

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

RESOLUTION NO. R5-2010-0046

AMENDING THE WATER QUALITY CONTROL PLAN  
FOR  
THE SACRAMENTO RIVER AND SAN JOAQUIN RIVER BASINS  
FOR THE CONTROL OF SELENIUM IN THE  
LOWER SAN JOAQUIN RIVER BASIN

WHEREAS, the California Regional Water Quality Control Board, Central Valley Region (hereafter Central Valley Water Board) finds that:

1. In 1975 the Central Valley Water Board adopted a Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (hereafter Basin Plan), which has been amended occasionally.
2. The Basin Plan may be amended in accordance with the California Water Code Section 13240, et seq.
3. Water Code Section 13242 requires a program for implementation for achieving water quality objectives and Section 13243 states that the Board may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted.
4. The Basin Plan contains a compliance timetable (Table IV-4) for meeting the Water Quality Objective for selenium. It also contains conditional prohibitions of discharge and indicates that discharges will be regulated under Waste Discharge Requirements (WDRs).
5. A regional agricultural drainage management authority has been established by a group of water agencies within the Grassland watershed to implement a selenium control program known as the Grassland Bypass Project (GBP). This group is known as the Grassland Area Farmers (GAF) and they are part of the San Luis & Delta-Mendota Water Authority. The GBP manages most of the subsurface agricultural drainage generated in the Grassland watershed and is the key feature of the selenium control effort.
6. The Central Valley Water Board has issued WDRs with a Monitoring and Reporting Program (Order No. 5-01-234) to the San Luis & Delta-Mendota Water Authority and US Bureau of Reclamation for the GBP, requiring submittal of updates to the Long-Term Drainage Management Plan on 1 January each year until the discharge ceases. Staff will prepare WDRs and a Monitoring and Reporting Program (MRP) that are consistent with the Selenium Control Program Basin Plan Amendments and consider the conditions and requirements in the 2010-2019 Agreement for Use of the San Luis Drain. The public will have an opportunity to review and provide comments on the draft WDRs and MRP.

7. The selenium control program's time schedule requires compliance with the selenium objectives in the San Joaquin River and specified channels within the Grassland watershed by certain dates. The GBP is in compliance with applicable objectives in most channels addressed in the Basin Plan, but the Board has been notified that the project will be unable to fully manage all agricultural subsurface drainage to meet the water quality objective for Mud Slough and the San Joaquin River above the Merced River by 1 October 2010, the date when these water bodies must meet the 5 µg/L selenium objective.
8. In a 13 December 2006 letter to the US Bureau of Reclamation, the GAF informed the Bureau and Central Valley Water Board staff that the GBP would be unable to eliminate all surface water discharges of agricultural subsurface drainage by 30 October 2010 without increased risks of loss of soil productivity; accelerated loss of beneficial use of groundwater due to salinization; a significant decrease in farm profitability stemming from a rising water table if irrigation continues; or low or no returns if fields are dryland farmed or fallowed. Rising groundwater would also increase groundwater seepage to surface water channels and open ditches, potentially increasing selenium in channels now protected by the monitoring and management of the regional drainage program. Continued farm productivity and profitability is necessary to fund ongoing regional drainage management in this area; and continued wildlife protection is consistent with state, federal, local and GBP priorities.
9. The GBP operators anticipate that the project area will be able to achieve full control of agricultural subsurface drainage if an additional nine years, three months beyond the existing compliance date is granted.
10. The GBP operators have consulted with US Fish and Wildlife Service, California Department of Fish and Game and other interested parties; and have incorporated mitigation actions for selenium impacts from agricultural subsurface drainage discharges to the Grassland Ecological Area for the term of the compliance schedule time extension. These mitigation measures will be incorporated into updated WDRs for the project following final approval of the proposed Basin Plan Amendments.
11. The Central Valley Water Board has prepared draft Amendments which extend the date for meeting the selenium objective in Mud Slough (north) and the San Joaquin River above the Merced River by another nine years, three months (through 31 December 2019), and which establishes an interim performance measure for selenium.
12. The Amendments will revise the compliance time schedule located in chapter IV (implementation chapter) of the Basin Plan for Agricultural Drainage Discharges in the San Joaquin River Basin and its accompanying narrative description in Regional Water Board Prohibitions, section 6.c.

13. The Amendments give the Central Valley Water Board the option of activating the prohibition before the term shown in Table IV-4 if it determines that timely and adequate mitigation agreed to in the 2010-2019 *Agreement for Continued Use of the San Luis Drain* has not been provided.
14. The GBP operators have agreed to continue to share salt and selenium management information with the Board's CV-SALTS (Central Valley Salinity Alternatives for Long-Term Sustainability) collaborative Basin Planning effort as technologies are tested and validated in the GBP area; supporting development and implementation of a long-term regional salt management plan through the term of the compliance schedule time extension.
15. Water Code section 13141 requires cost estimates to be developed for any agricultural water quality control program. This is an ongoing program. The Basin Plan includes a cost estimate for the selenium control program with potential sources of funding and neither the cost nor the sources need to be revised.
16. The Amendments are strictly administrative in nature and do not require scientific peer review.
17. The regulatory action proposed meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).
18. A full Environmental Impact Report/Environmental Impact Statement for the Grassland Bypass Project 2010-2019 was prepared by the US Bureau of Reclamation and San Luis & Delta-Mendota Water Authority to satisfy National Environmental Protection Act (NEPA) and CEQA requirements for continued use of the San Luis Drain. This document received final approval from the San Luis & Delta-Mendota Water Authority on 8 February 2009. After consultation with and issuance of a Biological Opinion and letter of concurrence from the US Fish and Wildlife Service and National Marine Fisheries Service, respectively, the US Bureau of Reclamation issued a Record of Decision on 18 December 2009. US Fish and Wildlife Service and National Marine Fisheries Service concluded that adequate mitigation was provided for any potential negative environmental impacts.
19. The Basin Planning process has been certified by the Resources Agency as an exempt regulatory program because its process adequately fulfills the purposes of the California Environmental Quality Act (CEQA). Central Valley Water Board is therefore exempt from CEQA's requirements to prepare an environmental impact report, negative declaration, or initial study (Public Resources Code, section 21000 et seq.) for the proposed Amendments. Central Valley Water Board staff has prepared the required documentation for adoption of Basin Plan Amendments, including a completed environmental checklist and written report

(Staff Report) prepared for the Board (California Code of Regulations, title 23, section 3777).

20. Central Valley Water Board staff held CEQA scoping meetings on 17 October and 12 November 2008 to receive comments on the draft Amendments and to identify any significant issues that must be considered. A notice of the CEQA Scoping meeting was sent to interested parties including cities and counties with jurisdiction in or bordering the affected watersheds of Mud Slough (north) and the upper San Joaquin River between Sack Dam and the Merced River.
21. Central Valley Water Board staff has prepared draft Amendments and a staff report dated March 2010. The staff report included a description of the proposed Amendments and analysis of reasonable alternatives and mitigation measures to the proposed Amendments. The staff report included an analysis of the reasonably foreseeable environmental impacts of methods of compliance and an analysis of the reasonably foreseeable alternative methods of compliance with the proposed Amendments.
22. Central Valley Water Board staff completed an environmental checklist that concluded that the proposed Amendments results in lesser environmental effects than the No Action alternative and that mitigating measures incorporated in the *Agreement for the Continued Use of the San Luis Drain for the period January 1, 2010 through December 31, 2019* between the US Bureau of Reclamation and the San Luis & Delta-Mendota Water Authority (Use Agreement) will have the effect of reducing potential adverse effects to less than significant, both individually and cumulatively, on wildlife and the environment.
23. Central Valley Water Board staff has circulated a Notice of Public Hearing, Notice of Filing, a written staff report, response to public comments documents, and environmental checklist, and draft proposed Amendments to interested individuals and public agencies, including persons having special expertise with regard to the environmental effects involved with the proposed Amendments, for review and comment in accordance with state and federal environmental regulations (California Code of Regulations, title 23, section 3775; Code of Federal Regulations, title 40, sections 25 and 131).
24. Written responses to all comments that were received 10 or more days before the Central Valley Water Board hearing have been prepared and the draft Amendments, staff report and environmental checklist revised as appropriate in response to comments.
25. The Central Valley Water Board held a public hearing on 27 May 2010 for the purpose of receiving testimony on the draft Basin Plan Amendments. Notice of the public hearing was sent to all interested persons and published in accordance with California Water Code section 13244. Based on the record as a whole, including the draft Basin Plan Amendments, the environmental document, accompanying written documentation, and public comments received, the

Central Valley Water Board concurs with staff's conclusion that the Amendments will not result in significant adverse effects after implementing mitigations described in the Use Agreement and staff report.

26. Basin Plan Amendments must be approved by the State Water Board and Office of Administrative Law (OAL). The proposed Amendments become effective under State law after OAL approval.

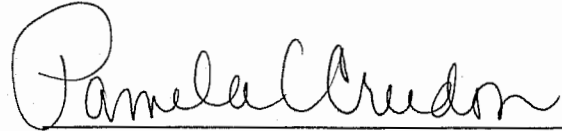
27. The Central Valley Water Board finds that the Amendments to the Basin Plan were developed in accordance with California Water Code section 13240, et seq.

**THEREFORE BE IT RESOLVED:**

1. Pursuant to California Water Code section 13240, et seq., the Central Valley Water Board, after considering the entire record, including all late revisions and including oral testimony at the hearing, hereby approves the staff report, which contains the environmental review of the proposed project, and adopts the Amendments to the Basin Plan as set forth in Attachment A.
2. The Executive Officer is directed to forward copies of the Basin Plan Amendments to the State Water Board in accordance with the requirements of California Water Code section 13245.
3. The Central Valley Water Board requests that the State Water Board approve the Basin Plan Amendments in accordance with the requirements of California Water Code sections 13245 and 13246 and forward it to OAL.
4. If during its approval process the Central Valley Water Board staff, State Water Board or OAL determines that minor, non-substantive corrections to the language of the Amendments are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Central Valley Water Board of any such changes.
5. Following approval of the Basin Plan Amendments by the OAL, the Executive Officer shall file a Notice of Decision with the Secretary for Resources in accordance with Public Resources Code section 21080.5, subsection (d)(2)(E), and California Code of Regulations, title 23, section 3781.
6. Staff is directed to update Order No. 5-01-234 to be consistent with the Basin Plan Amendments and consider the conditions and requirements in the 2010-2019 Agreement for Use of the San Luis Drain.
7. The Dischargers are directed to include their decision on the technical and economic feasibility of drainage treatment in the 1 January 2013 update to the Long-Term Drainage Management Plan required by Order No. 5-01-234. The report submitted on 1 January 2013 must include a plan demonstrating how

compliance with the prohibition and water quality objectives will be achieved, whether or not drainage treatment is determined to be feasible.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Central Valley Region, on 27 May 2010.

A handwritten signature in cursive script that reads "Pamela Creedon". The signature is written in black ink and is positioned above a horizontal line.

PAMELA C. CREEDON, Executive Officer

**Attachment A**  
**To**  
**Resolution No. R5-2010-0046**

**Basin Plan Amendments**

The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins is amended as presented below. Deletions are indicated as strikethrough text (~~deleted text~~) and shaded fields (~~deleted field~~). Additions are shown as underlined text (added text). Italicized text (*notation text*) is included to locate where the modifications will be made in the Basin Plan. All other text changes are shown accurately, however, formatting on the page may change.

*Under the Chapter IV heading: "Regional Water Board Prohibitions, Item 6 on page IV-26.00, make the following changes:*

b. The discharge of agricultural subsurface drainage water to Salt Slough and wetland water supply channels identified in Appendix 40 is prohibited after 10 January 1997, unless water quality objectives for selenium are being met. ~~This prohibition may be reconsidered if public or private interests prevent the implementation of a separate conveyance facility for agricultural subsurface drainage.~~

c. The discharge of agricultural subsurface drainage water to ~~Mud Slough (north)~~ and the San Joaquin River from Sack Dam to ~~the mouth of the Merced River~~ Mud Slough (north) is prohibited after 1 October 2010 unless water quality objectives for selenium are being met. The discharge of agricultural subsurface drainage water to Mud Slough (north) and the San Joaquin River from the Mud Slough confluence to the Merced River is prohibited after 31 December 2019 unless water quality objectives for selenium are being met. This prohibition may be reconsidered if public or private interests prevent the implementation of a separate conveyance facility for agricultural subsurface drainage to the San Joaquin River. The prohibition becomes effective immediately upon Board determination that timely and adequate mitigation, as outlined in the 2010-2019 Agreement for Continued Use of the San Luis Drain<sup>1</sup> has not been provided.

*Under the Chapter IV heading: "Agricultural Drainage Discharges in the San Joaquin River Basin" page IV-31.00, make the following changes:*

Per the amendment to the Basin Plan for San Joaquin River subsurface agricultural drainage, approved by the State Water Board in Resolution No.

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<sup>1</sup> United States Department of the Interior, Bureau of Reclamation, Central Valley Project, California and San Luis & Delta-Mendota Water Authority, Los Banos, CA, Agreement for Continued Use of the San Luis Drain for the period January 1 2010, through December 31, 2019.

96-078, as amended by Resolution No. R5-2010-0046 and incorporated herein, the following actions will be implemented.

1. In developing control actions for selenium, the Regional Board will utilize a priority system which focuses on a combination of sensitivity of the beneficial use to selenium and the environmental benefit expected from the action.
2. Control actions which result in selenium load reduction are most effective in meeting water quality objectives.
3. With the uncertainty in the effectiveness of each control action, the regulatory program will be conducted as a series of short-term actions that are designed to meet long-term water quality objectives.
4. Best management practices, such as water conservation measures, are applicable to the control of agricultural subsurface drainage.
5. Performance goals will be used to measure progress toward achievement of water quality objectives for selenium. Prohibitions of discharge and waste discharge requirements will be used to control agricultural subsurface drainage discharges containing selenium. Compliance with performance goals and water quality objectives for nonpoint sources will occur no later than the dates specified in Table IV-4 for Mud Slough (north) and the San Joaquin River from the Mud Slough confluence to the Merced River.
6. Waste discharge requirements will be used to control agricultural subsurface drainage discharges containing selenium and may be used to control discharges containing other toxic trace elements.
7. Selenium load reduction requirements will be incorporated into waste discharge requirements as effluent limits as necessary to ensure that the selenium water quality objectives in the San Joaquin River downstream of the Merced River inflow is achieved. The Board ~~intends to implement~~ adopted a TMDL for selenium in the San Joaquin River in 2001 after public review.

**---Additional changes are shown on the next page---**



**Table IV-4. Compliance Time Schedule for Meeting the 4-day Average and ~~Monthly Mean~~ Water Quality Objective for Selenium**

**Selenium Water Quality Objectives (in bold) and Performance Goals (in italics)**

Water Body/ <del>Water</del> Year Type <sup>1</sup>	<del>1-October</del> 1996	<del>1-October</del> 2002	<del>1-October</del> 2005	<del>1-October</del> 2010	<u>31</u> <u>December</u> <u>2015</u>	<u>31</u> <u>December</u> <u>2019</u>
Salt Slough and Wetland Water Supply Channels listed in Appendix 40	<b>2 ug/L</b> <b>monthly</b> <b>mean</b>					
San Joaquin River below the Merced River; Above Normal and Wet Water Year types <sup>1</sup>		<i>5 ug/L</i> <i>monthly</i> <i>mean</i>	<b>5 ug/L</b> <b>4-day</b> <b>avg.</b>			
San Joaquin River below the Merced River; Critical, Dry, and Below Normal Water Year types		<i>8 ug/L</i> <i>monthly</i> <i>mean</i>	<i>5 ug/L</i> <i>monthly</i> <i>mean</i>	<b>5 ug/L</b> <b>4-day</b> <b>avg.</b>		
Mud Slough (north) and the San Joaquin River from <del>Sack Dam</del> the Mud Slough <u>confluence</u> to the Merced River				<b>5 ug/L</b> <b>4-day</b> <b>avg.</b>	<i>15 ug/L</i> <i>monthly</i> <i>mean</i>	<b>5 ug/L</b> <b>4-day</b> <b>avg.</b>

<sup>1</sup> The water year classification will be established using the best available estimate of the 60-20-20 San Joaquin Valley water year hydrologic classification (as defined in Footnote 17 for Table 3 in the State Water Resources Control Board's *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary*, May 1995) at the 75% exceedance level using data from the Department of Water Resources Bulletin 120 series. The previous water year's classification will apply until an estimate is made of the current water year.