

**Proposed CALFEDD Water Quality Actions and Affected Parameters that Impact
Ecosystem Water Quality**

ACTION	BENEFIT	AFFECTED PARAMETERS																												
		TRACE ELEMENTS							ORGANICS			NUTRIENTS			OTHER															
		Metals	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Zinc	Arsenic	Pesticides (Insecticides, Herbicides, etc.)	Petroleum Related	Other Organics	Nitrogen (other than Ammonia)	Ammonia	Phosphorous	Dissolved Oxygen (D.O.)	Pathogens	pH	Temperature	Salinity (TDS, EC)	Chloride	Sodium	Suspended Solids (SS)	Settleable Solids	Oil & Grease	
7. Treat agricultural drainage to remove pollutants, to either be reused or used as part of a localized drainage management practice in coordination with management of drainage timing.	Provides additional dilution flows for improving the quality of receiving waters in Delta and to Delta tributaries.	1	1	1	2	1	1	1	1	3	1			3	1?	?								1	1					
8. Increase the level of agricultural water conservation to reduce demand.	May improve overall Delta and tributary water quality through retention of agricultural drainage water for release when pulse flows can provide dilution.		1	1	1			1		3				1	1	1	1	1	1					2	1					
9. Treat and recycle agricultural drainage for irrigation purposes to reduce export demand where feasible while maintaining appropriate salt leaching requirements.	Can improve Delta and San Joaquin River and export water quality depending on reclamation activity.		1	1	1			1		3				1	1	1	1	1	1					2	1					
10. Encourage management of riparian zones to protect water quality by funding a cooperative program in watersheds of reservoirs operated by participating watersheds.	Preserves riparian and aquatic habitats, reduces sedimentation, improves Delta water quality.																1	1	1		1									1
11. Dilute pollutants in Delta inflows from San Joaquin River using stored water.	Improves Delta water quality by providing a source of manageable dilution flows that can be released during low-flow/high drainage discharge periods.									2				1	1	1	1	1						2	1	1				
12. Manage water flows and stages down Old River.	Improves water quality in the South Delta.									1				1	1	1					1				2?	1?	1			

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13. Acquire water from willing sellers in the San Joaquin Valley or develop from expanded surface water or groundwater storage.	Improves water quality.									1							1							1						
14. Improve management of urban stormwater runoff to retain an additional 20 to 30 percent of runoff volume.	Improves Delta water quality by reducing the volume of urban stormwater runoff and concentration of pollutants entering Delta tributaries.	1	3	3	3	3	2	1	3	1	1	1		2	2	1	1	1	1	1	1	1								
15. Increase enforcement of source control regulations for urban and industrial runoff.	Enforcement of economic penalties can result in improved management practices that can improve tributary and Delta water quality.	3	2	2	2	3	2	2	3	2	2	1		2	2		1	1		1								1		
16. Implement urban wastewater reclamation programs to develop additional water supply.	Can improve Delta and San Joaquin River and export water quality depending on reclamation activity.	1												1							1						1			
17. Implement moderate on-site mine drainage remediation measures developed in site specific studies at the Walker Mine, Iron Mountain Mine, Malakoff Diggins, Leavathon Mine, and Penn Mine sites, and other priority sites.	Reduces future tributary and Delta heavy metals loading.	1	3	1	3	1	1	1	1	1	1	2								?				1			1			
18. Encourage management of land uses to protect water quality.	Preserves riparian and aquatic habitats, reduces sedimentation, improves Delta water quality.													1			1			1			1						2	
19. Study and implement actions to reduce effects of salinity in the San Joaquin River, to maintain water levels and circulation in the south Delta, and to reduce recycled salt load to the San Joaquin Valley.	Better manage flow circulation, increase water stages for the south Delta, improve San Joaquin River and south Delta water quality.									1													3	2	2	1				

