (0\%) |
|  | All | 113 (12.7\%) | 0 (0\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C. 9 Alternative 9

## 11C.9.1 Upstream

11C.9.1.1 Sacramento River at Keswick
Table 1. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 9: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 16,526 | 18,233 | 18,566 |
|  | AN | 8,318 | 8,205 | 8,314 |
|  | BN | 4,502 | 4,184 | 4,329 |
|  | D | 3,996 | 4,096 | 3,592 |
|  | C | 3,490 | 4,238 | 3,460 |
|  | All | 8,614 | 9,215 | 9,138 |
| FEB | W | 18,577 | 20,853 | 20,997 |
|  | AN | 14,409 | 15,297 | 15,399 |
|  | BN | 5,981 | 5,544 | 6,237 |
|  | D | 3,684 | 3,410 | 3,327 |
|  | C | 3,599 | 3,372 | 3,364 |
|  | All | 10,355 | 11,039 | 11,199 |
| MAR | W | 16,200 | 17,065 | 17,067 |
|  | AN | 9,131 | 8,818 | 8,477 |
|  | BN | 5,200 | 4,318 | 4,165 |
|  | D | 3,903 | 3,814 | 3,925 |
|  | C | 3,487 | 3,583 | 3,592 |
|  | All | 8,728 | 8,800 | 8,750 |
| APR | W | 9,418 | 9,131 | 8,988 |
|  | AN | 6,182 | 5,536 | 5,776 |
|  | BN | 5,426 | 5,009 | 5,028 |
|  | D | 5,803 | 5,533 | 6,034 |
|  | C | 6,472 | 6,550 | 6,590 |
|  | All | 7,038 | 6,733 | 6,843 |
| MAY | W | 9,508 | 7,149 | 7,146 |
|  | AN | 7,709 | 7,783 | 7,824 |
|  | BN | 7,193 | 6,272 | 7,047 |
|  | D | 7,349 | 7,681 | 9,344 |
|  | C | 6,715 | 7,316 | 7,568 |
|  | All | 7,967 | 7,233 | 7,773 |
| JUN | W | 10,375 | 10,274 | 10,261 |
|  | AN | 11,147 | 12,032 | 12,245 |
|  | BN | 10,758 | 10,947 | 10,744 |
|  | D | 11,224 | 11,898 | 12,063 |
|  | C | 10,392 | 11,350 | 11,081 |
|  | All | 10,742 | 11,160 | 11,149 |


| Alternative 9: Upstream-Sacramento River at Keswick |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JUL | W | 12,779 | 14,098 | 13,972 |
|  | AN | 14,056 | 15,098 | 14,835 |
|  | BN | 12,965 | 13,177 | 12,784 |
|  | D | 13,302 | 13,727 | 13,329 |
|  | C | 12,849 | 11,935 | 11,550 |
|  | All | 13,123 | 13,689 | 13,400 |
| AUG | W | 11,029 | 10,491 | 10,219 |
|  | AN | 10,449 | 11,641 | 10,847 |
|  | BN | 10,139 | 10,261 | 9,946 |
|  | D | 10,627 | 10,986 | 10,521 |
|  | C | 9,473 | 7,348 | 7,970 |
|  | All | 10,476 | 10,269 | 10,002 |
| SEP | W | 9,385 | 12,833 | 13,633 |
|  | AN | 5,862 | 9,898 | 9,876 |
|  | BN | 5,492 | 5,601 | 5,731 |
|  | D | 5,985 | 4,469 | 4,359 |
|  | C | 5,563 | 4,368 | 4,395 |
|  | All | 6,899 | 8,094 | 8,346 |
| OCT | W | 6,886 | 7,034 | 6,944 |
|  | AN | 7,145 | 7,152 | 6,311 |
|  | BN | 6,396 | 7,072 | 6,070 |
|  | D | 6,128 | 6,494 | 6,394 |
|  | C | 5,902 | 5,752 | 5,112 |
|  | All | 6,530 | 6,752 | 6,313 |
| NOV | W | 6,672 | 7,539 | 7,461 |
|  | AN | 6,224 | 7,134 | 7,223 |
|  | BN | 5,088 | 5,936 | 6,516 |
|  | D | 5,669 | 5,406 | 5,262 |
|  | C | 4,822 | 4,710 | 5,240 |
|  | All | 5,845 | 6,324 | 6,457 |
| DEC | W | 12,766 | 11,022 | 10,797 |
|  | AN | 5,531 | 5,377 | 5,243 |
|  | BN | 5,413 | 5,195 | 5,344 |
|  | D | 4,215 | 3,936 | 3,892 |
|  | C | 3,828 | 3,582 | 4,001 |
|  | All | 7,267 | 6,557 | 6,543 |

Table 2. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Keswick, Year-Round

| Alternative 9: Upstream-Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{gathered} \text { EXISTING CONDITIONS } \\ \text { vs. A9_LLT } \end{gathered}$ | NAA vs. A9_LLT |
| JAN | W | 2,040 (12.3\%) | 333 (1.8\%) |
|  | AN | -3 (0\%) | 110 (1.3\%) |
|  | BN | -172 (-3.8\%) | 146 (3.5\%) |
|  | D | -404 (-10.1\%) | -504 (-12.3\%) |
|  | C | -31 (-0.9\%) | -778 (-18.4\%) |
|  | All | 524 (6.1\%) | -78 (-0.8\%) |
| FEB | W | 2,420 (13\%) | 144 (0.7\%) |
|  | AN | 989 (6.9\%) | 102 (0.7\%) |
|  | BN | 256 (4.3\%) | 693 (12.5\%) |
|  | D | -356 (-9.7\%) | -83 (-2.4\%) |
|  | C | -235 (-6.5\%) | -9 (-0.3\%) |
|  | All | 843 (8.1\%) | 159 (1.4\%) |
| MAR | W | 868 (5.4\%) | 2 (0\%) |
|  | AN | -654 (-7.2\%) | -341 (-3.9\%) |
|  | BN | -1,034 (-19.9\%) | -153 (-3.5\%) |
|  | D | 22 (0.6\%) | 111 (2.9\%) |
|  | C | 105 (3\%) | 8 (0.2\%) |
|  | All | 23 (0.3\%) | -50 (-0.6\%) |
| APR | W | -429 (-4.6\%) | -142 (-1.6\%) |
|  | AN | -406 (-6.6\%) | 241 (4.3\%) |
|  | BN | -398 (-7.3\%) | 19 (0.4\%) |
|  | D | 231 (4\%) | 501 (9\%) |
|  | C | 119 (1.8\%) | 40 (0.6\%) |
|  | All | -195 (-2.8\%) | 109 (1.6\%) |
| MAY | W | -2,362 (-24.8\%) | -3 (0\%) |
|  | AN | 115 (1.5\%) | 41 (0.5\%) |
|  | BN | -145 (-2\%) | 776 (12.4\%) |
|  | D | 1,996 (27.2\%) | 1,663 (21.6\%) |
|  | C | 853 (12.7\%) | 253 (3.5\%) |
|  | All | -194 (-2.4\%) | 540 (7.5\%) |
| JUN | W | -115 (-1.1\%) | -14 (-0.1\%) |
|  | AN | 1,098 (9.8\%) | 213 (1.8\%) |
|  | BN | -15 (-0.1\%) | -204 (-1.9\%) |
|  | D | 840 (7.5\%) | 165 (1.4\%) |
|  | C | 689 (6.6\%) | -269 (-2.4\%) |
|  | All | 407 (3.8\%) | -11 (-0.1\%) |
| JUL | W | 1,193 (9.3\%) | -125 (-0.9\%) |
|  | AN | 779 (5.5\%) | -263 (-1.7\%) |
|  | BN | -181 (-1.4\%) | -393 (-3\%) |
|  | D | 27 (0.2\%) | -398 (-2.9\%) |
|  | C | -1,300 (-10.1\%) | -385 (-3.2\%) |
|  | All | 277 (2.1\%) | -289 (-2.1\%) |


| Alternative 9: Upstream—Sacramento River at Keswick |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | -810 (-7.3\%) | -272 (-2.6\%) |
|  | AN | 399 (3.8\%) | -794 (-6.8\%) |
|  | BN | -193 (-1.9\%) | -315 (-3.1\%) |
|  | D | -106 (-1\%) | -465 (-4.2\%) |
|  | C | -1,502 (-15.9\%) | 623 (8.5\%) |
|  | All | -475 (-4.5\%) | -267 (-2.6\%) |
| SEP | W | 4,248 (45.3\%) | 800 (6.2\%) |
|  | AN | 4,013 (68.5\%) | -22 (-0.2\%) |
|  | BN | 239 (4.3\%) | 130 (2.3\%) |
|  | D | -1,627 (-27.2\%) | -110 (-2.5\%) |
|  | C | -1,168 (-21\%) | 27 (0.6\%) |
|  | All | 1,447 (21\%) | 252 (3.1\%) |
| OCT | W | 58 (0.8\%) | -91 (-1.3\%) |
|  | AN | -833 (-11.7\%) | -840 (-11.7\%) |
|  | BN | -326 (-5.1\%) | -1,002 (-14.2\%) |
|  | D | 266 (4.3\%) | -100 (-1.5\%) |
|  | C | -791 (-13.4\%) | -640 (-11.1\%) |
|  | All | -216 (-3.3\%) | -438 (-6.5\%) |
| NOV | W | 789 (11.8\%) | -78 (-1\%) |
|  | AN | 999 (16.1\%) | 89 (1.3\%) |
|  | BN | 1,428 (28.1\%) | 580 (9.8\%) |
|  | D | -407 (-7.2\%) | -144 (-2.7\%) |
|  | C | 417 (8.7\%) | 530 (11.3\%) |
|  | All | 612 (10.5\%) | 133 (2.1\%) |
| DEC | W | -1,969 (-15.4\%) | -225 (-2\%) |
|  | AN | -288(-5.2\%) | -134 (-2.5\%) |
|  | BN | -69 (-1.3\%) | 149 (2.9\%) |
|  | D | -322 (-7.6\%) | -43 (-1.1\%) |
|  | C | 172 (4.5\%) | 418 (11.7\%) |
|  | All | -724 (-10\%) | -14 (-0.2\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.9.1.2 Sacramento River Upstream of Red Bluff

Table 3. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 9: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 28,036 | 30,390 | 30,723 |
|  | AN | 16,725 | 16,885 | 16,994 |
|  | BN | 9,381 | 9,146 | 9,291 |
|  | D | 7,098 | 7,262 | 6,757 |
|  | C | 6,143 | 6,942 | 6,168 |
|  | All | 15,396 | 16,278 | 16,200 |
| FEB | W | 30,255 | 33,472 | 33,612 |
|  | AN | 23,492 | 24,828 | 24,927 |
|  | BN | 12,005 | 11,614 | 12,305 |
|  | D | 8,947 | 8,790 | 8,709 |
|  | C | 6,599 | 6,378 | 6,376 |
|  | All | 18,010 | 19,092 | 19,251 |
| MAR | W | 25,004 | 26,210 | 26,211 |
|  | AN | 16,599 | 16,428 | 16,093 |
|  | BN | 9,333 | 8,474 | 8,305 |
|  | D | 8,385 | 8,300 | 8,410 |
|  | C | 5,999 | 6,101 | 6,110 |
|  | All | 14,669 | 14,876 | 14,824 |
| APR | W | 15,172 | 14,842 | 14,702 |
|  | AN | 10,477 | 9,761 | 10,006 |
|  | BN | 8,711 | 8,282 | 8,308 |
|  | D | 7,948 | 7,661 | 8,161 |
|  | C | 7,742 | 7,829 | 7,873 |
|  | All | 10,709 | 10,376 | 10,488 |
| MAY | W | 12,541 | 10,073 | 10,077 |
|  | AN | 10,012 | 10,047 | 10,092 |
|  | BN | 8,781 | 7,875 | 8,656 |
|  | D | 8,677 | 9,012 | 10,673 |
|  | C | 7,746 | 8,348 | 8,602 |
|  | All | 9,979 | 9,208 | 9,751 |
| JUN | W | 11,905 | 11,720 | 11,714 |
|  | AN | 12,001 | 12,789 | 13,014 |
|  | BN | 11,464 | 11,651 | 11,448 |
|  | D | 11,777 | 12,441 | 12,598 |
|  | C | 10,885 | 11,881 | 11,612 |
|  | All | 11,666 | 12,046 | 12,038 |
| JUL | W | 13,255 | 14,525 | 14,409 |
|  | AN | 14,129 | 15,142 | 14,891 |
|  | BN | 13,011 | 13,258 | 12,877 |
|  | D | 13,368 | 13,826 | 13,435 |
|  | C | 13,005 | 12,149 | 11,801 |
|  | All | 13,329 | 13,898 | 13,623 |


| Alternative 9: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 11,284 | 10,735 | 10,473 |
|  | AN | 10,580 | 11,775 | 10,995 |
|  | BN | 10,202 | 10,364 | 10,059 |
|  | D | 10,747 | 11,143 | 10,686 |
|  | C | 9,590 | 7,665 | 8,304 |
|  | All | 10,630 | 10,464 | 10,208 |
| SEP | W | 9,856 | 13,312 | 14,120 |
|  | AN | 6,279 | 10,320 | 10,309 |
|  | BN | 5,821 | 5,963 | 6,100 |
|  | D | 6,391 | 4,911 | 4,807 |
|  | C | 5,887 | 4,838 | 4,848 |
|  | All | 7,302 | 8,535 | 8,792 |
| OCT | W | 8,020 | 8,188 | 8,096 |
|  | AN | 8,112 | 8,162 | 7,320 |
|  | BN | 7,094 | 7,778 | 6,784 |
|  | D | 6,903 | 7,287 | 7,172 |
|  | C | 6,670 | 6,537 | 5,907 |
|  | All | 7,432 | 7,675 | 7,235 |
| NOV | W | 9,876 | 10,821 | 10,744 |
|  | AN | 8,144 | 9,098 | 9,192 |
|  | BN | 6,791 | 7,682 | 8,269 |
|  | D | 7,548 | 7,347 | 7,213 |
|  | C | 5,811 | 5,703 | 6,237 |
|  | All | 7,990 | 8,521 | 8,660 |
| DEC | W | 21,015 | 19,613 | 19,387 |
|  | AN | 10,019 | 10,053 | 9,916 |
|  | BN | 8,408 | 8,228 | 8,369 |
|  | D | 7,292 | 7,091 | 7,050 |
|  | C | 5,628 | 5,433 | 5,859 |
|  | All | 11,989 | 11,446 | 11,432 |

Table 4. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River Upstream of Red Bluff, Year-Round

| Alternative 9: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 2,686 (9.6\%) | 333 (1.1\%) |
|  | AN | 270 (1.6\%) | 109 (0.6\%) |
|  | BN | -91 (-1\%) | 144 (1.6\%) |
|  | D | -341 (-4.8\%) | -505 (-6.9\%) |
|  | C | 25 (0.4\%) | -774 (-11.1\%) |
|  | All | 805 (5.2\%) | -78 (-0.5\%) |
| FEB | W | 3,357 (11.1\%) | 140 (0.4\%) |
|  | AN | 1,435 (6.1\%) | 99 (0.4\%) |
|  | BN | 301 (2.5\%) | 691 (5.9\%) |
|  | D | -238 (-2.7\%) | -80 (-0.9\%) |
|  | C | -223 (-3.4\%) | -2 (0\%) |
|  | All | 1,241 (6.9\%) | 159 (0.8\%) |
| MAR | W | 1,207 (4.8\%) | 1 (0\%) |
|  | AN | -506 (-3\%) | -336 (-2\%) |
|  | BN | -1,028 (-11\%) | -169 (-2\%) |
|  | D | 25 (0.3\%) | 110 (1.3\%) |
|  | C | 111 (1.9\%) | 9 (0.1\%) |
|  | All | 155 (1.1\%) | -52 (-0.4\%) |
| APR | W | -470 (-3.1\%) | -140 (-0.9\%) |
|  | AN | -471 (-4.5\%) | 245 (2.5\%) |
|  | BN | -403 (-4.6\%) | 25 (0.3\%) |
|  | D | 213 (2.7\%) | 500 (6.5\%) |
|  | C | 131 (1.7\%) | 43 (0.6\%) |
|  | All | -221 (-2.1\%) | 112 (1.1\%) |
| MAY | W | -2,464 (-19.6\%) | 4 (0\%) |
|  | AN | 79 (0.8\%) | 45 (0.4\%) |
|  | BN | -125 (-1.4\%) | 781 (9.9\%) |
|  | D | 1,996 (23\%) | 1,661 (18.4\%) |
|  | C | 856 (11\%) | 254 (3\%) |
|  | All | -228 (-2.3\%) | 543 (5.9\%) |
| JUN | W | -191 (-1.6\%) | -5 (0\%) |
|  | AN | 1,012 (8.4\%) | 224 (1.8\%) |
|  | BN | -16 (-0.1\%) | -203 (-1.7\%) |
|  | D | 821 (7\%) | 157 (1.3\%) |
|  | C | 728 (6.7\%) | -269 (-2.3\%) |
|  | All | 372 (3.2\%) | -8 (-0.1\%) |
| JUL | W | 1,154 (8.7\%) | -116 (-0.8\%) |
|  | AN | 762 (5.4\%) | -250 (-1.7\%) |
|  | BN | -134 (-1\%) | -381 (-2.9\%) |
|  | D | 67 (0.5\%) | -391 (-2.8\%) |
|  | C | -1,203 (-9.3\%) | -348 (-2.9\%) |
|  | All | 293 (2.2\%) | -275 (-2\%) |


| Alternative 9: Upstream-Sacramento River Upstream of Red Bluff |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | -811 (-7.2\%) | -263 (-2.4\%) |
|  | AN | 414 (3.9\%) | -781 (-6.6\%) |
|  | BN | -143 (-1.4\%) | -305 (-2.9\%) |
|  | D | -61 (-0.6\%) | -457 (-4.1\%) |
|  | C | -1,287 (-13.4\%) | 639 (8.3\%) |
|  | All | -423 (-4\%) | -256 (-2.5\%) |
| SEP | W | 4,264 (43.3\%) | 808 (6.1\%) |
|  | AN | 4,030 (64.2\%) | -11 (-0.1\%) |
|  | BN | 280 (4.8\%) | 137 (2.3\%) |
|  | D | -1,584 (-24.8\%) | -104 (-2.1\%) |
|  | C | -1,039 (-17.6\%) | 10 (0.2\%) |
|  | All | 1,490 (20.4\%) | 257 (3\%) |
| OCT | W | 77 (1\%) | -92 (-1.1\%) |
|  | AN | -791 (-9.8\%) | -841 (-10.3\%) |
|  | BN | -311 (-4.4\%) | -994 (-12.8\%) |
|  | D | 269 (3.9\%) | -115 (-1.6\%) |
|  | C | -763 (-11.4\%) | -629 (-9.6\%) |
|  | All | -197 (-2.7\%) | -439 (-5.7\%) |
| NOV | W | 868 (8.8\%) | -77 (-0.7\%) |
|  | AN | 1,049 (12.9\%) | 95 (1\%) |
|  | BN | 1,479 (21.8\%) | 587 (7.6\%) |
|  | D | -335 (-4.4\%) | -134 (-1.8\%) |
|  | C | 426 (7.3\%) | 534 (9.4\%) |
|  | All | 670 (8.4\%) | 139 (1.6\%) |
| DEC | W | -1,628 (-7.7\%) | -226 (-1.2\%) |
|  | AN | -104 (-1\%) | -138 (-1.4\%) |
|  | BN | -39 (-0.5\%) | 141 (1.7\%) |
|  | D | -242 (-3.3\%) | -41 (-0.6\%) |
|  | C | 232 (4.1\%) | 427 (7.9\%) |
|  | All | -557 (-4.6\%) | -14 (-0.1\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.9.1.3 Sacramento River at Wilkins Slough

Table 5. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 9: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 19,145 | 19,320 | 19,331 |
|  | AN | 17,084 | 16,593 | 16,421 |
|  | BN | 12,521 | 12,143 | 12,307 |
|  | D | 8,896 | 9,189 | 8,732 |
|  | C | 7,858 | 8,586 | 7,794 |
|  | All | 13,811 | 13,901 | 13,691 |
| FEB | W | 19,887 | 20,044 | 20,048 |
|  | AN | 19,139 | 19,095 | 19,101 |
|  | BN | 14,528 | 14,328 | 14,532 |
|  | D | 11,520 | 11,473 | 11,401 |
|  | C | 8,499 | 8,158 | 8,208 |
|  | All | 15,359 | 15,309 | 15,337 |
| MAR | W | 18,223 | 18,323 | 18,324 |
|  | AN | 17,696 | 17,537 | 17,482 |
|  | BN | 12,208 | 11,534 | 11,377 |
|  | D | 11,364 | 11,191 | 11,325 |
|  | C | 8,101 | 8,166 | 8,168 |
|  | All | 14,132 | 13,997 | 13,992 |
| APR | W | 13,392 | 13,119 | 13,037 |
|  | AN | 10,264 | 9,783 | 10,040 |
|  | BN | 7,152 | 6,858 | 6,897 |
|  | D | 5,319 | 5,112 | 5,608 |
|  | C | 4,164 | 4,331 | 4,390 |
|  | All | 8,746 | 8,518 | 8,654 |
| MAY | W | 10,467 | 8,435 | 8,512 |
|  | AN | 7,318 | 7,500 | 7,599 |
|  | BN | 5,638 | 4,871 | 5,676 |
|  | D | 4,669 | 5,088 | 6,734 |
|  | C | 3,998 | 4,528 | 4,796 |
|  | All | 6,962 | 6,383 | 6,960 |
| JUN | W | 6,503 | 6,435 | 6,505 |
|  | AN | 5,781 | 6,530 | 6,847 |
|  | BN | 5,243 | 5,628 | 5,439 |
|  | D | 5,245 | 6,075 | 6,189 |
|  | C | 5,140 | 6,253 | 6,002 |
|  | All | 5,707 | 6,205 | 6,230 |
| JUL | W | 6,685 | 7,771 | 7,746 |
|  | AN | 6,971 | 7,892 | 7,733 |
|  | BN | 6,122 | 6,560 | 6,263 |
|  | D | 6,788 | 7,474 | 7,097 |
|  | C | 7,162 | 6,649 | 6,379 |
|  | All | 6,723 | 7,353 | 7,148 |


| Alternative 9: Upstream-Sacramento River at Wilkins Slough |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 6,287 | 5,537 | 5,332 |
|  | AN | 5,498 | 6,610 | 5,900 |
|  | BN | 5,138 | 5,462 | 5,177 |
|  | D | 5,833 | 6,356 | 5,905 |
|  | C | 5,551 | 4,719 | 5,511 |
|  | All | 5,768 | 5,741 | 5,541 |
| SEP | W | 9,338 | 12,737 | 13,580 |
|  | AN | 5,631 | 9,546 | 9,601 |
|  | BN | 5,128 | 5,216 | 5,356 |
|  | D | 5,636 | 4,114 | 4,040 |
|  | C | 5,200 | 4,354 | 4,311 |
|  | All | 6,658 | 7,866 | 8,143 |
| OCT | W | 7,347 | 7,382 | 7,310 |
|  | AN | 6,799 | 6,927 | 6,018 |
|  | BN | 5,987 | 6,570 | 5,570 |
|  | D | 5,688 | 6,040 | 5,886 |
|  | C | 5,642 | 5,572 | 4,921 |
|  | All | 6,421 | 6,617 | 6,161 |
| NOV | W | 9,644 | 10,889 | 10,737 |
|  | AN | 8,210 | 9,141 | 9,281 |
|  | BN | 6,793 | 7,588 | 8,230 |
|  | D | 7,407 | 7,227 | 7,122 |
|  | C | 5,118 | 4,986 | 5,518 |
|  | All | 7,794 | 8,402 | 8,539 |
| DEC | W | 17,881 | 17,257 | 17,199 |
|  | AN | 10,809 | 10,755 | 10,654 |
|  | BN | 8,505 | 8,258 | 8,221 |
|  | D | 8,950 | 8,725 | 8,696 |
|  | C | 6,229 | 5,981 | 6,338 |
|  | All | 11,580 | 11,246 | 11,252 |

Table 6. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Wilkins Slough, Year-Round

| Alternative 9: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 186 (1\%) | 10 (0.1\%) |
|  | AN | -663 (-3.9\%) | -173 (-1\%) |
|  | BN | -214 (-1.7\%) | 164 (1.3\%) |
|  | D | -164 (-1.8\%) | -456 (-5\%) |
|  | C | -64 (-0.8\%) | -792 (-9.2\%) |
|  | All | -120 (-0.9\%) | -210 (-1.5\%) |
| FEB | W | 161 (0.8\%) | 3 (0\%) |
|  | AN | -38 (-0.2\%) | 6 (0\%) |
|  | BN | 4 (0\%) | 204 (1.4\%) |
|  | D | -118 (-1\%) | -72 (-0.6\%) |
|  | C | -291 (-3.4\%) | 49 (0.6\%) |
|  | All | -23 (-0.1\%) | 28 (0.2\%) |
| MAR | W | 101 (0.6\%) | 1 (0\%) |
|  | AN | -213 (-1.2\%) | -54 (-0.3\%) |
|  | BN | -831 (-6.8\%) | -157 (-1.4\%) |
|  | D | -39 (-0.3\%) | 134 (1.2\%) |
|  | C | 67 (0.8\%) | 2 (0\%) |
|  | All | -140 (-1\%) | -5 (0\%) |
| APR | W | -355 (-2.7\%) | -82 (-0.6\%) |
|  | AN | -224 (-2.2\%) | 257 (2.6\%) |
|  | BN | -255 (-3.6\%) | 39 (0.6\%) |
|  | D | 288 (5.4\%) | 495 (9.7\%) |
|  | C | 226 (5.4\%) | 59 (1.4\%) |
|  | All | -93 (-1.1\%) | 136 (1.6\%) |
| MAY | W | -1,955 (-18.7\%) | 77 (0.9\%) |
|  | AN | 281 (3.8\%) | 99 (1.3\%) |
|  | BN | 38 (0.7\%) | 805 (16.5\%) |
|  | D | 2,065 (44.2\%) | 1,646 (32.4\%) |
|  | C | 798 (20\%) | 268 (5.9\%) |
|  | All | -2 (0\%) | 577 (9\%) |
| JUN | W | 2 (0\%) | 70 (1.1\%) |
|  | AN | 1,066 (18.4\%) | 317 (4.9\%) |
|  | BN | 197 (3.8\%) | -189 (-3.4\%) |
|  | D | 943 (18\%) | 114 (1.9\%) |
|  | C | 862 (16.8\%) | -251 (-4\%) |
|  | All | 523 (9.2\%) | 25 (0.4\%) |
| JUL | W | 1,061 (15.9\%) | -25 (-0.3\%) |
|  | AN | 762 (10.9\%) | -159 (-2\%) |
|  | BN | 140 (2.3\%) | -297 (-4.5\%) |
|  | D | 310 (4.6\%) | -377 (-5\%) |
|  | C | -782 (-10.9\%) | -270 (-4.1\%) |
|  | All | 425 (6.3\%) | -204 (-2.8\%) |


| Alternative 9: Upstream-Sacramento River at Wilkins Slough |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | -955 (-15.2\%) | -204 (-3.7\%) |
|  | AN | 402 (7.3\%) | -710 (-10.7\%) |
|  | BN | 39 (0.8\%) | -285 (-5.2\%) |
|  | D | 72 (1.2\%) | -451 (-7.1\%) |
|  | C | -40 (-0.7\%) | 792 (16.8\%) |
|  | All | -227 (-3.9\%) | -201 (-3.5\%) |
| SEP | W | 4,243 (45.4\%) | 843 (6.6\%) |
|  | AN | 3,970 (70.5\%) | 56 (0.6\%) |
|  | BN | 229 (4.5\%) | 141 (2.7\%) |
|  | D | -1,596 (-28.3\%) | -74 (-1.8\%) |
|  | C | -889 (-17.1\%) | -43 (-1\%) |
|  | All | 1,485 (22.3\%) | 277 (3.5\%) |
| OCT | W | -37 (-0.5\%) | -72 (-1\%) |
|  | AN | -782 (-11.5\%) | -909 (-13.1\%) |
|  | BN | -417 (-7\%) | -1,000 (-15.2\%) |
|  | D | 198 (3.5\%) | -154 (-2.6\%) |
|  | C | -721 (-12.8\%) | -651 (-11.7\%) |
|  | All | -259 (-4\%) | -456 (-6.9\%) |
| NOV | W | 1,093 (11.3\%) | -153 (-1.4\%) |
|  | AN | 1,072 (13.1\%) | 141 (1.5\%) |
|  | BN | 1,437 (21.2\%) | 642 (8.5\%) |
|  | D | -285 (-3.9\%) | -105 (-1.5\%) |
|  | C | 400 (7.8\%) | 532 (10.7\%) |
|  | All | 745 (9.6\%) | 137 (1.6\%) |
| DEC | W | -683 (-3.8\%) | -58 (-0.3\%) |
|  | AN | -155 (-1.4\%) | -101 (-0.9\%) |
|  | BN | -284 (-3.3\%) | -37 (-0.4\%) |
|  | D | -254 (-2.8\%) | -29 (-0.3\%) |
|  | C | 109 (1.8\%) | 357 (6\%) |
|  | All | -327 (-2.8\%) | 6 (0.1\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.9.1.4 Sacramento River at Verona

Table 7. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 9: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 44,589 | 45,567 | 43,918 |
|  | AN | 34,120 | 33,671 | 31,706 |
|  | BN | 20,175 | 19,121 | 17,685 |
|  | D | 14,756 | 14,782 | 13,695 |
|  | C | 12,085 | 13,051 | 11,519 |
|  | All | 27,583 | 27,795 | 26,276 |
| FEB | W | 49,892 | 51,326 | 49,828 |
|  | AN | 39,162 | 39,749 | 38,133 |
|  | BN | 26,429 | 25,341 | 23,647 |
|  | D | 18,402 | 18,090 | 17,108 |
|  | C | 12,822 | 12,325 | 11,962 |
|  | All | 31,979 | 32,192 | 30,923 |
| MAR | W | 43,455 | 44,624 | 42,519 |
|  | AN | 39,477 | 39,687 | 37,086 |
|  | BN | 21,484 | 19,448 | 18,116 |
|  | D | 17,868 | 17,649 | 16,522 |
|  | C | 11,903 | 11,789 | 11,367 |
|  | All | 28,888 | 28,877 | 27,292 |
| APR | W | 32,219 | 31,636 | 29,419 |
|  | AN | 22,250 | 21,313 | 20,135 |
|  | BN | 14,459 | 13,857 | 13,563 |
|  | D | 11,113 | 10,903 | 11,513 |
|  | C | 9,420 | 9,489 | 9,497 |
|  | All | 19,759 | 19,298 | 18,507 |
| MAY | W | 26,193 | 20,229 | 20,385 |
|  | AN | 17,079 | 16,002 | 16,317 |
|  | BN | 11,451 | 10,534 | 11,929 |
|  | D | 9,283 | 9,841 | 12,318 |
|  | C | 7,125 | 7,611 | 8,130 |
|  | All | 15,840 | 13,828 | 14,782 |
| JUN | W | 18,367 | 15,304 | 15,090 |
|  | AN | 13,590 | 13,574 | 13,735 |
|  | BN | 11,062 | 11,320 | 10,973 |
|  | D | 10,429 | 10,780 | 10,960 |
|  | C | 8,911 | 9,827 | 9,519 |
|  | All | 13,295 | 12,576 | 12,467 |
| JUL | W | 16,253 | 17,965 | 17,613 |
|  | AN | 17,488 | 18,338 | 18,219 |
|  | BN | 16,698 | 16,598 | 15,921 |
|  | D | 16,352 | 16,465 | 15,241 |
|  | C | 14,476 | 12,457 | 11,598 |
|  | All | 16,271 | 16,651 | 16,012 |


| Alternative 9: Upstream-Sacramento River at Verona |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 12,464 | 14,016 | 13,854 |
|  | AN | 13,691 | 15,828 | 15,130 |
|  | BN | 13,389 | 14,074 | 13,676 |
|  | D | 14,688 | 13,018 | 12,307 |
|  | C | 9,207 | 8,085 | 9,138 |
|  | All | 12,813 | 13,204 | 12,981 |
| SEP | W | 14,279 | 23,592 | 24,645 |
|  | AN | 10,537 | 19,044 | 18,910 |
|  | BN | 9,961 | 10,576 | 10,634 |
|  | D | 10,542 | 7,664 | 7,446 |
|  | C | 7,764 | 6,832 | 6,606 |
|  | All | 11,220 | 14,755 | 14,999 |
| OCT | W | 11,503 | 11,232 | 10,872 |
|  | AN | 9,381 | 9,890 | 8,715 |
|  | BN | 9,867 | 10,146 | 8,872 |
|  | D | 8,681 | 8,989 | 8,673 |
|  | C | 8,543 | 8,104 | 7,039 |
|  | All | 9,861 | 9,900 | 9,171 |
| NOV | W | 15,307 | 15,754 | 15,455 |
|  | AN | 11,792 | 12,817 | 12,687 |
|  | BN | 9,852 | 10,437 | 11,051 |
|  | D | 10,157 | 9,731 | 9,738 |
|  | C | 7,341 | 7,223 | 7,539 |
|  | All | 11,565 | 11,846 | 11,884 |
| DEC | W | 33,840 | 31,254 | 29,406 |
|  | AN | 17,572 | 18,481 | 17,529 |
|  | BN | 13,099 | 13,028 | 12,796 |
|  | D | 12,685 | 12,532 | 12,113 |
|  | C | 9,770 | 8,627 | 9,211 |
|  | All | 19,752 | 18,852 | 18,081 |

Table 8. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento River at Verona, Year-Round

| Alternative 9: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | -671 (-1.5\%) | -1,649 (-3.6\%) |
|  | AN | -2,414 (-7.1\%) | -1,965 (-5.8\%) |
|  | BN | -2,490 (-12.3\%) | -1,436 (-7.5\%) |
|  | D | -1,061 (-7.2\%) | -1,087 (-7.4\%) |
|  | C | -567 (-4.7\%) | -1,532 (-11.7\%) |
|  | All | -1,307 (-4.7\%) | -1,518 (-5.5\%) |
| FEB | W | -64 (-0.1\%) | -1,498 (-2.9\%) |
|  | AN | -1,029 (-2.6\%) | -1,616 (-4.1\%) |
|  | BN | -2,782 (-10.5\%) | -1,694 (-6.7\%) |
|  | D | -1,294 (-7\%) | -982 (-5.4\%) |
|  | C | -860 (-6.7\%) | -363 (-2.9\%) |
|  | All | -1,056 (-3.3\%) | -1,269 (-3.9\%) |
| MAR | W | -936 (-2.2\%) | -2,105 (-4.7\%) |
|  | AN | -2,391 (-6.1\%) | -2,601 (-6.6\%) |
|  | BN | -3,368 (-15.7\%) | -1,332 (-6.8\%) |
|  | D | -1,346 (-7.5\%) | -1,127 (-6.4\%) |
|  | C | -536 (-4.5\%) | -422 (-3.6\%) |
|  | All | -1,596 (-5.5\%) | -1,585 (-5.5\%) |
| APR | W | -2,800 (-8.7\%) | -2,217 (-7\%) |
|  | AN | -2,116 (-9.5\%) | -1,178 (-5.5\%) |
|  | BN | -895 (-6.2\%) | -294 (-2.1\%) |
|  | D | 399 (3.6\%) | 610 (5.6\%) |
|  | C | 76 (0.8\%) | 7 (0.1\%) |
|  | All | -1,252 (-6.3\%) | -791 (-4.1\%) |
| MAY | W | -5,809 (-22.2\%) | 156 (0.8\%) |
|  | AN | -762 (-4.5\%) | 316 (2\%) |
|  | BN | 478 (4.2\%) | 1,395 (13.2\%) |
|  | D | 3,035 (32.7\%) | 2,477 (25.2\%) |
|  | C | 1,005 (14.1\%) | 519 (6.8\%) |
|  | All | -1,058 (-6.7\%) | 954 (6.9\%) |
| JUN | W | -3,277 (-17.8\%) | -214 (-1.4\%) |
|  | AN | 145 (1.1\%) | 161 (1.2\%) |
|  | BN | -89 (-0.8\%) | -347 (-3.1\%) |
|  | D | 531 (5.1\%) | 179 (1.7\%) |
|  | C | 607 (6.8\%) | -308 (-3.1\%) |
|  | All | -828 (-6.2\%) | -109 (-0.9\%) |
| JUL | W | 1,360 (8.4\%) | -352 (-2\%) |
|  | AN | 731 (4.2\%) | -119 (-0.6\%) |
|  | BN | -777 (-4.7\%) | -678 (-4.1\%) |
|  | D | -1,111 (-6.8\%) | -1,224 (-7.4\%) |
|  | C | -2,878 (-19.9\%) | -860 (-6.9\%) |
|  | All | -260 (-1.6\%) | -639 (-3.8\%) |


| Alternative 9: Upstream-Sacramento River at Verona |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | 1,390 (11.2\%) | -162 (-1.2\%) |
|  | AN | 1,439 (10.5\%) | -698 (-4.4\%) |
|  | BN | 287 (2.1\%) | -398 (-2.8\%) |
|  | D | -2,380 (-16.2\%) | -710 (-5.5\%) |
|  | C | -69 (-0.8\%) | 1,053 (13\%) |
|  | All | 168 (1.3\%) | -223 (-1.7\%) |
| SEP | W | 10,366 (72.6\%) | 1,053 (4.5\%) |
|  | AN | 8,374 (79.5\%) | -133 (-0.7\%) |
|  | BN | 674 (6.8\%) | 59 (0.6\%) |
|  | D | -3,096 (-29.4\%) | -218 (-2.8\%) |
|  | C | -1,158 (-14.9\%) | -226 (-3.3\%) |
|  | All | 3,778 (33.7\%) | 244 (1.7\%) |
| OCT | W | -631 (-5.5\%) | -360 (-3.2\%) |
|  | AN | -666 (-7.1\%) | -1,175 (-11.9\%) |
|  | BN | -995 (-10.1\%) | -1,274 (-12.6\%) |
|  | D | -8 (-0.1\%) | -316 (-3.5\%) |
|  | C | -1,504 (-17.6\%) | -1,065 (-13.1\%) |
|  | All | -689 (-7\%) | -729 (-7.4\%) |
| NOV | W | 148 (1\%) | -299 (-1.9\%) |
|  | AN | 895 (7.6\%) | -130 (-1\%) |
|  | BN | 1,199 (12.2\%) | 613 (5.9\%) |
|  | D | -419 (-4.1\%) | 7 (0.1\%) |
|  | C | 197 (2.7\%) | 316 (4.4\%) |
|  | All | 320 (2.8\%) | 38 (0.3\%) |
| DEC | W | -4,435 (-13.1\%) | -1,849 (-5.9\%) |
|  | AN | -43 (-0.2\%) | -952 (-5.1\%) |
|  | BN | -303 (-2.3\%) | -231 (-1.8\%) |
|  | D | -572 (-4.5\%) | -420 (-3.3\%) |
|  | C | -559 (-5.7\%) | 584 (6.8\%) |
|  | All | -1,672 (-8.5\%) | -772 (-4.1\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.9.1.5 Trinity River below Lewiston

Table 9. Mean Monthly Flows (cfs) for Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 9: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 1,440 | 1,518 | 1,490 |
|  | AN | 300 | 300 | 300 |
|  | BN | 358 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 287 | 278 |
|  | All | 671 | 684 | 674 |
| FEB | W | 1,056 | 1,495 | 1,460 |
|  | AN | 689 | 784 | 746 |
|  | BN | 517 | 568 | 409 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 634 | 795 | 752 |
| MAR | W | 1,209 | 1,385 | 1,385 |
|  | AN | 436 | 519 | 519 |
|  | BN | 319 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 300 | 300 |
|  | All | 611 | 676 | 676 |
| APR | W | 721 | 844 | 844 |
|  | AN | 469 | 513 | 515 |
|  | BN | 507 | 504 | 504 |
|  | D | 529 | 529 | 529 |
|  | C | 575 | 580 | 580 |
|  | All | 584 | 630 | 630 |
| MAY | W | 4,636 | 4,620 | 4,620 |
|  | AN | 4,462 | 4,416 | 4,416 |
|  | BN | 3,774 | 3,865 | 3,865 |
|  | D | 3,216 | 3,216 | 3,216 |
|  | C | 2,092 | 1,973 | 1,973 |
|  | All | 3,779 | 3,766 | 3,766 |
| JUN | W | 3,371 | 3,560 | 3,560 |
|  | AN | 2,488 | 3,188 | 3,188 |
|  | BN | 1,672 | 1,767 | 1,767 |
|  | D | 1,251 | 1,251 | 1,251 |
|  | C | 783 | 783 | 783 |
|  | All | 2,108 | 2,286 | 2,286 |
| JUL | W | 1,289 | 1,103 | 1,103 |
|  | AN | 1,048 | 1,048 | 1,048 |
|  | BN | 869 | 916 | 916 |
|  | D | 667 | 667 | 667 |
|  | C | 450 | 413 | 413 |
|  | All | 923 | 866 | 866 |


| Alternative 9: Upstream-Trinity River below Lewiston |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 338 | 300 |
|  | All | 450 | 434 | 428 |
| SEP | W | 450 | 450 | 450 |
|  | AN | 450 | 450 | 450 |
|  | BN | 450 | 450 | 450 |
|  | D | 450 | 450 | 450 |
|  | C | 450 | 265 | 265 |
|  | All | 450 | 423 | 423 |
| OCT | W | 373 | 373 | 373 |
|  | AN | 373 | 311 | 311 |
|  | BN | 346 | 346 | 346 |
|  | D | 373 | 346 | 352 |
|  | C | 373 | 311 | 311 |
|  | All | 368 | 344 | 346 |
| NOV | W | 489 | 414 | 416 |
|  | AN | 300 | 275 | 275 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 283 | 283 |
|  | C | 300 | 225 | 250 |
|  | All | 360 | 318 | 322 |
| DEC | W | 1,072 | 837 | 845 |
|  | AN | 300 | 300 | 300 |
|  | BN | 300 | 300 | 300 |
|  | D | 300 | 300 | 300 |
|  | C | 300 | 275 | 272 |
|  | All | 545 | 466 | 469 |

Table 10. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Trinity River Below Lewiston, Year-Round

| Alternative 9: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 50 (3.5\%) | -28 (-1.9\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | -58 (-16.3\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -22 (-7.2\%) | -9 (-3.1\%) |
|  | All | 3 (0.4\%) | -10 (-1.5\%) |
| FEB | W | 404 (38.2\%) | -35 (-2.3\%) |
|  | AN | 56 (8.2\%) | -38 (-4.9\%) |
|  | BN | -107 (-20.8\%) | -159 (-28\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 118 (18.6\%) | -44 (-5.5\%) |
| MAR | W | 176 (14.6\%) | 0 (0\%) |
|  | AN | 83 (19.1\%) | 0 (0\%) |
|  | BN | -19 (-5.8\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 65 (10.6\%) | 0 (0\%) |
| APR | W | 122 (17\%) | 0 (0\%) |
|  | AN | 46 (9.8\%) | 3 (0.6\%) |
|  | BN | -3 (-0.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 5 (0.9\%) | 0 (0\%) |
|  | All | 46 (7.8\%) | 0 (0.1\%) |
| MAY | W | -16 (-0.3\%) | 0 (0\%) |
|  | AN | -46 (-1\%) | 0 (0\%) |
|  | BN | 90 (2.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -119 (-5.7\%) | 0 (0\%) |
|  | All | -14 (-0.4\%) | 0 (0\%) |
| JUN | W | 189 (5.6\%) | 0 (0\%) |
|  | AN | 700 (28.1\%) | 0 (0\%) |
|  | BN | 96 (5.7\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 179 (8.5\%) | 0 (0\%) |
| JUL | W | -185 (-14.4\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 47 (5.4\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -38 (-8.3\%) | 0 (0\%) |
|  | All | -56 (-6.1\%) | 0 (0\%) |


| Alternative 9: Upstream-Trinity River below Lewiston |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -150 (-33.3\%) | -37 (-11.1\%) |
|  | All | -22 (-4.9\%) | -5 (-1.3\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -185 (-41.1\%) | 0 (0\%) |
|  | All | -27 (-6\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | -62 (-16.7\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -21 (-5.6\%) | 6 (1.9\%) |
|  | C | -62 (-16.7\%) | 0 (0\%) |
|  | All | -23 (-6.2\%) | 1 (0.4\%) |
| NOV | W | -72 (-14.8\%) | 2 (0.6\%) |
|  | AN | -25 (-8.3\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | -17 (-5.6\%) | 0 (0\%) |
|  | C | -50 (-16.7\%) | 25 (11.1\%) |
|  | All | -38 (-10.4\%) | 4 (1.4\%) |
| DEC | W | -227 (-21.1\%) | 8 (1\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -28 (-9.3\%) | -3 (-0.9\%) |
|  | All | -76 (-13.9\%) | 2 (0.5\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.9.1.6 Clear Creek below Whiskeytown

Table 11. Mean Monthly Flows (cfs) for Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 9: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 220 | 339 | 339 |
|  | AN | 192 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 159 | 168 |
|  | All | 193 | 233 | 234 |
| FEB | W | 220 | 257 | 257 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 184 | 192 | 192 |
|  | C | 155 | 168 | 168 |
|  | All | 194 | 209 | 209 |
| MAR | W | 200 | 259 | 258 |
|  | AN | 197 | 196 | 203 |
|  | BN | 189 | 202 | 189 |
|  | D | 186 | 192 | 192 |
|  | C | 155 | 168 | 171 |
|  | All | 188 | 212 | 211 |
| APR | W | 200 | 200 | 200 |
|  | AN | 197 | 196 | 196 |
|  | BN | 189 | 189 | 189 |
|  | D | 188 | 192 | 192 |
|  | C | 155 | 168 | 171 |
|  | All | 189 | 191 | 191 |
| MAY | W | 277 | 277 | 277 |
|  | AN | 277 | 277 | 277 |
|  | BN | 263 | 269 | 269 |
|  | D | 264 | 264 | 264 |
|  | C | 211 | 224 | 224 |
|  | All | 262 | 265 | 265 |
| JUN | W | 200 | 200 | 200 |
|  | AN | 200 | 200 | 200 |
|  | BN | 181 | 186 | 186 |
|  | D | 180 | 180 | 180 |
|  | C | 115 | 131 | 131 |
|  | All | 180 | 183 | 183 |
| JUL | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 85 | 85 | 85 |
|  | All | 85 | 85 | 85 |


| Alternative 9: Upstream-Clear Creek below Whiskeytown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 85 | 85 | 85 |
|  | AN | 85 | 85 | 85 |
|  | BN | 85 | 85 | 85 |
|  | D | 85 | 85 | 85 |
|  | C | 94 | 71 | 78 |
|  | All | 86 | 83 | 84 |
| SEP | W | 150 | 150 | 150 |
|  | AN | 150 | 150 | 150 |
|  | BN | 150 | 150 | 150 |
|  | D | 144 | 150 | 150 |
|  | C | 133 | 96 | 83 |
|  | All | 146 | 142 | 140 |
| OCT | W | 198 | 198 | 198 |
|  | AN | 183 | 183 | 183 |
|  | BN | 189 | 182 | 189 |
|  | D | 175 | 183 | 175 |
|  | C | 150 | 142 | 154 |
|  | All | 182 | 182 | 183 |
| NOV | W | 198 | 198 | 198 |
|  | AN | 185 | 182 | 182 |
|  | BN | 184 | 189 | 189 |
|  | D | 177 | 177 | 184 |
|  | C | 155 | 145 | 146 |
|  | All | 183 | 182 | 184 |
| DEC | W | 198 | 198 | 198 |
|  | AN | 185 | 192 | 192 |
|  | BN | 189 | 189 | 189 |
|  | D | 177 | 189 | 189 |
|  | C | 155 | 156 | 171 |
|  | All | 184 | 187 | 190 |

Table 12. Differences ${ }^{a}$ (Percent Differences) between Pairs of Model Scenarios in Clear Creek Below Whiskeytown, Year-Round

| Alternative 9: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 118 (53.7\%) | 0 (0\%) |
|  | AN | 0 (-0.1\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 13 (8.4\%) | 9 (5.6\%) |
|  | All | 41 (21.2\%) | 1 (0.5\%) |
| FEB | W | 38 (17.1\%) | 0 (0\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 7 (3.9\%) | 0 (0\%) |
|  | C | 13 (8.4\%) | 0 (0\%) |
|  | All | 15 (7.9\%) | 0 (0\%) |
| MAR | W | 58 (29.2\%) | 0 (0\%) |
|  | AN | 7 (3.4\%) | 7 (3.8\%) |
|  | BN | 0 (0\%) | -12 (-6.1\%) |
|  | D | 6 (3.2\%) | 0 (0\%) |
|  | C | 16 (10\%) | 3 (1.5\%) |
|  | All | 23 (12.3\%) | -1 (-0.3\%) |
| APR | W | 0 (0.1\%) | 0 (-0.1\%) |
|  | AN | -1 (-0.4\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 3 (1.7\%) | 0 (0\%) |
|  | C | 16 (10\%) | 3 (1.5\%) |
|  | All | 3 (1.5\%) | 0 (0.2\%) |
| MAY | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 6 (2.2\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 13 (6.2\%) | 0 (0\%) |
|  | All | 3 (1.1\%) | 0 (0\%) |
| JUN | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 5 (2.6\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 16 (14.1\%) | 0 (0\%) |
|  | All | 3 (1.8\%) | 0 (0\%) |
| JUL | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |


| Alternative 9: Upstream-Clear Creek below Whiskeytown |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | -16 (-17.4\%) | 7 (10\%) |
|  | All | -2 (-2.8\%) | 1 (1.2\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 6 (3.8\%) | 0 (0\%) |
|  | C | -50 (-37.5\%) | -13 (-13\%) |
|  | All | -6 (-4.2\%) | -2 (-1.3\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 7 (4.1\%) |
|  | D | 0 (0\%) | -8 (-4.5\%) |
|  | C | 4 (2.8\%) | 12 (8.8\%) |
|  | All | 1 (0.3\%) | 1 (0.7\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | -3 (-1.8\%) | 0 (0\%) |
|  | BN | 6 (3.1\%) | 0 (0\%) |
|  | D | 7 (4.1\%) | 8 (4.5\%) |
|  | C | -9 (-5.9\%) | 0 (0.3\%) |
|  | All | 1 (0.4\%) | 2 (1\%) |
| DEC | W | 0 (0.1\%) | 0 (0.1\%) |
|  | AN | 7 (3.6\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 12 (6.6\%) | 0 (0\%) |
|  | C | 16 (10.1\%) | 15 (9.6\%) |
|  | All | 6 (3.2\%) | 2 (1.2\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.9.1.7 Feather River Low-Flow Channel (Upstream of Thermalito Afterbay)

Table 13. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 9: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| FEB | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| MAR | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| APR | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| MAY | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUN | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| JUL | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |


| Alternative 9: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 700 | 700 | 700 |
|  | AN | 700 | 700 | 700 |
|  | BN | 700 | 700 | 700 |
|  | D | 700 | 700 | 700 |
|  | C | 700 | 700 | 700 |
|  | All | 700 | 700 | 700 |
| SEP | W | 773 | 773 | 773 |
|  | AN | 773 | 773 | 773 |
|  | BN | 773 | 773 | 773 |
|  | D | 773 | 773 | 773 |
|  | C | 773 | 773 | 773 |
|  | All | 773 | 773 | 773 |
| OCT | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| NOV | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |
| DEC | W | 800 | 800 | 800 |
|  | AN | 800 | 800 | 800 |
|  | BN | 800 | 800 | 800 |
|  | D | 800 | 800 | 800 |
|  | C | 800 | 800 | 800 |
|  | All | 800 | 800 | 800 |

Table 14. Differences (Percent Differences) between Pairs of Model Scenarios in the Feather River Upstream of Thermalito Afterbay (Low-Flow Channel), Year-Round

| Alternative 9: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{c}\text { EXISTING CONDITIONS } \\ \text { vs. A9_LLT }\end{array}$ | NAA vs. A9_LLT |  |  |  |$]$


| Alternative 9: Upstream-Feather River Low-Flow Channel (Upstream of Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| SEP | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| OCT | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| NOV | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |
| DEC | W | 0 (0\%) | 0 (0\%) |
|  | AN | 0 (0\%) | 0 (0\%) |
|  | BN | 0 (0\%) | 0 (0\%) |
|  | D | 0 (0\%) | 0 (0\%) |
|  | C | 0 (0\%) | 0 (0\%) |
|  | All | 0 (0\%) | 0 (0\%) |

## 11C.9.1.8 Feather River High-Flow Channel (at Thermalito Afterbay)

Table 15. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 9: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 11,257 | 11,896 | 12,037 |
|  | AN | 4,434 | 2,838 | 2,713 |
|  | BN | 2,640 | 1,441 | 1,498 |
|  | D | 1,798 | 1,459 | 1,459 |
|  | C | 1,459 | 1,648 | 1,293 |
|  | All | 5,277 | 4,995 | 4,979 |
| FEB | W | 12,466 | 14,787 | 14,726 |
|  | AN | 7,411 | 5,809 | 6,086 |
|  | BN | 3,916 | 1,897 | 1,774 |
|  | D | 1,817 | 1,659 | 1,647 |
|  | C | 1,610 | 1,482 | 1,521 |
|  | All | 6,340 | 6,444 | 6,447 |
| MAR | W | 12,895 | 14,772 | 14,525 |
|  | AN | 7,733 | 8,568 | 8,668 |
|  | BN | 3,373 | 1,985 | 2,050 |
|  | D | 2,017 | 1,762 | 1,647 |
|  | C | 1,697 | 1,634 | 1,618 |
|  | All | 6,487 | 6,902 | 6,822 |
| APR | W | 6,472 | 6,408 | 6,403 |
|  | AN | 2,251 | 2,170 | 2,165 |
|  | BN | 1,205 | 1,203 | 1,376 |
|  | D | 1,286 | 1,470 | 1,755 |
|  | C | 1,389 | 1,407 | 1,462 |
|  | All | 3,073 | 3,084 | 3,181 |
| MAY | W | 7,528 | 4,740 | 4,907 |
|  | AN | 3,340 | 3,101 | 3,400 |
|  | BN | 1,205 | 1,749 | 2,428 |
|  | D | 1,591 | 2,223 | 3,153 |
|  | C | 1,574 | 1,790 | 2,141 |
|  | All | 3,661 | 3,005 | 3,473 |
| JUN | W | 5,062 | 4,211 | 4,015 |
|  | AN | 3,301 | 3,930 | 3,863 |
|  | BN | 2,707 | 3,552 | 3,490 |
|  | D | 3,134 | 3,284 | 3,455 |
|  | C | 2,695 | 2,666 | 2,734 |
|  | All | 3,632 | 3,628 | 3,593 |
| JUL | W | 6,490 | 8,577 | 8,217 |
|  | AN | 8,757 | 9,488 | 9,547 |
|  | BN | 8,981 | 8,833 | 8,577 |
|  | D | 8,294 | 8,099 | 7,289 |
|  | C | 6,703 | 5,217 | 4,532 |
|  | All | 7,674 | 8,157 | 7,730 |


| Alternative 9: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 3,308 | 6,228 | 6,251 |
|  | AN | 6,042 | 7,346 | 7,311 |
|  | BN | 6,295 | 6,868 | 6,750 |
|  | D | 7,036 | 4,990 | 4,757 |
|  | C | 2,613 | 2,163 | 2,528 |
|  | All | 4,935 | 5,634 | 5,619 |
| SEP | W | 2,280 | 8,327 | 8,707 |
|  | AN | 2,253 | 6,899 | 6,790 |
|  | BN | 2,466 | 3,068 | 3,048 |
|  | D | 2,366 | 1,052 | 1,044 |
|  | C | 1,421 | 1,345 | 1,275 |
|  | All | 2,201 | 4,601 | 4,691 |
| OCT | W | 3,456 | 3,051 | 2,855 |
|  | AN | 2,386 | 2,741 | 2,587 |
|  | BN | 3,183 | 2,862 | 2,688 |
|  | D | 2,688 | 2,652 | 2,579 |
|  | C | 2,472 | 2,102 | 1,798 |
|  | All | 2,940 | 2,747 | 2,572 |
| NOV | W | 3,292 | 2,470 | 2,361 |
|  | AN | 1,824 | 2,119 | 1,916 |
|  | BN | 2,101 | 1,900 | 1,964 |
|  | D | 1,859 | 1,664 | 1,869 |
|  | C | 1,854 | 1,876 | 1,756 |
|  | All | 2,349 | 2,058 | 2,032 |
| DEC | W | 7,157 | 3,948 | 4,138 |
|  | AN | 2,951 | 3,344 | 3,027 |
|  | BN | 2,176 | 2,102 | 2,143 |
|  | D | 2,364 | 2,229 | 2,166 |
|  | C | 2,609 | 1,694 | 2,037 |
|  | All | 3,973 | 2,837 | 2,895 |

Table 16. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at Thermalito Afterbay (High-Flow Channel), Year-Round

| Alternative 9: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 780 (6.9\%) | 142 (1.2\%) |
|  | AN | -1,720 (-38.8\%) | -125 (-4.4\%) |
|  | BN | -1,142 (-43.3\%) | 57 (3.9\%) |
|  | D | -339 (-18.8\%) | 1 (0\%) |
|  | C | -167 (-11.4\%) | -355 (-21.6\%) |
|  | All | -298 (-5.7\%) | -16 (-0.3\%) |
| FEB | W | 2,260 (18.1\%) | -61 (-0.4\%) |
|  | AN | -1,325 (-17.9\%) | 277 (4.8\%) |
|  | BN | -2,142 (-54.7\%) | -123 (-6.5\%) |
|  | D | -170 (-9.4\%) | -13 (-0.8\%) |
|  | C | -90 (-5.6\%) | 39 (2.6\%) |
|  | All | 107 (1.7\%) | 3 (0\%) |
| MAR | W | 1,630 (12.6\%) | -247 (-1.7\%) |
|  | AN | 935 (12.1\%) | 100 (1.2\%) |
|  | BN | -1,323 (-39.2\%) | 66 (3.3\%) |
|  | D | -370 (-18.3\%) | -115 (-6.5\%) |
|  | C | -79 (-4.6\%) | -15 (-0.9\%) |
|  | All | 335 (5.2\%) | -80 (-1.2\%) |
| APR | W | -70 (-1.1\%) | -6 (-0.1\%) |
|  | AN | -87 (-3.8\%) | -5 (-0.2\%) |
|  | BN | 171 (14.2\%) | 173 (14.4\%) |
|  | D | 469 (36.5\%) | 284 (19.3\%) |
|  | C | 73 (5.3\%) | 55 (3.9\%) |
|  | All | 108 (3.5\%) | 97 (3.2\%) |
| MAY | W | -2,621 (-34.8\%) | 167 (3.5\%) |
|  | AN | 60 (1.8\%) | 298 (9.6\%) |
|  | BN | 1,223 (101.4\%) | 679 (38.9\%) |
|  | D | 1,562 (98.1\%) | 930 (41.8\%) |
|  | C | 567 (36\%) | 351 (19.6\%) |
|  | All | -188 (-5.1\%) | 468 (15.6\%) |
| JUN | W | -1,046 (-20.7\%) | -196 (-4.6\%) |
|  | AN | 562 (17\%) | -66 (-1.7\%) |
|  | BN | 783 (28.9\%) | -62 (-1.7\%) |
|  | D | 321 (10.2\%) | 171 (5.2\%) |
|  | C | 39 (1.5\%) | 68 (2.6\%) |
|  | All | -40 (-1.1\%) | -35 (-1\%) |
| JUL | W | 1,727 (26.6\%) | -360 (-4.2\%) |
|  | AN | 790 (9\%) | 59 (0.6\%) |
|  | BN | -404 (-4.5\%) | -255 (-2.9\%) |
|  | D | -1,006 (-12.1\%) | -810 (-10\%) |
|  | C | -2,171 (-32.4\%) | -685 (-13.1\%) |
|  | All | 56 (0.7\%) | -427 (-5.2\%) |


| Alternative 9: Upstream-Feather River High-Flow Channel (at Thermalito Afterbay) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS <br> vs. A9_LLT | NAA vs. A9_LLT |$|-23(0.4 \%)$.

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.9.1.9 Feather River at Confluence with Sacramento River

Table 17. Mean Monthly Flows (cfs) for Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 9: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 23,533 | 26,106 | 26,249 |
|  | AN | 12,430 | 11,953 | 11,831 |
|  | BN | 6,499 | 5,575 | 5,631 |
|  | D | 4,621 | 4,412 | 4,412 |
|  | C | 3,646 | 3,837 | 3,479 |
|  | All | 11,938 | 12,509 | 12,493 |
| FEB | W | 27,039 | 31,065 | 31,008 |
|  | AN | 14,818 | 14,599 | 14,879 |
|  | BN | 9,153 | 7,892 | 7,769 |
|  | D | 4,402 | 4,436 | 4,423 |
|  | C | 3,237 | 3,096 | 3,136 |
|  | All | 13,744 | 14,761 | 14,765 |
| MAR | W | 24,172 | 26,784 | 26,542 |
|  | AN | 19,990 | 21,490 | 21,586 |
|  | BN | 8,136 | 6,882 | 6,932 |
|  | D | 5,073 | 4,940 | 4,811 |
|  | C | 2,933 | 2,756 | 2,736 |
|  | All | 13,521 | 14,300 | 14,215 |
| APR | W | 15,897 | 15,852 | 15,852 |
|  | AN | 9,832 | 9,585 | 9,583 |
|  | BN | 5,401 | 5,189 | 5,362 |
|  | D | 4,152 | 4,137 | 4,423 |
|  | C | 3,298 | 3,185 | 3,241 |
|  | All | 8,796 | 8,689 | 8,789 |
| MAY | W | 14,387 | 10,385 | 10,557 |
|  | AN | 8,068 | 6,884 | 7,186 |
|  | BN | 4,704 | 4,509 | 5,188 |
|  | D | 3,652 | 3,767 | 4,695 |
|  | C | 2,389 | 2,321 | 2,663 |
|  | All | 7,697 | 6,237 | 6,705 |
| JUN | W | 10,222 | 7,199 | 7,007 |
|  | AN | 6,391 | 5,598 | 5,534 |
|  | BN | 4,495 | 4,342 | 4,278 |
|  | D | 3,853 | 3,367 | 3,533 |
|  | C | 2,782 | 2,522 | 2,565 |
|  | All | 6,197 | 4,951 | 4,913 |
| JUL | W | 8,177 | 8,734 | 8,376 |
|  | AN | 9,322 | 9,223 | 9,283 |
|  | BN | 9,380 | 8,725 | 8,453 |
|  | D | 8,290 | 7,674 | 6,855 |
|  | C | 6,450 | 4,891 | 4,164 |
|  | All | 8,322 | 8,009 | 7,572 |


| Alternative 9: Upstream-Feather River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 4,923 | 7,222 | 7,253 |
|  | AN | 7,080 | 8,089 | 8,069 |
|  | BN | 7,236 | 7,570 | 7,435 |
|  | D | 7,711 | 5,487 | 5,220 |
|  | C | 2,841 | 2,340 | 2,663 |
|  | All | 5,941 | 6,313 | 6,285 |
| SEP | W | 4,351 | 10,329 | 10,712 |
|  | AN | 4,194 | 8,773 | 8,670 |
|  | BN | 4,252 | 4,786 | 4,795 |
|  | D | 4,179 | 2,848 | 2,802 |
|  | C | 2,054 | 1,964 | 1,884 |
|  | All | 3,937 | 6,289 | 6,375 |
| OCT | W | 4,176 | 3,746 | 3,555 |
|  | AN | 2,630 | 2,988 | 2,824 |
|  | BN | 3,754 | 3,437 | 3,259 |
|  | D | 3,033 | 2,987 | 2,925 |
|  | C | 2,938 | 2,566 | 2,262 |
|  | All | 3,446 | 3,243 | 3,070 |
| NOV | W | 4,697 | 3,825 | 3,721 |
|  | AN | 3,065 | 3,186 | 2,985 |
|  | BN | 2,687 | 2,455 | 2,522 |
|  | D | 2,342 | 2,125 | 2,333 |
|  | C | 2,084 | 2,107 | 1,989 |
|  | All | 3,216 | 2,873 | 2,851 |
| DEC | W | 12,409 | 10,246 | 10,436 |
|  | AN | 5,193 | 6,000 | 5,685 |
|  | BN | 3,079 | 3,249 | 3,292 |
|  | D | 2,838 | 2,811 | 2,745 |
|  | C | 2,975 | 2,054 | 2,405 |
|  | All | 6,279 | 5,599 | 5,658 |

Table 18. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Feather River at the Confluence with the Sacramento River, Year-Round

| Alternative 9: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 2,716 (11.5\%) | 143 (0.5\%) |
|  | AN | -599 (-4.8\%) | -122 (-1\%) |
|  | BN | -868 (-13.4\%) | 56 (1\%) |
|  | D | -209 (-4.5\%) | 0 (0\%) |
|  | C | -167 (-4.6\%) | -358 (-9.3\%) |
|  | All | 555 (4.6\%) | -15 (-0.1\%) |
| FEB | W | 3,969 (14.7\%) | -57 (-0.2\%) |
|  | AN | 61 (0.4\%) | 280 (1.9\%) |
|  | BN | -1,384 (-15.1\%) | -123 (-1.6\%) |
|  | D | 21 (0.5\%) | -14 (-0.3\%) |
|  | C | -101 (-3.1\%) | 40 (1.3\%) |
|  | All | 1,021 (7.4\%) | 5 (0\%) |
| MAR | W | 2,370 (9.8\%) | -242 (-0.9\%) |
|  | AN | 1,596 (8\%) | 96 (0.4\%) |
|  | BN | -1,204 (-14.8\%) | 50 (0.7\%) |
|  | D | -262 (-5.2\%) | -129 (-2.6\%) |
|  | C | -196 (-6.7\%) | -20 (-0.7\%) |
|  | All | 693 (5.1\%) | -85 (-0.6\%) |
| APR | W | -45 (-0.3\%) | 0 (0\%) |
|  | AN | -249 (-2.5\%) | -2 (0\%) |
|  | BN | -39 (-0.7\%) | 173 (3.3\%) |
|  | D | 271 (6.5\%) | 286 (6.9\%) |
|  | C | -57 (-1.7\%) | 56 (1.8\%) |
|  | All | -6 (-0.1\%) | 100 (1.2\%) |
| MAY | W | -3,830 (-26.6\%) | 172 (1.7\%) |
|  | AN | -882 (-10.9\%) | 302 (4.4\%) |
|  | BN | 484 (10.3\%) | 680 (15.1\%) |
|  | D | 1,043 (28.6\%) | 928 (24.6\%) |
|  | C | 274 (11.5\%) | 342 (14.7\%) |
|  | All | -992 (-12.9\%) | 468 (7.5\%) |
| JUN | W | -3,215 (-31.4\%) | -192 (-2.7\%) |
|  | AN | -857 (-13.4\%) | -64 (-1.1\%) |
|  | BN | -217 (-4.8\%) | -64 (-1.5\%) |
|  | D | -320 (-8.3\%) | 166 (4.9\%) |
|  | C | -218 (-7.8\%) | 42 (1.7\%) |
|  | All | -1,284 (-20.7\%) | -38 (-0.8\%) |
| JUL | W | 199 (2.4\%) | -358 (-4.1\%) |
|  | AN | -39 (-0.4\%) | 60 (0.7\%) |
|  | BN | -928 (-9.9\%) | -272 (-3.1\%) |
|  | D | -1,434 (-17.3\%) | -819 (-10.7\%) |
|  | C | -2,287 (-35.4\%) | -728 (-14.9\%) |
|  | All | -750 (-9\%) | -437 (-5.5\%) |


| Alternative 9: Upstream-Feather River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS <br> vs. A9_LLT | NAA vs. A9_LLT |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.9.1.10 American River at Nimbus Dam

Table 19. Mean Monthly Flows (cfs) for Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 9: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 8,806 | 11,036 | 11,134 |
|  | AN | 4,833 | 5,805 | 5,819 |
|  | BN | 2,392 | 2,073 | 2,139 |
|  | D | 1,723 | 1,506 | 1,433 |
|  | C | 1,474 | 1,095 | 1,096 |
|  | All | 4,502 | 5,194 | 5,222 |
| FEB | W | 9,294 | 11,102 | 11,107 |
|  | AN | 6,469 | 8,153 | 8,263 |
|  | BN | 4,360 | 4,961 | 4,983 |
|  | D | 1,852 | 1,844 | 1,983 |
|  | C | 1,185 | 1,007 | 1,021 |
|  | All | 5,218 | 6,112 | 6,167 |
| MAR | W | 6,089 | 6,992 | 6,998 |
|  | AN | 5,454 | 5,790 | 5,782 |
|  | BN | 2,429 | 2,794 | 2,798 |
|  | D | 2,191 | 2,314 | 2,236 |
|  | C | 939 | 938 | 929 |
|  | All | 3,762 | 4,187 | 4,170 |
| APR | W | 5,300 | 5,508 | 5,517 |
|  | AN | 3,546 | 3,298 | 3,312 |
|  | BN | 3,126 | 2,970 | 3,068 |
|  | D | 1,837 | 1,888 | 2,092 |
|  | C | 1,156 | 1,255 | 1,206 |
|  | All | 3,305 | 3,334 | 3,393 |
| MAY | W | 6,157 | 4,592 | 4,637 |
|  | AN | 3,885 | 2,521 | 2,588 |
|  | BN | 2,930 | 1,969 | 2,364 |
|  | D | 1,790 | 1,686 | 2,130 |
|  | C | 1,182 | 992 | 1,130 |
|  | All | 3,587 | 2,676 | 2,886 |
| JUN | W | 6,003 | 3,694 | 3,852 |
|  | AN | 3,346 | 3,022 | 3,104 |
|  | BN | 2,863 | 2,883 | 2,921 |
|  | D | 2,506 | 2,596 | 2,521 |
|  | C | 1,824 | 1,025 | 1,066 |
|  | All | 3,699 | 2,825 | 2,884 |
| JUL | W | 4,108 | 3,860 | 3,690 |
|  | AN | 4,638 | 4,927 | 4,497 |
|  | BN | 4,744 | 4,328 | 3,571 |
|  | D | 3,577 | 3,143 | 2,408 |
|  | C | 1,784 | 2,022 | 1,975 |
|  | All | 3,838 | 3,670 | 3,256 |


| Alternative 9: Upstream-American River at Nimbus Dam |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 3,520 | 2,132 | 2,109 |
|  | AN | 2,542 | 1,944 | 1,955 |
|  | BN | 2,495 | 2,324 | 2,292 |
|  | D | 2,613 | 1,620 | 1,489 |
|  | C | 1,500 | 1,100 | 991 |
|  | All | 2,707 | 1,874 | 1,818 |
| SEP | W | 4,025 | 3,622 | 3,573 |
|  | AN | 2,764 | 2,044 | 2,112 |
|  | BN | 2,370 | 1,605 | 1,788 |
|  | D | 1,856 | 1,182 | 1,205 |
|  | C | 1,164 | 594 | 651 |
|  | All | 2,663 | 2,068 | 2,107 |
| OCT | W | 1,723 | 1,634 | 1,639 |
|  | AN | 1,706 | 1,732 | 1,446 |
|  | BN | 1,602 | 1,767 | 1,519 |
|  | D | 1,468 | 1,258 | 1,395 |
|  | C | 1,461 | 1,655 | 1,510 |
|  | All | 1,605 | 1,592 | 1,518 |
| NOV | W | 3,527 | 2,612 | 2,819 |
|  | AN | 3,181 | 2,554 | 2,428 |
|  | BN | 2,067 | 1,716 | 1,733 |
|  | D | 2,176 | 1,424 | 1,687 |
|  | C | 1,994 | 1,608 | 1,725 |
|  | All | 2,706 | 2,043 | 2,168 |
| DEC | W | 6,302 | 6,171 | 6,160 |
|  | AN | 3,137 | 2,933 | 2,930 |
|  | BN | 2,676 | 2,527 | 2,523 |
|  | D | 1,741 | 1,351 | 1,496 |
|  | C | 1,524 | 1,251 | 1,276 |
|  | All | 3,519 | 3,297 | 3,328 |

Table 20. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at Nimbus Dam, Year-Round

| Alternative 9: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | $\begin{array}{c}\text { EXISTING CONDITIONS } \\ \text { vs. A9_LLT }\end{array}$ | NAA vs. A9_LLT |
|  | W | $2,327(26.4 \%)$ | $97(0.9 \%)$ |
|  | AN | $986(20.4 \%)$ | $14(0.2 \%)$ |
|  | BN | $-253(-10.6 \%)$ | $66(3.2 \%)$ |
|  | D | $-290(-16.8 \%)$ | $-73(-4.9 \%)$ |
|  |  | C | $-378(-25.7 \%)$ |$] 1(0.1 \%)$


| Alternative 9: Upstream-American River at Nimbus Dam |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | -1,411 (-40.1\%) | -23 (-1.1\%) |
|  | AN | -587 (-23.1\%) | 10 (0.5\%) |
|  | BN | -203 (-8.1\%) | -32 (-1.4\%) |
|  | D | -1,124 (-43\%) | -131 (-8.1\%) |
|  | C | -509 (-33.9\%) | -109 (-9.9\%) |
|  | All | -889 (-32.9\%) | -56 (-3\%) |
| SEP | W | -451 (-11.2\%) | -49 (-1.4\%) |
|  | AN | -652 (-23.6\%) | 69 (3.4\%) |
|  | BN | -583 (-24.6\%) | 183 (11.4\%) |
|  | D | -652 (-35.1\%) | 23 (1.9\%) |
|  | C | -513 (-44.1\%) | 58 (9.7\%) |
|  | All | -556 (-20.9\%) | 39 (1.9\%) |
| OCT | W | -84 (-4.9\%) | 5 (0.3\%) |
|  | AN | -260 (-15.2\%) | -285 (-16.5\%) |
|  | BN | -83 (-5.2\%) | -247 (-14\%) |
|  | D | -73 (-5\%) | 137 (10.8\%) |
|  | C | 50 (3.4\%) | -144 (-8.7\%) |
|  | All | -87 (-5.4\%) | -74 (-4.6\%) |
| NOV | W | -708 (-20.1\%) | 207 (7.9\%) |
|  | AN | -753 (-23.7\%) | -126 (-4.9\%) |
|  | BN | -334 (-16.2\%) | 17 (1\%) |
|  | D | -490 (-22.5\%) | 262 (18.4\%) |
|  | C | -269 (-13.5\%) | 117 (7.3\%) |
|  | All | -539 (-19.9\%) | 125 (6.1\%) |
| DEC | W | -141 (-2.2\%) | -11 (-0.2\%) |
|  | AN | -206 (-6.6\%) | -2 (-0.1\%) |
|  | BN | -153 (-5.7\%) | -4 (-0.2\%) |
|  | D | -245 (-14.1\%) | 145 (10.7\%) |
|  | C | -248 (-16.3\%) | 25 (2\%) |
|  | All | -191 (-5.4\%) | 31 (0.9\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.9.1.11 American River at Confluence with Sacramento River

Table 21. Mean Monthly Flows (cfs) for Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 9: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 8,748 | 10,960 | 11,057 |
|  | AN | 4,806 | 5,760 | 5,774 |
|  | BN | 2,326 | 1,988 | 2,054 |
|  | D | 1,654 | 1,424 | 1,349 |
|  | C | 1,403 | 1,008 | 1,009 |
|  | All | 4,443 | 5,118 | 5,145 |
| FEB | W | 9,183 | 10,947 | 10,951 |
|  | AN | 6,422 | 8,073 | 8,183 |
|  | BN | 4,309 | 4,888 | 4,910 |
|  | D | 1,781 | 1,756 | 1,896 |
|  | C | 1,119 | 921 | 936 |
|  | All | 5,142 | 6,007 | 6,061 |
| MAR | W | 5,979 | 6,837 | 6,843 |
|  | AN | 5,364 | 5,661 | 5,651 |
|  | BN | 2,340 | 2,672 | 2,676 |
|  | D | 2,121 | 2,224 | 2,144 |
|  | C | 864 | 836 | 827 |
|  | All | 3,672 | 4,063 | 4,045 |
| APR | W | 5,156 | 5,300 | 5,308 |
|  | AN | 3,383 | 3,079 | 3,093 |
|  | BN | 2,984 | 2,778 | 2,876 |
|  | D | 1,672 | 1,677 | 1,880 |
|  | C | 996 | 1,059 | 1,002 |
|  | All | 3,152 | 3,128 | 3,186 |
| MAY | W | 5,959 | 4,332 | 4,378 |
|  | AN | 3,700 | 2,285 | 2,353 |
|  | BN | 2,733 | 1,726 | 2,120 |
|  | D | 1,605 | 1,454 | 1,896 |
|  | C | 1,014 | 790 | 928 |
|  | All | 3,398 | 2,438 | 2,646 |
| JUN | W | 5,743 | 3,388 | 3,547 |
|  | AN | 3,103 | 2,736 | 2,817 |
|  | BN | 2,631 | 2,603 | 2,637 |
|  | D | 2,282 | 2,320 | 2,241 |
|  | C | 1,621 | 793 | 823 |
|  | All | 3,462 | 2,545 | 2,599 |
| JUL | W | 3,844 | 3,560 | 3,389 |
|  | AN | 4,399 | 4,635 | 4,205 |
|  | BN | 4,509 | 4,038 | 3,282 |
|  | D | 3,347 | 2,858 | 2,124 |
|  | C | 1,568 | 1,784 | 1,734 |
|  | All | 3,597 | 3,385 | 2,970 |


| Alternative 9: Upstream-American River at Confluence with Sacramento River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 3,295 | 1,858 | 1,836 |
|  | AN | 2,313 | 1,663 | 1,677 |
|  | BN | 2,265 | 2,048 | 2,023 |
|  | D | 2,395 | 1,357 | 1,232 |
|  | C | 1,314 | 899 | 797 |
|  | All | 2,488 | 1,612 | 1,560 |
| SEP | W | 3,846 | 3,415 | 3,366 |
|  | AN | 2,594 | 1,838 | 1,907 |
|  | BN | 2,205 | 1,402 | 1,585 |
|  | D | 1,691 | 987 | 1,010 |
|  | C | 1,011 | 427 | 484 |
|  | All | 2,495 | 1,870 | 1,909 |
| OCT | W | 1,607 | 1,499 | 1,503 |
|  | AN | 1,597 | 1,613 | 1,318 |
|  | BN | 1,472 | 1,617 | 1,368 |
|  | D | 1,344 | 1,114 | 1,253 |
|  | C | 1,342 | 1,517 | 1,372 |
|  | All | 1,486 | 1,454 | 1,379 |
| NOV | W | 3,472 | 2,540 | 2,746 |
|  | AN | 3,100 | 2,455 | 2,331 |
|  | BN | 1,990 | 1,618 | 1,637 |
|  | D | 2,094 | 1,326 | 1,587 |
|  | C | 1,897 | 1,489 | 1,608 |
|  | All | 2,632 | 1,950 | 2,075 |
| DEC | W | 6,255 | 6,115 | 6,102 |
|  | AN | 3,072 | 2,856 | 2,855 |
|  | BN | 2,609 | 2,445 | 2,441 |
|  | D | 1,675 | 1,275 | 1,417 |
|  | C | 1,443 | 1,158 | 1,181 |
|  | All | 3,457 | 3,224 | 3,253 |

Table 22. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the American River at the Confluence with the Sacramento River, Year-Round

| Alternative 9: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 2,310 (26.4\%) | 97 (0.9\%) |
|  | AN | 968 (20.1\%) | 13 (0.2\%) |
|  | BN | -272 (-11.7\%) | 66 (3.3\%) |
|  | D | -305 (-18.4\%) | -75 (-5.2\%) |
|  | C | -395 (-28.1\%) | 1 (0.1\%) |
|  | All | 703 (15.8\%) | 28 (0.5\%) |
| FEB | W | 1,768 (19.3\%) | 4 (0\%) |
|  | AN | 1,760 (27.4\%) | 110 (1.4\%) |
|  | BN | 601 (13.9\%) | 21 (0.4\%) |
|  | D | 115 (6.5\%) | 140 (8\%) |
|  | C | -183 (-16.3\%) | 15 (1.6\%) |
|  | All | 920 (17.9\%) | 54 (0.9\%) |
| MAR | W | 863 (14.4\%) | 6 (0.1\%) |
|  | AN | 287 (5.4\%) | -10 (-0.2\%) |
|  | BN | 337 (14.4\%) | 4 (0.1\%) |
|  | D | 24 (1.1\%) | -79 (-3.6\%) |
|  | C | -38 (-4.3\%) | -9 (-1.1\%) |
|  | All | 373 (10.2\%) | -18 (-0.4\%) |
| APR | W | 153 (3\%) | 9 (0.2\%) |
|  | AN | -290 (-8.6\%) | 14 (0.5\%) |
|  | BN | -107 (-3.6\%) | 98 (3.5\%) |
|  | D | 208 (12.4\%) | 203 (12.1\%) |
|  | C | 6 (0.6\%) | -58 (-5.5\%) |
|  | All | 34 (1.1\%) | 58 (1.8\%) |
| MAY | W | -1,581 (-26.5\%) | 45 (1\%) |
|  | AN | -1,347 (-36.4\%) | 67 (3\%) |
|  | BN | -614 (-22.5\%) | 393 (22.8\%) |
|  | D | 292 (18.2\%) | 442 (30.4\%) |
|  | C | -86 (-8.5\%) | 138 (17.4\%) |
|  | All | -752 (-22.1\%) | 209 (8.6\%) |
| JUN | W | -2,196 (-38.2\%) | 158 (4.7\%) |
|  | AN | -286 (-9.2\%) | 81 (3\%) |
|  | BN | 6 (0.2\%) | 34 (1.3\%) |
|  | D | -41 (-1.8\%) | -79 (-3.4\%) |
|  | C | -798 (-49.2\%) | 31 (3.9\%) |
|  | All | -863 (-24.9\%) | 55 (2.2\%) |
| JUL | W | -455 (-11.8\%) | -172 (-4.8\%) |
|  | AN | -194 (-4.4\%) | -430 (-9.3\%) |
|  | BN | -1,228 (-27.2\%) | -757 (-18.7\%) |
|  | D | -1,223 (-36.5\%) | -735 (-25.7\%) |
|  | C | 167 (10.6\%) | -49 (-2.8\%) |
|  | All | -626 (-17.4\%) | -415 (-12.3\%) |


| Alternative 9: Upstream-American River at Confluence with Sacramento River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | -1,459 (-44.3\%) | -22 (-1.2\%) |
|  | AN | -636 (-27.5\%) | 14 (0.8\%) |
|  | BN | -242 (-10.7\%) | -25 (-1.2\%) |
|  | D | -1,163 (-48.5\%) | -124 (-9.2\%) |
|  | C | -517 (-39.3\%) | -102 (-11.4\%) |
|  | All | -928 (-37.3\%) | -52 (-3.2\%) |
| SEP | W | -480 (-12.5\%) | -49 (-1.4\%) |
|  | AN | -687 (-26.5\%) | 69 (3.7\%) |
|  | BN | -621 (-28.1\%) | 183 (13\%) |
|  | D | -680 (-40.2\%) | 23 (2.4\%) |
|  | C | -527 (-52.1\%) | 57 (13.3\%) |
|  | All | -585 (-23.5\%) | 39 (2.1\%) |
| OCT | W | -104 (-6.5\%) | 5 (0.3\%) |
|  | AN | -279 (-17.5\%) | -295 (-18.3\%) |
|  | BN | -104 (-7.1\%) | -249 (-15.4\%) |
|  | D | -91 (-6.8\%) | 139 (12.4\%) |
|  | C | 30 (2.2\%) | -145 (-9.6\%) |
|  | All | -107 (-7.2\%) | -75 (-5.2\%) |
| NOV | W | -726 (-20.9\%) | 206 (8.1\%) |
|  | AN | -769 (-24.8\%) | -123 (-5\%) |
|  | BN | -353 (-17.7\%) | 19 (1.2\%) |
|  | D | -508 (-24.2\%) | 261 (19.7\%) |
|  | C | -289 (-15.2\%) | 119 (8\%) |
|  | All | -557 (-21.2\%) | 125 (6.4\%) |
| DEC | W | -153 (-2.4\%) | -13 (-0.2\%) |
|  | AN | -217 (-7.1\%) | -1 (0\%) |
|  | BN | -168 (-6.5\%) | -5 (-0.2\%) |
|  | D | -257 (-15.4\%) | 142 (11.1\%) |
|  | C | -262 (-18.1\%) | 24 (2\%) |
|  | All | -204 (-5.9\%) | 30 (0.9\%) |

a Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than 5\% greater than flows under the baseline.

## 11C.9.1.12 Stanislaus River at Confluence with the San Joaquin River

Table 23. Mean Monthly Flows (cfs) for Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 9: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 956 | 885 | 885 |
|  | AN | 843 | 963 | 963 |
|  | BN | 416 | 369 | 369 |
|  | D | 403 | 366 | 366 |
|  | C | 314 | 265 | 265 |
|  | All | 635 | 615 | 615 |
| FEB | W | 1,285 | 1,236 | 1,243 |
|  | AN | 917 | 858 | 858 |
|  | BN | 551 | 438 | 438 |
|  | D | 562 | 359 | 359 |
|  | C | 490 | 348 | 348 |
|  | All | 827 | 723 | 726 |
| MAR | W | 2,063 | 2,217 | 2,217 |
|  | AN | 1,295 | 956 | 956 |
|  | BN | 732 | 548 | 548 |
|  | D | 559 | 390 | 390 |
|  | C | 541 | 444 | 443 |
|  | All | 1,167 | 1,071 | 1,070 |
| APR | W | 2,054 | 1,965 | 1,965 |
|  | AN | 1,719 | 1,535 | 1,534 |
|  | BN | 1,494 | 1,211 | 1,211 |
|  | D | 1,438 | 1,199 | 1,197 |
|  | C | 823 | 670 | 668 |
|  | All | 1,562 | 1,387 | 1,387 |
| MAY | W | 1,653 | 1,613 | 1,614 |
|  | AN | 1,389 | 1,243 | 1,243 |
|  | BN | 1,238 | 898 | 898 |
|  | D | 1,140 | 916 | 914 |
|  | C | 715 | 627 | 625 |
|  | All | 1,271 | 1,125 | 1,124 |
| JUN | W | 1,608 | 1,763 | 1,769 |
|  | AN | 1,134 | 985 | 985 |
|  | BN | 663 | 568 | 568 |
|  | D | 447 | 364 | 363 |
|  | C | 332 | 296 | 289 |
|  | All | 932 | 914 | 914 |
| JUL | W | 1,064 | 1,080 | 1,080 |
|  | AN | 489 | 454 | 454 |
|  | BN | 450 | 425 | 425 |
|  | D | 398 | 359 | 355 |
|  | C | 337 | 310 | 306 |
|  | All | 607 | 590 | 588 |


| Alternative 9: Upstream-Stanislaus River at Confluence with the San Joaquin Rive |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 930 | 717 | 717 |
|  | AN | 476 | 454 | 454 |
|  | BN | 423 | 418 | 418 |
|  | D | 387 | 382 | 382 |
|  | C | 341 | 338 | 334 |
|  | All | 560 | 491 | 491 |
| SEP | W | 1,040 | 863 | 863 |
|  | AN | 502 | 474 | 474 |
|  | BN | 417 | 407 | 407 |
|  | D | 395 | 390 | 390 |
|  | C | 324 | 317 | 320 |
|  | All | 595 | 533 | 534 |
| OCT | W | 897 | 845 | 846 |
|  | AN | 873 | 822 | 822 |
|  | BN | 903 | 844 | 844 |
|  | D | 984 | 925 | 925 |
|  | C | 689 | 612 | 612 |
|  | All | 867 | 808 | 808 |
| NOV | W | 426 | 408 | 408 |
|  | AN | 580 | 524 | 524 |
|  | BN | 341 | 334 | 334 |
|  | D | 345 | 321 | 321 |
|  | C | 325 | 308 | 308 |
|  | All | 410 | 386 | 386 |
| DEC | W | 512 | 429 | 418 |
|  | AN | 722 | 697 | 697 |
|  | BN | 331 | 353 | 353 |
|  | D | 317 | 294 | 294 |
|  | C | 289 | 272 | 272 |
|  | All | 450 | 417 | 414 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 24. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Stanislaus River at the Confluence with the San Joaquin River, Year-Round

| Alternative 9: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | -71 (-7.4\%) | 0 (0\%) |
|  | AN | 120 (14.3\%) | 0 (0\%) |
|  | BN | -47 (-11.3\%) | 0 (0\%) |
|  | D | -37 (-9.1\%) | 0 (0\%) |
|  | C | -49 (-15.5\%) | 0 (0\%) |
|  | All | -20 (-3.2\%) | 0 (0\%) |
| FEB | W | -41 (-3.2\%) | 8 (0.6\%) |
|  | AN | -59 (-6.4\%) | 0 (0\%) |
|  | BN | -114 (-20.6\%) | -1 (-0.1\%) |
|  | D | -203 (-36.1\%) | 0 (0\%) |
|  | C | -142 (-29\%) | 0 (0\%) |
|  | All | -101 (-12.3\%) | 2 (0.3\%) |
| MAR | W | 154 (7.4\%) | 0 (0\%) |
|  | AN | -339 (-26.2\%) | 0 (0\%) |
|  | BN | -184 (-25.2\%) | 0 (0\%) |
|  | D | -169 (-30.2\%) | -1 (-0.1\%) |
|  | C | -98 (-18.1\%) | -1 (-0.2\%) |
|  | All | -96 (-8.2\%) | 0 (0\%) |
| APR | W | -89 (-4.3\%) | 0 (0\%) |
|  | AN | -185 (-10.7\%) | 0 (0\%) |
|  | BN | -283 (-18.9\%) | 0 (0\%) |
|  | D | -241 (-16.8\%) | -1 (-0.1\%) |
|  | C | -155 (-18.8\%) | -2 (-0.3\%) |
|  | All | -175 (-11.2\%) | -1 (0\%) |
| MAY | W | -39 (-2.3\%) | 1 (0.1\%) |
|  | AN | -145 (-10.5\%) | 1 (0\%) |
|  | BN | -340 (-27.4\%) | 0 (0\%) |
|  | D | -227 (-19.9\%) | -2 (-0.3\%) |
|  | C | -90 (-12.6\%) | -2 (-0.3\%) |
|  | All | -147 (-11.6\%) | 0 (0\%) |
| JUN | W | 161 (10\%) | 6 (0.3\%) |
|  | AN | -149 (-13.1\%) | 0 (0\%) |
|  | BN | -95 (-14.4\%) | 0 (-0.1\%) |
|  | D | -84 (-18.7\%) | -1 (-0.3\%) |
|  | C | -43 (-13\%) | -7 (-2.4\%) |
|  | All | -19 (-2\%) | 0 (0\%) |
| JUL | W | 17 (1.6\%) | 0 (0\%) |
|  | AN | -35 (-7.2\%) | 0 (0\%) |
|  | BN | -25 (-5.5\%) | 0 (0\%) |
|  | D | -43 (-10.8\%) | -4 (-1.2\%) |
|  | C | -31 (-9.3\%) | -5 (-1.5\%) |
|  | All | -19 (-3.1\%) | -2 (-0.3\%) |


| Alternative 9: Upstream-Stanislaus River at Confluence with the San Joaquin River |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | $\mathbf{W Y T}^{\text {b }}$ | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | -212 (-22.8\%) | 0 (0\%) |
|  | AN | -22 (-4.6\%) | 0 (0\%) |
|  | BN | -4 (-1\%) | 0 (0\%) |
|  | D | -5 (-1.2\%) | 0 (0\%) |
|  | C | -7 (-2\%) | -4 (-1.1\%) |
|  | All | -69 (-12.4\%) | -1 (-0.1\%) |
| SEP | W | -177 (-17\%) | 0 (0\%) |
|  | AN | -28 (-5.6\%) | 0 (0\%) |
|  | BN | -10 (-2.4\%) | 0 (0\%) |
|  | D | -5 (-1.3\%) | 0 (0\%) |
|  | C | -5 (-1.4\%) | 3 (1\%) |
|  | All | -61 (-10.2\%) | 1 (0.1\%) |
| OCT | W | -52 (-5.7\%) | 1 (0.1\%) |
|  | AN | -51 (-5.8\%) | 0 (0\%) |
|  | BN | -59 (-6.5\%) | 0 (0\%) |
|  | D | -59 (-6\%) | 0 (0\%) |
|  | C | -77 (-11.1\%) | 0 (0\%) |
|  | All | -59 (-6.8\%) | 0 (0\%) |
| NOV | W | -18 (-4.3\%) | 0 (0\%) |
|  | AN | -56 (-9.6\%) | 0 (0\%) |
|  | BN | -8 (-2.3\%) | 0 (0\%) |
|  | D | -23 (-6.7\%) | 0 (0\%) |
|  | C | -16 (-5.1\%) | 0 (0\%) |
|  | All | -24 (-5.9\%) | 0 (0\%) |
| DEC | W | -94 (-18.4\%) | -11 (-2.6\%) |
|  | AN | -25 (-3.5\%) | 0 (0\%) |
|  | BN | 23 (6.8\%) | 0 (0\%) |
|  | D | -23 (-7.3\%) | 0 (0\%) |
|  | C | -16 (-5.7\%) | 0 (0\%) |
|  | All | -36 (-8\%) | -3 (-0.8\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
${ }^{\mathrm{b}}$ Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.9.2 In Delta

## 11C.9.2.1 OMR Flow (Old and Middle Rivers)

Table 25. Mean Monthly Flows (cfs) for Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 9: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | -1,820 | -1,606 | 4,473 |
|  | AN | -3,553 | -3,446 | 2,617 |
|  | BN | -4,240 | -3,803 | 3,019 |
|  | D | -4,664 | -4,675 | 2,276 |
|  | C | -4,130 | -3,684 | 1,780 |
|  | All | -3,449 | -3,228 | 3,077 |
| FEB | W | -2,365 | -2,293 | 3,528 |
|  | AN | -3,274 | -3,147 | 5,009 |
|  | BN | -3,437 | -3,290 | 3,139 |
|  | D | -3,986 | -3,502 | 2,485 |
|  | C | -3,191 | -3,047 | 1,991 |
|  | All | -3,158 | -2,964 | 3,225 |
| MAR | W | -1,600 | -1,454 | 4,294 |
|  | AN | -4,251 | -3,815 | 3,976 |
|  | BN | -4,147 | -3,834 | 3,453 |
|  | D | -2,852 | -2,614 | 2,135 |
|  | C | -2,010 | -1,636 | 1,532 |
|  | All | -2,758 | -2,487 | 3,226 |
| APR | W | 2,431 | 2,415 | 8,451 |
|  | AN | 1,058 | 787 | 6,203 |
|  | BN | 677 | 214 | 5,073 |
|  | D | -268 | -615 | 2,769 |
|  | C | -950 | -845 | 1,562 |
|  | All | 843 | 659 | 5,290 |
| MAY | W | 509 | 396 | 7,152 |
|  | AN | 272 | -237 | 5,365 |
|  | BN | -647 | -1,010 | 4,181 |
|  | D | -1,020 | -911 | 2,322 |
|  | C | 353 | 155 | 1,475 |
|  | All | -4,164 | -4,369 | 4,492 |
| JUN | W | -4,761 | -4,454 | 1,953 |
|  | AN | -4,154 | -3,420 | 2,183 |
|  | BN | -3,301 | -2,592 | 1,208 |
|  | D | -2,250 | -2,143 | 290 |
|  | C | -3,780 | -3,504 | 77 |
|  | All | -8,959 | -8,699 | 1,220 |


| Alternative 9: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JUL | W | -9,919 | -7,962 | 1,550 |
|  | AN | -10,853 | -9,942 | 1,080 |
|  | BN | -10,891 | -9,505 | 594 |
|  | D | -8,058 | -5,234 | 168 |
|  | C | -9,715 | -8,473 | -85 |
|  | All | -10,062 | -10,518 | 775 |
| AUG | W | -10,348 | -10,985 | 1,909 |
|  | AN | -10,044 | -9,374 | 1,186 |
|  | BN | -10,122 | -7,259 | 920 |
|  | D | -4,384 | -3,192 | 662 |
|  | C | -9,283 | -8,604 | 402 |
|  | All | -9,317 | -7,580 | 1,140 |
| SEP | W | -9,163 | -9,002 | 2,764 |
|  | AN | -8,575 | -8,392 | 2,015 |
|  | BN | -8,081 | -5,165 | 1,664 |
|  | D | -4,807 | -3,966 | 1,492 |
|  | C | -8,236 | -6,868 | 1,100 |
|  | All | -8,347 | -5,049 | 1,944 |
| OCT | W | -7,643 | -3,648 | 2,237 |
|  | AN | -7,804 | -4,793 | 2,151 |
|  | BN | -6,961 | -4,103 | 2,400 |
|  | D | -6,440 | -3,920 | 2,412 |
|  | C | -7,568 | -4,427 | 1,912 |
|  | All | -8,902 | -6,527 | 2,243 |
| NOV | W | -7,264 | -6,003 | 1,500 |
|  | AN | -7,997 | -5,542 | 2,129 |
|  | BN | -7,136 | -5,007 | 2,204 |
|  | D | -5,294 | -4,389 | 2,218 |
|  | C | -7,592 | -5,636 | 1,905 |
|  | All | -5,542 | -5,591 | 1,929 |
| DEC | W | -6,987 | -7,050 | 2,505 |
|  | AN | -7,304 | -7,040 | 1,438 |
|  | BN | -7,214 | -7,006 | 2,544 |
|  | D | -6,166 | -4,173 | 2,150 |
|  | C | -6,513 | -6,155 | 1,711 |
|  | All | -6,513 | -6,155 | 2,161 |

Table 26. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Old and Middle Rivers, Year-Round

| Alternative 9: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 6,292 (345.8\%) | 6,078 (378.5\%) |
|  | AN | 6,170 (173.7\%) | 6,064 (175.9\%) |
|  | BN | 7,259 (171.2\%) | 6,822 (179.4\%) |
|  | D | 6,940 (148.8\%) | 6,951 (148.7\%) |
|  | C | 5,909 (143.1\%) | 5,464 (148.3\%) |
|  | All | 6,525 (189.2\%) | 6,305 (195.3\%) |
| FEB | W | 5,893 (249.2\%) | 5,821 (253.9\%) |
|  | AN | 8,283 (253\%) | 8,155 (259.2\%) |
|  | BN | 6,576 (191.3\%) | 6,430 (195.4\%) |
|  | D | 6,471 (162.4\%) | 5,987 (171\%) |
|  | C | 5,182 (162.4\%) | 5,038 (165.3\%) |
|  | All | 6,382 (202.1\%) | 6,188 (208.8\%) |
| MAR | W | 5,894 (368.3\%) | 5,748 (395.4\%) |
|  | AN | 8,227 (193.5\%) | 7,791 (204.2\%) |
|  | BN | 7,600 (183.3\%) | 7,288 (190.1\%) |
|  | D | 4,987 (174.8\%) | 4,748 (181.7\%) |
|  | C | 3,542 (176.2\%) | 3,168 (193.6\%) |
|  | All | 5,984 (217\%) | 5,713 (229.7\%) |
| APR | W | 6,020 (247.6\%) | 6,036 (249.9\%) |
|  | AN | 5,144 (486.1\%) | 5,415 (687.9\%) |
|  | BN | 4,396 (649.3\%) | 4,859 (2,270.8\%) |
|  | D | 3,037 (1,133.6\%) | 3,384 (550\%) |
|  | C | 2,512 (264.3\%) | 2,407 (284.8\%) |
|  | All | 4,446 (527.1\%) | 4,631 (703\%) |
| MAY | W | 5,501 (333.2\%) | 5,596 (359.8\%) |
|  | AN | 4,855 (953.1\%) | 4,969 (1,255.3\%) |
|  | BN | 3,909 (1,438.9\%) | 4,419 (1,860.7\%) |
|  | D | 2,969 (459\%) | 3,332 (329.9\%) |
|  | C | 2,494 (244.6\%) | 2,386 (261.8\%) |
|  | All | 4,139 (1,171.7\%) | 4,337 (2,789.8\%) |
| JUN | W | 6,116 (146.9\%) | 6,322 (144.7\%) |
|  | AN | 6,944 (145.9\%) | 6,637 (149\%) |
|  | BN | 5,362 (129.1\%) | 4,628 (135.3\%) |
|  | D | 3,590 (108.8\%) | 2,882 (111.2\%) |
|  | C | 2,327 (103.4\%) | 2,220 (103.6\%) |
|  | All | 5,000 (132.3\%) | 4,723 (134.8\%) |
| JUL | W | 10,509 (117.3\%) | 10,249 (117.8\%) |
|  | AN | 10,999 (110.9\%) | 9,042 (113.6\%) |
|  | BN | 11,446 (105.5\%) | 10,536 (106\%) |
|  | D | 11,059 (101.5\%) | 9,673 (101.8\%) |
|  | C | 7,973 (99\%) | 5,149 (98.4\%) |
|  | All | 10,490 (108\%) | 9,249 (109.2\%) |


| Alternative 9: In Delta-OMR Flow (Old and Middle Rivers) |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | 11,972 (119\%) | 12,428 (118.2\%) |
|  | AN | 11,535 (111.5\%) | 12,171 (110.8\%) |
|  | BN | 10,964 (109.2\%) | 10,294 (109.8\%) |
|  | D | 10,784 (106.5\%) | 7,921 (109.1\%) |
|  | C | 4,786 (109.2\%) | 3,594 (112.6\%) |
|  | All | 10,424 (112.3\%) | 9,744 (113.3\%) |
| SEP | W | 12,081 (129.7\%) | 10,345 (136.5\%) |
|  | AN | 11,178 (122\%) | 11,017 (122.4\%) |
|  | BN | 10,239 (119.4\%) | 10,056 (119.8\%) |
|  | D | 9,574 (118.5\%) | 6,657 (128.9\%) |
|  | C | 5,906 (122.9\%) | 5,065 (127.7\%) |
|  | All | 10,180 (123.6\%) | 8,812 (128.3\%) |
| OCT | W | 10,584 (126.8\%) | 7,286 (144.3\%) |
|  | AN | 9,794 (128.2\%) | 5,800 (159\%) |
|  | BN | 10,204 (130.7\%) | 7,193 (150.1\%) |
|  | D | 9,373 (134.7\%) | 6,515 (158.8\%) |
|  | C | 8,353 (129.7\%) | 5,833 (148.8\%) |
|  | All | 9,811 (129.6\%) | 6,671 (150.7\%) |
| NOV | W | 10,402 (116.8\%) | 8,027 (123\%) |
|  | AN | 9,393 (129.3\%) | 8,132 (135.5\%) |
|  | BN | 10,200 (127.6\%) | 7,746 (139.8\%) |
|  | D | 9,354 (131.1\%) | 7,225 (144.3\%) |
|  | C | 7,199 (136\%) | 6,295 (143.4\%) |
|  | All | 9,521 (125.4\%) | 7,565 (134.2\%) |
| DEC | W | 8,047 (145.2\%) | 8,096 (144.8\%) |
|  | AN | 8,426 (120.6\%) | 8,488 (120.4\%) |
|  | BN | 9,848 (134.8\%) | 9,585 (136.1\%) |
|  | D | 9,364 (129.8\%) | 9,156 (130.7\%) |
|  | C | 7,877 (127.7\%) | 5,884 (141\%) |
|  | All | 8,674 (133.2\%) | 8,317 (135.1\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.9.2.2 Sacramento River Downstream of North Delta Diversion Facility

Table 27. Mean Monthly Flows (cfs) for Model Scenarios for the Sacramento River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 9: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 50,961 | 52,878 | 51,284 |
|  | AN | 39,863 | 40,484 | 38,473 |
|  | BN | 23,781 | 22,653 | 21,278 |
|  | D | 17,444 | 17,451 | 16,286 |
|  | C | 14,281 | 15,073 | 13,540 |
|  | All | 31,971 | 32,595 | 31,080 |
| FEB | W | 57,314 | 59,847 | 58,328 |
|  | AN | 45,676 | 47,786 | 46,267 |
|  | BN | 31,934 | 31,592 | 29,941 |
|  | D | 21,202 | 21,107 | 20,243 |
|  | C | 14,708 | 14,291 | 13,919 |
|  | All | 37,116 | 38,087 | 36,857 |
| MAR | W | 49,416 | 50,993 | 48,918 |
|  | AN | 44,495 | 45,088 | 42,536 |
|  | BN | 24,489 | 22,915 | 21,609 |
|  | D | 20,656 | 20,650 | 19,473 |
|  | C | 13,245 | 13,137 | 12,714 |
|  | All | 32,834 | 33,134 | 31,560 |
| APR | W | 37,809 | 37,543 | 35,337 |
|  | AN | 25,979 | 24,931 | 23,766 |
|  | BN | 17,752 | 17,128 | 16,921 |
|  | D | 12,990 | 12,904 | 13,721 |
|  | C | 10,229 | 10,365 | 10,333 |
|  | All | 23,169 | 22,826 | 22,096 |
| MAY | W | 31,948 | 24,500 | 24,704 |
|  | AN | 21,021 | 18,657 | 19,044 |
|  | BN | 14,227 | 12,394 | 14,190 |
|  | D | 10,959 | 11,427 | 14,347 |
|  | C | 7,749 | 8,011 | 8,661 |
|  | All | 19,175 | 16,295 | 17,459 |
| JUN | W | 23,900 | 18,603 | 18,559 |
|  | AN | 16,309 | 16,051 | 16,301 |
|  | BN | 13,576 | 13,898 | 13,597 |
|  | D | 12,222 | 12,656 | 12,771 |
|  | C | 9,884 | 10,123 | 9,855 |
|  | All | 16,412 | 14,880 | 14,837 |
| JUL | W | 19,876 | 21,425 | 20,891 |
|  | AN | 21,574 | 22,727 | 22,212 |
|  | BN | 20,953 | 20,513 | 19,039 |
|  | D | 19,272 | 18,957 | 16,983 |
|  | C | 15,397 | 13,767 | 12,989 |
|  | All | 19,520 | 19,797 | 18,754 |


| Alternative 9: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 15,816 | 16,064 | 15,854 |
|  | AN | 15,877 | 17,491 | 16,779 |
|  | BN | 15,643 | 16,232 | 15,759 |
|  | D | 16,965 | 14,351 | 13,418 |
|  | C | 10,095 | 8,996 | 9,924 |
|  | All | 15,210 | 14,891 | 14,571 |
| SEP | W | 18,254 | 27,212 | 28,217 |
|  | AN | 13,198 | 21,006 | 20,943 |
|  | BN | 12,427 | 12,306 | 12,502 |
|  | D | 12,155 | 8,620 | 8,393 |
|  | C | 8,485 | 7,292 | 7,053 |
|  | All | 13,751 | 16,763 | 17,021 |
| OCT | W | 13,505 | 13,277 | 12,917 |
|  | AN | 11,118 | 11,864 | 10,362 |
|  | BN | 11,557 | 12,124 | 10,591 |
|  | D | 10,279 | 10,487 | 10,309 |
|  | C | 10,073 | 9,964 | 8,711 |
|  | All | 11,613 | 11,776 | 10,958 |
| NOV | W | 19,447 | 19,285 | 19,189 |
|  | AN | 15,309 | 15,925 | 15,692 |
|  | BN | 12,574 | 13,037 | 13,674 |
|  | D | 12,868 | 11,914 | 12,182 |
|  | C | 9,633 | 9,295 | 9,725 |
|  | All | 14,788 | 14,647 | 14,812 |
| DEC | W | 39,708 | 37,022 | 35,191 |
|  | AN | 21,663 | 22,629 | 21,671 |
|  | BN | 16,678 | 16,692 | 16,455 |
|  | D | 15,442 | 15,159 | 14,881 |
|  | C | 11,816 | 10,632 | 11,244 |
|  | All | 23,727 | 22,784 | 22,051 |

Table 28. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios for the Sacramento
River Downstream of the North Delta Diversion Facility, Year-Round

| Alternative 9: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 323 (0.6\%) | -1,594 (-3\%) |
|  | AN | -1,390 (-3.5\%) | -2,012 (-5\%) |
|  | BN | -2,503 (-10.5\%) | -1,375 (-6.1\%) |
|  | D | -1,158 (-6.6\%) | -1,165 (-6.7\%) |
|  | C | -741 (-5.2\%) | -1,533 (-10.2\%) |
|  | All | -891 (-2.8\%) | -1,515 (-4.6\%) |
| FEB | W | 1,014 (1.8\%) | -1,519 (-2.5\%) |
|  | AN | 590 (1.3\%) | -1,520 (-3.2\%) |
|  | BN | -1,993 (-6.2\%) | -1,651 (-5.2\%) |
|  | D | -959 (-4.5\%) | -864 (-4.1\%) |
|  | C | -789 (-5.4\%) | -372 (-2.6\%) |
|  | All | -258 (-0.7\%) | -1,230 (-3.2\%) |
| MAR | W | -498 (-1\%) | -2,075 (-4.1\%) |
|  | AN | -1,959 (-4.4\%) | -2,552 (-5.7\%) |
|  | BN | -2,879 (-11.8\%) | -1,305 (-5.7\%) |
|  | D | -1,183 (-5.7\%) | -1,177 (-5.7\%) |
|  | C | -531 (-4\%) | -423 (-3.2\%) |
|  | All | -1,274 (-3.9\%) | -1,574 (-4.8\%) |
| APR | W | -2,471 (-6.5\%) | -2,206 (-5.9\%) |
|  | AN | -2,213 (-8.5\%) | -1,165 (-4.7\%) |
|  | BN | -830 (-4.7\%) | -207 (-1.2\%) |
|  | D | 731 (5.6\%) | 817 (6.3\%) |
|  | C | 104 (1\%) | -32 (-0.3\%) |
|  | All | -1,073 (-4.6\%) | -731 (-3.2\%) |
| MAY | W | -7,244 (-22.7\%) | 204 (0.8\%) |
|  | AN | -1,977 (-9.4\%) | 387 (2.1\%) |
|  | BN | -37 (-0.3\%) | 1,795 (14.5\%) |
|  | D | 3,388 (30.9\%) | 2,921 (25.6\%) |
|  | C | 911 (11.8\%) | 649 (8.1\%) |
|  | All | -1,716 (-8.9\%) | 1,164 (7.1\%) |
| JUN | W | -5,340 (-22.3\%) | -44 (-0.2\%) |
|  | AN | -8 (0\%) | 250 (1.6\%) |
|  | BN | 22 (0.2\%) | -300 (-2.2\%) |
|  | D | 548 (4.5\%) | 115 (0.9\%) |
|  | C | -28 (-0.3\%) | -267 (-2.6\%) |
|  | All | -1,574 (-9.6\%) | -42 (-0.3\%) |
| JUL | W | 1,015 (5.1\%) | -534 (-2.5\%) |
|  | AN | 638 (3\%) | -516 (-2.3\%) |
|  | BN | -1,914 (-9.1\%) | -1,473 (-7.2\%) |
|  | D | -2,289 (-11.9\%) | -1,975 (-10.4\%) |
|  | C | -2,408 (-15.6\%) | -778 (-5.7\%) |
|  | All | -766 (-3.9\%) | -1,044 (-5.3\%) |


| Alternative 9: In Delta-Sacramento River Downstream of North Delta Diversion Facility |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | 38 (0.2\%) | -210 (-1.3\%) |
|  | AN | 902 (5.7\%) | -712 (-4.1\%) |
|  | BN | 117 (0.7\%) | -473 (-2.9\%) |
|  | D | -3,547 (-20.9\%) | -933 (-6.5\%) |
|  | C | -171 (-1.7\%) | 928 (10.3\%) |
|  | All | -640 (-4.2\%) | -321 (-2.2\%) |
| SEP | W | 9,963 (54.6\%) | 1,005 (3.7\%) |
|  | AN | 7,745 (58.7\%) | -63 (-0.3\%) |
|  | BN | 75 (0.6\%) | 195 (1.6\%) |
|  | D | -3,762 (-31\%) | -228 (-2.6\%) |
|  | C | -1,432 (-16.9\%) | -239 (-3.3\%) |
|  | All | 3,270 (23.8\%) | 258 (1.5\%) |
| OCT | W | -588 (-4.4\%) | -360 (-2.7\%) |
|  | AN | -757 (-6.8\%) | -1,502 (-12.7\%) |
|  | BN | -967 (-8.4\%) | -1,533 (-12.6\%) |
|  | D | 30 (0.3\%) | -177 (-1.7\%) |
|  | C | -1,362 (-13.5\%) | -1,254 (-12.6\%) |
|  | All | -655 (-5.6\%) | -818 (-6.9\%) |
| NOV | W | -258 (-1.3\%) | -96 (-0.5\%) |
|  | AN | 383 (2.5\%) | -233 (-1.5\%) |
|  | BN | 1,100 (8.8\%) | 637 (4.9\%) |
|  | D | -687 (-5.3\%) | 268 (2.2\%) |
|  | C | 93 (1\%) | 430 (4.6\%) |
|  | All | 25 (0.2\%) | 166 (1.1\%) |
| DEC | W | -4,517 (-11.4\%) | -1,831 (-4.9\%) |
|  | AN | 8 (0\%) | -958 (-4.2\%) |
|  | BN | -223 (-1.3\%) | -237 (-1.4\%) |
|  | D | -561 (-3.6\%) | -277 (-1.8\%) |
|  | C | -572 (-4.8\%) | 612 (5.8\%) |
|  | All | -1,676 (-7.1\%) | -733 (-3.2\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.9.2.3 Sacramento River at Rio Vista

Table 29. Mean Monthly Flows (cfs) for Model Scenarios in the Sacramento River at Rio Vista, Year-Round

| Alternative 9: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 71,111 | 78,551 | 80,189 |
|  | AN | 41,963 | 42,919 | 42,085 |
|  | BN | 20,943 | 19,991 | 17,380 |
|  | D | 14,895 | 14,927 | 11,423 |
|  | C | 11,853 | 12,601 | 9,077 |
|  | All | 37,268 | 39,721 | 38,388 |
| FEB | W | 80,958 | 89,989 | 91,621 |
|  | AN | 52,542 | 55,363 | 55,700 |
|  | BN | 30,159 | 29,442 | 29,114 |
|  | D | 19,320 | 19,422 | 16,717 |
|  | C | 12,247 | 11,956 | 9,929 |
|  | All | 44,541 | 47,675 | 47,295 |
| MAR | W | 63,763 | 68,663 | 68,974 |
|  | AN | 46,750 | 48,513 | 48,637 |
|  | BN | 20,980 | 19,562 | 16,633 |
|  | D | 17,656 | 17,679 | 15,421 |
|  | C | 10,710 | 10,684 | 8,994 |
|  | All | 36,084 | 37,655 | 36,529 |
| APR | W | 38,214 | 38,422 | 37,812 |
|  | AN | 22,726 | 21,855 | 20,685 |
|  | BN | 14,652 | 14,207 | 11,773 |
|  | D | 10,331 | 10,299 | 8,432 |
|  | C | 7,665 | 7,816 | 7,028 |
|  | All | 21,333 | 21,211 | 19,905 |
| MAY | W | 26,933 | 20,046 | 18,440 |
|  | AN | 17,008 | 14,948 | 12,935 |
|  | BN | 10,924 | 9,355 | 8,750 |
|  | D | 8,135 | 8,564 | 8,069 |
|  | C | 5,305 | 5,554 | 6,071 |
|  | All | 15,456 | 12,833 | 11,893 |
| JUN | W | 16,557 | 11,418 | 11,503 |
|  | AN | 9,887 | 9,220 | 9,304 |
|  | BN | 7,001 | 7,241 | 6,941 |
|  | D | 6,020 | 6,335 | 6,451 |
|  | C | 4,333 | 4,513 | 6,393 |
|  | All | 9,847 | 8,257 | 8,546 |
| JUL | W | 11,125 | 12,181 | 12,667 |
|  | AN | 12,128 | 12,927 | 13,086 |
|  | BN | 11,686 | 11,357 | 10,387 |
|  | D | 10,523 | 10,307 | 8,915 |
|  | C | 7,736 | 6,596 | 6,044 |
|  | All | 10,739 | 10,921 | 10,546 |


| Alternative 9: In Delta-Sacramento River at Rio Vista |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 8,507 | 8,650 | 8,693 |
|  | AN | 8,538 | 9,648 | 9,208 |
|  | BN | 8,371 | 8,753 | 8,482 |
|  | D | 9,264 | 7,417 | 6,761 |
|  | C | 4,390 | 3,615 | 4,277 |
|  | All | 8,052 | 7,806 | 7,662 |
| SEP | W | 10,767 | 21,199 | 22,467 |
|  | AN | 6,788 | 12,832 | 12,971 |
|  | BN | 6,283 | 6,197 | 6,511 |
|  | D | 6,116 | 3,644 | 3,557 |
|  | C | 3,588 | 2,996 | 2,707 |
|  | All | 7,348 | 10,896 | 11,310 |
| OCT | W | 8,718 | 8,287 | 8,426 |
|  | AN | 6,183 | 7,207 | 5,874 |
|  | BN | 6,258 | 6,976 | 5,745 |
|  | D | 5,312 | 5,727 | 5,728 |
|  | C | 5,215 | 4,969 | 4,217 |
|  | All | 6,667 | 6,858 | 6,387 |
| NOV | W | 15,829 | 15,879 | 15,736 |
|  | AN | 11,333 | 12,156 | 11,752 |
|  | BN | 8,184 | 9,071 | 9,557 |
|  | D | 8,733 | 8,061 | 7,723 |
|  | C | 5,473 | 5,565 | 5,439 |
|  | All | 10,793 | 10,946 | 10,832 |
| DEC | W | 43,367 | 40,431 | 39,808 |
|  | AN | 19,040 | 19,936 | 18,148 |
|  | BN | 13,987 | 14,049 | 13,344 |
|  | D | 11,999 | 11,687 | 10,040 |
|  | C | 8,131 | 7,186 | 7,528 |
|  | All | 22,749 | 21,753 | 20,862 |

Table 30. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the Sacramento
River at Rio Vista, Year-Round

| Alternative 9: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 9,078 (12.8\%) | 1,638 (2.1\%) |
|  | AN | 122 (0.3\%) | -834 (-1.9\%) |
|  | BN | -3,562 (-17\%) | -2,610 (-13.1\%) |
|  | D | -3,472 (-23.3\%) | -3,504 (-23.5\%) |
|  | C | -2,776 (-23.4\%) | -3,524 (-28\%) |
|  | All | 1,120 (3\%) | -1,333 (-3.4\%) |
| FEB | W | 10,663 (13.2\%) | 1,632 (1.8\%) |
|  | AN | 3,157 (6\%) | 337 (0.6\%) |
|  | BN | -1,045 (-3.5\%) | -328 (-1.1\%) |
|  | D | -2,603 (-13.5\%) | -2,706 (-13.9\%) |
|  | C | -2,318 (-18.9\%) | -2,026 (-16.9\%) |
|  | All | 2,754 (6.2\%) | -380 (-0.8\%) |
| MAR | W | 5,210 (8.2\%) | 311 (0.5\%) |
|  | AN | 1,887 (4\%) | 125 (0.3\%) |
|  | BN | -4,346 (-20.7\%) | -2,929 (-15\%) |
|  | D | -2,234 (-12.7\%) | -2,257 (-12.8\%) |
|  | C | -1,716 (-16\%) | -1,689 (-15.8\%) |
|  | All | 445 (1.2\%) | -1,126 (-3\%) |
| APR | W | -402 (-1.1\%) | -611 (-1.6\%) |
|  | AN | -2,041 (-9\%) | -1,169 (-5.4\%) |
|  | BN | -2,880 (-19.7\%) | -2,435 (-17.1\%) |
|  | D | -1,900 (-18.4\%) | -1,867 (-18.1\%) |
|  | C | -637 (-8.3\%) | -789 (-10.1\%) |
|  | All | -1,428 (-6.7\%) | -1,306 (-6.2\%) |
| MAY | W | -8,493 (-31.5\%) | -1,606 (-8\%) |
|  | AN | -4,073 (-23.9\%) | -2,013 (-13.5\%) |
|  | BN | -2,174 (-19.9\%) | -605 (-6.5\%) |
|  | D | -66 (-0.8\%) | -495 (-5.8\%) |
|  | C | 766 (14.4\%) | 517 (9.3\%) |
|  | All | -3,562 (-23\%) | -940 (-7.3\%) |
| JUN | W | -5,054 (-30.5\%) | 85 (0.7\%) |
|  | AN | -583 (-5.9\%) | 84 (0.9\%) |
|  | BN | -60 (-0.9\%) | -300 (-4.1\%) |
|  | D | 431 (7.2\%) | 115 (1.8\%) |
|  | C | 2,060 (47.6\%) | 1,880 (41.7\%) |
|  | All | -1,302 (-13.2\%) | 289 (3.5\%) |
| JUL | W | 1,542 (13.9\%) | 485 (4\%) |
|  | AN | 958 (7.9\%) | 159 (1.2\%) |
|  | BN | -1,299 (-11.1\%) | -970 (-8.5\%) |
|  | D | -1,608 (-15.3\%) | -1,392 (-13.5\%) |
|  | C | -1,692 (-21.9\%) | -553 (-8.4\%) |
|  | All | -193 (-1.8\%) | -375 (-3.4\%) |


| Alternative 9: In Delta-Sacramento River at Rio Vista |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | 186 (2.2\%) | 43 (0.5\%) |
|  | AN | 670 (7.8\%) | -440 (-4.6\%) |
|  | BN | 111 (1.3\%) | -270 (-3.1\%) |
|  | D | -2,504 (-27\%) | -656 (-8.8\%) |
|  | C | -113 (-2.6\%) | 662 (18.3\%) |
|  | All | -390 (-4.8\%) | -144 (-1.8\%) |
| SEP | W | 11,700 (108.7\%) | 1,268 (6\%) |
|  | AN | 6,183 (91.1\%) | 139 (1.1\%) |
|  | BN | 227 (3.6\%) | 313 (5.1\%) |
|  | D | -2,559 (-41.8\%) | -87 (-2.4\%) |
|  | C | -881 (-24.6\%) | -289 (-9.6\%) |
|  | All | 3,963 (53.9\%) | 414 (3.8\%) |
| OCT | W | -291 (-3.3\%) | 139 (1.7\%) |
|  | AN | -309 (-5\%) | -1,333 (-18.5\%) |
|  | BN | -513 (-8.2\%) | -1,231 (-17.6\%) |
|  | D | 416 (7.8\%) | 1 (0\%) |
|  | C | -998 (-19.1\%) | -752 (-15.1\%) |
|  | All | -280 (-4.2\%) | -471 (-6.9\%) |
| NOV | W | -93 (-0.6\%) | -143 (-0.9\%) |
|  | AN | 419 (3.7\%) | -404 (-3.3\%) |
|  | BN | 1,373 (16.8\%) | 487 (5.4\%) |
|  | D | -1,009 (-11.6\%) | -338 (-4.2\%) |
|  | C | -35 (-0.6\%) | -126 (-2.3\%) |
|  | All | 40 (0.4\%) | -114 (-1\%) |
| DEC | W | -3,559 (-8.2\%) | -623 (-1.5\%) |
|  | AN | -892 (-4.7\%) | -1,788 (-9\%) |
|  | BN | -644 (-4.6\%) | -705 (-5\%) |
|  | D | -1,959 (-16.3\%) | -1,648 (-14.1\%) |
|  | C | -603 (-7.4\%) | 342 (4.8\%) |
|  | All | -1,887 (-8.3\%) | -891 (-4.1\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

Table 31. Mean Monthly Flows (cfs) for Model Scenarios at the Delta Outflow, Year-Round

| Alternative 9: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 85,900 | 94,620 | 97,198 |
|  | AN | 49,448 | 51,100 | 53,318 |
|  | BN | 22,968 | 22,301 | 23,930 |
|  | D | 14,736 | 14,732 | 15,597 |
|  | C | 11,343 | 12,651 | 11,658 |
|  | All | 43,289 | 46,372 | 47,837 |
| FEB | W | 96,835 | 107,085 | 108,810 |
|  | AN | 62,321 | 65,873 | 69,090 |
|  | BN | 36,766 | 36,084 | 38,460 |
|  | D | 20,915 | 21,461 | 22,776 |
|  | C | 12,991 | 12,798 | 13,626 |
|  | All | 52,594 | 56,338 | 58,171 |
| MAR | W | 78,956 | 84,471 | 85,974 |
|  | AN | 54,171 | 56,737 | 58,768 |
|  | BN | 24,029 | 22,467 | 24,376 |
|  | D | 19,880 | 19,985 | 20,872 |
|  | C | 11,911 | 12,215 | 12,572 |
|  | All | 43,172 | 45,097 | 46,443 |
| APR | W | 54,394 | 54,562 | 52,374 |
|  | AN | 31,975 | 30,576 | 28,278 |
|  | BN | 21,928 | 20,641 | 19,364 |
|  | D | 14,142 | 13,413 | 14,077 |
|  | C | 9,053 | 9,294 | 9,424 |
|  | All | 30,099 | 29,603 | 28,520 |
| MAY | W | 41,040 | 32,880 | 31,309 |
|  | AN | 24,200 | 21,709 | 20,081 |
|  | BN | 16,299 | 13,596 | 14,324 |
|  | D | 10,487 | 10,375 | 12,909 |
|  | C | 6,000 | 6,286 | 7,118 |
|  | All | 22,517 | 19,121 | 19,187 |
| JUN | W | 23,451 | 15,640 | 16,323 |
|  | AN | 11,801 | 10,676 | 11,618 |
|  | BN | 8,004 | 8,943 | 8,979 |
|  | D | 6,636 | 7,689 | 7,545 |
|  | C | 5,322 | 5,632 | 5,659 |
|  | All | 12,765 | 10,560 | 10,893 |
| JUL | W | 11,441 | 11,407 | 10,186 |
|  | AN | 9,430 | 12,225 | 8,669 |
|  | BN | 7,151 | 7,668 | 5,965 |
|  | D | 5,024 | 6,448 | 5,191 |
|  | C | 4,238 | 5,832 | 5,104 |
|  | All | 7,951 | 8,984 | 7,403 |


| Alternative 9: In Delta-Delta Outflow |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 5,341 | 4,308 | 4,234 |
|  | AN | 4,000 | 4,713 | 4,216 |
|  | BN | 4,000 | 5,129 | 4,490 |
|  | D | 4,829 | 5,348 | 5,455 |
|  | C | 4,077 | 4,433 | 5,676 |
|  | All | 4,618 | 4,754 | 4,754 |
| SEP | W | 9,569 | 20,078 | 20,595 |
|  | AN | 3,672 | 11,581 | 12,095 |
|  | BN | 3,445 | 3,428 | 3,899 |
|  | D | 3,350 | 3,021 | 3,000 |
|  | C | 3,000 | 3,036 | 3,000 |
|  | All | 5,334 | 9,754 | 10,063 |
| OCT | W | 6,487 | 9,520 | 8,710 |
|  | AN | 4,021 | 8,982 | 6,406 |
|  | BN | 4,477 | 8,054 | 6,545 |
|  | D | 4,157 | 7,294 | 6,305 |
|  | C | 4,158 | 6,607 | 4,724 |
|  | All | 4,931 | 8,276 | 6,892 |
| NOV | W | 14,232 | 15,987 | 15,824 |
|  | AN | 9,683 | 11,529 | 11,203 |
|  | BN | 5,864 | 8,681 | 8,694 |
|  | D | 6,943 | 8,052 | 7,681 |
|  | C | 5,045 | 5,725 | 5,681 |
|  | All | 9,193 | 10,844 | 10,658 |
| DEC | W | 48,185 | 45,191 | 46,340 |
|  | AN | 18,014 | 19,119 | 18,822 |
|  | BN | 11,950 | 12,231 | 12,294 |
|  | D | 8,884 | 8,828 | 8,034 |
|  | C | 5,531 | 6,560 | 5,154 |
|  | All | 22,714 | 22,113 | 22,064 |

Table 32. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios at the Delta Outflow, Year-Round

| Alternative 9: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 11,298 (13.2\%) | 2,578 (2.7\%) |
|  | AN | 3,870 (7.8\%) | 2,218 (4.3\%) |
|  | BN | 962 (4.2\%) | 1,629 (7.3\%) |
|  | D | 861 (5.8\%) | 865 (5.9\%) |
|  | C | 315 (2.8\%) | -992 (-7.8\%) |
|  | All | 4,548 (10.5\%) | 1,465 (3.2\%) |
| FEB | W | 11,975 (12.4\%) | 1,725 (1.6\%) |
|  | AN | 6,768 (10.9\%) | 3,216 (4.9\%) |
|  | BN | 1,693 (4.6\%) | 2,375 (6.6\%) |
|  | D | 1,860 (8.9\%) | 1,315 (6.1\%) |
|  | C | 635 (4.9\%) | 828 (6.5\%) |
|  | All | 5,578 (10.6\%) | 1,833 (3.3\%) |
| MAR | W | 7,018 (8.9\%) | 1,502 (1.8\%) |
|  | AN | 4,597 (8.5\%) | 2,031 (3.6\%) |
|  | BN | 347 (1.4\%) | 1,909 (8.5\%) |
|  | D | 991 (5\%) | 886 (4.4\%) |
|  | C | 661 (5.5\%) | 357 (2.9\%) |
|  | All | 3,272 (7.6\%) | 1,346 (3\%) |
| APR | W | -2,020 (-3.7\%) | -2,188 (-4\%) |
|  | AN | -3,698 (-11.6\%) | -2,298 (-7.5\%) |
|  | BN | -2,564 (-11.7\%) | -1,277 (-6.2\%) |
|  | D | -65 (-0.5\%) | 664 (4.9\%) |
|  | C | 371 (4.1\%) | 131 (1.4\%) |
|  | All | -1,579 (-5.2\%) | -1,083 (-3.7\%) |
| MAY | W | -9,731 (-23.7\%) | -1,571 (-4.8\%) |
|  | AN | -4,119 (-17\%) | -1,629 (-7.5\%) |
|  | BN | -1,975 (-12.1\%) | 728 (5.4\%) |
|  | D | 2,422 (23.1\%) | 2,534 (24.4\%) |
|  | C | 1,118 (18.6\%) | 832 (13.2\%) |
|  | All | -3,330 (-14.8\%) | 66 (0.3\%) |
| JUN | W | -7,128 (-30.4\%) | 683 (4.4\%) |
|  | AN | -183 (-1.6\%) | 942 (8.8\%) |
|  | BN | 975 (12.2\%) | 35 (0.4\%) |
|  | D | 910 (13.7\%) | -144 (-1.9\%) |
|  | C | 337 (6.3\%) | 28 (0.5\%) |
|  | All | -1,871 (-14.7\%) | 333 (3.2\%) |
| JUL | W | -1,255 (-11\%) | -1,221 (-10.7\%) |
|  | AN | -761 (-8.1\%) | -3,555 (-29.1\%) |
|  | BN | -1,186 (-16.6\%) | -1,703 (-22.2\%) |
|  | D | 168 (3.3\%) | -1,257 (-19.5\%) |
|  | C | 866 (20.4\%) | -728 (-12.5\%) |
|  | All | -548 (-6.9\%) | -1,581 (-17.6\%) |

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| Alternative 9: In Delta-Delta Outflow |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | -1,107 (-20.7\%) | -74 (-1.7\%) |
|  | AN | 216 (5.4\%) | -497 (-10.5\%) |
|  | BN | 490 (12.3\%) | -639 (-12.5\%) |
|  | D | 626 (13\%) | 107 (2\%) |
|  | C | 1,599 (39.2\%) | 1,243 (28\%) |
|  | All | 136 (2.9\%) | 0 (0\%) |
| SEP | W | 11,026 (115.2\%) | 517 (2.6\%) |
|  | AN | 8,423 (229.4\%) | 514 (4.4\%) |
|  | BN | 454 (13.2\%) | 471 (13.7\%) |
|  | D | -350 (-10.5\%) | -21 (-0.7\%) |
|  | C | 0 (0\%) | -36 (-1.2\%) |
|  | All | 4,729 (88.7\%) | 310 (3.2\%) |
| OCT | W | 2,223 (34.3\%) | -810 (-8.5\%) |
|  | AN | 2,385 (59.3\%) | -2,576 (-28.7\%) |
|  | BN | 2,068 (46.2\%) | -1,509 (-18.7\%) |
|  | D | 2,148 (51.7\%) | -989 (-13.6\%) |
|  | C | 566 (13.6\%) | -1,882 (-28.5\%) |
|  | All | 1,961 (39.8\%) | -1,384 (-16.7\%) |
| NOV | W | 1,592 (11.2\%) | -164 (-1\%) |
|  | AN | 1,520 (15.7\%) | -326 (-2.8\%) |
|  | BN | 2,829 (48.2\%) | 12 (0.1\%) |
|  | D | 738 (10.6\%) | -372 (-4.6\%) |
|  | C | 636 (12.6\%) | -44 (-0.8\%) |
|  | All | 1,465 (15.9\%) | -185 (-1.7\%) |
| DEC | W | -1,845 (-3.8\%) | 1,149 (2.5\%) |
|  | AN | 808 (4.5\%) | -297 (-1.6\%) |
|  | BN | 344 (2.9\%) | 63 (0.5\%) |
|  | D | -850 (-9.6\%) | -794 (-9\%) |
|  | C | -377 (-6.8\%) | -1,406 (-21.4\%) |
|  | All | -650 (-2.9\%) | -48 (-0.2\%) |

a Red boxes indicate that flows under the alternative are more than $5 \%$ lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.

## 11C.9.2.5 San Joaquin River at Vernalis

Table 33. Mean Monthly Flows (cfs) for Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 9: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 9,089 | 9,681 | 9,778 |
|  | AN | 5,447 | 6,011 | 6,037 |
|  | BN | 2,326 | 2,220 | 2,241 |
|  | D | 2,270 | 2,202 | 2,204 |
|  | C | 1,667 | 1,592 | 1,592 |
|  | All | 4,777 | 5,018 | 5,055 |
| FEB | W | 12,750 | 13,191 | 13,202 |
|  | AN | 6,965 | 6,721 | 6,722 |
|  | BN | 2,983 | 2,841 | 2,808 |
|  | D | 2,590 | 2,269 | 2,271 |
|  | C | 2,120 | 1,941 | 1,941 |
|  | All | 6,388 | 6,361 | 6,359 |
| MAR | W | 14,374 | 15,235 | 15,245 |
|  | AN | 6,284 | 6,364 | 6,365 |
|  | BN | 2,949 | 2,476 | 2,476 |
|  | D | 2,479 | 2,146 | 2,145 |
|  | C | 1,813 | 1,688 | 1,687 |
|  | All | 6,648 | 6,763 | 6,766 |
| APR | W | 11,955 | 12,457 | 12,455 |
|  | AN | 6,014 | 6,042 | 6,043 |
|  | BN | 4,490 | 3,922 | 3,923 |
|  | D | 3,656 | 3,112 | 3,110 |
|  | C | 1,983 | 1,796 | 1,794 |
|  | All | 6,351 | 6,291 | 6,290 |
| MAY | W | 12,109 | 12,632 | 12,630 |
|  | AN | 5,381 | 5,092 | 5,091 |
|  | BN | 4,074 | 3,657 | 3,658 |
|  | D | 3,308 | 2,823 | 2,820 |
|  | C | 1,964 | 1,798 | 1,795 |
|  | All | 6,148 | 6,069 | 6,067 |
| JUN | W | 11,058 | 6,820 | 6,826 |
|  | AN | 2,965 | 2,678 | 2,678 |
|  | BN | 2,051 | 1,870 | 1,871 |
|  | D | 1,537 | 1,291 | 1,289 |
|  | C | 1,020 | 956 | 952 |
|  | All | 4,583 | 3,206 | 3,207 |
| JUL | W | 7,654 | 4,345 | 4,344 |
|  | AN | 1,958 | 1,801 | 1,801 |
|  | BN | 1,491 | 1,381 | 1,383 |
|  | D | 1,295 | 1,100 | 1,094 |
|  | C | 898 | 858 | 853 |
|  | All | 3,239 | 2,184 | 2,182 |


| Alternative 9: In Delta-San Joaquin River at Vernalis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 3,539 | 2,645 | 2,643 |
|  | AN | 2,000 | 1,699 | 1,699 |
|  | BN | 1,460 | 1,375 | 1,376 |
|  | D | 1,375 | 1,225 | 1,224 |
|  | C | 1,007 | 987 | 983 |
|  | All | 2,072 | 1,710 | 1,709 |
| SEP | W | 3,519 | 3,127 | 3,126 |
|  | AN | 2,355 | 2,164 | 2,164 |
|  | BN | 1,829 | 1,748 | 1,749 |
|  | D | 1,796 | 1,643 | 1,642 |
|  | C | 1,402 | 1,378 | 1,379 |
|  | All | 2,338 | 2,144 | 2,144 |
| OCT | W | 2,760 | 2,726 | 2,712 |
|  | AN | 2,745 | 2,595 | 2,595 |
|  | BN | 2,502 | 2,348 | 2,348 |
|  | D | 2,945 | 2,790 | 2,791 |
|  | C | 2,213 | 2,031 | 2,031 |
|  | All | 2,639 | 2,515 | 2,511 |
| NOV | W | 2,534 | 2,411 | 2,418 |
|  | AN | 3,182 | 3,193 | 3,195 |
|  | BN | 2,150 | 1,997 | 2,052 |
|  | D | 2,272 | 2,217 | 2,253 |
|  | C | 1,968 | 1,898 | 1,898 |
|  | All | 2,448 | 2,367 | 2,384 |
| DEC | W | 4,370 | 4,504 | 4,580 |
|  | AN | 4,711 | 4,567 | 4,574 |
|  | BN | 2,182 | 2,065 | 2,073 |
|  | D | 2,129 | 2,166 | 2,155 |
|  | C | 1,729 | 1,694 | 1,681 |
|  | All | 3,219 | 3,211 | 3,231 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

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Table 34. Differences ${ }^{\text {a }}$ (Percent Differences) between Pairs of Model Scenarios in the San Joaquin River at Vernalis, Year-Round

| Alternative 9: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 689 (7.6\%) | 97 (1\%) |
|  | AN | 590 (10.8\%) | 26 (0.4\%) |
|  | BN | -85 (-3.7\%) | 20 (0.9\%) |
|  | D | -66 (-2.9\%) | 3 (0.1\%) |
|  | C | -76 (-4.5\%) | 0 (0\%) |
|  | All | 278 (5.8\%) | 37 (0.7\%) |
| FEB | W | 452 (3.5\%) | 11 (0.1\%) |
|  | AN | -243 (-3.5\%) | 1 (0\%) |
|  | BN | -174 (-5.8\%) | -32 (-1.1\%) |
|  | D | -320 (-12.3\%) | 1 (0.1\%) |
|  | C | -179 (-8.4\%) | 0 (0\%) |
|  | All | -28 (-0.4\%) | -2 (0\%) |
| MAR | W | 871 (6.1\%) | 10 (0.1\%) |
|  | AN | 80 (1.3\%) | 0 (0\%) |
|  | BN | -473 (-16\%) | 0 (0\%) |
|  | D | -334 (-13.5\%) | -1 (0\%) |
|  | C | -126 (-7\%) | -1 (0\%) |
|  | All | 118 (1.8\%) | 3 (0\%) |
| APR | W | 501 (4.2\%) | -2 (0\%) |
|  | AN | 29 (0.5\%) | 1 (0\%) |
|  | BN | -567 (-12.6\%) | 1 (0\%) |
|  | D | -547 (-14.9\%) | -2 (-0.1\%) |
|  | C | -189 (-9.6\%) | -2 (-0.1\%) |
|  | All | -61 (-1\%) | -1 (0\%) |
| MAY | W | 521 (4.3\%) | -2 (0\%) |
|  | AN | -291 (-5.4\%) | -1 (0\%) |
|  | BN | -416 (-10.2\%) | 1 (0\%) |
|  | D | -488 (-14.8\%) | -3 (-0.1\%) |
|  | C | -169 (-8.6\%) | -2 (-0.1\%) |
|  | All | -81 (-1.3\%) | -2 (0\%) |
| JUN | W | -4,231 (-38.3\%) | 6 (0.1\%) |
|  | AN | -287 (-9.7\%) | 0 (0\%) |
|  | BN | -180 (-8.8\%) | 1 (0.1\%) |
|  | D | -249 (-16.2\%) | -2 (-0.2\%) |
|  | C | -68 (-6.7\%) | -4 (-0.4\%) |
|  | All | -1,376 (-30\%) | 1 (0\%) |
| JUL | W | -3,311 (-43.3\%) | -2 (0\%) |
|  | AN | -157 (-8\%) | 0 (0\%) |
|  | BN | -108 (-7.3\%) | 2 (0.2\%) |
|  | D | -202 (-15.6\%) | -6 (-0.6\%) |
|  | C | -45 (-5\%) | -5 (-0.6\%) |
|  | All | -1,058 (-32.6\%) | -2 (-0.1\%) |


| Alternative 9: In Delta-San Joaquin River at Vernalis |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | $\mathrm{WYT}^{\text {b }}$ | $\begin{gathered} \hline \text { EXISTING CONDITIONS } \\ \text { vs. A9_LLT } \end{gathered}$ | NAA vs. A9_LLT |
| AUG | W | -895 (-25.3\%) | -1 (0\%) |
|  | AN | -302 (-15.1\%) | 0 (0\%) |
|  | BN | -84 (-5.7\%) | 2 (0.1\%) |
|  | D | -151 (-11\%) | -1 (-0.1\%) |
|  | C | -24 (-2.4\%) | -4 (-0.4\%) |
|  | All | -363 (-17.5\%) | -1 (-0.1\%) |
| SEP | W | -392 (-11.2\%) | -1 (0\%) |
|  | AN | -190 (-8.1\%) | 0 (0\%) |
|  | BN | -80 (-4.4\%) | 1 (0\%) |
|  | D | -154 (-8.6\%) | -1 (0\%) |
|  | C | -23 (-1.6\%) | 2 (0.1\%) |
|  | All | -194 (-8.3\%) | 0 (0\%) |
| OCT | W | -48 (-1.7\%) | -14 (-0.5\%) |
|  | AN | -150 (-5.5\%) | 0 (0\%) |
|  | BN | -154 (-6.2\%) | 0 (0\%) |
|  | D | -154 (-5.2\%) | 0 (0\%) |
|  | C | -182 (-8.2\%) | 0 (0\%) |
|  | All | -128 (-4.8\%) | -4 (-0.2\%) |
| NOV | W | -115 (-4.6\%) | 7 (0.3\%) |
|  | AN | 13 (0.4\%) | 2 (0.1\%) |
|  | BN | -98 (-4.6\%) | 56 (2.8\%) |
|  | D | -20 (-0.9\%) | 35 (1.6\%) |
|  | C | -70 (-3.6\%) | 0 (0\%) |
|  | All | -64 (-2.6\%) | 17 (0.7\%) |
| DEC | W | 210 (4.8\%) | 76 (1.7\%) |
|  | AN | -137 (-2.9\%) | 7 (0.2\%) |
|  | BN | -109 (-5\%) | 8 (0.4\%) |
|  | D | 26 (1.2\%) | -11 (-0.5\%) |
|  | C | -48 (-2.8\%) | -13 (-0.8\%) |
|  | All | 12 (0.4\%) | 21 (0.6\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.

## 11C.9.2.6 Mokelumne River at the Delta

Table 35. Mean Monthly Flows (cfs) for Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 9: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A9_LLT |
| JAN | W | 3,071 | 3,634 | 3,634 |
|  | AN | 1,707 | 1,876 | 1,876 |
|  | BN | 597 | 617 | 617 |
|  | D | 495 | 493 | 493 |
|  | C | 280 | 281 | 281 |
|  | All | 1,460 | 1,660 | 1,660 |
| FEB | W | 3,290 | 3,781 | 3,781 |
|  | AN | 2,525 | 2,913 | 2,913 |
|  | BN | 1,011 | 1,035 | 1,035 |
|  | D | 695 | 678 | 678 |
|  | C | 426 | 442 | 442 |
|  | All | 1,809 | 2,033 | 2,033 |
| MAR | W | 3,179 | 3,336 | 3,336 |
|  | AN | 1,582 | 1,639 | 1,639 |
|  | BN | 1,181 | 1,140 | 1,140 |
|  | D | 754 | 691 | 691 |
|  | C | 595 | 580 | 580 |
|  | All | 1,662 | 1,700 | 1,700 |
| APR | W | 2,819 | 2,694 | 2,694 |
|  | AN | 1,619 | 1,424 | 1,424 |
|  | BN | 1,243 | 1,068 | 1,068 |
|  | D | 623 | 550 | 550 |
|  | C | 340 | 311 | 311 |
|  | All | 1,503 | 1,384 | 1,384 |
| MAY | W | 3,170 | 2,885 | 2,885 |
|  | AN | 1,439 | 1,179 | 1,179 |
|  | BN | 976 | 812 | 812 |
|  | D | 406 | 333 | 333 |
|  | C | 181 | 170 | 170 |
|  | All | 1,463 | 1,289 | 1,289 |
| JUN | W | 1,755 | 1,415 | 1,415 |
|  | AN | 851 | 631 | 631 |
|  | BN | 471 | 366 | 366 |
|  | D | 93 | 76 | 76 |
|  | C | 52 | 44 | 44 |
|  | All | 779 | 616 | 616 |
| JUL | W | 772 | 469 | 469 |
|  | AN | 347 | 167 | 167 |
|  | BN | 123 | 70 | 70 |
|  | D | 7 | 6 | 6 |
|  | C | 3 | 3 | 3 |
|  | All | 315 | 183 | 183 |


| Alternative 9: In Delta-Mokelumne River at the Delta |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {a }}$ | EXISTING CONDITIONS | NAA | A9_LLT |
| AUG | W | 703 | 346 | 346 |
|  | AN | 328 | 216 | 216 |
|  | BN | 112 | 71 | 71 |
|  | D | 4 | 4 | 4 |
|  | C | 2 | 2 | 2 |
|  | All | 289 | 156 | 156 |
| SEP | W | 702 | 497 | 497 |
|  | AN | 333 | 259 | 259 |
|  | BN | 114 | 91 | 91 |
|  | D | 9 | 9 | 9 |
|  | C | 5 | 5 | 5 |
|  | All | 291 | 213 | 213 |
| OCT | W | 161 | 147 | 147 |
|  | AN | 178 | 180 | 180 |
|  | BN | 154 | 144 | 144 |
|  | D | 180 | 160 | 160 |
|  | C | 117 | 123 | 123 |
|  | All | 158 | 150 | 150 |
| NOV | W | 487 | 431 | 431 |
|  | AN | 912 | 855 | 855 |
|  | BN | 347 | 301 | 301 |
|  | D | 380 | 327 | 327 |
|  | C | 195 | 186 | 186 |
|  | All | 474 | 429 | 429 |
| DEC | W | 1,504 | 1,732 | 1,732 |
|  | AN | 1,411 | 1,628 | 1,628 |
|  | BN | 447 | 472 | 472 |
|  | D | 384 | 374 | 374 |
|  | C | 204 | 209 | 209 |
|  | All | 887 | 999 | 999 |

a Water year type for this location was determined using the San Joaquin River Valley Index.

Table 36. Differences ${ }^{a}$ (Percent Differences) between Pairs of Model Scenarios in the Mokelumne River at the Delta, Year-Round

| Alternative 9: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT ${ }^{\text {b }}$ | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| JAN | W | 563 (18.3\%) | 0 (0\%) |
|  | AN | 169 (9.9\%) | 0 (0\%) |
|  | BN | 21 (3.4\%) | 0 (0\%) |
|  | D | -2 (-0.5\%) | 0 (0\%) |
|  | C | 1 (0.3\%) | 0 (0\%) |
|  | All | 201 (13.8\%) | 0 (0\%) |
| FEB | W | 491 (14.9\%) | 0 (0\%) |
|  | AN | 388 (15.4\%) | 0 (0\%) |
|  | BN | 24 (2.4\%) | 0 (0\%) |
|  | D | -17 (-2.4\%) | 0 (0\%) |
|  | C | 15 (3.5\%) | 0 (0\%) |
|  | All | 223 (12.3\%) | 0 (0\%) |
| MAR | W | 158 (5\%) | 0 (0\%) |
|  | AN | 57 (3.6\%) | 0 (0\%) |
|  | BN | -41 (-3.4\%) | 0 (0\%) |
|  | D | -63 (-8.3\%) | 0 (0\%) |
|  | C | -15 (-2.5\%) | 0 (0\%) |
|  | All | 38 (2.3\%) | 0 (0\%) |
| APR | W | -125 (-4.4\%) | 0 (0\%) |
|  | AN | -194 (-12\%) | 0 (0\%) |
|  | BN | -175 (-14.1\%) | 0 (0\%) |
|  | D | -73 (-11.7\%) | 0 (0\%) |
|  | C | -29 (-8.7\%) | 0 (0\%) |
|  | All | -120 (-8\%) | 0 (0\%) |
| MAY | W | -284 (-9\%) | 0 (0\%) |
|  | AN | -260 (-18.1\%) | 0 (0\%) |
|  | BN | -164 (-16.8\%) | 0 (0\%) |
|  | D | -72 (-17.8\%) | 0 (0\%) |
|  | C | -11 (-6.1\%) | 0 (0\%) |
|  | All | -174 (-11.9\%) | 0 (0\%) |
| JUN | W | -339 (-19.3\%) | 0 (0\%) |
|  | AN | -220 (-25.8\%) | 0 (0\%) |
|  | BN | -105 (-22.3\%) | 0 (0\%) |
|  | D | -17 (-18.8\%) | 0 (0\%) |
|  | C | -8 (-14.7\%) | 0 (0\%) |
|  | All | -163 (-20.9\%) | 0 (0\%) |
| JUL | W | -303 (-39.3\%) | 0 (0\%) |
|  | AN | -180 (-51.8\%) | 0 (0\%) |
|  | BN | -54 (-43.4\%) | 0 (0\%) |
|  | D | 0 (-3.1\%) | 0 (0\%) |
|  | C | 0 (-4.4\%) | 0 (0\%) |
|  | All | -132 (-42\%) | 0 (0\%) |


| Alternative 9: In Delta-Mokelumne River at the Delta |  |  |  |
| :---: | :---: | :---: | :---: |
| Month | WYT $^{\text {b }}$ | EXISTING CONDITIONS vs. A9_LLT | NAA vs. A9_LLT |
| AUG | W | -357 (-50.8\%) | 0 (0\%) |
|  | AN | -113 (-34.3\%) | 0 (0\%) |
|  | BN | -41 (-36.5\%) | 0 (0\%) |
|  | D | 0 (-0.5\%) | 0 (0\%) |
|  | C | 0 (-3.1\%) | 0 (0\%) |
|  | All | -133 (-46.1\%) | 0 (0\%) |
| SEP | W | -205 (-29.3\%) | 0 (0\%) |
|  | AN | -74 (-22.2\%) | 0 (0\%) |
|  | BN | -23 (-20.5\%) | 0 (0\%) |
|  | D | -1 (-5.9\%) | 0 (0\%) |
|  | C | 0 (4.6\%) | 0 (0\%) |
|  | All | -78 (-26.9\%) | 0 (0\%) |
| OCT | W | -14 (-8.7\%) | 0 (0\%) |
|  | AN | 2 (1.1\%) | 0 (0\%) |
|  | BN | -10 (-6.6\%) | 0 (0\%) |
|  | D | -20 (-11.1\%) | 0 (0\%) |
|  | C | 6 (4.7\%) | 0 (0\%) |
|  | All | -7 (-4.7\%) | 0 (0\%) |
| NOV | W | -56 (-11.5\%) | 0 (0\%) |
|  | AN | -57 (-6.3\%) | 0 (0\%) |
|  | BN | -46 (-13.2\%) | 0 (0\%) |
|  | D | -53 (-13.9\%) | 0 (0\%) |
|  | C | -9 (-4.6\%) | 0 (0\%) |
|  | All | -45 (-9.5\%) | 0 (0\%) |
| DEC | W | 228 (15.2\%) | 0 (0\%) |
|  | AN | 217 (15.4\%) | 0 (0\%) |
|  | BN | 25 (5.5\%) | 0 (0\%) |
|  | D | -10 (-2.6\%) | 0 (0\%) |
|  | C | 6 (2.9\%) | 0 (0\%) |
|  | All | 113 (12.7\%) | 0 (0\%) |

${ }^{\text {a }}$ Red boxes indicate that flows under the alternative are more than 5\% lower than flows under the baseline; green boxes indicate that flows under the alternative are more than $5 \%$ greater than flows under the baseline.
b Water year type for this location was determined using the San Joaquin River Valley Index.


[^0]:    a Water year type for this location was determined using the San Joaquin River Valley Index.

