

3 Work Plan

Filename: Att3_IG2_WorkPlan_1of3

The Work Plan contains summary descriptions of all the projects constituting the Proposal and tasks necessary to complete each project in the Proposal. The Work Plan must be sufficiently detailed to demonstrate that the Proposal is ready for implementation, and should include a brief discussion of the supporting studies, data, and resources for each project, to ensure implementation of the proposal is based on sound scientific and technical principles. Deliverables should be identified in the Work Plan. The Work Plan should identify linkages between and among projects that are critical to the success of the regional effort. The Work Plan tasks must also be consistent with the major tasks and sub-tasks identified in the Budget (Attachment 4) and Schedule (Attachment 5).

3.1 Introduction to Work Plan

The introduction should provide information about the Proposal and shall include, but not be limited to the following items.

3.1.1 Goals and Objectives

A presentation of the goals and objectives of the Proposal.

The projects included in this proposal will assist the Region with meeting multiple goals and objectives, as shown in Table 3-1. Both the HDWD and VVWRA projects will reclaim water to disadvantaged communities for irrigation and/or recharge of groundwater aquifers used for municipal supply. Both projects serve disadvantaged communities.

Table 3-1 IRWMP Objectives Addressed By Proposed Projects

Project No. and Title	IRWMP Objectives					
	Water Supply Reliability	Ground-water Levels	Ground-water Quality	Water Supply Costs	Environmental Resources	Flood Control
1 HDWD Wastewater Treatment and Water Reclamation Project	✓	✓	✓	✓	✓	✓
2 VVWRA Subregional Reclamation Project	✓	✓		✓		

3.1.1.1 Hi-Desert Water District Wastewater Treatment and Reclamation Project

Hi-Desert Water District will construct Phase 1 to begin construction of the District’s ultimate wastewater collection, treatment, and disposal system. The intent is to provide a blueprint for the multi-phase sewer service to the Town of Yucca Valley. Phase 1 will provide 5,500 sewer connections in the Town of Yucca Valley and convey and treat an average of 1.25 million gallons per day (mgd). The project will be expanded in stages to collect up to 4.0 mgd. The wastewater will be treated to meet Title 22 recycled water standards and discharge to percolation basins to recharge the treated effluent into the Warren Valley groundwater basin.

The first phase of the wastewater treatment and collection system will provide service to the most densely populated area in Yucca Valley, which is also the location of the majority of the District’s groundwater wells. The Town of Yucca is disadvantaged community based on 80 percent of year 2010 statewide median household income and is listed on the DWR website as such. A wastewater system collection and treatment will result in the elimination of septic systems, as customers will be required to connect. The effluent from the treatment facility will be percolated into the District’s recharge basin. Diversion of a portion of the effluent to parks and the local golf course is being considered as a future option, but currently there are no immediate plans for this.

The goals and objectives of the proposed project consist of the following:

1. Reduce the quantity of leachate from septic tank systems flowing into aquifers used for the District’s potable water supply.
2. Construct a wastewater collection system and treat wastewater to a level such that percolated effluent will not degrade groundwater quality.
3. Provide the core infrastructure for expansion of the collection, treatment and disposal system as needed either to further protect groundwater, or to accommodate growth in the District’s service area.
4. Maximize the total water supply available to the District.



5. Minimize any adverse economic and environmental impacts on the community.
6. In addition, specific objectives for the Phase 1 treatment facilities are as follows:
 - a. Provide sufficient treatment capacity to ensure continuous compliance with anticipated regulatory requirements for an average annual wastewater flow of 1.25 mgd.
 - b. Provide for future expansion of the plant to an annual average flow capacity of 6 mgd.

The Colorado River Basin Region of California Regional Water Quality Control Board passed Resolution No. R7-2011-0004 in May 2011. This Resolution is attached to this application as Att7_IG2_TechJust_2of8. This Resolution prohibits the discharge from septic tanks after 2016. The Regional Board's objective is to protect public health by ensuring that water quality meets water quality objectives.

The January 2009 Hi-Desert Water District Water Reclamation Facility Preliminary Design Report⁶ reports nitrogen effluent loadings of 510 pounds per day in a Phase 1 influent flow of 1.0 mgd, or about 61 parts per million total nitrogen. This will be reduced to 8 parts million through the water treatment process, comfortably below the Colorado River Basin Plan limit of 10 parts per million.⁷ A total nitrogen load of 15,900 pounds per year will be diverted from the drinking water aquifer.

Other alternatives that would serve the same function as the wastewater treatment plant include regular pumping of septic tanks, and export of the effluent out of the basin for treatment. Importing additional surface water through MWA's State Water Project contract would improve drinking water quality but would not meet the Regional Board's water quality objectives for the groundwater basin and is not an acceptable alternative. Wellhead treatment systems would improve drinking water quality but would not meet the Regional Board's water quality objectives for the groundwater basin and are not an acceptable alternative.⁸

This project has no relationship to other projects in this application. Adverse effects are limited to temporary noise, dust and traffic impacts during construction. The certainty of achieving the nitrogen load reduction is very high.

3.1.1.2 Victor Valley Wastewater Reclamation Authority Subregional Reclamation Project

The Victor Valley Wastewater Reclamation Authority (VWVRA) will construct two water reclamation plants (WRPs) to recycle water for percolation to groundwater and serving recycled water to customers in Hesperia and Apple Valley. This will expand VWVRA's regional recycled water system to new locations within its service area. The Apple Valley WRP and Hesperia WRP have been designed as scalping facilities, meaning that these facilities will take a relatively

⁶ Montgomery Watson Harza, January 2009, Hi-Desert Water District Water Reclamation Facility Preliminary Design Report, Volume 1, Report. Tables 2-2 and 2-4; attached to this application as "Att7_IG2_TechJust_3of8"

⁷ MWH, 2009, Op cit., p. 2-6

⁸ Tom Vandenberg, attorney for the Colorado River RWQCB, personal communication March 19, 2013

constant wastewater flow from the interceptor system. Wastewater flow in the interceptor in excess of the plant capacity will continue to flow through the collection system to the Westside Regional WRP for treatment. The WRPs have been designed with membrane bioreactors and ultraviolet disinfection to provide advanced treatment suitable for both Title 22 customers and groundwater percolation basins.

Project Objective

The goals and objectives of the proposed project are to:

1. Construct two 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.
6. In addition to these general objectives, specific objectives for the proposed facilities are as follows:
 - a. Provide sufficient wastewater treatment to ensure continuous compliance with anticipated regulatory requirements.
 - b. Provide additional treatment capacity in the upper reaches of the service area to alleviate existing flows in downstream interceptors
7. Provide for future expansion of services

3.1.2 Purpose and Need

A description of the purpose and need of the Proposal and how it addresses the adopted IRWM Plan's goals and objectives.

3.1.2.1 High Desert Hydrology and Overdraft

The MWA service area lies in the California High Desert, which is part of the Mojave Desert. The High Desert Area is located on the northeastern flanks of the San Bernardino and San Gabriel Mountains, which separate the High Desert from the coastal basins and inland valleys of the greater Los Angeles area. Average rainfall within the lower lying areas of the Mojave Basin Area and Morongo Basin/Johnson Valley area is roughly five inches per year⁹. The 1980 edition of the Department of Water Resources' Bulletin 118 states that there is evidence of overdraft in the following MWA basins: Lower Mojave River Valley, Middle Mojave River Valley, Upper Mojave River Valley, Harper Valley, Warren Valley and Lucerne Valley.

⁹ RWMP p.3-23

All water suppliers share a keen interest in their local and regional water supplies. The economic health of the region is tied to its ability to demonstrate that affordable high quality water will be available as the region develops. Overdraft in 2000 averaged approximately 34,300 acre-feet per year, and is projected to increase to 50,600 acre-feet by 2020¹⁰. Consumptive use in the MWA service area is currently approximately 108,000 acre-feet per year, and is expected to grow to approximately 124,000 acre-feet by 2020¹¹. Less than half of 2020 demands would be met without RWMP implementation and full implementation of two adjudicated physical solutions.¹² Relative impacts would be severe in some subareas, with less than 20 percent of demands met.

3.1.2.2 Adjudications

Scarcity of water in the Mojave region and rapid growth in water use led to two adjudications within the MWA service area: the Mojave Basin Judgment, and the Warren Valley Judgment.

Mojave Basin Judgment. Fearing uncontrolled overdraft of the Mojave Basin, adjudication proceedings were initiated in the mid-1960s, and ultimately negotiations resulted in a 1993 Stipulated Judgment that: 1) formed a minimal class of producers using 10 acre-feet or less per year who were dismissed from the litigation, and 2) offered a physical solution for water production by the remaining producers. The Appellate Court issued a final decision in June 1998. The Supreme Court affirmed the decision in August 2000¹³. The Mojave Basin Judgment assigned Base Annual Production (BAP) quotas to each producer using 10 acre-feet per year or more, based on historical production. Users are assigned a variable Free Production Allowance (FPA), which is a uniform percentage of BAP set for each subarea. This percentage is reduced or “ramped-down” over time until total FPA comes into balance with available supplies. This percentage was set at 65-80% for the five subareas as of May 2010. Any water user that pumps more than their FPA is compelled to purchase replenishment water from MWA equal to the amount of production in excess of the FPA.

Warren Valley Judgment. Groundwater from the Warren Valley Basin is used to supply Yucca Valley and its environs. Extractions from the Basin began exceeding extractions in the 1950s. The progressively increasing overdraft led to adjudication of the Basin in 1977¹⁴. In its Judgment, the court appointed the Hi-Desert Water District as Watermaster and ordered it to develop a physical solution for halting overdraft. Objectives identified by the Watermaster Board included managing extraction, importing water supplies, conserving

¹⁰ RWMP Tables 5-6 and 5-12 with current SWP imports level of 8,000 acre-feet per year

¹¹ RWMP Tables 5-9 and 5-10

¹² PEIR p.6-15

¹³ RWMP p.2-1

¹⁴ Hi-Desert Water District v. Yucca Water Company Ltd., Case Number 172103, San Bernardino, California, September 16, 1977.

stormwater, encouragement of conservation and reclamation, and protecting groundwater quality. A Basin Management Plan¹⁵ was adopted that called for importing SWP water from MWA through the then-proposed Morongo Basin Pipeline to balance demand and replenish past overdraft.

3.1.2.3 Key Water Management Issues

Identification of the area's key water management issues¹⁶ stemmed from evaluation of hydrogeologic data, the RWMP update of supply and demand estimates, and a stakeholder outreach and assessment process. The following six key water management issues emerged from this process:

- **Demand Exceeds Supply.** The projected year 2020 water balance shows a water deficit in MWA service area of over 50,000 acre-feet per year.
- **Water Quality.** Water quality problems affect drinking water supplies throughout the MWA service area. Key constituents of concern include arsenic, nitrates, iron, manganese, chromium VI and TDS.
- **Overdraft of the Groundwater Basins.** Declining groundwater levels occur in all subareas of the Mojave Basin Area and in the Morongo Basin/Johnson Valley Area.
- **Riparian Ecosystem Maintenance.** All but two of the subareas (Oeste and Morongo Basin/Johnson Valley) have potential riparian maintenance issues to consider, such as invasive species and habitat preservation.
- **Wastewater Infrastructure.** Wastewater infrastructure issues affect the two subareas with the largest urban water demands within the Mojave Basin Area (Alto and Centro).
- **Subarea Interaction.** Many subareas within the MWA service area are impacted by activities in other subareas. These impacts include water supply and water quality issues.

3.1.3 How Proposed Projects Address Needs

- Projects will help balance supply and demand and address groundwater overdraft
 - **Hi-Desert Water District Wastewater Treatment and Water Reclamation Project** – Phase 1 will recharge 1,400 acre-feet per year of tertiary-treated wastewater effluent into the overdrafted Warren Valley Groundwater Basin¹⁷
 - **Victor Valley Wastewater Reclamation Authority Subregional Reclamation Project**—Construction of the facilities could offset demands on

¹⁵ Warren Valley Basin Management Plan, Kennedy/Jenks/Chilton, January 31, 1991. Adopted by Watermaster May 10, 1991.

¹⁶ RWMP p.8-12

¹⁷ With subsequent phases, the total project will recharge 4,500 acre-feet per year

the potable water supply if enough excess effluent not used for recycling is disposed of in percolation ponds.

- Projects that improve water quality
 - **Hi-Desert Water District Wastewater Treatment and Water Reclamation Project** – will treat wastewater effluent from up to 5,500 connections currently on septic systems and treat this water to a tertiary level
 - **Victor Valley Wastewater Reclamation Authority Subregional Reclamation Project**—will treat wastewater effluent to a secondary level, provide up to 4,480 acre-feet per year for irrigation uses on parks, golf courses and open space areas, and for commercial and industrial uses. Excess effluent not used for recycling will be disposed of in percolation ponds.
- Projects that enhance maintenance of riparian ecosystems
 - Neither of the proposed projects enhance the maintenance of riparian ecosystems.
- Projects that address wastewater infrastructure needs.
 - The **Hi-Desert Water District Wastewater Treatment and Water Reclamation Project** – will provide wastewater collection and treatment services for up to 5,500 connections and eliminate an equal number of septic tank systems linked to groundwater quality degradation
 - The **Victor Valley Wastewater Reclamation Authority Subregional Reclamation Project** will treat up to 4,480 acre-feet per year proximate to areas of reuse, and will defer expansion of the main VVWRA wastewater treatment plant.
- Projects that address subarea interaction issues
 - **Hi-Desert Water District Wastewater Treatment and Water Reclamation Project** – will recharge treated wastewater effluent just upstream of the Joshua Tree groundwater basin, maintaining and enhancing existing basin inflow patterns
- Projects that address flood damage reduction
 - The **Hi-Desert Water District Wastewater Treatment and Water Reclamation Project** is designed to capture on-site runoff, and to channelize and attenuate the flow of a significant local drainage feature to reduce flooding in the downstream Paradise Valley neighborhood, a disadvantaged community.

3.1.4 **Project List**

A table of specific projects in the Proposal, including an abstract of each project, the current status of each project in terms of percent completion of design, and implementing agencies.

Table 3-2 Project Abstracts and Status

Project and Implementing Agency	Abstract	Status
<p>Hi-Desert Water District Wastewater Treatment and Water Reclamation Project (Figure 3-2) Colorado River Funding Area</p>	<p>HDWD will construct a wastewater treatment facility and collection system to serve the residents of the Yucca Valley area. There are currently no wastewater facilities in Yucca Valley, which relies on septic systems linked to nitrate contamination of the groundwater basin.</p> <p>The first phase of the wastewater treatment and collection system will provide service to the most densely populated area in Yucca Valley, which is also the location of the majority of the District’s groundwater wells. Approximately 5,500 units could be served by the treatment facility, which will be designated to process 1.25 million gallons a day. The effluent from the treatment facility will be percolated into the District’s recharge basin.</p>	<p>Preliminary design, complete environmental documentation, and land acquisition are underway and will be complete by early 2015.</p>
<p>Victor Valley Wastewater Reclamation Authority Subregional Reclamation Project (Figure 3-5) Lahontan Funding Area</p>	<p>VVWRA will construct two water reclamation plants to recycle water for percolation to groundwater while serving recycled water to customers in Hesperia and Apple Valley. This will expand VVWRA’s regional recycled water system.</p> <p>The two plants are scalping plants, meaning they draw a portion of water from existing sewers to supply recycled water demands. They are expected to withdraw 2.0 million gallons per day, relieving the sewer system and supplying a total of 4.0 mgd (4,480 acre-ft per year)</p>	<p>Ready to Construct. Assembling bid documents beginning January 2013</p>

3.1.5 Integrated Elements of Projects

A description of synergies or linkages between projects that result in added value or require coordinated implementation or operation.

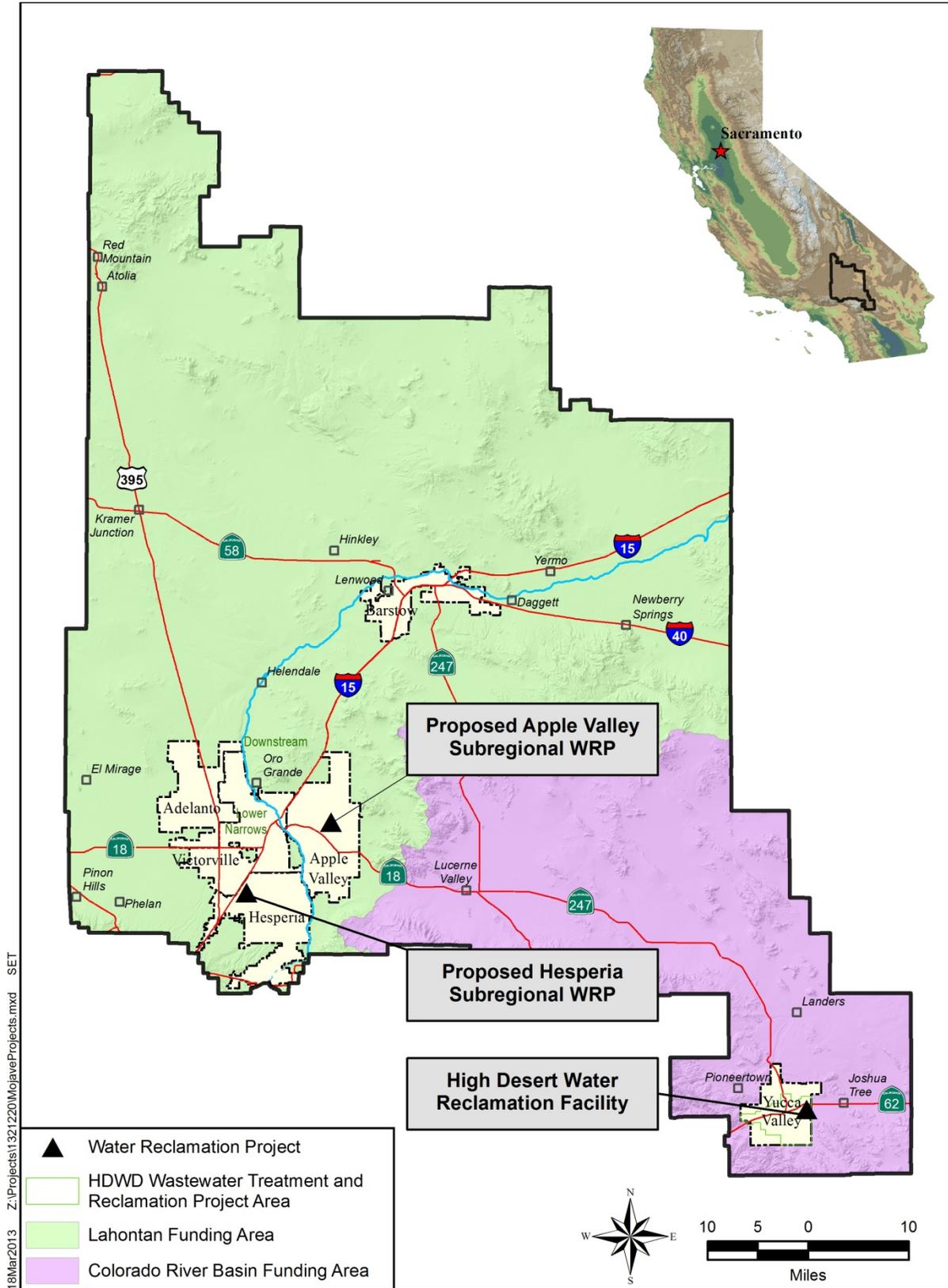
There are no linkages between projects.

3.1.6 Regional Map

Detailed maps that show, at a minimum, the location of activities or facilities of the project(s), the water resources (groundwater or surface water) that will be affected, DACs within the region, and proposed monitoring locations.

The regional map is presented as Figure 3-1.

Figure 3-1 Mojave Water Agency Regional Projects Map



3.1.7 **Completed Work**

A description of the work that has been completed or is expected to be completed prior to the grant award date. For example, if CEQA/NEPA and other environmental compliance efforts have been completed discuss the environmental determination made by the lead agency and the documents that were filed.

Hi-Desert Water District Wastewater Treatment and Water Reclamation Project

Items that have been completed for this project are:

1. Preliminary design reports for the Yucca Valley Wastewater Reclamation Facility
2. Environmental documentation
3. Surveying and mapping tasks
4. Hydrologic studies
5. 30% design

Victor Valley Wastewater Reclamation Authority Subregional Reclamation Project

Items that have been completed for this project are:

1. Preliminary design reports for both the Hesperia and Apple Valley Water Reclamation Plants as well as the Hesperia Lift Station
2. Biological Resources Assessment
3. Cultural Resources Assessment
4. Air Quality Assessment
5. Environmental Impact Report

3.1.8 **Existing Data and Studies**

A description of the work that has been completed or is expected to be completed prior to the grant award date. For example, if CEQA/NEPA and other environmental compliance efforts have been completed discuss the environmental determination made by the lead agency and the documents that were filed.

Existing studies and Workplan items of special interest include:

Environmental Documentation

- A Mitigated Negative Environmental Declaration for the **Hi-Desert Water District Wastewater Treatment and Water Reclamation Project** was adopted on August 5, 2009. A copy of this resolution is presented as Figure 3-6 (page 3-26). The lead agency's environmental determination found that all impacts are either insignificant or can be mitigated to a level of insignificance.
- The Final EIR for the **Victor Valley Wastewater Reclamation Authority** was certified in January 2011. Victory Valley Wastewater Reclamation Authority's determination found the proposed project is considered environmentally superior to the No Project Alternative due to the potential for significant biologic and cultural resources impacts of reconstructing the regional collection system.

Design Documents

- Montgomery Watson Harza, January 2009. Hi-Desert Water District Water Reclamation Facility Preliminary Design Report. (Att7_IG2_TechJust_3of8 and Att7_IG2_TechJust_4of8)
- Carollo December 2009. City of Hesperia Water Reclamation Project Preliminary Design Report (Att7_IG2_TechJust_8of8)
- Carollo December 2009 City of Hesperia Lift Station and Force Main Preliminary Design Report
- Carollo December 2009. Town of Apple Valley Water Reclamation Project Preliminary Design Report. (Att7_IG2_TechJust_7of8)

Special Studies

- U.S. Geological Survey, 2004. Evaluation of Geohydraulic Framework, Recharge Estimates, and Ground-Water Flow of the Joshua Tree Area, San Bernardino County.
- U.S. Geological Survey, 201_ (unpublished), Effects of Artificial Recharge on Nitrate Concentrations in Ground Water in the Joshua Tree Subbasin, California. The field work for this study has been completed. The report has been drafted and is under peer review.

3.1.9 **Project Maps**

Provide a site map showing the project(s) geographical location and the surrounding work boundaries.

The project map for Hi Desert Water District is shown in Figure 3-2 (page 3-13) and the project map for Victor Valley Wastewater Reclamation Authority is shown in Figure 3-5 (page 3-16).

Figure 3-2 Hi-Desert Water District Water Reclamation Facility

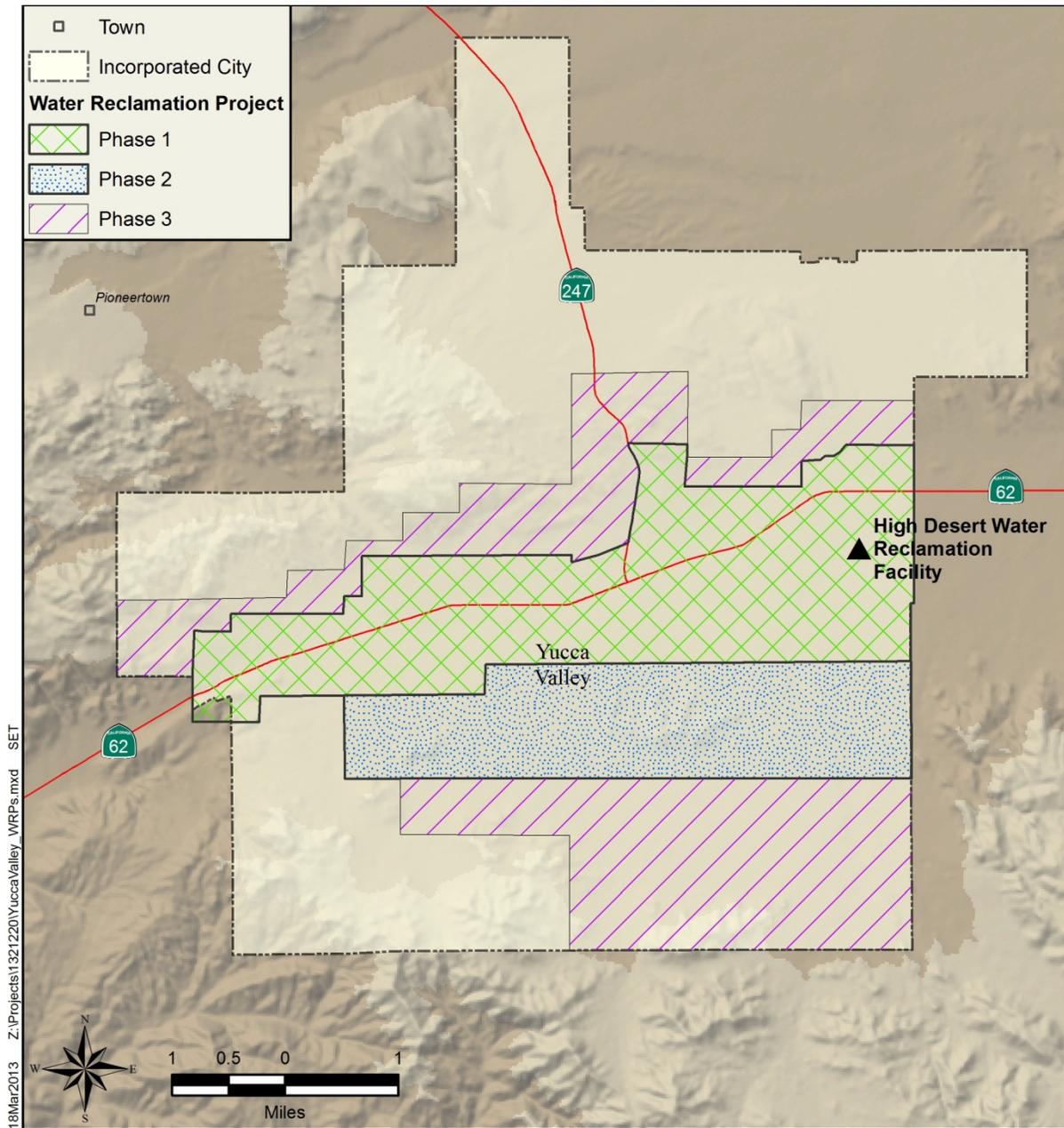


Figure 3-3 HDWD Water Treatment Plant Collection System, All Phase

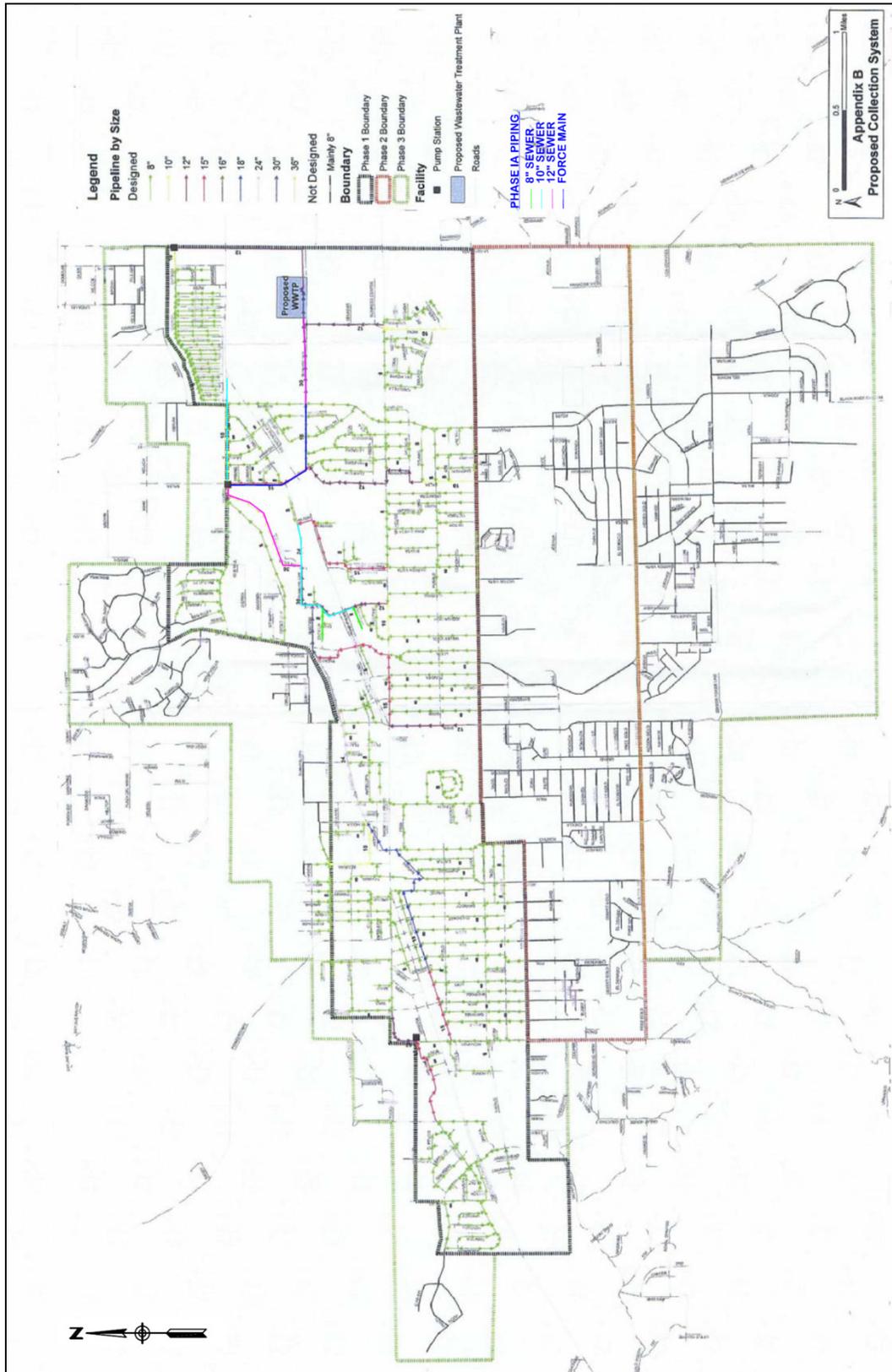


Figure 3-4 HDWD Water Treatment Plant Phase 1 Collection System Detail

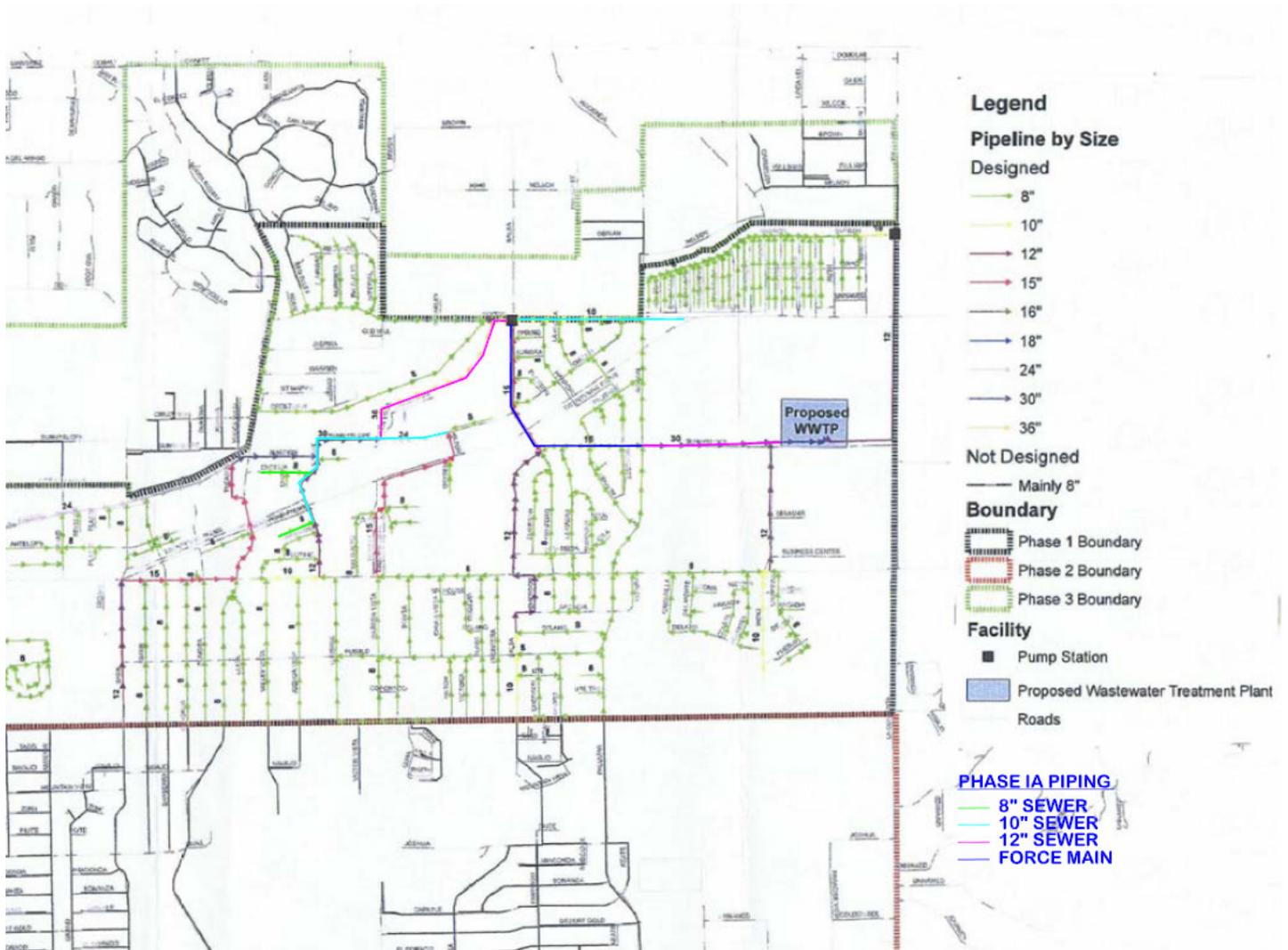
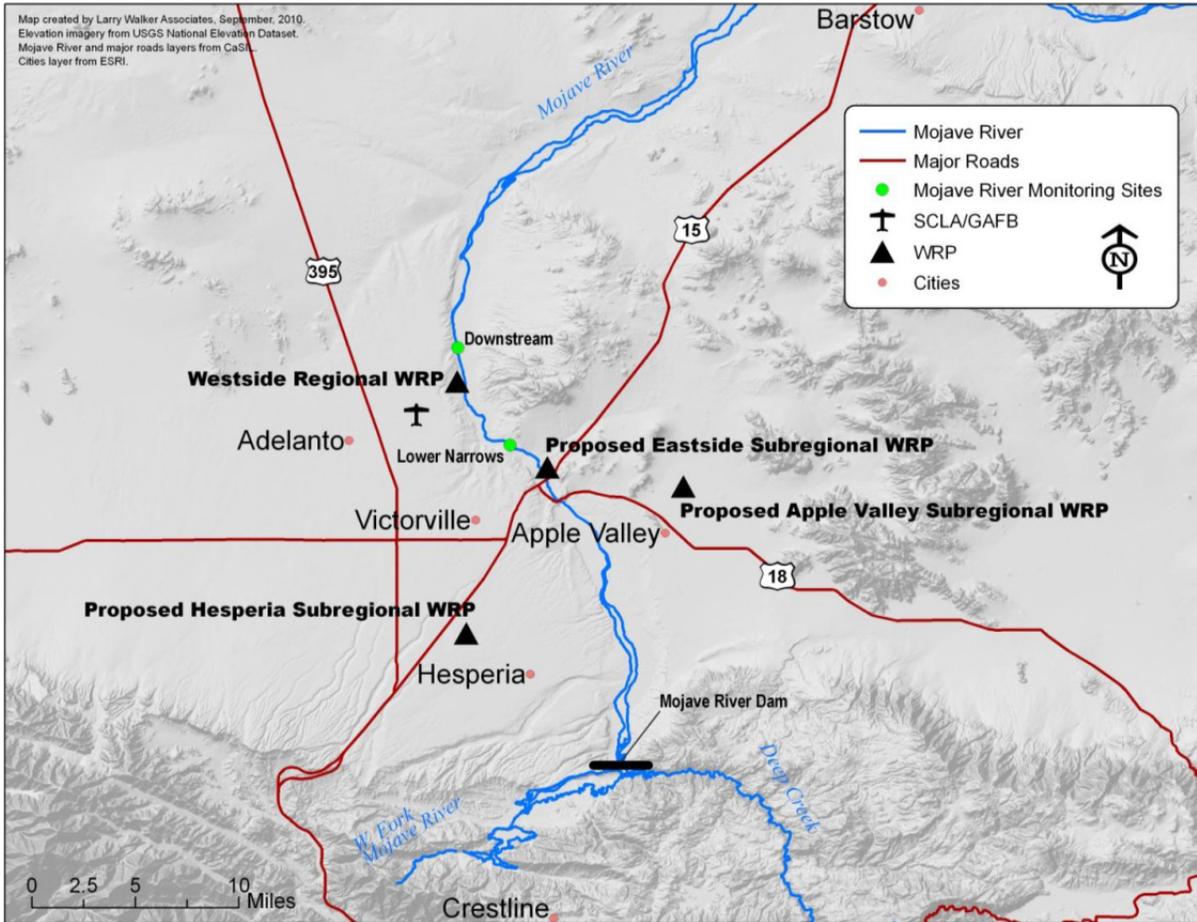


Figure 3-5 Victor Valley Wastewater Reclamation Authority Subregional Water Reclamation Plants



3.1.10 **Project Timing and Phasing**

If the proposed project(s) is part of a multi-phased project complex, provide a description that demonstrates that the proposal can operate on a standalone basis, i.e., can be fully functional without implementation of the subsequent projects.

Where requested funding is for a component of a larger project, this section must describe all of the components of the larger project complex and identify project elements the IRWM Implementation Grant is proposed to fund. Linkages to any other projects that must be completed first or that are essential to obtain the full benefits of the Proposal must be discussed.

Hi-Desert Water District Wastewater Treatment and Water Reclamation Project

Phase 1 is the first stage of development of a larger regional treatment and collection system. The Phase 1 facilities will collect, fully treat, and reclaim 1,400 acre-feet per year. A summary of Phase 1 is outlined below.

- Phase 1
 - Complete by 2016
 - Service to approximately 5,500 connections
 - 1.25 mgd treatment capacity
 - \$126 million
 - Will require assessment district vote
 - Land has been purchased
 - Environmental documentation complete
- Phase 2
 - Complete by 2017
 - Land has been purchased
 - Environmental documentation complete
- Phase 3
 - Complete by 2018
 - Land has been purchased
 - Environmental documentation complete

Victor Valley Wastewater Reclamation Authority Subregional Reclamation Project

This project is a stand-alone project with final design beginning in January 2013 and ending with construction in 2015. Both the Apple Valley and Hesperia plants will follow the same schedule.

A summary of the project is outlined below:

- Hesperia Water Reclamation Plant and Apple Valley Water Reclamation Plant
 - Complete by 2015
 - Will re-use 4,480 acre-feet per year by 2020
 - Land has been purchased
 - Fully functional stand-alone projects
 - Environmental documentation complete
 - Design Complete

- Full Project
 - Will reuse 8,960 acre-ft per year reclaimed water
 - Satisfies 28% of the area’s water demand
 - Land has been purchased
 - Fully functional stand-alone projects
 - Environmental documentation complete
 - Preliminary design reports complete

3.2 Proposed Work-Hi Desert Water District Wastewater Treatment and Reclamation Project

3.2.1 Description of Tasks

For each project contained in the Proposal, include a description of work to be performed under each task and the current status of the task. The description should include as much detail as possible and explain all work necessary to complete each project in the Proposal.

The accomplished and ongoing tasks associated with the proposed Hi Desert Water District Wastewater Treatment and Water Reclamation Project are summarized in the table below:

Table 3-3 Hi Desert Water District Wastewater Treatment and Reclamation Project

TASK	DESCRIPTION	DELIVERABLE	STATUS	
1	Prop 84 IRWM Grant Administration			
1a	Application	Prepare Proposition 84 Implementation Grant application	Complete application	Completed by March 2013
1b	DWR Review	Review and scoring of grant applications	Recommend projects to be funded	Completed by October 2013
1c	Award	Develop contracts with selected applicants	Completed grant contracts	Completed by November 2013
1d	Start Construction	Milestone date for start of construction of first MWA project	Two of three projects will be ready for implementation within 6 months of grant award	January 2014
1e	Quarterly Reports	MWA grant administrator submits quarterly progress reports to DWR	Quarterly project reports to DWR on grant-funded activities	Completed by June 2016
1f	Final Report	MWA grant administrator submits final progress report to DWR	Final progress report at end of all grant-funded project implementation	Completed by July 2016



TASK	DESCRIPTION	DELIVERABLE	STATUS	
2	HDWD Wastewater Treatment & Reclamation Project			
2a	Land Acquisition, Easements and Rights of Way	Acquire the land to construct the Treatment Plan	Land ownership; Easement and ROW acquisition	Land acquisition completed in 2003; easements to be acquired after final design
2b	Sewer Master Plan	Develop the strategy for deploying the sewer system	Sewer Master Plan	Completed in 2008
2c	Design			
2c1	Prelim Design for Phase 1	Preliminary Design Report for the construction of Phase 1	Preliminary Design Report	Completed March 2011
2c2	Survey and Mapping	Survey and Map the land in Phase 1 and 2 to determine the location of underground utilities and topography	Survey Documents	Completed January 2012
2c3	Hydrology Study	Perform a hydrologic study of the project location and surrounding area.	Hydrologic Study Report	Completed December 2011
2c4	Geotechnical Study	Perform a geotechnical study of the project location and surrounding area.	Geotechnical Study Report	Complete by April 2014
2c5	Conditional Use Permit	Submit to the Town of Yucca Valley the Conditional Use Permit to determine the site improvements to meet the Town's standards	Conditional Use Permit	Completed March 2014
2c6	Final Design	Using the Survey and Mapping, the Final Engineered Plans for Construction	Final Design Plans	Completed by March 2014
2c7	Confirm Final Design	Confirmation and technical review of preliminary design.	Final Preliminary Design Report	Completed by March 2014
2c8	Prepare Final Plans/Specs/Cost Estimate	Complete and confirm final plans, specifications, and cost estimates.	Final Plans, Final Specifications, and Cost Estimate	Completed by January 2015
2d	CEQA Environmental Review	State Environmental Clearance	Mitigated Negative Declaration	Completed August 2009

TASK	DESCRIPTION	DELIVERABLE	STATUS	
2e	NEPA Environmental Review	National Environmental Clearance	FONZI	Completed by February 2011
2f	Permitting	Acquire required County, State, and Federal permits	Final permit documents	Complete by January 2015
2g	Assessment District Formation			
2g1	State Revolving Loan Application	Maintained the listing on the State Revolving Fund Funding priority list	Loan Application	Completed by June 2011
2g2	Assessment District Formation	Forming the mechanism to assess the property owners to fund the Project	Engineer's Assessment Report	Completed by March 2011
2g3	Vote	Revote of Assessment District	Revote of Assessment District	November 2014
2h	Construction			
2h1	Construction Contracting	Public Bid Process for selection of a contractor	Bid Advertisement, bid evaluation, contract award	Complete by April 2015
2h2	Construct Phase 1	Project Construction	Completed project	Completed by July 2016
2h3	Construct Future Phases			
2h3a	Construct Phase 2	Project Construction		Complete by March 2017
2h3b	Construct Phase 3	Project Construction		Complete by January 2018
2i	Begin Operation	Operations Begin	Functional Facility	Completed by June 2016
2j	Public Outreach			Complete by January 2015
2k	Program Management			Complete by June 2016



3.2.2 Grant Reporting Tasks

Grant reporting tasks including the submittal of *Quarterly Progress Reports, Invoices, Final Reports, and Post Completion Reports.*

The accomplished and ongoing tasks associated with the grant reporting tasks are covered by the Prop 84 IRWM Grand Administration task list and are summarized in the table below:

Table 3-4 Prop 84 IRWM Grand Administration Tasks

TASK	TITLE	DESCRIPTION	DELIVERABLE	STATUS
1	Prop 84 IRWM Grant Administration <i>(Project Costs included in HDWD Task 2k)</i>			
1a	Application	Prepare Proposition 84 Implementation Grant application	Complete application posted on BMS with 4 hard copies	Submitted March 29, 2012
1b	DWR Review	Review and scoring of grant applications	Recommend projects to be funded	Complete by Oct-2013
1c	Award	Develop contracts with selected applicants	Completed grant contracts	Complete by Nov-2013
1d	Start Construction	Milestone date for start of construction of first MWA project	Two of three projects will be ready for implementation within 6 months of grant award	Complete by Jan-2014
1e	Quarterly Reports	MWA grant administrator submits quarterly progress reports to DWR	Quarterly project reports to DWR on grant-funded activities	Complete by Jun-2016
1f	Final Report	MWA grant administrator submits final progress report to DWR	Final progress report at end of all grant-funded project implementation	Complete by Jul-2016

3.2.3 Coordination Procedures

Procedures by which the applicant will coordinate with its partner agencies and organizations that may receive funding from the grant including any contracts, memorandums of understanding (MOUs), and other formal agreements.

Hi Desert Water District will coordinate with the MWA Technical Advisory Committee to ensure the project meets IRWM Plan standards. The following entities comprise the Committee:

- Apple Valley Ranchos
- Baldy Mesa Water District
- Bar-H Mutual Water Company
- Joshua Basin Water District
- Jubilee Mutual Water Company
- Lahontan Regional Water Quality Control Board



- Bighorn Desert View Water Agency
- California Department of Fish & Game
- Citizens for a Better Community
- City of Barstow
- City of Hesperia
- City of Victorville
- County of San Bernardino Special Districts
- Department of Water Resources
- Hi-Desert Water District
- Jess Ranch
- Mariana Ranchos County Water District
- Mojave Basin Area Judgment Subarea Advisory Committee
- Newberry Springs-Harvard Property Owners Association
- Palisades Ranch
- Rancho Los Flores
- Silver Lakes Association
- Town of Apple Valley
- Southern California Water Company
- Spring Valley Lakes Association
- Victor Valley Wastewater Reclamation Authority

3.2.4 Victor Valley Wastewater District Standards

A discussion of standards, such as construction standards, health and safety standards, laboratory analysis, or accepted classifications methods that will be used in implementation.

All design elements will meet Hi-Desert Water District Design Standards, as well as any requirements of permits (e.g. Caltrans Standards).

3.2.5 Performance Measures

Development of performance measures and monitoring plans for the project(s) listed in the Proposal.

Design consultant teams will be required to submit monthly progress reports to the District to identify completed tasks, potential schedule delays, potential cost impacts, and anticipated activities for the following month. Regular reporting will allow the District to gauge the development of the project and ensure the project remains on schedule and on budget.

3.2.6 Permitting and Environmental Documentation

A discussion of the status of acquisition of land or rights-of-way, if applicable. Identification of all necessary permits and the status of securing such permits. A discussion of the status of preparation and completion of requirements to comply with the CEQA, NEPA, and other environmental laws. If environmental compliance efforts have not been completed, include tasks for environmental compliance. Discuss the status of environmental mitigation or enhancement actions or tasks to comply with recommended mitigation measures. There is a tribal notification requirement pertaining to projects using Proposition 84 funds (PRC §75102). Applicants need to account for this step in the CEQA process in the work plan. See Appendix D of the 2012 Guidelines for further information.

3.2.6.1 Environmental Documentation

The District has prepared a joint California Environmental Quality Act (CEQA)/NEPA environmental document, termed an Initial Study/Environmental Assessment (IS/EA). This

document, including responses to comments received, the Mitigation Monitoring & Reporting Program (MMRP), and other project related material prepared to address issues evaluated in the IS were compiled into a final Mitigated Negative Declaration (MND) dated June 2009.

- The District has adopted the final MND and MMRP.
- The State Clearing House number for the MND is SCH#2009061035.
- The CEQA documentation was completed October 7, 2009.
- The required NEPA documentation, including the FONSI, was completed in May 2012
- Final EIR adopted August 5, 2009
- A Draft discharge permit was acquired in 2009, it has not yet been revised by the RWQCB

Hi-Desert Water District Resolution No. 09-16 adopting the Mitigated Negative Declaration for the project was adopted August 5th, 2009. A copy of the resolution is attached as Figure 3-6.

3.2.6.2 Status of Required State and Federal Permits

The permitting process has been started. The District received a draft copy of the Water Discharge Requirements from the Regional Water Quality Control Board in 2009; a final permit is expected prior to facilities startup. Obtaining environmental permits for the project will begin once the designs of the collection system and treatment facility have been adequately developed. For several of the permits, it is anticipated that meetings will take place early in design so that permitting agency requirements can be incorporated for agency review prior to the 90 percent design phase. Most permitting agencies require 90 percent design documents in order to complete their review and issue a permit.

For this component of the Project, the District has budgeted the cost to begin communicating with the permitting agencies, meeting with the agencies, submission of permit applications, and preparation of supporting documents required for inclusion with the permit applications. The anticipated timeline for the permitting process is included in the schedule above.

All construction related permits will be obtained prior to bidding the project with the exception of local encroachment permits, which are typically the responsibility of the selected contractor. The District is currently working with the Regional Water Quality Control Board on the Waste Discharge Requirements for the water reclamation facility. Some regulatory permits and approvals will not be issued until construction of the facility is complete and start-up demonstrates compliance with requirements. Currently anticipated Federal, State, and local permits include:

- California Department of Public Health
- California Department of Fish and Game Streambed Alteration Permit
- Town of Yucca Valley

- Encroachment, Grading, and Building Permits
- Conditional Use Permit
- Mojave Air Quality Management District Authority to Construct and Permit to Operate
- State Water Resources Control Board
- Components include Storm Water Pollution Prevention Plan
- Water Quality Management Plans
- County of San Bernardino Flood Control District Encroachment Permit
- County of San Bernardino Department of Public Health, Environmental Health Services, Safe Drinking Water Permit Section Well Permit to Drill and Well Abandonment Permit -Monitoring wells for the percolation pond retention basin will be required per CDPH regulations. CDPH may require closure of existing drinking water wells within a certain distance/time from retention basin
- Army Corps of Engineers Section 404 Permit
- Regional Water Quality Control Board
- Waste Discharge Requirements
- Section 401 Permit
- CALTRANS Encroachment Permit
- CalOSHA, Mining and Tunneling

3.2.7 Deliverables

A description of deliverables to DWR for assessing progress and accomplishments, such as Quarterly and Final reports.

Deliverables of the project to DWR should a grant agreement be offered are described in Table 3-4. These deliverables will be those as required by an agreement with DWR such as Quarterly Progress Reports, Invoices, Final Reports, and Post Completion Reports.

3.2.8 Relevant Plans and Specifications

Plans and specifications relevant to the Hi-Desert Water District Wastewater Treatment and Reclamation Project are located in the following attachments:

Tab	Attachment	Electronic Attachment Name
B	HDWD Wastewater Treatment and Reclamation Project Facility and Collection System Planning and Design, December 2012	Att3_IG2_WorkPlan_2of3
E	HDWD Preliminary Value Engineering Study Report - HDWD Collection Systems, August 2008	Att4_IG2_Budget_2of3
G	Hi-Desert Water District, Water Reclamation Facility Preliminary Design Report, Volume 1 – Report, January 2009	Att7_IG2_TechJust_3of8

H	Hi-Desert Water District, Water Reclamation Facility Preliminary Design Report, Volume 2 – Drawings, January 2009	Att7_IG2_TechJust_4of8
I	Hi-Desert Water District Final 2010 Urban Water Management Plan, adopted June 27, 2011	Att7_IG2_TechJust_5of8
M	HDWD Covington Wash Floodplain Study and Alternatives Analysis	Att8_IG2_BenCost_2of5



Figure 3-6 HDWD Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program

RESOLUTION NO. 09-16

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE HI-DESERT WATER DISTRICT ADOPTING A MITIGATED NEGATIVE DECLARATION AND A MITIGATION MONITORING AND REPORTING PROGRAM AND APPROVING THE HI-DESERT WATER DISTRICT WATER RECLAMATION FACILITY, WASTEWATER TREATMENT PLANT AND COLLECTION SYSTEM PROJECT

WHEREAS, the Hi-Desert Water District (“District”) is a local water district serving the greater Yucca Valley area in Southern California; and

WHEREAS, the District wishes to construct and install a water reclamation facility, wastewater treatment plant, and collection system to eliminate existing septic systems (the “Project”), thereby reducing the amount of nitrate contamination and ensuring the protection and ultimate enhancement of water quality within the District’s service area; and

WHEREAS, Phase 1 the proposed Project would involve the construction and installation of a wastewater treatment facility designed for an initial two (2) million gallons per day (MGD) treatment capacity; a sewage collection system that will serve the core developed area of the Town of Yucca Valley; and percolation basins used to return treated effluent to the Warren Valley Groundwater Basin; and

WHEREAS, Phase 2 of the proposed Project, if needed to protect groundwater quality and expand sewer capacity, would expand the collection, treatment, and disposal facilities to collect an additional one (1) MGD of sewage; and

WHEREAS, Phase 3 of the proposed Project, if needed, would include facilities designed to collect an additional one (1) MGD of wastewater flow for a total system capacity of four (4) MGD; and

WHEREAS, the proposed Project site would be located approximately 1,000 feet south of State Route 62 (Twenty-nine Palms Highway), east of Indio Avenue, north of Sunnyslope Drive, and west of La Contenta Road in the Town of Yucca Valley in San Bernardino County, California; and

WHEREAS, the proposed Project improvements would satisfy current wastewater collection, treatment, and disposal demands and are consistent with approved local planning; and

WHEREAS, pursuant to the California Environmental Quality Act (“CEQA”) (Pub. Res. Code, § 21000 et seq.) and the State CEQA Guidelines (Cal. Code Regs, tit. 14 § 15000 et seq.), the District is the lead agency for the proposed Project; and

WHEREAS, District staff reviewed the Project and determined that it is subject to the requirements of CEQA and prepared an Initial Study/Environmental Assessment; and

WHEREAS, on the basis of the Initial Study/Environmental Assessment, which concluded that the Project will not have significant impacts on the environment with mitigation, the District determined that a Mitigated Negative Declaration (“MND”) should be prepared for the Project, and an MND was prepared pursuant to CEQA and the State CEQA Guidelines; and

WHEREAS, the District provided copies of the draft MND and Initial Study/Environmental Assessment to the public and the State Clearinghouse for a thirty-day review and comment period beginning on June 9, 2009 and ending on July 9, 2009 pursuant to Public Resources Code section 21091(b), and written comment letters were received by the District; and

WHEREAS, as contained here, the District has endeavored in good faith to set forth the basis for its decision on the proposed Project; and

WHEREAS, all of the findings and conclusions made by the District pursuant to this Resolution are based upon the oral and written evidence before it as a whole; and

WHEREAS, the District’s Board of Directors has reviewed the MND, Initial Study/Environmental Assessment, and all other relevant information contained in the record regarding the Project; and

WHEREAS, on July, 15 2009 at a duly noticed special District Board meeting, further consideration of the proposed Project was postponed to allow staff to respond to additional public comments on the MND; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred;

NOW THEREFORE, the Board of Directors do hereby resolve as follows:

SECTION 1. Compliance with the California Environmental Quality Act. As the decisionmaking body for the Project, the Board of Directors has reviewed and considered the information contained in the MND, Initial Study/Environmental Assessment, and administrative record, on file with the District and available for review at the District office, 55439 Twentynine Palms Highway, Yucca Valley, California 92284. The Board of Directors finds that the MND and Initial Study/Environmental Assessment have been completed in compliance with CEQA and the State CEQA Guidelines.

SECTION 2. Findings on Environmental Impacts. In the District’s role as the lead agency under CEQA, the Board of Directors finds that the MND and Initial Study/Environmental Assessment contains a complete and accurate reporting of the environmental impacts associated with the Project. The Board of Directors further finds that the documents have been completed in compliance with CEQA, the State CEQA Guidelines, and the District’s Local CEQA Guidelines. The Board of Directors further finds that all environmental impacts of the Project are either insignificant or can be mitigated to a level of insignificance pursuant to the mitigation measures outlined in the MND, Initial Study/Environmental Assessment, and the Mitigation Monitoring and Reporting Program. The Board of Directors further finds that there is no substantial evidence in the record supporting a fair argument that the Project may result in significant environmental impacts, and that all comments received regarding the Project have been examined and determined

to not modify the conclusions of the MND or the Board of Directors. The Board of Directors finds that the MND contains a complete, objective, and accurate reporting of the environmental impacts associated with the Project and reflects the independent judgment of the Board of Directors.

SECTION 3. Adoption of Mitigated Negative Declaration. The Board of Directors hereby approves and adopts the MND prepared for the Project.

SECTION 4. Adoption of the Mitigation Monitoring and Reporting Program. The Board of Directors hereby approves and adopts the Mitigation Monitoring and Reporting Program prepared for the Project and included in the MND.

SECTION 5. Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at the Hi-Desert Water District office, 55439 Twenty-nine Palms Highway, Yucca Valley, California 92284. Mr. Joseph Glowitz, District Engineer, is the custodian of the record of proceedings.

SECTION 6. Execution of Resolution. The President of the Hi-Desert Water District and its Board of Directors shall sign this Resolution and the Secretary of the Hi-Desert Water District and its Board of Directors shall attest and certify to the passage and adoption thereof.

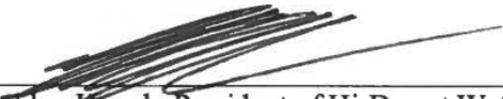
PASSED, APPROVED, AND ADOPTED this 5th day of August, 2009 by the following vote:

Ayes: Munsey, Mayes, Hough, Graham

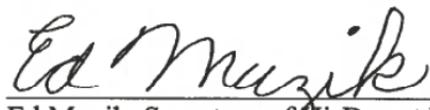
Noes:

Abstain:

Absent: Stadum


Sheldon Hough, President of Hi-Desert Water District
and its Board of Directors

ATTEST:


Ed Muzik, Secretary of Hi-Desert Water District
and its Board of Directors

(Seal)



3.3 Proposed Work-Victor Valley Wastewater Reclamation Authority

3.3.1 Description of Tasks

For each project contained in the Proposal, include a description of work to be performed under each task and the current status of the task. The description should include as much detail as possible and explain all work necessary to complete each project in the Proposal.

The accomplished and ongoing tasks associated with the proposed Victor Valley Wastewater Reclamation Authority Subregional Reclamation Project are summarized in the table below:

Table 3-5 Victor Valley Wastewater Reclamation Authority Subregional Reclamation Project

TASK	DESCRIPTION	DELIVERABLE	STATUS	
3a	Detailed Design/Construction Administration			
3a1	Administrative and legal expenses	Covers administrative activities required in preparation for bidding and during construction.	Contract administration and legal reviews	Complete by Apr-2013
3a2	Complete and assemble bid documents	Complete and assemble documents in preparation for bid.	Bid documents packet	Complete by Apr-2013
3a3	Final contract documents	Prepare contract documents in preparation for bid and award contract.	Final contract documents	Complete by Apr-2013
3a4	Land, structures, rights-of-way, appraisals, etc.	Acquire the land, required rights-of-way, and perform appraisals done as appropriate.	Land ownerships, rights-of-way, appraisal reports.	Complete by Apr-2013
3a5	Relocation expenses and payments	Provide monetary compensation to individuals and businesses required to move for this project.	Checks and appropriate documentation.	Complete by Apr-2013
3a6	Architectural and engineering fees	Fees incurred by architectural and engineering firms to complete the preliminary design of the water reclamation plants.	Design documents	Complete by Apr-2013
3b	Bidding Phase Services			
3b1	Pre-bid conference	Conference held prior to bidding to discuss how bidding should occur and to communicate bid requirements.	Pre-bid conference	Complete by May-2013
3b2	Response to bidder questions & issue addenda	Responding to bidder questions.	Provide responses to bidder inquires	Complete by Jun-2013
3b3	Bid opening	Open bid	Milestone date	Complete by Jun-2013
3b4	Bid Evaluation and	Bid evaluation and	Recommendation letter	Complete

TASK	DESCRIPTION	DELIVERABLE	STATUS	
	Letter Recommendation	recommendation letter	by Jun-2013	
3c	VVWRA Award to Contractor			
3c1	Recommendation to board	Discussion of recommended bid	Prepare and recommend bid award	Complete by Jul-2013
3c2	Board adoption and award to contractor	Board vote and award	Bid award; Milestone date	Complete by Jul-2013
3c3	Contractor Notice to Proceed		Notice to Proceed; Milestone date	Complete by Jul-2013
3d	Construction			
3d1	Construct Apple Valley and Hesperia WRPs	Project construction	Two completed regional reclamation plants	Complete by May-2015
3d2	Project inspection fees	Fees incurred by inspections of construction sites.	Inspection during construction; Progress estimates	Complete by Aug-2013
3d3	Site work	Surveying, lot clearing, foundation preparation, rough grading, final grading landscaping, driveways, walkways, etc.	Survey, clear and grub, site preparation, grading, landscaping, hardscaping	Complete by Oct-2013
3d4	Demolition and removal	Demolition and removal of existing facilities.	Removal of facilities	Complete by Dec-2013
3d5	Equipment	Equipment rented or purchased for construction of the project.	Acquire and utilize construction equipment	Complete by May-2015
3d6	Miscellaneous	Miscellaneous costs or fees incurred by unforeseeable issues arising during construction.	Payment for legitimate claims	Complete by May-2015
3d7	Contingencies	Construction contingencies	Owner's contingency	Complete by May-2015

3.3.2 Grant Reporting Tasks

Grant reporting tasks including the submittal of Quarterly Progress Reports, Invoices, Final Reports, and Post Completion Reports.

The accomplished and ongoing tasks associated with the grant reporting tasks are covered by the Prop 84 IRWM Grand Administration task list and are summarized as Task 1 in the HDWD discussion above.

3.3.3 Standards

A discussion of standards, such as construction standards, health and safety standards, laboratory analysis, or accepted classifications methods that will be used in implementation.

All design elements will meet Victor Valley Wastewater Reclamation Authority Design Standards, as well as any requirements of permits (e.g. Caltrans Standards).

3.3.4 Performance Measures

Development of performance measures and monitoring plans for the project(s) listed in the Proposal.

Benefits of this project will be measured in several ways including:

- Community consciousness of sustainability – measured in annual community surveys.
- Community conservation philosophy – measured in lower per capita water use.

Upon completion of the project, the benefit to local water resources will be measured by annual purchase of State Water Project water, annual production of recycled water and annual withdrawal of groundwater to track the decrease in imported water and increase in recycled water. Complete and accurate measurement of these performance measures is currently in place and/or will be included as part of the project. This will be measured in part by:

- Actual reduction in imported water (measured by MWA).
- Actual reduction in groundwater pumping (measured by MWA).
- Focus groups to gauge public education and participation in water recycling.
- Including questions about the use of recycled water in individual community surveys.

3.3.5 Permitting and Environmental Documentation

A discussion of the status of acquisition of land or rights-of-way, if applicable. Identification of all necessary permits and the status of securing such permits. A discussion of the status of preparation and completion of requirements to comply with the CEQA, NEPA, and other environmental laws. If environmental compliance efforts have not been completed, include tasks for environmental compliance. Discuss the status of environmental mitigation or enhancement actions or tasks to comply with recommended mitigation measures. There is a tribal notification requirement pertaining to projects using Proposition 84 funds (PRC §75102). Applicants need to account for this step in the CEQA process in the work plan. See Appendix D of the 2012 Guidelines for further information.

3.3.5.1 Environmental Documentation

VVWRA has completed all NEPA requirements. The Programmatic Environmental Impact Report / Environmental Impact Study (EIR/EIS) has been published for the VVWRA Subregional Water Recycling Project. In addition a project-level Cumulative Impact Assessment for the Hesperia and Apple Valley plants has been published to accompany the EIR/EIS.

- Report of Wastewater Discharge for Master Water Recycling Requirements, July 2009
- Published Notice of Preparation of an EIR, scope of work coordinated with Bureau of Reclamation Staff, May 2010
- Published Draft EIR for public review and comment, November 2010
- Published Cumulative Impact Analysis to accompany EIR, January 2011
- VVWRA Board certified the Final EIR; no litigation was filed, February 2011
- VVWRA Board approves CEQA addendum to previously certified final EIR, November 2012
- Construction expected to begin, March 2013

3.3.5.2 Status of Required State and Federal Permits

The Waste Discharge Requirement Permit was on the January, 2013 agenda of the Lahontan Regional Water Quality Control Board meeting and was approved. All other permits needed to construct the project have been obtained as included as Appendix C (Att3_IG2_Workplan_3of3).

3.3.6 Deliverables

A description of deliverables to DWR for assessing progress and accomplishments, such as Quarterly and Final reports.

Deliverables of the project to DWR should a grant agreement be offered are described in Table 3-4. These deliverables will be those as required by an agreement with DWR such as Quarterly Progress Reports, Invoices, Final Reports, and Post Completion Reports.

3.3.7 Relevant Plans and Specifications

Plans and specifications relevant to the Hi-Desert Water District Wastewater Treatment and Reclamation Project are located in the following attachments:

Tab	Attachment	Electronic Attachment Name
E	VVWRA Phase II Expansion Estimate Summary	Att4_IG2_Budget_3of3
F	California Regional Water Quality Control Board, Colorado River Basin Region, Resolution No. R7-2011-0004	Att7_IG2_TechJust_2of8
J	VVWRA Flow Projection Update, Update 2 - August 2008	Att7_IG2_TechJust_6of8
K	Town of Apple Valley Wastewater Reclamation Project, Final Preliminary Design Report, December 2009	Att7_IG2_TechJust_7of8
L	City of Hesperia Wastewater Reclamation Project, Final Preliminary Design Report, December 2009	Att7_IG2_TechJust_8of8