# State of California Office of Administrative Law

In re:

State Water Resources Control Board

Regulatory Action:

Title 23, California Code of Regulations

Adopt sections:

875, 875.1, 875.2, 875.3, 875.5, 875.6, 875.7, 875.8,

875.9

Amend sections: Repeal sections: NOTICE OF APPROVAL OF EMERGENCY REGULATORY ACTION

Government Code Sections 11346.1 and 11349.6

OAL Matter Number: 2024-0123-03

OAL Matter Type: Emergency (E)

This emergency action adopts regulations concerning Scott and Shasta River Watersheds drought requirements. The regulations authorize curtailments of diversions where flows are insufficient to protect fish. They allow for diversions for nonconsumptive uses, minimum health and safety needs, and livestock watering as specified. The regulations establish a process for determining whether flows in the watershed are insufficient to support all water rights and the order of priority for curtailments as well as curtailment order reporting requirements, and provisions regarding penalties for violations of curtailment orders.

OAL approves this emergency regulatory action pursuant to sections 11346.1 and 11349.6 of the Government Code.

This emergency regulatory action is effective on 2/1/2024 and will expire on 2/1/2025. The Certificate of Compliance for this action is due no later than 1/31/2025.

Date: February 1, 2024

Thanh Huynh Senior Attorney

For:

Kenneth J. Pogue

Director

Original: Eileen Sobeck, Executive

Director

Copy: Marianna Aue STATE OF CALIFORNIA—OFFICE OF ADMINISTRATIVE LAW For use by Secretary of State only NOTICE PUBLICATION/REG OAL FILE NOTICE FILE NUMBER NUMBERS For use by Office of Administrative Law (OAL) only **ENDORSED - FILED** in the office of the Secretary of State of the State of California OFFICE OF ADMIN. LAW FEB 0 1 2024 2024 JAN 23 ANT1:49 1:45 PM REGULATIONS AGENCY WITH RULEMAKING AUTHORITY AGENCY FILE NUMBER (If any) State Water Resources Control Board A. PUBLICATION OF NOTICE (Complete for publication in Notice Register) 1. SUBJECT OF NOTICE TITLE(S) FIRST SECTION AFFECTED 2. REQUESTED PUBLICATION DATE 3. NOTICE TYPE 4. AGENCY CONTACT PERSON TELEPHONE NUMBER FAX NUMBER (Optional) Notice re Proposed Other Regulatory Action **ACTION ON PROPOSED NOTICE** OAL USE NOTICE REGISTER NUMBER PUBLICATION DATE Approved as Approved as Disapproved/ ONLY Withdrawn B. SUBMISSION OF REGULATIONS (Complete when submitting regulations) 1a. SUBJECT OF REGULATION(S) 1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S) Scott and Shasta River Watersheds Drought Emergency Requirements 2022-0719-01EE, 2021-0820-05E 2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics related) SECTION(S) AFFECTED Article 23.5, Sections 875, 875.1, 875.2, 875.3, 875.5, 875.6, 875.7, 875.8, 875.9 (List all section number(s) AMEND individually. Attach additional sheet if needed.) TITLE(S) REPEAL 23 3. TYPE OF FILING Regular Rulemaking (Gov. Certificate of Compliance: The agency officer named **Emergency Readopt** Changes Without Code §11346) below certifies that this agency complied with the (Gov. Code, §11346.1(h)) Regulatory Effect (Cal. provisions of Gov. Code §§11346.2-11347.3 either Resubmittal of disapproved Code Regs., title 1, §100) before the emergency regulation was adopted or or withdrawn nonemergency within the time period required by statute. filing (Gov. Code §§11349.3, File & Print Print Only 11349.4) Resubmittal of disapproved or withdrawn Emergency (Gov. Code, Other (Specify) Water Code, § 1058.5 emergency filing (Gov. Code, §11346.1) §11346.1(b)) 4. ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs. title 1, §44 and Gov. Code §11347.1) EFFECTIVE DATE OF CHANGES (Gov. Code, §§ 11343.4, 11346.1(d); Cal. Code Regs., title 1, §100) Effective January 1, April 1, July 1, or Effective on filing with §100 Changes Without Effective other October 1 (Gov. Code §11343.4(a)) Secretary of State Regulatory Effect (Specify) 6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY Department of Finance (Form STD, 399) (SAM §6660) Fair Political Practices Commission State Fire Marshal Other (Specify) TELEPHONE NUMBER **CONTACT PERSON** FAX NUMBER (Optional) E-MAIL ADDRESS (Optional) Marianna Aue (916) 327-4440 maue@waterboards.ca.gov 8. I certify that the attached copy of the regulation(s) is a true and correct copy For use by Office of Administrative Law (OAL) only of the regulation(s) identified on this form, that the information specified on this form ENDORSED APPROVED is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification. SIGNATURE OF AGENCY HEAD OR DESIGNEE FEB 01 2024 01/20/2024 TYPED NAME AND TITLE OF SIGNATORY Office of Administrative Law Eric Oppenheimer, Executive Director Adobe Acrobat Sign Transaction Number: CBJCHBCAABAA2ndID56Ka6fnVQrnuOZXSB9lhzuDj9Gq

Establishment of Minimum Instream Flow Requirements, Curtailment Authority, and Information Order Authority in the Scott River and Shasta River Watersheds

In Title 23, Division 3, Chapter 2, adopt Article 23.5, Sections 875, 875.1, 875.2, 875.3, 875.5, 875.6, 875.7, 875.8, and 875.9

Article 23.5. Scott River and Shasta River Watersheds Drought Emergency Requirements

§ 875 Emergency Curtailment Where Insufficient Flows are Available to Protect Fish in Certain Watersheds

- (a) It is necessary to prevent the diversion of water that would unreasonably interfere with an emergency minimum level of protection for commercially and culturally significant fall-run Chinook salmon, threatened Southern Oregon/Northern California Coast coho salmon, and culturally significant steelhead. For this reason surface water and groundwater shall not be diverted from the watersheds listed below at a diversion point or for the benefit of a place of use that is subject to a curtailment order, during the effective period of the curtailment order under this article, except as provided under sections 875.1, 875.2, or 875.3.
- (b) The Deputy Director for the Division of Water Rights (Deputy Director) may issue a curtailment order upon a determination that without curtailment of diversions, flows are likely to be reduced below the drought emergency minimum flows specified in subdivision (c), within the constraints detailed in this article. Curtailment orders shall be effective the day after issuance.
  - (1) Where flows are sufficient to support some but not all diversions, curtailment orders shall be issued, suspended, reinstated, and rescinded in order of water right priority provided in section 875.5. In determining which diversions should be subject to curtailment, the Deputy Director shall consider the need to provide reasonable assurance that the drought emergency minimum flows will be met with consideration of hydrologic, weather, and other conditions that influence flows.
  - (2) If maintaining the flows described in subdivision (c) would require curtailment of uses described in section 875.2 or 875.3, then the Executive Director may determine whether or not those diversions should be allowed to continue based on the most current information available regarding fish populations, human health and safety needs, livestock needs, and the alternatives available to protect human health and safety, livestock, and fish populations.

- (3) The Deputy Director may determine not to issue curtailment orders, to issue curtailment orders to a smaller priority grouping described in section 875.5, or to suspend curtailment orders already issued in order of priority as described in section 875.5, as applicable, using information provided by the California Department of Fish and Wildlife described in section 875.1(c)(1)(B), as well as other information that could affect the need for curtailments to meet minimum flow needs for fisheries purposes, including weather forecasting, the need for flows to ramp up or down, the contributions of voluntary flow measures, and future flow needs.
- (c) Drought Emergency Minimum Flows are as specified below.
  - (1) Scott River. The Scott River enters the Klamath River at United States Geological Survey River Mile 145.1.
    - (A) As measured in cubic feet per second at United States Geological Survey gage 11519500 located downstream of the city of Fort Jones at the northern end of Scott Valley (Scott River Mile 21), the natural flow of the system up to the following amounts:

Jan	Feb	Mar	Apr	May	June 1-23	June 24-30	July	Aug	Sept	Oct	Nov	Dec
200	200	200	150	150	125	90	50	30	33	40	60	150

(B) The California Department of Fish and Wildlife or the National Marine Fisheries Service may notify the Deputy Director that the pertinent life stage(s) of the pertinent species the flows are crafted to protect is not yet present, or is no longer present at the time anticipated. Additionally, the California Department of Fish and Wildlife, after coordination with the National Marine Fisheries Service, may notify the Deputy Director that lower, alternative flows at the Fort Jones gage, or alternative flows at a different point or points in the watershed, provide equal or better protection for the pertinent species' relevant life stages.

- (2) Shasta River. The Shasta River enters the Klamath River at United States Geological Survey River Mile 179.5, at the junction of State Routes 263 and 96.
  - (A) As measured in cubic feet per second at United States Geological Survey gage 11517500 located near Yreka:

Jan	Feb	Mar 1-24	Mar 25-31	Apr	May	June	July	Aug	Sept 1-15	Sept 16-30	Oct	Nov	Dec
125	125	125	105	70	50	50	50	50	50	75	105	125	125

- (B) The California Department of Fish and Wildlife or the National Marine Fisheries Service may notify the Deputy Director that the pertinent life stage(s) of the pertinent species the flows are crafted to protect is not yet, or is no longer present at the time anticipated, or the California Department of Fish and Wildlife, after coordination with the National Marine Fisheries Service, may notify the Deputy Director that lower alternative flows at the Yreka gage, or alternative flows at a different point or points in the watershed, provide equal or better protection for the pertinent species' relevant life stages.
- (3) Compliance with the drought emergency minimum flows will be determined by the Deputy Director.

#### (d) Notice

- (1) Initial curtailment orders will be sent to each water right holder, agent of record on file with the Division of Water Rights, or landowner, as applicable. The water right holder, agent of record on file with the Division of Water Rights, or landowner is responsible for immediately providing notice of the curtailment order(s) to all diverters exercising the water right(s) covered by the curtailment order(s).
- (2) The State Water Board has established the "Scott-Shasta Drought" email subscription and distribution list that water right holders, landowners, and other parties may join to receive drought-related notices and updates regarding curtailments in the Scott River and Shasta River watersheds. The State Water Board has also established a "Scott-Shasta Drought" webpage at:

https://www.waterboards.ca.gov/drought/scott\_shasta\_rivers/. Notice provided by email or by posting on the State Water Board's drought webpage shall be sufficient for all purposes related to drought notices and updates regarding curtailment orders.

- (e) Suspension, reinstatement, or rescission of curtailment orders shall be noticed using the email subscription and distribution list or webpage described in subdivision (d)(2).
- (f) Local Cooperative Solutions
  - (1) Local cooperative solutions by individuals or groups may be proposed by petition to the Deputy Director as an alternative means of reducing water use to meet or preserve drought emergency minimum flows, or to provide other fishery benefits (such as cold-water refugia, localized fish passage, or redd protection), in lieu of curtailment as described in this section.
    - (A) Petitions to implement local cooperative solutions that coordinate diversions, share water, strategically manage groundwater and/or surface water for fisheries benefits, reduce annual water use, or engage in similar activities may be submitted to the Deputy Director at any time, except as noted in subsection (f)(4)(D)(ii).
    - (B) The Division of Water Rights and the Executive Director may coordinate with the California Department of Fish and Wildlife, National Marine Fisheries Service, the Scott River and Shasta River Watermaster District, the developers of any model or other information used as part of the petition, and others in evaluating local cooperative solutions.
    - (C) After or as part of approval of a petition, the Deputy Director shall not issue curtailment orders or shall suspend, rescind, or modify, as applicable, such orders already issued, affecting those rights relevant to the proposed local cooperative solution so long as the Deputy Director finds that any continued diversions under the local cooperative solution are reasonable and do not result in unreasonable harm to other legal users of water.
    - (D) Deputy Director approval of a petition for a local cooperative solution may be subject to appropriate conditions, including metering, monitoring, and reporting requirements, to assure that no unreasonable injury to users of water will occur, that the terms and purpose of the petition or the associated underlying binding agreement will be met, and to provide information useful in responding to the ongoing drought.
    - (E) The Deputy Director may delegate approval of any local cooperative solution to an Assistant Deputy Director for the Division of Water Rights.
    - (F) The Deputy Director may rescind approval of a local cooperative solution and issue or reinstate curtailment orders for the relevant

water rights in the order described in section 875.5, notwithstanding approval of the local cooperative solution, if monitoring or other reliable information indicates that parties are not meeting their obligations under the local cooperative solution or the agreement is not providing the benefits outlined in the local cooperative solution, or based on an objection filed under (f)(2).

- (G) A coordinating entity for the purposes of this section shall refer to an entity which possesses the expertise and ability to evaluate and require performance of the commitments made in a local cooperative solution, and which commits that:
  - (i) Evaluation of local cooperative solution proposals and inspections shall be conducted by representatives who lack a financial or close personal interest in the outcome, and
  - (ii) Information collected on compliance with local cooperative solutions is provided to the State Water Board monthly and upon request. The entity shall undertake data collection (including metering data) and inspections, either by itself or in coordination with State Water Board staff, sufficient to ensure implementation of local cooperative solutions, including inspection or data collection targeted within two weeks of completion of commitments to cease pumping as of a date certain.

With such commitment, the coordinating entity may be the California Department of Fish and Wildlife, the National Marine Fisheries Service, the Scott Valley and Shasta Valley Watermaster District, the Siskiyou or Shasta Valley Resources Conservation District, a nonprofit organization with expertise and experience in water-saving transactions, or a similarly qualified public entity.

(2) Diversions covered by a local cooperative solution approved by the Deputy Director pursuant to this section are subject to this article and violations of such an approved local cooperative solution shall be subject to enforcement as a violation of this article. Notice of petitions and decisions under this section will be posted as soon as practicable on the State Water Board's drought webpage described in subdivision (d)(2). Normally, notice of the local cooperative solution petition shall post on the website at least one week prior to a decision on the merits; however, the Deputy Director may issue a decision under this article prior to providing such notice. Any interested person may file an objection to the petition or decision. The objection shall indicate the manner of service upon the petitioner. The State Water Board will consider any objection, and may hold a hearing thereon, after notice to all interested persons.

- (3) The Division of Water Rights, California Department of Fish and Wildlife, National Marine Fisheries Service, Scott Valley and Shasta Valley Watermaster District, or North Coast Regional Water Quality Control Board may install and maintain additional gages in the Scott River and Shasta River watersheds. The gages may be used to evaluate compliance with the flow requirements defined in subdivisions (c)(1) and (c)(2) on a watershed or tributary scale, as needed. Diverters or other entities may also request to install and maintain a gage or use an existing gage to support new flow requirement compliance points by submitting a written request with supporting data and information to the Deputy Director for approval.
- (4) The Deputy Director may approve a petition to implement local cooperative solutions under this article as follows:
  - (A) For watershed-wide cooperative solutions: The Executive Director determines that a watershed-wide local cooperative solution will provide sufficient assurance that the flows in subdivision (c)(1) or (c)(2) are achieved for a specific time period, considering the amount of flow anticipated and the level of assurance that flows made available by agreements will be protected.
  - (B) For tributary-wide local cooperative solutions: The Deputy Director may approve the petition submitted under this article by a diverter or group of diverters that provides for tributary-wide benefits if:
    - (i) Sufficient information allows the Deputy Director to identify the appropriate contribution of the tributary to the flows identified in subdivision (c)(1) or (c)(2), and the Executive Director makes a finding that a local cooperative solution is sufficient to provide the pro-rata flow for that tributary. The Deputy Director may approve this solution regardless of whether the flows identified in subdivisions (c)(1) and (c)(2) are being met; or
    - (ii) The California Department of Fish and Wildlife finds that the in-tributary or downstream benefits are equal to or greater than the anticipated contribution to protections provided by the flows in subdivision (c)(1) or (c)(2). The Deputy Director may approve this solution regardless of whether the flows identified in subdivisions (c)(1) and (c)(2) are being met.
  - (C) For individual local cooperative solutions: In the absence of applicable watershed-wide or tributary-specific local cooperative

solutions, the Deputy Director may approve a petition submitted under this article:

- (i) Where the watershed-wide flows in subdivision (c)(1) or (c)(2) and tributary-specific pro-rata flows established by the Deputy Director cannot be guaranteed, and there is a binding agreement under which water users have agreed to cease diversions in a specific timeframe. Such binding agreement may be made with a coordinating entity. Where the diverter or coordinating entity submits a petition under this subdivision that includes a certification that diversion under a specified right has ceased for a certain time period, the Deputy Director shall approve the petition unless there is evidence that the diversion is nonetheless occurring.
- (ii) Where an individual diverter or sub-tributary group of diverters has entered into a binding agreement with the California Department of Fish and Wildlife or the National Marine Fisheries Service to perform actions for the benefit of anadromous salmonids, and the California Department of Fish and Wildlife makes a recommendation for an exemption to curtailment based on an assessment that the benefits of the actions to anadromous fish in a specific time period are equal to or greater than the protections provided by their contribution to flow described in section 875, subdivision (c)(1) or (c)(2) for that time period.
- (D) For overlying or adjudicated groundwater diversions for irrigated agriculture described under in section 875.5, subdivision (a)(1)(A)(ix) [Scott River] or section 875.5, subdivision (b)(1)(C) [Shasta River] the Deputy Director may approve a groundwater-basin-wide, groundwater-sub-basin-wide, or any number of individual local cooperative solutions where:
  - (i) The proposal may be based on a binding agreement made with a coordinating entity with primary responsibility to verify implementation of the local cooperative solution.
  - (ii) For individual proposals, the proposal must be submitted no later than April 15 and must be implemented during the entirety of the irrigation season (including during pendency of approval), unless the proponent withdraws.
  - (iii) The proposal includes a description of metering in place for groundwater well extractions, and a proposal to meter and record such extractions daily and report monthly to the Deputy Director or the coordinating entity, as applicable,

except as described below. The State Water Board has funding and technical support available to support some amount of metering, and those interested in such assistance are encouraged to promptly contact the State Water Board.

- a. The Deputy Director may waive this requirement for groundwater wells irrigating less than 30 acres. In determining whether to waive the requirement, the Deputy Director may consider, among other things, distance of the groundwater well from surface water and whether the groundwater well would provide uniquely useful information in light of other metered information being provided. The Deputy Director may require other information in lieu of metering in such an instance.
- b. When a meter is not currently installed and may not be installed prior to the start of the irrigation season, the petitioner may submit a time schedule as part of a proposal that describes and substantiates the efforts, actions, and timelines for installation of a meter. The Deputy Director may approve a proposal with a reasonable time-schedule, and upon a finding that the proponent has taken reasonable steps to procure and install a meter, including coordination with the State Water Board or another entity with funding and/or expertise in meter installation.
- c. The Deputy Director may waive the requirement upon a determination that metering in a particular instance is not feasible.
- is not feasible. (iv) The proponent(s) agrees to allow compliance inspections with 24-hour notice.
- (v) For percent-based reduction in pumping local cooperative solutions:
  - a. For the Scott River: The proposal provides at least:
    - A net reduction of water use of 30 percent throughout the irrigation season (April 1 – October 31); and
    - 2. A monthly reduction of 30 percent in the July through October time period.

- b. For the Shasta River: The proposal provides at least:
  - A net reduction of water use of 15 percent throughout the irrigation season (March 1 – November 1); and
  - 2. A monthly reduction of 15 percent in the June through September time period.
- c. The relevant water use reduction shall generally be based on a comparison to the 2020, 2021, 2022, or 2023 irrigation season, and may be demonstrated by evidence that provides a reasonable assurance that the change in farming practice or other action results in at least the relevant proportionate reduction in water use. Such evidence may include but is not limited to: pumping reports; actions that will be taken to reduce water use; estimation of water saved from conservation measures or changes in irrigation or planting decisions; and electric bills. However, if evidence for the amount of water applied for the 2020. 2021, 2022, or 2023 irrigation seasons indicates a base rate of applied water that is higher than 33 inches per year for alfalfa, 14 inches per year for grain, or 30 inches per year for pasture, then the base rate of applied water shall be the aforementioned values unless the proponent makes an additional showing that a higher base rate number is an appropriate comparison in light of relevant information that can include but is not limited to multi-year practices, soil type, and irrigation methods.
- d. In implementing a local cooperative solution approved under this subdivision (f)(4)(D)(v), a diverter or water user may adjust the timing of the actions planned to meet the requirements of subdivision (f)(4)(D)(v)a or (f)(4)(D)(v)b, by up to one week as an adaptive response to precipitation or cool weather, if the shift in timing does not reduce the total irrigation season water savings. For example, a diverter may postpone a planned irrigation rotation for one week if rain or cool weather allows for greater time between rotations than initially planned, even if the shift would trigger a failure to meet the monthly reductions described in subdivision (f)(4)(D)(v)a.2. or (f)(4)(D)(v)b.2.

- The diverter or user must provide the coordinating entity and the Deputy Director at least three (3) business days notice of the intent to shift actions, including the reason for the shift and a demonstration that it will continue to meet the approved irrigation season water savings.
- The diverter or user may implement the change unless the Deputy Director disapproves the shift based on a failure to meet the requirements of this subdivision. Signed binding agreements do not need revision to incorporate this subdivision (f)(4)(D)(v)d. or actions thereunder.
- (vi) Graduated Overlying Groundwater Diversion Cessation Schedules: The Deputy Director may approve a petition that provides for cessation of overlying groundwater diversions on one of the following two schedules, after evidence of compliance with the terms is evaluated. Such evidence shall include a demonstration that the proposal reduces irrigation as compared to standard practice on the property (e.g., practice in a similar unregulated year), taking crop rotation and number of alfalfa cuttings into account, unless not applicable (e.g., not for pasture).
  - a. Option 1: Diversion to irrigate the following percentages of irrigated acres shall cease by the dates below:
    - 1. 15 percent by July 15;
    - 2. 50 percent by August 15; and
    - 3. 90 percent by August 31, with a maximum of 8 inches of water to be applied to the remaining 10 percent of irrigated acres during the remainder of the irrigation season. This 10 percent can be on land previously fallowed.
  - b. Option 2: Diversion to irrigate the following percentages of irrigated acres shall cease by the dates below:
    - 1. 20 percent by July 20;
    - 2. 50 percent by August 20; and

- 3. 95 percent by September 5, with a maximum of 6 inches of water to be applied to the remaining 5 percent of irrigated acres during the remainder of the irrigation season. This 5 percent can be on land previously fallowed.
- (vii) Best Management Practices Local Cooperative Solution: The Deputy Director may approve a petition that incorporates all of the following:
  - a. Use of a low-energy precision application (LEPA) system on all irrigated acreage, including no irrigation of corners after June 15 and no use of end guns.
  - b. Use of soil moisture sensors to inform irrigation timing, with records available for inspection by the coordinating entity, if applicable, and/or State Water Board.
  - c. In years with a snow pack of 80 percent or less of the Department of Water Resources' California Data Exchange Center's first May snow water equivalent station average (or the average of the first April measurement if May snow pack measurements are not gathered in the irrigation year) in the Scott River watershed, or with a water year determination of dry or very dry in the Shasta River watershed, as determined under Table 2 of the March 2021 Montague Water Conservation District water operation plan (hereby incorporated by reference), cessation of irrigation on 90 percent of irrigated acreage by August 31, with a maximum of two (2) inches of water/acre to be applied to the remaining 10 percent of irrigated acres for existing alfalfa fields and grain, or four (4) inches of water/acre for pasture or new alfalfa
    - plantings, during the remainder of the irrigation season.
- (viii) A diverter may propose a local cooperative solution for all or a portion of their agricultural lands. In considering approval of a proposed local cooperative solution for a portion of irrigated land or affecting only certain diversions exercised by a diverter, the Deputy Director can require assurance that water use is not increased on lands outside the local cooperative solution in a manner that undermines the groundwater reductions achieved through the local

cooperative solution. For example, the Deputy Director may consider whether increasing groundwater pumping on lands outside the area proposed will provide increased run-off to lands that otherwise would have reduced water application or consider whether a proposed local cooperative solution presents a water savings beyond that achieved by a standard grain rotation.

- (ix) Overlying groundwater local cooperative solutions may be crafted or amended to allow for enhanced use of valid surface water rights as compared to previous years, in light of the potential for groundwater recharge benefits. Such local cooperative solutions shall include support for an anticipated improvement in groundwater elevations and/or instream benefits and may require monitoring for evaluation of benefits to groundwater elevation and/or instream conditions.
- (E) Where a diverter receives a curtailment order for fewer water rights than are used on his or her property, the Deputy Director may approve a petition for a comparable reduction in use of a more senior right in favor of continuing diversion under the more junior right otherwise subject to curtailment where the petition provides reliable evidence sufficient to support the following findings:
  - (i) The change does not injure other legal users of water, including by reducing the contribution to flows described in subdivision (c) that other users would rely on;
  - (ii) The change does not result in an increased consumptive use of water; and
  - (iii) The change does not result in elevation of water temperature above that which would occur from curtailing the original source.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art X, Sec. 2; Sections 100, 104, 105, 109, 186, 275, 1011, 1011.5, 1051.1, 1058.5, 5106, Water Code; Environmental Defense Fund v. East Bay Muni. Util. Dist. (1980) 26 Cal.3d 183; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463; City of Barstow v. Mojave Water Agency (2000) 23 Cal.4th 1224; Stanford Vina Ranch Irrigation. Co v. State of California (2020) 50 Cal.App.5th 976.

#### § 875.1 Non-Consumptive Uses

- (a) Diversion and use described in this section under any valid basis of right may continue after issuance of a curtailment order under this article without further approval from the Deputy Director, subject to the conditions set forth in this section. Any diverter wishing to continue diversion under this subdivision must submit to the Deputy Director a certification which describes the non-consumptive use and explains, with supporting evidence, how the diversion and use do not decrease downstream flows in the applicable watershed. The Deputy Director may request additional information or disapprove any certification if the information provided is insufficient to support the statement or if more convincing evidence contradicts the claims. If a certification submitted pursuant to this section is disapproved, the diversions are subject to any curtailment order issued for that right. Exceptions to curtailment under this section apply to:
  - (1) Direct surface diversions solely for hydropower if discharges are returned to the stream from which they are withdrawn, and water is not held in storage.
  - (2) Direct surface water or groundwater diversions dedicated to instream uses for the benefit of fish and wildlife pursuant to Water Code section 1707, including those diversions that divert water to a different location for subsequent release. This subdivision only applies where the location of release is hydraulically connected to the basin or watershed from which it was withdrawn.
  - (3) Direct surface water or groundwater diversions where the Deputy Director, the California Department of Fish and Wildlife, and the Executive Officer of the North Coast Regional Water Quality Control Board have approved a substitution of releases of either stored water or groundwater into the Scott River or Shasta River or a tributary thereof for the benefit of fish and wildlife such that there is not anticipated to be a measurable net decrease in stream flow as a result of the diversion at the confluence of the tributary with the mainstem of the Scott River or Shasta River, or the next downstream United States Geological Survey gage, as applicable. The release of water does not have to be conducted by the owner of the water right proposed for the continued diversions, provided an agreement between the water right holder and the entity releasing the water is included in the proposal. The party proposing the substitution of releases shall provide documentation supporting no measurable decrease in stream flow is anticipated as a result of the release of water. The Deputy Director may require reporting and monitoring as part of any approval.
  - (4) Other direct diversions solely for non-consumptive uses upon a demonstration that the diversion and use do not decrease downstream flow.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 187, 275, 348, Water Code

§ 875.2 Minimum Human Health and Safety Needs

- (a) Definition: For the purposes of this article, "minimum human health and safety needs" refer to the amount of water necessary to prevent adverse impacts to human health and safety, for which there is no feasible alternate supply. "Minimum human health and safety needs" include:
  - (1) Minimum domestic water uses, including water for human consumption, cooking, or sanitation purposes. Further, minimum domestic water uses include incidental uses necessary for sustenance, such as non-commercial vegetable gardens, and domestic animals but do not include commercial irrigation or commercial livestock. As necessary to provide for minimum domestic water use, water diverted for minimum human health and safety needs may include water hauling and bulk water deliveries, so long as the diverter maintains records of such deliveries and complies with the reporting requirements of section 875.6, and so long as such diversion and use is consistent with a valid water right.
  - (2) For Urban Water Suppliers, as defined in Water Code section 10617, water uses allowed under and in accordance with the strictest stage of that supplier's adopted Water Shortage Contingency Plan as part of its Urban Water Management Plan.
  - (3) Water supplies necessary for energy sources that are critical to basic grid reliability, as identified by the California Independent System Operator, California Public Utilities Commission, California Energy Commission, or a similar energy grid reliability authority.
  - (4) Water supplies necessary to prevent tree die-off that would contribute to fire risk to residences, and for maintenance of ponds or other water sources for firefighting, in addition to water supplies identified by the California Department of Forestry and Fire Protection or another appropriate authority as regionally necessary for fire preparedness or post-fire recovery and reforestation efforts.
  - (5) Water supplies identified by the California Air Resources Board, a local air quality management district, or other appropriate public agency with air quality expertise, as necessary to address critical air quality impacts to protect public health.
  - (6) Water supplies necessary to address immediate public health or safety threats, as determined by a public agency with health or safety expertise.

- (7) Other water uses necessary for human health and safety which a state, local, tribal, or federal health, environmental, or safety agency has determined are critical to public health and safety or to the basic infrastructure of the state. Diverters wishing to continue diversions for these uses must identify the human health and safety need, include approval or similar relevant documentation from the appropriate public agency, describe why the amount requested is critical for the need and cannot be met through alternate supplies, state how long the diversion is expected to continue, certify that the supply will be used only for the stated need, and describe steps taken and planned to obtain alternative supplies.
- (b) Diversions described in this section under any valid basis of right may be authorized to continue notwithstanding curtailment of that right, subject to the conditions set forth in this section. A diversion that would otherwise be subject to curtailment may be authorized if:
  - (1) The diversion is necessary for minimum human health and safety needs; and therefore
  - (2) The diversion is necessary to further the constitutional policy that the water resources of the state be put to beneficial use to the full extent they are capable, and that waste and unreasonable use be prevented, notwithstanding the effect of the diversions on more senior water rights or instream beneficial uses.

(c)

- (1) Diversions for minimum human health and safety needs under any valid basis of right of not greater than 55 gallons per person per day may continue notwithstanding curtailment of that right without further approval from the Deputy Director, subject to the conditions set forth in this section. Any diverter wishing to continue diversion under this subdivision must submit to the Deputy Director a certification of compliance with the requirements of subdivisions (c)(1)(A)-(E), below. The Deputy Director may request additional information or set additional requirements on continued diversion.
  - (A) Not more than 55 gallons per person per day will be diverted and used for human health and safety purposes under all bases of right.
  - (B) The diversion is necessary to serve minimum human health and safety needs after all other alternate sources of water have been used. To the extent other water sources are available, those sources will be used first and the total used will not exceed 55 gallons per person per day.

- (C) The diverter and all end users of the diverted water are operating under the strictest existing conservation plan for that place of use, if such a plan exists for the area or service provider. If additional approvals are required before implementation of the conservation regime, the diverter must certify that all possible steps will be taken immediately to ensure prompt approval.
- (D) If the diverter or anyone using water under the diverter's basis of right is an Urban Water Supplier, it has declared a water shortage emergency condition and either already has adopted regulations and restrictions on the delivery of water or will adopt conservation and water delivery restrictions and regulations within a timeframe specified by the Deputy Director as a condition of certification.
- (E) The diverter, or the end user where the end user is purchasing water for human health and safety use, has either pursued steps to acquire other sources of water, but has not yet been completely successful, as described in an attached report, or the diverter or end user, where appropriate, will pursue the steps in an attached plan to identify and secure additional water.
- (2) To the extent that a diversion for minimum human health and safety needs requires more than 55 gallons per person per day, or cannot be quantified on the basis of gallons per person per day, continued diversion of water notwithstanding curtailment of the applicable water right requires submission of a petition demonstrating compliance with the requirements of subdivisions (c)(1)(B)-(E) above and (c)(2)(A)-(F) below, and approval by the Deputy Director. The Deputy Director may condition approval of the petition on implementation of additional conservation measures and reporting requirements. Any petition to continue diversion to meet minimum human health and safety needs of more than 55 gallons per person per day must:
  - (A) Describe the specific circumstances that make the requested diversion amount necessary to meet minimum human health and safety needs.
  - (B) Estimate the amount of water needed.
  - (C) Certify that the supply will be used only for the stated need.
  - (D) Describe conservation steps already taken and any other additional steps the diverter or end user, as appropriate, will take to reduce diversions and consumption.
  - (E) Provide the timeframe in which the diverter or end user expects to reduce usage to no more than 55 gallons per person per day, or

- why minimum human health and safety needs will continue to require more water.
- (F) As necessary, provide documentation that the use meets the definition of minimum human health and safety needs. For water supplies necessary for fire prevention or firefighting purposes, substantiating documentation, such as guidance from the local fire department, local city or county ordinances, or equivalent local requirements, may be requested by the Deputy Director.
- (d) For public water systems with 15 or greater connections and small water systems of 5 to 15 connections, gallons per person per day shall be calculated on a monthly basis and the calculation methodology shall be consistent with the State Water Board's Percentage Residential Use and Residential Gallons Per Capita Daily Calculation (PRV and R-GPCD Calculation), dated September 22, 2020, which is hereby incorporated by reference.
- (e) For water supplies necessary for electrical power generation critical to grid reliability, substantiating documentation, such as a letter of support from California Independent System Operator, California Public Utilities Commission, California Energy Commission, or a similar energy grid reliability authority, must be provided.
- (f) To the extent necessary to resolve immediate public health or safety threats, a diversion subject to curtailment may continue while a petition under subdivision (b)(2) is being prepared and is pending. The Deputy Director may require additional information to support the initial petition, information on how long the diversion is expected to continue, and a description of other steps taken or planned to obtain alternative supplies.
- (g) Notice of petitions and decisions under this section and sections 875.3 and 875.1 will be posted as soon as practicable on the State Water Board's drought webpage. The Deputy Director may issue a decision under this article prior to providing notice.
- (h) Notwithstanding California Code of Regulations, Title 23, section 1064, a petition pursuant to Water Code section 1435 or 1725 solely for the provision of water for minimum human health and safety shall be accompanied by a filing fee of \$250.
- (i) For the purposes of this section and section 875.6, subdivision (b) only, a governmental entity or nonprofit organization with the ability to assess human health and human safety water needs for communities without service from a public water system, may "stand in the shoes of" a diverter and file a certification or petition for human health and safety water that otherwise complies with the terms of this section.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 100.5, 104, 105, 106.3, 275, 1058.5, Water Code; Environmental Defense Fund v. East Bay Muni. Util. Dist. (1980) 26 Cal.3d 183; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463; Stanford Vina Ranch Irrigation Co. v. State of California (2020) 50 Cal.App.5th 976.

# § 875.3 Minimum Diversions for Livestock Watering

- (a) Limited diversions for minimal livestock watering, even through means that result in some seepage losses, may be authorized to continue after receipt of a curtailment order as specified in this section. Such diversions may include, but are not limited to, pipes, wells, or lined ditches.
- (b) Limited livestock watering diversions may be authorized to continue after receipt of a curtailment order upon certification to the Deputy Director that the diversion: (1) is necessary to provide adequate water to livestock, (2) is conveyed without seepage through a means specified in the certification, and (3) either, shall not, on average, exceed the reasonable livestock watering quantities set forth in Article 5, section 697 for livestock addressed in that section, or, for livestock not addressed in Article 5, section 697, shall not, on average, exceed the closest analogous livestock in Article 5, section 697 or a minimum water amount set forth in the certification with reference to supporting evidence regarding the particular livestock needs. The self-certification shall also include the number of livestock being provided with water, diversion location, water source information, the anticipated daily amount diverted to provide water for livestock, and whether the water source is an alternate source used to comply with the emergency regulation. The Deputy Director may request additional information or disapprove any self-certification if the information provided is insufficient to support the statement or if more convincing evidence contradicts the claim(s). If a selfcertification submitted pursuant to this section is disapproved, the diversions are subject to any applicable curtailment order issued for that basis of right.
- (c) Limited diversions may be temporarily increased to up to twice the amount in Article 5, section 697 to support minimum livestock water needs when the daily high temperatures meet or exceed 90 degrees Fahrenheit.
- (d) To the extent that a diversion for minimum livestock water needs requires more than the reasonable livestock watering quantities set forth in Article 5, section 697, or that it relies on conveyances with minimal amounts of seepage, the continued diversion of water after issuance of a curtailment order for the diversion requires submission of a petition demonstrating compliance with the requirements of subdivisions (d)(1)-(5), below, and approval by the Deputy Director. The Deputy Director may condition approval of the petition on implementation of additional conservation measures, monitoring, or reporting requirements. Any petition to continue diversion to meet minimum livestock

watering needs greater than the reasonable livestock watering quantities set forth in Article 5, section 697 must:

- (1) Describe the specific circumstances that make the requested diversion amount necessary to meet minimum livestock watering needs, if a larger amount is sought.
- (2) Estimate the total amount of water needed.
- (3) Certify that the supply will be used only for the stated need.
- (4) Describe any other additional steps taken to reduce diversions and consumption.
- (5) Provide the timeframe in which the petitioner expects to reduce usage to no more than the reasonable livestock watering quantities specified in Article 5, section 697, or why minimum livestock needs will continue to require more water.

Authority: 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 100.5, 104, 105, 275, 1058.5, Water Code; Environmental Defense Fund v. East Bay Muni. Util. Dist. (1980) 26 Cal.3d 183; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463; Stanford Vina Ranch Irrigation Co. v. State of California (2020) 50 Cal.App.5th 976.

§ 875.5 Priority for Curtailments in the Scott River and Shasta River Watersheds

#### (a) Scott River

- (1) Regarding curtailment orders in the Scott River watershed:
  - (A) Curtailment orders in the Scott River watershed to meet drought emergency minimum fisheries flows in the Scott River shall be issued taking into account water right priority, in groupings from lowest to highest priority, as follows:
    - (i) All post-Scott River Adjudication appropriative water rights.
    - (ii) Surplus Class Rights in all schedules of the Scott River Adjudication.
    - (iii) All Post-1914 Appropriative water rights in the Scott River Adjudication, Shackleford Adjudication, and French Creek Adjudication, collectively.
    - (iv) Diversions in Schedule D4 of the Scott River Adjudication.
    - (v) Diversions in Schedule D3 of the Scott River Adjudication.
    - (vi) Diversions in Schedule D2 of the Scott River Adjudication.
    - (vii) Diversions in Schedule D1 of the Scott River Adjudication.
    - (viii) Diversions in French Creek Adjudication, the Shackleford Adjudication, and Schedule B of the Scott River Adjudication, collectively.

- (ix) Diversions in Schedule C of the Scott River Adjudication, and overlying groundwater diversions not described in the Scott River Adjudication.
- (B) Surface diversions from the Scott River, Big Slough, Etna Creek, or Kidder Creek and described in Scott River Adjudication Schedules D2, D3, D4, B18, B23, and B26 that have moved from surface water to groundwater diversions as permitted under Scott River Adjudication, Paragraph 44, will be curtailed in priority grouping (a)(1)(A)(ix), rather than under (a)(1)(A)(iv), (a)(1)(A)(v), (a)(1)(A)(vii).
- (C) Domestic and Livestock Water Uses during the non-irrigation season by diverters in Scott River Adjudication Schedules A, B, C, and D, under paragraph 36 shall follow the priority groups under (a)(1)(A)(iv) through (a)(1)(A)(viii), as applicable.
- (D) To the extent that curtailment of fewer than all diversions in the groupings listed in (a)(1)(A)(i) and (a)(1)(A)(iii) through (a)(1)(A)(viii) would reliably result in sufficient flow to meet drought emergency minimum fisheries flows, the Deputy Director shall maintain the authority to issue, suspend, reinstate, or rescind curtailment orders for partial groupings based on the priorities in the applicable adjudication or through the appropriative right priority date, as applicable. Any partial curtailment of groups (a)(1)(A)(ii) and (a)(1)(A)(ix) shall be correlative, except that the Deputy Director may issue curtailments to groundwater diverters in (a)(1)(A)(ix) first to diversions closest to surface waterbodies, or use other reliable information to determine which diversions have the highest potential impact on surface flows.
- (E) Diversions under Paragraph 39 of the Scott River Adjudication shall be curtailed with the group defined in (a)(1)(A) that corresponds to the schedule in which the diversion would be placed if the right were defined in the adjudication. If partial curtailment of the group is issued, suspended, reinstated, or rescinded under (a)(1)(D), these rights will be subordinated to the other rights in that schedule.
- (F) Diversions under paragraph 41 of the Scott River Adjudication shall be curtailed with the group defined in (a)(1)(A) that corresponds to the schedule in which the diversion would be placed if the right were defined in the adjudication. If partial curtailment of the group is issued, suspended, reinstated, or rescinded under (a)(1)(D), these rights shall be treated as

- subordinate to first priority rights in the schedule, and senior to second priority rights in that schedule.
- (G)Diversions under paragraph 42 of the Scott River Adjudication shall be curtailed with the group defined in (a)(1)(A) that corresponds to the schedule in which the diversion would be placed if the right were defined in the adjudication. If partial curtailment of the group is issued, suspended, reinstated, or rescinded under (a)(1)(D), these rights shall be treated as first priority rights compared to downstream rights in that schedule, and subordinate to all upstream rights in that schedule.
- (H) Diversions under paragraph 43 of the Scott River Adjudication shall be curtailed with the group defined in (a)(1)(A) that corresponds to the schedule in which the diversion would be placed if the right were defined in the adjudication. If an order for partial curtailment of the group is issued, suspended, reinstated, or rescinded under (a)(1)(D), these rights shall be treated as first priority rights in that schedule.
- (I) Diversions under paragraphs 49 and 61 of the Scott River Adjudication shall be curtailed with the group defined in (a)(1)(A)(viii). If an order for partial curtailment of the group is issued, suspended, reinstated, or rescinded under (a)(1)(D), these rights will be treated as first priority rights in the schedule for the appropriate tributary.
- (2) Curtailment orders in the Scott River watershed for lack of water availability at a diverter's priority of right shall be issued:
  - (A) First to appropriative rights that were initiated after the relevant adjudication, in the Shackleford Creek watershed, the French Creek watershed, and the Scott River Stream System as defined in paragraph 2 of the Scott River Adjudication,
  - (B) Then in accordance with the priorities set forth in the Scott River, Shackleford Creek, and French Creek Adjudications, as applicable, and
  - (C) Then correlatively to unadjudicated overlying groundwater diversions.

## (b) Shasta River

- (1) Curtailment orders in the Shasta River Watershed to meet drought emergency minimum fisheries flows shall be issued taking into account water right priority, in groupings from lowest to highest water right priority, as follows:
  - (A) Appropriative diversions initiated after the Shasta Adjudication. Appropriative surface water diversions obtained after the Shasta Adjudication in priority of the issuance date specified in the permit or license by the State Water Board. Groundwater appropriations in order of the priority date from when the well was constructed and water first used for appropriative purposes. For the purposes of this article, an appropriative groundwater right is distinguished from an overlying groundwater right when the diverter: 1) does not own land overlying the basin, 2) owns overlying land but uses the water on non-overlying land, or 3) sells or distributes the water to another party.
  - (B) Post-1914 and pre-1914 water rights under the priorities and quantities set forth in the Shasta Adjudication. Groundwater appropriations initiated prior to the Shasta Adjudication in priority of when the well was constructed and water first used.
  - (C) Riparian diversions and overlying groundwater diversions. The Deputy Director may limit overlying groundwater curtailment orders to larger diversions or diversions with the highest potential impact on surface flows.
    - (i) If there is insufficient natural flow to furnish all rights of equal priority, then the available natural flow in excess of the minimum instream flow established in section 875, subdivision (c)(2) shall be distributed proportionally among the rights of the priority in question.
    - (ii) Water released from storage or bypassed pursuant to a Water Code section 1707 Order is not available to downstream users.
- (c) There are numerous small groundwater diversions in the Scott River and Shasta River watersheds, that are primarily used for domestic uses, firefighting ponds, and other uses closely related to human health and safety and minimum livestock watering needs. The Deputy Director may determine not to curtail such diversions of less than two acre-feet per annum in light of their de minimis impact on flows and the considerable effort required on the part of diverters and of the

State Water Board's staff to issue and respond to curtailment orders, and to file, review, and act on appropriate minimum use petitions.

- (d) Definitions: For the purposes of this section:
  - (1) "Scott River Adjudication" shall refer to the Decree entered on January 30, 1980 in Siskiyou County Superior Court Case No. 30662, In the Matter of Determination of the Rights of the Various Claimants to the Waters of Scott River Stream System, Except Rights to Water of Shackleford Creek, French Creek, and all Streams Tributary to Scott River Downstream from the U.S. Geological Survey Gaging Station, in Siskiyou County, California, and all supplements thereto.
  - (2) "Shackleford Adjudication" shall refer to the Decree entered on April 3, 1950 in Siskiyou County Superior Court Case No. 13775, In the Matter of the Determination of the Rights of the Various Claimants to the Waters of Shackleford Creek and its Tributaries in Siskiyou County, California, and all supplements thereto.
  - (3) "French Creek Adjudication" shall refer to the Judgement entered on July 1, 1959 in Siskiyou County Superior Court Case No. 14478, Mason v. Bemrod, and all supplements thereto.
  - (4) "Shasta Adjudication" shall refer to the Judgement and Decree entered on December 29, 1932 in Siskiyou County Superior Court Case No. 7035, In the Matter of the Determination of the Relative Rights, Based Upon Prior Appropriation, of the Various Claimants to the Waters of Shasta River and its Tributaries in Siskiyou County, California, and all supplements thereto.

Authority: Sections 101, 103,174, 186, Water Code

Reference: Sections 1058, 1058.5, Water Code; Cal. Const., Art. X, § 5; Hudson v. Dailey (1909) 156 Cal. 617; Shasta River Adjudication; Shackleford Adjudication; French Creek Adjudication; Scott River Adjudication; Stanford Vina Ranch Irrigation. Co v. State of California (2020) 50 Cal.App.5th 976.

#### § 875.6 Curtailment Order Reporting

(a) All water users or water right holders issued a curtailment order under this article are required, within the timeframe specified by the Deputy Director, but not less than seven (7) days, to certify that one or more of the actions enumerated below was taken in response to the curtailment order. The Deputy Director may grant additional time for the submission of information regarding diversion and use of water upon a showing of good cause. The water user or water right holder shall certify, as applicable, that:

- (1) Diversion under the identified water right(s) has ceased;
- (2) Any continued use is under other water rights not subject to curtailment, specifically identifying those other rights, including the basis of right and quantity of diversion;
- (3) Diversions under the identified water right(s) continue only to the extent that they are non-consumptive, for which a certification for continued diversion has been submitted as specified in section 875.1;
- (4) Diversions under the identified water right(s) continue only to the extent that they are necessary to provide for minimum human health and safety needs, a certification has been filed as authorized under section 875.2, and the subject water right authorizes the diversion in the absence of a curtailment order:
- (5) Diversions under the identified water right(s) continue only to the extent that they are necessary to provide for minimum livestock watering needs and a certification has been filed as identified in section 875.3, and the subject water right authorizes the diversion in the absence of a curtailment order.
- (6) Diversions under the water right(s) continue only to the extent that they are consistent with a petition filed under section 875.2, subdivision (c)(2) or under section 875.3, subdivision (d) and diversion and use will comply with the conditions for approval of the petition; or
- (7) The only continued water use is for instream purposes.
- (b) All persons who are issued a curtailment order and continue to divert during a period of suspension or conditional suspension of such order, or to continue to divert out of order of the priority established in section 875.5, as authorized under sections 875.1, 875.2, or 875.3, may be required to submit and certify information identified on a schedule established by the Deputy Director as a condition of continued suspension or conditional suspension, or of certification or petition approval. The required information may include, but is not limited to, the following:
  - (1) The water right identification number(s), well information, or, if not applicable, other manner of identifying the water right under which diversions continue. For wells, this includes the location (GPS coordinates) and depth to groundwater.
  - (2) The public water system identification number for any public water system served by the diversion.

- (3) How the diverter complies with any conditions of continued diversion, including the conditions of certification under section 875.3.
- (4) Any failures to comply with conditions, including the conditions of certification under sections 875.2 or 875.3, and steps taken to prevent further violations. Conservation and efficiency efforts planned, in the process of implementation, and implemented, as well as any information on the effectiveness of implementation.
- (5) Efforts to obtain alternate water sources.
- (6) If the diversion is authorized under an approved petition filed pursuant to section 875.3, subdivision (d) or 875.2, subdivision (c)(2), progress toward implementing the measures imposed as conditions of petition approval.
- (7) If the diversion is authorized under section 875.3, or cannot be quantified on the basis of amount per person per day under section 875.2, subdivision (c)(2):
  - (A) The rate of diversion if it is still ongoing;
  - (B) Whether the water has been used for any other purpose; and
  - (C) The date diversion ceased, if applicable.
- (8) The total water diverted for the reporting period and the total population served for minimum human health and safety needs. The total population must include actual or best available estimates of external populations not otherwise reported as being served by a diversion, such as individuals receiving bulk or hauled water deliveries for minimum domestic water use.
- (9) The total water diverted for the reporting period and the total population of livestock watered to meet minimum livestock watering needs identified in section 875.3.
- (10) Diversion amounts for each day in acre-feet per day, maximum diversion rate in cubic feet per second, pumping rate in gallons per minute, and anticipated future daily diversion amounts and diversion rates.

Authority: Sections 1058, 1058.5, Water Code

Reference: Sections 100, 187, 275, 348, 1051, 1058.5, 1841, Water Code

#### § 875.7 Inefficient Livestock Watering

- (a) For the purposes of this regulation, inefficient surface water diversions for livestock watering are those that divert, as measured at the point of diversion, more than ten times the amount of water needed to support the number of livestock and reasonable water quantities set forth in Article 5, section 697 (or, for livestock not addressed in Article 5, section 697, the closest analogous livestock to those listed in Article 5, section 697).
- (b) From September through March 31, inefficient surface water diversions in the Scott River and Shasta River watersheds for livestock watering, which result in excessive water diversion for a small amount of water delivered for beneficial use, are not reasonable and are therefore prohibited in light of the alternatives available and competing uses unless all of the following minimum flow requirements are met:
  - (1) The minimum flow requirements in Section 875, subsection (c) are met without any active curtailment orders in the relevant watershed.
  - (2) The diversions do not occur in the fall until the California Department of Fish and Wildlife has determined there has been flow sufficient to stimulate fall-run Chinook salmon migration.
  - (3) The diversions do not occur after November 1 until the California Department of Fish and Wildlife has determined there has been a flow sufficient to stimulate coho salmon migration, including in the relevant tributary if applicable.
  - (4) For tributary diversions, except those from Moffett Creek in the Scott River Watershed, the relevant tributary is and remains connected to the mainstem.
  - (5) The diversions are operated to bypass 90 percent of flow at the point of diversion, except that when flows exceed those listed below in the relevant watershed, the diversions may operate to bypass 80 percent of flow:
    - (A) In the Scott River watershed when flows at the United States Geological Survey gage 11519500 located downstream of the city of Fort Jones at the northern end of Scott Valley (Scott River Mile 21), in cubic feet per second, are greater than 62 in September; 134-from October 1-15; 139 from October 16-31; 266 in November; 337 in December; 362 in January and February, and 354 in March.
    - (B) In the Shasta River watershed when flows are greater than 220 cubic feet per second at the United States Geological Survey gage 11517500 located near Yreka.
  - (6) The diversions are operated to bypass amounts greater than those described in subdivision (5) as necessary to avoid disturbing redds.

- (c) For diversions occurring under the flow conditions described in subdivision (b)(1)-(6):
  - (1) Diverters shall notify the State Water Board of the intent to divert by e-mailing <a href="mailto:ScottShastaDrought@waterboards.ca.gov">ScottShastaDrought@waterboards.ca.gov</a>, including: the diverter's name and contact information; the point of diversion and water right under which the diversion will occur and the anticipated diversion amount; and the means by which the diverter will track compliance with the minimum flow requirements in (b); and
  - (2) Diverters shall maintain records of such diversions and provide them to the State Water Board upon request.
- (d) The requirements for diversions in subdivision (b)(4)-(6) do not apply to diversions upstream of Dwinell Dam in the Shasta River watershed.
- (e) Livestock diversions that would otherwise be prohibited under this section may be included in a proposal for a local cooperative solution, either on their own or as either part of a proposal under section 875 (f)(4)(B) or (C). For a local cooperative solution under section 875(f)(4)(B)(ii) or (C)(ii), California Department of Fish and Wildlife or National Marine Fisheries Service may make an alternative finding that a diversion under a local cooperative solution solely for livestock watering that is otherwise prohibited under this section will not result in redd dewatering or unreasonably interfere with adult or juvenile migration or rearing. The Deputy Director may approve such a local cooperative solution where lifting the prohibition will not cause or substantially contribute to tributary or mainstem disconnection.
- (f) The Deputy Director may suspend operation of this provision as to a particular diverter for a limited period of time upon a demonstration that the diverter's existing alternative watering system has failed.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 100.5, 104, 105, 275, 1058.5, Water Code; Environmental Defense Fund v. East Bay Muni. Util. Dist. (1980) 26 Cal.3d 183; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463; Stanford Vina Ranch Irrigation Co. v. State of California (2020) 50 Cal.App.5th 976.

#### § 875.8 Information Orders

(a) The Deputy Director may issue information orders to some or all water users, landowners, diverters, or other water right holders in the Scott River and Shasta River watersheds, requiring them to provide additional information related to water use as relevant to implementing this article. The Deputy Director will prioritize information orders for larger diverters and landowners or water right holders with the highest potential to impact surface flows. The Deputy Director, in

determining whether and the extent to which to impose information orders under this subdivision, will consider the need for the information and the burden of producing it, and will take reasonable efforts to avoid requiring duplicative reporting of information that is already in the State Water Board's possession. Information orders shall follow the same procedures set forth in section 875, subdivision (d).

Information required in an order may include, but is not limited to:

## (1) For wells:

- (A) Location of the well;
- (B) Age of well, including date of installation and first use;
- (C) Maximum pump rate and volume pumped per month;
- (D) Place of use and purpose of use (beneficial uses of water);
- (E) Projected estimate of pumping volumes at a frequency of no more than weekly;
- (F) Estimates or measurements\_of past use;
- (G)Groundwater level; and
- (H) Other available water sources.
- (2) For surface water diversions:
  - (A) Place of use and purpose of use (beneficial uses of water);
  - (B) Type of water right;
  - (C) Source of water:
  - (D) Volume of storage;
  - (E) Diversion rate;
  - (F) Other available water sources; and
  - (G)Projected estimate of diversion at a frequency of no more than weekly.

The orders may additionally request other information relevant to forecasting use, impacts to the surface streams in the current drought year, assessing compliance with this article, or in contingency planning for continuation of the existing drought emergency.

(b) Any party receiving an order under this subdivision shall provide the requested information within the time specified by the Deputy Director, but not less than five (5) days. The Deputy Director may grant additional time for the submission of information regarding diversion and use of water upon a showing of good cause. Each landowner is responsible for immediately providing notice of any information order(s) to all water users associated with the parcel of land related to the information order. (c) New Diversions. For purposes of this subdivision, a new diversion means a diversion initiated after issuance of a general information order to landowners in the watershed in which the new diversion is located. The owner of any new diversion must submit to the Deputy Director any information required by a general information order issued under section 875.8 prior to commencement of the new diversion, unless the Deputy Director approves commencement of the diversion based on substantial compliance with the general information order or one of the exemptions outlined in sections 875.2 or 875.3.

Authority: Sections 1058, 1058.5, Water Code

Reference: Article X, Section 2, California Constitution; Sections 100, 102, 104, 105, 109, 174, 275, 1051, 1052, 1058.5, Water Code; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463.

#### § 875.9 Penalties

- (a) A diverter must comply with a curtailment order issued under this article, any conditions of certification or approval of a petition under this article, and any water right condition under this article, notwithstanding receipt of more than one curtailment order. To the extent of any conflict between applicable requirements, the diverter must comply with the requirements that are the most stringent.
- (b) Failure to meet the requirements of this article or of any order issued thereunder constitutes:
  - (1) a violation subject to civil liability pursuant to Water Code section 1846, and
  - (2) an infraction pursuant to Water Code section 1058.5, subdivision (d). Each of these can carry a fine of up to five hundred dollars (\$500) for each day in which the violation occurs.
- (c) Nothing in this section shall be construed as limiting the enforceability of or penalties available under any other provision of law.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 275, 1052, 1055, 1058.5, 1825, 1831, Water Code; National Audubon Society v. Superior Court (1983) 33 Cal.3d 419.

September 22, 2020

This document contains suggested methods for estimating Percentage Residential Use (PRU), and explains how daily residential per capita water use (R-GPCD) is calculated by Water Board staff. As of October 1<sup>st</sup>, 2020, the R-GPCD is automatically calculated in the reporting tool. The methodology outlined here has not changed since the initial guidance was developed for the emergency conservation regulations.

When estimating PRU, we recommend using billing data to determine the volume of water provided to residential customers as a percentage of Total Monthly Potable Water Production. In cases where billing periods are not based on calendar month, the urban water supplier should use discretion in selecting the most comparable and appropriate billing period. PRU, rather than residential use volume, is requested in the monthly conservation report because it can be calculated using the previous year's data if current billing data is not available.

Example PRU Calculation: Using recent billing data to estimate PRU

Total Production (T): 1543.98 Acre-feet (AF)

Commercial Agriculture (C): 20 AF

Residential Use (R)1: 1001.42 AF

1. Subtract Commercial Agriculture (if any) from Total Production  $Total\ Production, minus\ Agriculture\ (TPA) = T-C$ 

$$TPA = 1543.98 - 20 = 1523.98 AF$$

2. Divide Residential Use by (Total Production – Commercial Agriculture)

$$PRU = \frac{R}{TPA} \times 100$$

$$PRU = \frac{1001.42}{1523.98} \times 100 = 65.71\%$$

If you do not have billing data for the current reporting month, use last year's data (BOTH residential use and total potable production) for the month that corresponds to the reporting month. For example, if you do not currently have October 2020 billing data available, use October 2019 data. This calculated PRU using last year's data should be entered in the "Preliminary" column when submitting a report.

<sup>&</sup>lt;sup>1</sup> When estimating "Residential Use," we recommend using billing data to determine the volume of water provided to residential customers. In cases where billing periods are not based on calendar month, the urban water supplier should use discretion in selecting the most comparable and appropriate billing period.

September 22, 2020

Once you have current billing data, re-calculate the PRU using current numbers and enter the new value in the "Final" column of the edited report.

Example PRU Calculation: Bi-Monthly Billing Cycle Initial Estimate

Total Production (T) Over Billing Cycle: 3002.15 AF

Commercial Agriculture (C) Over Billing Cycle: 35 AF

Residential Use (R) Over Billing Cycle: 1900.23 AF

Length of Billing Cycle: 61 days

Reporting Month: May

Days in May: 31 days

1. Subtract Commercial Agriculture (if any) from total production

Total Production, minus Agriculture (TPA) = 
$$T - C$$
  
 $TPA = 3002.15 - 35 = 2967.15 AF$ 

2. Calculate Residential Use for Reporting Month (RM) and Total Production for Reporting Month (TPM)

$$TPA for May (TPM) = \frac{TPA \times days in May}{days in billing cycle}$$

$$TPM = \frac{2967.15 \times 31}{61} = 1507.90 AF$$

$$R for May (RM) = \frac{R \times days in May}{days in billing cycle}$$

$$RM = \frac{1900.23 \times 31}{61} = 965.69 AF$$

3. Divide Residential Use for Reporting Month by (Total Production – Commercial Agriculture) for Reporting Month

$$PRU = \frac{RM}{TPM} \times 100$$

$$PRU = \frac{965.69}{1507.90} \times 100 = 64.04\%$$

Please note in the "Qualification" box that the billing data is bi-monthly. As with the previous PRU calculation example, if you do not have billing data that encompasses the current reporting month, please use billing data from the previous year to estimate PRU and enter the value in the "Preliminary" column.

September 22, 2020

Example Residential Gallons Per Capita Daily (R-GPCD) Calculation The updated reporting tool automatically calculates the monthly R-GPCD value. The calculation methodology is outlined below.

Original Units	Conversion Factor (CF) from
	Original Units to Gallons
Gallons (G)	1
Million Gallons (MG)	1000000
Hundred Cubic Feet (CCF)	748.052
Acre Feet (AF)	325851

Total Production (T): 1543.98 AF

Commercial Agriculture (C): 20 AF

Percentage Residential Use (PRU): 65.71%

Population (P): 69078 people

Month: May

Days in Month: 31 days

Conversion Factor (CF): 325851

1. Subtract Commercial Agriculture (if any) from Total Production

Total Production, minus Agriculture (TPA) = 
$$T - C$$

$$TPA = 1543.98 - 20 = 1523.98 AF$$

2. Convert (Total Production-Commercial Agriculture) to Gallons, using the Conversion Factor

$$TPA \text{ in Gallons } (TG) = TPA \times CF$$
  
 $TG = 1523.98 \times 325851 = 496590407 G$ 

3. Multiply the Total Production Gallons by Percentage Residential Use to get Residential Use in Gallons

Residential Use in Gallons (RG) = 
$$TG \times \frac{PRU}{100}$$

$$RG = 496590407 \times \frac{65.71}{100} = 326313708 G$$

4. Divide Residential Use by (Population x Days in Month) to get R-GPCD

$$R - GPCD \ for \ May = \frac{RG}{P \times days \ in \ May}$$

$$R - GPCD for May = \frac{RG}{P \times days in May}$$

$$R - GPCD for May = \frac{326313708}{690798 \times 31} = 152.38 GPCD$$

September 22, 2020

# Montague Water Conservation District Water Operation Plan March, 2021

<u>Background:</u> The Montague Water Conservation District (MWCD) owns and operates Dwinnell Reservoir located on the Shasta River, tributary to the Klamath River, in Siskiyou County, California. MWCD holds two water right permits for water stored in Dwinnell Reservoir. One permit is for diversion to storage on the Shasta River while the other is for water delivered to storage from Parks Creek. Both diversions are governed and operated within the confines of the Shasta River Decree and Watermaster service required by Siskiyou County Superior Court.

SWRCB Permit No. 2452; Decree No. 287 (Shasta River at Dwinnell Dam)

Point of Diversion: N. 52°, 43' E., approximately 2601 feet from SW corner of Section 25,

T43N, R5W, MDB&M, being within the NE¼ of SW¼ of said Section 25

Place of Use: 19,500 acres within District, as shown on map on file with SWRCB

Purpose of Use: Irrigation

Season of Diversion: October 1 to June 15, collected to storage in Dwinnell Reservoir

Season of Use: April 1 to October 1

Quantity: 35,000 acre-feet per annum

Priority date: July 23, 1923

SWRCB Permit No. 2453; Decree No. 288 (Parks Creek diversion to Dwinnell Reservoir)

Point of Diversion: N. 70°, 30' E., approximately 2511.8 feet from SE corner of Section 29,

T42N, R5W, MDB&M, being within the SW¼ of SE¼ of said Section 29

Place of Use: 19,500 acres within District, as shown on map on file with SWRCB

Purpose of Use: Irrigation

Season of Diversion: October 1 to June 15, collected to storage in Dwinnell Reservoir

Season of Use: April 1 to October 1

Quantity: 14,000 acre-feet per annum

Maximum Diversion: 150 cfs
Priority date: July 30, 1923

In 2017, MWCD received federal authorizations to implement its Conservation and Habitat Enhancement and Restoration Project (CHERP), a comprehensive water conservation and salmonid habitat enhancement program consisting of infrastructure improvements and modified operations. The term of CHERP's Section 7 permit through the U.S. Army Corps of Engineers (ACOE) is five years. Concurrent with the implementation of CHERP, MWCD is also developing a long term Safe Harbor Agreement (SHA) that is intended to continue for approximately 20 years. MWCD is currently working toward finalizing a Template Safe Harbor Agreement (SHA) with the National Marine Fisheries Service (NMFS) and (California Department of Fish and Wildlife (CDFW). Under the Template SHA, MWCD has prepared a draft Site Plan that outlines Beneficial Management Activities and Avoidance and Minimization Measures MWCD is proposing to implement for the purpose of promoting the conservation, enhancement of survival, and recovery of the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho salmon. MWCD's draft Site Plan proposes activities and measures that are inclusive and complementary with CHERP, but also includes a number of additional enhancement measures.

As MWCD fully implements its water conservation measures identified in CHERP and SHA, a formal operations plan for MWCD is necessary for managing additional beneficial uses including environmental releases throughout the year dependent on varied water year types.

MWCD is managing its operations to provide water for the following responsibilities during specific times of the year:

Elements of the MWCD Water Management Plan: Upon full implementation of MWCD's SHA, MWCD will provide efficient deliveries of irrigation water to its District users, meet existing delivery responsibilities to prior rights holders, provide deliveries for municipal use by the City of Montague, and provide instream releases for environmental enhancement objectives. MWCD's goal of maximizing beneficial uses of water is dependent upon clear objectives, scheduling and well defined management triggers and resulting options. Given that demand often exceeds supply, MWCD must estimate the approximate volume of water available, and develop a schedule of timing, volume and priority for the multiple beneficial uses MWCD seeks to provide. MWCD Board can amend the Operations Plan when necessary as the Plan is a living document that will likely need refinement. In the event MWCD elects to change any of the parameters of the Operations Plan, MWCD will CDFW, NOAA, NCRWQCB, SSWD and effected water users, if any. MWCD's Water Operations Plan must be capable of:

- Responding and apportioning to variable water year types
- Restricting use based on priority when supplies are not sufficient
- Providing for year-round beneficial uses including municipal, environmental and irrigation.
- Quickly responding to changes in available water
- Planning for and meeting beneficial uses on a priority scale, often using predictive calculations

Managing for annual supply variability and multiple beneficial uses: Methods and indicators used by water districts to determine available water supply are numerous. Over time, MWCD has refined its operations by making management decisions based on actual condition at specific times of the year, and this approach has proven effective. MWCD now proposes to manage the release of approximately 2,662 to 8,153 acre-feet (af) annually, based on water year type, to the Shasta River for instream beneficial uses to made available through water conservation. Determination of releases of dedicated volumes throughout varied year types for instream beneficial use is a new use to plan for and manage, including year-round releases of water for instream benefit. Pending infrastructure improvements under SHA, MWCD will have the operational flexibility and monitoring capacity to manage and record water for instream benefit distinctly from other uses, concurrent or otherwise. New and existing infrastructure to provide for the release of instream flows is expected to be utilized throughout the calendar year to enhance flows and habitat for all life stages of Coho salmon and other salmonids.

In order to incorporate MWCD's SHA instream flow release management into MWCD's existing operations, a refined management strategy is proposed to ensure the instream flow volumes are commensurate with supply and fairly apportioned compared to the volume of water expected to be conserved as a result of Main Canal lining actions committed to in MWCD's SHA. In many years, MWCD's storage supply is less

than demand. To plan for and operate under the premise that supply often cannot fully meet all of MWCD's responsibilities, this operations plan provides a method of internal curtailment and apportionment based on two general premises:

- A.) Implementation of an internal allocation and prioritization system among beneficial uses that is predictive.
- B.) Management and operations based on a water year type determination system that is based on real-time storage volumes, storage loss assumptions and predicted inflows.
- A. Internal Allocation Priority: To address limited supply conditions, MWCD's Water Operations Plan establishes MWCD's internal priorities for its beneficial uses, always being mindful that MWCD and its users must remain viable for the District and its services to continue. MWCD has the following internal priority objectives for allocation purposes only.
  - 1.) Prior Rights Agreements: Prior to the establishment of MWCD, a number water rights existed within or downstream of the current location of Dwinnell Dam on the Shasta River. Construction of Dwinnell Reservoir interrupted or destroyed the conduits and/or Points of Diversion (PODs) of five water rights holders (hereinafter termed Prior Rights Users). In exchange for allowing construction of Dwinnell Reservoir, MWCD agreed to provide the Prior Rights Users a mutually agreed-upon annual volume of water to be released at the rate and schedule of individual Prior Rights Users' choosing. From a priority standpoint, MWCD considers Prior Rights the highest internal priority as the District is legally bound to provide water to the Prior Rights Users. MWCD's internal priority ranking is supported by the priority schedule of the Shasta River Decree. The Prior Rights Holders have higher priority water rights compared to MWCD's right and must be provided by MWCD per agreement developed with each prior right user. Therefore, MWCD's primary priority is to provide up to 3,382 af annually to Prior Rights Users during the period of March 1 October 31. Of the 3,382 af allotted to prior rights, 1,398 af are delivered via MWCD's Main Canal to the respective PODs while 1,984 af are released to the Shasta River for downstream re-diversion by Prior Rights Users.

## Schedule of MWCD Prior Rights:

The water rights for Tracts 57, 58, 59, 60, 61, and 62 are held in Dwinnell Reservoir and released, by Watermaster, between March 1 and October 31 on demand by agreement with MWCD as follows:

Present Owner	<b>Delivery Conduit</b>	Ac-Ft	Div. Number
Richards, R. & D. Trust	MWCD Main Canal	1,200	153, 154, 157
Emmerson Investment Inc.	Shasta River	471	165, 166
Emmerson Investment Inc.	Shasta River	125	158
Mallett, B.	Shasta River	464	158, 160, 161
Lea, Debra	MWCD Main Canal	65	149
Lassen Canyon Nursery	MWCD Main Canal	133	149
Emmerson Investment Inc.	Shasta River	924	156, 157, 159

Total

3,382

## **Delivery Conduit and Volume Summary**

 Shasta River
 1,984 af

 MWCD Main Canal
 1,398 af

 Sub-total
 3,382 af

**2.)** Municipal: Based on MWCD's internal prioritization, municipal water deliveries to the City of Montague (City) is the second highest priority behind only Prior Rights responsibilities. Municipal water deliveries to the City have historically been combined with MWCD's Main Canal delivery of irrigation water to district users. Municipal use is not recognized as a beneficial use for MWCD's storage rights, even though it has been a common practice for over 90 years.

MWCD submitted a Change Petition to the SWRCB including adding municipal use as an additional beneficial use. As a result of recently completed infrastructure improvements provided by emergency drought funds for the City of Montague. MWCD now has the ability to deliver municipal water more efficiently via the Shasta River to a re-diversion point constructed in 2014 near the City of Montague while concurrently providing added instream habitat value. MWCD can also divert water for municipal purposes from the Little Shasta River but this source is typically only available between December 15 and April 15 due to the low priority of that water right.

The City of Montague currently uses an average of approximately 1,200-1,400 af annually for municipal and industrial use. Historically, delivery of municipal water to the City of Montague used MWCD's Main Canal as the conduit to deliver municipal water even when not delivering irrigation water to the district. When MWCD is not delivering district irrigation water, delivery of municipal water to the City of Montague Storage very inefficient.

3.) Fish and Wildlife - Instream use: In the past, MWCD has participated in individual or collaborative spring pulse flow releases, fall flow transactions, and water forbearances for instream benefits on numerous occasions. Under full implementation of MWCD's Safe Harbor Agreement, MWCD will be releasing pre-determined volumes of water, based on water year type determinations and commensurate with estimated volumes of water conserved through lining high loss sections of the Main Canal. These values were re-analyzed and adjusted through MWCD's Safe Harbor Agreement in collaboration with CDFW, NOAA and other stakeholders. As such, MWCD considers instream environmental uses and MWCD's in-district irrigation uses to be coequal in priority. The volume of water released for instream benefits by MWCD will depend on water year type, but will remain commensurate with MWCD-District irrigation use based on the volume of water conserved through Main Canal Lining. During Wet and Very Wet water years MWCD will provide more water for instream benefit than would have been conserved through delivery efficiency. MWCD will be providing block volumes of water (in addition to pre-determined flow release schedule volumes and rates) for additional beneficial instream, to be released in coordination with NMFS, CDFW and the NCRWQCB during Wet and Very Wet water years.

- 3.) MWCD District Irrigation: The volume of water delivered to MWCD users varies greatly from year to year. After accounting for the two top priorities (prior rights and municipal), the average volume of water sold by MWCD in a normal water year is approximately 16,200 af delivered via the Main Canal for irrigation between April 1 and September 30. The average irrigation season for MWCD members is 133 days, but has varied from as little as 11 days during a very dry water year to a full irrigation season, ending on September 30th. As described above, irrigation uses and instream benefits uses are coequal priorities under this water operations plan, and MWCD will continue to provide variable annual volumes of water for district irrigation, based on water year type determinations and efficiency improvements.
- 4.) Minimum Reservoir Storage: MWCD recognizes Dwinnell Reservoir has an important recreational and distinctly different fishery in Dwinnell Reservoir that is managed by CDFW and Siskiyou County. Depending on water year type and demand, MWCD will target variable October 1 minimum storage volumes, ranging from 600 af in a Very Dry water year to 8,000 af or more in a Very Wet water year. October 1 reservoir storage targets are also used ensure water is available for instream flow releases for the remainder of the water year (i.e., through February 29)¹. Minimum reservoir storage is an internal objective, not a directive. If higher priorities require the reservoir targets storage targets to be missed, the MWCD Board may elect to do so.
- B. Dwinnell Reservoir Water Year Determination: Annual supply variation requires MWCD to manage for drier years differently than Average or Wet years. While highest priorities of meeting Prior Rights and Municipal has always been fully met, MWCD District use and instream enhancement allocations will vary based on availability and water year type. In coordination with NMFS and CDFW, MWCD developed a water year type designation methodology specific to Dwinnell Reservoir to determine the volume of water available to be provided for instream benefit to the Shasta River via MWCD's storage and incorporated infrastructure.

The water year type designation methodology utilizes first-of-month storage in Dwinnell Reservoir during March 1, April 1 and May1. Reservoir storage is the primary criterion for determining year types, and to a lesser extent, snowpack (water content) expected to be released during the snowmelt period for that year. Reservoir storage is estimated to be the most applicable indicator of available water to meet MWCD's uses and obligations and downstream demands. Snowpack is representative of near-future water that may become available but can be diverted prior to MWCD's PODs.

MWCD's methodology uses five water year type designations: Very Dry, Dry, Normal, Wet, and Very Wet. The methodology was developed by Watercourse Engineering (2016) and is summarized below: For purposes of MWCD's water year type designations, a water year determination starts on March 1 and continues through February 29 of the following calendar year. MWCD's water year determination does no follow a standard water year (October 1st through September 30th). Year type designations are evaluated on March 1, April 1, May 1 conditions. March 1st water year type designations are determined based on Dwinnell Reservoir storage alone. April 1st and May 1st water year determinations consider storage and snow pack (snow water content). Storage volumes are determined from the *Dwinnell Reservoir Near Edgewood (DRE)* California Data Exchange Center (CDEC) data station, and snow pack (snow water

<sup>&</sup>lt;sup>1</sup> For the purposes of MWCD's water operations, a water year extends from March 1 through February 29 of the following year.

content) is determined from the *Peterson Flat* (PET) CDEC station. Both stations provide real-time provisional data.

March 1 Year Type Determination: The March 1 year type designation is based only on storage in Dwinnell Reservoir. Dependent on storage volume on March 1, a water year determination is made and the corresponding instream flow schedule per water year type (Tables 4-8) released (per daily time step) for the month of March. The storage criteria for each water year type are provided in Table 1 below.

Table 1. March 1 year type designation criteria

March 1st Storage (af)	Year Type
Less than 17,000	Very Dry
17,000 - 23,999	Dry
24,000,- 35,999	Normal
36,000 - 42,999	Wet
43,000 or greater	Very Wet

April 1 Year Type Determination: The April 1 year type designation is based primarily on storage in Dwinnell Reservoir, with a secondary criterion based on first-of-month accumulated snow pack at Peterson Flat (snow water content). When first of month storage in Dwinnell Reservoir is within 2,000 af of April 1 storage criterion threshold, snow water content is used to determine if the year type should be adjusted. If the storage is within 2,000 af of the lower storage criterion for a year type (e.g., lower storage criterion plus 2,000 af) and snow water content is less than 75 percent of normal, the year type will be adjusted down one step (e.g., normal to dry). If the storage is within 2,000 af of the upper storage criterion for a year type (e.g., upper storage criterion minus 2,000 af) and snow water content is greater than 125 percent of normal, the year type will be adjusted up one step (e.g., normal to wet). Table 2 provides the storage and snow water content-based water year determinations for April 1.

Table 2. April 1 year type designation by storage and snow water content

April 1 Storage (af)	April 1 Snow Water Content (% of normal)	Year Type
Less than 16,000	N/A	Very Dry
16,000-17,999	< 125%	Very Dry
,	> 125%	Dry
18,000 - 19,999	< 75%	Very Dry
	> 75%	Dry
20,000 - 23,999	N/A	Dry

24,000 - 25,999	< 125%	Dry
	> 125%	Normal
26,000 - 27,999	< 75%	Dry
	> 75%	Normal
28,000 - 35,999	N/A	Normal
36,000 - 37,999	< 125%	Normal
	> 125%	Wet
38,000 - 39,999	< 75%	Normal
	> 75%	Wet
40,000 - 43,999	N/A	Wet
44,000 - 45,999	< 125%	Wet
	> 125%	Very Wet
46,000 - 47,999	< 75%	Wet
	> 75%	Very Wet
48,000 or greater	N/A	Very Wet

May 1 Year Type Determination: The May 1st year type designation has the same format as the April 1st designation, but with different storage criteria. The May 1st determination is important because it sets the water year type and instream flow schedule through the month of February of the following year. The storage and snow water content-based water year determinations for May 1 are presented in Table 3.

Table 3. May 1 year type designation by storage and snow water content

May 1 Storage (af)	May 1 Snow Water Content (% of normal)	Year Type
Less than 12,500	N/A	Very Dry
12,500 - 14,499	< 125%	Very Dry
12,300 - 14,499	> 125%	Dry
14 500 16 400	< 75%	Very Dry
14,500 - 16,499	> 75%	Dry
26,500 - 21,999	N/A	Dry
22 222 22 222	< 125%	Dry
22,000 - 23,999	> 125%	Normal
24,000 - 25,999	< 75%	Dry
21,000 20,000	> 75%	Normal
26,000 - 35,999	· N/A	Normal
26 000 27 000	< 125%	Normal
36,000 - 37,999	> 125%	Wet
20,000, 20,000	. < 75%	Normal
38,000 - 39,999	> 75%	Wet
40,000 - 42,999	N/A	Wet
	< 125%	Wet
43,000 - 44,999	> 125%	Very Wet
45,000, 46,000	< 75%	Wet
45,000 - 46,999	> 75%	Very Wet
47,000 or greater	N/A	Very Wet

Environmental Flow Release Schedules: Water year types can change from March 1st through May 1st depending on precipitation conditions. For instance, it is possible to release instream values for an average March and end up with a wet or dry water year determination on May 1. If a March 1 water year determination were for a dry year, MWCD would release water for instream benefit per daily time step for a dry year through March. If the April 1 determination was for a normal year, MWCD would release for instream benefit per daily time step for a normal year in March. The final water year determination on May 1 set the water year type from May 1 through February 28th. Upon full implementation of MWCD's SHA, MWCD will release variable volumes of water to the Shasta River per flow schedule developed with CDFW and NOAA. Annual instream water year determination volumes are presented below by water year type:

Very Dry: 2,662 af Dry: 3,541 af Normal: 4,437 af

Wet: 6,236 af (includes 684 af of unscheduled releases to be managed adaptively)
Very Wet: 8,152 af (includes 1,154 af of unscheduled releases to be managed adaptively)

Tables 4 through 8 provide the daily release rates for instream benefit based on the water year type determinations. The initial release schedule is implemented on March 1 based on storage, as described above. Potential shifts to a higher or lower water year type release schedule may occur on April 1 and May 1. As such, the total volume released in any given CHERP water year (i.e., March 1 through February 29) may differ from the above volumes (for example, when a Normal water year schedule is implemented on March 1, but switched over to a Wet water year schedule on April 1).

The total release volumes for Wet and Very Wet water years include 684 af and 1,154 af blocks of water, respectively, that are not included in the releases schedules for those years. These blocks of water will be released adaptively in coordination with NCRWQCB, NMFS and CDFW for purposes such as flushing flows, habitat maintenance, or enhanced salmonid migration.

In the rare event that both prior rights users on the Shasta River request temporary cessation of water deliveries during the summer of a Very Dry water year, MWCD will provide an additional 2.0 cfs (in addition to the proposed CHERP flow release of 1.0 cfs) from Flying L wells (see below) until prior rights deliveries are resumed to maintain sufficient flow and water quality fo rinstream benefit.

Furthermore, all water year schedules listed in Tables 4 through 8 include an August 21 increase to 5 cfs of SHA releases. It is important to note that August 21 is simply an estimated schedule placeholder representing the average date when prior rights deliveries have historically ended. Under SHA, MWCD commits to ensuring at least 5.0 cfs is released the Shasta River through the end of August, regardless of purpose (unless the release would increase increase water temperatures above 18°C at MWCD's verification site.

<u>Use of Flying L Pumps:</u> An important component of the CHERP and SHA water operations plan is the incorporation of MWCD's Flying L well/pumps to provide improved water quality through delivery of groundwater (12.8°C) to the Shasta River. Under CHERP, water temperatures released to the Shasta River will be monitored in the Shasta River on MWCD property downstream of the connected cold water wetland habitat feature. As maximum daily release temperatures from Dwinnell Reservoir approach 18°C, MWCD will incorporate cold water from the Flying L wells to reduce water temperatures released into the Shasta River. MWCD will provide variable rates (up to a maximum of 5.5 cfs) of water from Flying L wells to

maintain the water quality and keep the flow released to the Shasta River at or under 18° C or less. The groundwater is intended to maintain a water quality objective while also serving an identified approved purpose.

## PROPOSED CHERP FLOW RELEASES – VERY DRY YEAR (2,662 AF)

Date					R	elease l	Rate (cf	s)				
2440	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
1	4	15	5	3	1	1	3	3	3	3	2	2
2	4	15	5	3	1	1	3	3	3	3	2	2
3	4	15	5	3	• 1	1	3	3	3	3	2	-2
4	4	15	5	3	1	1	3	3	3	3	2	
5	4	15	5	3	1	1	3	3	3	3	2	2
6	4	15	5	3	1	1 "	3	3	3	3	2	2
7	4	15	5	3	1	1	3	3	3	3	2	_2
8	4	15	5	3	1	1	3	3	3	3	2.	2
9	4	15	-5	1	1	1	3	- 3	3	3	2	2
10	4	15	5	1	1	1	3	3	3	3	2	2
11	4	15	5	1	1	1	3	3	3	3	2	2
12	4	15	5	1	1	1	3	3	3	3	2	2
13	4	15	5	1,	1	1	3	3	3	3	2	2
14	4	15	5	1	1	1	3	3	3	3	2	2
15	4	15	5	1-1-	1	1	3	3	3	3	2	2
16	4	15	3	1	1	1	3	3	3	3	2	2
17	4	15	3	1	1	1	3	3	3	3	2	2
18	4	10	3	1	1	1	3	3	3	3	2	2
19	4	10	3	1	1	1 1	3	3	3	3	2	2
20	4	10	3	1	1	1	3	3	3	3	2	2
21	4	10	3	1	1	5	3	3	3	3	2	2
22	4	10	3	1	1	5	3	3	3	3	2	2
23	15	10	3	1	1	5	3	3	3	3	2	2
24	15	10	3	1	1	5	3	3	3	3	2	2
25	15	10	3	1	1	5	3	3.	3	3	2	2
26	15	5	3	1-1	1	5	3	3	3	3	2	2
27	15	5	3	1	1	5	.3	3	3	3	2	2
28	15	5	3	1	1	5	3	3	3	3	2	2
29	15	5	3	1	1	5	3	3	3	3	2	2
30	15	5	3	1	1	5	3	3	3	3	2	
31	15	<del> </del>	3		1	5		3		3	2	
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<sup>\*</sup>If all prior rights on the Shasta River cease to call for water during summer rearing period, MWCD will provide 2.0 cfs to the Shasta River for instream benefit until prior rights are again resumed.

TABLE 5
PROPOSED CHERP FLOW RELEASES – DRY YEAR (3,541 AF)

					Re	lease R	ate (cfs	 s)				
Date	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
1	4	15	10	5	3	3	3	3	4	3	2	2
2	4	15	10	5	3	3	3	3	4	3	2	2
3	4	15	10	5	3	3	3	3	4	3	2	2
4	4	15	10	5	3	3	3	3	4	3	2	2
5	4	15	10	5	3	3	3	3	4	3	2	2
6	. 4	15	10	5	3	3	3	3	4	3	2	2
7	4	15	10	5	3	3	3	3	4	3	2	2
8	4	15	10	5	3	3	3	3	4	3	2	2
9	4	15	10	5	3	3	3	3	4	3	2	2
10	4	15	10	5	3	3	3	3	4	3	2	2
11	4	15	10	5	3	3	3	3	4	3	2	2
12	4	15	10	5	3	3	3	3	4	3	2	2
13	4	15	10	5	3	3	3	3	4	3	2	2
14	4	15	10	5	3	3	3	3	4	3	2	2
15	4	15	5	3	3	3	3	3	4	3	2	2
16	15	15	5	3	3	- 3	3	3	4	3	2	2
17	15	15	5	3	3	3	3	3	4	3	2	2
18	15	15	5	3	3	3	3	3	4	3	2	2
19	15	15	5	3	3	3	3	3	4	3	2	2
20	15	15	5	3	3	3	3	3	4	3	2	2
21	15	15	5	3	3	5	3	3	4	3	2	2
22	15	15	5	3	3	5	3	3	4	3	2	2
23	15	15	5	3	3	5	3	3	4	3	2	2
24	15	15	5	3	3	5	3	3	4	3	2	2
25	15	10	5	3	3	5	3	3	4	3	2	2
26	15	10	5	3	3	5	3	3	4	3	2	2
27	15	10	5	3	3	5	3	3	4	3	2	2
28	15	10	5	3	3	5	3	3	4	3	2	2
29	15	10	5	3	3	5	3	3	4	3	2	2
30	15	10	5	3	3	5	3	3	4	3	2	
31	15		5		3	5		3		3	2	

TABLE 6
PROPOSED FLOW RELEASES – NORMAL YEAR (4,437 AF)

			-		Re	lease R	ate (cfs	5)				,
Date	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
1	4	25	10	5	3	3	3	6	6	3	4	4
2	4	15	10	5	3	3	3	6	6	3	4	4
3	4	15	10	5	3	3	3	6	6	3	4	4
4	4	15	10	5	3	3	3	6	6	3	4	4
5	4	15	10	5	3	3	3	6	6	3	4	4
6	4	15	10	5	3	3	3	6	6	3	4	4
_7_	4	15	10	5	3	3	3	6	6	3	4	4
8	4	15	10	5	3	3	3	6	6	. 3	4	4
9	4	15	10	5	3	3	3	6	6	3	4	4
10	4	15	10	5	3	3	3	6	6	3	4	4
11	4	15	10	5	3	3	3	6	6	3	4	4
12	4	15	10	5	3	3	ი	6	. 6	3	4	4
13	4	15	10	5	3	3	3	6	6	3	4	4
14	4	15	10	5	3	3	3	6	6	3	4	4
15	4	15	5	3	3	3	6	6	6	. 3	4.	4
16	15	_15	5	3	3	3	6	6	6	3	4	· 4
17	15	15	5	3	3	3	6	6	6	3	4	4
18	15	15	5	3	3	3	6	6	6	3	4	4
19	15	15	5	3	3	3	6	6	6	3	4	4
20	15	15	5	3	3	3	6	6	6	3	4	4
21	15	15	5	3	3	5	6	6	6	3	4	4
22	15	15	5	3	3	5	6	6	6	3	4	4
23	15	15	5	3	3	5	6	6	6	3	4	4
24	15	15	5	3	3	5	6	6	6	3	4	4
25	15	10	5	3	3	5	6	6	6	3	4	4
26	15	10	5	3	3	5	6	6	6	3	4	4
27	15	10	5	3	3	5	6	6	6	3	4	4
28	15	10	5	3	3	5	6	6	6	3	4	4
29	25	10	5	3	3	5	6	6	6	3	4	4
30	25	10	5	3	3	5	6	6	6	3	4	
31	25		5		3	5		6		3	4	

TABLE 7
PROPOSED CHERP FLOW RELEASES – WET YEAR (6,236 AF)\*

					Re	elease l	Rate (cf	s)				
Date	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
1	8	25	10	5	3	3	3	10	10	10	4	4
2	8	20	10	5	3	3	3	10	10	10	4	4
3	8	20	10	- 5	3	3	3	10	10	10	4	4
4	8	20	10	5	3	3	3	10	10	10	4	4
5	8	20	10	5	3	3	3	10	10	10	4	4
6	8	20	10	5	3	3	3	10	10	10	4	4
7	8	20	10	5	. 3	3	3	10	10	10	4	4
8	8	20	10	5	3	3	3	10	10	10	4	4
9	8	20	10	5	3	3	3	10	10	10	4	4
10	8	20	10	5	3	3	3	10	10	10	4	4
11	8	20	10	5	3	3	3	10	10	10	4	4
12	8	20	10	5	3	3	-3	10	10	10	4	4
13	8	20	10	5	3	3	3	10	10	10	4	4
14	8	20	10	5	3	3	3	10	10	10	4	4
15	8	20	5	3	3	3	10	10	10	10	4	4
16	15	15	5	3	3	3	10	10	10	10	4	4
17	15	15	5	3	3	3	10	10	10	10	4	4
18	15	15	5	3	3	3	10	10	10	10	4	4
19	15	15	5	3	3	3	10	10	10	10	4	4
20	15	15	5	3	3	3	10	10	10	10	4	4
21	15	15	5	- 3	3	5	10	10	10	10	4	4
22	15	15	5	3	3	5	10	10	10	10	4	4
23	15	15	5	3	3	5	10	10	10	10	4	4
24	15	15	5	3	3	5	10	10	10	10	4	4
25	15	10	5	3	3	5	10	10	10	10	4	4
26	15	10	5	3	3	5	10	10	10	10	4	4
27	15	10	5	3	3	5	10	10	10	10	4	4
28	15	10	5	3	3	5	10	10	10	10	4	4
29	25	10	5	3	3	5	10	10	10	10	4	4
30	25	10	5	3	3	5	10	10	10	10	4	
31	25		5		3	5		10		10	4	

\*Note: 5,552 AF scheduled; 684 AF Block for flushing, habitat maintenance, migration, etc.

TABLE 8
PROPOSED CHERP FLOW RELEASES – VERY WET YEAR (8,152 AF)\*

					R	telease	Rate (cf	s)				
Date [	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
1	10	25	15	5	3	3	3	13	13	10	4	4
2	10	25	15	5	3	3	3	13	13	10	4	4
3	10	25	15	5	3	3	3	13	13	10	4	4
4	10	25	15	5	3	3	3	13	13	10	4	4
5	10	25	15	5	3	3	3	13	13	10	4	4
6	10	25	15	5	3	3	3	13	13	10	4	4
7	10	25	15	5	3	3	3	13	13	10	4	4
8	10	25	15	5	3	3	3	13	13	10	4	4
9	10	25	15	5	3	3	3	13	13	10	4	4
10	10	25	15	5	3	3	3	13	13	10	4	4
11	10	25	15	5	3	3	3	13	13	10	4	4
12	10	25	15	5	3	3	3	13	13	10	4	4
13	10	25	15	5	3	3	3	13	13	10	4	4
14	10	25	15	5	3	3	3	13	13	10	4	4
15	10	25	10	3	3	3	10	13	13	10	4	4
16	15	20	10	3	3	3	10	13	13	10	4	4
17	15	20	10	3	3	3	10	13	13	10	4	4
18	15	20	10	3	3	3	10	13	13	10	4	4
19	15	20	10	3	3	3	10	13	13	10	4	4
20	15	20	10	3	3	3	10	13	13	10	4	4
21	15	20	10	3	3	5	10	13	13	10	4	4
22	15	20	10	3	3	5	10	13	13	10	4	4
23	15	20	10	3	3	5	10	13	13	10	4	4
24	15	20	10	3	3	5	10	13	13	10	4	4
25	15	20	10	3	3	5	10	13	13	10	4	4
26	15	20	10	3	3	5	10	13	13	10	4	4
27	15	20	10	3	3	5	10	13	13	10	4	4
28	15	20	10	3	3	5	10	13	13	10	4	4
29	25	20	10	3	3	5	10	13	13	10	4	4
30	25	20	10	3	3	5	10	13	13	10	4	
31	25		10		3	5		13		10	4	
*NI0+0+		cobodi		SA AL B	ock for	luching	habitat		0000 0			1

\*Note: 6,998 AF scheduled; 1,154 AF block for flushing, habitat maintenance, migration, etc.

Parks Creek Water Diversion: MWCD has a right to divert Parks Creek flows into Dwinnell Reservoir from October 1st through June 15th. Through the SHA, MWCD has committed to provide additional by-pass in exchange for an improved and compliant diversion point. Until the infrastructure improvements have been made, MWCD will abide by current interim operational commitments. Upon completed construction of improved infrastructure at the Parks Creek diversion, MWCD will increase its bypass values to enhance instream flow conditions. Under SHA, the following seasonal bypass flows will be provided at the MWCD's Parks Creek diversion when infrastructure improvements to the diversion are made:

Season	<u>Proposed</u>	<u>Current</u>		
10/1-1/1	20 cfs	6 cfs		
1/1-3/1 <sup>-</sup>	6 cfs	6 cfs		
3/1-6/15	21 cfs	16 cfs		

## MWCD - SHA -Upper Parks Creek Flow Strategy - Instream flow targets at PCE:

<u>Upper Parks Creek Flow Strategy:</u> MWCD will participate in a reach-wide flow strategy on upper Parks Creek including seeking funding for water conservation projects, and serve on an advisory panel to confirm implementation plans and monitoring. MWCD will participate throughout the term of this agreement. Upon completion of MWCD's infrastructure improvements at Parks Creek Diversion (described in E.2c), MWCD will expand the bypass terms to include the following terms proposed in the Upper Parks Creek Flow Plan:

10/1-12/31: Bypass 21.0 cfs at the Parks Creek at Edgewood (PCE) gage, located at the downstream extent of Upper Parks Creek reach, prior to diverting to aid adult migration and spawning from 10/1-12/31.
 21 cfs includes conserved water made available when water conservation measures are implemented by Upper Parks Creek stream reach participants.

MWCD's Parks Creek Diversion By-pass at PCE from 10/1-12/31: In order to provide increased flow variation below MWCD Parks Creek diversion, MWCD agrees to increase by-pass values proportionality with diverted volume, verified downstream by CDEC stream flow gage PCE (PCE stream flow gage is the downstream extent of Upper Parks Creek reach). Proportionate by-pass to diversion values include:

- 1.) Stream flow in Parks Creek at PCE gage must equal 21.0 cfs or more before MWCD can begin diversion and can divert up to 20 cfs.
- 2.) Stream flow in Parks Creek at PCE gage must equal 30 cfs or more before MWCD can divert more than 20 cfs but less than 90 cfs.
- 3.) Stream flow in Parks Creek at PCE gage must equal 40 cfs or more before MWCD can divert more than 90 cfs but less than 150 cfs.
- 1/1-2/28: Bypass 6.0 cfs at PCE from 1/1-2/28 prior to diverting. MWCD will work with agencies and other participants in the Upper Parks Creek stream reach to evaluate if redds are sufficiently protected with 6.0 cfs of bypass by the close of the 5th year of the agreement. If redds are not sufficiently protected, up to 10.0 cfs may need to be bypassed at PCE to meet the biological objective. MWCD will assure 10.0 cfs is at PCE after MWCD diverts more than 20 cfs from 1/1-2/28, bypass 21.0 cfs at PCE prior to diverting from 3/1-6/15. The 21 cfs bypass includes water conserved through conservation projects conducted by Parks Creek Ranch and Edson-Foulke Ditch when proposed upstream water conservation projects are completed. Bypass of conserved water by other participants is contingent on operating gages at PCE and participating diversions.

MWCD's Parks Creek Diversion By-pass at PCE from 1/1-2/28: In order to provide increased flow variation below MWCD Parks Creek diversion, MWCD agrees to increase by-pass values proportionality with diverted volume, verified downstream by CDEC stream flow gage PCE (PCE stream flow gage is the downstream extent of Upper Parks Creek reach). Proportionate by-pass to diversion values include:

- 1.) Stream flow in Parks Creek at PCE gage must equal 6.0 cfs or more before MWCD can begin diversion and can divert up to 20 cfs.
- 2.) Stream flow in Parks Creek at PCE gage must equal 30 cfs or more before MWCD can divert more than 20 cfs but less than 90 cfs.
- 3.) Stream flow in Parks Creek at PCE gage must equal 40 cfs or more before MWCD can divert more than 90 cfs but less than 150 cfs.
- <u>3/1-6/15</u>: By-pass values from 3/1-6/15 prior to diverting. In order to provide flow variability in Parks Creek, MWCD will provide the following bypass values as diversion volumes increase as presented below:

MWCD's Parks Creek Diversion By-pass at PCE from 3/1-6/15: In order to provide increased flow variation below MWCD Parks Creek diversion, MWCD agrees to increase by-pass values proportionality with diverted volume, verified downstream by CDEC stream flow gage PCE (PCE stream flow gage is the downstream extent of Upper Parks Creek reach). Proportionate by-pass to diversion values include:

- 1.) Stream flow in Parks Creek at PCE gage must equal 21.0 cfs or more before MWCD can begin diversion and can divert up to 20 cfs.
- 2.) Stream flow in Parks Creek at PCE gage must equal 30 cfs or more before MWCD can divert more than 20 cfs but less than 90 cfs.
- 3.) Stream flow in Parks Creek at PCE gage must equal 40 cfs or more before MWCD can divert more than 90 cfs but less than 150 cfs.
- 6/16-9/30: MWCD does not divert from 6/16-9/30.