

Revisions to Waste Discharge Requirements for San Luis & Delta-Mendota Water Authority and United States Department of the Interior Bureau of Reclamation Surface Water Discharges from the Grassland Bypass Project

Grassland Bypass Project Order R5-2015-0094

Response to Comments

The Central Valley Regional Water Quality Control Board (Central Valley Water Board or “Board”) has provided an opportunity for the public to submit written comments on the proposed revisions to Waste Discharge Requirements for San Luis & Delta-Mendota Water Authority and United States Department of the Interior Bureau of Reclamation Surface Water Discharges from the Grassland Bypass Project (referred to as the “tentative revised Order” or “Order”) under the Order listed above. The primary goal of the revisions is to address surface water discharges from the Grassland Drainage Area that will occur after 31 December 2019. This document contains written responses to comments that were timely received on the tentative revised Order.

The tentative revised Order was released for public review on 7 October 2019 with the 30-day comment period ending on 6 November 2019. Seven (7) comment letters received by the deadline were submitted by:

1. Patricia Schifferle, Pacific Advocates
2. Stephan C. Volker, Attorney for North Coast Rivers Alliance, et al.
3. Noah Oppenheim, Pacific Coast Federation of Fishermen’s Association, et al.
4. Leah Orloff, Contra Costa Water District
5. Gary Bobker, The Bay Institute
6. Ryan Hernandez, Contra Costa County
7. Karna E. Harrigfeld, Attorney for Stockton East Water District

This response to comments includes responses that apply to broader issues addressing a theme recurring in multiple comments (master responses), and responses to individual comments (specific responses). The master responses are given first, followed by itemized comments and responses for each letter.

There are six key issues addressed by master responses:

1. Surface Water Quality Management Plan/Drainage Management Plan Requirements
2. Selenium Water Quality Objective is Not Protective
3. Historical Reductions in Monitoring Not Warranted, Additional Monitoring Needed
4. NPDES Permit Needed for Discharges from the Grassland Bypass Project
5. 2009 EIS/EIR and 2019 Addendum Inadequate for Compliance with the California Environmental Quality Act

6. Term of Tentative Revised Order is too Long

Master Responses

1. Surface Water Quality Management Plan/Drainage Management Plan Requirements

Comments summary

A drainage management plan/surface water quality management plan should be developed upon adoption of the tentative revised Order to address constituents that pose known threats to water quality (e.g., selenium and salts) rather than postponed until triggered by water quality exceedances. Management practices, performance standards, and reporting obligations should be included in the plan. The adaptive management approach to be employed by the Dischargers should be further defined. The current discharge of salt should be defined so that concentrations are not permitted to rebound and specific load limits for salt should be included in the tentative revised Order. A storm event that would permit discharges of stormwater to the San Luis Drain from the Grassland Drainage Area should be quantified.

Master Response 1

The Drainage Management Plan requirement of the tentative revised Order has been updated to require the Dischargers to prepare and submit a new Drainage Management Plan by 6 December 2020. The Drainage Management Plan will replace the Long-term Drainage Management Plan first required under Order No. 98-171. The Drainage Management Plan will provide details of the management strategy that will be implemented by the Dischargers. The draft Drainage Management Plan will be made available for a public review and comment period and requires Executive Officer approval. The Drainage Management Plan will include:

- An approach that addresses selenium, boron, molybdenum, and salt discharges;
- Identification of specific control or treatment methods;
- Operation and maintenance procedures for specific control or treatment methods (e.g., discrete triggers for implementing remote shutoff of tile sumps and routing of stormwater to short-term storage basins), as well as discrete criteria for storm events that result in discharge from the Grassland Bypass Project;
- Timelines for implementation of specific control or treatment methods; and
- A specific schedule and milestones for achieving compliance with the *Water Quality Control Plan, Fifth Edition, for the Sacramento River and San Joaquin River Basins* (Basin Plan) objectives and other limitations.

The Drainage Management Plan will also include the Dischargers' decision on the technical and economic feasibility of drainage treatment, which was initially required for inclusion in the 1 January 2013 update to the Long Term Drainage Management Plan by Order No. 5-01-234. The Drainage Management Plan must identify how compliance with the prohibition and selenium water quality objective will be achieved, whether or not drainage treatment is determined to be feasible.

The Dischargers will prepare annual updates to the Drainage Management Plan that discusses progress towards meeting milestones and any changes to the management strategy, which may be provided as an attachment to the Annual Monitoring Report.

Other parameters monitored under the Order that exceed objectives or trigger limits more than once in three years will be required to prepare a Surface Water Quality Management Plan according to MRP-1 of the Order.

In addition to the Drainage Management Plan, the Central Valley Water Board adopted amendments to the Basin Plan on 31 May 2018 to implement the Salt and Nitrate Management Plan that was developed through the Central Valley Salinity Alternatives for Long-term Sustainability initiative (CV-SALTS). The amendments include, in part, implementation provisions for the discharges of salt and nitrate, collectively referred to as the Salt and Nitrate Control Program. The amendments have been revised and adopted by the State Water Board and must be approved by the Office of Administrative Law prior to becoming effective. The Dischargers must comply with applicable provisions of the Salt and Nitrate Control Program upon such provisions becoming effective. Dischargers who do not comply with the requirements of the Salt and Nitrate Control Program will be subject to a prohibition of discharge and associated enforcement actions as stated in the amendments.

2. Selenium Water Quality Objective is Not Protective

Comments summary

The selenium water quality objective is not protective of beneficial uses and public trust resources and does not comply with the United States Environmental Protection Agency's proposed selenium criteria for the San Francisco Bay and Delta. The tentative revised order should include a 2 part per billion (ppb) performance goal and the Basin Plan process for revising the water quality objective should be initiated to ensure that fish and aquatic invertebrates are protected, as well as waterfowl. Biological monitoring should be completed.

Master Response 2

The water quality objectives for selenium included in the tentative revised Order are water quality requirements adopted in the Basin Plan. For Mud Slough (north) and the San Joaquin River from the Mud Slough Confluence to the Merced River the selenium water quality objective is 5 µg/L (4-day average). For Salt Slough and constructed and re-constructed water supply channels in the Grassland watershed, listed in Appendix 40 of the Basin Plan, the selenium water quality objective is 2 µg/L (monthly mean). The Basin Plan states on page 4-58 "The selenium water quality objective for the wetland channels can not be achieved without removal of drainage water from these channels." On page 4-60 the Basin Plan states that "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." Therefore, subsurface agricultural drainage has been permitted to be routed around higher priority wetland channels through the San Luis Drain to protect this sensitive habitat. The 2 µg/L (monthly mean) water quality objective could not be achieved in the wetland channels with the presence of subsurface agricultural drainage water and it is unlikely that it could be achieved in Mud Slough with the presence of subsurface agricultural drainage water.

The Basin Plan includes consideration of what is reasonable and feasible in the adoption of water quality objectives. Due to naturally occurring selenium in the marine origin soils present in the Grassland Drainage Area, a 15 µg/L (monthly mean) performance goal for selenium, applicable through 31 December 2019, and progressively lower load limits have resulted in the Dischargers' elimination of subsurface agricultural drainage discharge during the irrigation season. However, even with the planned installation of a remote shutoff system for tile drain sumps to assist in the segregation of subsurface agricultural drainage from stormwater and the expansion of the network of existing short-term storage basins to retain peak storm flows, it is possible that occasional discharge to Mud Slough will still occur during significant storm events (to be defined in the Drainage Management Plan, see Master Response 1). Regional Board staff recognizes the Dischargers' effort to achieve compliance with the 5 µg/L (4-day average) water quality objective in Mud Slough, while also ensuring that subsurface agricultural drainage is segregated from wetland channels, as much as possible. This is an important balancing act that has taken substantial effort, in the absence of which stormwater has the potential to pond against and flow into wetland channels transporting naturally occurring selenium accumulated along its course into sensitive wetland habitat.

Additional language has been added to the tentative revised Order recognizing a presentation (*Standing too Close to the Elephant: Addressing Scales in Restoration and Fisheries Conservation*) that was made on 22 October 2019 and included information about spinal deformities observed in juvenile splittail in 2011 attributed by the researchers, at least in part, to the presence of selenium in the San Joaquin River. The Central Valley Water Board is working with the scientists who completed the study to gather additional information about the potential selenium impacts. In addition, re-opener language has been added to the tentative revised Order to address scientific evidence that demonstrates that revisions or additional requirements are needed in the tentative revised Order to ensure that water quality standards are being met. In addition, this information will be used to inform any decision making on selenium undertaken during the Basin Planning process.

The draft selenium criteria proposed by the United States Environmental Protection Agency does not apply to Mud Slough (north) and the San Joaquin River from the Mud Slough Confluence to the Merced River, where the site-specific water quality objective of 5 µg/L (4-day average) has been adopted by the Basin Plan. Selenium monitoring required in the tentative revised Order is included to ensure the Dischargers comply with the Basin Plan water quality criteria.

The Biological Opinion issued by the United States Fish and Wildlife Service includes requirements for biological monitoring. A new Biological Opinion will be needed to support a new Use Agreement. Re-opener language has been added to the tentative revised Order to state that if the biological monitoring required under the Biological Opinion is not completed, or found to be inadequate to protect beneficial uses, the tentative revised Order maybe reopened, or the Executive Officer may revise the Monitoring and Reporting Program, to include additional monitoring requirements for the Dischargers.

3. Historical Reductions in Monitoring Not Warranted, Additional Monitoring Needed

Comments summary

Adequate monitoring is needed. Bureau of Reclamation reductions in monitoring have occurred without meeting the contract provisions contained in the 3rd Use Agreement. The tentative revised Order should include monitoring in Salt Slough and the south Grasslands wetland channels. No technical justification or rationale for reductions in monitoring, that occurred prior to the proposed revisions, at stations A, B, C, I2, F, J, K, L/L2, M/M2, G, and H was identified. The tentative revised Order should include daily monitoring of electrical conductivity just prior to and during the occurrence of stormwater discharge consistent with the daily monitoring of flow and selenium. Weekly monitoring of flow, selenium, and salinity at sites C and F, should also be included or required to be reported where it is already monitored by a different program.

Master Response 3

Additional monitoring has been added to the tentative revised Order at sites A, B2, B3, D, G, H2, and N for parameters that vary by site including flow, field measurements, electrical conductivity (daily and weekly), and selenium (daily and weekly). Daily monitoring for electrical conductivity at sites A, B2, D, G, H2, and N will be required year-round as is required for selenium. In addition, while flow and electrical conductivity are the only parameters required for monitoring at site H2, site R (San Joaquin River at China Island Unit) is located on the same stretch of the San Joaquin River between the confluences with Mud Slough (north) and the Merced River, and is located upstream of site H2 closer to the discharge from Mud Slough.

The Dischargers are required to conduct stormwater monitoring in wetland channels at sites J (Camp 13 Drain), K2 (Agatha Canal), L2 (San Luis Canal), and M2 (Santa Fe Canal), which may receive water from the Grassland Bypass Project in the event that the capacity of the San Luis Drain is exceeded. Site C, located on Mud Slough (north) upstream of the San Luis Drain, and Site F, located on Salt Slough at Lander Avenue, are currently monitored by the Westside San Joaquin River Watershed Coalition under Order R5-2014-0002. Sites L3 and M3, on the San Luis Canal and Santa Fe Canal are also monitored by the Westside Coalition. The tentative revised Order requires that the Dischargers analyze all readily available monitoring data in their Annual Monitoring Report including at relevant sites monitored by the Westside Coalition.

The Biological Opinion issued by the United States Fish and Wildlife Service includes requirements for biological monitoring. A new Biological Opinion will be needed to support a new Use Agreement.

4. NPDES Permit Needed for Discharges from the Grassland Bypass Project

Comments summary

Grassland Bypass Project discharges include activities that are not related to crop production and are commingled with stormwater, which require a National Pollutant Discharge Elimination (NPDES) permit.

Master Response 4

On 6 September 2019, the United States Court of Appeals for the Ninth Circuit issued a ruling that reversed and remanded for the district court to reconsider the claims related to the necessity to obtain a NPDES permit for the Grassland Bypass Project¹. The Court held that under 33 U.S.C. section 1342(l)(1), discharges must be entirely from return flows related to crop production to qualify for the exemption from NPDES permit requirements for return flows from irrigated agriculture. The tentative revised Order is not a NPDES permit, nor does it permit any discharges from activities other than those related to crop production. If, after final deposition of the case, it is determined that additional permitting is needed for discharges from the Grassland Drainage Area, the Central Valley Water Board will begin the appropriate permitting process.

5. 2009 EIS/EIR and 2019 Addendum Inadequate for Compliance with the California Environmental Quality Act

Comment summary

The requirements of the California Environmental Quality Act (CEQA) are not sufficiently met by the tentative revised Order and the 2019 Addendum to the 2009 EIS/EIR fails to study and disclose the significant impacts of the Grassland Bypass Project. The 2009 EIS/EIR and 2019 Addendum are inadequate for compliance with CEQA and a comprehensive cumulative effects analysis on the downstream impacts of the Grassland Bypass Project stormwater plan is needed.

Master Response 5

On 10 October 2019, San Luis & Delta-Mendota Water Authority, as the lead agency for CEQA, approved the 2019 Addendum to the 2009 EIS/EIR. As the lead agency, the San Luis & Delta-Mendota Water Authority determined that there were some changes or additions to the project since the previous Environmental Impact Report (EIR), but that none of the specific scenarios listed in Public Resources Code section 21166 and CEQA Guidelines section 15162 necessitated a new or supplemental EIR. The Addendum states that “substantial evidence demonstrates that the prior CEQA analyses retain their relevance; that the 2009 Final EIS/EIR fully analyzed and mitigated, where feasible, all potentially significant environmental impacts, if any, that would result from the modified project.” (Addendum, p. 1-8.) As the responsible agency pursuant to CEQA (Public Resources Code, section 21069), the Central Valley Water Board must presume that the Addendum to the 2009 EIS/EIR comports with the requirements of CEQA and is valid when making its determinations and findings. (Public Resources Code, section 21167.3.) In this case, the Central Valley Water Board must presume that the Addendum to the 2009 EIS/EIR appropriately studied and mitigated the impacts of the Grasslands Bypass Project. Only if a subsequent EIR was required would the Central Valley Water Board become the lead agency. However, none of the scenarios listed in Public Resources Code section 21166 and CEQA Guidelines section 15162 are met, and so a subsequent EIR is not required. The Central Valley Water Board does not believe that there are new significant environmental effects or a substantial increase in the severity of previously identified significant effects that necessitate a subsequent EIR. (Cal. Code of Regs., tit. 14,

¹ Pacific Coast Federation of Fishermen’s Associations v. Donald R. Glaser (9th Cir. 2019), 937 F.3d 1191.

section 15162, subd. (a)(1).) The Grasslands Bypass Project does have impacts due to selenium and other pollutants as noted in the Addendum to the 2009 EIS/EIR, but that the Grassland Bypass Project has demonstrated significant water and habitat quality improvements and further modifications are implemented specifically to offset the impacts of the Grassland Bypass Project.

6. Term of Tentative Revised Order is too Long

Comment summary

The tentative revised Order should include a re-opener at least every five years, less than the 2045 timeline of the Long-term Storm Water Management Plan and include specific re-openers for findings associated with new information about splittail deformities from selenium, reassessment of the selenium water quality objective, and issuance of an NPDES permit.

Master Response 6

Language was added to the tentative revised Order requiring that no later than 31 December 2024, and every five years thereafter, Central Valley Water Board staff will present to the Board an update on the Grassland Bypass Project, project compliance with Order requirements, and any additional information needed to determine whether the Order should be revised. In addition, a re-opener was added to the tentative revised Order so that scientific evidence that supports the need for revisions to, additional, or new requirements within the WDRs for the Dischargers to ensure that water quality standards are being met, including additional information about splittail deformities, may be addressed. The tentative revised Order is not an NPDES permit and its adoption will not prevent the Central Valley Water Board from beginning the appropriate permitting process if it is determined that additional permitting is needed for discharges from the Grassland Drainage Area.

Specific Responses

Comment Letter 1

1-1. Letter 1, Comment 1

Comment summary:

A drainage management plan that includes monitoring requirements, performance standards, reporting obligations, measurable milestones, and consequences for future violations should be required for the Grassland Bypass Project to ensure management of drainage from the San Luis Unit is protective of downstream beneficial uses. The tentative revised Order is insufficient for meeting this need.

Response:

See Master Response 1.

1-2. Letter 1, Comment 2

Comment summary:

Discharges to Mud Slough will likely have a significant impact on special-status species, as well as anadromous fish species that utilize portions of the San Joaquin River. Downstream fish tissue and biological monitoring is needed, as well as the implementation of reasonable and

prudent measures contained in the United States Fish and Wildlife Service Biological Opinion, which the Bureau of Reclamation has failed to implement.

Response:

See Master Response 2.

1-3. Letter 1, Comment 3

Comment summary:

Adequate monitoring is necessary to ensure that public health, water quality, and endangered species are protected. Bureau of Reclamation reductions in monitoring have occurred without meeting the contract provisions contained in the 3rd Use Agreement.

Response:

See Master Response 3.

Comment Letter 2

2-1. Letter 2, Comment 1

Comment summary:

Grassland Bypass Project discharges include activities that are not related to crop production, which require a NPDES permit.

Response:

See Master Response 4.

2-2. Letter 2, Comment 2

Comment summary:

The adaptive management approach that will be employed by the Dischargers to address exceedances of the selenium water quality objective is too vague to ensure protection of water quality. The WDRs will permit selenium discharges at levels that are above the water quality objective, if the water quality objective is met in the San Joaquin River at Crows Landing.

Response:

The tentative revised Order will implement the Basin Plan prohibition of 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 after 31 December 2019 unless water quality objectives for selenium are being met. The selenium water quality objective applies in Mud Slough (north), as well as in the San Joaquin River from the Mud Slough Confluence to the Merced River and exceedances in these waterbodies are not permitted by the tentative revised Order.

See also Master Response 1.

2-3. Letter 2, Comment 3

Comment summary:

The Dischargers must obtain an NPDES permit for the Grassland Bypass Project.

Response:

See Master Response 4.

2-4. Letter 2, Comment 4

Comment summary:

The water quality objective in the Basin Plan is not protective of beneficial uses and public trust resources.

Response:

See Master Response 2.

2-5. Letter 2, Comment 5

Comment summary:

The requirements of the California Environmental Quality Act (CEQA) are not sufficiently met by the WDRs and the 2019 Addendum to the 2009 EIS/EIR fails to study and disclose the significant impacts of the Grassland Bypass Project.

Response:

See Master Response 5.

2-6. Letter 2, Comment 6

Comment summary:

The tentative revised Order violates the Delta Reform Act and has not addressed whether the Project is consistent with the Delta Plan or the co-equal goals of the Delta Reform Act. A “covered action” requires a State agency to prepare a written certification of consistency with the Delta Plan.

Response:

The tentative revised Order does not violate the Delta Reform Act. The Delta Reform Act requires that a State agency that proposes to approve a project must first determine whether the project is a “covered action” pursuant to Water Code section 5001(j)(1)(A) through (D). A “covered action” must meet all screening criteria found in the regulatory language. Additionally, a “covered action” does not include any plan, program, or project that is exempted pursuant to Water Code section 85057.5(b). Regional Board staff have determined that the project is not a “covered action” because it does not meet all screening criteria in the regulatory language (5001(j)(1)), and it is exempted per Water Code section 85057.5(b)(1) as a regulatory action of a state agency.

Comment Letter 3

3-1. *Letter 3, Comment 1*

Comment summary:

The CEQA analysis completed in the 2009 EIS/EIR and 2019 Addendum are insufficient because discharges are proposed to continue beyond 2019.

Response:

See Master Response 5.

3-2. *Letter 3, Comment 2*

Comment summary:

An NPDES permit is required because discharges from the Grassland Bypass Project are commingled.

Response:

See Master Response 4.

3-3. *Letter 3, Comment 3*

Comment summary:

The water quality objective for selenium is not protective.

Response:

See Master Response 2.

3-4. *Letter 3, Comment 4*

Comment summary:

The 2009 EIS/EIR and 2019 Addendum are inadequate for compliance with CEQA and a comprehensive cumulative effects analysis on the downstream impacts of the Grassland Bypass Project stormwater plan is needed.

Response:

See Master Response 5.

3-5. *Letter 3, Comment 5*

Comment summary:

The water quality objective for selenium in the Basin Plan does not comply with the United States Environmental Protection Agency's proposed selenium criteria for the San Francisco Bay and Delta.

Response:

See Master Response 2.

3-6. Letter 3, Comment 6

Comment summary:

The tentative revised Order should include biological monitoring requirements, performance standards, and enforcement and mitigation provisions for the San Joaquin River Water Quality Improvement Project and the short-term storage basins.

Response:

See Master Responses 1 and 3.

3-7. Letter 3, Comment 7

Comment summary:

The tentative revised Order should include monitoring in Salt Slough and the south Grasslands wetland channels. No technical justification or rationale for reductions in monitoring, that occurred prior to the proposed revisions, at stations A, B, C, I2, F, J, K, L/L2, M/M2, G, and H was identified.

Response:

See Master Response 3.

3-8. Letter 3, Comment 8

Comment summary:

Treatment was a significant component of the plan to reduce selenium discharges to the San Luis Drain in the 2009 EIS/EIR and treatment is not discussed in the stormwater plan.

Response:

See Master Response 1.

3-9. Letter 3, Comment 9

Comment summary:

The long-term viability of the San Joaquin River Water Quality Improvement Project is uncertain, and reuse of agricultural drainage does not eliminate the loading of wastes.

Response:

See Master Responses 1, 5, and 6.

3-10. Letter 3, Comment 10

Comment summary:

Land retirement should be implemented to reduce eliminate drainage at its source.

Response:

See Master Response 1. It is outside of the authority of the Central Valley Water Board to dictate the method the Discharges employ to achieve compliance with the Basin Plan and tentative revised Order.

Comment Letter 4

4-1. *Letter 4, Comment 1*

Comment summary:

The tentative revised Order should include a re-opener at least every five years due to the uncertainties associated with selenium impacts on fish and salt loads discharged during storm events.

Response:

See Master Response 6.

4-2. *Letter 4, Comment 2*

Comment summary:

Due to the elevated concentrations of salts already observed in downstream waterbodies, a surface water quality management plan should be required immediately rather than postponing the requirement until after an exceedance of the performance target has occurred. The tentative revised Order should also quantitatively define the current discharge level for salt to ensure that the Dischargers are complying with CV-SALTS requirement to maintain it.

Response:

See Master Response 1.

Comment Letter 5

5-1. *Letter 5, Comment 1*

Comment summary:

The water quality objective for selenium is not protective of fish and wildlife beneficial uses and the tentative revised Order should include a 2 ppb performance goal.

Response:

See Master Response 2.

5-2. *Letter 5, Comment 2*

Comment summary:

The Grassland Bypass Project was intended to eliminate agricultural subsurface discharges from the San Joaquin River and the tentative revised Order should include a prohibition of discharge from agricultural subsurface drainage to Mud and Salt Sloughs.

Response:

The Basin Plan establishes the prohibition of discharge of agricultural subsurface drainage water to Mud Slough (north) after 31 December 2019 unless water quality objectives for selenium are being met and to Salt Slough and the wetland water supply channels identified in Appendix 40 of the Basin Plan unless the provisions of the Storm Event Plan are being implemented, or the water quality objectives for selenium are being met. The tentative revised

Order has been developed to implement the requirements of the Basin Plan, but it cannot modify those requirements.

5-3. Letter 5, Comment 3

Comment summary:

The tentative revised Order should include a shorter term (than the 2045 timeline of the Long-term Storm Water Management Plan) and include specific re-openers for findings associated with new information about splittail deformities from selenium, reassessment of the selenium water quality objective, and issuance of an NPDES permit.

Response:

See Master Response 6.

5-4. Letter 5, Comment 4

Comment summary:

The tentative revised Order should include a specific, quantified definition of a storm event that would permit discharges of stormwater to the San Luis Drain from the Grassland Drainage Area.

Response:

See Master Response 1.

Comment Letter 6

6-1. Letter 6, Comment 1

Comment summary:

A delay of adoption of the tentative revised Order should be considered until a new Use Agreement can be completed that specifies the conditions under which the Grassland Bypass Project would be operated, and discharges occur.

Response:

A Drainage Management Plan containing the requested information is required to be submitted by 6 December 2020. It is anticipated that a new Use Agreement will be completed in early 2020 and that the conditions established in the Use Agreement would be incorporated into this plan. Alternatively, the conditions that would result in discharges from the Grassland Bypass Project must be defined in the Drainage Management Plan.

See also Master Response 1.

6-2. Letter 6, Comment 2

Comment summary:

The tentative revised Order should be limited to a period of five years, consistent with the draft Use Agreement (31 March 2019) that proposed an initial 5-year term, which will allow sufficient data to be collected to describe the water quality and environmental impacts of stormwater discharges.

Response:

See Master Response 6.

*6-3. Letter 6, Comment 3***Comment summary:**

The tentative revised Order must prohibit all discharges of tailwater and agricultural drainage to Mud Slough and Salt Slough, which was a condition of the 2009 Use Agreement, regardless of whether the water quality objectives for selenium are being met.

Response:

The Basin Plan establishes the prohibition of discharge of agricultural subsurface drainage water to Mud Slough (north) after 31 December 2019 unless water quality objectives for selenium are being met and to Salt Slough and the wetland water supply channels identified in Appendix 40 of the Basin Plan unless the provisions of the Storm Event Plan are being implemented, or the water quality objectives for selenium are being met. The tentative revised Order has been developed to implement the requirements of the Basin Plan, but it cannot modify those requirements.

*6-4. Letter 6, Comment 4***Comment summary:**

The tentative revised Order should set a specific salinity objective to ensure salt, as well as selenium, is addressed and does not increase independently of selenium as a result of reuse.

Response:

The tentative revised Order has been developed to implement the requirements of the Basin Plan. Monthly and annual salt load limits established in the Use Agreements were developed by the Dischargers and are separate from the requirements of the Basin Plan. The Dischargers will be required to develop a Drainage Management Plan (see Master Response 1) that includes specific control or treatment measures for salt discharges.

*6-5. Letter 6, Comment 5***Comment summary:**

The tentative revised Order should include daily monitoring of electrical conductivity just prior to and during the occurrence of stormwater discharge consistent with the daily monitoring of flow and selenium. Weekly monitoring of flow, selenium, and salinity at sites C and F, should also be included or required to be reported where it is already monitored by a different program.

Response:

See Master Response 3.

*6-6. Letter 6, Comment 6***Comment summary:**

The tentative revised Order should provide a definition of a storm event and trigger to allow stormwater discharges to ensure discharges are only occurring during high rainfall events when

more runoff is generated than can be handled by the reuse area and short-term storage basins. Discharge should no longer occur for agricultural drainage when there has been little or no precipitation.

Response:

See Master Response 1.

6-7. Letter 6, Comment 7

Comment summary:

The tentative revised Order should require the Dischargers to participate in monitoring of fish tissue in the south and central Delta. Based on the results of this monitoring additional management actions may be needed.

Response:

See Master Response 2 and 3.

6-8. Letter 6, Comment 8

Comment summary:

The tentative revised Order should require that a surface water quality management plan be prepared within six months of the adoption of the tentative revised Order so that additional management practices can be put into place as soon as possible.

Response:

See Master Response 1.

Comment Letter 7

7-1. Letter 7, Comment 1

Comment summary:

The tentative revised Order should include a discussion of how the Grassland Bypass Project affects salinity concentrations downstream on the San Joaquin River and how these discharges may impact the need of Reclamation to increase discharges from New Melones on the Stanislaus River or otherwise provide mitigation.

Response:

Two figures were added to the tentative revised Order that show the electrical conductivity in Mud Slough below the San Luis Drain (site D) and in the San Joaquin River at Crows Landing (site N) from 1997 through 2018 and 2019, respectively. These figures show elevated measurements of electrical conductivity in the San Joaquin River at Crows Landing from mid-2013 into 2016 that lag similar increases in electrical conductivity in Mud Slough below the San Luis Drain that occurred from mid-2013 to mid-2015. 2013, 2014, and 2015 were classified as critical water year types and 2016 was classified as a dry/below normal water year type. In addition, Master Response 1 describes requirements in the tentative revised Order for the development of a Drainage Management Plan that will include specific control or treatment methods for constituents including salt.

7-2. Letter 7, Comment 2

Comment summary:

The tentative revised Order should include monthly and annual salt load limits consistent with the previous two Use Agreements.

Response:

The tentative revised Order has been developed to implement the requirements of the Basin Plan. Monthly and annual salt load limits established in the Use Agreements were developed by the Dischargers and are separate from the requirements of the Basin Plan. The Dischargers will be required to develop a Drainage Management Plan (see Master Response 1) that includes specific control or treatment measures for salt discharges.

7-3. Letter 7, Comment 3

Comment summary:

Attachment A should include figures displaying the salt concentrations at Mud Slough below the San Luis Drain, Salt Slough, and in the San Joaquin River.

Response:

Two figures were added to Attachment A that show the electrical conductivity in Mud Slough below the San Luis Drain (site D) and in the San Joaquin River at Crows Landing (site N) from 1997 through 2018 and 2019, respectively. A figure was not added for electrical conductivity in Salt Slough because Salt Slough is located upstream of the discharge point from the Grassland Bypass Project and the Dischargers are not required to perform monitoring at this location.

7-4. Letter 7, Comment 4

Comment summary:

Any drainage management plan must specifically address how this drainage will meet the Basin Plan objectives for salinity in the San Joaquin River, since implementation of the Real Time Management Program has been delayed.

Response:

See Master Response 1.

7-5. Letter 7, Comment 5

Comment summary:

Compliance with the Basin Plan objectives for salinity, updated in May 2018, for the San Joaquin River from the Merced Confluence to Vernalis should be required in the tentative revised Order and included in the prohibition for selenium.

Response:

The prohibition of discharge included in the tentative revised Order is a Basin Plan requirement that is specific to selenium. The Dischargers are required to comply with all applicable Basin Plan requirements and water quality criteria. See also Master Response 1.

7-6. Letter 7, Comment 6

Comment summary:

The proposed timeline of the tentative revised Order that extends through 2045 is too long and continued discharges to the San Luis Drain should end sooner.

Response:

See Master Response 6.