

Attachment C

**Central Valley Regional Water Quality Control Board
Irrigated Lands Regulatory Program
Mitigation Monitoring and Reporting Plan
Resolution No. R5-2011- [REDACTED]**

Background

Public Resources Code Section 21081.6 requires a CEQA lead agency which is approving a project with significant environmental impacts that can be mitigated, as disclosed in an environmental impact report (EIR), to prepare and adopt a mitigation monitoring and reporting plan (MMRP). The purpose of the MMRP is to ensure that mitigation measures identified in the EIR are adopted and implemented.

Irrigated Lands Regulatory Program

The California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) is the principal agency responsible for protecting and improving the quality of the State's waters within the Central Valley. The primary mission of the Central Valley Water Board is to preserve, enhance, and restore the quality of Central Valley waters. As part of this mission, the Central Valley Water Board has selected a framework to guide the regulation of waste discharges from irrigated agricultural operations. A complete description of the selected Long-term Irrigated Lands Regulatory Program alternative (Framework) can be found in the *Recommended Irrigated Lands Regulatory Program Framework Staff Report, March 2011* (ILRP Framework Report) prepared for this program.

Adopted Mitigation Measures

The Central Valley Water Board has adopted the following programmatic mitigation measures as part of its approval of this program (Table 1). These mitigation measures were identified in the Final Irrigated Lands Regulatory Program PEIR, certified pursuant to Central Valley Water Board Resolution No. R5-2011- [REDACTED].

The implementation and monitoring requirements for each mitigation measure also are identified in Table 1. Each of these mitigation measures will be incorporated into the Recommended Framework's implementing mechanisms (waste discharge requirements, conditional waivers of waste discharge requirements) as findings, conditions, enforceable prohibitions, provisions, or discharge specifications and will become requirements for those growers who seek to be covered under the program.

Table 1. Mitigation Monitoring and Reporting Plan, California Regional Water Quality Control Board, Central Valley Region Irrigated Lands Regulatory Program

Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Monitoring/Reporting Notes
Mitigation Measure CUL-MM-1: Avoid Impacts to Cultural Resources The measure described below will reduce the severity of impacts on significant cultural resources, as defined and described in Sections 5.3.1 and 5.3.3 of the draft PEIR. Avoidance of such impacts also can be achieved when growers choose the least impactful management practices that will effectively meet the ILRP water quality improvement goals and objectives. Note that these measures may not be necessary in cases where no ground-disturbing activities would be undertaken as a result of implementation of the ILRP. Although cultural resource inventories and evaluations typically are conducted prior to preparation of a CEQA document, the size of the program area, the programmatic nature of the alternatives, and the lack of specificity regarding the location and type of management practice that would be implemented following adoption of an alternative render conducting inventories prior to release of this draft PEIR untenable. Therefore, where the ILRP water quality improvement goals cannot be achieved without modifying or disturbing an area of land or existing structure to a greater degree than through previously employed farming practices, individual farmers, coalitions, or third-party representatives should implement the following measures to reduce potential impacts to less-than-significant levels. • Where construction within areas that may contain cultural resources cannot be avoided through the use of alternative management practices, conduct an assessment of the potential for damage to cultural resources prior to construction; this may include the hiring of a qualified cultural resources specialist to determine the presence of significant cultural resources; • Where the assessment indicates that damage may occur, submit a non-confidential records search request to the appropriate CHRIS information center(s); • Implement the recommendations provided by the CHRIS information center(s) in response to the records search request; and • Where adverse effects to cultural resources cannot be avoided, undertake additional CEQA review and develop appropriate mitigation to avoid or minimize the potential impact. In addition, California state law provides for the protection of interred human remains from vandalism and destruction. According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and the disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of the discovered human remains until the County Coroner has been notified, according to PRC Section 5097.98, and can determine whether the remains are those of Native American origin. If the coroner determines that the remains are of Native American origin, the coroner must contact the Native American Heritage Commission (NAHC) within 24 hours (Health and Safety Code Section 7050[c]). The NAHC will identify and notify the most likely descendant (MLD) of the interred individual(s), who will then make a recommendation for means of treating or removing, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. PRC Section 5097.9 identifies the responsibilities of the project proponent upon notification of a discovery of Native American burial remains. The project proponent would work with the MLD (determined by the NAHC) and a professional archaeologist with specialized human osteological experience to develop and implement an appropriate treatment plan for avoidance and preservation of, or recovery and removal of, the remains. Growers implementing management practices should be aware of the following protocols for identifying cultural resources: • If built environment resources or archaeological resources, including chipped stone (often obsidian, basalt, or chert), ground stone (often in the form of a bowl mortar or pestle), stone tools such as projectile points or scrapers, unusual amounts of shell or bone, historic debris (such as concentrations of cans or bottles), building foundations, or structures are inadvertently discovered during ground-disturbing activities, the land owner should stop work in the vicinity of the find and retain a qualified cultural resources specialist to assess the significance of the resources. If necessary, the cultural resource specialist also will develop appropriate treatment measures for the find. • If human bone is found as a result of ground disturbance, the land owner should notify the County Coroner in accordance with the instructions described above. If Native American remains are identified and descendants are found, the descendants may—with the permission of the owner of the land or his or her authorized representative—inspect the site of the discovery of the Native American remains. The descendants may recommend to the owner or the person responsible for the excavation work means for treating or disposing of the human remains and any associated grave goods, with appropriate dignity. The descendants will make their recommendation within 48 hours of inspection of the	At adoption of Long-term Irrigated Lands Regulatory Program implementing mechanisms	Central Valley Water Board	Central Valley Water Board	The Central Valley Water Board will incorporate this mitigation as a condition, prohibition, discharge specification, or provision in its implementing waste discharge requirements or conditional waivers for the program.

Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Monitoring/Reporting Notes
remains. If the NAHC is unable to identify a descendant, if the descendants identified fail to make a recommendation, or if the landowner rejects the recommendation of the descendents, the landowner will inter the human remains and associated grave goods with appropriate dignity on the property in a location not subject to further and future subsurface disturbance.				
Mitigation Measure NOI-MM-1: Implement Noise-Reducing Construction Practices Growers will implement noise-reducing construction practices such that noise from construction does not exceed applicable local noise standards or limits specified in the applicable county ordinances and general plan noise elements.	Concurrent with relevant changes in management practices	Participating Growers	Local agency: branch of relevant city or county responsible for enforcing local noise ordinances.	Pursuant to CEQA Guidelines Section 15091(a)(2), such measures are within the responsibility and jurisdiction of another public agency, and can or should be adopted by such other agency.
Mitigation Measure NOI-MM-2: Reduce Noise Generated by Individual Well Pumps If well pumps are installed, growers will ensure that they are enclosed or located behind barriers such that noise does not exceed applicable local noise standards or limits specified in the applicable county ordinances and general plan noise elements.	Concurrent with relevant changes in management practices	Participating Growers	Local agency: branch of relevant city or county responsible for enforcing local noise ordinances.	Pursuant to CEQA Guidelines Section 15091(a)(2), such measures are within the responsibility and jurisdiction of another public agency, and can or should be adopted by such other agency.
Mitigation Measure AQ-MM-1: Apply Applicable Air District Mitigation Measures to Reduce Construction Emissions below the District Thresholds Growers will apply appropriate construction mitigation measures from the applicable air district to reduce construction emissions. These measures will be applied on a project-level basis and may be tailored in consultation with the appropriate air district, depending on the severity of anticipated construction emissions. Although not specifically cited in this document, references to individual air district documents that contain recommended mitigation measures are included in Chapter 8, References, of the Draft PEIR.	Concurrent with relevant changes in management practices	Participating Growers	Local agency: individual air districts as referenced in Chapter 8, References, of the Draft PEIR	Pursuant to CEQA Guidelines Section 15091(a)(2), such measures are within the responsibility and jurisdiction of another public agency, and can or should be adopted by such other agency.
Mitigation Measure AQ-MM-2: Apply Applicable Air District Mitigation Measures to Reduce Operational Emissions below the District Thresholds Growers will apply appropriate mitigation measures from the applicable air district to reduce operational emissions. These measures were suggested by the district or are documented in official rules and guidance reports; however, not all districts make recommendations for operational mitigation measures. Where applicable, measures will be applied on a project-level basis and may be tailored in consultation with the appropriate air district, depending on the severity of anticipated operational emissions.	Concurrent with relevant changes in management practices	Participating Growers	Local agency: individual air districts as referenced in Chapter 8, References, of the Draft PEIR	Pursuant to CEQA Guidelines Section 15091(a)(2), such measures are within the responsibility and jurisdiction of another public agency, and can or should be adopted by such other agency.
Mitigation Measure AQ-MM-3: Apply Applicable Air District Mitigation Measures to Reduce TAC/HAP Emissions Growers will apply appropriate TAC and HAP mitigation measures from the applicable air district to reduce public exposure to DPM, pesticides, and asbestos. These measures were suggested by the district or are documented in official rules and guidance reports; however, not all districts make recommendations for mitigation measures for TAC/HAP emissions. These measures will be applied on a project-level basis and may be tailored in consultation with the appropriate air district, depending on the severity of anticipated TAC/HAP emissions.	Concurrent with relevant changes in management practices	Participating Growers	Local agency: individual air districts as referenced in Chapter 8, References, of the Draft PEIR	Pursuant to CEQA Guidelines Section 15091(a)(2), such measures are within the responsibility and jurisdiction of another public agency, and can or should be adopted by such other agency.
Mitigation Measure BIO-MM-1: Avoid and Minimize Impacts on Sensitive Biological Resources Implementation of the following avoidance and minimization measures would ensure that the construction activities related to implementation of management practices and installation of monitoring wells on irrigated lands would minimize effects on sensitive vegetation communities (such as riparian habitat and wetlands adjacent to the construction area) and special-status plants and wildlife species as defined and listed in Section 5.7.3 of the Draft PEIR. In each instance where particular management practices could result in impacts on the biological resources listed above, growers should use the least impactful effective management practice to avoid such impacts. Where the ILRP water quality improvement goals cannot be achieved without incurring potential impacts, individual farmers, coalitions, or third-party representatives should implement the following measures to reduce potential impacts to less-than-significant levels. • Where detention basins are to be abandoned, retain the basin in its existing condition or ensure that sensitive biological resources are not present before modification. • Where construction in areas that may contain sensitive biological resources cannot be avoided through the use of alternative management practices, conduct an assessment of habitat conditions and the potential for presence of sensitive vegetation communities or special-status plant and animal species prior to construction. this may include the hiring of a qualified biologist to identify riparian and other sensitive vegetation communities and/or habitat for special status plant and animal species;	At adoption of Long-term Irrigated Lands Regulatory Program implementing mechanisms	Central Valley Water Board	Central Valley Water Board	The Central Valley Water Board will incorporate this mitigation as a condition, prohibition, discharge specification, or provision in its implementing waste discharge requirements or conditional waivers for the program.

Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Monitoring/Reporting Notes
• Avoid and minimize disturbance of riparian and other sensitive vegetation communities. • Avoid and minimize disturbance to areas containing special-status plant or animal species. • Where adverse effects on sensitive biological resources cannot be avoided, undertake additional CEQA review and develop a restoration or compensation plan to mitigate the loss of the resources.				
Mitigation Measure BIO-MM-2: Determine Extent of Wetland Loss and Compensate for Permanent Loss of Wetlands Prior to implementing any management practice that will result in the permanent loss of wetlands, conduct a delineation of affected wetland areas to determine the acreage of loss in accordance with current USACE methods. For compliance with the CWA Section 404 permit and WDRs protecting State waters from unauthorized fill, compensate for the permanent loss (fill) of wetlands and ensure no net loss of habitat functions and values. Compensation ratios will be determined through coordination with the Central Valley Water Board and USACE as part of the permitting process. Compensation may be a combination of mitigation bank credits and restoration/creation of habitat, as described below: • Purchase credits for the affected wetland type (e.g., perennial marsh, seasonal wetland) at a locally approved mitigation bank and provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. • Develop and ensure implementation of a wetland restoration plan that involves creating or enhancing the affected wetland type.	At adoption of Long-term Irrigated Lands Regulatory Program implementing mechanisms	Central Valley Water Board	Central Valley Water Board	The Central Valley Water Board will incorporate this mitigation as a condition, prohibition, discharge specification, or provision in its implementing waste discharge requirements or conditional waivers for the program.
Mitigation Measure FISH-MM-1: Avoid and Minimize Impacts to Fish and Fish Habitat This mitigation measure incorporates all measures identified in Mitigation Measure BIO-MM-1. In each instance where particular management practices could result in impacts to special-status fish species (see “Regulatory Classification of Special-Status Species” in Section 5.8.2 of the draft PEIR), growers should use the least impactful effective management practice to avoid such impacts. Where the ILRP water quality improvement goals cannot be achieved without incurring potential impacts, individual farmers, coalitions, or third-party representatives should implement the following measures to reduce potential impacts to less-than-significant levels. Note that these measures may not be necessary in many cases and are dependent on the location of construction in relation to water bodies containing special-status fish. • Where construction in areas that may contain special-status fish species cannot be avoided through the use of alternative management practices, conduct an assessment of habitat conditions and the potential for presence of special-status fish species prior to construction; this may include the hiring of a qualified fisheries biologist to determine the presence of special status fish species; • Based on the species present in adjacent water bodies and the likely extent of construction work that may affect fish, limit construction to periods that avoid or minimize impacts to special-status fish species. • Where construction periods cannot be altered to minimize or avoid effects on special-status fish, undertake additional CEQA review and develop a restoration or compensation plan to mitigate the loss of the resources.	At adoption of Long-term Irrigated Lands Regulatory Program implementing mechanisms	Central Valley Water Board	Central Valley Water Board	The Central Valley Water Board will incorporate this mitigation as a condition, prohibition, discharge specification, or provision in its implementing waste discharge requirements or conditional waivers for the program.
Mitigation Measure FISH-MM-2: Educate Growers on the Use of Polyacrylamides for Sediment Control The Central Valley Water Board will provide information on the potential risks to aquatic life, including special-status fish, that may result from the use of cationic or neutral PAMs during water management activities. Information in the form of leaflets and website information will be provided to grower coalitions, encouraging the use of anionic PAMs. Application of anionic PAMs at prescribed rates will be emphasized in the information provided to growers. Adoption of the USDA National Conservation Practice Standard 450 also will be recommended in the information.	At adoption of Long-term Irrigated Lands Regulatory Program implementing mechanisms	Central Valley Water Board	Central Valley Water Board	The Central Valley Water Board will incorporate this mitigation as a condition, prohibition, discharge specification, or provision in its implementing waste discharge requirements or conditional waivers for the program.
Mitigation Measure AG-MM-1: Assist the Agricultural Community in Identifying Sources of Financial Assistance That Would Allow Growers to Keep Important Farmland in Production The Central Valley Water Board will assist the agricultural community in identifying sources of financial assistance from existing federal, state, or local programs that promote water conservation and water quality through increased management practices. Funding received from grants, cost-sharing, or low-interest loans would offset some of the local growers’ expenditures for compliance and implementation of FWQMPS, and likely would reduce the estimated losses in irrigated acreage. Potential funding sources for this mitigation measure are discussed below. The programs described below are illustrative and are not intended to constitute a comprehensive list of funding sources. <i>Federal Farm Bill</i> Title II of the 2008 Farm Bill (the Food, Conservation, and Energy Act of 2008, in effect through 2012) authorizes funding for conservation programs such as the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program. Both of these programs provide financial and technical assistance for activities that improve water quality on	At adoption of Long-term Irrigated Lands Regulatory Program implementing mechanisms	Central Valley Water Board	Central Valley Water Board	The Central Valley Water Board will incorporate this mitigation as a finding in its implementing waste discharge requirements or conditional waivers for the program. Implementation requirements will include findings encouraging third-party groups, growers, and the Board to work to secure sources of funding to help implement the ILRP.

Measure	Timing	Implementation Responsibility	Monitoring/Reporting Responsibility	Monitoring/Reporting Notes
agricultural lands. <i>State Water Resources Control Board</i> The Division of Financial Assistance administers water quality improvement programs for the State Water Board. The programs provide grant and loan funding to reduce non-point-source pollution discharge to surface waters. The Division of Financial Assistance currently administers two programs that improve water quality—the Agricultural Drainage Management Loan Program and the Agricultural Drainage Loan Program. Both of these programs were implemented to address the management of agricultural drainage into surface water. The Agricultural Water Quality Grant Program provides funding to reduce or eliminate the discharge of non-point-source pollution from agricultural lands into surface water and groundwater. It currently is funded through bonds authorized by Proposition 84. The State Water Board’s Clean Water State Revolving Fund also has funding authorized through Proposition 84. It provides loan funds to a wide variety of point-source and non-point-source water quality control activities. <i>Potential Funding Provided by the Safe, Clean, and Reliable Drinking Water Supply Act of 2010</i> This act was placed on the ballot by the Legislature as SBX 7-2 and was scheduled for voter approval in November 2010. In August of 2010, the Legislature removed this issue from the 2010 ballot and intends to re-introduce it in November of 2012. If approved by the public, the new water bond would provide grant and loan funding for a wide range of water-related activities, including agricultural water quality improvement, watershed protection, and groundwater quality protection. The actual amount and timing of funding availability will depend on its passage, on the issuance of bonds and the release of funds, and on the kinds of programs and projects proposed and approved for funding. <i>Other Funding Programs</i> Other state and federal funding programs have been available in recent years to address agricultural water quality improvements. Integrated Regional Water Management grants were authorized and funded by Proposition 50 and now by Proposition 84. These are administered jointly by the State Water Board and DWR. Proposals can include agricultural water quality improvement projects. Reclamation also can provide assistance and cost-sharing for water conservation projects that help reduce discharges.				
Mitigation Measure CC-MM-1: Apply Applicable Air District Mitigation Measures to Reduce Construction and Operational GHG Emissions Several of the standard mitigation measures provided by the 24 local air districts to reduce criteria pollutant emissions would also help to minimize GHG emissions (please see Section 5.6.5). Measures to reduce vehicle trips and promote use of alternative fuels, as well as clean diesel technology and construction equipment retrofits, should be considered by the program applicants.	Concurrent with relevant changes in management practices	Participating Growers	Local agency: individual air districts as referenced in Chapter 8, References, of the Draft PEIR	Pursuant to CEQA Guidelines Section 15091(a)(2), such measures are within the responsibility and jurisdiction of another public agency, and can or should be adopted by such other agency.
Mitigation Measure CC-MM-2: Apply Applicable California Attorney General Mitigation Measures to Reduce Construction and Operational GHG Emissions A recent report by the California Attorney General’s office entitled The California Environmental Quality Act: Addressing Global Warming at the Local Agency Level identifies various example measures to reduce GHG emissions at the project level (State of California Department of Justice 2008). The following mitigation measures and project design features were compiled from the California Attorney General’s Office report. They are not meant to be exhaustive but to provide a sample list of measures that could be incorporated into future project design. Only those measures applicable to the proposed program are included. <i>Solid Waste Measures</i> • Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). • Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers. • Recover by-product methane to generate electricity. <i>Transportation and Motor Vehicles</i> • Limit idling time for commercial vehicles, including delivery and construction vehicles. • Use low- or zero-emission vehicles, including construction vehicles.	At adoption of Long-term Irrigated Lands Regulatory Program implementing mechanisms	Central Valley Water Board	Central Valley Water Board	The Central Valley Water Board will incorporate this mitigation as a condition, prohibition, discharge specification, or provision in its implementing waste discharge requirements or conditional waivers for the program.