Conditional Waiver of Waste Discharge Requirements for Agricultural Wastewater Discharges and Discharges of Wastes from Drain Operation and Maintenance Activities within the Palo Verde Valley and Palo Verde Mesa, Riverside and Imperial Counties

> Initial Study and Proposed Negative Declaration

Colorado River Basin Regional Water Quality Control Board

August 2012

#### Initial Study CEQA Environmental Checklist and Determination

#### **Project Title**

Conditional Waiver of Waste Discharge Requirements for Agricultural Discharges and Discharges of Wastes from Drain Operation and Maintenance Activities within the Palo Verde Valley and Palo Verde Mesa, Riverside and Imperial Counties

#### Lead Agency Name and Address

California Regional Water Quality Control Board, Colorado River Basin Region 73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260

#### **Contact Person and Phone Number**

Doug Wylie, Senior Water Resources Control Engineer, 760-346-7491

#### **Project Location**

Colorado River Basin Region (southeastern California), Riverside and Imperial Counties

#### **Project Sponsor's Name and Address**

See Lead Agency

**General Plan Designation** 

Not applicable

# Zoning

Not applicable

## **Project Description**

The proposed project is a Conditional Waiver of Waste Discharge Requirements (WDRs) for agricultural wastewater discharges and discharges of wastes from drain operation and maintenance activities originating within the Palo Verde Valley and Palo Verde Mesa. This Conditional Waiver is considered the Preferred Alternative in this CEQA Environmental Checklist and Determination.

This Conditional Waiver applies strictly to discharges of wastes from drain operation and maintenance activities and agricultural wastewater discharges from irrigated lands, specifically: 1) storm water runoff from irrigated lands, and 2) irrigation return water, which includes surface discharges (also known as "tailwater"), and subsurface discharges (known as "tile water" in tiled areas, or "seepage" in areas not tiled). Most agricultural wastewater discharges in the Palo Verde Valley and Palo Verde Mesa are collected in open drains, tributary to the Palo Verde Outfall Drain, which discharges into an old channel of the Colorado River before joining the active channel upstream of the Cibola National Wildlife Refuge. The purpose of the Conditional Waiver is to protect the beneficial uses of water in Palo Verde Valley Drains, and Palo Verde Valley Lagoon and Outfall Drain, by ensuring farmers and drainage maintenance entities implement management practices (MPs) to reduce pollutant concentrations in agricultural wastewater. These surface waters are tributary to the Colorado River.

### Surrounding Land Uses and Setting

Land use in the area is predominately agricultural. Other land use categories include residential, commercial, industrial, and open space. The proposed Conditional Waiver applies to those agricultural lands whose wastewater discharges drain into the Palo Verde Outfall Drain.

#### Other Public Agencies Whose Approval Is Required: None

#### **Environmental Factors Potentially Affected**

The environmental resource categories identified below are analyzed herein to determine whether the Proposed Project would result in adverse impacts to any of these resources. None of the categories below are checked because the Proposed Project is not expected to result in "significant or potentially significant impacts" to any of these resources (see the detailed checklist on the following pages).

Aesthetics	Agriculture Resources	Air Quality
Biological Resources	Cultural Resources	Geology and Soils
Hazards and Hazardous Materials	Hydrology and Water Quality	Land Use and Planning
Mineral Resources	Noise	Population and Housing
Public Services	Recreation	Transportation and Traffic
Utilities and Service Systems	Mandatory Findings of Significance	

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
1. AESTHETICS – Would the project:				
a) Have any substantial adverse effect on a scenic vista?				$\checkmark$
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				
2. AGRICULTURE RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b) Conflict with existing zoning for agricultural use, or Williamson Act contract?				$\mathbf{\mathbf{Y}}$

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				
<b>3. AIR QUALITY</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon the make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				$\checkmark$
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d) Expose sensitive receptors to substantial pollutant concentrations?				$\checkmark$
e) Create objectionable odors affecting a substantial number of people?				$\checkmark$
<b>4. BIOLOGICAL RESOURCES</b> Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				$\mathbf{\overline{\mathbf{A}}}$
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				$\mathbf{\mathbf{\overline{A}}}$
d) Disturb any human remains, including those interred outside of formal cemeteries?				
Γ		Γ		[
6. GEOLOGY AND SOILS Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?				$\checkmark$
iii) Seismic-related ground failure, including liquefaction?				$\checkmark$
iv) Landslides?				$\checkmark$
b) Result in substantial soil erosion or the loss of topsoil?				$\checkmark$

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
7. HAZARDS AND HAZARDOUS MATERIALS Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				
8. HYDROLOGY AND WATER				

8. HYDROLOGY AND WATER QUALITY Would the project:		
a) Violate any water quality standards or Waste Discharge Requirements?		$\mathbf{Y}$
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support the existing land uses or planned uses for which permits have been granted)?		

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
f) Otherwise substantially degrade water quality?				$\checkmark$
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				N
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
j) Inundation by seiche, tsunami, or mudflow?				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
9. LAND USE AND PLANNING Would the project:				
a) Physically divide an established community?				
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				
<b>10. MINERAL RESOURCES</b> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				
<b>11. NOISE</b> Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan ordinance, or applicable standards of other agencies?				
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				
12. POPULATION AND HOUSING Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				7

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

✓

✓

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>13. PUBLIC SERVICES</b> Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?				$\checkmark$
ii) Police protection?				$\checkmark$
iii) Schools?				$\checkmark$
iv) Parks?				$\checkmark$
v) Other public facilities?				$\checkmark$
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<b>14. RECREATION</b> Would the project:				
a) Increase the use of existing	1	1	1	1

14. RECREATION Would the project:		
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		
b) Include recreational facilities or require the construction or expansion or recreational facilities which might have an adverse physical effect on the environment?		

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>15. TRANSPORTATION AND TRAFFIC</b> Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e) Result in inadequate emergency access?				$\checkmark$
f) Result in inadequate parking capacity?				$\checkmark$
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				V

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
16. UTILITIES AND SERVICE SYSTEMS Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g) Comply with federal, state, and local statutes and regulations related to solid waste?				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
17. MANDATORY FINDINGS OF SIGNIFICANCE Does the project:				
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Have impacts that are individually limited, but cumulatively considerable ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)?				$\checkmark$
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

# DETERMINATION

On the basis of this initial evaluation:

 $\underline{X}$  I find that the proposed project could not have a significant effect on the environment, and a Negative Declaration will be prepared.

I find that the proposed project could have a significant adverse effect on the environment. However, there are feasible alternatives and/or feasible mitigation measures that would substantially lessen any significant adverse impact. These alternatives are discussed in the attached written report.

I find that the proposed project may have a significant effect on the environment. There are no feasible alternatives and/or mitigation measures available which would substantially lessen any significant adverse impacts. See attached written report for a discussion of this determination.

ROBERT PERDUE Executive Officer Colorado River Basin Regional Water Quality Control Board

Date

## ENVIRONMENTAL CHECKLIST DISCUSSION

This section discusses: (a) the proposed project; (b) the bodies of water potentially affected by the proposed project, (c) the likely management practices (MPs) to be implemented to comply with the proposed project; and (d) each major area of the Environmental Checklist covering the categories of Potentially Significant Impact, Less Than Significant Impact With Mitigation, Less Than Significant Impact, and No Impact. For the purpose of this CEQA Checklist and Determination, the "proposed project" is the proposed Conditional Waiver of Waste Discharge Requirements, the reasonably foreseeable actions (i.e., MPs) to be implemented by responsible parties, and the compliance monitoring actions.

The following discussion fulfills requirements of Public Resources Code section 21159, subdivision (a)(1) through (3); and California Code of Regulations, Title 14, Section 15187, Subdivisions (b) and (c)(1) through (3). More explicitly, this document provides an analysis of reasonably foreseeable environmental impacts resulting from project implementation. Where appropriate, the evaluation also includes an analysis of feasible and reasonably foreseeable mitigation measures that would avoid or eliminate identified impacts.

#### **Project Description**

Palo Verde Irrigation District (PVID) diverts and distributes irrigation water from the Colorado River and provides agricultural drainage services for farmland in the Palo Verde Valley, which covers about 189 square miles (roughly 131,000 acres). The proposed Conditional Waiver will provide control of (a) the quality of agricultural wastewater discharges into PVID drains; and (b) potential water quality impacts from operation and maintenance (O&M) of PVID drains, in eastern Riverside County and northeastern Imperial County. It is not the intent of this Conditional Waiver to restrict the quantity of agricultural wastewater discharges into the drains (and ultimately into the Colorado River) or to prohibit drain O&M activities. The objective of the Conditional Waiver is to ensure that agricultural discharges and drain O&M take place in a manner that does not adversely affect the beneficial uses in Palo Verde Valley Drains and the Palo Verde Valley Lagoon and Outfall Drain, all of which are tributary to the Colorado River, as defined in the Water Quality Control Plan for the Colorado River Basin Region (Basin Plan). Under the terms of this Conditional Waiver, the above objectives will be accomplished by requiring appropriate Responsible Parties to implement management practices to address the threats their discharges pose to water quality.

The Basin Plan establishes the beneficial uses (BUs) for waters and narrative and quantitative water quality objectives (WQOs) to protect those uses for all surface waters in the Region, including the PVID drains. The purpose of the Conditional Waivers is to prevent adverse water quality impacts that threaten BUs, and ensure consistent compliance with WQOs. Tailwater can carry sediments, nutrients, pesticides and other chemicals that adversely impact surface water BUs. Also, periodic drain cleaning necessary to reduce sediment buildup, can flush sediment (and associated pollutants) downstream if not managed properly.

This Conditional Waiver will address these issues through the development and implementation of Individual or Group Compliance Programs. These Compliance Programs include the following components:

- Water Quality Management Plans (WQMPs),
- Monitoring and Reporting Programs (MRPs),
- Drain Water Quality Plans (DWQPs),
- Drain Monitoring and Reporting Programs (DMRPs),
- Compliance with Designated Management Requirements, and Compliance assurance and enforcement policies specified by the Regional Water Board.

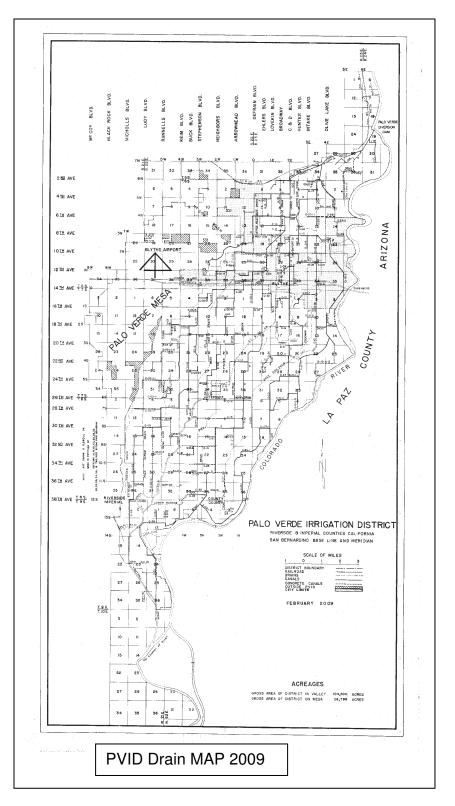
## Water Body and Area Description

From 1996 to 2006, farming operations in the Valley generated an average of 383,769 acre feet per year of irrigation return flows into the Palo Verde Outfall Drain. The agricultural wastewater discharges subject to this Conditional Waiver are: 1) storm water runoff from irrigated lands; and 2) irrigation return water, which includes surface discharges (also known as "tailwater") and subsurface discharges (known as "tile water" in tiled areas, ground water or "seepage" in areas not tiled). Agricultural wastewater discharges have the potential to violate WQOs if they transport excess sediment, nutrients, or pesticides.

PVID operates a network of irrigation canals and laterals that service farmland in the Palo Verde Valley. The main canals at the north end of the District handle up to 2,100 cubic feet per second (cfs), while the smaller laterals handle up to 25 cfs. PVID also operates and maintains a drainage system servicing about 22,000 acres of farm land with field spill pipes. The system extends for about 142 miles and includes about 300 siphons, or submerged culverts. The drains are unlined and carry seepage and agricultural wastewater discharges. With the exception of the Shaws Drain and the Olive Lake Drain the resulting mix eventually goes into the Palo Verde Outfall Drain, the main drain within the PVID. The Shaws Drain and the Olive Lake Drain discharge directly into the Colorado River. The Palo Verde Outfall Drain discharges into an old channel of the Colorado River inside the Cibola National Wildlife Refuge, which then discharges into the Colorado River.

Part of the Palo Verde Outfall Drain is known as the Palo Verde Lagoon, which is located adjacent to the unincorporated community of Palo Verde in Imperial County. This community is about six (6) miles west of the Colorado River, and has an estimated population of 236. Housing includes single family residences and two RV parks. Wastewater is treated by subsurface septic systems. The beneficial uses of water in the Palo Verde Lagoon include water contact recreation.

**Figure 1** PVID Drain Map 2009 shows the service area of PVID. "Project area" refers to the Palo Verde Valley Drains the Palo Verde Outfall Drain and the surrounding farmland.



Tables 1, 2, and 3, below, summarize the beneficial uses of the tributary drains, the Palo Verde Lagoon and Outfall Drain, and the Colorado River, respectively<sup>1</sup>.

Table 1: Palo Verde Valley Drains Beneficial Uses			
Beneficial	Description		
Use			
REC I <sup>2</sup> Uses of water for recreational activities involving body contact water, where ingestion of water is reasonably possible. These usinclude, but are not limited to, swimming, wading, water skiing, and scuba diving, surfing, whitewater activities, fishing, and us natural hot springs.			
REC II <sup>3</sup>	Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.		
WARM Uses of water that support warm water ecosystems including, limited to, preservation or enhancement of aquatic h vegetation, fish, or wildlife, including invertebrates.			
WILD	Uses of water that support terrestrial ecosystems including but not limited to, the preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.		

Table	Table 2: Palo Verde Lagoon and Outfall Drain Beneficial Uses				
Beneficial Use	Description				
REC I⁴	Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.				
REC II⁴	Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.				
WARM	Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.				

 <sup>&</sup>lt;sup>1</sup> Source: Basin Plan as amended to date.
<sup>2</sup> The REC I usage known to occur is from fishing activity.
<sup>3</sup> Unauthorized use.

<sup>&</sup>lt;sup>4</sup> Unauthorized use within Riverside County portion of flow.

Tab	Table 2: Palo Verde Lagoon and Outfall Drain Beneficial Uses			
Beneficial Use	Description			
WILD	Uses of water that support terrestrial ecosystems including but not limited to, the preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.			
RARE	Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.			

Table 3: Colorado River Beneficial Uses				
Beneficial Use	Description			
MUN	Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.			
AGR	Uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.			
AQUA	Uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.			
IND	Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well repressurization.			
GWR	Uses of water for natural or artificial recharge of ground water for purposes of future extraction, maintenance of water quality, or halting salt water intrusion into fresh water aquifers.			
COLD⁵	Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.			
POWR	Uses of water for hydropower generation.			
REC I	Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.			
REC II	Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.			

 $<sup>^{\</sup>rm 5}$  Limited to reach from Parker Dam to Nevada State Line.

	Table 3: Colorado River Beneficial Uses				
Beneficial Use	Description				
WARM	Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.				
WILD	D Uses of water that support terrestrial ecosystems including but limited to, the preservation and enhancement of terrestrial habita vegetation, wildlife (e.g., mammals, birds, reptiles, amphibia invertebrates), or wildlife water and food sources.				
RARE	Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.				

## **Existing Drain Maintenance and Required Improvement Plans**

Although there are some private drains maintained by landowners, PVID owns and maintains the vast majority of drains in the Valley. Since the 1970's, PVID has used long-reach excavators to remove mud and place the excavated material on drain banks as the equipment moves downstream. In areas where the long-reach excavators are ineffective, a dragline is used to open the flow area. Weeds on the inside slope of drains are crushed and large trees are removed. Weeds and plants within the drains are also removed to restore flow. The cleaning of channels is done on an as-needed basis. For some drains, 10 or 15 years may pass before a second cleaning is necessary.

#### Farming Management Practices (MPs)

This section describes the MPs Responsible Parties may select to comply with this Waiver and address potential water quality impacts caused by sediment, nutrients, and pesticides in agricultural wastewater discharges. Growers may choose from a number of MPs from the categories shown in Table 6 below. The list is not exclusive; Responsible Parties can determine what MP or combination of MPs is appropriate for their farms, regardless of whether the MP is listed. Proper selection and implementation of MPs is fundamental to water quality protection and enhancement. Currently, farmers are implementing MPs that effectively manage nutrients and pesticides, and improve irrigation efficiency and erosion control.

#### Table 4– Sediment MPs **Tailwater Ditch Checks or Check Dams**: Tailwater Ditch Checks are temporary or permanent dams that hold water level well above ground. They can be placed at intervals in tailwater ditches, especially those with steeper slopes. They increase the cross-section of the stream of water, decrease water velocity and reduce erosion, and may cause sediment already in the water to settle out. Tailwater Ditch Checks can be constructed of plastic, concrete, fiber, metal, or other suitable material. If plastic sheets are used, care must be taken not to allow plastic pieces to be carried downstream with water. In order to be effective, this MP must be utilized where water velocities will not wash out check dams or sides of the tailwater ditch around the dams.

#### Table 4– Sediment MPs

**Field to Tailditch Transition**: This practice involves controlling water flow from the field into the tailwater ditch through spillways or pipes without washing across and eroding soil. Spillways might be constructed of plastic, concrete, metal, or other suitable material. If plastic sheets are used, care must be taken not to allow plastic pieces to be carried downstream with water. This procedure may be useful on fields irrigated in border strips and furrows.

**Furrow Dikes (C-Taps)**: Furrow dikes are small dikes created in furrows to manage water velocity in the furrow. They can be constructed of earth and built with an attachment to tillage equipment, pre-manufactured "C-Taps," or other material, including rolled fiber mat, plastic, etc. Jones & Stokes (Jones & Stokes Associates 1996) rated this MP as having a likely positive sediment transport reduction effect and a relatively low cost.

**Filter Strips**: This practice involves border elimination on the field's last 20 to 200 feet. The planted crop is maintained to the field's end, and tailwater from upper lands is used to irrigate the crop at the ends of adjacent lower lands. The main slope on the field's lower end should be no greater than on the balance of the field. A reduced slope might be better. With no tailwater ditch, very little erosion occurs as water slowly moves across a wide area of the field to the tailwater box. Some sediment might settle out as the crop slows the water as it moves across the field.

**Irrigation Water Management**: Irrigation water management is defined as determining and controlling irrigation water rate, amount, and timing in a planned manner. Effective implementation can result in minimizing on-farm soil erosion and subsequent sediment transport into receiving waters. Specific irrigation water management methods include: surge irrigation, tailwater cutback, irrigation scheduling, and runoff reduction. In some cases, irrigation water management of an additional irrigator to better monitor and manage irrigation water and potential erosion.

**Irrigation Land Leveling**: This practice involves maintaining or adjusting field slope to avoid excessive slopes or low spots at a field's tail end. It might be advantageous in some cases to maintain a reduced main or cross slope, which facilitates more uniform distribution of irrigation water and can result in reduced salt build-up in soil, increased production, reduced tailwater, and decreased erosion. Jones & Stokes (Jones & Stokes Associates 1996) rated this MP as having a sediment reduction efficiency of 10% to 50%, and a medium to high cost.

**Sprinkler Irrigation**: Sprinkler irrigation involves water distribution by means of sprinklers or spray nozzles. The purpose is to apply irrigation water efficiently and uniformly to maintain adequate soil moisture for optimum plant growth without causing excessive water loss, erosion, or reduced water quality. Jones & Stokes (Jones & Stokes Associates 1996) rated this MP as having a demonstrated positive sediment transport reduction effect (sediment reduction efficiency of 25% to 35% if utilized during germination, and 90% to 95% for an established crop), and a relatively high cost.

**Drip Irrigation**: Drip irrigation consists of a network of pipes and emitters that apply water to soil surface or subsurface in the form of spray or small stream.

**Channel Vegetation/Grassed Waterway**: This practice involves establishing and maintaining adequate plant cover on channel banks to stabilize channel banks and adjacent areas, and to establish maximum side slopes. This practice reduces erosion and sedimentation, thus reducing bank failure potential.

#### Table 4– Sediment MPs

**Irrigation Canal or Lateral**: This practice applies to irrigation drainage channels. One objective is to prevent erosion or water quality degradation. Drainage channels should be designed to develop velocities that are non-erosive for the soil materials from which the channel is constructed.

#### Table 5 – Nutrient MPs

**Nutrient and Irrigation Water Management Plan (NIWMP)**: These plans document practices and strategies to address natural resource concerns related to nutrient. A NIWMP is a written description of the procedures used to select and apply crop nutrients (manure and commercial fertilizers) and water to cropland, including pasture. The NIWMP includes a description of the process used to determine how much manure and commercial fertilizer is needed by the crops and a description of when and how nutrients and irrigation water (including reclaimed treated wastewater) are applied.

**Tailwater Ditch Checks or Check Dams:** Same as in previous Table. The checks also act as nutrient MPs by reducing and preventing erosion of soil which contains nutrients.

**Field to Tailditch Transition:** Same as in previous table. The spillways also act as nutrient MPs by reducing and preventing erosion of nutrient-laden soils from the tailwater ditch.

**Furrow Dikes (also known as "C-Taps"):** Same as in previous table. The C-Taps also act as nutrient MPs by reducing and preventing erosion of nutrient-laden soils from the tailwater ditch.

**Filter Strips:** Same as in previous table. The filter strips also act as nutrient MPs by reducing and preventing erosion of nutrient-laden soils from the tailwater ditch.

**Irrigation Water Management:** Same as in previous table. The purpose is to apply irrigation water efficiently and uniformly to maintain adequate soil moisture for optimum plant growth without causing excessive erosion of nutrient laden soils.

**Irrigation Land Leveling:** Same as in previous table. The purpose is to apply irrigation water efficiently and uniformly to maintain adequate soil moisture for optimum plant growth without causing excessive erosion of nutrient laden soils.

**Sprinkler Irrigation:** Same as in previous table. The purpose is to apply irrigation water efficiently and uniformly to maintain adequate soil moisture for optimum plant growth without causing excessive erosion of nutrient laden soils.

**Drip Irrigation:** Same as in previous table. The purpose is to apply irrigation water efficiently and uniformly to maintain adequate soil moisture for optimum plant growth without causing excessive erosion of nutrient laden soils.

**Reduced Tillage:** Same as in previous table. This practice involves eliminating one or more cultivation per crop. It minimizes erosion of nutrient laden soils, and sedimentation that may occur in the furrow.

**Channel Vegetation** / **Grassed Waterway**: Same as in previous table. This practice reduces erosion of nutrient laden soils and sedimentation.

**Irrigation Canal or Lateral**: Same as in previous table. This practice reduces erosion of nutrient laden soils and sedimentation at the irrigation drainage channels.

Table 6 – Pesticide MPs

**Pesticide Training and Certification**: Obtain training and the appropriate certification on pesticide use/management prior to any pesticide use.

Pesticide Recording Keeping: Keep precise pest and pesticide records

Read and Follow the Label: Read the label before you purchase, use or dispose of a pesticide. Check for ground water advisories or other water protection guidelines. You are required by law to follow label directions. Be aware of how your pesticide handling and application practices can impact ground water.

**Evaluate the Pesticide**: Select pesticides that are less likely to leach. Pesticides that have the greatest potential to leach to ground water are highly water soluble, relatively persistent and do not adsorb to soil. The UC Extension Service and the Natural Resources Conservation Service can assist you in selecting the appropriate pesticide. **Pesticide Selection**: Select least toxic and less persistent pesticides when feasible.

**Site-specific Pesticide**: Avoid the overuse of preventive pesticides treatments. Base pesticide application on site-specific pest scouting and indicators of economic return.

**Integrated Pest Management**: Integrated Pest Management (IPM) is the use of all means of pest control (chemical and nonchemical) in a compatible fashion to reduce crop losses. Pesticides are the last line of defense and are used only when pest levels are causing sufficient damage to offset the expense of the application.

**Prevent back-siphoning and spills**: Never allow a hose used for filling a spray tank to extend below the level of the water in the tank. It is better to haul water to the field to fill the spray tank. It is also recommended that you mix and dilute pesticides in the field. If a pesticide spill happens, contain the spill as quickly as possible and handle according to label directions. Use anti-siphon devices in the water line. They are inexpensive and effective.

**Consider weather and irrigation plans**: Never begin an application if a significant weather event such as rainfall is forecast and might cause drift or soil runoff at the application site. Application just before rainfall or irrigation may result in reduced efficacy if the pesticide is washed off the target crop, resulting in the need to reapply the pesticide.

**Pesticide use:** Use pesticides only when economic thresholds are reached and buy only what you need.

Leave buffer zones around sensitive areas: Read the pesticide label for guidance on required buffer zones around water, buildings, wetlands, wildlife habitats and other sensitive areas where applications are prohibited.

**Reduce off-target drift**: Never begin an application when wind or temperature favors pesticide drift to an off target area. Use appropriate spray pressure and nozzle selection to minimize drift.

**Application equipment:** Maintain all application equipment in good working order and calibrate it regularly.

**Pesticide use and storage**: Only store pesticides on the farm for a short time and in a locked weather-tight enclosure downstream and a reasonable distance (greater than 100 ft) from a well or any surface water. Use appropriate protective equipment and clothing according to label instructions.

**Dispose of pesticide and chemical wastes safely**: Use pesticides and other agricultural chemicals only when necessary. Carry water in a nurse tank to the field to mix and measure on site. Prepare only as much as is needed. Dispose of excess chemical and its container in accordance with label directions.

Implementation of MPs will have a positive impact on the waters of the state by (a) reducing levels of constituents of concern (COCs) in receiving waters; e.g., nutrients, sediment, etc.; and/or (b) preventing COCs from reaching receiving waters. This will improve drain water quality in the Palo Verde Valley and Palo Verde Mesa, and improve the habitat for aquatic and other biological resources. This Conditional Waiver also requires implementation of a comprehensive monitoring program for receiving waters and MPs to measure actual water quality improvements and compliance with Water Quality Standards for receiving waters.

## **Detailed Discussion of the Environmental Checklist**

### I. Aesthetics

#### Would the project:

#### a) Have any substantial adverse effect on a scenic vista?

**No Impact.** The proposed project will not have a substantial adverse effect on a scenic vista. While some PVID farmland is riparian to the Colorado River, MPs implemented to control and improve tailwater quality and compliance monitoring will occur on existing, privately owned farmland or on existing agricultural drains. The land has been cultivated for at least 90 years. Also, implementation of MPs on drain operations will not affect scenic vistas.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

**No Impact.** The proposed project will not substantially damage scenic resources within a state scenic highway. MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least 90 years. Controlling and improving the quality of agricultural wastewater discharges, and implementing MPs on drain operations will not affect scenic resources.

# c) Substantially degrade the existing visual character or quality of the site and its surroundings?

**No Impact.** The proposed project will not substantially degrade the existing visual character or quality of the site and its surroundings. MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least 90 years. This agricultural land is not sensitive with respect to visual character or quality. Controlling and improving the quality of agricultural wastewater discharges and implementing MPs on drain operations will not affect such resources.

# d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

**No Impact.** The proposed project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. MP implementation and compliance monitoring will occur mostly in daylight hours, using standard non-glaring machinery (e.g., tractors, backhoes).

## II. Agriculture Resources

## Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? **No Impact.** The proposed project will not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. The project requires farmers/growers to continue using MPs on farmland to control agricultural wastewater discharge quality and control pollutants associated with discharges. It also requires PVID to continue use of MPs to control potential water quality impacts due to drain O&M.

b) Conflict with existing zoning for agricultural use, or Williamson Act contract? **No Impact.** The proposed project does not conflict with existing zoning for agricultural use, or the California Land Conservation Act known as the Williamson Act.

<u>c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?</u>
**No Impact.** The proposed project does not involve other changes in the existing environment which could result in conversion of Farmland to non-agricultural use.

### III. Air Quality

Would the project:

<u>a) Conflict with or obstruct implementation of the applicable air quality plan?</u> **No Impact.** The proposed Conditional Waiver does not conflict with or obstruct implementation of the applicable air quality plan.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

**No impact.** The proposed project does not violate air quality standards or contribute substantially to an existing or projected air quality violation. MPs themselves are not sources of emissions. Construction, operation, and maintenance of some MPs (e.g., land leveling, sprinkler irrigation, drip irrigation, etc.) may involve the temporary use (one-time or once-per-year) of construction equipment (e.g., tractors, backhoes) that are sources of gasoline/diesel byproduct emissions and fugitive dust emissions (particulates). However, the equipment used for construction and O&M meets emission standards. Therefore, construction equipment emissions are not expected to violate or contribute substantially to an existing or projected air quality violation.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

**No Impact.** The contribution attributable to the proposed project is not considered cumulatively considerable and therefore, is less than significant.

## d) Expose sensitive receptors to substantial pollutant concentrations?

**No Impact.** The proposed project will not expose sensitive receptors to substantial pollutant concentrations. Particulate emissions associated with MP construction and operation and maintenance will occur primarily in agricultural drains and fields where large numbers of people are not expected to congregate.

e) Create objectionable odors affecting a substantial number of people? **No Impact.** The proposed project will not create objectionable odors.

# IV. Biological Resources

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

**No Impact.** The proposed project will not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

**No Impact.** The proposed project will not have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game, or U.S. Fish and Wildlife Service.

The subject drains support riparian habitat spaced intermittently along the drains. Riparian habitat provides valuable vegetative cover for numerous sensitive bird species, including the endangered Yellow-billed cuckoo, Elf owl, Gila woodpecker, Southwestern willow flycatcher, and Arizona Bell's vireo. Critical habitat also provides cover for sensitive fish habitat including the endangered Bonytail and the Razorback sucker (Lower Colorado River Multi-Species Conservation Program 2004). Reduction of pollutants to the drains will not alter this important vegetative cover nor will it affect sensitive wildlife in any adverse manner. To the contrary—improved water quality creates a healthier habitat for wildlife and other biological resources.

 c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
No Impact. The proposed project will not have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

**No Impact.** The proposed project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with an established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy ordinance?

**No Impact.** The proposed project does not conflict with any local policies or ordinances protecting biological resources.

<u>f)</u> Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

**No Impact.** The proposed project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Control and reduction of pollutants that could impair water quality in the drains will benefit water bodies in the project area.

# V. Cultural Resources

# Would the project:

# a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

**No Impact.** The proposed project will not cause a substantial adverse change in the significance of historical resources. The Regional Water Board is not aware of these resources in the project area, despite holding a CEQA Scoping Meeting on September 13, 2005, early in the development of this Conditional Waiver. Local tribes and tribal agencies were invited (via letter) to attend this meeting to discuss CEQA-related issues that should be brought to the Regional Water Board's attention. In addition, the CEQA-Scoping Meeting was noticed in local newspapers, libraries, and post offices. The Regional Water Board received no comments regarding the occurrence of sensitive or unique historical, archaeological, paleontological, or geological resources. Likewise, no

information was obtained concerning the occurrence of ancient burial grounds, outside of formal cemeteries. Local tribes and tribal agencies invited included the Torres Martinez Desert Cahuilla Indian Tribe, and the Fort Mohave Tribal Council.

MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least 90 years. Any historical resources should have been identified and protected if present. Control and reduction of pollutants that impair water quality is beneficial to water bodies (drains) in the project area, and will not affect historical resources.

# b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

**No Impact.** The proposed project will not cause a substantial adverse change in the significance of archaeological resources. The Regional Water Board is not aware of these resources in the project area, despite holding a CEQA Scoping Meeting. (Please see response to Question V.a. for further discussion of the CEQA Scoping Meeting, likelihood of resources, and communication with local tribes.) MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least 90 years. Archaeological resources present on-site should already have been identified and protected. Reduction and control of pollutants benefit water quality, and will not affect these resources.

# c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**No Impact.** The proposed project will not directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature. The Regional Water Board is not aware of any such resources in the project area, despite holding a CEQA Scoping Meeting. (Please see response to Question V.a. for further discussion of the CEQA Scoping Meeting, likelihood of resources, and communication with local tribes.) MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least 90 years. Paleontological or geologic resources present should already have been identified and protected. Reduction of pollutants in the drains is beneficial to water quality and will not affect these resources.

## d) Disturb any human remains, including those interred outside of formal cemeteries?

**No Impact.** The proposed project will not disturb any human remains, including those interred outside of formal cemeteries. The Regional Water Board is not aware of these resources in the project area, despite holding a CEQA Scoping Meeting. (Please see response to Question V.a. for further discussion of the CEQA Scoping Meeting, likelihood of resources, and communication with local tribes.) MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least 90 years. Interred human remains should have been identified and protected if present. Reduction of pollutants in the drains is beneficial to water quality and will not affect these resources.

# VI. Geology and Soils

#### Would the project:

<u>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</u>

- 1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
- 2) Strong seismic ground shaking?
- 3) Seismic-related ground failure, including liquefaction?
- 4) Landslides?

**No Impact.** The proposed project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic activity.

b) Result in substantial soil erosion or the loss of topsoil?

**No Impact.** The proposed project will not result in substantial soil erosion or the loss of topsoil.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

**No Impact.** MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least 90 years. The MPs are not individually or cumulatively significantly different than current agricultural practices (e.g., preparing land for planting). MPs likely to be implemented do not involve structures that will affect or disturb soils to any significant degree, cause soils to become unstable, or result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

<u>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building</u> Code (1994), creating substantial risks to life or property?

**No Impact.** MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least 90 years. The MPs are not individually or cumulatively drastically unlike current agricultural practices (e.g., preparing land for planting). MPs to be implemented are unlikely to affect soil to any significant degree, or create substantial risk to life or property.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

**No Impact.** The proposed project does not involve septic tanks or alternative wastewater disposal systems.

## VII. Hazards and Hazardous Materials

### Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

**No Impact.** The proposed project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The proposed project does not involve use of hazardous materials.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

**No Impact.** The proposed project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The proposed project does not involve use of hazardous materials.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

**No Impact.** The proposed project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The proposed project does not involve use of hazardous materials.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

**No Impact.** The proposed project will not be located on sites included on a list of hazardous materials sites that would result in creation of a significant hazard to the public or the environment. MP implementation and compliance monitoring will occur on existing fields and drains, which are not identified as hazardous materials sites.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

**No Impact.** The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport. MP implementation and compliance monitoring will occur on existing fields and drains.

<u>f)</u> For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

**No Impact.** The proposed project is not located within the vicinity of a private airstrip. MP implementation and compliance monitoring will occur on existing fields and drains.

<u>g) Impair implementation of or physically interfere with an adopted emergency response</u> plan or emergency evacuation plan?

**No Impact.** The proposed project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. MP implementation and compliance monitoring will occur on existing fields and drains, which generally are not corridors for emergency response or evacuation.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

**No Impact.** The proposed project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. MP implementation and compliance monitoring will occur on existing fields and drains that are not adjacent to urbanized areas or residences.

# VIII. Hydrology and Water Quality

Would the project:

a) Violate any water quality standards or waste discharge requirements?

**No Impact.** The proposed Conditional Waiver requires implementation of actions to reduce pollutant discharges to the outfall drain, and discharge in compliance with Basin Plan water quality standards. Implementation of MPs will improve water quality of receiving waters by reducing pollutant loading to receiving waters, and preventing pollutants from reaching receiving waters. The Conditional Waiver also includes a comprehensive monitoring program for receiving waters to ensure compliance with WQS, and overall improvements in water quality.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support the existing land uses or planned uses for which permits have been granted)?

**No Impact.** The proposed project does not involve the extraction or recharge of groundwater supplies. Surface waters involved in this project do not recharge groundwater aquifers of significant value in terms of their beneficial uses.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

**No Impact.** The proposed project does not require alteration of the existing drainage pattern of the site or area, and would not result in substantial erosion or siltation on- or off-site. Rather, the proposed project expects to reduce sediment/silt to surface waters by implementing MPs that minimize erosion and sediment deposition.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

**No Impact.** The proposed project does require alteration of the existing drainage pattern of the site or area, and would not result in a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Alteration of drainage patterns (e.g., re-routing surface waters, increasing paved areas, increasing agricultural runoff) is not a foreseeable method of compliance with this prohibition.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

**No Impact.** The proposed project will not create or contribute runoff water. Rather, the proposed project should improve the quality of runoff from agricultural fields, thereby reducing substantial additional sources of pollution.

# f) Otherwise substantially degrade water quality?

**No Impact.** The proposed project will not otherwise substantially degrade water quality. Rather, the proposed project should improve water quality by prohibiting discharges with pollutants at concentrations that violate or threaten to violate water quality standards.

<u>g) Place housing within a 100-year flood hazard area as mapped on a federal Flood</u> <u>Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?</u> **No Impact.** The proposed project will not place housing within a 100-year flood hazard area.

# h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

**No Impact.** The proposed project will not place structures which would impede or redirect flood flows anywhere within a 100-year flood hazard area.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

**No Impact.** The proposed project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

## j) Inundation by seiche, tsunami, or mudflow?

**No Impact.** The proposed project will not expose people or structures to a significant risk of inundation by seiche, tsunami, or mudflow.

# IX. Land Use and Planning

## Would the project:

# a) Physically divide an established community?

**No Impact.** The proposed project will not physically divide an established community. MP implementation and compliance monitoring will occur on existing fields and drains, and will not result in any land use or planning impacts.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

**No Impact.** The proposed project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. MP implementation and compliance monitoring will occur on existing fields and drains, and will not impact land use or planning.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

**No Impact.** The proposed project will not conflict with any applicable habitat conservation plan or natural community conservation plan.

## X. Mineral Resources

## Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

**No Impact.** The proposed project will not result in the loss of availability of a known mineral resource of value to the region and the residents of the state. MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland under cultivation for at least 90 years.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

**No Impact.** The proposed project will not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland under cultivation for at least 90 years.

# XI. Noise

## Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan ordinance, or applicable standards of other agencies?

**No Impact.** The proposed project will not result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan ordinance, or applicable standards of other agencies. Construction and/or installation of some MPs may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, caterpillars) that may emit noise at levels greater than 60 decibels. However, such activities will occur on farmland not typically surrounded by people. Once installed, the MPs themselves are not sources of significant noise.

# b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

**No Impact.** The proposed project will not expose persons to or generate excessive groundborne vibration or groundborne noise levels. Construction and/or installation of some MPs may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, caterpillars) that may emit groundborne vibration or noise. However, such activities will occur on farmland not typically surrounded by people. Once installed, the MPs themselves are not sources of significant groundborne vibration or noise.

# c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

**No Impact.** The proposed project will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Construction and/or installation of some MPs may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, caterpillars) that may increase ambient noise levels in the area. However, such activities will occur on farmland not typically surrounded by people. Once installed, the MPs themselves are not sources of significant permanent ambient noise.

# d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

**No Impact.** The proposed project will not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Construction and/or installation of some MPs may involve the temporary use of

farming and construction equipment (e.g., tractors, backhoe, caterpillars) that may increase noise levels, but these noise levels will not exceed typical levels from daily farming operations. Additionally, such activities will occur on farmland not typically surrounded by people. Once installed, the MPs themselves are not sources of temporary or periodic increases in ambient noise.

 e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
No Impact. The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?
No Impact. The proposed project is not located within the vicinity of a private airstrip.

# XII. Population and Housing

Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

**No Impact.** The proposed project will not induce substantial population growth in an area, either directly or indirectly. MP implementation will not involve construction of buildings or infrastructure.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

**No Impact.** The proposed project will not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. MP implementation will not necessitate removal of housing.

# c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

**No Impact.** The proposed project will not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. MP implementation will not necessitate displacement of people.

## XIII. Public Services

### Would the project:

(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

<u>Fire protection?</u> <u>Police protection?</u> <u>Schools?</u> <u>Parks?</u> <u>Other public facilities?</u>

**No Impact.** The proposed project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives for public services.

## XIV. Recreation

Would the project:

(a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

**No Impact.** The proposed project will not increase the use of existing neighborhood and regional parks or other recreational facilities. MP implementation will not increase park or recreational facility use.

(b) Include recreational facilities or require the construction or expansion or recreational facilities which might have an adverse physical effect on the environment?

**No Impact.** The proposed project will not include recreational facilities or require the construction or expansion of recreational facilities. MP implementation will not include or require recreational facility use.

# XV. Transportation and Traffic

Would the project:

a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? **No Impact.** The proposed project will not cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). Construction and/or installation of some MPs may require use of farming equipment (e.g., tractors, backhoe, caterpillars). However, transportation and movement of farming equipment is common on roads and highways serving the area where MPs are to be implemented. Traffic congestion may occur temporarily in isolated areas, but is not expected to increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

**No Impact.** The proposed project will not exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. Construction and/or installation of some MPs may require use of farming equipment (e.g., tractors, backhoe, caterpillars). However, transportation and movement of farming equipment is common on the roads and highways serving the area where MPs are to be implemented. Potential traffic congestion may occur temporarily in isolated areas, but is not expected to exceed a level of service standard for designated roads or highways.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

**No Impact.** The proposed project will not result in a change in air traffic patterns. MP implementation does not involve or affect air traffic.

<u>d)</u> Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

**No Impact.** The proposed project will not substantially increase hazards due to design features or incompatible uses. Construction and/or installation of some MPs may require use of farming equipment (e.g., tractors, backhoe, caterpillars). However, transportation and movement of farming equipment is common on the roads and highways serving the area where MPs are to be implemented, and do not create an incompatible use hazard.

## e) Result in inadequate emergency access?

**No Impact.** The proposed project will not result in inadequate emergency access. Construction and/or installation of some MPs may require use of farming equipment (e.g., tractors, backhoe, caterpillars). However, transportation and movement of farming equipment is common on the roads and highways serving the area where MPs are to be implemented, and should not create inadequate emergency access.

# f) Result in inadequate parking capacity?

**No Impact.** The proposed project will not result in inadequate parking capacity. Construction and/or installation of some MPs may require use of farming equipment

(e.g., tractors, backhoe, caterpillars). However, MPs will occur on existing drains and farmland, where adequate space exists to park construction and/or installation equipment.

<u>g)</u> Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

**No Impact.** The proposed project does not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). MP implementation does not involve or affect alternative transportation.

# XVI. Utilities and Service Systems

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

**No Impact.** The proposed project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. MP implementation does not involve wastewater treatment plants under Regional Board requirements.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

**No Impact.** The proposed project will not require or result in construction of new water or wastewater treatment facilities or expansion of existing facilities. MP implementation does not involve wastewater treatment plants.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

**No Impact.** The proposed project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities. MP implementation does not involve storm water drainage facilities.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

**No Impact.** The proposed project has sufficient water supplies available to serve the project from existing entitlements and resources. The proposed project will not need new or expanded entitlements, either during or after MP construction/installation.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

**No Impact.** The proposed project will result in a determination by the wastewater treatment provider which serves the project area that it has adequate capacity to serve

the project's projected demand in addition to the provider's existing commitments. MP implementation does not involve wastewater treatment plants.

<u>f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?</u>

**No Impact.** The proposed project does not involve landfills, and will not generate additional garbage to be accommodated by a landfill.

g) Comply with federal, state, and local statutes and regulations related to solid waste? **No Impact.** The proposed project complies with federal, state, and local statutes and regulations related to solid waste. MP implementation does not involve solid waste.

# XVII. Mandatory Findings of Significance

Does the project:

a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

**No Impact.** The proposed project will not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. Rather, the proposed project is expected to improve the environment by prohibiting the discharges of waste and thereby return the area to a more natural and pristine state.

b) Have impacts that are individually limited, but cumulatively considerable ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

**No Impact.** The proposed project will not have impacts that are individually limited or cumulatively considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

**No Impact.** The proposed project does not have environmental effects which will cause substantial adverse effects on human beings either directly or indirectly. Rather, the proposed project is expected to reduce water quality-related problems (e.g., unsafe fish consumption) that may adversely affect human beings.

#### No Action Alternative

The No Action Alternative is defined as the Regional Water Board's decision not to consider adoption of a Conditional Waiver. This alternative means that the subject drains may violate Basin Plan WQOs for pesticides and other pollutants. This alternative does not comply with the Porter-Cologne Water Quality Control Act (Wat. Code § 13000 et seq.) nor does it meet the purpose of the Preferred Alternative, which is to eliminate water quality problems. This alternative is not acceptable because Beneficial Uses will continue to be in danger, and health of biological and human communities will continue to be at risk.

#### Preferred Alternative

The proposed (i.e., Preferred Alternative) is the basis for all discussions in this CEQA Environmental Checklist and Determination. The Preferred Alternative is a feasible approach to decrease existing and future pollutants in the subject drains, and thus to decrease health risks for biological and human communities. The Preferred Alternative calls for Responsible Parties to develop and implement either Individual Compliance Programs or participate in Coalition Group Compliance Programs, such as the PVID Coalition Group Compliance Program, and requires the Regional Water Board staff to determine if WQOs are attained by the third year. This time schedule is moderately aggressive, yet reasonable. The time schedule provides Responsible Parties with the necessary time to explore financial options and implement tasks. The proposed Implementation Plan utilizes a combination of self-determined actions (e.g., PVID's Watershed Program) and regulatory-encouraged actions (e.g., PVID's development and implementation of a water quality monitoring program). This alternative will prohibit pollutant discharge, thus reducing the human health threat, and protecting beneficial uses.

## Shorter Compliance Timeframe Alternative

The Shorter Compliance Timeframe Alternative is defined as the proposed project that requires the Regional Water Board staff to determine if WQOs are attained by the second year instead of the third year in the Preferred Alternative. This alternative is not feasible or reasonable, considering the amount of data collection required to assess conditions/sources and the amount of time needed by Responsible Parties to develop/implement plans to reduce pollutant discharges. This alternative would decrease existing pollutant discharges, reduce the human health threat and protect beneficial uses. However, this alternative may lead to insufficient data to effectively determine if WQOs are attained and may lead to greater economic impacts to responsible parties who may require additional personnel to implement required measures so quickly.

## Increased Regulatory Oversight

The Increased Regulatory Oversight Alternative is defined as the proposed project with an Implementation Plan of greater regulatory oversight, including the adoption of general permits, effluent limitations for the PVID, and/or effluent limitations for individual Responsible Parties. This alternative would result in similar impacts to biological resources as the proposed project (Preferred Alternative), but could be unnecessarily burdensome on the regulated community, and unnecessarily exhaustive of limited Regional Water Board staff resources.

# **Comparison of Alternatives**

Table 7 provides a comparison of the alternatives discussed above.

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Alternative	Impacts on Responsible Parties	Biological Impacts	Water Quality Impacts	Objectives Met?
No Action	None	None	Adverse	Objectives not met
Preferred Alternative	Less than significant	None	None	Objectives met
Shorter Compliance Timeframe	Potentially Significant	None	None	Objectives met - faster time frame than Preferred Alternative
Increased Regulatory Oversight	Potentially Significant	None	None	Objectives met - same time frame as Preferred Alternative

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