CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

FOR

GENERAL WASTE DISCHARGE REQUIREMENTS FOR IN-SITU GROUNDWATER REMEDIATION AT SITES WITHIN THE COLORADO RIVER BASIN REGION

March 4, 2019

TABLE OF CONTENTS

GENERAL INFORMATION iii

1.0 INTRODUCTION 1

1.1 INTRODUCTION AND PROJECT SUMMARY……... .. 1

1.2 AGENCY AUTHORITY UNDER CEQA……...……..……..……1

2.0 PROJECT DESCRIPTION……….……..…….… ..…2

2.1 GENERAL DESCRIPTION……..…….…….…….....2

2.2 PROJECT LOCATION……..……..5

3.0 CHECKLIST..... 5

3.1 INTRODUCTION…….……6

I. AESTHETICS 6

II. AGRICULTURE AND FOREST RESOURCES..... 7

III. AIR QUALITY 8

IV. BIOLOGICAL RESOURCES 9

V. CULTURAL RESOURCES. 10

VI. GEOLOGY AND SOILS..... 11

VII. GREENHOUSE GAS EMISSIONS..... 12

VIII. HAZARDS AND HAZARDOUS MATERIALS..... 13

IX. HYDROLOGY AND WATER QUALITY 14

Mitigation Measures……..…….…….. 16

X . LAND USE AND PLANNING..... 17

XI. MINERAL RESOURCES..... 18

XII. NOISE 18

XIII. POPULATION AND HOUSING 19

XIV. PUBLIC SERVICES 20

XV. RECREATION 20

XVI. TRANSPORTATION/TRAFFIC 21

XVII. TRIBAL CULTURAL RESOURCES 22

XVIII. UTILITIES AND SERVICE SYSTEMS 23

XIX. MANDATORY FINDINGS OF SIGNIFICANCE 25

4.0 DETERMINATION 25

5.0 NEGATIVE DECLARATION 26

GENERAL INFORMATION

Project Title:	General Waste Discharge Requirements for In-Situ Groundwater Remediation at Sites Within the Colorado River Basin Region
Lead Agency Name:	California Regional Water Quality Control Board, Colorado River Basin Region
Lead Agency Address:	73-720 Fred Waring Drive, Suite 100, Palm Desert, CA 92260
Contact Person:	Joan Stormo, Senior Engineering Geologist
Contact Phone Number, email:	(760) 776-8982, Joan.Stormo@waterboards.ca.gov
Project Location:	The Colorado River Basin Region; see Figure 2.1
Project Applicant's Name and Address:	Various
Zoning:	Commercial/Industrial/Agricultural
Description of Project:	The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) proposes to adopt General Waste Discharge Requirements (General WDRs) for *in situ* groundwater remediation at sites impacted by discharges of various types of wastes, including petroleum hydrocarbon fuel, volatile organic compounds, and inorganic contaminants.
Surrounding Land Uses and Setting:	Various
Responsible Agencies:	Local permits may be required by various cities and counties in the Colorado River Basin Region for the installation of groundwater monitoring, extraction, and recharge wells, and by other agencies. Permits may also be required by those same agencies for storage of some amendments that are allowed under the General WDRs.

1.0 INTRODUCTION

1.1 INTRODUCTION AND PROJECT SUMMARY

This document is a Programmatic Initial Study and Mitigated Negative Declaration prepared pursuant to the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., for the proposed *General Waste Discharge Requirements for In-Situ Groundwater Remediation at Sites Within the Colorado River Basin Region*.

The most common method of cleanup of groundwater pollution in the Colorado River Basin Region is *in-situ* remediation, which involves the addition of chemicals and/or other reactive materials (amendments) into soil and groundwater (*in situ*), via chemical, biological, or physical treatment systems to promote groundwater remediation. This includes discharge of amendments directly to the groundwater, as well as amendments added to extracted groundwater through a groundwater recirculation system.

Currently, individual, site-specific waste discharge requirements (WDRs) are issued by the California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board) to regulate *in-situ* groundwater remediation projects. The process to develop and adopt site-specific WDRs can be lengthy. Many *in-situ* treatment processes have common components and issues that are more efficiently regulated under General WDRs. Therefore, the project will expedite cleanup by streamlining the permitting process for *in situ* remediation.

1.2 AGENCY AUTHORITY UNDER CEQA

CEQA and its implementing regulations, the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), require that the environmental impacts of a public agency's proposed discretionary action be evaluated and that feasible methods to reduce, avoid, or eliminate significant adverse impacts of such actions be identified and implemented. The Regional Water Board is the lead agency for preparation of this Initial Study and proposed Mitigated Negative Declaration in conformance with CEQA and the CEQA Guidelines.

A Mitigated Negative Declaration may be prepared for a project subject to CEQA when an Initial Study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the project proponent (the Regional Water Board) before the proposed Initial Study/Mitigated Negative Declaration are released for public review would avoid the effects or mitigate the potentially significant effects of the proposed project to a point where clearly no significant effect on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment. (Cal. Code Regs., tit. 14, § 15064, subd. (f)(2).)

Based on the findings of the Initial Study, and after appropriate consideration of comments submitted in response to the notice of intent to adopt the proposed Mitigated Negative Declaration, the Regional Water Board concludes that the proposed project will not have any significant effects on the environment that cannot be mitigated to a less-than-significant level.

2.0 PROJECT DESCRIPTION

2.1 GENERAL DESCRIPTION

The project entails the adoption of proposed Order No. R7-2019-0016, *General Waste Discharge Requirements for In-Situ Groundwater Remediation at Sites Within the Colorado River Basin Region* (hereinafter, "General WDRs" or "project"), which proposes to regulate the addition (discharge) of chemicals and other reactive materials (amendments) into soil and groundwater (*in-situ*), via chemical, biological, or physical treatment systems, to promote groundwater remediation within the Colorado River Basin Region.

Discharges of petroleum hydrocarbon compounds and volatile organic compounds, heavy metals, perchlorate, pesticides, and other types of contaminants have degraded groundwater at numerous sites throughout the Colorado River Basin Region and have impacted or are threatening to impact beneficial uses of groundwater. Those sites are being required to clean up the pollution and restore the beneficial uses of the groundwater. A common cleanup method for groundwater pollution is *in-situ* remediation.

Water Code section 13260, subdivision (a)(1), requires that any person discharging wastes or proposing to discharge wastes (other than into a community sewer system), which could affect the quality of the waters of the state, must file a report of waste discharge (ROWD). The Regional Water Board then prescribes requirements for the discharge or proposed discharge of wastes pursuant to Water Code section 13263. General WDRs may be prescribed for discharges produced by the same or similar operations, involving the same or similar types of wastes, and requiring the same or similar treatment standards.

Currently, separate site-specific WDRs must be issued to regulate each *in-situ* groundwater remediation project. The adoption of General WDRs is appropriate because the Regional Water Board regulates many sites using this type of cleanup process, the cleanup of these types of sites is of high priority, the issuance of individual, site-specific WDRs is time-consuming without providing additional benefit, and the types of treatment used have similar effects that can reasonably be regulated under general WDRs. Adoption of the General WDRs for *in-situ* groundwater remediation processes will simplify the application process for dischargers, prevent regulatory delays to groundwater remediation activities, reduce time needed for the Regional Water Board to prepare and adopt WDRs for common remedial activities in the Colorado River Basin Region, and provide a comparable level of water quality protection to individual, site-specific WDRs.

In-situ remediation of groundwater pollution at most sites includes the use and application of biological, chemical, and/or physical treatment processes. These remediation processes include oxygen enhancement, chemical oxidation, chemical reduction, bio-stimulation (addition of nutrients to enhance biodegradation), bioaugmentation (introducing appropriate bacteria), and metals precipitation/stabilization, surfactants/co-solvents, buffering and pH adjustment, and/or physical treatments to degrade pollutants or change them to less toxic or less mobile forms. The method of delivery can be via injection to soil or groundwater *in-situ*, or via groundwater recirculation (extraction and treatment with return of treated groundwater to the impacted aquifer zone). In most instances, the *in-situ* remediation processes will create reducing or oxidizing conditions within the aquifer in order to either reduce or oxidize the target pollutant. The remediation processes can result in localized exceedances of water quality objectives that are generally limited in duration and/or in a relatively small portion of the aquifer. The proposed General WDRs allow exceedances of water quality objectives to occur while oxidation/reduction processes are taking place, but only within the treatment zone, and for a limited period of time.

The treatment zone is the area where the oxidation/reduction processes take place. During oxidation, several changes in water quality parameters can occur. The oxidation process can cause trivalent chromium in formation materials and dissolved in the aquifer to be converted to hexavalent chromium, a much more toxic form of chromium. In addition, chlorides will be liberated if the pollutants being oxidized are chlorinated compounds. Increases in salts can occur if the oxidant being used has a salt component such as sodium or potassium.

Reduction processes have similar concerns with chlorides and salts. Reducing conditions will remove dissolved oxygen from groundwater, and can liberate excess concentrations of dissolved iron and manganese from formation materials, and generate methane, causing secondary water quality problems.

Water quality objectives for some parameters may be exceeded within the treatment zone. However, water quality objectives cannot be exceeded outside of the treatment and transition zones. Monitoring wells are established downgradient of the treatment zone for use as compliance wells. The monitoring wells are used to measure compliance with water quality objectives and groundwater limitations.

The *in-situ* treatment system is usually one of three types:

a. The first type utilizes groundwater recirculation system consisting of extraction and injection wells, and provides control of the injectants and of the extent of the treatment zone. The extracted groundwater is amended aboveground, and the amended water is then recharged upgradient of the extraction well(s).

b. The second type injects the amendments into the groundwater and allows the groundwater to flow though the treatment zone.

c. The third type uses extraction and injection wells to create a barrier with the treatment zone being established within and downgradient of the capture zone of the extraction well(s). In this type of system, the injection tends to occur downgradient of the extraction well(s). The use of extraction and recharge systems is preferred as it provides greater flexibility and control of the treatment zone, is generally more efficient, and can be operated to help restore the treatment zone to pre-project conditions after remediation of the initial pollution has been completed.

The proposed General WDRs require that the injectant materials be analyzed to determine the suitability of the materials to be used for *in-situ* remediation. Amendments containing pollutants such as metals could contribute to exceedances of water quality objectives and/or degradation of the groundwater. In most instances, this degradation is short-lived, and the groundwater returns to its background conditions within a relatively short distance past the treatment zone.

In order for a project to be covered under the General WDRs, the cleanup proponent is required to demonstrate through laboratory-scale tests or a field pilot test that the proposed cleanup project will adequately promote remediation of the pollution.

Laboratory-scale tests will also be used to identify potential adverse water quality impacts with the project and help establish monitoring parameters. If there are data from projects sufficiently similar to the proposed project, the proponent can use that information in lieu of performing the laboratory-scale testing, as appropriate.

The responsible party proposing *in-situ* remediation is required to determine background groundwater quality. The background water quality data is used to determine compliance with water quality limitations at the points of compliance downgradient from the treatment zone. Salts can increase due to the dehalogenation of volatile organics or other pollutants or from salts present in amendments. Metals can be solubilized from aquifer materials by the reduction process, be released from amendments during reactions, or change to more toxic states during the oxidation process. The General WDRs allow a slight increase (up to 10% over background) in metals, as long as water quality objectives are met. Water quality limitations for certain anticipated pollutants that are commonly found at these remediation project sites are established in the General WDRs. These limitations are established based on the numerical and narrative water quality objectives found in the Water Quality Control Plan (Basin Plan) for the Regional Water Board.

The General WDRs require the cleanup proponent to provide a site-specific Contingency Plan for approval by the Regional Water Board's Executive Officer. The Contingency Plan is designed to address violations of the General WDRs resulting from unintended and/or unanticipated effects of remediation, such as unacceptable concentrations of remediation by-products at groundwater monitoring points established as points of compliance. The monitoring of the points of compliance, and other monitoring points, are provided in a project-specific monitoring and reporting program (MRP) developed for each project and are required by the General WDRs. Development and implementation of the Contingency Plan will protect groundwater quality and beneficial uses of the groundwater.

The General Order also covers the treatment and discharge of groundwater to ground – either at or below the ground surface. Effluent limitations for the discharge of the treated groundwater are specified in the General Order and are protective of beneficial uses of the groundwater.

To obtain coverage under the General Order, the party responsible for the cleanup must submit a Notice of Intent (NOI) and supplemental information describing the project. The information requirements are significant as these *in-situ* cleanups are often complex and require a great deal of knowledge about the cleanup site and remediation processes. Also, as the overall cleanup project may require various types of construction activities, such as construction of wells, the project proponent must have demonstrated project-specific compliance with CEQA prior to obtaining coverage under the General Order.

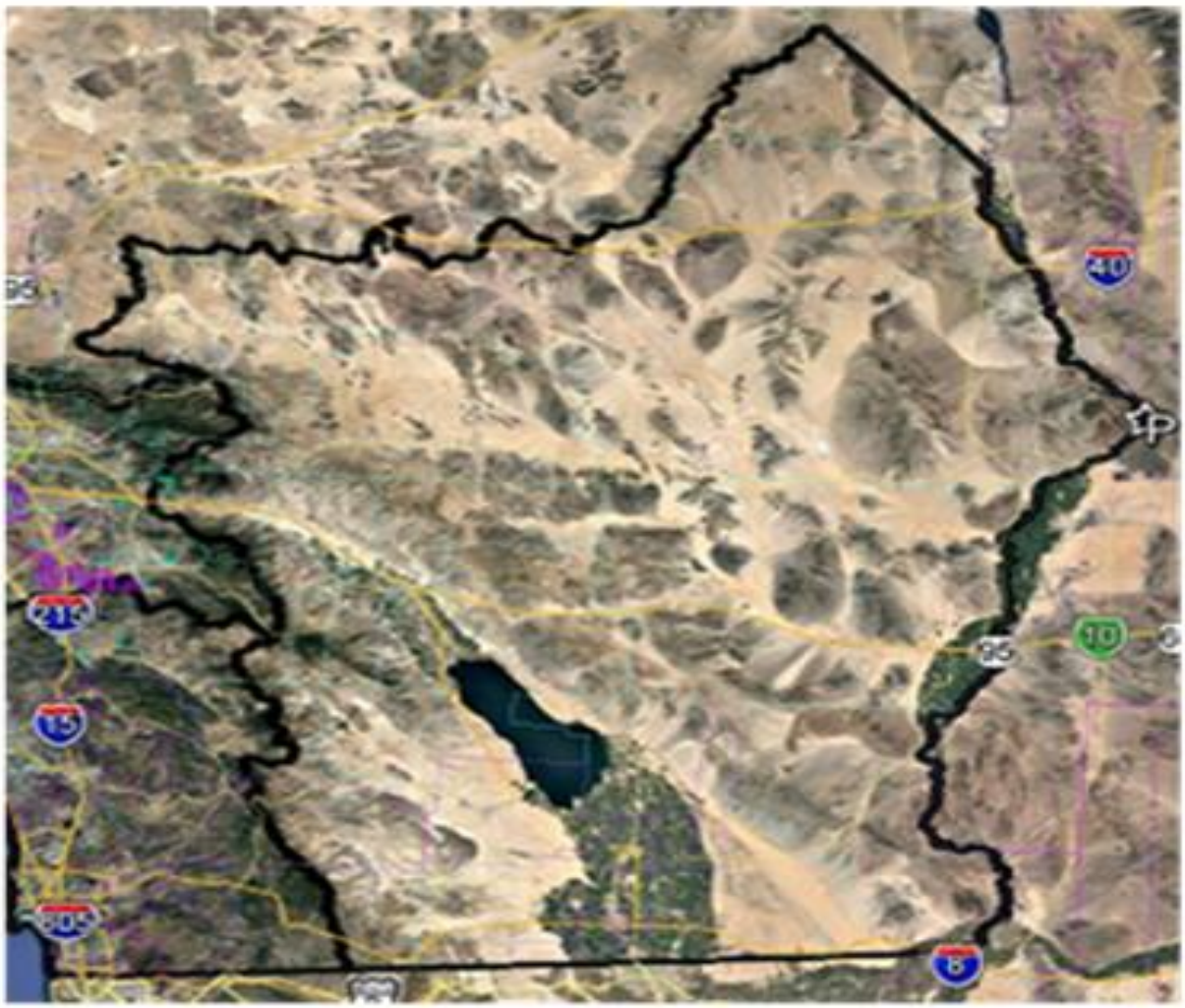
When the project is completed, the cleanup proponent will file for termination of coverage under the General WDRs.

2.2 PROJECT LOCATION

The Project is located in the Colorado River Basin region, which comprises all basins east of the Santa Ana and San Diego regions draining into the Colorado River, Salton Sea and local sinks from the southerly boundary of the Lahontan region to the California-Mexico Boundary. (Water Code, § 13200, subd. (i).)

See Figure 2-1 below.

Figure 2.1 - Project Vicinity Map



3.0 ENVIRONMENTAL CHECKLIST

3.1 INTRODUCTION

This section provides an evaluation of the potential environmental impacts of the proposed project, including the CEQA Mandatory Findings of Significance. There are 16 specific environmental issues evaluated in this chapter. Cumulative impacts to these issues are evaluated in Section 4.0.

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/ Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☒ Hydrology/ Water Quality
☐ Land Use/ Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation / Traffic	☐ Tribal Cultural Resources	☐ Utilities / Service Systems
☒ Mandatory Findings of Significance		

For each issue area, one of four conclusions are made:

- ***"Potentially Significant Impact"*** *is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.*

- ***"Less Than Significant with Mitigation Incorporated"*** *applies where the incorporation of mitigation measures has reduced an effect from* ***"Potentially Significant Impact"*** *to a* ***"Less Than Significant Impact."*** *The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.*

- ***"Less Than Significant Impact"*** *applies to an effect that would not be significantly adverse.*

- ***"No Impact"*** *applies where the effect occurs without impact.*

I. AESTHETICS

AESTHETICS *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Environmental Impacts Analysis

The adoption of the General WDRs would not change existing zoning or land use policy pertaining to scenic vistas and/or other scenic and historic resources. Additionally, the remediation projects eligible for coverage under the General WDRs will typically be located on already disturbed land in areas of existing agricultural or industrial development. Covered remediation projects would require the installation of monitoring and injection wells, and in some instances, above-ground remediation systems at the cleanup sites, but these will be relatively low profile (wells are typically mounted flush with the ground surface) and impacts to aesthetic resources (such as to scenic resources or the visual character/quality of the site) would likely be less than significant. Additionally, the remediation systems are unlikely to be a substantial source of light or glare. As such, any impacts to aesthetic resources will be less than significant.

Mitigation Measures

The proposed project would not result in any significant impacts to aesthetic resources, therefore no mitigation is required.

II. AGRICULTURE AND FOREST RESOURCES

AGRICULTURE AND FOREST RESOURCES *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 nonagricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

Environmental Impacts Analysis

The adoption of the General WDRs would not change zoning or land use designations. The General WDRs do not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned for timber production. While the General WDRs may require the installation of monitoring and injection wells and remediation systems at the cleanup sites

regulated under the General WDRs, this will not cause the ground disturbance of large areas or the significant loss of any agricultural or forest land, or result in any change in zoning.

Mitigation Measures

The proposed project would not result in any significant impacts to agricultural and forest resources. Therefore, no mitigation is required.

III. AIR QUALITY

AIR QUALITY *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Environmental Impacts Analysis

The adoption of the General WDRs would not directly result in a conflict with an applicable air quality plan or violate an air quality standard.

Short-term increases in traffic during the construction and installation of some remedial equipment, short-term emissions generated by construction equipment, and long-term increases in traffic caused by ongoing maintenance of these devices (e.g., delivery of materials) are potential sources of increased air pollutant emissions. However, emission levels for all pollutants are expected far below the air quality significance thresholds established by the Imperial County Air Pollution Control District (ICAPCD) and the South Coast Air Quality Management District (SCAQMD). No sensitive receptors will likely be impacted because emissions from the construction of the remediation systems will not be substantial. Some remedial devices (e.g., pumps) may be a source of objectionable odors, but the impacts will be at localized areas for a short-term duration and are not expected to affect a substantial number of people. Moreover, to the extent any significant construction is required by a particular remediation project, the local land use authority will evaluate project-specific impacts in a CEQA analysis.

Mitigation Measures

The proposed project would not result in any significant impacts to air quality. Therefore, no mitigation is required.

IV. BIOLOGICAL RESOURCES

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

Environmental Impacts Analysis

The adoption of the General WDRs would not directly result in any impact to biological resources. The General WDRs do not address, preempt, or supersede the authority of local policies or ordinances in protecting biological resources. Therefore, conflicts with such plans, policies or ordinances are unlikely to occur.

While the remediation sites covered by the General WDRs may be located in a variety of different settings, the sites would almost universally be located on already disturbed land in areas of existing agricultural or industrial development, which are unlikely to be sensitive natural habitat or habitat of wildlife species. Therefore, there not likely be any significant impacts. Moreover, to the extent any significant construction is required by a particular remediation project, the local land use authority will evaluate project-specific impacts in a CEQA analysis. The analysis will identify any site-specific biological resources that may be impacted by the proposed construction project.

Additionally, there would be no substantial effect on any riparian habitat or wetlands, as discharge of wastes to surface water or surface water drainage courses is prohibited by the General WDRs.

Mitigation Measures

The proposed project would not result in any significant impacts to biological resources, therefore no mitigation is required.

V. CULTURAL RESOURCES

CULTURAL RESOURCES *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

Environmental Impacts Analysis

The remediation projects enrolled in the General WDRs should avoid impacts to cultural resources, because each cleanup proponent must avoid any historic, archaeological, paleontological or unique geologic resources and demonstrate that they have done so by submitting information so indicating with the Notice of Intent (NOI) to enroll in the General WDRs and should not cause any impacts to any cultural resources.

As required by state law, if human remains are unearthed, the enrollees in the General WDRs must follow Health and Safety Code section 7050.5 and immediately notify the local county coroner, who will investigate the remains. No further disturbance will occur until the county coroner has made the necessary findings concerning the origin and disposition of the remains. The Native American Heritage Commission will be notified if the remains are determined to be of Native American descent. Given the foregoing, any impacts of the Project will be less than significant.

Mitigation Measures

The proposed project would not result in any significant impacts to cultural resources; therefore, no mitigation is required.

VI. GEOLOGY AND SOILS

GEOLOGY AND SOILS *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
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?	☐	☐	☐	☒

GEOLOGY AND SOILS *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 waste water?	☐	☐	☐	☒

Environmental Impacts Analysis

During remediation, some soil may be removed to install remedial equipment and/or monitoring/injection wells. All wells would be constructed in accordance with the California well standards (promulgated by the California Department of Water Resources under the authority of Water Code section 13700 et seq.) and by a licensed well driller under the supervision of a California-licensed engineer or geologist. However, impacts will be localized and of short-term duration and result in less-than-significant soil erosion and loss of topsoil. Any grading activity and well installation must be completed in accordance with the requirements of local grading and well construction permits. No septic tanks or other alternative waste water disposal systems are being proposed as part of the General WDRs.

Mitigation Measures

The proposed project would not result in any significant impacts to geology and soils; therefore, no mitigation is required.

VII. GREENHOUSE GAS EMISSIONS

GREENHOUSE GAS EMISSIONS *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Environmental Impacts Analysis

The greenhouse gas emissions from additional traffic and operation of remedial equipment for remediation projects enrolled under the General WDRs would be minor, localized, and of short-term duration, and would have less-than-significant impacts on the environment. The adoption of the General WDRs would not directly result in a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Mitigation Measures

The proposed project will not result in any significant impacts to greenhouse gas emissions; therefore, no mitigation is required.

VIII. HAZARDS AND HAZARDOUS MATERIALS

HAZARDS AND HAZARDOUS MATERIALS *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

HAZARDS AND HAZARDOUS MATERIALS *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wild land fires, including where wild lands are adjacent to urbanized areas or where residences are intermixed with wild lands?	☐	☐	☐	☒

Environmental Impacts Analysis

The personnel who implement the General WDRs for specific cleanup projects would be trained regarding potential safety and health risks associated with the activities as described in the site-specific and contractor-specific health and safety plans completed in conjunction with the Remedial Action Plan. The health and safety training and monitoring plans will limit hazardous material or waste discharged to the public and the environment. Additionally, the General WDRs also require that a contingency plan be developed and maintained at each cleanup site. The contingency plan must detail appropriate actions to be taken in order to protect human health and the environment in case of any spill, plume migration, or failure related to the operation or inappropriate operation of the treatment system.

Mitigation Measures

The proposed project will not result in any significant hazards or hazardous materials impacts; therefore, no mitigation is required.

IX. HYDROLOGY AND WATER QUALITY

HYDROLOGY AND WATER QUALITY *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
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 existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
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?	☐	☐	☐	☒

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

Environmental Impacts Analysis

The *in-situ* groundwater cleanups that will be governed by the General WDRs would be designed to remediate groundwater polluted by some or all of the following: petroleum hydrocarbon compounds and volatile organic compounds, heavy metals, perchlorate, pesticides, and other types of contaminants. In that process, amendments are added to the groundwater to stimulate appropriate reducing or oxidizing conditions that promote destruction of the target pollutant. Those amendments may cause concentrations of constituents other than the pollutant(s) targeted by the cleanup to temporarily occur above acceptable levels. Under the General WDRs, the degradation caused by the cleanup project is permitted only in the treatment zone and required to be mitigated before the cleanup project is completed. The net result will be better water quality than what existed prior to the cleanup project.

In the case of creating a reducing environment, the amendments are generally a carbon donor such as an alcohol or sugar, and potentially nutrients such as phosphorus and nitrogen to help promote bacterial growth. Reactions within the aquifer and with the pollutants will decrease the amount of dissolved oxygen, lower the redox potential, alter the pH, increase dissolved

concentrations of iron and manganese and increase the concentration of dissolved solids within the treatment zone.

In the case of creating an oxidizing environment, the amendment usually consists of an oxidizer such as ozone, peroxide or permanganate. The reactions in the oxidizing case will alter the pH, raise the redox potential, potentially increase the concentration of hexavalent chromium and increase the concentration of dissolved solids and organic carbon. At sites where these processes have already been applied, the conditions created within the treatment zone tend to revert back to ambient after a period of time following cessation of amendment addition. In some instances, dissolved iron and manganese, and hexavalent chromium may be recalcitrant and require measures to reduce their concentrations to acceptable levels.

For cleanup featuring reductive de-chlorination of chlorinated solvents, intermediate volatile byproducts (such as vinyl chloride and cis-1,2-dichlorethylene) can be formed and exist within the treatment zone above acceptable concentrations. However, proper design of the cleanup system, along with the implementation of additional cleanup measures will keep the concentrations of these volatile constituents to below acceptable levels at the points of compliance.

The General WDRs also cover discharge of treated groundwater to ground, either at or below the ground surface. Effluent limitations from the treatment plant are set at water quality objectives that are protective of beneficial uses of the groundwater. Background concentrations of metals are also determined. Those concentrations are used, along with the water quality objectives, as effluent limitations for the discharge. As an example, if the water quality objective for TDS is already exceeded in background groundwater, then the discharge from the treatment system is not allowed to discharge water with TDS greater than the background concentration.

Mitigation Measures

The cleanup projects conducted under the proposed General WDRs will be subject to all of the requirements and limitations of the General WDRs. The cleanup projects themselves are usually being conducted in response to an enforcement order, such as a Cleanup and Abatement Order, issued by the Regional Water Board or other regulatory agency.

Prior to issuing the Notice of Applicability for coverage under the General WDRs, the Colorado River Basin Regional Water Board will need to have received and approved a remedial action plan (RAP) to conduct the cleanup, received information regarding bench-scale or pilot-scale testing of the proposed cleanup action, received analysis of the chemical makeup of the proposed amendments, and received a Contingency Plan that will be implemented in case there are violations of the General WDRs by the cleanup proponent.

The General WDRs establish compliance points downgradient from the treatment zone where impacts associated with the cleanup action cannot cause exceedances of water quality limitations indicated in the General WDRs. Additionally, allowable concentrations for the target pollutants subject to cleanup would be established in the Cleanup and Abatement Order issued to the responsible party. The Discharger shall provide hydraulic control and complete containment of injected chemicals and wastes, including petroleum hydrocarbon fuel, volatile organic compounds, and inorganic contaminants, if any are observed to be migrating off-site. Additionally, if unacceptable concentrations of pollutants are found at the points of compliance, the Contingency Plan will be implemented to reduce the concentrations to acceptable levels.

The General WDRs includes a Monitoring and Reporting Program (MRP) developed on site-specific basis and designed to provide information regarding the success of the cleanup project, while also ascertaining compliance with the limitations established in the General WDRs. Monitoring is required for various constituents, depending on the type of cleanup undertaken, and can include dissolved oxygen, iron, manganese, target pollutants, potential breakdown products, amendment materials, chemical oxygen, redox potential, pH, electrical conductivity, hexavalent chromium and other analyses, as needed.

In short, the application of amendments for *in-situ* remediation may result in unintended adverse impacts to groundwater quality, but the above mitigation measures will ensure impacts that may result will be localized, of short-term duration, and will not have any long-term impact any existing or prospective beneficial uses of groundwater. Rather, the addition of materials for cleanup will improve groundwater conditions by promoting complete degradation of wastes, including petroleum hydrocarbon fuel, volatile organic compounds, and inorganic contaminants.

X. LAND USE AND PLANNING

LAND USE AND PLANNING *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☒	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☒	☐

Environmental Impacts Analysis

The adoption of the General WDRs would not change zoning or land use designations, nor would it change any applicable conservation plan or natural community conversation plan. Moreover, individual remediation projects must comply with all applicable land use plans, policies, and regulations by local agencies, including habitat conservation areas or natural community conservation plan areas. The proposed project would not result in any significant impacts to land use and planning.

Mitigation Measures

The proposed project would not result in any significant impacts to land use and planning; therefore, no mitigation is required.

XI. MINERAL RESOURCES

MINERAL RESOURCES *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Environmental Impacts Analysis

All remediation activities would occur within the boundaries of the individual cleanup sites (i.e., within the treatment zone) and will not impact surrounding mineral resources. Therefore, there will be no impacts.

Mitigation Measures

The proposed project will not result in any impacts to mineral resources; therefore, no mitigation is required.

XII. NOISE

NOISE *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

NOISE *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Impacts Analysis

Noise levels generated from the construction and operation of remedial equipment would be unlikely exceed the noise standards established in the local general plan or noise ordinance. To the extent any significant construction is required by a particular remediation project, the local land use authority will evaluate project-specific impacts in a CEQA analysis. The adoption of these General WDRs and the projects eligible for coverage by these General WDRs would result in less than significant impacts to noise level.

Mitigation Measures

The proposed project would not result in any significant noise impacts; therefore, no mitigation is required.

XIII. POPULATION AND HOUSING

POPULATION AND HOUSING *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Environmental Impacts Analysis

The remedial activities on the cleanup sites may allow property owners to redevelop the land for residential or commercial uses. However, the adoption of these General WDRs and the projects eligible for coverage by these General WDRs will not change any land use type, or general plan governed by the local agencies.

Mitigation Measures

The proposed project would not result in any significant impacts to population or housing; therefore, no mitigation is required.

XIV. PUBLIC SERVICES

PUBLIC SERVICES *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☒
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

The adoption of these General WDRs and the projects eligible for coverage by these General WDRs would not result in any impacts to public services.

Mitigation Measures

The proposed project would not result in any impacts to public services; therefore, no mitigation is required.

XV. RECREATION

RECREATION *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project 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?	☐	☐	☐	☒

RECREATION *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

The adoption of these General WDRs and the projects eligible for coverage by these General WDRs would not result in any recreation impacts.

Mitigation Measures

The proposed project would not result in any recreation impacts; therefore, no mitigation is required.

XVI. TRANSPORTATION/TRAFFIC

TRANSPORTATION/TRAFFIC *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the importance of the circulatory system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulatory system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒

TRANSPORTATION/TRAFFIC *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

The adoption of these General WDRs and the projects eligible for coverage by these General WDRs may result in temporary alterations to existing transportation systems during construction of remedial systems. But any potential impacts would be limited and short-term. Moreover, to the extent any significant construction is required by a particular remediation project, the local land use authority will evaluate project-specific impacts in a CEQA analysis.

Mitigation Measures

The proposed project would not result in any significant transportation or traffic impacts; therefore, no mitigation is required.

XVII. TRIBAL CULTURAL RESOURCES

TRIBAL CULTURAL RESOURCES *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is	☐	☐	☒	☐
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐

TRIBAL CULTURAL RESOURCES *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision				
(c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Environmental Impacts Analysis

The remediation projects enrolled in the General WDRs should avoid impacts to tribal cultural resources, because each cleanup proponent must avoid any historic, archaeological, paleontological or unique geologic resources and demonstrate that they have done so by submitting information so indicating with the Notice of Intent (NOI) to enroll in the General WDRs and should not cause any impacts to any cultural resources.

As required by state law, if human remains are unearthed, the enrollees in the General WDRs must follow Health and Safety Code section 7050.5 and immediately notify the local county coroner, who will investigate the remains. No further disturbance will occur until the county coroner has made the necessary findings concerning the origin and disposition of the remains. The Native American Heritage Commission will be notified if the remains are determined to be of Native American descent.

Mitigation Measures

The proposed project would not result in any significant impacts to tribal cultural resources; therefore no mitigation is required.

XVIII. UTILITIES AND SERVICE SYSTEMS

UTILITIES AND SERVICE SYSTEMS *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒

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

Environmental Impacts Analysis

The adoption of these General WDRs and the projects eligible for coverage by these General WDRs would not result in any impacts related to utilities or service systems.

Mitigation Measures

The proposed project would not result in any impacts related to utilities or service systems; therefore, no mitigation is required.

XIX. MANDATORY FINDINGS OF SIGNIFICANCE

MANDATORY FINDINGS OF SIGNIFICANCE *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project 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)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Environmental Impacts Analysis

As discussed throughout this document and with the implementation of Regional Water Board-approved-remediation plans and associated addenda, the proposed project would not result in any significant impacts to the quality of the environment than cannot be mitigated to a less-than-significant level, nor would it substantially affect biological resources and associated habitats or eliminate important examples of California history or prehistory.

The proposed project would not result in significant cumulative impacts. The General WDRs would be used to regulate groundwater cleanup projects that will provide a net benefit to groundwater quality. Each individual project could create a small increase in metals or other pollutants in the groundwater; however, the increase is relegated to an increase of no more than 10% above background concentrations. As the groundwater will be restored to beneficial uses by the cleanup process at each of the sites, the net effect will be a greater volume of groundwater being available for beneficial use. Extracted groundwater will be discharged back to the groundwater so there should be minimal loss of volume of water. Depending on site conditions, utilizing *in-situ* cleanup techniques can help restore groundwater quality faster with the expenditure of fewer resources than other methods.

4.0 DETERMINATION

On the basis of this initial evaluation:

☐ I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared;

☒ I find that although the proposed Project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required; but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Signature Date

Joan Stormo, PG, CHG
Senior Engineering Geologist
Colorado River Basin
Regional Water Quality Control Board

5.0 NEGATIVE DECLARATION

Project Title
General Waste Discharge Requirements for *In-Situ* Groundwater Remediation at Sites Within the Colorado River Basin Region

Project Description
The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Water Board), as leady agency, proposes to adopt General Waste Discharge Requirements (General WDRs) for *in situ* groundwater remediation at sites impacted by discharges of various types of wastes, including petroleum hydrocarbon fuel, volatile organic compounds, and inorganic contaminants.

Project Location
The Colorado River Basin Region; see Figure 2.1 above.

Findings
Based on the findings of the Initial Study, and after appropriate consideration of comments submitted in response to the notice of intent to adopt the proposed Mitigated Negative Declaration, the Regional Water Board concludes that the proposed project will not have any significant effects on the environment that cannot be mitigated to a less-than-significant level.

Mitigation measures necessary to avoid the potentially significant effects on the environment are included in the attached Initial Study and will be adopted as part of General WDRs.