

EXHIBIT C

Mitigation Monitoring & Reporting Program

INTRODUCTION

The requirement for a mitigation monitoring or reporting program is introduced in Section 15091 of Title 14, California Code of Regulations, Section 3, Guidelines for Implementation of the California Environmental Quality Act. This section directs the public agency approving or carrying out the Proposed Project (San Luis & Delta-Mendota Water Authority [Authority]) to make specific written findings for each significant impact identified in the EIR. When making the required findings, the agency will also adopt a program for reporting on or monitoring the changes that it has either required in the Project or made a condition of approval to avoid or substantially lessen significant environmental effects. These mitigation measures must be fully enforceable through permit conditions, agreements, or other measures.

Section 15097 was added to the CEQA Guidelines on October 23, 1998. It requires the public agency to adopt a program for monitoring or reporting on the revisions that it has required in the Project and the measures it has imposed to mitigate or avoid significant environmental effects. Reporting or monitoring responsibilities may be delegated to another public agency or private entity. However, until mitigation measures have been completed, the lead agency (Authority) remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.

The Authority may choose whether its program will monitor mitigation, report on mitigation, or both.

- Reporting generally consists of a written compliance review that is presented to the decision-making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. It is suited to projects that have readily measurable or quantitative mitigation measures or that already involve regular review.
- Monitoring is generally an ongoing or periodic process of project oversight. It is suited to projects with complex mitigation measures that are expected to be implemented over a period of time.

This mitigation program report is comprised of a matrix of impacts and mitigation for the proposed Grassland Bypass Project and Long-term Storm Water Management Plan (LTSWMP) followed by a description of the two principal mitigation monitoring activities: the Grassland Bypass Project Compliance Monitoring Plan and *A Storm Event Plan for Operating the Grassland Bypass Project* (GAF 1997). The mitigation monitoring program for the Final EIS/EIR, as modified by the Addendum, is recommended to be a monitoring program that will comply with the Monitoring and Reporting Program as required by Waste Discharge Requirements to be adopted by the Regional Board and will be similar to the current plan.

C.1 MATRIX

The mitigation monitoring and reporting program for meeting the Grassland Bypass Project objectives for the 2010 Use Agreement is provided in Table 1. Table 1 includes all impacts for the proposed Grassland Bypass Project/2010 Use Agreement that were identified as significant or potentially significant. Impacts that are significant or potentially significant, but unavoidable,

are those where no mitigation is feasible. Table 2 shows the same information for impacts identified in the 2019 addendum. These are in addition to the impacts previously identified in the 2009 EIS/EIR and shown in Table 1. For impacts that are less than significant, mitigation is not required by CEQA. The text of each impact and mitigation measure is taken from the previous chapters of the 2009 EIS/EIR and the 2019 Addendum.

For each impact and mitigation measure, the matrix identifies the implementation action required, the timing requirements for implementation, and the agency responsible for ensuring that the action occurs. Under the Addendum, the Central Valley Regional Water Quality Control Board (Regional Board) is responsible for evaluating monitoring data and compliance with the Waste Discharge Requirements for the project. The Authority is responsible for implementing all monitoring activities and mitigation projects, as appropriate, regarding all aspects of the Project and reporting to the Regional Board.

C.2 COMPLIANCE MONITORING PLAN

Compliance with the terms and conditions in the 2010 Use Agreement, as modified by the Addendum, requires a monitoring plan and reporting of the results. Waste Discharge Requirements issued for the LTSWMP will include requirements for an Annual Monitoring Report that provides monitoring data and discussion of the status of mitigation measures, and:

- to provide water quality data for purposes of determining compliance with water quality objectives under the Waste Discharge Requirements issued for the LTSWMP
- to provide biological data to allow an assessment of whether or not any environmental impacts constitute Unacceptable Adverse Environmental Effects that have resulted from the LTSWMP
- to provide data on flows, sediment levels, distribution, and selenium content in discharges from the San Luis Drain, and
- to provide data to be utilized as appropriate to meet requirements of biological opinions issued in relation to this Agreement

Table 1 Mitigation Monitoring and Reporting Program for Grassland Bypass Project, 2010-2019

Identified Impact	Mitigation Measures	Implementation Action	Timing Requirements	Reporting Responsibility
<p>4.2.4.2.4 Additional sediment would accumulate in the Drain over the duration of the Proposed Action, 2010-2019. This is a potentially significant impact compared to existing conditions. After mitigation, the impact is less than significant.</p>	<p>Mitigation is to monitor the accumulation and remove the sediments in accordance with a Sediment Management Plan (Appendix B)</p>	<p>Approve Sediment Management Plan. Consult with Regional Board on preferred application area.</p>	<p>Complete Plan by 2025. Sediment removal to be determined.</p>	<p>Authority to provide progress reports to Regional Board</p>
<p>6.2.2.2.1 Special status species: Special status species that forage in the SJRIP reuse area may experience significant adverse impacts as compared to existing conditions, due to increases in Se soil concentrations and potential for increased ponding resulting in increased Se bioaccumulation. These species include the San Joaquin kit fox, bald eagle, Swainson's hawk, burrowing owl, northern harrier, tricolored blackbird, loggerhead shrike, and mountain plover, giant garter snake, and pallid and western red bats.</p>	<p>To be identified in Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service.</p> <p>Measure 2: Reduce exposure potential by reducing attractiveness of irrigation ditches for nesting (Section 6.2.2.4)</p> <p>Measure 3: Reduce exposure potential by hazing birds from nesting near, and foraging in, irrigation ditches. (Section 6.2.2.4)</p> <p>Measure 4: Implement flooded field contingency plan.</p> <p>Measure 5: Provide compensation breeding habitat if other measures fail.</p>	<p>As required by the U. S. Fish and Wildlife Service consistent with the Biological Opinion.</p> <p>As required by CDFW.</p>	<p>To be determined.</p>	<p>Authority to provide progress reports to Regional Board</p>
<p>6.2.2.2.1 Special Status Species: Construction and ground disturbance activities associated with the expansion of the reuse facilities could reduce the breeding success of burrowing owl or San Joaquin kit fox if burrows or dens that are utilized by these species are present within ground disturbance areas. Therefore, the reuse facilities would have unlikely but potentially significant adverse impacts to burrowing owl and San Joaquin kit fox, if these species are present, compared to existing conditions.</p>	<p>To be identified in Endangered Species Act Section 7 consultation with the U.S. Fish and Wildlife Service.</p> <p>Measure 1: Avoiding burrowing owls through preconstruction survey and buffer area (Section 6.2.2.4)</p>	<p>As required by the U. S. Fish and Wildlife Service consistent with the Biological Opinion.</p> <p>As required by CDFW.</p>	<p>To be determined.</p>	<p>Authority to provide progress reports to Regional Board</p>

Table 1 Mitigation Monitoring and Reporting Program for Grassland Bypass Project, 2010-2019

Identified Impact	Mitigation Measures	Implementation Action	Timing Requirements	Reporting Responsibility
<p>6.2.2.2.4. Bioaccumulation: The effects from the Proposed Action on waterbirds and terrestrial birds utilizing reuse areas would be potentially significantly adverse relative to existing conditions, but can be mitigated to less-than-significant by the measures discussed in Section 6.2.2.1.4 and those in Section 6.2.2.4.</p>	<p>To reduce impacts to nesting shorebirds in reuse areas:</p> <ol style="list-style-type: none"> 1. Dredging the bottom of open drains that had been consistently used by shorebirds to eliminate potential feeding and nesting substrates. 2. Discharging cracker shells to discourage shorebird use where shorebird nesting had been concentrated in the past. 3. Enhancing habitat for nesting shorebirds outside the project site at a site with clean (non-seleniferous) water. <p>To avoid or minimize the potential for ponding, careful management of irrigation water and tailwater may be sufficient. These practices include:</p> <ol style="list-style-type: none"> 1. Installation of subsurface drains. 2. Draining tailwater into the Grassland Bypass Channel. 3. Application rates that handle crop needs and avoid overwatering. 4. Drainage treatment. 5. Cessation of irrigation (temporary). 6. Development of a contingency plan. 	<p>As required by the U. S. Fish and Wildlife Service consistent with the Biological Opinion.</p>	<p>To be determined.</p>	<p>Grassland Area Farmers to provide progress reports to U. S. Fish and Wildlife Service</p>

The incorporation of Short-term Storage Basins, as described in the Addendum, identified an additional potential biological impact, as well as three additional mitigation measure to reduce that impact less-than-significant. These additional mitigation measures, listed in Table 2, are in addition to the mitigation measures listed in Table 1.

Table 2 Mitigation Monitoring and Reporting Program for Grassland Bypass Project, Incorporated by the 2019 Addendum

Identified Impact	Mitigation Measures	Implementation Action	Timing Requirements	Reporting Responsibility
<p>Impact Bio-2 (IS Section 2.4) Waterbird use of the regulating pond and proposed short-term storage basins could negatively impact waterbirds through dietary selenium exposure. This can be mitigated to less-than-significant by measures discussed above and Section 2.4 of the 2019 Initial Study</p>	<p>Measure BIO-2b: reduce Se exposure potential by reducing attractiveness of Regulating Pond/Basins for nesting.</p> <p>Measure BIO-2c: Reduce exposure potential by hazing waterbirds from the Project Site during nesting season.</p> <p>Measure BIO-2d: Reduce exposure potential by hazing waterbirds from the Regulating Pond/Storage Basins when water is present.</p>	<p>As required by the U. S. Fish and Wildlife Service consistent with the Biological Opinion.</p> <p>As required by CDFW.</p>	<p>To be determined.</p>	<p>Authority to provide progress reports to U.S. Fish & Wildlife Service</p>

Results of the monitoring program will be submitted to the U. S Fish & Wildlife Service and to the Regional Board in Annual Monitoring Reports. If unacceptable problems or impacts are identified, appropriate mitigative actions to address the problems will be identified by the Authority and submitted to the Regional Board and other agencies. The definition and identification of “unacceptable” problems or impacts and need for mitigative action will consider applicable laws (e.g., Migratory Bird Treaty Act, Endangered Species Act, Clean Water Act) as well as the impacts in all channels affected by implementation of the Project. Appropriate mitigative actions, depending on the situation, would include, but not necessarily be limited to, interruption of a specific identified contamination pathway through hazing or habitat manipulation; increased management, enhancement, and recovery activities directed at impacted species in channels cleaned up as a result of the Project. The costs of mitigation, as well as any required cleanup, will be borne by the Authority.

A summary of key features of the monitoring plan is provided as follows:

- Realtime flow monitoring at Station A (inlet to the San Luis Drain), Station B (outlet from the San Luis Drain), Station D (Mud Slough north downstream of Station B, Station H (San Joaquin River above Merced River) and Station N (San Joaquin River at Crows Landing).
- Daily composite water quality sampling at Station B, Station D, and Station N.
- Weekly water quality samples at Station B, Station D, Station R (San Joaquin River above Station H and above Merced River) , and Station N.
- Monthly aquatic toxicity testing (3 species) at Station D, and quarterly toxicity testing at Stations B, F (Salt Slough and Lander Avenue) and R.
- Annual sediment accumulation surveys and quality testing in the San Luis Drain.
- Biannual sediment toxicity testing at Station D
- Biannual sediment quality testing (selenium) at Stations F and R.
- Annual biological monitoring at the San Joaquin River Improvement Project (SJ RIP).
- Quality assurance, data management, and reporting program
- Monitoring costs will be shared by the Authority and Reclamation.

The Sediment Management Plan (Appendix B of the 2009 EIS/EIR) includes the following monitoring protocol to be applied to all land application sites until selenium levels have decreased to unrestricted use (in areas where applied sediments exceeded ecological or human health risk criteria). In areas where revegetation was conducted as part of the application of sediments, monitoring will continue until the predetermined success criteria for the revegetation program is met (i.e. percent cover or establishment of a particular vegetation community).

- Quarterly monitoring of soil water and groundwater to confirm that soluble selenium is not migrating toward the water table.
- Biannual soil sampling to monitor selenium displacement and solubility.
- Annual plant sampling and analysis at agriculture and open space sites to confirm that selenium is not being accumulated to levels of concern. Selenium uptake may change as selenium solubility increases.

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- Installation of either neutron probe access pipes and/or tensiometers in agricultural sites to measure soil water movement.

C.3 STORM EVENT PLAN

A storm event management plan has been developed describing how the Project will operate during storm events (Authority 1997). The major concerns with allowing high flows into the San Luis Drain are related to excess sediment loading and accumulation in the Drain and scour of previously accumulated sediment from the Drain into the receiving waters due to high water velocities. In addition, structural integrity of the bypass channel is of concern. The major components of the storm event plan include the following:

- Notification of regulatory and system users to inform them of the intent to operate under the storm event plan when Project flows are to be affected by impending storm events
- Opening of gates to Grassland Water District supply channels (Agatha Canal and Camp 13 Ditch) when anticipated flows exceed 100 cubic feet per second and precipitation is imminent
- In-field decisions on how much to divert to Grassland Water District and how much to allow into the Project during event conditions
- Closing gates to Grassland when flow falls below 100 cubic feet per second and no further threat of imminent precipitation exists
- Daily monitoring of bypassed flows to the Grassland Water District for quantity and quality
- Modification of sump pump operations as practical to minimize the production of drainwater.

C.4 OTHER MITIGATION AND ENVIRONMENTAL COMMITMENTS

The Authority will implement those commitments contained in the Record of Decision for the LTSWMP Use Agreement pertaining to operations, spill prevention, downstream users notification, regional archaeology, protection of China Island, Mud Slough, and sediment management.

The Grassland Bypass Project proposes to complete the development of the SJRIP reuse facility on up to 7,550 acres of agricultural land. The Negative Declaration on Phase I (and subsequent Negative Declaration in August 2007 on expansion of the facility) commits the Grassland Area Farmers/Panoche Drainage District to a biological monitoring program that would be capable of detecting migratory bird impacts and, if necessary, capable of providing the data for project adjustments to avoid such impacts.