Amendments to the 1994 Water Quality Control Plan for the Sacramento River and San Joaquin River Basins

Subject	Date Adopted By Reg. Bd.	Regional Board Resolution No.	Date in Effect
18. Non-Regulatory Amendments to Correct Editing Errors and Update Language	8/13/09	R5-2009-0069	5/18/11
19. Amendments to Control Methylmercury And Total Mercury in the Sacramento-San Joaquin Delta Estuary	4/22/2010	R5-2010-0043	10/20/11
20. Non-Regulatory Amendments to Provide A Cost Estimate and Potential Sources of Financing for a Long-Term Irrigated Lands Program	10/13/2011	R5-2011-0075	12/14/12
21. Amendments to Establish Site-Specific Water Quality Objectives for Chloroform, Chlorodibromomethane, and Dichlorobromomethane for New Alamo And Ulatis Creeks, Solano County, and Permit Implementation Provisions	5/27/2010	R5-2010-0047	4/9/13*
22. Amendments for the Control of Selenium In the Lower San Joaquin River Basin	5/27/2010	R5-2010-0046	11/7/13
23. Amendment to Establish a Drinking Water Policy for Surface Waters of the Delta and Its Upstream Tributaries	7/26/2013	R5-2013-0098	11/20/14
24. Amendments to the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin Regarding Onsite Wastewater System Implementation Program	3/27/2014	R5-2014-0036	1/26/15
25. Amendments to Edit and Update Language	3/27/2014	R5-2014-0037	1/26/15
26. Amendment to Provide a Groundwater Regulatory Framework Towards Closure of the Royal Mountain King Mine Site, Calaveras County	3/28/2014	R5-2014-0047	6/17/15
27. Amendment to Remove the Municipal and Domestic Supply (MUN) Beneficial Use in Twelve Constructed and/or Modified Water Bodies in the Sacramento River Basin that Receive Treated Municipal Wastewater from the Cities of Biggs, Colusa, Live Oak or Willows	4/16/2015	R5-2015-0022	4/21/16

* For R5-2010-0047, U.S. Environmental Protection Agency specifically did not approve the implementation provisions.

THE WATER QUALITY CONTROL PLAN (BASIN PLAN)

FOR THE

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

CENTRAL VALLEY REGION

FOURTH EDITION

Revised April 2016 (with Approved Amendments)

THE SACRAMENTO RIVER BASIN AND THE SAN JOAQUIN RIVER BASIN

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

Karl E. Longley, Chair
Denise Kadara, Vice-Chair
Jon Costantino, Member
Carmen L. Ramirez, Member
Robert (Bob) Schneider, Member

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COVER PHOTO ACKNOWLEDGMENTS:

Rafting the American River: Rapid Shooters, Lotus CA
Yosemite: David Rosen/ Ducks Unlimited
Sunset Waterfowl: David Rosen/ Ducks Unlimited
Sugar Beets: Brenda Grewell/ Dept. of Water Resources

Water Bodies within the basins that do not have beneficial uses designated in Table II-1 are assigned MUN designations in accordance with the provisions of State Water Board Resolution No. 88-63 which is, by reference, a part of this Basin Plan, except as provided below:

- Old Alamo Creek (Solano County) from its headwaters to the confluence with New Alamo Creek

- Water bodies listed in Appendix 44, Water Bodies That Meet One or More Sources of Drinking Water Policy (Resolution 88-63) Exceptions

These MUN designations in no way affect the presence or absence of other beneficial use designations in these water bodies.

In making any exemptions to the beneficial use designation of MUN, the Regional Board will apply the exceptions listed in Resolution 88-63 (Appendix Item 8) and the excepted water bodies will be listed in Appendix 44.

Ground Waters

Beneficial uses of ground waters of the basins are presented below. For the purposes of assigning beneficial uses, the term ground water is defined in Chapter I.

5. *State Water Board Resolution No. 77-1, Policy and Action Plan for Water Reclamation in California*
The policy was adopted 6 January 1977. Among other things, the policy requires the Regional Water Boards to conduct reclamation surveys and specifies reclamation actions to be implemented by the State and Regional Water Boards and other agencies. The policy and action plan are contained in the State Water Board report titled, *Policy and Action Plan for Water Reclamation in California*. See Appendix Item 5.

6. *State Water Board Resolution No. 87-22, Policy on the Disposal of Shredder Waste*

This State Water Board Resolution, adopted 19 March 1987, permits the disposal into certain landfills of wastes, produced by the mechanical destruction of car bodies, old appliances and similar castoffs, under specific conditions designated and enforced by the Regional Water Boards. See Appendix Item 6.

7. *State Water Board Resolution No. 88-23, Policy Regarding the Underground Storage Tanks Pilot Program*

The State Water Board adopted this policy on 18 February 1988. The policy implements a pilot program to fund oversight of remedial action at leaking underground storage tank sites, in cooperation with the California Department of Public Health (formerly the California Department of Health Services). Oversight may be deferred to the Regional Water Boards. See Appendix Item 7.

8. *State Water Board Resolution No. 88-63, Sources of Drinking Water Policy*

This policy for water quality control, adopted on 19 May 1988, is essential to the designation of beneficial uses. The policy specifies that, except under specifically defined exceptions, all surface and ground waters of the state are to be protected as existing or potential sources of municipal and domestic supply. The specific exceptions include waters with existing high total dissolved solids concentrations (greater than 3000 mg/l), low sustainable yield (less than 200 gallons per day for a single well), waters with contamination that cannot be treated for domestic use using best management practices or best economically achievable treatment practices, waters within particular municipal, industrial and agricultural wastewater conveyance and holding facilities, and regulated geothermal ground waters. Where the Regional Water Board finds that one of the exceptions applies, it may remove the municipal and domestic supply beneficial use designation for the particular body of water through a formal Basin Plan amendment and a public hearing, followed by approval of such an amendment by the State Water Board and the Office of Administrative Law. See Appendix Item 8 for Resolution 88-63 exceptions and Appendix 44 for water bodies that meet one or more of the exceptions.

9. *State Water Board Resolution No. 90-67, Pollutant Policy Document (PPD)*

The PPD was adopted by the State Water Board in 1990, as part of their overall Delta water rights proceedings. The PPD establishes state policy for water quality control to be used by the San Francisco Bay Regional Water Board and the Central Valley Regional Water Board in updating basin plans. The PPD requires the Central Valley Regional Water Board to develop a mass emission strategy for limiting loads of heavy metals, PAHs and selenium entering the Delta. It also requires that specific actions be taken to eliminate the discharge of chlorinated dibenzodioxins and dibenzofurans to the Delta. The PPD describes other actions for controlling antifouling compounds used on boats and for regulating dredging.

10. *State Water Board Resolution No. 92-49, Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*

This resolution contains policies and procedures for Regional Water Boards to follow for the oversight and regulation of investigations and cleanup and abatement activities from all types of discharge or threat of discharge subject to Section 13304 of the Water Code. It directs Regional Water Boards to ensure that dischargers are required to cleanup and to abate the effect of discharges. This cleanup and abatement shall be done in a manner that promotes attainment of background water quality, or the highest water quality which is reasonable if background levels of water quality cannot be restored. Any cleanup less stringent than background water quality shall be consistent with maximum benefit to the people of the state

and not unreasonably affect present and anticipated beneficial uses of such water. See Appendix Item 9.

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V. SURVEILLANCE AND MONITORING

This chapter describes the methods and programs that the Regional Water Board uses to acquire water quality information. Acquisition of data is a basic need of a water quality control program and is required by both the Clean Water Act and the Porter-Cologne Water Quality Control Act.

The Regional Water Board's surveillance and monitoring efforts include different types of sample collection and analysis. Surface water surveillance may involve analyses of water, sediment, or tissue samples and ground water surveillance often includes collection and analysis of soil samples. Soil, water, and sediment samples are analyzed via standard, EPA approved, laboratory methods. The Regional Water Board addresses quality assurance through bid specifications and individual sampling actions such as submittal of split, duplicate, or spiked samples and lab inspections.

Although surveillance and monitoring efforts have traditionally relied upon measurement of key chemical/physical parameters (e.g., metals, organic and inorganic compounds, bacteria, temperature, and dissolved oxygen) as indicators of water quality, there is increasing recognition that close approximation of water quality impacts requires the use of biological indicators. This is particularly true for regulation of toxic compounds in surface waters where standard physical/chemical measurement may be inadequate to indicate the wide range of substances and circumstances able to cause toxicity to aquatic organisms. The use of biological indicators to identify or measure toxic discharges is often referred to as *biotoxicity testing*. EPA has issued guidelines and technical support materials for biotoxicity testing. A key use of the method is to monitor for compliance with narrative water quality objectives or permit requirements that specify that there is to be no discharge of toxic materials in toxic amounts. The Regional Water Board will continue to use biotoxicity procedures and testing in its surveillance and monitoring program.

As discussed previously, the protection, attainment, and maintenance of beneficial uses occur as part of a continuing cycle of identifying beneficial use impairments, applying control measures, and assessing program effectiveness. The Regional Water Board surveillance and monitoring program provides for the collection, analysis, and distribution of the water quality data needed to sustain its control program. Under ideal circumstances, the Regional Water Board surveillance and monitoring program would produce information on the frequency, duration, source, extent, and severity of beneficial use impairments. In attempting to meet this goal, the Regional Water Board relies upon a variety of measures to obtain information. The current surveillance and monitoring program consists primarily of seven elements:

Data Collected by Other Agencies

The Regional Water Board currently relies on internal staff coordination and compilation of data collected by a variety of other agencies to augment data collected by internal programs in order to assess ambient water quality conditions and program effectiveness. For example, the Department of Water Resources (DWR) has an ongoing monitoring program in the Delta and the United States Geological Survey (USGS) and DWR conduct monitoring in some upstream rivers. The Department of Fish and Wildlife, Fish and Wildlife Service, USGS, and State Water Board Division of Drinking Water Programs also conduct special studies and collect data, as do local entities such as water purveyors, county health departments and wastewater treatment plants.

The long-term goal is to have a system in place that facilitates consolidation of information gathered from all agencies in a format that can be readily utilized to provide the foundation for regular assessments of ambient surface water quality conditions and program effectiveness including support of updates to the California Integrated Report (Clean Water Act Sections 303(d)/305(b)) which provides a water quality conditions assessment of surface water bodies.

Regional Water Board and State Water Board Monitoring Programs

The State Water Board manages its own Toxic Substances Monitoring (*TSM*) program to collect and analyze fish tissue for the presence of bioaccumulative chemicals. The Regional Water Board participates in the selection of sampling sites for its basins and annually is provided with a report of the testing results.

APPENDIX DIRECTORY

ITEM*	DESCRIPTION
~~32.~~	~~Regional Water Board Resolution No. 90-34, Conditional Waiver of Waste Discharge Requirements at Pesticide Applicator Facilities~~ - - - Removed 13 August 2009
33.	Regional Water Board Guidelines for Winery Waste
34.	Regional Water Board Guidelines for Erosion
35.	Regional Water Board Guidelines for Small Hydroelectric Facilities
~~36.~~	~~Regional Water Board Guidelines for Disposal from Land Developments~~ - - - Removed 27 March 2014
37.	Regional Water Board Guidelines for Mining
~~38.~~	~~Regional Water Board list of Water Quality Limited Segments~~ - - - Removed 6 September 2002
39.	Federal Anti-degradation policy (40 CFR 131.12)
40.	Grassland Watershed Wetland Channels
41.	San Joaquin Area Subarea Descriptions
42.	Sacramento-San Joaquin Delta Waterways
43.	Delta and Yolo Bypass Waterways Applicable to the Delta Mercury Control Program
44.	Water Bodies That Meet One or More of the Sources of Drinking Water Policy (Resolution 88-63) Exceptions

* Appendix items are paginated by: item number/item page/item total pages

Appendix 44
Water Bodies That Meet One or More of the
Sources of Drinking Water Policy (Resolution 88-63) Exceptions

County	Water Body Name	Description	Approximate GIS Coordinates *(WGS84 Datum)*	
			Starting Location	**Ending Location**
Butte	Cherokee Canal	Cherokee Canal runs southwest from the Richvale area (near Nelson Shippee Road) to Butte Creek, west of the City of Live Oak	(39.537741, -121.707079)	(39.285685, -121.921656)
Butte	Lateral K	Lateral K is part of Reclamation District 833 and starts near 8th Street in the City of Biggs and travels southwest past the City of Bigg's Wastewater Treatment Plant to the Main Drainage Canal	(39.421894, -121.71297)	(39.406837, -121.725361)
Butte	Main Drainage Canal	The Main Drainage Canal (also known as the Main Drain C) is part of Reclamation District 833 and starts on the south end of the City of Biggs near Trent Street and runs southwest to the Cherokee Canal	(39.41041, -121.704258)	39.327924, -121.882067
Colusa	New Ditch (2011)	New Ditch (2011) starts near the south end of the Colusa Wastewater Treatment Plant and runs south, parallel to the unnamed tributary, until the two water bodies join near the effluent outfall and weir.	(39.180224, -122.031358)	(39.174267, -122.031274)
Colusa	Powell Slough	Powell Slough begins just north of Highway 20, downstream of Hopkins Slough, and runs south until its confluence with the Colusa Basin Drain.	(39.211133, -122.062955)	(39.161267, -122.038445)
Colusa	Sulphur Creek	Lower two miles from Schoolhouse Canyon to its confluence with Little Bear Creek.	39.035631, -122.437619	39.040144, -122.408168
Colusa	unnamed tributary (to Powell Slough)	unnamed tributary to Powell Slough starts near Will S. Green Avenue and runs west and southwest to Powell Slough	(39.188028 ,-122.02328)	(39.166857, -122.034722)
Glenn	Ag Drain C	Glenn-Colusa Irrigation District's Ag Drain C (segments also known as North Fork Logan Creek and Logan Creek) runs southeast from Highway 5 near Highway 99W through the Sacramento Wildlife Refuge to the Colusa Basin Drain	(39.498519, -122.199216)	(39.356401, -122.082675)
Sutter	East Interceptor Canal	The East Interceptor Canal starts at Pease Road and runs west until it meets the Wadsworth Canal.	(39.170745, -121.670588)	(39.171003, -121.727014)

Appendix 44
Water Bodies That Meet One or More of the
Sources of Drinking Water Policy (Resolution 88-63) Exceptions

County	**Water Body Name**	**Description**	**Approximate GIS Coordinates** *(WGS84 Datum)*	
			Starting Location	**Ending Location**
Sutter	Lateral 1	Lateral 1 is part of Reclamation District 777 and starts near the City of Live Oak's Wastewater Treatment Plant and runs south and west to the Western Intercepting Canal.	(39.257501, -121.678718)	(39.201248, -121.696329)
Sutter	Lateral 2	Lateral 2 is part of Reclamation District 777. It starts on the south end of the City of Live Oak near Treatment Plant Access Road and runs south and then west past the City of Live Oak's Treatment Plant outfall until it meets Lateral 1.	(39.264739, -121.669314)	(39.257501, -121.678718)
Sutter	Western Intercepting Canal *(not to be confused with West Interceptor Canal)*	Western Interceptor Canal is under shared management between Reclamation District 777 and Reclamation District 2056. It starts south of Sanders Road and runs south until it meets the East Interceptor Canal.	(39.201248, -121.696329)	(39.17092, -121.695374)
Sutter	Wadsworth Canal	The Wadsworth Canal starts just north of Butte House Road and runs southwest until it meets the Sutter Bypass	(39.171003,-121.727014)	(39.113605,-121.768985)