Conditional Waiver of Waste Discharge Requirements for Agricultural Wastewater Discharges and Discharges of Wastes from Drain Operation and Maintenance Activities within the Imperial Valley, Imperial County, California

Initial Study and Proposed Negative Declaration

Colorado River Basin
Regional Water Quality Control Board

December 12, 2014

ENVIRONMENTAL CHECKLIST DISCUSSION

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

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

Project Description

The proposed Conditional Waiver will provide control of (a) the quality of agricultural wastewater discharges into Imperial Valley drains and the Alamo and New Rivers; and (b) potential water quality impacts from operation and maintenance (O&M) of Imperial Valley Drains. It is not the intent of this Conditional Waiver to restrict the quantity of agricultural wastewater discharges into the drains (and ultimately into the Salton Sea) or to prohibit drain O&M activities. The objective of the Conditional Waiver is to ensure that agricultural discharges and drain O&M activities take place in a manner that does not adversely affect the beneficial uses in the Imperial Valley Drains, the Alamo River, the New River and ultimately the Salton Sea, as defined in the Water Quality Control Plan for the Colorado River Basin Region (Basin Plan). Under the terms of this Conditional Waiver, the above objectives will be accomplished by requiring appropriate Responsible Parties to implement management practices (MPs) to address the threats their discharges pose to water quality.

The Imperial Valley consists of about 500,000 acres of irrigated land. The Imperial Irrigation District (IID) distributes up to 3.1 million acre-feet (3.8 billion cubic meters)/year of irrigation water from the Colorado River to Imperial County irrigated lands.[1] This amount is projected to decrease due to an approved long-term water transfer from the IID to the San Diego County Water Authority (SDCWA). Under the terms of the transfer Order, up to 200,000 acre-feet per year (AFY) of water from the IID

[1] IID Water Transportation System at <http://www.iid.com/index.aspx?page=117> [As of December 4, 2014].

will be transferred to SDCWA and 100,000 AFY can be transferred to Coachella Valley Water District and Metropolitan Water District of Southern California.[2]

The Basin Plan establishes the beneficial uses (BUs) for waters and the narrative and numeric water quality objectives (WQOs) to protect those uses for all surface and ground waters in the Region, including above-mentioned Imperial Valley waterbodies. The purpose of the Conditional Waiver is to prevent adverse water quality impacts that threaten BUs and ensure consistent compliance with WQOs. Agricultural return flows can carry sediments, nutrients, pesticides and other chemicals that adversely impact surface water BUs. Also, periodic drain cleaning necessary to reduce sediment buildup can flush sediment (and associated pollutants) downstream if not managed properly.

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

- Water Quality Management Plans (WQMPs),
- Monitoring and Reporting Programs (MRPs),
- Drain Water Quality Improvement Plans (DWQIPs),
- Drain Monitoring and Reporting Programs (DMRPs),
- Compliance with Designated Management Requirements, and compliance assurance and enforcement policies specified by the California Regional Water Quality Control Board, Colorado River Basin Region (Colorado River Basin Water Board).

The WQMPs and DWQIPs must include specific management practices to protect water quality and address existing and potential water quality problems associated with irrigated return flows and drain operation and maintenance activities. The monitoring and reporting programs are necessary because they provide a feedback mechanism to ensure MPs are working and responsible parties comply with the proposed Waiver. The programs also provide data to make modifications to the Waiver to make sure it functions as envisioned to protect water quality. This Conditional Waiver will also require all Responsible Parties to comply with this Conditional Waiver in accordance with a set of milestones and time schedule. The project as envisioned also provides for the formation of an IID-ICFB Coalition Group to assist the farming community in the Imperial Valley comply with the Waiver conditions. Under the terms of the proposed Waiver, this Coalition Group will have approximately nine (9) months to fully implement an approved Control Program to comply with the Waiver.

[2] For further information about the Quantification Settlement Agreement, see San Diego County Water Authority webpage regarding the Quantification Settlement Agreement, its modifications, and court rulings at: <http://www.sdcwa.org/quantification-settlement-agreement>.

Waterbodies and Area Description

The agricultural wastewater discharges subject to this Conditional Waiver are: 1) storm water runoff from irrigated lands; and 2) irrigation return water, which includes surface discharges (also known as "tailwater") and subsurface discharges (known as "tile water" in tiled areas, ground water or "seepage" in areas not tiled). Agricultural wastewater discharges have the potential to violate WQOs if they transport excess sediment, nutrients, or pesticides.

The IID operates and maintains an agricultural irrigation and drainage system in the Imperial Valley in Imperial County, California. A map of the IID service area is shown in Figure 1 below. IID diverts and delivers Colorado River water annually to nine cities and agricultural land in Imperial Valley. Approximately 480,000 acres within the Imperial Irrigation District are considered farmable. The major crops in the Valley, based on the amount of land in production, are alfalfa, wheat, sudan grass, and sugar beets.

Irrigation water is delivered to farmland via a gravity driven system of supply canals and ditches. This water is applied to nearly level land for irrigation and salinity control. Excess water is removed from the land via tail- and tile-water systems. The district serves water through approximately 5,600 delivery gates for irrigation purposes. It operates and maintains more than 1,438 miles of lateral canals, 230 miles of main canals and the 80-mile long All-American Canal.

Surface (gravity) or flood irrigation is the dominant irrigation method in the Imperial Valley. Two types of surface irrigation are practiced: furrow irrigation and border irrigation. For both furrow and border irrigation methods in the IID, water is delivered to an individual field's head canal via the All-American Canal and a series of delivery canals. Each field's head canal contains a gated pipe (head gate), which, when open, conveys irrigation water via gravity either directly onto a field or into small holding ponds at the top end (head end) of the field. Irrigation water that is not taken up by the crop or lost through evaporation is discharged at the end of the field in irrigation return water, which includes tailwater and tile water in tiled areas, and groundwater or seepage in untiled areas, and is then discharged into a drainage ditch, the New River, the Alamo River, or into the Salton Sea

IID maintains approximately 1,456 miles of unlined drainage ditches (drains) used to collect surface runoff and subsurface drainage from the 32,227 miles of tile drains underlying 426,202 acres of farmland.[3] Most of these drains discharge water into the Alamo River, the New River, and ultimately discharge into the Salton Sea. However, a handful of drains also discharge directly into the Salton Sea.

Silt and vegetation tend to clog drains. Drains are typically cleaned by dredging using a heavy-duty backhoe. This results in short-term extreme increases in turbidity because the operation re-suspends bed bottom sediment and erodes the drain sidewalls and bed bottom. Mechanical removal of vegetation from the drains also results in long-term

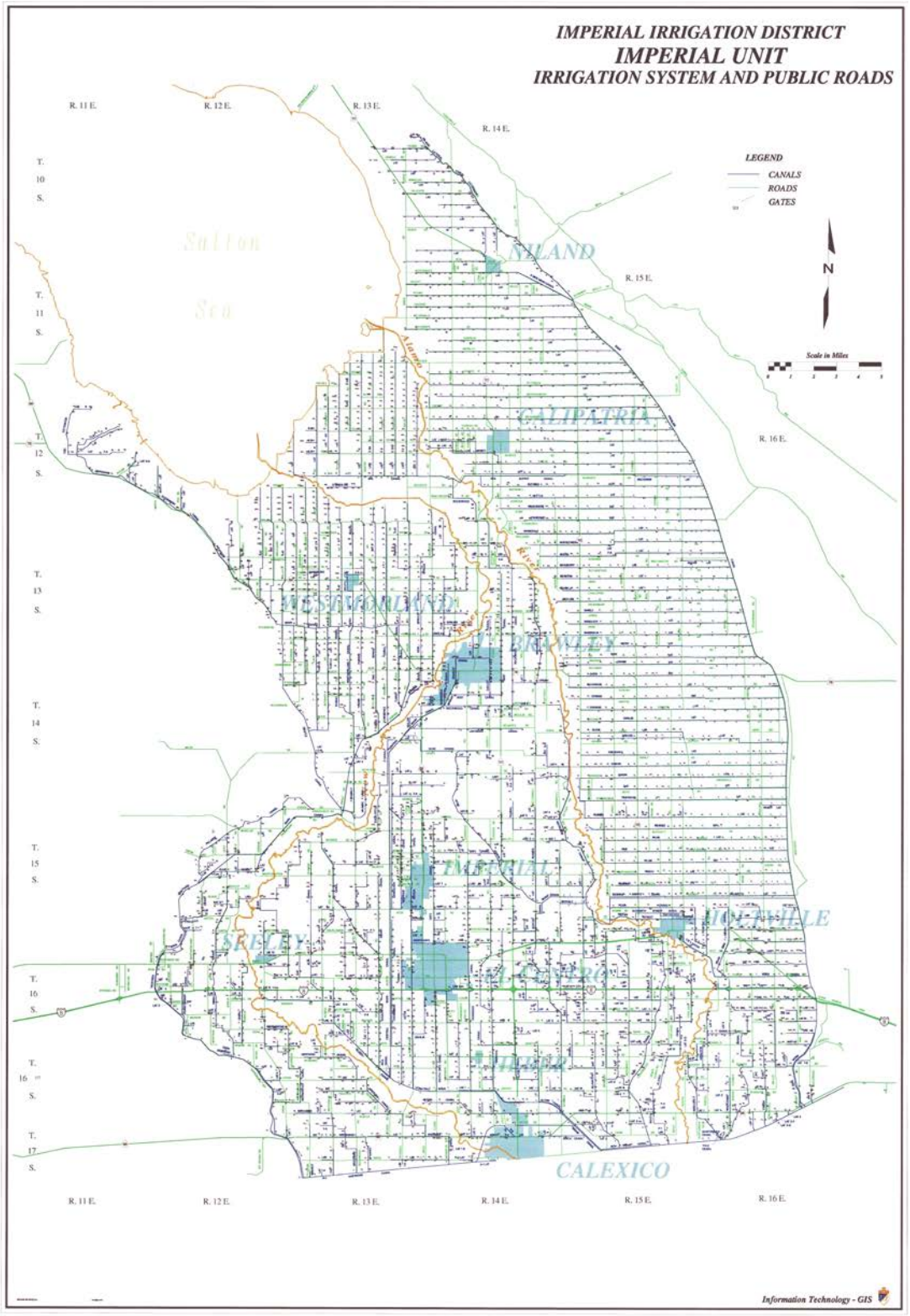
[3] See footnote 1, *supra*.

increases in turbidity as the vegetation removed from the banks and bed of the drain had a sediment binding effect. Also, as the vegetation is being removed, the drain sidewalls and bed bottom are eroded banks and bed sediment is also re-suspended. Chemical removal of vegetation also has the potential to adversely impact water quality.

Water and wastewater from sources other than agriculture are also transported by IID's drains and the New and Alamo Rivers into the Salton Sea. These sources include storm water flows, municipal wastewater treatment plant effluent, groundwater from the east and west mesas in the Imperial Valley, and industrial effluent discharges. Highly contaminated waters from Mexico (five-year average of 150,000 acre-feet per year) enter the Imperial Valley via the New River. All of the aforementioned discharge sources contribute to the degradation of water quality within the Imperial Valley waterways. There is approximately two (2) cubic feet per second of agricultural wastewater that Mexico discharges into the Alamo River at the International Border. The water quality impact from this discharge is not significant however.

The beneficial uses of the Imperial Valley Drains, Alamo River, New River, and Salton Sea are shown in Tables 1 and 2 below.

Figure 1 – Map of IID irrigation and drainage system service area. (Source Maps of IID Service Area at <http://www.iid.com/index.aspx?page=132>[As of December 4, 2014].)



Tables 1 and 2 below summarize the beneficial uses of the Alamo River, the New River, the Imperial Valley Drains, and the Salton Sea.[4]

Table 1: Imperial Valley Drains, Alamo River, and New River Beneficial Uses	
Designated Beneficial Uses of Water	**Description**
Freshwater Replenishment (FRSH)	Uses of water for natural or artificial maintenance of surface water quantity or quality.
Industrial Service Supply (IND)[5]	Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well repressurization.
Water Contact Recreation (REC I)[6][7][8]	Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
Water Non-Contact Recreation (REC II)[3]	Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
Warm Freshwater Habitat (WARM)	Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Wildlife Habitat (WILD)	Uses of water that support terrestrial ecosystems including, but not limited to, the preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

[4] From the Basin Plan as amended to date
[5] A Potential Beneficial Use recognized for the New River only
[6] Unauthorized uses for the Imperial Valley Drains.
[7] The only REC I usage that is known to occur in Imperial Valley Drains, and Alamo Rivers are from infrequent fishing activity.
[8] Although some fishing occurs in the downstream reaches of the New River, the presently contaminated water in the river makes it unfit for any recreational use. An advisory has been issued by the Imperial County Health Department warning against the consumption of any fish caught from the river and the river has been posted with advisories against any body contact with the water.

Table 1: Imperial Valley Drains, Alamo River, and New River Beneficial Uses	
Designated Beneficial Uses of Water	**Description**
Hydropower Generation (POW)[9]	Uses of water for hydropower generation.
Preservation of Rare, Threatened, or Endangered Species (RARE)[10]	Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.

Table 2: Salton Sea Beneficial Uses	
Designated Beneficial Uses of Water	**Description**
Aquaculture (AQUA)	Uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.
Industrial Service Supply (IND)[11]	Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well repressurization.
Water Contact Recreation (REC I)	Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
Water Non-Contact Recreation (REC II)	Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

[9] A Potential Beneficial Use recognized for the Alamo River only

[10] Rare, endangered, or threatened wildlife exists in or utilizes some of these waterway(s). If the RARE beneficial use may be affected by a water quality control decision, responsibility for substantiation of the existence of rare, endangered, or threatened species on a case-by-case basis is upon the California Department of Fish and Game on its own initiative and/or at the request of the Regional Board; and such substantiation must be provided within a reasonable time frame as approved by the Regional Board.

[11] A Potential Beneficial Use recognized for the Salton Sea

Table 2: Salton Sea Beneficial Uses	
Designated Beneficial Uses of Water	**Description**
Warm Freshwater Habitat (WARM)	Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Wildlife Habitat (WILD)	Uses of water that support terrestrial ecosystems including, but not limited to, the preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.
Preservation of Rare, Threatened, or Endangered Species (RARE)	Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.

Existing IID Drain Water Quality Improvement Plan

The Imperial Irrigation District is the designated drain operation and maintenance agency for the Imperial Valley, although there is a handful of farmers who maintain the drains riparian to their farmland. The cleaning of drains is done on an as-needed basis. For some drains, 10 or 15 years may pass before cleaning is necessary. Since 2003, the IID has been implementing a revised Drain Water Quality Improvement Plan (DWQIP). It has completed studies to characterize the water quality impacts of their drain cleaning/dredging operations. It enforces IID Regulation No. 39—a requirement that water users maintain a properly functioning tailwater box, developed a drain cleaning checklist, purchased excavator mounted GPS units for use during drain cleaning/dredging operations. It has also developed and implemented a Vegetation Control Plan, a Drain Water Improvement Program, and a Tailwater Education Program.

The IID has also maintained a drain water quality monitoring program, sampling major and minor drains monthly (major drains) and quarterly (minor drains), reporting quarterly on sample results, and preparing an annual report on program activities. For this project IID will continue to monitor the drains. Currently, and contingent on funding availability and priorities, the Regional Water Board monitors water quality in the New and Alamo Rivers, but the IID is expected to conduct this monitoring as Regional Water Board funding and priorities change.

Responsible Parties

The Responsible Parties include agricultural dischargers and drain maintenance dischargers as defined below:

"Agricultural Discharger" means the owner, renter/lessee, and operator/grower of irrigated agricultural land in the Imperial Valley who discharges, has the potential to

discharge, or proposes to discharge waste, which could directly or indirectly affect the quality of waters of the state.

"Drain Maintenance Discharger" means any individual or entity that conducts drain operation and maintenance activities in the Imperial Valley that discharges, or has the potential to discharge, wastes that could directly or indirectly affect the quality of waters of the state.

Farming Management Practices (MPs)

This section describes the farming MPs Agricultural Dischargers may select to comply with this Waiver and address potential water quality impacts caused by sediment, nutrients, and pesticides in agricultural wastewater discharges. Growers may choose from a number of MPs from the categories shown in Tables 3, 4 or 5 below. The list is not exclusive; Agricultural Dischargers may determine what MP or combination of MPs is appropriate for their farms, regardless of whether the MP is listed. Proper selection and implementation of MPs is fundamental to water quality protection and enhancement. Currently, Agricultural Dischargers are implementing MPs that effectively manage nutrients and pesticides, and improve irrigation efficiency and erosion control.

Table 3– Sediment MPs
Tailwater Ditch Checks or Check Dams: Tailwater Ditch Checks are temporary or permanent dams that hold water level well above ground. They can be placed at intervals in tailwater ditches, especially those with steeper slopes. They increase the cross-section of the stream of water, decrease water velocity and reduce erosion, and may cause sediment already in the water to settle out. Tailwater Ditch Checks can be constructed of plastic, concrete, fiber, metal, or other suitable material. If plastic sheets are used, care must be taken not to allow plastic pieces to be carried downstream with water. In order to be effective, this MP must be utilized where water velocities will not wash out check dams or sides of the tailwater ditch around the dams.
Field to Tailditch Transition: This practice involves controlling water flow from the field into the tailwater ditch through spillways or pipes without washing across and eroding soil. Spillways might be constructed of plastic, concrete, metal, or other suitable material. If plastic sheets are used, care must be taken not to allow plastic pieces to be carried downstream with water. This procedure may be useful on fields irrigated in border strips and furrows.
Furrow Dikes (C-Taps): Furrow dikes are small dikes created in furrows to manage water velocity in the furrow. They can be constructed of earth and built with an attachment to tillage equipment, pre-manufactured "C-Taps," or other material, including rolled fiber mat, plastic, etc. Jones & Stokes (Jones & Stokes Associates 1996) rated this MP as having a likely positive sediment transport reduction effect and a relatively low cost.
Filter Strips: This practice involves border elimination on the field's last 20 to 200

Table 3– Sediment MPs
feet. The planted crop is maintained to the field's end, and tailwater from upper lands is used to irrigate the crop at the ends of adjacent lower lands. The main slope on the field's lower end should be no greater than on the balance of the field. A reduced slope might be better. With no tailwater ditch, very little erosion occurs as water slowly moves across a wide area of the field to the tailwater box. Some sediment might settle out as the crop slows the water as it moves across the field.
Irrigation Water Management: Irrigation water management is defined as determining and controlling irrigation water rate, amount, and timing in a planned manner. Effective implementation can result in minimizing on-farm soil erosion and subsequent sediment transport into receiving waters. Specific irrigation water management methods include: surge irrigation, tailwater cutback, irrigation scheduling, and runoff reduction. In some cases, irrigation water management could include employment of an additional irrigator to better monitor and manage irrigation water and potential erosion.
Irrigation Land Leveling: This practice involves maintaining or adjusting field slope to avoid excessive slopes or low spots at a field's tail end. It might be advantageous in some cases to maintain a reduced main or cross slope, which facilitates more uniform distribution of irrigation water and can result in reduced salt build-up in soil, increased production, reduced tailwater, and decreased erosion. Jones & Stokes (Jones & Stokes Associates 1996) rated this MP as having a sediment reduction efficiency of 10% to 50%, and a medium to high cost.
Sprinkler Irrigation: Sprinkler irrigation involves water distribution by means of sprinklers or spray nozzles. The purpose is to apply irrigation water efficiently and uniformly to maintain adequate soil moisture for optimum plant growth without causing excessive water loss, erosion, or reduced water quality. Jones & Stokes (Jones & Stokes Associates 1996) rated this MP as having a demonstrated positive sediment transport reduction effect (sediment reduction efficiency of 25% to 35% if utilized during germination, and 90% to 95% for an established crop), and a relatively high cost.
Drip Irrigation: Drip irrigation consists of a network of pipes and emitters that apply water to soil surface or subsurface in the form of spray or small stream.
Channel Vegetation/Grassed Waterway: This practice involves establishing and maintaining adequate plant cover on channel banks to stabilize channel banks and adjacent areas, and to establish maximum side slopes. This practice reduces erosion and sedimentation, thus reducing bank failure potential.
Irrigation Canal or Lateral: This practice applies to irrigation drainage channels. One objective is to prevent erosion or water quality degradation. Drainage channels should be designed to develop velocities that are non-erosive for the soil materials from which the channel is constructed.

Table 4 – Nutrient MPs
Nutrient and Irrigation Water Management Plan (NIWMP): These plans document practices and strategies to address natural resource concerns related to nutrient. A NIWMP is a written description of the procedures used to select and apply crop

nutrients (manure and commercial fertilizers) and water to cropland, including pasture. The NIWMP includes a description of the process used to determine how much manure and commercial fertilizer is needed by the crops and a description of when and how nutrients and irrigation water (including reclaimed treated wastewater) are applied.
Tailwater Ditch Checks or Check Dams: Same as in previous Table. The checks also act as nutrient MPs by reducing and preventing erosion of soil which contains nutrients.
Field to Tailditch Transition: Same as in previous table. The spillways also act as nutrient MPs by reducing and preventing erosion of nutrient-laden soils from the tailwater ditch.
Furrow Dikes (also known as "C-Taps"): Same as in previous table. The C-Taps also act as nutrient MPs by reducing and preventing erosion of nutrient-laden soils from the tailwater ditch.
Filter Strips: Same as in previous table. The filter strips also act as nutrient MPs by reducing and preventing erosion of nutrient-laden soils from the tailwater ditch.
Irrigation Water Management: Same as in previous table. The purpose is to apply irrigation water efficiently and uniformly to maintain adequate soil moisture for optimum plant growth without causing excessive erosion of nutrient laden soils.
Irrigation Land Leveling: Same as in previous table. The purpose is to apply irrigation water efficiently and uniformly to maintain adequate soil moisture for optimum plant growth without causing excessive erosion of nutrient laden soils.
Sprinkler Irrigation: Same as in previous table. The purpose is to apply irrigation water efficiently and uniformly to maintain adequate soil moisture for optimum plant growth without causing excessive erosion of nutrient laden soils.
Drip Irrigation: Same as in previous table. The purpose is to apply irrigation water efficiently and uniformly to maintain adequate soil moisture for optimum plant growth without causing excessive erosion of nutrient laden soils.
Reduced Tillage: Same as in previous table. This practice involves eliminating one or more cultivation per crop. It minimizes erosion of nutrient laden soils, and sedimentation that may occur in the furrow**.**
Channel Vegetation / Grassed Waterway: Same as in previous table. This practice reduces erosion of nutrient laden soils and sedimentation.
Irrigation Canal or Lateral: Same as in previous table. This practice reduces erosion of nutrient laden soils and sedimentation at the irrigation drainage channels.

Table 5 – Pesticide MPs
Pesticide Training and Certification: Obtain training and the appropriate certification on pesticide use/management prior to any pesticide use.
Pesticide Recording Keeping: Keep precise pest and pesticide records Read and Follow the Label: Read the label before you purchase, use or dispose of a pesticide. Check for ground water advisories or other water protection guidelines. You are required by law to follow label directions. Be aware of how your pesticide handling and application practices can impact ground water.
Evaluate the Pesticide: Select pesticides that are less likely to leach. Pesticides that

Table 5 – Pesticide MPs
have the greatest potential to leach to ground water are highly water soluble, relatively persistent and do not adsorb to soil. The UC Extension Service and the Natural Resources Conservation Service can assist you in selecting the appropriate pesticide.
Pesticide Selection: Select least toxic and less persistent pesticides when feasible.
Site-specific Pesticide: Avoid the overuse of preventive pesticides treatments. Base pesticide application on site-specific pest scouting and indicators of economic return.
Integrated Pest Management: Integrated Pest Management (IPM) is the use of all means of pest control (chemical and nonchemical) in a compatible fashion to reduce crop losses. Pesticides are the last line of defense and are used only when pest levels are causing sufficient damage to offset the expense of the application.
Prevent back-siphoning and spills: Never allow a hose used for filling a spray tank to extend below the level of the water in the tank. It is better to haul water to the field to fill the spray tank. It is also recommended that you mix and dilute pesticides in the field. If a pesticide spill happens, contain the spill as quickly as possible and handle according to label directions. Use anti-siphon devices in the water line. They are inexpensive and effective.
Consider weather and irrigation plans: Never begin an application if a significant weather event such as high winds and rainfall is forecast and might cause drift or soil runoff at the application site. Application just before rainfall or irrigation may result in reduced efficacy if the pesticide is washed off the target crop, resulting in the need to reapply the pesticide.
Pesticide use: Use pesticides only when economic thresholds are reached and buy only what you need.
Leave buffer zones around sensitive areas: Read the pesticide label for guidance on required buffer zones around water, buildings, wetlands, wildlife habitats and other sensitive areas where applications are prohibited.
Reduce off-target drift: Never begin an application when wind or temperature favors pesticide drift to an off target area. Use appropriate spray pressure and nozzle selection to minimize drift.
Application equipment: Maintain all application equipment in good working order and calibrate it regularly.
Pesticide use and storage: Only store pesticides on the farm for a short time and in a locked weather-tight enclosure downstream and a reasonable distance (greater than 100 ft) from a well or any surface water. Use appropriate protective equipment and clothing according to label instructions.
Dispose of pesticide and chemical wastes safely: Use pesticides and other agricultural chemicals only when necessary. Carry water in a nurse tank to the field to mix and measure on site. Prepare only as much as is needed. Dispose of excess chemical and its container in accordance with label directions.

Implementation of MPs will have a positive impact on the waters of the state by (a) reducing levels of constituents of concern (COCs) in receiving waters; e.g., nutrients, sediment, etc.; and/or (b) preventing COCs from reaching receiving waters. This will improve water quality in the Imperial Valley and improve the habitat for aquatic and other biological resources. This Conditional Waiver also requires implementation of a

comprehensive monitoring program for receiving waters and MPs to measure actual water quality improvements and compliance with Water Quality Standards for receiving waters.

Drain Maintenance MPs

This section describes the Drain Maintenance MPs Drain Maintenance Dischargers may select to comply with this Waiver and address potential water quality impacts caused by drain operation and maintenance activities. Drain Maintenance Dischargers may choose from a number of MPs from the categories shown in Table 6. The list is not exclusive; Drain Maintenance Dischargers may determine what MP or combination of MPs is appropriate, regardless of whether the MP is listed. Proper selection and implementation of MPs is fundamental to water quality protection and enhancement.

Table 6- Drain Maintenance Management Practices
Drain Maintenance Checklist. A checklist is completed prior to scheduling drain maintenance. The checklist establishes more developed criteria and documents the conditions that warrant the scheduling or postponement of a cleaning or maintenance activity. Reduces unnecessary drain cleaning.
Excavator Mounted Rakes. Rather than using a backhoe to clean the drain a “rake” is attached to the excavator arm which is used to remove nuisance vegetation, while leaving behind the root structure to maintain bank stability.
Vegetation Management. A Vegetative Management Unit was created at IID to train/advise operators on the proper control of vegetation in drains. The Vegetation Management Unit is supervised by a certified pest applicator, who will advise/train drain operators to; select the most effective herbicides and effective application rates, remove invasive vegetation and maintain beneficial vegetation, These efforts will help to maintain drain bank stability, reduce suspended sediment caused by drain maintenance operations, and reduce unnecessary drain cleaning
Excavator-mounted laser/GPS units. Operators work from upstream to downstream, so that as water flows downstream it is filtered by nuisance vegetation before the vegetation is removed. Also the high level of accuracy afforded a GPS unit helps to eliminate over-excavation.
Regulation No. 39 enforcement. This tailwater regulation is a requirement that water users maintain a properly functioning tailwater box to prevent erosion at the tail end of the field and in the receiving drain.
Tailwater Education Program. Through this program 10 percent of all agricultural fields in the IID service area, about 500 fields, are selected at random annually for delivery and tailwater monitoring Should the percentage of tailwater exceed 15 percent of delivered water on two out of three TEP monitoring events, the responsible party will be directed to attend a TEP seminar on water management issues conducted by the district.

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. The project applies to land that has been cultivated for at least the last 60 years and in many cases to farmland that has been cultivated for over a century. The MPs which will be implemented to control and improve tailwater and tilewater quality will occur on existing, privately owned farmland and farmland owned by the IID. The MPs to address existing and potential water quality impacts from drain operation and maintenance activities will be implemented on existing agricultural drains. The RPs have been implementing many of these MPs (e.g., Irrigation Land Leveling, Irrigation Water Management, Pesticide Selection, etc.) for decades as part of their day-to-day farming operations. Further, the compliance monitoring activities will take place at static locations on the drains and New and Alamo Rivers.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
No Impact. The proposed project will not substantially damage scenic resources within a state scenic highway. MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least the last 60 years and in many cases to farmland that has been cultivated for over a century. Controlling and improving the quality of agricultural wastewater discharges, and implementing MPs on drain operations, and compliance monitoring will not affect scenic resources.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?
No Impact. The proposed project will not substantially degrade the existing visual character or quality of the site and its surroundings. MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least the last 60 years and in many cases to farmland that has been cultivated for over a century. This agricultural land is not sensitive with respect to visual character or quality. Controlling and improving the quality of agricultural wastewater discharges, MP implementation, and compliance monitoring 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 and Forest Resources

Would the project:

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

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 Conditional Waiver does not conflict with or obstruct implementation of the applicable air quality plan.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
No impact. The proposed project does not violate air quality standards or contribute substantially to an existing or projected air quality violation. This project requires farmers/growers to continue using MPs on existing farmland to control agricultural wastewater discharge quality and control pollutants associated with discharges. It also requires IID to continue the use of MPs to control potential water quality impacts due to drain O&M. MPs themselves are not sources of emissions. Construction, operation,

and maintenance of some MPs (e.g., land leveling, sprinkler irrigation, drip irrigation, etc.) may involve the temporary use (one-time or once-per-year) of construction equipment (e.g., tractors, backhoes) that are sources of gasoline/diesel byproduct emissions and fugitive dust emissions (particulates). However, the equipment used for construction and O&M meets emission standards. Therefore, construction equipment emissions are not expected to violate or contribute substantially to an existing or projected air quality violation.

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

No Impact. The contribution attributable to the proposed project is not considered cumulatively considerable and therefore, is less than significant. The project requires farmers/growers to continue using MPs on farmland to control agricultural wastewater discharge quality and control pollutants associated with discharges. It also requires IID to continue the use of MPs to control potential water quality impacts due to drain O&M. MPs themselves are not sources of emissions. Construction, operation, and maintenance of some MPs (e.g., land leveling, sprinkler irrigation, drip irrigation, etc.) may involve the temporary use (one-time or once-per-year) of construction equipment (e.g., tractors, backhoes) that are sources of gasoline/diesel byproduct emissions and fugitive dust emissions (particulates). However, the equipment used for construction and O&M meets emission standards. Therefore, construction equipment emissions are not expected to violate or contribute substantially to an existing or projected air quality violation.

d) Expose sensitive receptors to substantial pollutant concentrations?

No Impact. The proposed project will not expose sensitive receptors to substantial pollutant concentrations. The MPs are not individually or cumulatively significantly different than current agricultural practices (e.g., preparing land for planting). The project requires farmers/growers to continue using MPs on farmland to control agricultural wastewater discharge quality and control pollutants associated with discharges. It also requires IID to continue the use of MPs to control potential water quality impacts due to drain O&M. Particulate emissions associated with MP construction and operation and maintenance will occur primarily in agricultural drains and fields where large numbers of people are not expected to congregate.

e) Create objectionable odors affecting a substantial number of people?

No Impact. The proposed project will not create objectionable odors.

IV. Biological Resources

Would the project:

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

No Impact. The proposed project will not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. MP implementation, and compliance monitoring will not affect such resources, on the contrary. Improved water quality contributes to healthier and sustainable habitat for biological resources.

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 Wildlife 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 Wildlife, or U.S. Fish and Wildlife Service.

The Imperial Valley drains and the Alamo and New rivers support riparian habitat. Riparian habitat provides valuable vegetative cover for numerous sensitive bird species, including the endangered Yuma Clapper Rail, the Mountain Plover, Burrowing owl, Short-eared owl, Black-tailed gnatcatcher, Crissal thrasher, Yellow warbler, California gray-headed junco, and Colorado Valley woodrat. The drains and delta also provides critical habitat for sensitive fish species including the endangered Desert Pupfish. Reduction of pollutants to the drains will not alter this important vegetative cover nor will it affect sensitive wildlife in any adverse manner. To the contrary—improved water quality creates a healthier habitat for wildlife and other biological resources.

In 2011, the Natural Resources Agency prepared an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Salton Sea Species Conservation Habitat Project. The Species Conservation Habitat Project is intended to serve as a proof of concept for the restoration of the shallow water habitat that currently supports fish and wildlife dependent on the Salton Sea. This habitat is being threatened and lost due to salinity increases and declining Sea elevation. The Species Conservation Habitat Project's goals are: (1) to develop a range of aquatic habitats that will support fish and wildlife species that depend on the Sea; and (2) develop and refine data needed to successfully manage the Project's habitat through adaptive management.

The proposed project complements the Natural Resources Agency's Project and the Agency's overall efforts to restore the Salton Sea because it requires implementation of management practices to address water quality impairments and improve overall drain water quality—drain water is a vital source of flow for the Salton Sea. Further, it also compliments and is consistent with with the New River Improvement Project Strategic Plan (New River Strategic Plan). In May 2012, the California-Mexico Border Relations Council adopted the New River Strategic Plan, which recommends implementation of a series of structural and non-structural measures to address New River water quality impairments. Included in the non-structural recommendations is the development and implementation of a Waiver of Waste Discharge Requirements to address water quality impacts associated with agricultural return flows discharged into the New River. A copy of the New River Strategic Plan can be downloaded from:

http://www.calepa.ca.gov/Border/CMBRC/2011/StrategicPlan.pdf

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

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

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy ordinance?
No Impact. The proposed project does not conflict with any local policies or ordinances protecting biological resources.

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. Control and reduction of pollutants that could impair water quality in the drains will benefit water bodies in the project area. Please see discussion responding to Question IV.b., above, for further discussion of the Natural Resources Agency Salton Sea Species Conservation Habitat Project.

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 Colorado River Basin Water Board is not aware of these resources in the project area and the CEQA Scoping Meeting it held on December 5, 2013, early in the development of this Conditional Waiver, did not disclose the presence of any such resources as well.. The Colorado River Basin Water Board received no comments regarding the occurrence of sensitive or unique historical, archaeological, paleontological, or geological resources. Likewise, no information was obtained concerning the occurrence of ancient burial grounds, outside of formal cemeteries.

MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least the last 60 years and in many cases to farmland that has been cultivated for over a century. Therefore, any historical resources should have been identified and protected by now, if present. Control and reduction of pollutants that impair water quality is beneficial to water bodies in the project area, and will not affect historical resources.

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

No Impact. The proposed project will not cause a substantial adverse change in the significance of archaeological resources. Please see discussion responding to Question V.a., above.)

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. Please see discussion responding to Question V.a., above.

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. Please see discussion responding to Question V.a., above.

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?

No Impact. The proposed project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic activity. While it is true that the Imperial Valley is one of the most active seismic zones in North America, with numerous historic earthquakes, the MPs in the proposed project are not individually or cumulatively significantly different than current agricultural practices (e.g., preparing land for planting). The project requires farmers/growers to continue using MPs on farmland to control agricultural wastewater discharge quality and control pollutants associated with discharges. It also requires IID to continue the use of MPs to control potential water quality impacts due to drain O&M.

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.

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. MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least the last 60 years and in many cases to farmland that has been cultivated for over a century. The MPs are not individually or cumulatively significantly different than current agricultural practices (e.g., preparing land for planting). The project requires farmers/growers to continue using MPs on farmland to control agricultural wastewater discharge and control pollutants associated with discharges. It also requires IID to continue the use of MPs to control potential water quality impacts due to drain O&M.

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

No Impact. MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least 100 years. The MPs are not individually or cumulatively significantly different than current agricultural practices (e.g., preparing land for planting). MPs likely to be implemented do not involve structures that will affect or disturb soils to any significant degree, cause soils to become unstable, or result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

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 will occur on existing agricultural drains and on farmland cultivated for at least 100 years. The MPs are not individually or cumulatively drastically unlike current agricultural practices (e.g., preparing land for planting). MPs to be implemented are unlikely to affect soil to any significant degree, or create substantial risk to life or property.

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

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

VII. Greenhouse Gas Emissions

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

No Impact. The proposed project will not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. MPs themselves are not sources of emissions. Construction, operation, and maintenance of some MPs (e.g., land leveling, sprinkler irrigation, drip irrigation, etc.) may involve the temporary use (one-time or once-per-year) of construction equipment (e.g., tractors, backhoes) that are mobile point source emissions. However, the equipment used for construction and O&M meets emission standards. Therefore, construction equipment emissions are not expected to violate or contribute substantially to greenhouse gas emissions.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?

No Impact. The proposed project will does not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases.

VIII. 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 may indirectly impact the application of pesticides as it relates to the operation and maintenance of drains. Pesticides can be considered as hazardous materials, but the application of pesticides is controlled by the California Department of Pesticide Regulation (CDPR) and the Imperial County Agricultural Commissioner (ICAC) to prevent and mitigate hazards to the public or the environment. Pesticides should only be applied after consulting with a licensed Agricultural Pest Control Advisor, and only then by a certificated Qualified Applicator. In addition, the MPs are not individually or cumulatively significantly different than current agricultural pesticide practices. The project requires farmers/growers to continue using MPs on farmland to control agricultural wastewater discharge quality and control pollutants associated with discharges. It also requires IID to continue the use of MPs to control potential water quality impacts due to drain O&M.

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. See discussion in Item "a," above.

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. See previous discussion in Item "a," above.

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

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

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

No Impact. Small portions of the proposed project are located within two miles of public airports, but the proposed project will not result in a safety hazard for people residing or working in the project area. According to the Airport Land Use Compatibility plan, Imperial County Airports (Imperial County, 1996), the principal means of reducing risk to people on the ground is to restrict land uses so as to limit the gathering of people in areas most susceptible to aircraft accidents, which means that agricultural land use, which does not tend to result in a gathering of people, can be carried out with minimal exposure to safety hazard. Construction and/or installation of some MPs in an airport land use area may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, and caterpillars) that may temporarily increase the hazard potential. However, such activities will occur on farmland not typically surrounded by people, and once installed, the MPs themselves are not areas where people would tend to gather.

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. Small portions of the proposed project are located within two miles of private airstrips, but the proposed project will not result in a safety hazard for people residing or working in the project area. According to the Airport Land Use Compatibility plan, Imperial County Airports (Imperial County, 1996), the principal means of reducing risk to people on the ground is to restrict land uses so as to limit the gathering of people in areas most susceptible to aircraft accidents, which means that agricultural land use, which does not tend to result in a gathering of people, can be carried out with minimal exposure to safety hazard. Construction and/or installation of some MPs in an airport land use area may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, and caterpillars) that may temporarily increase the hazard potential. However, such activities will occur on farmland not typically surrounded by people, and once installed, the MPs themselves are not areas where people would tend to gather.

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 will occur on existing fields and drains, which generally are not corridors for emergency response or evacuation.

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

No Impact. The proposed project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland cultivated for at least 60 years and in many cases on farmland that has been cultivated for over a century. The MPs are not individually or cumulatively

drastically unlike current agricultural practices (e.g., preparing land for planting). MPs to be implemented are unlikely to increase the risk of loss, injury or death involving wildland fires.]

IX. Hydrology and Water Quality

Would the project:

a) Violate any water quality standards or waste discharge requirements?
No Impact. The proposed Conditional Waiver requires implementation of actions to reduce pollutant discharges to Imperial Valley waterways and to discharge in compliance with Basin Plan water quality standards (WQS). Implementation of MPs will improve water quality of receiving waters by reducing pollutant loading to receiving waters, and preventing pollutants from reaching receiving waters. The Conditional Waiver also includes a comprehensive monitoring program for receiving waters to ensure compliance with WQS, and overall improvements in water quality.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support the existing land uses or planned uses for which permits have been granted)?
No Impact. The proposed project does not involve the extraction or recharge of groundwater supplies. The Imperial Valley is part of the Imperial Hydrologic Unit. In general, first-encountered groundwater in the Imperial Valley is not used for domestic purposes because it typically consists of storm water and irrigation water that percolates and passes the root zone of farmland. Tile drains have been installed by IID to convey shallow groundwater away from the root zone of crops. Most of the shallow groundwater, leaching water, or excess irrigation water flows into the drains and New and Alamo rivers. Groundwater levels have remained relatively stable within the majority of the basin between 1970 and 1990 because of a constant rate of discharge from canals and subsurface agricultural drains (DWR, 2003).

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
No Impact. The proposed project does not require alteration of the existing drainage pattern of the site or area, and would not result in substantial erosion or siltation on- or off-site. Rather, the proposed project expects to reduce sediment/silt to surface waters by implementing MPs that minimize erosion and sediment deposition.

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

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

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

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

f) Otherwise substantially degrade water quality?

No Impact. The proposed project will not otherwise substantially degrade water quality. Rather, the proposed project should improve water quality because it requires that Responsible Parties implement management practices to ensure their discharges of waste comply with state water quality standards. Further, the proposed project compliments and is consistent with the New River Improvement Project Strategic Plan (New River Strategic Plan). In May 2012, the California-Mexico Border Relations Council adopted the New River Strategic Plan, which recommends implementation of a series of structural and non-structural measures to address New River water quality impairments. Included in the non-structural recommendations is the development and implementation of a Waiver of Waste Discharge Requirements to address water quality impacts associated with agricultural return flows discharged into the New River.

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) Expose people or structures to 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.

X. Land Use and Planning

Would the project:

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

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
No Impact. The proposed project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. MP implementation and compliance monitoring will occur on existing fields and drains, and will not impact land use or planning.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?
No Impact. The proposed project will not conflict with any applicable habitat conservation plan or natural community conservation plan.

XI. Mineral Resources

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
No Impact. The proposed project will not result in the loss of availability of a known mineral resource of value to the region and the residents of the state. MP implementation and compliance monitoring will occur on existing agricultural drains and on farmland under cultivation for at least 100 years.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?
No Impact. The proposed project will not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. MP implementation and compliance monitoring will occur

on existing agricultural drains and on farmland under cultivation for at least 60 years and in many cases on farmland that has been cultivated for over a century.

XII. Noise

Would the project result in:

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

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

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

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

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

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

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

No Impact. The proposed project will not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Construction and/or installation of some MPs may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, caterpillars) that may increase noise levels, but these noise levels will not exceed typical levels from daily

farming operations. Additionally, such activities will occur on farmland not typically surrounded by people. Once installed, the MPs themselves are not sources of temporary or periodic increases in ambient noise.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. Small portions of the proposed project are located within two miles of public airports, but the proposed project will not expose people residing or working in the project area to excessive noise levels. According to the Airport Land Use Compatibility plan, Imperial County Airports (Imperial County, 1996), noise exposure in the vicinity of the airports for agricultural cropland will clearly be acceptable, which means that agricultural land use can be carried out with essentially no interference from the noise exposure. Construction and/or installation of some MPs may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, and caterpillars) that may increase ambient noise levels in the area. However, such activities will occur on farmland not typically surrounded by people, and once installed, the MPs themselves are not the sources of excessive noise.

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. Small portions of the proposed project are located within the vicinity of private airstrips, but the proposed project will not expose people residing or working in the project area to excessive noise levels. Construction and/or installation of some MPs may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, and caterpillars) that may increase ambient noise levels in the area. However, such activities will occur on farmland not typically surrounded by people, and once installed, the MPs themselves are not the sources of excessive noise.

XIII. 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.

XIV. 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:

i. Fire protection?
ii. Police protection?
iii. Schools?
iv. Parks?
v. 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.

XV. Recreation

Would the project:

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

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

(b) Include recreational facilities or require the construction or expansion or recreational facilities which might have an adverse physical effect on the environment?
No Impact. The proposed project will not include recreational facilities or require the construction or expansion of recreational facilities. MP implementation will not include or require recreational facility use.

XVI. Transportation and Traffic

Would the project:

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

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

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
No Impact. The proposed project will not result in a change in air traffic patterns. MP implementation does not involve or affect air traffic.

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, and do not create an incompatible use hazard.

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

f) Result in inadequate parking capacity?
No Impact. The proposed project will not result in inadequate parking capacity. Construction and/or installation of some MPs may require use of farming equipment (e.g., tractors, backhoe, caterpillars). However, MPs will occur on existing drains and farmland, where adequate space exists to park construction and/or installation equipment.

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.

XVII. Utilities and Service Systems

Would the project:

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

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
No Impact. The proposed project will not require or result in construction of new water or wastewater treatment facilities or expansion of existing facilities. MP implementation does not involve wastewater treatment plants.

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

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

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

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
No Impact. The proposed project will result in a determination by the wastewater treatment provider which serves the project area that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. MP implementation does not involve wastewater treatment plants.

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 solid waste 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.

XVIII. 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 regulating the discharges of waste and thereby improve water quality by meeting the Water Quality Standards.

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

No Impact. The proposed project will not have impacts that are individually limited or cumulatively considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. There are several existing and proposed projects involving water quality of the Alamo River, New River, Imperial Valley Drains, and Salton Sea: Alamo River Sediment TMDL, Imperial Valley Sediment TMDL, New River Sediment TMDL, Wetlands Demonstration Projects, Colorado River Quantification Settlement Agreement (QSA), and California Natural Resources Agency's Salton Sea Species Conservation Habitat Project (SCH Project). These projects have been providing benefits to the water quality of the affected waterbodies and to the biological resources and environment by reducing the amount of pollutants inflow into the waterbodies. For example, the QSA projects provided for mitigation of the adverse water quality impacts that the QSA projects might create, and further enhances water quality by creating SCH Project to restore the Salton Sea. In connection with the SCH Project, this project compliments the SCH Project and overall efforts to restore the Salton Sea because this project requires implementation of management practices to address water quality impairments and improve overall drain water quality.

In addition, implementation of existing laws/regulations/treaties, better coordination with third party cooperating agencies/organizations, and monitoring of water quality are activities that are not cumulatively considerable. Rather, the proposed project is expected to reduce negative cumulative effects, if any, through better agency

coordination, and to protect beneficial uses of Alamo and New Rivers, Imperial Valley Drains, and Salton Sea by reducing the amount of pollutants in agricultural discharges.

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. Implementation of existing laws/regulations/treaties, better coordination with third party cooperating agencies/organizations, and monitoring are activities that do not adversely affect human beings. Rather, the proposed project is expected to reduce water quality-related problems (e.g., unsafe fish consumption) that may adversely affect human beings.

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

Preferred Alternative
The Preferred Alternative is defined as the Colorado River Basin Water Board adopts the Conditional Waiver and requires the Colorado River Basin Water Board staff to determine if WQOs are attained by the third year. The proposed project (i.e., Preferred Alternative) is the basis for all discussions in this CEQA Environmental Checklist and Determination. The Preferred Alternative is a feasible approach to decrease existing and future pollutants in the subject drains, and thus to decrease health risks for biological and human communities. The Preferred Alternative calls for Responsible Parties to develop and implement either Individual Compliance Programs or to participate in Coalition Group Compliance Programs. The time schedule is moderately aggressive, yet reasonable given the number of drains and private farmland acres involved. The time schedule provides Responsible Parties with the necessary time to explore financial options and implement tasks. The proposed Implementation Plan utilizes a combination of self-determined actions and regulatory-encouraged actions (e.g., the development and implementation of a water quality monitoring program). This alternative will decrease pollutant discharge because it requires responsible parties to implement management practices to ensure their discharges of wastes comply with state water quality standards and address existing water quality impairments, thus reducing the human health threat, and protecting beneficial uses.

Shorter Compliance Timeframe Alternative

The project as envisioned provides for the formation of an IID-ICFB Coalition Group to assist the farming community in the Imperial Valley comply with the Waiver conditions. Under the terms of the proposed Waiver, this Coalition Group will have approximately nine (9) months to begin implementing an approved Control Program to comply with the Waiver. The Shorter Compliance Timeframe Alternative is defined as the proposed project that requires the Colorado River Basin Water Board staff to determine if WQOs are attained by the second year instead of the third year in the Preferred Alternative. This alternative is not feasible or reasonable, considering the amount of data collection required to assess conditions/sources and the amount of time needed by Responsible Parties to develop/implement plans to reduce pollutant discharges. This alternative would decrease existing pollutant discharges, reduce the human health threat and protect beneficial uses. However, this alternative may lead to insufficient data to effectively determine if WQOs are attained and may lead to greater economic impacts to Responsible Parties, who may require additional personnel to implement required measures so quickly.

Increased Regulatory Oversight

The Increased Regulatory Oversight Alternative is defined as the proposed project with an Implementation Plan of greater regulatory oversight, including the adoption of general permits, effluent limitations for the IID, 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 Colorado River Basin Water Board staff resources without commensurate environmental benefit.

Comparison of Alternatives

Table 6, below, provides a comparison of the alternatives discussed above.

Table 6. Comparison of Alternatives

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

REFERENCES

California Regional Water Quality Control Board. 2006. Water Quality Control Plan, Colorado River Basin – Region 7. Colorado River Basin, Regional Water Quality Control Board. Palm Desert, CA.

Environmental Leader. 2014. EPA Funds Reduce Water Pollution, Increase E-Waste Recycling. October 14, 2014. Fort Collins, CO. Available online at: http://www.environmentalleader.com/2014/10/14/epa-funds-reduce-water-pollution-increase-e-waste-recycling/#ixzz3KxlWVzwQ

Imperial Irrigation District and CH2MHILL. 2011. Practices that Result in Selenium Discharges in the Imperial Valley of California. Final Report prepared for State Water Resources Control Board, December 2011, 245 pages. El Centro, CA.

Imperial County General Plan, http://www.icpds.com/?pid=571

Airport Land Use Compatibility Plan, Imperial County Airports, Imperial County, 1996. <http://www.icpds.com/CMS/Media/ALUC-Compatibility-Plan-1996-Part-I.pdf>

IID Water Transportation System:<http://www.iid.com/index.aspx?page=117