

## 1.1 Introduction

Discharges from agricultural lands include irrigation return flow; flows from tile drains; and storm water runoff from fields, managed wetlands, nurseries, and water districts that accept agricultural discharges. These discharges can affect water quality by transporting constituents of concern including pesticides, sediment, nutrients, salts (including selenium and boron), pathogens, and heavy metals from cultivated fields into surface waters. Many surface water bodies are impaired because of pollutants from agricultural sources. Groundwater bodies also have suffered pesticide, nitrate, and salt contamination. Statewide, approximately 9,493 miles of rivers/streams and some 513,130 acres of lakes/reservoirs are listed on the Section 303(d) list as being impaired by irrigated agriculture. Of these, approximately 2,800 miles, or approximately 28 percent, have been identified as impaired by pesticides.

Since 1982, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has regulated nonpoint source (NPS) discharges from agricultural lands through a waiver of waste discharge requirements (WDRs). Senate Bill (SB) 390, signed into law on October 6, 1999, amended Section 13269 of the California Water Code (Water Code) to require the State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (Regional Water Boards) to review their existing waivers and to renew them or replace them with WDRs. Under SB 390, waivers not reissued automatically expired on January 1, 2003. To comply with SB 390, the Regional Water Boards adopted revised waivers. To comply with the requirements of SB 390, the Central Valley Water Board adopted a Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Conditional Waiver).

Under the 2003 Conditional Waiver, the Central Valley Water Board directed staff to prepare an Environmental Impact Report (EIR) for a long-term Irrigated Lands Regulatory Program (ILRP). The 2003 Conditional Waiver expired in 2006, and a revised Conditional Waiver was adopted that continues the Conditional Waiver until June 2011. With adoption of the 2006 Conditional Waiver, the Central Valley Water Board reaffirmed its goal of analyzing the environmental effects of alternatives for a long-term ILRP through development and public review of a Program Environmental Impact Report (EIR or PEIR). This draft PEIR analyzes the environmental impacts of five program alternatives and will assist the Central Valley Water Board in determining which alternative, or elements of alternatives, would best meet applicable statutory requirements and the goals and objectives of the ILRP.

## 1.2 Overview of Central Valley Agriculture

The Central Valley is a large, flat, fertile valley that dominates the central portion of California. The northern half of the Central Valley is referred to as the Sacramento Valley, and the southern half is referred to as the San Joaquin Valley. The two halves meet at the shared delta of the Sacramento and San Joaquin Rivers, which flow through the northern and southern halves of the valley, respectively.

The Central Valley is one of the most productive agricultural regions in the world. Crops produced in the Central Valley include land planted to vineyard, row, pasture, field, and tree crops; commercial nurseries; nursery stock production; rice production; greenhouse operations; and livestock.

The program area encompasses the jurisdiction of the Central Valley Water Board, shown in Figure 2-1. The Central Valley Water Board's region stretches from the Oregon border to the northernmost tip of Los Angeles County. Three major watersheds have been delineated within this region: the Sacramento River Basin, the San Joaquin River Basin, and the Tulare Lake Basin. These three basins cover approximately 40 percent of the total area of the state and include approximately 75 percent of California's irrigated acreage (Central Valley Water Board 2002a). Much of the surface water supplies in the Central Valley originate north of the Sacramento-San Joaquin River Delta (Delta), while much of the water use is south of the Delta. Although the surface water in the Sacramento River Basin is adequate to meet the present level of demand, surface water supplies in the San Joaquin River and Tulare Lake Basins are inadequate to support the present level of agricultural and development use. In these basins, groundwater resources are being used to meet existing water supply demands.

### 1.3 Program Purpose and Objectives

The proposed goals and objectives of the ILRP are those recommended by the Stakeholder Advisory Workgroup (Workgroup) (Central Valley Water Board and ICF Jones & Stokes 2009). *Irrigated agricultural lands* include lands where water is applied to produce crops, fiber, or livestock for commercial sale or use. For the purposes of this draft PEIR, irrigated agricultural lands also include managed wetlands, nurseries, and water districts that accept discharges from irrigated lands. Understanding that irrigated agriculture in the Central Valley provides valuable food and fiber products to communities worldwide, the overall goals of the ILRP are to (1) restore and/or maintain the highest reasonable quality of state waters considering all the demands being placed on the water; (2) minimize waste discharge from irrigated agricultural lands that could degrade the quality of state waters; (3) maintain the economic viability of agriculture in California's Central Valley; and (4) ensure that irrigated agricultural discharges do not impair access by Central Valley communities and residents to safe and reliable drinking water. In accordance with these goals, the objectives of the ILRP are to:

- Restore and/or maintain appropriate beneficial uses established in Central Valley Water Board water quality control plans by ensuring that all state waters meet applicable water quality objectives.
- Encourage implementation of management practices that improve water quality in keeping with the first objective without jeopardizing the economic viability for all sizes of irrigated agricultural operations in the Central Valley or placing an undue burden on rural communities to provide safe drinking water.
- Provide incentives (i.e., financial assistance, monitoring reductions, certification, or technical help) for agricultural operations to minimize waste discharge to state waters from their operations.
- Coordinate with other Central Valley Water Board programs (e.g., the Grasslands Bypass Project WDRs for agricultural lands, efforts by the Westlands Water District to develop WDRs for

agricultural lands, development of total maximum daily loads [TMDLs] for Central Valley Salinity Alternatives for Long-Term Sustainability [CV-SALTS], and WDRs for dairies).

- Promote coordination with other regulatory and non-regulatory programs associated with agricultural operations to minimize duplicative regulatory oversight while ensuring program effectiveness (e.g., U.S. Department of Agriculture [USDA] National Organic Program, State Water Board Groundwater Ambient Monitoring and Assessment Program).

## 1.4 Program Description

The alternatives analyzed in this draft PEIR are the result of an intensive workgroup process described in Chapter 2, Introduction. The Central Valley Water Board intends to consider the analysis in this draft PEIR in selecting a preferred alternative, either one considered in this document directly or a staff-recommended program comprised of elements from multiple considered alternatives. Therefore, the document does not identify a “preferred alternative.” All alternatives selected for analysis are analyzed to an equal level of detail. The alternatives are described in greater detail in Chapter 3.

### 1.4.1 Alternative 1 – Full Implementation of Current Program (No Project Alternative)

Under Alternative 1, the Central Valley Water Board would renew the current program and continue to implement it into the future. This would be considered the “No Project” Alternative per California Environmental Quality Act (CEQA) guidance at Title 14 California Code of Regulations (CCR) Section 15126.6(e)(3)(A): “When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the ‘No Project’ Alternative will be the continuation of the existing plan, policy, or operation into the future.” Given the ministerial nature of the extension or renewal of the ongoing waiver, which would allow continuation of the existing program, Alternative 1 is best characterized as the “No Project” Alternative. This approach best serves the purpose of allowing the Central Valley Water Board to compare the impacts of revising the ILRP with those of continuing the existing program (14 CCR Section 15126.6[e][1]).<sup>1</sup>

Coalition groups would continue to function as lead entities representing growers (owners of irrigated lands, wetland managers, nursery owners, and water districts). This alternative is based on continuing watershed monitoring to determine whether operations are causing water quality problems. Where monitoring indicates a problem, third-party groups and growers would be required to implement management practices to address the problem and work toward compliance with applicable water quality standards. This alternative would not establish any new Central Valley Water Board requirements for discharges to groundwater from irrigated agricultural lands.

Under this alternative, the Central Valley Water Board would renew the current program through WDRs or a waiver of the WDRs. Water quality coalition groups have formed throughout the Central Valley to function as representative or “lead” entities in administration of the current ILRP.

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<sup>1</sup> The existing environmental setting, not the “No Project” Alternative, constitutes the baseline for determining whether a project’s environmental impacts may be significant (14 CCR Section 15126.5[e][1]). Therefore, defining the “No Project” Alternative as continuing the existing program does not change the analysis of the environmental impacts under the remaining alternatives.

Coalitions represent growers, provide education, organize monitoring, and work with the Central Valley Water Board to help ensure that the current program is effectively implemented. These third-party water quality coalition groups would continue to function as lead entities for their members to ensure that all Central Valley Water Board requirements are met.

Monitoring under this alternative would be the same as the watershed-based assessment and core monitoring required under the current ILRP. Under this monitoring scheme, coalition groups would work with the Central Valley Water Board to develop monitoring plans for Central Valley Water Board approval. These plans would specify monitoring parameters and site locations.

## 1.4.2 Alternative 2 – Third-Party Lead Entity

Under Alternative 2, the Central Valley Water Board would develop a single mechanism or a series of regulatory mechanisms for waste discharge from irrigated agricultural lands to groundwater and surface water. The series of regulatory mechanisms would be designed to provide flexibility in establishing requirements for growers considering the variety of environmental conditions and agricultural operations throughout the Central Valley. These could include WDRs, conditional waivers of WDRs, or conditional prohibitions of discharge.

Under Alternative 2, third-party groups (e.g., water quality coalitions) would function as lead entities representing growers. Regulation of discharges to surface water would be similar to Alternative 1 (the current ILRP). However, this alternative allows for a reduction in monitoring under lower threat circumstances and where watershed or area management objective plans are being developed. This alternative also includes requirements for development of groundwater quality management plans (GQMPs) to minimize discharge of waste to groundwater from irrigated lands. However, GQMPs under this alternative would not involve monitoring of groundwater to determine the performance of these management plans. These GQMPs would be reviewed every 5 years by the Central Valley Water Board and the third-party groups to determine whether and how the GQMPs should be updated. This alternative also relies on coordination with the California Department of Pesticide Regulation (DPR) for regulating discharges of pesticides to groundwater.

Under this alternative, water quality coalitions or other third-party groups would be responsible for general administration of the ILRP and would need to agree to assume greater responsibilities than under Alternative 1. (See Chapter 3 for a detailed list of these responsibilities.)

Third-party groups would have the option of developing a watershed or area management objectives plan. The goal of this plan would be to meet source control management objectives that would reduce the threat to surface water quality from waste discharge associated with irrigated agriculture. In areas implementing a Central Valley Water Board-approved watershed or area management objectives plan, surface water monitoring would be reduced. Plans would specify optional water quality management practices that could be implemented to achieve plan objectives. Further, the plan would be developed consistent with the area or watershed commodity types, common agricultural practices, pesticides commonly used, and local land characteristics. Optional practices would be provided to allow growers to adapt to their specific conditions for compliance with the ILRP. The plan also would consider the results of previous water quality sampling.

Growers would be required to track implemented management practices and submit the results to the third-party group. The third-party group would report summary results to the Central Valley Water Board. The third-party group would be required to summarize the results of groundwater

and surface water monitoring and tracking in an annual monitoring report to the Central Valley Water Board.

### **1.4.3 Alternative 3 – Individual Farm Water Quality Management Plan**

Under Alternative 3, growers would have the option of working directly with the Central Valley Water Board or another implementing entity (e.g., county agricultural commissioners [CACs]) in development of a farm water quality management plan (FWQMP). Growers would individually apply for a conditional waiver or WDRs that would require Central Valley Water Board approval of their FWQMP.

On-farm implementation of effective water quality management practices would be the mechanism to reduce or eliminate waste discharged to state waters. This alternative would provide incentive for individual growers to participate by providing growers with Central Valley Water Board certification that they are implementing farm management practices to protect state waters. This alternative relies on coordination with DPR for regulating discharges of pesticides to groundwater.

Under Alternative 3, growers would be the lead entities working directly with the Central Valley Water Board and would be responsible for applying for coverage, developing FWQMPs, and conducting any required reporting.

Unless specifically required in response to water quality problems, owners/operators would not be required to conduct water quality monitoring of adjacent receiving waters or underlying groundwater. Required monitoring would include evaluation of management practice effectiveness. The Central Valley Water Board, or a designated third-party entity, would conduct annual site inspections on a selected number of operations. They also would review available applicable water quality monitoring data as additional means of monitoring the implementation of management practices and program effectiveness.

### **1.4.4 Alternative 4 – Direct Oversight with Regional Monitoring**

Under this alternative, the Central Valley Water Board would develop WDRs and/or a conditional waiver of WDRs for waste discharge from irrigated agricultural lands to groundwater and surface water. As in Alternative 3, growers, or legal entities responsible for waste discharges by a group of growers, would apply directly to the Central Valley Water Board in order to obtain coverage (“direct oversight”). As in Alternative 3, growers would be required to develop and implement individual FWQMPs in order to minimize discharge of waste to groundwater and surface water from irrigated agricultural lands. However, Alternative 4 would include an option for regional monitoring run by a third party instead of monitoring conducted by individual growers.

Discharge of waste to groundwater and surface water would be regulated using a tiered approach. Fields would be placed in one of three tiers based on their threat to water quality. The tiers represent fields with minimal (Tier 1), low (Tier 2), and high (Tier 3) potential threat to water quality. Requirements to avoid or minimize discharge of waste would be the least stringent for Tier 1 fields and the most stringent for Tier 3 fields. This would allow for less regulatory oversight for low-threat operations while establishing necessary requirements to protect water quality from

higher-threat discharges. This alternative relies on coordination with DPR for regulating discharges of pesticides to groundwater.

Growers would be lead entities working directly with the Central Valley Water Board; they would be responsible for applying for coverage, developing FWQMPs, and conducting any required monitoring and reporting. This alternative would allow for formation of responsible legal entities that could serve a group of growers who discharge to the same general location and thus could share monitoring locations. In such cases, the legal entity would be required to assume responsibility for the waste discharges of member growers, to be approved by the Central Valley Water Board, and ultimately to be responsible for compliance with ILRP requirements.

For monitoring, growers would have the option of enrolling in a third-party group regional monitoring program instead of conducting individual monitoring. In cases where responsible legal entities were formed, these entities would be responsible for conducting monitoring. All growers would be required to track nutrient, pesticide, and implemented management practices and submit the results to the Central Valley Water Board (or an approved third-party monitoring group) annually. Other monitoring requirements would depend on designation of the fields as Tier 1, Tier 2, or Tier 3. (See Chapter 3 for a full description of this alternative.)

## **1.4.5 Alternative 5 – Direct Oversight with Farm Monitoring**

Alternative 5 would consist of general WDRs designed to protect groundwater and surface water from discharges associated with irrigated agriculture.

All growers would be required to apply for and obtain coverage under the general WDRs. This alternative would include requirements to (1) develop and implement a FWQMP; (2) monitor (a) discharges of tailwater, drainage water, and storm water to surface water; (b) applications of irrigation water, nutrients, and pesticides; and (c) groundwater; (3) keep records of (a) irrigation water; (b) pesticide applications; and (c) the nutrients applied, harvested, and moved off the site; and (4) submit an annual monitoring report to the Central Valley Water Board.

Alternative 5 relies on coordination with DPR for regulating discharges of pesticides to groundwater. The Central Valley Water Board would develop general WDRs for irrigated agriculture. Growers would be the lead entity in working with the Central Valley Water Board. The Central Valley Water Board would adopt the WDRs, enroll individual growers under the program, provide regulatory oversight, and enforce the requirements of the program.

Each grower would be required to monitor tailwater discharges, storm water discharges, and drainage system discharges. In addition, each grower would be required to conduct nutrient and pesticide tracking as well as groundwater monitoring.

## **1.5 CEQA Process**

### **1.5.1 Purpose of This Draft PEIR**

The Lead Agency, the Central Valley Water Board, will consult this draft PEIR in determining which alternative, or elements of alternatives, would best meet applicable statutory requirements and the goals and objectives of the ILRP.

## 1.5.2 Public Outreach

As the ILRP has been developed, the Central Valley Water Board has sought public input on many occasions, as described at length in Chapter 2, Introduction. Public comment on this draft PEIR has been requested through a scoping process described below and is again invited during the public comment period.

### Notice of Preparation

The Central Valley Water Board released a Notice of Preparation (NOP) on February 14, 2003.

### Scoping

On March 5 and 6, 2003, CEQA scoping meetings were held in Fresno and Sacramento to solicit and receive public comment on the scope of the EIR as described in the NOP. Following the scoping meetings, the Central Valley Water Board began preparation of the draft *Existing Conditions Report* (ECR) in 2004 to assist in defining the baseline condition for the EIR's environmental analyses. The draft ECR was circulated in 2006, public comment on the document was received and incorporated, and it was released in 2008 (ICF Jones & Stokes 2008).

In March and April 2008, the Central Valley Water Board staff conducted [another series of CEQA scoping meetings](#) to generate recommendations on the scope and goals of the long-term ILRP. Information also was gathered as to how stakeholders would like to be involved in development of the long-term program. Stakeholders indicated in these scoping meetings that they would like to be actively involved in developing the program. To address this interest, the Central Valley Water Board initiated a series of Workgroup meetings, described below.

## 1.5.3 Scope of Draft PEIR Analysis

All CEQA-recognized environmental resources were analyzed for possible environmental impacts resulting from the ILRP alternatives. The alternatives were determined to have possible significant effects on several resource areas, which are discussed at length in Chapter 5. Likewise, the alternatives were determined to have no significant impact on other resources, which are discussed in Section 5.11, Minimally Impacted Resources.

### Resources with Potentially Significant Impacts

The Central Valley Water Board determined that the program could result in potentially significant impacts on the following resources, which thus warrant close scrutiny:

- Cultural resources
- Noise
- Air quality
- Climate change
- Vegetation and wildlife
- Fisheries
- Hydrology and water quality

- Agriculture resources

## Resources Not Significantly Impacted

The Central Valley Water Board has determined that the program will result in no or less-than-significant direct impacts and no indirect impacts on the following resources, which thus do not warrant close scrutiny:

- Aesthetics
- Geology and soils
- Hazards and hazardous materials
- Land use and planning
- Mineral resources and energy
- Population and housing
- Public services
- Recreation
- Transportation and circulation
- Utilities and service systems

## Known Areas of Controversy

In accordance with State CEQA Guidelines Section 15123(b)(2), the areas of controversy known to the lead agency, including issues raised by agencies and the public, shall be identified in the EIR. Through public scoping, the efforts of the Workgroup, and other outreach efforts, the following areas of controversy were identified:

- The costs to growers of implementing a more stringent ILRP will be prohibitive and suppress the economic sustainability or growth of agriculture.
- Adding a groundwater monitoring element to the ILRP would be unnecessarily duplicative of existing monitoring efforts.
- The alternatives do not contain a clear methodology for defining a groundwater discharger or determining the nature of discharges to groundwater.
- The program does not take adequate steps to offset the costs to rural communities for cleanup of existing water quality impairments that can be linked back to historical agricultural discharges.



## **1.5.4 Public Comment on the Draft PEIR**

This draft PEIR was made available for public review and comment on July 28, 2010. In addition, the Central Valley Water Board will conduct public hearings on the draft document. Comments received at the hearings or received in written form will be considered in development of a final PEIR.

Comments may be sent to:

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## 1.6 Summary of Program Environmental Impacts and Mitigation

Table 1-1 provides a summary of the potential impacts and mitigation measures for the ILRP.

**Table 1-1. Summary of Impacts and Mitigation Measures for the Irrigated Lands Regulatory Program**

<b>Impact</b>	<b>Applicable Alternative</b>	<b>Significance before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance after Mitigation</b>
<b>CULTURAL RESOURCES</b>				
CUL-1. Physical Destruction, Alteration, or Damage of Cultural Resources from Implementation of Management Practices	1, 2, 3, 4, 5	Significant	CUL-MM-1: Avoid Impacts to Cultural Resources	Less than significant
CUL-2. Potential Damage to Cultural Resources from Construction Activities and Installation of Groundwater Monitoring Wells	5	Significant	CUL-MM-1: Avoid Impacts to Cultural Resources	Less than significant
<b>NOISE</b>				
NOI-1. Exposure of Sensitive Land Uses to Noise from Construction Activities in Excess of Applicable Standards	1, 2, 3, 4, 5	Potentially significant	NOI-MM-1: Implement Noise-Reducing Construction Practices	Less than significant
NOI-2. Exposure of Sensitive Land Uses to Noise from Operational Activities in Excess of Applicable Standards	1, 2, 3, 4, 5	Potentially significant	NOI-MM-1: Implement Noise-Reducing Construction Practices NOI-MM-2: Reduce Noise Generated by Individual Well Pumps	Less than significant
<b>AIR QUALITY</b>				
AQ-1. Generation of Construction Emissions in Excess of Local Air District Thresholds	1, 2, 3, 4, 5	Potentially significant	AQ-MM-1: Apply Applicable Air District Mitigation Measures to Reduce Construction Emissions below the District Thresholds	Less than significant
AQ-2. Generation of Operational Emissions in Excess of Local Air District Thresholds	1, 2, 3, 4, 5	Potentially significant	AQ-MM-2: Apply Applicable Air District Mitigation Measures to Reduce Operational Emissions below the District Thresholds	Less than significant

<b>Impact</b>	<b>Applicable Alternative</b>	<b>Significance before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance after Mitigation</b>
AQ-3. Elevated Health Risks from Exposure of Nearby Sensitive Receptors to TACs/HAPs	1, 2, 3, 4, 5	Potentially significant	AQ-MM-1: Apply Applicable Air District Mitigation Measures to Reduce Construction Emissions below the District Thresholds AQ-MM-2: Apply Applicable Air District Mitigation Measures to Reduce Operational Emissions below the District Thresholds AQ-MM-3: Apply Applicable Air District Mitigation Measures to Reduce TAC/HAP Emissions	Less than significant
<b>CLIMATE CHANGE</b>				
CC-1. Generation of Greenhouse Gas Emissions Resulting in Global Climate Change	1, 2, 3, 4, 5	Less than significant	No mitigation is required. CC-MM-1: Apply Applicable Air District Mitigation Measures to Reduce Construction and Operational GHG Emissions (recommended) CC-MM-2: Apply Applicable California Attorney General Mitigation Measures to Reduce Construction and Operational GHG Emissions (recommended)	-
<b>VEGETATION AND WILDLIFE</b>				
BIO-1. Loss of Downstream Habitat from Reduced Field Runoff	1, 2, 3, 4, 5	Potentially significant	BIO-MM-2: Determine Extent of Wetland Loss and Compensate for Permanent Loss of Wetlands	Less than significant
BIO-2. Improved Water Quality in Natural Communities Adjacent to Agricultural Lands and Managed Wetlands	1, 2, 3, 4, 5	Beneficial	No mitigation is required.	-
BIO-3. Potential Loss of Sensitive Natural Communities and Special-Status Plants from Construction Activities	1, 2, 3, 4, 5	Potentially significant	BIO-MM-1: Avoid and Minimize Impacts on Sensitive Biological Resources	Less than significant
BIO-4. Potential Loss of Wetland Communities due to Loss of Existing Sedimentation Ponds	2, 3, 4, 5	Potentially significant	BIO-MM-2: Determine Extent of Wetland Loss and Compensate for Permanent Loss of Wetlands	Less than significant
BIO-5. Impacts to Special-Status Wildlife Species due to Loss of Existing Sedimentation Ponds	2, 3, 4, 5	Potentially significant	BIO-MM-1: Avoid and Minimize Impacts on Sensitive Biological Resources	Less than significant
BIO-6. Loss of Sensitive Natural Communities and Special-Status Plants from Construction Activities and Installation of Groundwater Monitoring Wells	5	Potentially significant	BIO-MM-1: Avoid and Minimize Impacts on Sensitive Biological Resources	Less than significant

<b>Impact</b>	<b>Applicable Alternative</b>	<b>Significance before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance after Mitigation</b>
BIO-7. Loss of Special-Status Wildlife from Construction Activities and Installation of Groundwater Monitoring Wells	5	Potentially significant	BIO-MM-1: Avoid and Minimize Impacts on Sensitive Biological Resources	Less than significant
<b>FISHERIES</b>				
FISH-1. Improvement to Surface Water Quality in Water Bodies Receiving Inputs from Agricultural Lands and Managed Wetlands	1, 2, 3, 4, 5	Beneficial	No mitigation is required.	-
FISH-2. Temporary Loss or Alteration of Fish Habitat during Construction of Facilities for Management Practices	1, 2, 3, 4, 5	Potentially significant	FISH-MM-1: Avoid and Minimize Impacts to Fish and Fish Habitat	Less than significant
FISH-3. Permanent Loss or Alteration of Fish Habitat during Construction of Facilities for Management Practices	1, 2, 3, 4, 5	Potentially significant	FISH-MM-2: Educate Growers on the Use of Polyacrylamides for Sediment Control	Less than significant
FISH-4. Toxicity to Fish or Fish Prey from Particle-Coagulant Water Additives	1, 2, 3, 4, 5	Potentially significant	FISH-MM-2: Educate Growers on the Use of Polyacrylamides for Sediment Control	Less than significant
FISH-5. Temporary Loss or Alteration of Fish Habitat during Wellhead Protection Construction Required by Groundwater Quality Management Plans	2, 3, 4, 5	Less than significant	No mitigation is required.	-
FISH-6. Temporary Loss or Alteration of Fish Habitat during Construction of Facilities for Management Practices and Groundwater Monitoring Wells	5	Potentially significant	FISH-MM-1: Avoid and Minimize Impacts to Fish and Fish Habitat	Less than significant
FISH-7. Permanent Loss or Alteration of Fish Habitat during Construction of Facilities for Management Practices and Groundwater Monitoring Wells	5	Potentially significant	FISH-MM-1: Avoid and Minimize Impacts to Fish and Fish Habitat	Less than significant
<b>HYDROLOGY AND WATER QUALITY</b>				
SWQ = surface water quality				
HWQ = groundwater quality				

<b>Impact</b>	<b>Applicable Alternative</b>	<b>Significance before Mitigation</b>	<b>Mitigation Measures</b>	<b>Significance after Mitigation</b>
HYD-1. Change in Quality of State Waters from Agricultural Discharge or Alteration of Hydrologic Patterns of Runoff or Infiltration	1	SWQ: Beneficial GWQ: Potentially significant	SWQ: No mitigation is required. GWQ: Mitigation Measure HYD-MM-1: Develop and Implement a Groundwater Quality Management Plan	SWQ: – GWQ: Less than significant
HYD-1. Change in Quality of State Waters from Agricultural Discharge or Alteration of Hydrologic Patterns of Runoff or Infiltration	2, 3, 4, 5	Beneficial	No mitigation is required.	–
<b>AGRICULTURE RESOURCES</b>				
AG-1. Conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to Nonagricultural Use	1, 2, 3, 4, 5	Significant	AG-MM-1: Assist the Agricultural Community in Identifying Sources of Financial Assistance That Would Allow Growers to Keep Important Farmland in Production	Significant and unavoidable