

# **CEQA Environmental Checklist and Determination**

## **Sedimentation/Siltation Total Maximum Daily Load (TMDL) for Imperial Valley Drains: Niland 2, P, and Pumice Drains, and Implementation Plan**

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Board) is the Lead Agency responsible for evaluating potential environmental impacts of the proposed amendment to the Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) incorporating a **Sedimentation/Siltation Total Maximum Daily Load (TMDL) for Imperial Valley Drains: Niland 2, P, and Pumice Drains, and Implementation Plan**.

The Secretary for Resources certified the basin planning process as exempt from certain requirements under the California Environmental Quality Act (CEQA), including preparation of an environmental impact report [Title 14, California Code of Regulations, Section 15251(g)]. The TMDL staff report and its supporting documents are a proposed amendment to the Basin Plan, and, therefore, are part of the basin planning process. Thus, the proposed amendment is considered functionally equivalent to an environmental impact report. Included in the functionally equivalent amendment are the:

- Basin Plan Amendment
- Regional Board Resolution
- TMDL Staff Report
- Economic Analysis
- CEQA Environmental Checklist and Determination
- Natural Environment Study

Any regulatory program of the Regional Board certified as functionally equivalent, however, must satisfy documentation requirements of Title 23, California Code of Regulations, Section 377(a), which requires an Environmental Checklist with a description of the proposed activity and a determination with respect to significant environmental impacts. This information is presented below.

### **Project Title**

Amendment to the California Regional Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) to establish the Sedimentation/Siltation Total Maximum Daily Load (TMDL) for the Imperial Valley Drains: Niland 2, P, and Pumice Drains, and Implementation Plan

### **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**

Joan Stormo, Senior Engineering Geologist, (760) 776-8982

### **Project Location**

Colorado River Basin Region (southeastern California), Imperial County

**Project Sponsor's Name and Address**

See Lead Agency

**General Plan Designation**

Not applicable

**Zoning**

Not applicable

**Project Description**

The Imperial Valley drains are listed as impaired by silt on the State of California's Clean Water Act Section 303(d) List. Accordingly, the proposed Basin Plan Amendment addresses this issue by establishing the Sedimentation/Siltation Total Maximum Daily Load (TMDL) for the Imperial Valley Drains: Niland 2, P, and Pumice Drains, and Implementation Plan. This project includes: (1) load allocations for three (Niland 2, P, and Pumice Drains) Imperial Valley Drains that empty directly into the Salton Sea, (2) an Implementation Plan for all Imperial Valley Drains that empty directly into the Salton Sea, and (3) a Prohibition for discharge of silt-laden tailwater into the Imperial Valley, including the New River, Alamo River, all Imperial Valley Drains, and their tributaries. The TMDL Implementation Plan requires that responsible parties implement Management Practices (MPs) in accordance with a time schedule to address the impairment. The Basin Plan is applicable to the Colorado River Basin Region of California, as set forth in the California Water Code, Division 7, Section 13200(i).

**Surrounding Land Uses and Setting**

The project area is located in southeastern California. The amendment applies to agricultural land in Imperial Valley.

**Other Public Agencies Whose Approval Is Required (for Permits, Financing Approval, Participation Agreement, Etc.)**

None

**Environmental Factors Potentially Affected**

The environmental factors checked below involve at least one impact that may be potentially affected by the project, as indicated by the checklist on the following pages.

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Aesthetics                      | <input checked="" type="checkbox"/> Agriculture Resources              | <input checked="" type="checkbox"/> Air Quality                |
| <input type="checkbox"/> Biological Resources            | <input type="checkbox"/> Cultural Resources                            | <input checked="" type="checkbox"/> Geology and Soils          |
| <input type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Hydrology and Water Quality        | <input type="checkbox"/> Land Use and Planning                 |
| <input type="checkbox"/> Mineral Resources               | <input type="checkbox"/> Noise   | <input type="checkbox"/> Population and Housing                |
| <input type="checkbox"/> Public Services                 | <input type="checkbox"/> Recreation                                    | <input checked="" type="checkbox"/> Transportation and Traffic |
| <input type="checkbox"/> Utilities and Service Systems   | <input checked="" type="checkbox"/> Mandatory Findings of Significance |  |

## ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>1. AESTHETICS</b> – Would the project:				
a) Have any substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>2. AGRICULTURE RESOURCES</b> -- 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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**3. AIR QUALITY** -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Expose sensitive receptors to substantial pollutant concentrations?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**4. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>5. CULTURAL RESOURCES -- Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>6. GEOLOGY AND SOILS -- Would the project:</b>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- |  | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact                           |
|--|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| 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?                                   | <input type="checkbox"/>       | <input type="checkbox"/>              | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/>       | <input type="checkbox"/>              | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

**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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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**8. HYDROLOGY AND WATER QUALITY -- Would the project:**

- |   |                          |                                     |                          |                                     |
|---|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| 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)? | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Otherwise substantially degrade water quality?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| j) Inundation by seiche, tsunami, or mudflow?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**9. LAND USE AND PLANNING -- Would the project:**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

- |   | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact                           |
|---|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| 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? | <input type="checkbox"/>       | <input type="checkbox"/>              | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan?   | <input type="checkbox"/>       | <input type="checkbox"/>              | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

**10. 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?                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**11. 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**12. POPULATION AND HOUSING** -- Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**13. 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: Fire protection? Police protection? Schools? Parks? Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**15. 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**16. UTILITIES AND SERVICE SYSTEMS** -- Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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regulations related to solid waste?

**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? | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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.)?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

## DETERMINATION

On the basis of this initial evaluation:

  X   I find that the proposed Basin Plan Amendment could not have a significant effect on the environment.

       I find that the proposed Basin Plan Amendment 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 Basin Plan Amendment 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.

\_\_\_\_\_  
PHIL GRUENBERG  
Executive Officer

\_\_\_\_\_  
Date

## ENVIRONMENTAL CHECKLIST DISCUSSION

This section contains a:

- (a) project description
- (b) water body and area description
- (c) analysis of likely Management Practices (MPs)
- (d) detailed discussion of each major area of the Environmental Checklist, covering the Potentially Significant Impact, Less Than Significant Impact With Mitigation, Less Than Significant Impact, and No Impact categories

For the purpose of this CEQA Checklist and Determination, the “proposed project” includes the amendment, the reasonably foreseeable actions (i.e., MPs) to be implemented by responsible parties, and the TMDL compliance monitoring actions.

The following discussion fulfills requirements of California Code of Regulations Title 23, Section 3777, subdivision (a)(1) through (3); 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 reasonably foreseeable mitigation measures that would avoid or eliminate identified impacts.

### **Project Description**

The proposed project is an amendment to the Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) that will establish the Sedimentation/Siltation Total Maximum Daily Load (TMDL) for Imperial Valley Drains: Niland 2, P, and Pumice, and Implementation Plan. The Amendment includes allocations that apply to three Imperial Valley drains (Niland 2, P, and Pumice) and their tributary drains (Vail 4A, Vail 4, Vail 3A, Vail 3, and Vail 2A feed into Pumice), and includes an Implementation Plan for all Imperial Valley drains that empty directly into the Salton Sea. The Amendment also includes a Prohibition for discharge of silt-laden tailwater into the Imperial Valley, including the New River, Alamo River, all Imperial Valley Drains, and their tributaries.

The Niland 2, P, and Pumice drains (and their tributary drains) total 39 miles long, and are referred to in this document as "subject drains". Niland 2, P, and Pumice drains empty directly into the Salton Sea. "Project area" refers to the subject drains' 39 miles of canals and the surrounding farmland that drains into them, as well as all drains and surrounding farmland that empty directly into the Salton Sea. (The Alamo River, New River, and drains that empty into them are covered under previous TMDLs for those rivers.)

As required by Section 13242 of the Porter-Cologne Water Quality Act, the proposed amendment also incorporates a TMDL Implementation Plan that includes:

- (a) a description of actions to be taken to achieve the TMDL, including recommended actions,
- (b) time schedules for actions to be taken, and
- (c) compliance monitoring activities.

A TMDL is the maximum amount of a pollutant that a water body can receive while it still meets water quality objectives (narrative or numerical) designed to protect beneficial uses, pursuant to 40 Code of Federal Regulations (CFR) 130.2(d), and California Water Code (CWC) 13241. The designated beneficial uses of Imperial Valley Drains include: warm freshwater habitat (WARM); wildlife habitat (WILD); preservation of rare threatened, or endangered species (RARE); contact- and non-contact water recreation (REC I and REC II); and freshwater replenishment (FRSH) (California Regional Water Quality Control Board as amended to date). REC I and REC II usage is unauthorized in the Imperial Valley Drains, even though it occurs there.

The Basin Plan includes narrative water quality objectives that apply to sediment (suspended solids, sediment, turbidity) for all surface waters in the Region, including the Imperial Valley drains. Violation of these objectives indicates that beneficial uses are impaired.

The TMDL's purpose is to eliminate sediment-caused impairments of beneficial uses. Excess sediment in the water column and in bottom deposits adversely affects aquatic and terrestrial organisms. Sediment also serves as a carrier for DDT, DDT metabolites, and other insoluble pesticides including toxaphene. These deposits and chemicals pose a threat to aquatic and avian communities and people feeding on fish.

The main source of excess sediment to the subject drains (and all drains that empty directly into the Salton Sea) is agricultural runoff. The drain system is owned mainly by private landowners. The Imperial Irrigation District (IID), in addition to operating and maintaining the drainage system, also owns farmland in the Valley (e.g., a recently purchased 40,000 acres of agricultural land), and thus also is an owner of the drains. Most sediment in drains comes from agricultural tailwater, which is applied irrigation water that does not percolate into soil, thereby exiting at the lower end of the field, into an IID drain. IID periodically dredges to reduce sediment buildup in drains. Such activity can cause excess sediment to be flushed downstream.

The amendment will require responsible parties to utilize sediment-control Management Practices (MPs). The proposed time schedule outlined in the TMDL Implementation Plan occurs in four phases with interim numeric targets and corresponding allocations, and requires full compliance by the year 2015. The proposed Basin Plan Amendment:

1. Updates references to the State's Nonpoint Source Management Plan.
2. Includes Regional Nonpoint Source Management Plan elements.
3. Deletes dated information that is no longer accurate.
4. Establishes a numeric target of 200 milligrams per liter of total suspended solids.
5. Adds a section for this proposed TMDL that:
  - a. Summarizes TMDL elements, including the Problem Statement, Numeric Target, Source Analysis, Margin of Safety, Seasonal Variations and Critical Conditions, Loading Capacity, and Load Allocations and Wasteload Allocations;
  - b. Establishes interim numeric targets;
  - c. Designates responsible parties and management actions;
  - d. Lists recommended Management Practices (MPs), with estimated implementation costs and financing sources;
  - e. Describes recommended actions for cooperating agencies;
  - f. Describes TMDL compliance monitoring and enforcement activities;
  - g. Describes Regional Board water quality monitoring and implementation tracking activities to assess TMDL implementation;

- h. Describes public reporting activities; and
- i. Describes the Regional Board review process.

### **Water Body and Area Description**

A 1,668-mile system of main and lateral canals delivers water to 500,000 acres of Imperial Valley farmland (Imperial Irrigation District 1998). Agricultural tailwater that exits the farmland is conveyed by about 1,500 miles of drains into the Alamo River or New River (and eventually into the Salton Sea), or into the Salton Sea directly. The subject drains (and all drains that empty directly into the Salton Sea) are important habitat for birds and other wildlife, whose native habitat has been drastically reduced due to human encroachment.

Imperial County covers about 4,597 square miles (2,942,080 acres) (Imperial County 1998). About 74% of County lands are undeveloped desert and mountain areas, mostly under Federal or State ownership. About 17% of County lands are irrigated for agriculture, totaling over 500,000 acres located mostly in the Imperial Valley. The Salton Sea covers about 8% of the County. Developed areas (e.g., communities) occupy less than 1% of County land.

### **Likely Dredging Mitigations**

At the time of this analysis, it was uncertain what measures IID may implement to mitigate for dredging operations to ensure TMDL compliance. Options include reducing the amount and frequency of dredging, and implementing appropriate seasonal dredging restrictions (i.e., outside of the March through August nesting season) to avoid impacts on sensitive resources. Because of the uncertainty, the proposed Basin Plan Amendment requires IID to submit a Revised Drain Water Quality Improvement Plan (DWQIP) that details a sediment-control and monitoring program for its drains, pursuant to Section 13267 of the California Water Code. The program, in part, must identify proposed control measures and a time schedule for implementation. The IID is a "Public Agency" as defined by state law (PRC 21063), and acts as a Lead Agency for its projects to comply with CEQA requirements (PRC 21159.2, State CEQA Guidelines 15189).

### **Likely Management Practices (MPs)**

During TMDL development, the Imperial Valley Sedimentation/Siltation TMDL Technical Advisory Committee (Silt TMDL TAC) and the University of California Cooperative Extension created two MP lists, one for on-field and one for off-field sediment control. These lists are the basis for the MPs contained in the proposed amendment. Most sediment-control MPs work by slowing the velocity of irrigation water runoff and/or making the field or drain more resistant to erosive forces. The listed MPs are not prescriptive because California law prohibits the Regional Board from specifying design, location, type of construction, or particular manner in which compliance may be had, pursuant to California Water Code (CWC) § 13360. Hence, the Basin Plan Amendment allows responsible parties to implement other non-listed MPs, so long as law does not prohibit the MPs.

At the time of this analysis, it was uncertain which MPs farmers may choose to implement. However, a qualitative analysis was undertaken to identify those MPs most likely to be implemented widely. The analysis was based on cost, effectiveness, and anticipated acceptability. A MP was considered to be cost-effective if it was:

- (a) rated as low in cost in the List of Agricultural Best Management Practices for the Imperial Valley (Jones & Stokes Associates 1996), or

- (b) determined to increase total production costs by less than 1% for field crops and vegetables, and by about 2% for non-vegetable row-crops, in the Imperial Valley Drains Silt TMDL: Economic Impact Assessment (State Water Resources Control Board 2003).

MP effectiveness was assessed using the effectiveness ratings in the List of Agricultural Best Management Practices for the Imperial Valley, recommendations of the U.C. Cooperative Extension, the Silt TMDL Technical Advisory Committee, and professional judgment. MP anticipated acceptability was determined based on communication with Imperial Valley farmers, the Silt TMDL TAC, and Imperial Irrigation District, as well as whether a MP has been or is being used by local farmers. Table 1 summarizes the results of the MP evaluation.

**Table 1. Management Practice (MP) Evaluation**

<b>Management Practice</b>	<b>Cost-Effective?</b>	<b>Effective in Reducing Silt?</b>	<b>Anticipated Acceptability</b>	<b>Widespread Implementation Likely?</b>
<b>On-Field</b>				
Tailwater Drop Box with Raised Grade Board (Imperial Irrigation District Regulation No. 39)	Yes	Yes	Yes	Yes
Improved Drop Box with Widened Weir and Raised Grade Board	Yes	Yes	Yes	Yes
"Pan Ditch" (Enlarged Tailwater Ditch Cross Section)	Yes	Yes	Yes	Yes
Tailwater Ditch Checks or Check Dams	Yes	Yes	Yes	Yes
Field to Tailditch Transition	Yes	Yes	Yes	Yes
Furrow Dikes (C-Taps)	Yes	Yes	Yes	Yes
Filter Strips	Yes	Yes	Yes	Yes
Irrigation Water Management	Yes	Yes	No	No
Land Leveling	No	Yes	Yes	No
Sprinkler Irrigation	No	Yes	Yes	No
Drip Irrigation	No	Yes	Yes	No
Reduced Tillage	Yes	No	Yes	No
<b>Off-Field</b>				
Channel Vegetation/Grassed Waterway	Yes	Yes	Yes	Yes
Irrigation Canal or Lateral	Yes	Yes	Yes	Yes
Sedimentation Basins	No	Yes	Yes	No

Farmers are likely to select MPs that are cost-effective (affordable), effective in reducing silt, and acceptable to them (e.g., without significant risk of harm to crops or soils). Therefore, the MPs likely to have widespread implementation are: tailwater drop box with raised grade board

(Imperial Irrigation District Regulation No. 39); improved drop box with widened weir and raised grade board; "pan ditch" (enlarged tailwater ditch cross section); tailwater ditch checks or check dams; field to tailditch transition; furrow dikes (C-taps); filter strips; channel vegetation/ grassed waterway; and irrigation canal or lateral. The environmental analysis in this document is based on the potential widespread implementation of these MPs in the project area.

## 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. MP implementation and compliance monitoring is expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. This agricultural land is not sensitive with respect to scenic vistas. Reduced sediment levels in the drains themselves will not affect such resources.

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 is expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. This agricultural land is not sensitive with respect to scenic resources. Reduced sediment levels in the drains themselves will not affect such 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 is expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. This agricultural land is not sensitive with respect to visual character or quality. Reduced sediment levels in the drains themselves 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?

**Less Than Significant Impact.** The proposed project potentially may convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. Of the MPs recommended by the Silt TMDL TAC and the University of California Cooperative Extension, only three MPs (filter strips, pan ditch, and sedimentation basins) require the conversion of any amount of land. Two of these MPs are discussed below in relation to the amount of land they would remove from agricultural production. The third MP (sedimentation basins) is not likely to be implemented because of cost (Table 1).

A typical tailwater ditch in Imperial County is about 5 feet for an 80-acre field (i.e., 2,900-foot by 1,200-foot field). To implement the filter strip MP, the tailwater ditch would have to be widened by about another 15 feet to reach a total width of 20 feet (Sojka 1996). This amounts to about one acre (15 ft x 2,900 ft = 43,500 ft<sup>2</sup>) per 80-acre field that would be removed from agricultural production. (One acre = 43,560 ft<sup>2</sup>) Of the 10,463 acres of farmable land in the project area, approximately 5,487 acres are planted on any given year with alfalfa and sudan grass. The filter strip for these crops would consist of the same crop and, therefore, there is no conversion of land to non-agricultural use (i.e., the filter strip can be harvested) if filter strips are used for this acreage. Subsequently, there is no adverse impact on this acreage. Filter strips for the remaining 4,976 acres could result in the conversion of about 62 acres ((1 acre converted / 80 acres) x 4,976 acres = 62 acres converted) to non-agricultural use.

As stated in the paragraph above, a typical tailwater ditch in Imperial County is about 5 feet wide for an 80-acre field (i.e., 2,900-foot by 1,200-foot field). To implement the pan ditch (widened tailwater ditch) MP, the tailwater ditch would have to be widened by about another 10 feet to reach a total width of 15 feet (Cocke 2001). This amounts to about 0.67 acres (10 ft x 2,900 ft = 29,000 ft<sup>2</sup>, then 29,000 ft<sup>2</sup> / (43,560 ft<sup>2</sup> / acre) = 0.67 acre) per 80-acre field that would be removed from agricultural production. It is unlikely that this pan ditch MP will be chosen for the 5,487 acres planted with alfalfa and sudan grass, because the filter strip MP described above would allow harvest of the filter strip, thus keeping all land in production. Pan ditches for the remaining 4,976 acres could result in the conversion of about 42 acres ((0.67 acre converted / 80 acres) x 4,976 acres = 42 acres converted) to non-agricultural use.

Hence, a combination of 50% filter strips and 50% pan ditches for 4,976 acres (i.e., acres not planted with alfalfa and sudan grass) could result in the conversion of 52 acres ((62 acres + 42 acres) / 2 MP methods = 52 acres) to non-agricultural use. This equates to 0.5% of farmable land in the project area ((52 acres converted / 10,463 acres farmable land) x 100 = 0.5%). A substantial number of responsible parties most likely will choose other MPs (e.g., tailwater drop box with raised grade board, improved drop box with widened weir and raised grade board, tailwater ditch checks) that do not remove farmland from crop production. Therefore, in practice, less than 0.5% of farmland likely will be converted to non-agricultural use. This impact is considered less than significant.

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.

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?

**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:

a) Conflict with or obstruct implementation of the applicable air quality plan?

**No Impact.** The proposed project 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?

**Less Than Significant Impact.** The proposed project may violate air quality standards or contribute substantially to an existing or projected air quality violation. Particulate emissions and ozone in Imperial County exceed Federal and State Ambient Air Quality Standards (California Air Resources Board 2002). Particulate emissions and ozone are due to: (a) extensive disturbances of dry soil from agriculture and off-road vehicles, (b) pollutant transfer from the South Coast Air Basin, (c) industrial activities in the City of Mexicali, Mexico, where pollutants blow into the Imperial Valley, and (d) nocturnal air stagnation and ground-based temperature inversions. (Inversions lead to poor air quality at night that continues over into early morning.)

MPs themselves are not sources of emissions. However, construction, operation, and maintenance of some MPs (e.g., filter strips, sprinkler irrigation, drip irrigation, channel vegetation/ grassed waterway) 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, some MPs (e.g., sprinkler irrigation, drip irrigation) are unlikely to be implemented significantly because of cost (Table 1). Further, the Imperial County Air Pollution Control District (ICAPCD) reports that the equipment used for construction and operation and management (O&M) meets emission standards and is exempted from ICAPCD permitting requirements. Therefore, construction equipment emissions are expected to result in less than significant air quality impacts.

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)?

**Less Than Significant Impact.** The contribution attributable to the proposed project is not considered cumulatively considerable and, as a consequence, 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 O&M mostly will occur 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.

The subject drains (and all drains that empty directly into the Salton Sea) support over ninety special status wildlife species, including sixteen threatened and/or endangered species (see Natural Environment Study). Drains that empty directly into the Salton Sea, including the subject drains, provide valuable vegetation cover and are used as habitat by numerous sensitive bird species, including the endangered Yuma clapper rail (Setmire 1995), and the endangered Desert pupfish (Salton Sea Authority 1999). Reduction of sediment to the drains will not alter this important vegetation cover.

The mouths of Imperial Valley drains (i.e., where the drains empty into the Salton Sea) also are used by wildlife. However, these small areas of sediment/silt deposition do not provide the same protection from predators as do the delta areas at the mouths of the Alamo and New Rivers. Reduction of sediment to the drains may reduce the amount of sediment/silt at drains mouths, but will have no effect on biological resources, who prefer to use delta areas instead.

Reduction of sediment to the drains is anticipated to have an overall beneficial impact on biological resources within and downstream of drains. Silt deposition can result in smothering of some bottom-dwelling species, eggs, and larvae of fish and aquatic invertebrates. Sediment from agricultural drains serves as a carrier for pesticides such as DDT, DDT metabolites, and toxaphene. These pesticides accumulate in sediments and undergo biomagnification through the food chain. Imperial Valley fish routinely contain Total DDT levels exceeding the National Academy of Sciences (NAS) recommended maximum concentration and U.S Food and Drug Administration (FDA) action level, and are considered hazardous to the wildlife and people who consume them. Deleterious reproductive effects of DDT include decreased egg production, eggshell thinning (and thus, breakage), increased chick mortality, and decreased fledgling

success. Toxaphene is a known carcinogen, and like DDT, damages cells by disrupting important enzymatic and biochemical processes.

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 (and all drains that empty directly into the Salton Sea) support riparian habitat, which is spaced intermittently along the drains. Riparian habitat provides valuable vegetation cover for numerous sensitive bird species, including the endangered Yuma clapper rail (Setmire 1995), and the endangered Desert pupfish (Salton Sea Authority 1999). Reduction of sediment to the drains will not alter this important vegetation cover.

The mouths of Imperial Valley drains (i.e., where the drains empty into the Salton Sea) support small areas of sediment/silt deposition that contain components of wetland and mudflat communities. However, these sediment/silt areas are marginal habitat, as they do not provide the same protection from predators as do the delta areas at the mouths of the Alamo and New Rivers. Reduction of sediment to the drains may reduce the amount of sediment/silt at drains mouths, but will have no effect on the true sensitive natural communities located at the Alamo and New River delta areas.

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.

The mouths of Imperial Valley drains (i.e., where the drains empty into the Salton Sea) support small areas of sediment/silt deposition that contain components of wetland and mudflat communities. However, these sediment/silt areas are marginal habitat, as they do not provide the same protection from predators as do the delta areas at the mouths of the Alamo and New Rivers. Reduction of sediment to the drains may reduce the amount of sediment/silt at drains mouths, but will have no effect on the true sensitive natural communities located at the Alamo and New River delta areas.

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 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.

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?

**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. Additionally, the proposed project does not conflict with the water transfer plan (i.e., Quantification Settlement Agreement for the Colorado River) signed in the Fall of 2003 by the Imperial Irrigation District and other involved parties.

## 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 Board is not aware of any such resources in the project area, despite holding a CEQA Scoping Meeting on April 29, 2002, early in the development stage of this proposed TMDL. 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 Board's attention. Additionally, a notice for this CEQA Scoping Meeting was published in local newspapers, libraries, and post offices. The Regional Board did not receive any comments identifying the existence of or probable existence of sensitive historical, archaeological, unique paleontological, or unique geological resources, or human remains interred outside of formal cemeteries. Local tribes and tribal agencies invited included the: Agua Caliente Band of Cahuilla Indians, Morongo Band of Mission Indians, Twentynine Palms Tribal Environmental Protection Agency, Torres Martinez Desert Cahuilla Indian Tribe, Fort Mohave Tribal Council, Quechan Indian Tribe, Colorado River Indian Tribes, U.S. Bureau of Indian Affairs (Colorado River Agency), and U.S. Bureau of Indian Affairs (Fort Yuma Agency).

MP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. Any such historical resources already would be identified and protected if they occur on-site. Reduced sediment levels in the drains themselves will not affect such 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 Board is not aware of any such resources in the project area, despite holding a CEQA Scoping Meeting. (Please see Question V.a. for further discussion of the CEQA Scoping Meeting, likelihood of resources, and communication with local tribes.) MP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. Any such archaeological resources already would be identified and protected if they occur on-site. Reduced sediment levels in the drains themselves will not affect such 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 Board is not aware of any such resources in the project area, despite holding a CEQA Scoping Meeting. (Please see Question V.a. for further discussion of the CEQA Scoping Meeting, likelihood of resources, and communication with local tribes.) MP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. Any such paleontological or geologic resources already would be identified and protected if they occur on-site. Reduced sediment levels in the drains themselves will not affect such 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 Board is not aware of any such resources in the project area, despite holding a CEQA Scoping Meeting. (Please see Question V.a. for further discussion of the CEQA Scoping Meeting, likelihood of resources, and communication with local tribes.) MP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. Any such interred human remains already would be identified and protected if they occur on-site. Reduced sediment levels in the drains themselves will not affect such resources.

## **VI. 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?
- iii) Seismic-related ground failure, including liquefaction?
- iv) Landslides?

**Less Than Significant Impact.** The proposed project potentially may expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic activity. However, the impact is considered less than significant.

Imperial Valley is one of the most active seismic zones in North America, with numerous historic earthquakes. The Valley experiences continuous low-to-moderate level seismic activity. The Great San Andreas Fault lies near the project area. A Richter scale magnitude 8 earthquake might occur once per 160 years, a magnitude 7 every thirteen years, a magnitude 4 every ten years, and a magnitude 3 about ten to twenty times per year. The area had two magnitude 6 quakes in 1987. Additionally, some areas in the Valley have a perched groundwater table. The combination of loose, fine sediments, high groundwater, and a potential for seismic activity create a potential for soil liquefaction. Therefore, the potential for structural failure is inherently considerable for the area.

MP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. The MPs are not individually or cumulatively significantly different than current agricultural practices (e.g., preparing land for planting). People implementing MPs may be exposed to seismic activity because of their presence in an earthquake-prone area, but no more so than they would have been without MP implementation. Therefore, the proposed project will not result in significant soil disturbances that would result in fault rupture, strong seismic ground-shaking, seismic-related ground failure, or landslides. Rather, the proposed project will have a less than significant impact.

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. The objective of the proposed project is to control excess delivery of sediment/silt from irrigated agricultural fields into the drains. Implementation of MPs will reduce soil erosion and 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 are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. The MPs are not individually or cumulatively significantly different than current agricultural practices (e.g., preparing land for planting). The MPs that are likely to be implemented do not involve structures that would affect or disturb soils to any significant degree such that the soils would become unstable, 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?

**No Impact.** MP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. The MPs are not individually or cumulatively significantly different than current agricultural practices (e.g., preparing land for planting). The MPs that are likely to be implemented would not affect soil to any significant degree such that they would create a 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 which are 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 are expected to 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 are expected to occur on existing fields and drains.

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?

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

g) Impair implementation of or physically interfere with an adopted emergency response 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 are expected to 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 are expected to 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?

**Less Than Significant Impact with Mitigation.** The proposed project may violate water quality standards or waste discharge requirements. However, this can be reduced to a less than significant impact with mitigation. For the purpose of this subsection, impacts are considered significant if they result in violation of water quality standards or waste discharge requirements. A water quality standard for a water body is defined as a particular beneficial use of the water body and the water quality objective (WQOs) necessary to protect the beneficial use. WQOs can be numeric (e.g., “Dissolved oxygen concentrations shall not be reduced below 5.0 mg/L for any river with a designated WARM beneficial use.”) or narrative (e.g., “The suspended sediment load and suspended sediment discharge rate to surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.”). The Regional Board’s Clean Water Act Section 303(d) List of Impaired Water Bodies documents the pollutants/stressors associated with each listed water body in the Region, including the Imperial Valley drains (Table 2).

**Table 2. Pollutant/Stressors of the Imperial Valley Drains**

<b>Water Body</b>	<b>Pollutant/Stressor</b>
Imperial Valley Drains	Silt, Pesticides, Selenium

(California Regional Water Quality Control Board 2003)

Provisions of the California Water Code authorize the Regional Board to adopt Waste Discharge Requirements (WDRs) from point and nonpoint sources of pollution. WDRs for discharges from point sources are termed National Pollutant Discharge Elimination System (NPDES) permits. Currently, zero wastewater treatment plants (WWTPs) and zero power-generating stations discharge into the subject drains. Therefore, such facilities are not a source of suspended solids in the subject drains.

Currently, discharges of wastes from nonpoint sources (e.g., agricultural runoff) are not under WDRs. The proposed amendment will include a prohibition of sediment discharge unless the discharge is either in compliance with applicable TMDL(s), including implementation provisions, or WDRs. Additionally, the Regional Board will continue to use the State’s Nonpoint Source Management Plan to control degradation caused by nonpoint sources. The proposed project is consistent with that approach. The Regional Board will be implementing a comprehensive water quality monitoring program as part of this project to track water quality changes.

MP implementation may alter the composition of water in drains by reducing tailwater flows. Nearly 100% of discharges in the drains are from agricultural sources, with tailwater accounting for 48% of discharges (Table 3). Therefore, tailwater currently helps to dilute tilewater, which carries excess selenium, salt, and nutrients load into the watershed. Accordingly, a reduction in tailwater may increase these pollutants in the drains. However, tailwater discharge for the sole purpose of diluting current pollutants found in tilewater will not achieve compliance with State WQS. Subsequently, significant impacts on water quality (i.e., significant increases of pollutant concentrations in the drains) are unlikely as a result of implementing the proposed TMDL. The 1987 through 1996 average annual discharges to the New River, Alamo River, and Imperial Valley drains are summarized by source in Table 3.

**Table 3. 1987-1996 Average Annual Discharges to the New River, Alamo River, and Imperial Valley Drains by Source**

Source*	Acre-feet	Percent
Operational Spill	123,018	12
Tailwater	479,661	48
Tilewater	261,278	26
Seepage	128,165	13
<b>Total</b>	<b>992,122</b>	<b>100</b>

(Jensen and Walter 1997)

\* An operational spill is the quantity of fresh water that reaches the terminal end of an irrigation canal, but is not applied to the fields, and therefore is diverted into a drain. Tailwater, or surface runoff, is irrigation water that does not percolate into the soil, and exits the lower end of the field into the drain. Tailwater tends to erode fields and thus acquire sediment/silt as it crosses and exits a field. Tilewater, or subsurface drainage, is water that has percolated through the soil, but is not absorbed by crops. Tilewater flushes salts from the soil. This highly saline water accumulates in tile lines beneath the fields, wherein it is transported to drains by gravity flow or a sump system. Seepage denotes subsurface water that enters a drain due to a hydraulic gradient resulting primarily from losing irrigation canals.

MPs that are likely to be implemented (Table 1) were analyzed to determine the effects they might have on the volume of agricultural tailwater discharges. Table 4 summarizes the result of that analysis. As Table 4 indicates, widespread implementation of these MPs would result in a minor to negligible reduction in the volume of tailwater discharged to drains.

**Table 4. MP Effects on Volume of Agricultural Tailwater Discharges**

Management Practice	Potential for Tailwater Flow Reduction
Tailwater Drop Box with Raised Grade Board (Imperial Irrigation District Regulation No. 39)	Negligible
Improved Drop Box with Widened Weir and Raised Grade Board	Negligible
"Pan Ditch" (Enlarged Tailwater Ditch Cross Section)	Negligible
Tailwater Ditch Checks or Check Dams	Minor
Field to Tailditch Transition	Negligible
Furrow Dikes (C-Taps)	Minor
Filter Strips	Negligible
Channel Vegetation / Grassed Waterway	Negligible
Irrigation Canal or Lateral	Negligible

(Jones & Stokes Associates 1996, U.S. Department of Agriculture 1996)

IID routinely conducts dredging operations at Imperial Valley drains to remove sediment/silt, in order to maintain a stable water surface elevation, prevent bank erosion, and prevent upstream flood damage to adjacent agricultural lands. IID removes about 1,109 tons/year of sediment from the subject drains. Dredging operations have water quality impacts, including significant increases in turbidity.

The proposed project is expected to reduce the current annual mean suspended solids concentration in the subject drains at their outlets with the Salton Sea by about 52%, from the current 418 mg/L down to the target 200 mg/L. This corresponds to a sediment load reduction of about 6,055 tons/year, from the current 11,602 tons/year down to the target 5,547 tons/year (i.e., assimilative capacity). This reduction of sediment/silt by IID dredging operations could result in a significant decrease in the inputs of sediment/silt at the mouths of the drains.

**Mitigation Measures.** Mitigation measures include: (a) potential reduction of dredging at the mouths of drains, (b) potential dredging conducted outside of the March through August nesting season (i.e., from approximately September-February), and (c) IID submittal of a Revised Drain Water Quality Improvement Plan (DWQIP) pursuant to Section 13267 of the California Water Code describing measures it proposes to take (e.g., decrease dredging) along with a monitoring program, to ensure that dredging operations do not result in habitat loss as a result of TMDL implementation.

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. The surface waters involved with this project do not recharge any groundwater aquifers that are 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 excess delivery of 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 not 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 the TMDL.

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 expects to reduce 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 expects to improve water quality conditions by reducing excess sediment.

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?

**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 are expected to 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 are expected to occur on existing fields and drains, and will not result in any land use or planning impacts.

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 that would be of value to the region and the residents of the state. MP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been under cultivation for at least the last 60 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 are expected to occur on existing agricultural drains and on farmland that has been under cultivation for at least the last 60 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 result in exposure of persons to, or generation of, 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 be above 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:

Fire protection?

Police protection?

Schools?

Parks?

Other public facilities?

**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 of 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)?

**Less Than Significant Impact.** The proposed project potentially may cause an increase in traffic which is substantial to the existing traffic load and capacity of the street system. However, the impact is considered less than significant.

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 the traffic load. However, transportation and movement of farming equipment is common on roads and highways serving the area where MPs are to be implemented. Potential traffic congestion may occur temporarily in isolated areas, but is expected to have a less than significant impact. Once installed, the MPs themselves will not cause traffic impacts.

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.

d) 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, thus not causing 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, thus not causing 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 are expected to occur on existing drains and farmland, where adequate space exists to park construction and/or installation equipment.

g) 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.

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.

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.

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

**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 reducing excess sediment/silt, thereby returning the area to a more natural 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)?

**Less Than Significant Impact with Mitigation.** The proposed project potentially may have impacts that are individually limited, but cumulatively considerable. However, this can be reduced to a less than significant impact with mitigation. Cumulative impacts are those that are beyond the impact of an individual project. Cumulative impacts are analyzed by looking at the individual project in connection with effects of past projects, effects of other current projects, and effects of probable future projects.

Two existing and one proposed project have water quantity impacts on biological resources of Imperial Valley drains. A recently signed water transfer plan, called the Quantification Settlement Agreement for the Colorado River (QSA), has a potentially significant cumulative impact. The QSA involves a decrease in IID irrigation deliveries of as much as 300,000 acre-feet/year. The transferred water will be irrigation water “conserved” by IID and Imperial Valley farmers. This water will be diverted to other water agencies (e.g., San Diego County Water Authority). Assuming that the 300,000 acre-feet/year reduction in irrigation deliveries will result

in an equal decrease in total drain flow as a worst case scenario, the impact upon wildlife populations and habitats is significant.

The construction of power-generating plants near the International Boundary involves plants in Mexico and United States. Two plants in the Mexicali Valley of Mexico are on-line. The power plants use New River water for cooling purposes. Negative results include an increase in brine, cleaning agents, and metals. Positive results include a decrease in pathogen levels harmful to wildlife and humans. The combined projects are expected to decrease New River flow to a level that corresponds to a 5% flow reduction at the International Boundary, and a 2-3% flow reduction at the River's outlet to the Salton Sea. This correlates to about a one-foot drop in the Sea's depth, resulting in a shoreline perimeter location change of about one mile decrease from its present location, as the Salton Sea is so shallow. Such a drop in water level may have a substantial change on the amount and quality of wetland habitat at the New River's outlet to the Salton Sea, and on the interface area between drain mouths and the Salton Sea. This could significantly impact numerous species, including the federally endangered Yuma clapper rail, among others.

A proposed project in Mexico involves building a wastewater treatment plant for the City of Mexicali. This project plans to divert water from the watershed, and may decrease flow to the Salton Sea by 1%. This would impact the interface area between drain mouths and the Salton Sea, which could significantly impact numerous species. Even under the best scenario, this plan may take years to develop and at least another 10 years to be fully implemented. This type of project has been contingent on available funding, which has been unstable for this type of project.

The projects mentioned above must assess and address impacts to sensitive species and habitats. This proposed TMDL will contribute in a minor way to cumulative effects in relation to these other projects.

**Mitigation Measures.** Mitigation measures include those discussed in previous sections of this document.

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 problems (e.g., unsafe fish consumption, nuisance odors from fish die-offs, pathogens from decaying fish) that may adversely affect human beings.

## ALTERNATIVES DISCUSSION

### **No Action Alternative**

The No Action Alternative is defined as no Regional Board adoption of a TMDL and corresponding Implementation Plan. This alternative means that the subject drains will continue to violate Basin Plan water quality objectives for sediment, suspended solids, and turbidity. Beneficial uses will continue to be impaired, and health of biological and human communities will continue to be at risk. This alternative also means that the subject drains will not be under the same sedimentation/siltation standard as other Imperial Valley waterways (i.e., Alamo and New Rivers, and their tributary drains), despite similar farming practices along the Imperial Valley drains. This alternative does not comply with the Clean Water Act or meet the purpose of the proposed action, which is to eliminate water quality problems. This alternative is not acceptable.

### **Preferred Alternative**

The proposed Sedimentation/Siltation TMDL (i.e., Preferred Alternative) has been the basis for all discussions in this CEQA Environmental Checklist and Determination. The Preferred Alternative is a feasible approach to decrease existing sediment loads in the subject drains, and thus to decrease health risks for biological and human communities. The Preferred Alternative calls for attainment of interim numeric targets in four phases, and requires full compliance by the year 2015. This time schedule is moderately aggressive, yet reasonable. The time schedule provides responsible parties with necessary time to explore financial options and implement tasks. The proposed Implementation Plan utilizes a combination of self-determined actions (e.g., Imperial County Farm Bureau's Watershed Program) and regulatory-encouraged actions (e.g., IID development and implementation of a water quality monitoring program).

### **Alternative 2 -- Lower Numeric Target**

The Lower Numeric Target Alternative (Alternative 2) is defined as the proposed project with a lower numeric target of 80 mg/L TSS concentration, proposed by the National Academy of Sciences as being moderately protective of aquatic communities (U.S. Environmental Protection Agency 1973). Meeting this lower numeric target would require a lower total load, and thus lower load allocations to agricultural dischargers in the watershed. This alternative would result in similar impacts to biological resources as the proposed project (Preferred Alternative), but the economic impacts to agriculture would be much greater as it would require implementation of the most expensive MPs.

### **Alternative 3 -- Increased Regulatory Oversight**

The Increased Regulatory Oversight Alternative (Alternative 3) is defined as the proposed project with an Implementation Plan of greater regulatory oversight, including the adoption of conditional waivers, general permits, effluent limitations for the Imperial Irrigation District, 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 Board staff resources.

## Comparison of Alternatives

Table 5 compares the alternatives.

**Table 5. Comparison of Alternatives**

<b>Alternative</b>	<b>Impact on Agricultural Resources</b>	<b>Impact on Biological Resources</b>	<b>Impact on Water Quality</b>	<b>Objectives Met?</b>
No Action	No effect	Adverse	Adverse	Objectives not met
Preferred Alternative	Less than significant	No effect	Less than significant	Objectives met
Alternative 2 (Lower Numeric Target)	Potentially significant	No effect	Less than significant	Objectives met in same time frame as Preferred Alternative
Alternative 3 (Increased Regulatory Oversight)	Less than significant	No effect	Less than significant	Objectives met in faster time frame than Preferred Alternative

## REFERENCES

### References Cited

California Air Resources Board. 2002. Links for 2000 Area Designations Maps / State and National. <http://www.arb.ca.gov/desig/adm/adm.htm>

California Regional Water Quality Control Board. 2003. Clean Water Act 303(d) List of Impaired Water Bodies Within the Colorado River Basin Region. California Regional Water Quality Control Board, Colorado River Basin Region. Palm Desert, CA

California Regional Water Quality Control Board. As amended to date. Water Quality Control Plan: Colorado River Basin – Region 7. California Regional Water Quality Control Board, Colorado River Basin Region. Palm Desert, CA

Cocke, M. 2001. Personal Communication between Mr. Nadim Zeywar, California Regional Water Quality Control Board, Colorado River Basin Region, and Mr. Mark Cocke, Northern California Natural Resource Conservation Service (Phone #: 530-792-5663)

Imperial County. 1998. Imperial County General Plan. Imperial County Planning Department. El Centro, CA

Imperial Irrigation District. 1998. IID Background. <http://www.iid.com/aboutiid/iidbackground-facts.html>

Jensen, M.E. and I.A. Walter. 1997. Assessment of 1986-1997 Water Use by the Imperial Irrigation District using Water Balance and Cropping Data. Special Report Prepared for the U.S. Bureau of Reclamation. Boulder City, NV

Jones & Stokes Associates. 1996. List of Agricultural Best Management Practices for the Imperial Irrigation District. Jones & Stokes Associates. Sacramento, CA

Salton Sea Authority. 1999. The Desert Pupfish of the Salton Sea: A Synthesis. Salton Sea Database Program. <http://cem.uor.edu/salton/recon/pupfishSynthesisReport.html>

Setmire, James. 1995. Selenium in Water, Sediment, and Transplanted *Corbicula* in Irrigation Drainage and Wildlife Use of Drains in the Imperial Valley, California 1994-1995. U.S. Bureau of Reclamation. Temecula, CA

Sojka, R.E. 1996. Management Options for Control of Irrigation-Induced Erosion. United States Department of Agriculture, Agricultural Research Service, Northwest Irrigation and Soils Research Laboratory. Kimberly, ID

State Water Resources Control Board. 2003. Imperial Valley Drains Silt TMDL: Economic Impact Assessment. Gerald Horner, Ph.D. State Water Resources Control Board. Sacramento, CA

United States Department of Agriculture. 1996. Field Office Technical Guide, Section IV. Natural Resources Conservation Service. Davis, CA

United States Environmental Protection Agency. 1973. Water Quality Criteria 1972. EPA-R3-73-033-March 1973. A Report of the Committee on Water Quality Criteria, Environmental Studies Board, National Academy of Sciences, National Academy of Engineering. U.S. Government Printing Office, Washington D.C., 1972