

## APPENDIX L: Revisions to the Integrated Report since September 2016

The below table summarizes revisions made to the draft Integrated Report since the release of the draft report in September 2016 for public review and identifies which section of the Report was revised. The following sections had one or more revisions:

- Two report subsections:
  - "Evaluation of Data for Pyrethroid Pesticides"
  - "Evaluation of Fish Tissue Mercury Data"
- Appendix A: Proposed Changes to the 2012 Central Valley 303(d) List
- Appendix B: Category 5 Water Body Segments
- Appendix E: Category 2 Water Body Segments
- Appendix F: Category 1 Water Body Segments
- Appendix G: Fact Sheets

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
American River, Lower (Nimbus Dam to confluence with Sacramento River)	Bifenthrin	49714	59743	SSD-PWG Comment 12	LOE 59743 revised to include toxicity data incorrectly assigned to Sacramento River (Knights Landing to the Delta). Sample count revised to 39 and exceedance count revised to 20.	Appendix G	No
American River, Lower (Nimbus Dam to confluence with Sacramento River)	Bifenthrin	49714	59743	SSD-PWG Comment 12	Staff agrees that the observed toxicity was not clearly linked to bifenthrin. The toxicity line of evidence has been removed from this assessment fact sheet.	Appendix G	No
American River, Lower (Nimbus Dam to confluence with Sacramento River)	Bifenthrin	49714	59789, 59790	SSD-PWG Comment 13	Staff agrees that in this particular instance the acute criteria are most appropriate to compare to the single grab samples during these short term storm events. The assessment for bifenthrin in the American River has been updated. In the updated assess-	Appendix G	No

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
					ment, if multiple samples were collected over multiple days they were averaged and compared to the chronic toxicity threshold. If only a single sample was available, the single sample was compared to the acute criterion.		
Anderson Creek (Shasta County)	pH	54265	78453, 79045	CVCWA Comment 1 SVWQC Comments 2-4	Staff agrees that the data summarized in the two lines of evidence (LOE) were the same and were double-counted in the decision. Also, the data reference was incorrect in one of the LOEs (i.e., there are no pH results for Anderson Creek in the dataset), so LOE 79045 was deleted. The associated decision was updated to include only the correct LOE. Staff reassessed the data and revised Decision 54265 to 'Do Not List.'	Appendices A & G	Yes
Bell Creek (Tuolumne County)	Indicator bacteria	47152	NA	CVCWA Comment 2	Staff revised the decision to indicate 4 of 16 samples exceeded the water quality objective for fecal coliform and to indicate 5 of 16 samples exceeded the evaluation guideline for Escherichia coli (E. coli).	Appendix G	No
Blue Lakes (Lake County); Brite Valley Lake; Butt Valley Reservoir (Plumas County); Castac Lake; Contra Loma Reservoir; Jenkinson Lake (El Dorado County); McSwain Lake; Paradise Reservoir; San Joaquin River (Friant Dam to Mendota Pool); Tunnel Reservoir; Lake Webb; Yosemite Lake	Mercury	51510, 51513, 58613, 51275, 58633, 52047, 58779, 58809, 58814, 53831, 58873, 58906		Central Valley Water Board Staff Internal Quality Control	The fact sheets for these water bodies were re-assessed and the water bodies were removed from the proposed 303(d) List (Appendix A) for mercury after reviewing for consistency with the Listing Policy and the method described in the September 2016 draft staff report.	Appendices A & G	Yes
Bourland Creek; Cow Creek [Tuolumne County]; Herring Creek, unnamed tributary; Cottonwood Creek, unnamed tributary at Cottonwood Meadow; and Reed Creek, unnamed tributary (Tuolumne County). Water bodies already included in Ap-				USFS SNF Comment 4	Water bodies already included in Appendices C through F were removed from Appendix B. The following creeks, included in Appendix E as Category 2 water body segments, were removed from Appendix B: Bourland Creek; Cow Creek [Tuolumne County]; Herring Creek, unnamed tributary; and Cottonwood Creek, unnamed tributary at Cottonwood Meadow. Reed Creek, unnamed tributary (Tuolumne County), included in Appendix F as a Category 1 water body segment, was removed from Appendix B.	Appendix B	No

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
pendices C through F have been removed from Appendix B.							
Brack Tract Drain, at Woodbridge Rd (San Joaquin County)	Arsenic	58941	60635 (deleted) 60634 (revised)	CVCWA Comment 3	Because there is no freshwater aquatic life criterion for total arsenic, LOE 60635 was deleted and the decision was updated to include only the LOE for data that were correctly assessed as total arsenic for protection of the Municipal and Domestic Supply (MUN) beneficial use. As the commenter stated, not all of the available arsenic data were assessed for this water body. A total of 13 sample results are available and 11 sample results exceeded the California Maximum Contaminant Level (MCL) for arsenic. The LOE and decision information have been revised accordingly, and the recommendation remains to list this water body for arsenic.	Appendix G	No
Bull Meadow Creek (Tuolumne County)	Indicator Bacteria	52440		Internal staff quality control	Staff revised text in Decision 52440 to correct errors in sample and exceedance counts. The listing status is unchanged as a result of these revisions.	Appendix G	No
Cantua Creek	Boron	55205	79276	CVCWA Comment 4	Staff reviewed the LOE and revised the decision to indicate three of the seven samples were exceedances.	Appendix G	No
Cantua Creek	Boron	55205		Central Valley Water Board Staff Internal Quality Control	40 CFR Part 122 Appendix D identifies boron on its list of “Conventional & Nonconventional Pollutants” and not as a “Toxic Pollutant”. Consequently, boron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Cantua Creek has seven samples with three exceedances, and this does not exceed the allowable frequency listed in Table 3.2. As a result, staff changed the listing recommendation to ‘Do Not List’.	Appendices A & G	Yes
Carson Creek (from WWTP to Deer Creek)	Aluminum, Manganese	44575, 33274		Central Valley Water Board Staff Internal Quality Control	Carson Creek (from WWTP to Deer Creek) was listed for aluminum and manganese by the 2012 Integrated Report based on Table 3.1 in the Listing Policy. However, 40 CFR Part 122 Appendix D identifies aluminum and manganese on its list of “Conventional & Nonconventional Pollutants” and not as a “Toxic Pollutant”. Consequently, aluminum and manganese should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheets to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Two of 11 aluminum samples, and 3 of 4 manganese samples for Carson Creek exceed the secondary	Appendices A & G	Yes

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
					MCL, and these do not exceed the allowable frequency listed in Table 3.2. As a result, staff changed the listing recommendations to 'Delist' for aluminum and manganese.		
Coon Creek (from confluence of Orr and Dry Creeks to East Side Canal, Placer and Sutter Counties)	Indicator bacteria	55341	61764, 61775	CVCWA Comment 5	Staff revised the fecal coliform decision to indicate one of six samples exceed the evaluation guideline. Staff corrected the Water Quality Objective and its reference in the LOE for <i>E. coli</i> . Staff revised the LOE for <i>E. coli</i> to indicate a total of 31 samples.	Appendix G	No
Deadman Creek (Merced County)	Arsenic	59637	62201	CVCWA Comment 6	Because there is no freshwater aquatic life criterion for total arsenic, LOE 62201 was deleted and the decision was updated to include only the LOE for data that were correctly assessed as total arsenic for protection of the Municipal and Domestic Supply (MUN) beneficial use. The recommendation remains to list this water body for arsenic. The remaining LOE 62200 correctly reflects all of the available data.	Appendix G	No
Deer Creek (Sacramento County)	Iron	39792		CVCWA Comments 9-11 & Central Valley Water Board Staff Internal Quality Control	40 CFR Part 122 Appendix D identifies iron on its list of "Conventional & Nonconventional Pollutants" and not as a "Toxic Pollutant". Consequently, iron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, while all initial secondary MCL assessments were based on more conservative total recoverable values and daily samples, Title 22 is silent on whether to utilize total or dissolved concentrations or the time period for assessment. CV-SALTS is currently proposing guidance for the use of secondary MCLs in source water evaluation. As a result, staff changed the listing recommendation to 'Delist'.		
Deer Creek (Tulare County)	Chlorpyrifos	61218	62621, 78656	CVCWA Comment 7	The total numbers of water and sediment samples, and the number of criteria exceedances, were reviewed and revised for consistency in the LOEs and the decision. Staff's proposed recommendation to list Deer Creek as impaired by chlorpyrifos remains unchanged.	Appendix G	No
Delta Waterways (eastern portion)	Dissolved Oxygen	55544	62471	Stockton Permittees Comments 1 & 4	After reviewing available GIS information associated with the dissolved oxygen data, staff concurs with the commenter that the four stations do not represent a large spatial area (i.e., the entire eastern Delta). The available data are for the southeastern portion of Fourteenmile Slough. Staff has added a comment to the dissolved oxygen Fact Sheet for the Delta Waterways (eastern portion) noting that this data set applies only to the southeastern portion of Fourteenmile Slough. In addition, staff concurs with the commenter that the sampling stations are close enough to be considered	Appendices A & G	Yes

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
					the same location per section 6.1.5.2 of the Listing Policy. Further, the California Department of Pesticide Regulation (DPR) report that describes the monitoring design states, 'The four samples taken inside each marina and the four samples taken for each LRS <local reference site, i.e. Fourteenmile Slough> area during each sampling event represented sub-samples for that particular marina and LRS area.' (DPR, 2009, page 15) This provides additional justification for considering the four Fourteenmile Slough stations to be considered the same location. As a result, staff re-assessed the Fourteenmile Slough data as one location. The minimum dissolved oxygen values for each of the three sampling events are 4.82, 4.35, and 6.74 mg/L, which include two exceedances of the water quality objective for Delta waters of 5 mg/L. Per Table 3.2 of the Listing Policy, a minimum of five exceedances is required to list a water body for conventional constituents. Consequently, staff changed Decision 55544 from "List on 303(d) List (TMDL required list)" to "Do Not List". Staff also corrected the water quality objective to reflect the objective of 5.0 mg/L for eastern Delta waterways.		
Delta Waterways (eastern portion), Lake Natoma, and Rollins Reservoir	Mercury			Central Valley Water Board Staff Internal Quality Control	Made edits to improve clarity in the draft staff report section Report section "Evaluation of Fish Tissue Mercury Data". Removed bullets for Delta Waterways (eastern portion), Lake Natoma, and Rollins Reservoir because these water bodies were already identified on the 2012 303(d) List and should not have been included in this section.	Report section "Evaluation of Fish Tissue Mercury Data"	No
Delta Waterways (southern portion)	Aluminum, Iron, Manganese	60683, 49278, 60684		CVCWA Comment 9-11	Staff added a comment to the aluminum Fact Sheet for the Delta Waterways (southern portion) noting that the samples were collected from Grant Line Canal. In addition, 40 CFR Part 122 Appendix D identifies aluminum on its list of "Conventional & Nonconventional Pollutants" and not as a "Toxic Pollutant". Consequently, aluminum, iron and manganese should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheets to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. The <i>Delta Waterways (southern portion)</i> has four samples with four exceedances each for aluminum, iron and manganese, and these does not exceed the allowable frequency listed in Table 3.2. As a result, staff changed the listing recommendations to 'Do Not List'.	Appendices A & G	Yes
Delta Waterways (west-	Arsenic	61023	72731	CVCWA	The "Fraction" in LOE 72731 was changed to "Shellfish."	Appendix G	No

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
ern portion)				Comment 12			
Elbow Creek, unnamed tributary below Sheep Meadow (Alpine County)	Indicator Bacteria	52443	64439-64452, 63359, 63360	USFS Comment 8 Wooster Comments 1, 2 and 3	The commenter is correct that data associated with Jawbone Creek should not be associated with <i>Elbow Creek, unnamed tributary below Sheep Meadow (Alpine County)</i> , indicator bacteria Decision 52443. The two lines of evidence for Jawbone Creek, 63352 and 63360, were removed from Decision 52443. During staff’s review of this decision, the line of evidence for total coliform (63359) was also removed because total coliform is not a reliable indicator of pathogens. The text of Decision 52443 was updated to reflect the three remaining LOEs (63349, 63350 and 63351). The decision to place Elbow Creek, unnamed tributary below Sheep Meadow (Alpine County) was consequently changed from “List on 303(d) list (TMDL required list)” to “Do Not List”. Staff corrected the assessment and changed Decision 52443 from “List on 303(d) list (TMDL required list)” to “Do Not List”.	Appendices A & G	Yes
Elk Bayou (Tulare County)	Ammonia as N, total	61307	78427	CVCWA Comment 13	Staff reassessed the Ammonia as N data using the pH-dependent, calculated National Recommended Water Quality Criteria for total ammonia nitrogen. The number of date-averaged samples with both Ammonia as N and pH data, and the number of exceedances, were revised in the LOE and in the decision from 3 to 6, and from 3 to 0, respectively. As a result, the decision was changed from “List on 303(d) list (TMDL required list)” to “Do Not List”.	Appendices A & G	Yes
Freshwater Creek (Little Valley to Salt Creek, Colusa County)	Indicator Bacteria	60093	63962, 63964	CVCWA Comment 14	Staff revised the reference for the Criteria/Objective for the <i>E. coli</i> and fecal coliform LOEs to refer to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins.	Appendix G	No
Honcut Creek (Butte and Yuba Counties)	Indicator Bacteria	57013	64660, 64662, 22279	CVCWA Comment 15	Staff revised the reference for the Criteria/Objective for the <i>E. coli</i> and fecal coliform LOEs to refer to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins.	Appendix G	No
Hospital Creek	Methyl Parathion	41797		WSJRW C Comments 2 & 5	Staff revised the draft 303(d) List to reflect that methyl parathion in Hospital Creek is being addressed by an action other than TMDL, rather than “TMDL Required”, and revised the fact sheet in Appendix G of the draft Integrated Report to include a description of the Focused Management Plan actions. Also, in response to WSJRW C’s email of September 23, 2016, staff corrected the data references for the fact sheet for Hospital Creek to indicate the data were collected by the Westside San Joaquin Water Quality Coalition. The online fact sheets posted in September 2016 as part of the Central Valley Water Board’s solicitation of comments could not be updated in real time. Updated fact sheets have since been	Appendices A & G	Yes

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					posted online for public review.		
Hospital Creek (San Joaquin and Stanislaus Counties)	Arsenic	36082	64749, 8447, 26572	CVCWA Comment 16	LOE 64748 was deleted and the decision was updated to include only the LOEs for data that were correctly assessed as total arsenic for protection of the Municipal and Domestic Supply (MUN) beneficial use. The recommendation remains to list this water body for arsenic.	Appendix G	No
Ingram Creek (from confluence with Hospital Creek to Hwy 33 crossing)	Arsenic	36086	8459, 26641, 65013	CVCWA Comment 17	LOE 65012 was deleted and the decision was updated to include only the LOEs for data that were correctly assessed as total arsenic for protection of the Municipal and Domestic Supply (MUN) beneficial use. The recommendation remains to list this water body for arsenic.	Appendix G	No
Jawbone Creek (Tulolumne County)	Indicator Bacteria	52446		Central Valley Water Board Staff Internal Quality Control	Revised sample and exceedance counts in Decision 52446. Decision changed from 'List' to 'Do Not List'.	Appendices A & G	Yes
Jawbone Creek, unnamed tributary (Tulolumne County)	Indicator Bacteria	52447		Internal staff quality control	Staff revised text in Decision 52447 to correct errors in sample and exceedance counts. The listing status is unchanged as a result of these revisions.	Appendix G	No
Kentucky Creek (Nevada County)	Iron	54617		Central Valley Water Board Staff Internal Quality Control	40 CFR Part 122 Appendix D identifies iron on its list of “Conventional & Nonconventional Pollutants” and not as a “Toxic Pollutant”. Consequently, iron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Kentucky Creek has two samples with two exceedances, and this does not exceed the allowable frequency listed in Table 3.2. As a result, staff changed the listing recommendation to 'Do Not List'.	Appendices A & G	Yes
Kings River, Lower (Pine Flat Reservoir to Island Weir)	Alkalinity as CaO3	57469	79270, 78423	Central Valley Water Board Staff Internal Quality Control	LOE 79270 was deleted because it duplicated LOE 78423. LOE 78423 was revised using the criterion as a maximum, rather than a minimum, value. Decision 57469 was revised accordingly and the proposed recommendation has not changed from “List.”	Appendix G	No
Kings River, Lower (Pine Flat Reservoir to Island Weir)	Ammonia as N, Total	61503	78989	CVCWA Comment 18	Staff re-assessed the ammonia as N data using the pH- and temperature-dependent, calculated Criteria Maximum Concentrations (CMCs) for total ammonia nitrogen. None of the 63 assessed total ammonia results exceeded their respective calculated CMCs. The LOE and Decision were revised to reflect that the total number of	Appendices A & G	Yes

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
					water samples, for which the CMCs were calculated, was changed from 13 to 63, and the number of exceedances was changed from 13 to 0. As a result, the proposed decision to place Kings River, Lower (Pine Flat Reservoir to Island Weir) on the 303(d) List has been changed to "Do Not List."		
Knights Landing Ridge Cut (Yolo County)	Boron	40762		Central Valley Water Board Staff Internal Quality Control	40 CFR Part 122 Appendix D identifies boron on its list of "Conventional & Nonconventional Pollutants" and not as a "Toxic Pollutant". Consequently, boron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Knights Landing Ridge Cut has six samples with four exceedances, and this does not exceed the allowable frequency listed in Table 3.2. As a result, staff changed the listing recommendation to 'Delist'.	Appendices A & G	Yes
Laguna Creek (tributary to Cosumnes River, Sacramento County)	Indicator Bacteria	57791	65655	CVCWA Comment 19	Staff revised the reference for the Criteria/Objective for the <i>E. coli</i> LOE to refer to the narrative chemical constituent objective in the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins.	Appendix G	No
Laguna Creek (tributary to Cosumnes River, Sacramento County)	Oxygen, Dissolved	57789	65683	CVCWA Comment 20	The total number of samples, 23, was corrected in LOE 65683.	Appendix G	No
Los Banos Creek (below Los Banos Reservoir, Merced County)	Boron	39208		Central Valley Water Board Staff Internal Quality Control	40 CFR Part 122 Appendix D identifies boron on its list of "Conventional & Nonconventional Pollutants" and not as a "Toxic Pollutant". Consequently, boron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Los Banos Creek has four samples with two exceedances, and this does not exceed the allowable frequency listed in Table 3.2. As a result, staff changed the listing recommendation to 'Delist'.	Appendices A & G	Yes
Los Gatos Creek (Fresno County)	Boron	58337		Central Valley Water Board Staff Internal Quality Control	40 CFR Part 122 Appendix D identifies boron on its list of "Conventional & Nonconventional Pollutants" and not as a "Toxic Pollutant". Consequently, boron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Los Gatos Creek has six samples with two exceedances,	Appendices A & G	Yes



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					and this does not exceed the allowable frequency listed in Table 3.2. As a result, staff changed the listing recommendation to 'Do Not List'.		
Main Drain (Kern County)	Ammonia as N, Total	61537	78998	CVCWA Comment 21	Staff re-assessed the Ammonia as N data using the pH- and temperature-dependent, calculated National Recommended Water Quality Criteria for total ammonia nitrogen. The LOE and Decision were revised to reflect that the total number of water samples, for which the CMCs were calculated, was changed from six to five, and the number of exceedances was changed from six to zero. As a result, the proposed decision to place Main Drain (Kern County) on the 303(d) List has been changed to "Do Not List."	Appendices A & G	Yes
Marsh Creek (Marsh Creek Reservoir to San Joaquin River; partly in Delta Waterways, western portion)	Bifenthrin	40228	80383, 80384, 59118, 59292, 59321, 59291, 22253, 22180, 22240, 22250	City of Brentwood Comments 1 through 6	Sample and exceedance counts in LOE 80383 were revised from two samples and two exceedances to zero samples and zero exceedances. Sample and exceedance counts in LOE 80384 were revised from four samples and four exceedances to zero samples and zero exceedances. LOEs 59118, 59292, 59321, and 59291 have been removed from decision 40228. LOEs 22253, 22180, 22240, and 22250 are a subset of the data described in LOES # 59291 and 59321. LOEs # 22253, 22180, 22240, 22250 were removed from Decision 40228. Decision 40228 changed from 'List on 303(d) list (TMDL required list) to 'Do Not List on 303(d) list (TMDL required list)'.	Report section "Evaluation of Data for Pyrethroid Pesticides" and Appendices A & G	Yes
Marsh Creek (Marsh Creek Reservoir to San Joaquin River; partly in Delta Waterways, western portion)	multiple	39368, 39661, 39714, 40228, 40344, 51122, 51124, 58152, 58179, 58183, 58185, 58188	66745, 66749, 66767, 66768, 66769, 66770, 66955, 66956, 66957, 66958, 66826, 66828, 66860	CVCWA Comment 22	Lines of Evidence 66749, 66767, 66768, 66769, 66770, 66955, 66956, 66957, 66958, 66826, 66828, and 66860 have been revised such that the assessed beneficial use is WARM rather than COLD. Decisions 39368, 39661, 39714, 40344, 51122, 51124, 58152, 58179, 58183, 58185, and 58188 have also been revised to reflect changes to the Lines of Evidence indicated above. No changes to the proposed listing decisions for Marsh Creek result from these LOE changes.	Appendix G	No
Mill Creek (Fresno County)	Alkalinity as CaO3	62443	78424	CVCWA Comment 23	The criterion for alkalinity is a continuous <i>minimum</i> concentration (4-day average) of 20 mg/L or more as CaCO3. Staff corrected LOE 78424 and associated Decision 62443. As a result, the proposed recommendation to place Mill Creek (Fresno County) on the	Appendices A & G	Yes

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
					303(d) List has been changed to "Do Not List."		
Mill Creek (Fresno County)	Ammonia as N, Total	61539	79004	CVCWA Comment 24	Staff re-assessed the ammonia as N data using the pH- and temperature-dependent, calculated Criteria Maximum Concentrations (CMCs) for total ammonia nitrogen. The LOE and Decision were revised to reflect that the total number of water samples, for which the CMCs were calculated, was changed from 2 to 11, and the number of exceedances was changed from 2 to 0. As a result, the proposed recommendation to place Mill Creek (Fresno County) on the 303(d) List has been changed to "Do Not List."	Appendices A & G	Yes
Mill Creek (Tulare County)	Ammonia (Unionized)	61550	79011	CVCWA Comment 25	LOE 79011 was deleted because it was based on data for another Mill Creek water body, and associated Decision 61550 was revised to include LOE 67313 only. The recommendation has not changed; the available data still support placing Mill Creek (Tulare County) on the 303(d) List for unionized ammonia.	Appendix G	No
Natoma, Lake	Toxicity	61547	68214	SSQP Comments 5 & 8	Line of evidence 68214 has been revised to identify <i>Hyalella azteca</i> as the test species. Reference 3992 has been amended to include a publication describing sampling and testing methods for these data (Weston and Lydy, 2012). Line of Evidence 68214 was revised to reflect one exceedance out of nine samples and Decision 61547 was revised to recommend 'Do Not List.'	Appendices A & G	Yes
Newman Wasteway	Boron	39562			40 CFR Part 122 Appendix D identifies boron on its list of "Conventional & Nonconventional Pollutants" and not as a "Toxic Pollutant". Consequently, boron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Newman Wasteway has four samples with two exceedances, and this does not exceed the allowable frequency listed in Table 3.2. As a result, staff changed the listing recommendation to 'Delist'.	Appendices A & G	Yes
North Canyon Creek (El Dorado County)	Indicator Bacteria	40419	68296, 68304, 23113	CVCWA Comment 26	Staff revised the reference for the Criteria/Objective for the <i>E. coli</i> and fecal coliform LOEs to refer to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins.	Appendix G	No
Old River (San Joaquin River to Delta-Mendota Canal; in Delta Waterways, southern portion)	Aluminum, Iron, Manganese	50448, 60713, 50508		CVCWA Comments 27, 28, 30	Staff revised the sample and exceedance counts to fourteen and thirteen, respectively, in LOE 68402 and in Decision 50448 for aluminum. In addition, 40 CFR Part 122 Appendix D identifies aluminum on its list of "Conventional & Nonconventional Pollutants" and not as a "Toxic Pollutant". Consequently, aluminum, iron and manganese should have been assessed using Table 3.2 of the	Appendices A & G	Yes

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					Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheets to reflect Table 3.2. Finally, while all initial secondary MCL assessments were based on more conservative total recoverable values and daily samples, Title 22 is silent on whether to utilize total or dissolved concentrations or the time period for assessment. CV-SALTS is currently proposing guidance for the use of secondary MCLs in source water evaluation. As a result, staff changed the listing recommendations to 'Do Not List'.		
Old River (San Joaquin River to Delta-Mendota Canal; in Delta Waterways, southern portion)	Lead	40869	68412, 20793	CVCWA Comment 29	Staff revised the sample and exceedance counts to 14 and 0, respectively, in LOE 68412 and in Decision 40869. The LOE and Decision were also revised to compare total lead concentrations with the primary MCL for lead. The proposed recommendation has been changed to "Do Not List" because the available data do not exceed the MUN criterion for lead.	Appendices A & G	Yes
Oregon Creek (Yuba and Sierra Counties)	Copper	54173	68521	CVCWA Comment 31	Data were correctly evaluated in Line of Evidence 68521 using dissolved copper concentrations and the analyte fraction was revised to 'Dissolved'.	Appendix G	No
Oregon Creek (Yuba and Sierra Counties)	Iron	54174		Central Valley Water Board Staff Internal Quality Control	40 CFR Part 122 Appendix D identifies iron on its list of "Conventional & Nonconventional Pollutants" and not as a "Toxic Pollutant". Consequently, iron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Oregon Creek has 12 samples with 2 exceedances, and this does not exceed the allowable frequency listed in Table 3.2. As a result, staff changed the listing recommendation to 'Do Not List'.	Appendices A & G	Yes
Pleasant Grove Creek	Dissolved oxygen, Pyrethroids	39449, 38497		Central Valley Water Board Staff Internal Quality Control	The 303(d) List and associated Fact Sheets were revised to note 'This listing is for Pleasant Grove Creek upstream of Fiddymont Road.'	Appendices A & G	Yes
Putah Creek (Solano Lake to Putah Creek Sinks; partly in Delta Waterways, northwestern portion)	Boron	39326		Central Valley Water Board Staff Internal Quality Control	40 CFR Part 122 Appendix D identifies boron on its list of "Conventional & Nonconventional Pollutants" and not as a "Toxic Pollutant". Consequently, boron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Putah Creek has 6 samples with 2 exceedances, and this does not exceed the allowable frequency listed in Table 3.2. As a	Appendices A & G	Yes

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
					result, staff changed the listing recommendation to 'Delist'.		
Rose Creek	Indicator Bacteria	52460	78397, 69420, 77245, 95807	USFS SNF Comment 9	Staff reevaluated the available data for E. coli in Rose Creek (Tuolumne County). A total of 24 E. coli samples were collected between August 27, 2009 and August 13, 2010. From these 24 samples, 14 30-day geometric mean concentrations were calculated. Eight of 14 calculated geometric mean concentrations exceeded the allowable concentration of 126/100 ml. Line of Evidence 69420 and Decision 52460 have been revised to reflect this change. Because there continue to be exceedances of objectives in Rose Creek, the recommendation to list it as impaired remains unchanged.	Appendix G	No
Rose Creek (Tuolumne County)	Indicator Bacteria	52460		Central Valley Water Board Staff Internal Quality Control	Staff revised text in Decision 52460 to correct errors in sample and exceedance counts. The listing status is unchanged as a result of these revisions.	Appendix G	No
Sacramento River (Cottonwood Creek to Red Bluff)	Temperature	57656	69509	USEPA Comments <sup>(a)</sup>	The draft public-review version of this LOE and decision used an incorrect evaluation guideline for assessing the temperature data. The decision was revised using the appropriate water body-specific water quality objective in the Sacramento River and San Joaquin River Basin Plan to assess the available water temperature data. The revised version changed the total number of exceedances from 0 (of 1 sample) to 1 (of 1 sample). This change had no effect on staff's recommendation of 'Do Not List'.	Appendix G	No
Sacramento River (Knights Landing to the Delta)	Temperature	57832	69701, 69702	USEPA Comments <sup>(a)</sup>	The draft public-review, version of this LOE and decision used an incorrect evaluation guideline for assessing the temperature data. The decision was revised using the appropriate water body-specific water quality objective in the Sacramento River and San Joaquin River Basin Plan to assess the available water temperature data. The revised version changed the total number of exceedances from 6 (of 31 samples) to 21 (of 31 samples). This change had no effect on staff's recommendation of 'Do Not List'.	Appendix G	No
Sacramento River (Knights Landing to the Delta)	Toxicity	44604	69497	SSD-PWG Comment 12	LOE 69497 was retired because the data were for another water-body, and Decision 44604 was revised accordingly.	Appendix G	No
Sacramento River (Red Bluff to Knights Landing)	Temperature	57670	69613, 69614	USEPA Comments <sup>(a)</sup>	The draft public-review version of this LOE and decision used an incorrect evaluation guideline for assessing the temperature data. The decision was revised using the appropriate water body-specific water quality objective in the Sacramento River and San Joaquin	Appendix G	No

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
					River Basins Basin Plan to assess the available water temperature data. The revised version did not change the total number of exceedances (1 exceedance of 3 samples). This change had no effect on staff's recommendation of 'do not list'.		
Sand Creek (tributary to Marsh Creek, Contra Costa County; partly in Delta Waterways, western portion)	Bifenthrin	38173	70466	Central Valley Water Board Staff Internal Quality Control	Data presented in LOE 70466 represent total bifenthrin concentrations. The fraction identified in LOE 70466 was revised to 'Total' as noted in the laboratory result. Criteria used in the assessment of bifenthrin data are intended to evaluate the freely dissolved fraction of bifenthrin in water. LOE 70466 has been revised to show zero samples and zero exceedances. Freely dissolved fractions of bifenthrin are not available for this water body segment. The decision for bifenthrin in Sand Creek (tributary to Marsh Creek, Contra Costa County; partly in Delta Waterways, western portion) has been changed to 'Do No List'	Report section "Evaluation of Data for Pyrethroid Pesticides" and Appendices A & G	Yes
Scotchman Creek (Nevada County)	Iron	53986		Central Valley Water Board Staff Internal Quality Control	40 CFR Part 122 Appendix D identifies iron on its list of "Conventional & Nonconventional Pollutants" and not as a "Toxic Pollutant". Consequently, iron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Scotchman Creek has 11 samples with 2 exceedances, and this does not exceed the allowable frequency listed in Table 3.2. As a result, staff changed the listing recommendation to 'Do Not List'.	Appendices A & G	Yes
Snake River (Butte and Sutter Counties)	Indicator Bacteria	57358	71727, 71755, 71555	CVCWA Comment 33	Staff revised the reference for the Criteria/Objective for the <i>E. coli</i> and fecal coliform LOEs to refer to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins.	Appendix G	No
Spanish Creek (Plumas County)	Indicator Bacteria	38133	23387, 71880, 71855	CVCWA Comment 34	Staff revised the decision to indicate that three lines of evidence are available to assess <i>E. coli</i> , and they revised the evaluation guideline to specify <i>E. coli</i> . Staff also revised the reference to the Numeric Water Quality Objectives in the Listing Policy, from section 3.1 to section 3.2.	Appendix G	No
Spring Creek (Nevada County)	Iron	54702		Central Valley Water Board Staff Internal Quality Control	40 CFR Part 122 Appendix D identifies iron on its list of "Conventional & Nonconventional Pollutants" and not as a "Toxic Pollutant". Consequently, iron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Spring Creek has 15 samples with 2 exceedances, and this does not exceed the allowable frequency listed in Table 3.2. As a result,	Appendices A & G	Yes

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
					staff changed the listing recommendation to 'Do Not List'.		
Stanislaus National Forest creeks	Indicator Bacteria	47152, 52440, 52447, 52460, 58659		General Comment #2 for Stanislaus NF creeks	Updated the decision recommendations to add "natural sources" and "source unknown" in addition to "grazing-related sources".	Appendix G	Yes
Twain Harte Creek (Tulumne County)	Indicator Bacteria	58569		Central Valley Water Board Staff Internal Quality Control	Staff revised text in Decision 58569 to correct errors in sample and exceedance counts. The listing status is unchanged as a result of these revisions.	Appendix G	No
Village West Marina (part of Delta Waterways (eastern portion))	Dissolved Oxygen	56904	72098	Stockton Permittees Comments 2 & 5	After reviewing available GIS information associated with the data for the four Village West Marina stations, staff concurs with the commenter that the sampling stations are close enough to be considered the same location per section 6.1.5.2 of the Listing Policy. Further, the California Department of Pesticide Regulation (DPR) report that describes the monitoring design states, 'The four samples taken inside each marina and the four samples taken for each LRS <local reference site> area during each sampling event represented sub-samples for that particular marina and LRS area.' (DPR, 2009, page 15) This provides additional justification for considering the four Village West Marina stations to be considered the same location. As a result, staff re-assessed the Village West Marina data as one location. The minimum dissolved oxygen values for each of the three sampling events are 4.79, 3.55, and 6.46 mg/L, which include two exceedances of the water quality objective for Delta waters of 5 mg/L. Per Table 3.2 of the Listing Policy, a minimum of five exceedances is required to list a water body for conventional constituents. Consequently, staff changed Decision 56904 from "List on 303(d) list (TMDL required list)" to "Do Not List". Staff also corrected the water quality objective to reflect the objective of 5.0 mg/L for eastern Delta waterways.	Appendices A & G	Yes
Wadsworth Canal	Indicator Bacteria	37369	72129, 23225	CVCWA Comment 35	Staff revised LOE 72129 to refer to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the appropriate toxicity water quality objective. The recommendation is still to place Wadsworth Canal on the 303(d) List for indicator bacteria.	Appendix G	No
Walker Creek (Glenn County)	Indicator Bacteria	58698	72131, 72133,	CVCWA Comment 36	Staff revised the reference for the Criteria/Objective for the E. coli and fecal coliform LOEs to refer to the Water Quality Control Plan	Appendix G	No

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
			72002		for the Sacramento River and San Joaquin River Basins. Also, the "Water Quality Objective/Criterion" was corrected in the Line of Evidence for E. coli. During staff's review of this decision, the Line of Evidence for total coliform (LOE 72002) was removed because total coliform is not a reliable indicator of pathogens.		
Willow Slough Bypass (Yolo County)	Selenium	37499	72625, 72626	CVCWA Comment 37	Staff revised the total number of water samples to 16 in both LOEs. Zero of the 16 water samples exceed the California primary maximum contaminant level for the MUN beneficial use, and two of the 16 water samples exceed the California Toxics Rule continuous concentration criterion for COLD, freshwater aquatic life habitat. The correction does not affect the recommendation to place Willow Slough Bypass (Yolo County) on the 303(d) List for selenium.	Appendix G	No
Yuba River, Lower	pH	54958	59383	PG&E Comments 6 & 7	Staff re-examined the pH data used in the draft assessment for Yuba River, Lower and identified a total of 11 excursions from the water quality objective for pH out of a total of 139 daily maximum or minimum pH values (when only useable data were included). Line of Evidence 59383 has been revised to correct the number of samples and number exceedances. Per Table 3.2 of the Listing Policy, this does not exceed the allowable frequency for conventional pollutants. Staff no longer proposes to add Yuba River, Lower to the 303(d) list as impaired for pH.	Appendices A & G	Yes
Yuba River, South Fork (Headwaters to Spaulding Lake)	pH	54786	59390	PG&E Comments 10, 11 & 12	Line of Evidence 59390 was revised to correct the reference to the data used in the assessment: South Yuba River Citizens League – Data in Yuba: metal, 2000-2007 and conventional, 2000-2010. Staff re-examined the data pH data used in the draft assessment for Yuba River, South Fork (Headwaters to Spaulding Lake) and identified a total of 16 excursions from the water quality objective for pH out of a total of 81 daily maximum or minimum pH values (when only useable data were included). Line of Evidence 59390 has been revised to correct the number of samples and number exceedances. Per Table 3.2 of the Listing Policy, this exceeds the allowable frequency for conventional pollutants. Staff continues to propose to add Yuba River, South Fork (Headwaters to Spaulding Lake) to the 303(d) List as impaired for pH.	Appendix G	No
Yuba River, South Fork (Spaulding Reservoir to Englebright Reservoir)	Copper	60689	NA	CVCWA Comment 38	Staff revised the total number of samples described in the decision to "thirty-six" to be consistent with the two LOEs. The correction does not affect the decision to place <i>Yuba River, South Fork (Spaulding Reservoir to Englebright Reservoir)</i> on the 303(d) List for copper.	Appendix G	No

Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
Yuba River, South Fork (Spaulding Reservoir to Englebright Reservoir)	Iron	60690		Central Valley Water Board Staff Internal Quality Control	40 CFR Part 122 Appendix D identifies iron on its list of “Conventional & Nonconventional Pollutants” and not as a “Toxic Pollutant”. Consequently, iron should have been assessed using Table 3.2 of the Listing Policy rather than Table 3.1. Staff updated the language in the Fact Sheet to reflect Table 3.2. In addition, Table 3.2 states a minimum of five exceedances is required to list a water body. Yuba River has 20 samples with 3 exceedances, and this does not exceed the allowable frequency listed in Table 3.2. As a result, staff changed the listing recommendation to ‘Do Not List’.	Appendices A & G	Yes
Yuba River, South Fork (Spaulding Reservoir to Englebright Reservoir)	pH	58480	59393	PG&E Comments 3 & 4	Staff re-examined the pH data used in the draft assessment for Yuba River, South Fork (Spaulding Reservoir to Englebright Reservoir) and identified a total of 22 excursions from the water quality objective for pH out of a total of 277 daily maximum or minimum pH values (when only useable data were included). Line of Evidence 59393 has been revised to correct the number of samples and number exceedances. Per Table 3.2 of the Listing Policy, this does not exceed the allowable frequency for conventional pollutants. Staff no longer proposes to add Yuba River, South Fork (Spaulding Reservoir to Englebright Reservoir) to the 303(d) list as impaired for pH.	Appendices A & G	Yes
Butt Valley Reservoir (Plumas County); Jenkinson Lake (El Dorado County); Yosemite Lake				Update to Category Report	These three water bodies were re-categorized from Category 5 to Category 1 as a result of staff changing one or more of their pollutant fact sheet recommendations from “List” to “Do Not List” in response to public comments and re-assessments.		
Blue Lakes (Lake County); Brite Valley Lake; Castac Lake; Contra Loma Reservoir; Elbow Creek, unnamed tributary below Sheep Meadow (Alpine County); Jawbone Creek (Tulolumne County); McSwain Lake; Paradise Reservoir; Tunnel Reservoir; Village West Marina (part of Delta Waterways (eastern portion); Webb, Lake				Update to Category Report	These 11 water bodies were re-categorized from Category 5 to Category 2 as a result of staff changing one or more of their pollutant fact sheet recommendations from “List” to “Do Not List” in response to public comments and re-assessments.		



Water Body Segment	Pollutant	Decision #	LOE #	Revision made in response to:	Revision	Staff report section where revision was made	Revision made to 303(d) List since September 2016 draft report?
Multiple	<i>E. coli</i>	Multiple	Multiple	Central Valley Water Board Staff Internal Quality Control	For all <i>E. coli</i> LOEs, staff will replace the narrative toxicity objective with the narrative chemical constituents objective. This change had no effect on listing recommendations.	Appendix G	No

<sup>(a)</sup> The U.S. Environmental Protection Agency (USEPA) submitted written comments on 3 November 2016, after the formal public comment period closed, and consequently were not included in Appendix K: Response to Comments. The Central Valley Water Board Chair admitted the comments to the record and the Central Valley Water Board staff provided responses to the comments during the 5 December 2016 Board Hearing.