CHAPTER 1 – EXECUTIVE SUMMARY

1.1 BACKGROUND

This Executive Summary has been compiled by the Victor Valley Wastewater Reclamation Authority (VVWRA) for the installation of two Subregional Wastewater Reclamation Plants (WRPs), one in the Town of Apple Valley and the other in the City of Hesperia. VVWRA currently operates the Westside Regional Water Reclamation Plant that serves the communities of Hesperia, Apple Valley, Victorville, and much of the unincorporated area of the Victor Valley. VVWRA has prepared this Draft Environmental Impact Report (DEIR) that summarizes the environmental effects that are forecast to occur from installation and operation of these two Subregional WRPs and their support facilities (pipeline, lift stations, etc.). These facilities are hereafter termed the "proposed project."

This Chapter also contains a summary of the project background, project objectives, and project description. As required by the State California Environmental Quality Act (CEQA, Section 15123), this chapter of the DEIR contains a summary of environmental findings and mitigation measures. A tabular summary of impacts and mitigation measures is included at the end of this Executive Summary. Chapter 2 provides an Introduction to the DEIR and Chapter 3 provides a detailed Project Description. Chapters 4 through 6 contain the evaluation of potential environmental effects from implementing the proposed project, and a comparison between the available and feasible alternatives.

As the Lead Agency for compliance with the California Environmental Quality Act, VVWRA, is required to identify the potential environmental impacts of the project and where potential significant impacts are identified the agency must determine whether there are feasible mitigation measures or alternatives that can be implemented to avoid or substantially lessen significant environmental effects of the project. An Initial Study was completed to determine whether an EIR was required for the proposed project. Based on the information in the Initial Study, VVWRA concluded that the project proposed might cause significant adverse environmental impacts to the following issues that would require further analysis in an EIR: ***air quality, biological resources, cultural resources, hydrology/water quality, land use/planning, noise, population/growth inducement, and utilities/service systems.***

This DEIR has been prepared to address the issues identified above and provide an informational document intended for use by the VVWRA, interested and responsible agencies and parties, and the general public in evaluating the potential environmental effects of implementing this proposed project. A copy of the Initial Study is attached as Subchapter 8.1 in Chapter 8 and a copy of the Notice of Preparation (NOP) and comment letters are provided as Subchapter 8.2 in Chapter 8 of this DEIR.

CEQA requires that the VVWRA, the CEQA Lead Agency, consider the environmental information in the project record, including this DEIR, prior to making a decision regarding whether or not to approve and implement the proposed project. The decision that will be considered by VVWRA is whether to approve the capital improvement projects defined in Chapter 3 of this document, which include the Town of Apple Valley Wastewater Reclamation Plant, City of Hesperia Wastewater Reclamation Plant, and Related Facilities Project.

Alternatively, VVWRA can reject the project as proposed. This DEIR evaluates the environmental effects as outlined above.

VVWRA will serve as the CEQA Lead Agency pursuant to the State CEQA Guidelines Section 15015(b)(1). This DEIR has been prepared by Tom Dodson & Associates (TDA) under the direction of the VVWRA. TDA was retained to assist VVWRA to perform the independent review of the project required by CEQA before the DEIR is released. The VVWRA has reviewed the content of the DEIR and concurs in the conclusions and findings contained herein.

1.2 INTENDED USE OF THIS ENVIRONMENTAL IMPACT REPORT

This DEIR has been prepared in accordance with the California Environmental Quality Act (CEQA) Statutes and Guidelines, 2009, pursuant to Section 21151 of CEQA. The VVWRA is the local Lead Agency for the proposed project and has supervised the preparation of this DEIR. This DEIR is an information document prepared to inform public agency decision makers, interested parties and the general public of the potential environmental effects of implementing the proposed project, including any significant adverse environmental effects that may be caused by its implementation. This document also includes an evaluation of possible ways to minimize significant effects of the proposed project and reasonable alternatives to the proposed project are also identified and evaluated in the DEIR. This document assesses the impacts, including unavoidable significant adverse impacts and cumu¬lative impacts, related to the implementation of the proposed project.

1.3 PROJECT BACKGROUND

The VVWRA in collaboration with its member agencies, the City of Hesperia and the Town of Apple Valley, developed a strategic goal of locating subregional Water Reclamation Plants (WRPs) to augment reclaimed water treatment and reuse capabilities of the VVWRA's overall wastewater management system. Grant funding is being sought from the U.S. Bureau of Reclamation (BOR) to partially fund the construction of the proposed facilities to meet VVWRA's objective of providing reclaimed water within both communities to offset demand for potable water.

The following is a brief summary description of the activities proposed by the VVWRA Town of Apple Valley Wastewater Reclamation Plant, City of Hesperia Wastewater Reclamation Plant, and Related Facilities Project being evaluated in this Draft Environmental Impact Report.

The proposed project consists of the construction and installation of the following components: a 1.0 MGD average flow Water Reclamation Plant in the Town of Apple Valley expandable to a 4.0 MGD Plant; a 1.0 MGD average flow Water Reclamation Plant in the City of Hesperia expandable to a 4.0 MGD Plant (the expansion would occur in the future when demand justifies such expansion at both WRPs); a lift station and force main to serve the proposed Hesperia WRP; modification of a lift station to serve the proposed Apple Valley WRP; and recycled water distribution infrastructure and disposal percolation ponds to serve each WRP. The wastewater will be treated to meet highly restrictive Title 22 recycled water requirements and will be used for industrial and landscape irrigation with excess recycled water disposed of in percolation ponds.

1.4 PROJECT OBJECTIVES

The proposed project has five general objectives:

1. Construct wastewater reclamation plants at locations that facilitate an increase in the use of recycled water near end users.

2. Treat wastewater to produce effluent meeting the most stringent Title 22 Recycled Water criteria.

3. Provide the core infrastructure for expansion of the collection, treatment and disposal system as needed either to protect groundwater, or to accommodate growth in the VVWRA service area.

4. Maximize the total water supply available to the community.

5. Minimize any adverse economic and environmental impacts to the community.

In addition to these general objectives, specific objectives for the proposed facilities are as follows:

a. Provide sufficient wastewater treatment capacity to ensure continuous compliance with anticipated regulatory requirements.

b. Provide additional treatment capacity in the upper reaches of the service area to alleviate flows in downstream interceptors

c. Provide for future expansion of services.

The installation of the proposed components of the WRP and associated system infrastructure is considered essential to the VVWRA in order to continue meeting the public health and safety requirements for wastewater treatment and water supply within its service area and to meet Lahontan Regional Water Quality Control Board (Regional Board or RWQCB) water quality objectives.

1.5 IMPACTS

Based on data provided in this DEIR, VVWRA concluded the proposed project would not result in significant adverse environmental impacts. All of the potential environmental issues evaluated in this DEIR were determined to be less than significant impacts, either without mitigation or with implementation of the mitigation measures identified in this DEIR or the attached Initial Study (Subchapter 8.1). Note that the cumulative significant impacts are evaluated and determined in this document to also be less than significant impacts, based on a determination that the proposed project's contributions to such impacts are evaluated as being less than cumulatively considerable, which is the threshold identified in Section 15130 of the State CEQA Guidelines. Table 1.5-1 summarizes the environmental impacts and proposed mitigation measures for the environmental issues evaluated in this DEIR.

The following issues have been determined to experience **less than significant impacts** in the Initial Study (Subchapter 8.1), with or without mitigation.

Aesthetics/Visual: Due to the installation of future above-ground wastewater facilities in already developed locations, no potential for significant aesthetic/visual impacts was forecast to occur from implementation of the proposed Project. One mitigation measure was identified to minimize night-lighting impacts. With implementation of the mitigation measure the project-related aesthetic/visual impacts can be reduced to a less than significant impact level.

Agricultural Resources: Due to the developed nature of the project areas and lack of agricultural resources, no potential for significant agricultural resource impacts was forecast to result from implementation of the proposed Project. No mitigation was identified.

Geology and Soils Resources: Due to the location of the proposed project within a seismically active area, a potential for significant geology and soils resources impacts from implementation of the Project were identified in the Initial Study. A total of five mitigation measures were identified to minimize geology and soils resources impacts. With implementation of these mitigation measures, the project-related geology and soils resources impacts can be reduced to a less than significant impact level.

Hazards and Hazardous Materials: No potential for significant hazards and hazardous materials issue impacts were forecast to result from implementation of the proposed project. No mitigation measures were identified.

Mineral Resources: Limited mineral resource occur in the project area and the installation of future wastewater infrastructure facilities was determined to pose a less than significant impact to such resources without mitigation.

Public Services: The Initial Study concluded that implementation of the proposed project would not significantly impact fire protection, police protection, schools, recreation/parks or other public facilities. Therefore, these potential public service impacts were found to be less than significant without mitigation. No mitigation measures were identified.

Recreation: The proposed project includes development at existing recreational facilities; however, the Initial Study concluded that the installation of future water infrastructure facilities was determined to pose a less than significant impact to such resources without mitigation.

Transportation/Traffic: The Initial Study concluded that implementation of the proposed project would not significantly impact any airports or air traffic patterns. Therefore, potential air traffic transportation impacts were found to be less than significant without mitigation. Since transportation system facilities occur throughout much of the project area and the installation of future wastewater infrastructure facilities can directly impact roadways or traffic on such roadways, a potential for significant transportation/traffic impacts from implementation of the was identified in the Initial Study (Subchapter 8.1). A total of five mitigation measures were identified to minimize future project related transportation/traffic system impacts. With implementation of these mitigation measures, the project-related transportation/traffic impacts can be reduced to a less than significant impact level.

Utilities and Service Systems: The Initial Study concluded that implementation of the proposed project would not significantly or adversely impact any water supply or solid waste management issues. Therefore, potential water and solid waste service system impacts were found to be less than significant without mitigation. Since the installation of future wastewater infrastructure facilities may require result in impacts to existing stormwater flows, a potential for significant drainage system impacts from implementation of project construction activities was identified in the Initial Study. Temporary stormwater management measures will be imple-mented during construction of the proposed facilities to minimize future project related stormwater runoff/drain-age system impacts. In addition, since the proposed project includes the construction of new wastewater treatment facilities (expansion of the existing regional facilities), the construction of these facilities which may cause significant environmental effects, this issue was determined to generally require further analysis in the DEIR. These issues are addressed under the Hydro-logy/Water Quality Subchapter of the DEIR (Subchapter 4.4) of Chapter 4.

The following issues have been determined to experience **less than significant impacts** in the Draft Environmental Impact Report (DEIR), Chapter 4, with mitigation.

Air Quality: After detailed evaluation of the potential for the proposed project to impact air quality, the DEIR evaluation concluded that these impacts could be mitigated to a less than significant impact level. A total of twenty-four mitigation measures were identified to minimize future project related air quality impacts within the project area. With implementation of these mitigation measures, the project related air quality impacts can be reduced or controlled to a less than significant impact level.

Biological Resources: After detailed evaluation of the potential for the proposed project to impact biological resources, including conflict with habitat conservation plans, the DEIR evaluation concluded that these impacts could be mitigated to a less than significant impact level. A total of eleven mitigation measures were identified to minimize future project related biology resource impacts within the project area. With implementation of these mitigation measures, the project related biology resource impacts can be reduced or controlled to a less than significant impact level.

Cultural Resources: After detailed evaluation of the potential for the proposed project to impact cultural resources, the DEIR evaluation concluded that these impacts could be mitigated to a less than significant impact level. A total of four mitigation measures were identified to minimize future project related cultural resource impacts within the project area. With implementation of these mitigation measures, the project related cultural resource impacts can be reduced or controlled to a less than significant impact level.

Hydrology and Water Quality: After detailed evaluation of all hydrology/water quality issues in the DEIR, it was concluded that all hydrology and water quality impacts can be controlled to a less than significant impact level. Detailed assumptions regarding future wastewater management activities are included in this finding and a total of eight mitigation measures were identified to minimize future project related impacts. With implementation of these mitigation measures, hydrology and water quality impacts can be offset or otherwise mitigated, and the hydrology and water quality impacts (including those identified under Utilities and Services Systems) have been found to be less than significant, on a project specific and cumulative basis.

Noise: After detailed evaluation of the potential for the proposed project to impact the existing noise environment, the DEIR evaluation concluded that these impacts could be mitigated to a less than significant impact level. A total of eight mitigation measures were identified to minimize future project related noise impacts within the project areas. With implementation of these mitigation measures, the project related noise impacts can be reduced or controlled to a less than significant impact level.

Population and Housing: After detailed evaluation of the potential for the proposed project to impact population and housing the DEIR evaluation concluded that these impacts were less than significant without mitigation.

The analysis in the DEIR concluded that the proposed project (both WRPs and support facilities) can be implemented without causing significant adverse impacts on the environment. VVWRA concluded that the data, analysis and findings in Chapter 4 of the DEIR and the Technical Appendices in Volume 2 of the DEIR substantiate a finding that the proposed project can be implemented without causing project specific significant adverse environmental impacts or contributing to cumulatively considerable significant adverse environmental impacts. Refer to the detailed analysis in Chapter 4 and the Technical Appendices for the facts and findings supporting this conclusion.

1.6 ALTERNATIVES

The California Environmental Quality Act (CEQA) and the State CEQA Guidelines require an evaluation of alternatives to the proposed action. Section 15126 of the State CEQA Guidelines indicates that the "discussion of alternatives shall focus on alternatives capable of eliminating any significant adverse environmental effects or reducing them to a level of not significant...." In this case no environmental issues are identified as causing potential or actual significant adverse impacts if the project is implemented as proposed. The State Guidelines also state that "a range of reasonable alternatives to the project....which could feasibly attain the basic objectives of the project" and "The range of alternatives required in an EIR is governed by "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." For this project, the four alternatives to the proposed project have been identified and evaluated, including the mandated No Project Alternative.

The potential for an alternative regional location for the project as a whole was evaluated and determined not to be feasible since the management of wastewater within the Victor Valley region cannot be accomplished at an alternative location. However, three alternatives for the proposed WRPs are considered for evaluation in addition to the No Project Alternative based on original design considerations, input from the public and the identification of a site specific constraint at one of the WRP sites. The first of these three alternatives is Alterative 2, which is an alternative location for the City of Hesperia Subregional WRP. The second alternative (Alternative 3) is a modified design for the WRPs that would incorporate a Reverse Osmosis (RO) treatment unit which could reduce concentrations of most of the water pollutants of concern in the treated effluent (recycled water). The final alternative considered is an alternative location for the Apple Valley WRP (Alternative 4).

Selecting an environmental superior alternative is complex in this instance because certain of the above alternatives have less impact in certain areas. The Hesperia Alternative 1 site was

found to be the least environmentally superior alternative because of increased air emissions and substantially greater biological resource impacts. The No Project Alternative results in other adverse impacts associated with continued reliance on the Westside Regional WRP and these impacts and their location (within portions of the Mojave River) were also determined to be less environmentally superior than the proposed project. The No Project Alternative was also determined to be infeasible because it would not meet project objectives. The Apple Valley Alternative location was concluded to avoid a mitigable impact (flood hazards) when compared to the proposed project, but was concluded to be a less feasible alternative and to pose more significant air pollution impacts. Finally, the use of a Reverse Osmosis (RO) treatment train at the WRPs was concluded to be environmentally superior for water quality purposes, but the proposed project's groundwater quality impacts were not identified as being significant, and the addition of a RO treatment train was concluded to provide no substantial environmental superiority to the proposed project.

1.7 SUMMARY TABLE OF IMPACTS

The DEIR Chapter 1 Environmental Impact Summary table (Table 1.5-1) follows. Also, please refer to Chapter 2 for the required discussion of areas of controversy associated with the proposed project (Subchapter 2.2.5) and a discussion of issues that remain to be resolved (Subchapter 2.2.4).

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Table 1.5-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES DISCUSSED IN THIS DRAFT EIR

Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Air Quality	Construction-related air pollutant emissions.	4.2-1 Water active grading sites and haul roads at least three times daily and when dust is observed migrating from the site. (Mandatory) 4.2-2 Pave or apply water three times daily, or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering will occur if dust is observed migrating from the site during grading activities. (Mandatory) 4.2-3 Enclose, cover, or water twice daily, or apply non-toxic soil binders, to any onsite stockpiles of debris, dirt or other dusty material. (Mandatory) 4.2-4 Suspend all grading and excavation operations when wind speeds exceed 25 mph. (Mandatory) 4.2-5 Replace ground cover or pave disturbed areas immediately after construction is completed in the affected area. (Mandatory) 4.2-6 Hydro-seed, apply non-toxic chemical soil stabilizers or otherwise stabilize any cleared area which is to remain inactive for more than 10 days after clearing is completed. (Mandatory) 4.2-7 Cover all trucks hauling soil, sand and other loose materials on local paved roadways. (Mandatory) 4.2-8 Sweep or wash any site access points daily of any visible dirt deposition on any public roadway. (Mandatory) 4.2-9 Reduce and control traffic speeds on unpaved roads to less than 15 mph. (Mandatory)	With implementation of identified air quality mitigation measures, construction, emissions from future individual projects implemented in support of the VVWRA Town of Apple Valley Wastewater Reclamation Plant, City of Hesperia Wastewater Reclamation Plant, and Related Facilities are considered to be less than significant. Cumulative Subregional-related project construction emissions have a potential to exceed MDAQMD regional emission thresholds for NOx; however, implementation of the mandatory measures can reduce potential NOx emissions to the lowest achievable level. Thus, project-related construction air quality impacts are considered to result in a less than significant impact.

Table 1.5-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES DISCUSSED IN THIS DRAFT EIR

Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Air Quality (continued)		4.2-10 Install sandbags or other erosion control measures to prevent silt runoff to public paved roadways. (Mandatory) 4.2-11 To the extent feasible, limit the area subject to excavation, grading and other construction activity at any one time. (Optional) 4.2-12 All equipment shall be properly tuned and maintained in accordance with manufacturer's specifications to minimize nitrogen oxide emissions. (Mandatory) 4.2-13 General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. (Mandatory) 4.2-14 Require 90-day low NOx tune-ups for off road equipment. (Mandatory) 4.2-15 Use Tier3-rated engines during site grading for all equipment exceeding 100 horsepower, if available. (Optional) 4.2-16 During construction, trucks and vehicles in loading and unloading queues would be kept with their engines off, when not in use, to reduce exhaust emissions. (Mandatory) 4.2-17 Limit allowable idling to 5 minutes for trucks and heavy equipment. (Mandatory) 4.2-18 Encourage car pooling for construction workers. (Optional) 4.2-19 Limit lane closures to off-peak travel periods, when possible. (Optional)	

Table 1.5-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES DISCUSSED IN THIS DRAFT EIR

Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Air Quality (continued)	Project-related operational emissions.	4.2-20 Park construction vehicles off traveled roadways, when possible). (Optional) 4.2-21 Encourage receipt of materials during non-peak traffic hours. (Optional) 4.2-22 VVWRA shall establish a monitoring program to track Hesperia and Apple Valley Subregional facility operational electricity consumption. As part of this monitoring program, those non-GHG emitting electrical generation projects implemented by VVWRA shall be quantified to demonstrate the specific reductions in both criteria pollutants and GHG relative that which would occur from relying on electricity delivered by the Southern California Edison (SCE) grid. To the extent feasible and consistent with each agency's ability, an objective of offsetting criteria pollutant and GHG electricity consumption emissions by 50%, relative to reliance on the SCE grid, will be established. (Optional) 4.2-23 To the extent feasible, the VVWRA shall select landscaping that is fast-growing to create visual buffers at future Apple Valley and Hesperia Subregional facility sites to offset GHG emissions. Where landscaping is feasible, a landscape plan designed to initiate carbon sequestration and these plants shall be periodically harvested and/or replanted to maintain carbon sequestration. Alternatively, these agencies may choose to purchase annual or permanent carbon credits from the available carbon banks at the time that a facility begins operation. (Optional)	With implementation of identified air quality mitigation measures, operational emissions from future individual projects implemented in support of the VVWRA Town of Apple Valley Wastewater Reclamation Plant, City of Hesperia Wastewater Reclamation Plant, and Related Facilities are considered to be less than significant. In addition, the optional measures can also reduce long-term criteria and GHG emissions relative to the levels forecast for these facilities.

Table 1.5-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES DISCUSSED IN THIS DRAFT EIR

Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Air Quality (continued)		4.2-24 To the extent feasible, VVWRA shall select electrical equipment for future Apple Valley and Hesperia Subregional project that minimize electricity consumption. Documentation of such efforts shall be retained in project files to verify that electricity consumption of such equipment has been given consideration before selecting a specific piece of equipment, such as a booster pump. This measure is not intended to dictate selection of equipment that minimizes electricity consumption, only to ensure that this criterion is clearly given consideration in the selection of such equipment. Where electricity savings are achieved they shall be documented. (Optional)	
Biological Resources / Land Use & Planning	Subregional-related future site-specific projects have a potential to adversely impact listed and sensitive plant and animal species located within the project area.	<u>Burrowing Owl and Desert Tortoise</u> 4.3-1 Prior to, and, within 30 days of the start of any land disturbance activities, at all project locations, except those bounded by man-made facilities on all sides (such as a roadway through a residential subdivision), a qualified biologist shall conduct focused surveys to determine if desert tortoise or burrowing owl have migrated into the project area of potential effect (APE). If either species is encountered, land disturbance activities shall not commence until the biologist has implemented appropriate measures according to the CDFG and USFWS to clear the site for construction. 4.3-2 A biologist/monitor shall be present at the site during initial land disturbance activities. The biologist/monitor shall remain on-call during construction activities in developed roads. If tortoise or burrowing owls are encountered during construction, construction activities shall be halted in the vicinity of the find and the biologist/monitor called to the site. The contractor shall implement the recommendations of the biologist/monitor.	The DEIR evaluation reached a finding that with mitigation the future potential site specific Subregional project impacts to biological resources, including burrowing owl and desert tortoise are considered to be less than significant with mitigation.

Table 1.5-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES DISCUSSED IN THIS DRAFT EIR

Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Biological Resources / Land Use & Planning (continued)		4.3-3 All personnel associated with the construction on the site shall attend a worker education class. This class shall include general information regarding the MGS, desert tortoise, and burrowing owl; relevant Federal and State laws; and worker responsibilities when working in Mojave desert habitat. <u>Mohave ground squirrel</u> 4.3-4 Permanent impacts to the acreage west of I-15 disturbed in support of the proposed Hesperia Alternative A Subregional WRP facilities shall assume presence of MGS and loss of an unquantified amount of occupied MGS habitat will occur as a result of the project. a. The project proponent shall provide compensation for permanent impacts to MGS habitat by protecting in perpetuity (through property or mitigation bank credit acquisition) habitat for the sensitive species at a ratio of not less than 1:1 (protected: destroyed.) The mitigation property may be acquired by purchase of mitigation credits in a mitigation bank acceptable to the regulatory agencies, purchase of occupied habitat in the project area, or rehabilitation of degraded habitat adjacent to known occupied habitat. b. The project proponent will provide an endowment, to be determined at the time the impact is quantified, adequate to fund ongoing management requirements for the property purchased or rehabilitated. c. Temporary impacts of habitat are proposed to be mitigated by appropriate revegetation to be approved by the agencies.	

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Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Biological Resources / Land Use & Planning (continued)		4.3-4 (cont.) d. If required by the Agencies, precautionary mitigation measures will include exclusionary fence placement around construction in areas where MGS are documented to occur to be maintained for the duration of project construction activities. The fenced area will be trapped for MGS, and all MGS will be removed from inside the fenced, relocated to outside of the fenced area and all rodent burrows collapsed within the disturbed area. Night lighting may have an indirect effect on adjacent habitat and any night lighting shall be focused on the immediate area of construction and night lighting shall be limited in time to the minimum night construction essential to support the project. e. The final mitigation may differ from the above values based on negotiations between the project proponent and CDFG for an incidental take permit (2081 Permit). The project proponent shall retain a copy of the incidental take permit as verification that the mitigation of MGS impacts at a project site has been accomplished. The VVWRA concludes that this is sufficient mitigation for loss of habitat and impacts to MGS as a result of the project. If the regulatory permitting agency(ies) issue permits for this project that specify a different mitigation than provided in this measure, the VVWRA will ensure implementation of such mitigation as long as it is equivalent to or not less than that specified in this measure.	

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Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Biological Resources / Land Use & Planning (continued)		Nesting Birds 4.3-5 To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal will be conducted outside of the State identified nesting season of February 15 through September 1. Alternatively, project impact areas will be evaluated by a qualified biologist prior to initiation of ground disturbance to determine the presence or absence of nesting birds. Rivers, Streambeds, or Wetlands 4.3-6 Prior to discharge of fill or streambed alteration of either of the channels along the project alignment, the VVWRA shall obtain regulatory permits from the U.S. Army Corps of Engineers, Santa Ana Regional Water Quality Control Board and the CDFG, where required. Mitigation can be provided by purchasing into any authorized mitigation bank; by selecting a site of comparable acreage near the site and enhancing it with a native riparian habitat or invasive species removal in accordance with a habitat mitigation plan approved by regulatory agencies; or by acquiring sufficient compensating habitat to meet regulatory agency requirements. Typically, regulatory agencies require mitigation for jurisdictional waters without any riparian or wetland habitat to be mitigated at a 1:1 ratio. For loss of any riparian or other wetland areas, the mitigation ratio will begin at 2:1 and the ratio will rise based on the type of habitat, habitat quality, and presence of sensitive or listed plants or animals in the affected area. A revegetation plan using native riparian vegetation common to the project area shall be prepared and reviewed and approved by the appropriate regulatory agencies. The agencies can impose greater mitigation requirements in their permits, but the VVWRA will utilize the ratios outlined above as the minimum required to offset or compensate for impacts to jurisdictional waters, riparian areas or other wetlands.	

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Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Biological Resources / Land Use & Planning (continued)		<u>Local Plants</u> 4.3-7 In the event that one of the sensitive plant species identified in the CNDDB is positively identified on site, during construction, the plant will be flagged and avoided until the CDFG is notified and takes their opportunity to salvage the plant. 4.3-8 As required by the San Bernardino County plant protection Ordinance (or City or Town ordinances), the project proponents shall develop a cactus relocation plan to offset impacts to Joshua trees and other cactus species that may need to be removed as part of this project. This plan will identify the number and species of cactus to be protected in place or removed and relocated. <u>Desert tortoise and Mohave ground squirrel</u> 4.3-9 Following the pre-construction survey, a qualified biologist will make a determination: (1) if a biological monitor shall be present at the site during all land disturbance activities; (2) if desert tortoise fencing needs to be installed around the perimeter of the construction work zone; or (3) if no further action is required. a. If a desert tortoise is encountered during construction, no person including the biologist will touch the animal. Instead, the biologist will observe the area to see if the desert tortoise has an established burrow or if it is just wandering through the site. If it is clearly just moving through the site, all construction activity near the tortoise will cease until it is safely out of the area. The biologist will contact the USFWS and CDFG to coordinate with them for further instruction. At that time it may be appropriate to erect exclusionary fencing to prevent the re-entry of the desert tortoise back into the site. If the biologist finds that the desert tortoise is residing in a burrow on site,	

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Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Biological Resources / Land Use & Planning (continued)		4.3-9 (cont.) then all construction must cease until the USFWS and CDFG have issued take authority to relocate the tortoise out of the area in the vicinity of the burrow. In this case, land disturbance activities shall not commence until the biologist has implemented the required measures according to the CDFG and USFWS to clear the site for construction. b. The biologist/monitor shall remain on-call during construction activities. If a desert tortoise is encountered during construction following the initial phases of ground disturbance, construction activities shall be halted in the vicinity of the find and the biologist/monitor called to the site. The contractor shall implement the recommendations of the biologist/monitor. Implementation of the above measures is protective of the environment. Should the regulatory agencies determine an alternative, equivalent mitigation program during acquisition of regulatory permits, such measure shall be deemed equivalent to the above measures and no additional environmental documentation shall be required to implement a measure different than outlined above. 4.3-10 Within 30 days of the start of any land disturbance activities, a qualified biologist shall survey the site to determine if burrowing owls are present and nesting in the construction area. If burrowing owl are encountered and determined to be nesting, land disturbance activities shall not commence until the biologist has implemented the required measures according to the CDFG to clear the site for construction. One such measure may be to passively relocate the owls once the young have fledged the nest. This type of relocation requires the construction of artificial burrows in the near vicinity and collapsing of	

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Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Biological Resources / Land Use & Planning (continued)		4.3-10 (cont.) the old burrows once the owls have clearly flushed out of the site. If burrowing owls are encountered during construction, construction activities shall be halted in the vicinity of the find and the biologist/monitor called to the site. The contractor shall implement the recommendations of the biologist/monitor. 4.3-11 All project activities will be limited to a well-defined and visually delineated area. Prior to grading and construction activities, the limits of disturbance will be clearly marked with flagging, stakes, or fencing. 4.3-12 All project construction activities shall implement measures to minimize the potential to introduce invasive plant species into construction sites. This shall be accomplished by requiring the contractor to verify that construction equipment used at the WRP facility sites have been washed to minimize introduction of invasive plant species. Also, following construction activities, VVWRA shall monitor and remove invasive plant species until disturbed areas at all facilities are revegetated with native species or covered with hardscape, such as paving, gravel cover, etc.	
Cultural Resources	Potential cultural and paleontological resource impacts from construction and installation of the two Subregional WRPs and support facilities.	4.4-1 If unknown buried cultural or paleontological resources are discovered during project construction, all work in the area of the find shall cease, and a qualified archaeologist or paleontologist shall be retained by the project sponsor to investigate the find, and to make recommendations on its disposition. The VVWRA shall implement the archaeologist's recommendations as long as the cost does not exceed professional norms.	With implementation of mitigation, potential impacts to cultural and paleontological resource from Subregional-related activities are considered to be less than significant. Based on these measures, the proposed project is not forecast to result in cumulatively considerable impacts.

Table 1.5-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES DISCUSSED IN THIS DRAFT EIR

Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Cultural Resources (continued)		4.4-2 If human remains are encountered during construction, all work shall cease and the San Bernardino County Coroner's Office shall be contacted pursuant to procedures set forth in Section 7050.5 of the Health and Safety Code. The VVWRA shall be notified and actions to manage the remains shall be documented in a report to the VVWRA. 4.4-3 VVWRA shall arrange to have a professional archaeologist monitor all trenching, excavation and other earth-moving activities in the Apple Valley portion of the APE. The archaeologist shall ensure proper and timely evaluation and treatment of any cultural resource materials unearthed in this area. If any cultural resources are encountered during construction monitoring, a professional report detailing findings from the management activities shall be prepared under Authority direction and retained. 4.4-4 Prior to any planned construction activities at the future Eastside WRP site, a focused cultural resources survey shall be conducted to determine if any "historic properties" or "historical resources" are present within the project site that may be adversely affected by construction of the Eastside WRP.	
Hydrology / Water Quality	Potential erosion sedimentation impacts from construction and maintenance of the two Subregional WRPs and support facilities.	4.5-1 The construction contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices that will be implemented to prevent construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving offsite. The SWPPP shall be developed with the goal of achieving a reduction in pollutants both during and following construction to control urban runoff to the maximum extent practicable based on available, feasible best management practices. The SWPPP and the monitoring program for the	With implementation of mitigation, the impacts to hydrology and water quality from implementing the VVWRA Subregional WRP Project are considered to be less than significant.

Table 1.5-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES DISCUSSED IN THIS DRAFT EIR

Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Hydrology / Water Quality (continued)		4.5-1 (cont.) construction projects shall be consistent with the requirements of the latest version of the State's General Construction Activity Storm Water Permit and NPDES Permit No. CAS618036, Order No. R8-2002-0012 for projects within San Bernardino County. The following items should be included in the SWPPP: • The length of trenches which can be left open at any given time should be limited to that needed to reasonably perform construction activities. This will serve to reduce the amount of backfill stored onsite at any given time. • Backfill material should not be stored in areas which are subject to the erosive flows of water. • Measures such as the use of straw bales, sandbags, silt fencing or detention basins shall be used to capture and hold eroded material for future cleanup. • Rainfall will be prevented from entering material and waste storage areas and pollution-laden surfaces. • Construction-related contaminants will be prevented from leaving the site and polluting waterways. • Replanting and hydroseeding of native vegetation will be implemented to reduce slope erosion and filter runoff. • A spill prevention control and remediation plan to control release of hazardous substances.	

Table 1.5-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES DISCUSSED IN THIS DRAFT EIR

Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Hydrology / Water Quality (continued)	Exposure of Subregional WRP facilities to flood hazards or generation of downstream flood hazards due to increased runoff from Subregional WRP facilities.	4.5-2 The site design for Subregional WRP Project facilities shall prepare and implement a Water Quality Management Plan (WQMP) which specifies Best Management Practices that will be implemented to prevent long-term surface runoff from discharge of pollutants from sites on which construction has been completed. The WQMP shall be developed with the goal of achieving a reduction in pollutants following construction to control urban runoff pollution to the maximum extent practicable based on available, feasible best management practices. 4.5-3 Any future Subregional WRP Project facilities that will be installed at a location where flood hazards may occur, must be hardened to withstand the defined flood hazard so that the facility can continue to operate or be available to be placed into immediate operation following the flooding. 4.5-4 For long-term mitigation of site disturbances at Subregional WRP facility locations, all areas not covered by structures shall be covered with hardscape (concrete, asphalt, gravel, etc.), native vegetation and/or man-made landscape areas (for example, grass). Revegetated or landscaped areas shall provide sufficient cover to ensure that, after a two year period, erosion will not occur from concentrated flows (rills, gully, etc.) and sediment transport will be minimal as part of sheet flows. 4.5-5 Within each facility or project associated with the Subregional WRP Project that will impact more than one acre, surface runoff from upstream shall be collected and discharged in a manner downstream of the site that does not increase downstream flood hazards. Onsite surface runoff shall be collected and retained (for use onsite) or detained and percolated into the ground on the site such that site development results in no net increase in offsite	

Table 1.5-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES DISCUSSED IN THIS DRAFT EIR

Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Hydrology / Water Quality (continued)	Contingency mitigation measures to address potential groundwater quality impacts even though not forecast to occur in the water quality impact forecast.	4.5-5 (cont.) stormwater flows. Detainment shall be achieved through Low Impact Development techniques whenever possible, and shall include techniques that remove the majority of urban storm runoff pollutants, such as petroleum products and sediment. The purpose of this measure is to remove the onsite contribution to cumulative urban storm runoff and ensure the discharge from the sites is treated to reduce contributions of urban pollutants to downstream flows and to groundwater. If it is not possible to eliminate stormwater flows from leaving a site, the facility shall not be constructed until a drainage study has been conducted that verifies that there will be no adverse impacts to downstream stormwater management from implementation of the site development. 4.5-6 Under no circumstance shall discharge of recycled water cause or contribute to a cumulative violation of the 2005 Basin Plan maximum benefit objectives or interfere with a designated beneficial use for a water or groundwater body. In addition to monitoring, the VVWRA will use models to forecast future TDS and Nitrate concentrations pursuant to the Basin Plan and Title 22 permit requirements. VVWRA will, based on monitoring, begin the planning to develop measures to either protect beneficial uses of groundwater or to treat groundwater to meet beneficial use requirements if a violation appears imminent. 4.5-7 Hydrogeologic studies, including modeling, will be completed for each percolation basin site to define the impacts from percolating the recycled water on known groundwater quality. If modeling demonstrates that contamination of a downstream well associated with such percolation expansion will adversely impact groundwater	

Table 1.5-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES DISCUSSED IN THIS DRAFT EIR

Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Hydrology / Water Quality (continued)		4.5-7 (cont.) or water production capabilities, the recharge facility shall be closed and moved to an alternative location where such impacts will not occur or other adaptive management programs shall be implemented. 4.5-8 All water recharge operations shall be monitored, and if impacts that were not forecast to occur as a result of recycled water recharge operations cause unexpected significant adverse impact on the groundwater aquifer, the recharge operations shall be terminated or modified to eliminate the adverse impact.	
Noise	Potential noise impacts from construction and operation of the two Subregional WRPs and support facilities.	4.6-1 Construction shall be limited to the hours of 7 a.m. to 7 p.m. on Monday through Friday, and between 9 a.m. to 6 p.m. on Saturday, and shall be prohibited on Sundays and federal holidays, or as defined in local noise ordinances. Exceptions are for water pumping from wet areas or declared emergency circumstances. (Mandatory) 4.6-2 All construction vehicles and fixed or mobile equipment shall be equipped with properly operating and maintained mufflers. (Mandatory) 4.6-3 All employees that will be exposed to noise levels greater than 75 dB over an 8-hour period shall be provided with adequate hearing protection devices to ensure no hearing damage will result from construction activities. (Mandatory) 4.6-4 If equipment is being used that can cause hearing damage at adjacent noise receptor locations (distance attenuation shall be taken into account), portable noise barriers shall be installed that are demonstrated to be adequate to reduce noise levels at receptor locations below hearing damage thresholds. (Optional)	With implementation of identified noise mitigation measures, all potential adverse impacts to the existing noise environment are considered to be less than significant.

Table 1.5-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES DISCUSSED IN THIS DRAFT EIR

Environmental Category / Issue	Impact Description	Mitigation Measures	Impact After Mitigation
Noise (continued)		4.6-5 All production lift stations or booster pumps shall have their noise levels attenuated to 50 dBA CNEL at the adjacent property boundary, when noise sensitive uses occur on such property, or in accordance with a local noise ordinance. This measure is a modification to 4.11-5 from the OBMP PEIR. (Mandatory) 4.6-6 Schedule the construction such that the minimum number of pieces of equipment will be operating at the same time. (Optional) 4.6-7 Utilize construction methods or equipment that will provide the lowest level of noise impact, i.e., use newer equipment that will generate lower noise levels. (Optional) 4.6-8 Maintain good relations with the local community where construction is scheduled, such as keeping people informed of the schedule, duration, and progress of the construction, to minimize the public objections of unavoidable noise. Communities should be notified in advance of the construction and the expected temporary and intermittent noise increases during the construction period. (Optional)	
Population and Housing	Potential impacts to population growth within the Subregional WRPs service areas and potential impacts to existing housing resources.	No mitigation	Less than significant impact