

**Mojave Water Agency**

**2010 Proposition 84 Integrated Water Management  
Implementation Grant Application**

**Joshua Basin Water District Recharge Basin and Pipeline Project  
Hi-Desert Water District Wastewater Treatment and Water Reclamation Project  
Mojave Water Agency Turf Removal Conservation Incentive Program**

**January 7, 2011**



Submitted by:  
Mojave Water Agency  
22450 Headquarters Drive  
Apple Valley, CA 92307

# INTRODUCTION

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## *Eligible Grant Applicant*

Mojave Water Agency (MWA) is the grant applicant is the entity submitting the grant application and the entity that will enter into an agreement with the State should the application be successful. MWA is the regional planning agency submitting the application on behalf of project proponents. Project proponents are the Joshua Basin Water District (JBWD), the Hi-Desert Water District (HDWD), and MWA and will be responsible for implementing the projects described in this grant proposal.

## *Eligibility Criteria*

The Mojave IRWM Region has been accepted into the IRWM grant program through the 2009 Region Acceptance Process (RAP). The Region spans both the Lahontan and Colorado River Funding areas, and projects are included in both funding areas.

The MWA Regional Water Management Plan was adopted in February 2005. The Plan thus complies with CWC Section §83002.(b)(3)(B) since it was adopted before September 30, 2008. If awarded an Implementation Grant, the Mojave RWMG will:

- enter into a binding agreement with DWR to update the IRWM Plan to meet the IRWM Plan standards contained in the Guidelines within two years of the execution date of the agreement; and
- undertake all reasonable and feasible efforts to take into account water-related needs of disadvantaged communities (DACs) in the IRWM region

A copy of the 2004 MWA Regional Water Management Plan is included as Attachment A ( Att1\_IG1\_MWA\_ Eligible \_2ofTota3). A copy of the resolution adopting the Plan is included as Attachment B (Att1\_IG1\_MWA\_ Eligible \_3ofTota3).

## Eligible Project Types

This application requests grant funding for three projects:

- The Joshua Basin Water District Recharge Basin and Pipeline Project
- The Hi-Desert Water District Wastewater Treatment and Water Reclamation Project
- The Mojave Water Agency Turf Removal Conservation Incentive Program

All three projects were identified, identified as feasible, and prioritized in the 2004 RWMP.<sup>1</sup> These projects fall within eligible project types included in Guideline Section III.C, as displayed in Table 1.

Table 1 – Applicability of Eligible Project Types

	JBWD Groundwater Recharge Facility	HDWD Wastewater Treatment & Reclamation Project	MWA Water Conservation Incentives
Eligible projects			
Water supply reliability, water conservation and water use efficiency	X	X	X
Stormwater capture, storage, clean-up, treatment, and management			
Removal of invasive non-native species, the creation and enhancement of wetlands, and the acquisition, protection, and restoration of open space and watershed lands			
Non-point source pollution reduction, management and monitoring		X	
Groundwater recharge and management projects	X	X	X
Contaminant and salt removal through reclamation, desalting, and other treatment technologies and conveyance of reclaimed water for distribution to users		X	
Water banking, exchange, reclamation and improvement of water quality	X	X	
Planning and implementation of multipurpose flood management programs			
Watershed protection and management		X	
Drinking water treatment and distribution			
Ecosystem and fisheries restoration and protection			
Disadvantaged communities	X	X	X

## Funding Match

Funding match for the proposed projects is 59 percent.

<sup>1</sup> 2004 RWMP, p. 9-42; Included at Attachment A (Att1\_IG1\_MWA\_Eligible\_2ofTota3)

# 1. APPLICANT INFORMATION

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**Organization Name:** Mojave Water Agency

**Federal Tax ID:** 95-2283025

## Proposal Name:

2010 Proposition 84 Integrated Water Management Implementation Grant Application

- JBWD Recharge Basin and Pipeline Project,
- HDWD Wastewater Treatment and Water Reclamation Project, and
- MWA Turf Removal Incentive Program

## Proposal Objective:

*Briefly describe how the Proposal helps achieve the objectives of the IRWM Plan.*

### **Joshua Basin Water District Recharge Basin and Pipeline Project:**

- 1) Provide additional groundwater recharge, storage, and recovery capacity in the Joshua Basin region;
- 2) Allow the storage of water during wet hydrologic periods for recovery and use during dry periods, to provide JBWD customers with increased water supply reliability;
- 3) Reduce the demand for local groundwater;
- 4) Enhance water supply reliability;
- 5) Provide additional recharge to underlying groundwater basin, thereby reducing and/or reversing the degradation of local septic leachate on nitrate level buildup in District's water supply;
- 6) Take full advantage of total water supply available to the District - allowing acceptance of long-term State Water Project allocation, which have not been received due to lack of needed facilities;
- 7) Reduce or offset future economic impacts to the District customers by reducing need for extensive rate increases for water supply augmentation;
- 8) Reduce or eliminate risk of local ground subsidence caused by depleted groundwater levels within groundwater basin;
- 9) Replenishment of local groundwater basin prevents need to design, drill and operate deeper water supply wells which would result from groundwater basin depletion; and
- 10) Provides replenishment water to groundwater basin, needed as a result of reduced natural replenishment resulting from global climate change causing longer and drier drought periods.

**Hi-Desert Water District Wastewater Treatment and Water Reclamation Project:**

- 1) Construct a wastewater collection system to reduce the quantity of leachate from septic tank systems flowing into aquifers used for the District's potable water supply.
- 2) 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.

In addition, specific objectives for the Phase 1a treatment facilities are as follows:

- 6) Provide sufficient treatment capacity to ensure continuous compliance with anticipated regulatory requirements for an average annual wastewater flow of 0.125 mgd.
- 7) Provide for future expansion of the plant to an annual average flow capacity of 6 mgd.

**Mojave Water Agency Turf Removal Conservation Incentive Program:**

- 1) Incentivize removal of up to six million square feet of turf grass to produce a long-lasting reduction in water demand of 1,012 acre-feet per year.
- 2) Increase water conservation awareness, community support and participation in water conservation programs.
- 3) Establish long-term monitoring programs to gage the continued effectiveness of the program, and share this information with other agencies statewide.



## 2. BUDGET INFORMATION

A total of \$10 million in grant funds is being requested. Of this amount, \$8 million is being requested for projects in the Colorado River Funding Area, and \$2 million is being requested from the Lahontan Funding Area.

A summary of budgets and funding sources is presented below:

Funding Area	Colorado River	Colorado River	Lahontan	
	Joshua Basin Water District Recharge Basin and Pipeline Project	Hi-Desert Water District Wastewater Treatment and Water Reclamation Project	Mojave Water Agency Turf Removal Conservation Incentive Program	Total
Local Contribution	\$3,737,000	\$5,193,250	\$1,165,000	\$10,095,250
Federal Contribution	\$291,000	\$3,689,750		\$3,980,750
In-kind Contribution	\$0	\$0	\$70,000	\$70,000
Amount Requested	\$4,000,000	\$4,000,000	\$2,000,000	\$10,000,000
Total Project Cost	\$8,028,000	\$12,883,000	\$3,235,000	\$24,146,000

### 3. GEOGRAPHIC INFORMATION

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#### Latitude/Longitude

The approximate center of the Mojave Water Agency IRWM Region is 34°41'24"N 117°04'10"W.

Joshua Basin Water District is centered on 34°07'37"N 116°19'07"W.

High-Desert Water District is centered on 34°07'34"N 116°24'59"W.

The turf rebate program centered on 34°41'24"N 117°04'10"W.

#### Longitude/Latitude Clarification:

No clarification necessary.

#### Location:

The center of the IRWM Region is the center of the Mojave Water Agency, which is in the center of the Mojave River drainage, east of the San Bernardino Mountains in western San Bernardino County.

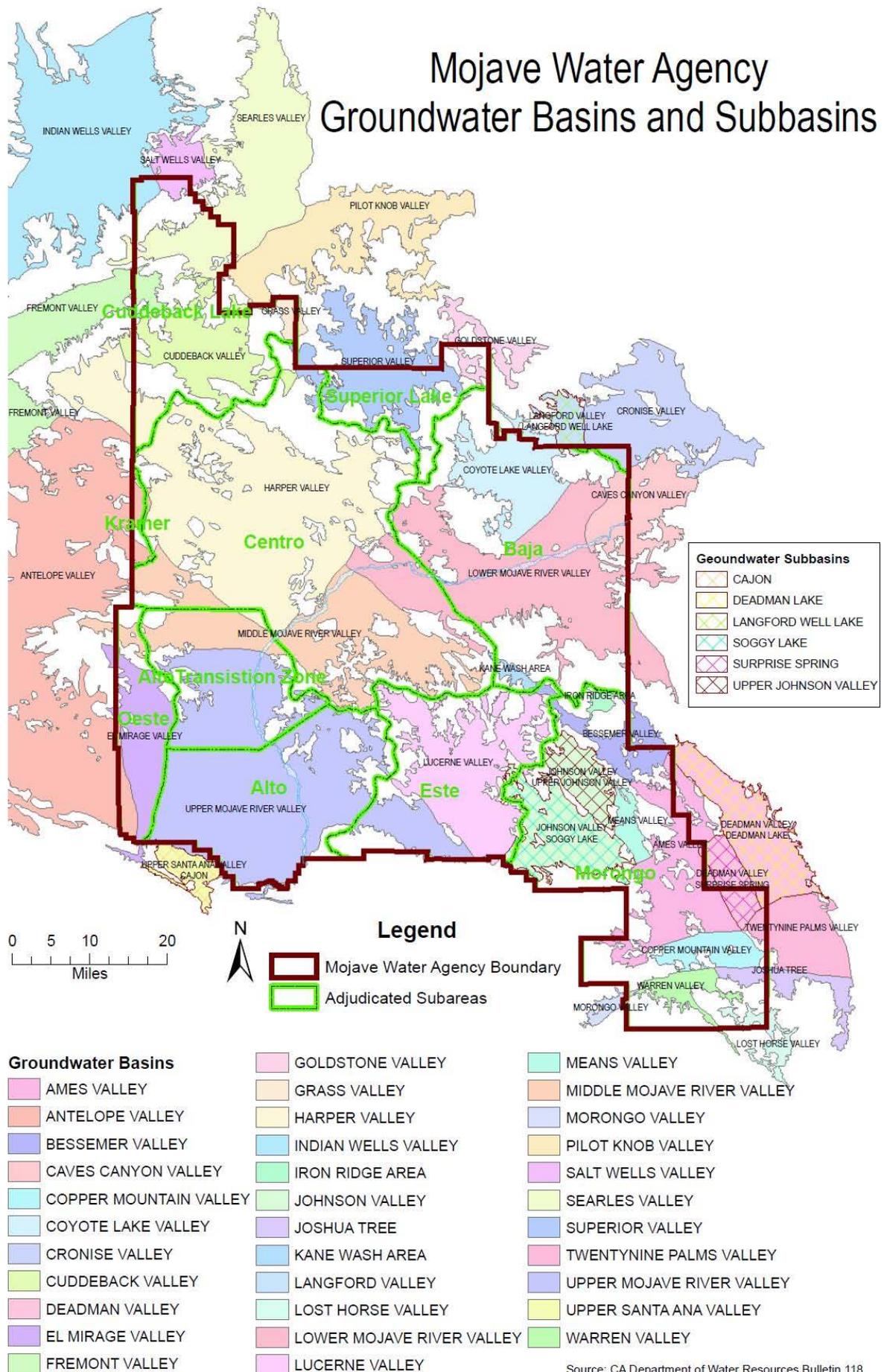
**County:** The entire Mojave IRWM Region and all projects are located in San Bernardino County.

#### Groundwater Basins:

The projects will be implemented in the following groundwater basins, as shown on **Error! Reference source not found..**

- Lucerne Valley Groundwater Basin
- Upper Move River Valley Groundwater Basin
- El Mirage Valley Groundwater Basin
- Middle Mojave River Valley Groundwater Basin
- Harper Valley Groundwater Basin
- Lower Mojave River Valley Groundwater Basin
- Coyote Lake Valley Groundwater Basin
- Warren Valley Groundwater Basin
- Copper Mountain Valley Groundwater Basin
- Joshua Tree Groundwater Basin

Figure 1 - Mojave Water Agency Groundwater Basins and Subbasins



### *Hydrologic Regions:*

The Mojave Water Agency IRWM Region is located in both the South Lahontan and Colorado River hydrologic regions. The HDWD and JBWD projects are located within the Colorado River hydrologic region. The MWA turf removal incentive program will be implemented in both the South Lahontan hydrologic region.

### **Watershed:**

The Mojave Water Agency IRWM Region encompasses most of the Mojave River watershed. The southeastern portion of the Region includes portions of the Colorado River hydrologic region, though these areas drain to terminal dry lakes in the Joshua Tree watershed. Principal watercourses in these areas are Yucca Creek and Joshua Creek.

## 4. LEGISLATIVE INFORMATION

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The Mojave Water Agency IRWM Region is overlain by the following legislative districts. The districts encompassing the proposed JBWD and HDWD projects are indicated by footnotes.

Legislative District	District Number
Senate District	17, 18 <sup>2</sup> , 31 <sup>3</sup>
Assembly District	36, 59, 65 <sup>2,3</sup>
US Congressional District	25, 41 <sup>2,3</sup>

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<sup>2</sup> Joshua Basin Water District

<sup>3</sup> Hi-Desert Water District

## 5. APPLICATION QUESTIONNAIRE

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### Q1. Project Description

*Provide a brief abstract of the Proposal, including a listing of individual project titles or types. Please note which projects, if any, directly address a critical water supply or water quality issue for a DACs or Native American Tribal communities.*

The Mojave Water Agency boundaries encompass over 4,900 square miles of the High Desert in San Bernardino County. The MWA was created in 1960 for the explicit purpose of providing sufficient water within the Agency's jurisdiction. The Mojave Basin area was adjudicated in the 1990s. The Court's ruling noted conditions of severe overdraft, and ordered the Agency to seek and deliver supplemental water. The Mojave Water Agency imports supplemental supply via the State Water Project (SWP).

The Warren Valley Basin provides a groundwater supply for the community of Yucca Valley. Conditions of overdraft led to a 1977 adjudication. The Court appointed a Watermaster for the Basin and ordered development of a physical solution.

The annual native water supply recharging the region's groundwater aquifers is estimated to average 65,500 acre-feet per year. Current estimates of SWP availability suggest reliable long-term supplies will average 60 percent of entitlement. At this level of reliability, water supply shortages could occur by 2030 or sooner, depending on the success of MWA's conservation programs.

#### **Joshua Basin Water District Recharge Basin and Pipeline Project:**

As part of its long term groundwater management plan, the Joshua Basin Water District (JBWD) will construct a Water Recharge Facility, consisting of a 4.4-mile water delivery pipeline and 30-acre recharge basin site. The water supply pipeline will provide the District access to SWP water from MWA and will relieve current overdraft conditions in the Joshua Tree groundwater basin. The recharge basins would fill by gravity and no pumping equipment is needed.

Annual average recharge is anticipated to be approximately 2,000 afy. The facilities are sized to recharge this amount in a six month period. The project includes stormwater management elements, and will provide recreation amenities to the local disadvantaged community area.

#### **Hi-Desert Water District Wastewater Treatment and Water Reclamation Project:**

The Hi-Desert Water District (HDWD) is under a RWQCB order to eliminate discharge to the dispersed septic facilities which are endangering the drinking water supply. Phase 1a of the project will sewer the central portion of the Town of Yucca Valley and convey and treat an average flow of 0.125 mgd. If the Phase 1a facilities do not adequately protect groundwater quality, or if the RWQCB requires more areas to be sewered, the collection, treatment and disposal facilities will be expanded to collect up to 4 mgd of sewage. The wastewater will be treated to meet Title 22 recycled water standards and discharged to percolation basins to recharge the treated effluent into the Warren Valley groundwater basin.

HDWD has purchased 80 acres near Highway 62 and La Contenta Road for the treatment facility. The project includes stormwater management elements protecting a disadvantaged neighborhood, and HDWD is developing an assistance program to help residents pay for connections to the new collection pipelines.

## **Mojave Water Agency Turf Removal Water Conservation Incentive Program:**

The Turf Replacement Water Conservation Incentive Program (WCIP) will fund a two-year extension to an existing program for the removal of turf grass with partial replacement with drought tolerant and desert adaptive landscaping to reduce per capita consumption and improve water use efficiency.

This existing program has proven to be one of the most popular and most effective water conservation programs being offered, with the removal of 3.3 million square feet of turf grass in the MWA service area.

Grant funds would be used to fund removal of 6 million square feet of turf by the end of 2012, conserving 1,012 acre-feet every year into the future. The Turf removal program includes consultation with a landscape architect for design of landscapes that retain and percolate stormwater, and includes long-term monitoring to document the program effectiveness.

## **Q2. Project Director**

*Provide the name and details of the person responsible for executing the grant agreement for the applicant. Persons that are subcontractors to be paid by the grant cannot be listed as the Project Director.*

The Project Director for this application is:

Kirby Brill, General Manager  
Mojave Water Agency  
22450 Headquarters Dr.  
Apple Valley, CA 92307  
760/946-7008 (direct)  
kbrill@mojavewater.org

## **Q3. Project Management**

*Provide the name and contact information of the Project Manager from the applicant agency or organization that will be the day-to-day contact on this application.*

The Project Manager for this application is:

Kathy Cortner, CFO  
Mojave Water Agency  
22450 Headquarters Dr.  
Apple Valley, CA 92307  
760/946-7054 (direct)  
kcortner@mojavewater.org

## **Q4. Applicant Information**

*Provide the agency name, address, city, state and zip code of the applicant submitting the application.*

The applicant submitting this application is:

Mojave Water Agency  
22450 Headquarters Dr.  
Apple Valley, CA 92307

## Q5. Additional Information

*Provide which funding area(s) in which projects are located.*

The JBWD and HDWD projects are located within the jurisdiction of the Colorado River Funding Area.

The MWA Turf Removal Conservation Incentive Program is located in the Lahontan Funding Area.

## Q6. Responsible Regional Water Quality Control Board(s)

*List the name of the RWQCB in which your Proposal is located. For a region that extends beyond more than one RWQCB boundary, list the name of each Board.*

The JBWD and HDWD projects are located within the jurisdiction of the Colorado River Regional Water Quality Control Board.

The MWA Turf Removal Conservation Incentive Program will be administered within the jurisdiction of the South Lahontan Regional Water Quality Control Board.

## Q7. Eligibility – Funding Match and Exceptions

*Proposition 84 requires a minimum funding match of 25% of total project cost unless there is a DAC project included in the proposal. Requirements for DAC cost share reductions are included in Exhibit G of this PSP.*

Under this proposal a local funding match of XX percent will be provided.

## Q8. Eligibility- Single Region

*Does the application represent a single application from an IRWM planning region approved in the RAP (See Section IIb, Table 1)? If yes, include the name of the IRWM planning region. If not, explain.*

Yes, this application represents a single application from the Mojave Water Agency IRWM Planning Region, which was approved in the 2009 Region Acceptance Process.

## Q9. Eligibility – Local Agency or Non-Profit

*Is the applicant a local agency or non-profit organization as defined in Appendix B of the Grant Guidelines?*

The applicant is a local agency as defined in Appendix B of the Grant Guidelines.

## Q10. Eligibility – Urban Water Suppliers

List the urban water suppliers that will receive funding from the proposed grant. Those listed must submit self certification of compliance with CWC § 525<sup>4</sup> et seq. and AB 1420<sup>5</sup>. If there are none, so indicate and you do not have to answer Q13 and Q14.

Urban water suppliers that will include funding from the proposed grant are:

- Joshua Basin Water District
- Hi-Desert Water District

## Q11. Eligibility – Urban Water Management Plans

Have all of the urban water suppliers, listed in Q10 above, submitted complete urban water management plans (UWMP) to DWR? Have those plans been verified as complete by DWR? If not, explain and provide the anticipated date for having a complete UWMP.

Both the Joshua Basin Water District and the Hi-Desert Water District have submitted complete 2005 Urban Water Management Plans to DWR. Both plans have been verified as complete by DWR.

Both the Joshua Basin Water District and the Hi-Desert Water District will submit updated 2010 Urban Water Management Plans to DWR, to be verified by DWR as complete, prior to execution of a grant agreement.

No additional water suppliers, including those that might meet the urban water supplier definition threshold for the first time, will receive funding through this grant application.

## Q12. Eligibility – AB1420 Compliance

Have any urban water suppliers listed in Q12 recently submitted AB1420 compliance tables and supporting documentation to DWR for a different grant program within the past three months? If so, please list the urban water supplier and the grant program. An urban water supplier must submit AB 1420 compliance documentation to DWR. If the urban water supplier has not submitted AB 1420 documentation, or that documentation was determined to be incomplete by DWR, the urban water supplier's projects will not be considered eligible for grant funding. Refer to Section IIIB of the Guidelines for additional information.

Both the Joshua Basin Water District and Hi-Desert Water District have submitted AB1420 compliance tables and supporting documentation to DWR. Copies of the certification letters can be found in Attachment 13 - AB 1420 and Water Meter Compliance Information.

## Q13. Eligibility – Groundwater Management or Groundwater Recharge Projects

Does the Proposal include any groundwater management or groundwater recharge projects or projects with potential groundwater impacts? If so, provide the name(s) of the project(s) and list the agency(ies) that will implement the project(s)

All three projects include groundwater management or groundwater recharge projects each with potential (beneficial) groundwater impacts.

Mojave Water Agency Turf Removal Water Conservation Incentive Program – a water conservation project to conserve local groundwater supplies

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<sup>4</sup> CWC §525 – water meter installation as condition of receiving a water management grant

<sup>5</sup> AB 1420 (Laird, Chapter 628, Statutes of 2007) – CWC §10631.5 – implementation of demand management measures as condition of receiving a water management grant

Joshua Basin Water District Recharge Basin and Pipeline Project – a groundwater recharge project

Hi-Desert Water District Wastewater Treatment and Water Reclamation Project – a groundwater quality protection project that will eliminate over 5,500 septic tank systems

## Q14. Eligibility – Groundwater Management Plan Compliance

*For the agency (ies) listed in Q13, how has the agency complied with CWC §10753 regarding GWMPs, as described in Section III.B of the Grant Guidelines?*

The adopted 2004 Mojave Water Agency IRWMP included a fully-integrated Groundwater Management Plan that is in compliance with CWC 10753.

In addition, the Mojave Basin area and the Warren Valley Groundwater Basin are adjudicated, and the projects included in this application are in compliance with these adjudications.

## Q15. Eligibility – Delta Water Supply

*Does the IRWM region receive water supplied from the Sacramento-San Joaquin Delta? Please answer yes or no. If no, please explain. If yes, please answer Question 16.*

Yes. The Mojave Water Agency is a State Water Project contractor and receives water from the Sacramento-San Joaquin Delta.

## Q16. Eligibility – Reduced Dependence on Delta Water Supply

*Does the existing IRWM Plan help reduce dependence on the Sacramento-San Joaquin Delta for water supply? Please answer yes or no. If no, please explain. If yes, please complete Attachment 15.*

Yes. The existing IRWM Plan helps reduce dependence on the Sacramento-San Joaquin Delta for water supply.

## Q17. Eligibility- Delta Water Supply in IRWMP Update

*If an update to the plan takes place in the near future, will the updated plan continue to reduce dependence on the Sacramento-San Joaquin Delta for water supply? Please answer yes or no. If no, please explain. If yes, please complete Attachment 15.*

Yes. Updates to the IRWM Plan will continue to reduce dependence on the Sacramento-San Joaquin Delta for water supply.

# PROJECTS TAB

Each Project in the proposal should be detailed on a separate Project Tab. Applicants may generate as many Project Tabs as are necessary. The following questions will be used to gather information on each specific project.

## JOSHUA BASIN WATER DISTRICT RECHARGE BASIN AND PIPELINE PROJECT

### Project Benefits Information

Project Benefit Type	Benefit Type	Measurement	Description
Primary	Conveyance-Water Supply Enhancement	2,000 af/yr	Construct 4.4-mile pipeline to convey water to recharge site
Primary	Water Storage -- Groundwater-Water Supply Enhancement	2,000 af/yr	Recharge imported supplemental supply to halt groundwater overdraft
Primary	Water Storage -- Groundwater-Recharge area developed	2,000 af/yr	Construct 30-acres of recharge ponds
Secondary	Groundwater Management-Monitoring wells installed	1	Develop deep, multi-level monitoring well with USGS
Secondary	Modeling-Groundwater modeling developed or improved	1	Develop basin-wide groundwater model with USGS
Tertiary	Flood Protection	30 ac	Incorporate on-site stormwater detention and floodwater management berms into recharge
Tertiary	Trail construction/Improvement	2 mi	Construct two miles of recreation trail connecting local trails and parks near recharge

### Budget

The following budget items should be taken from Table 7, Exhibit B where applicable.

Joshua Basin Water District Recharge Basin and Pipeline Project	
Other State Contribution:	\$0
Local Contribution:	\$3,737,020
Federal Contribution:	\$291,000
In-kind Contribution:	\$0
Amount Requested:	\$4,000,000
<b>Total Project Cost:</b>	<b>\$8,028,020</b>

### Geographic Information

**Latitude/Longitude:** Joshua Basin Water District is centered on 34°07'37"N 116°19'07"W



**Location:** Joshua Basin Water District, 61750 Chollita Road, Joshua Tree, CA 92252

**County:** San Bernardino County

**Groundwater Basins:** Joshua Tree, Copper Mountain Valley

**Hydrologic Region:** Colorado River

**Watershed:** Portions of the Colorado River hydrologic region, which drain to terminal dry lakes in the Joshua Tree (170) watershed.

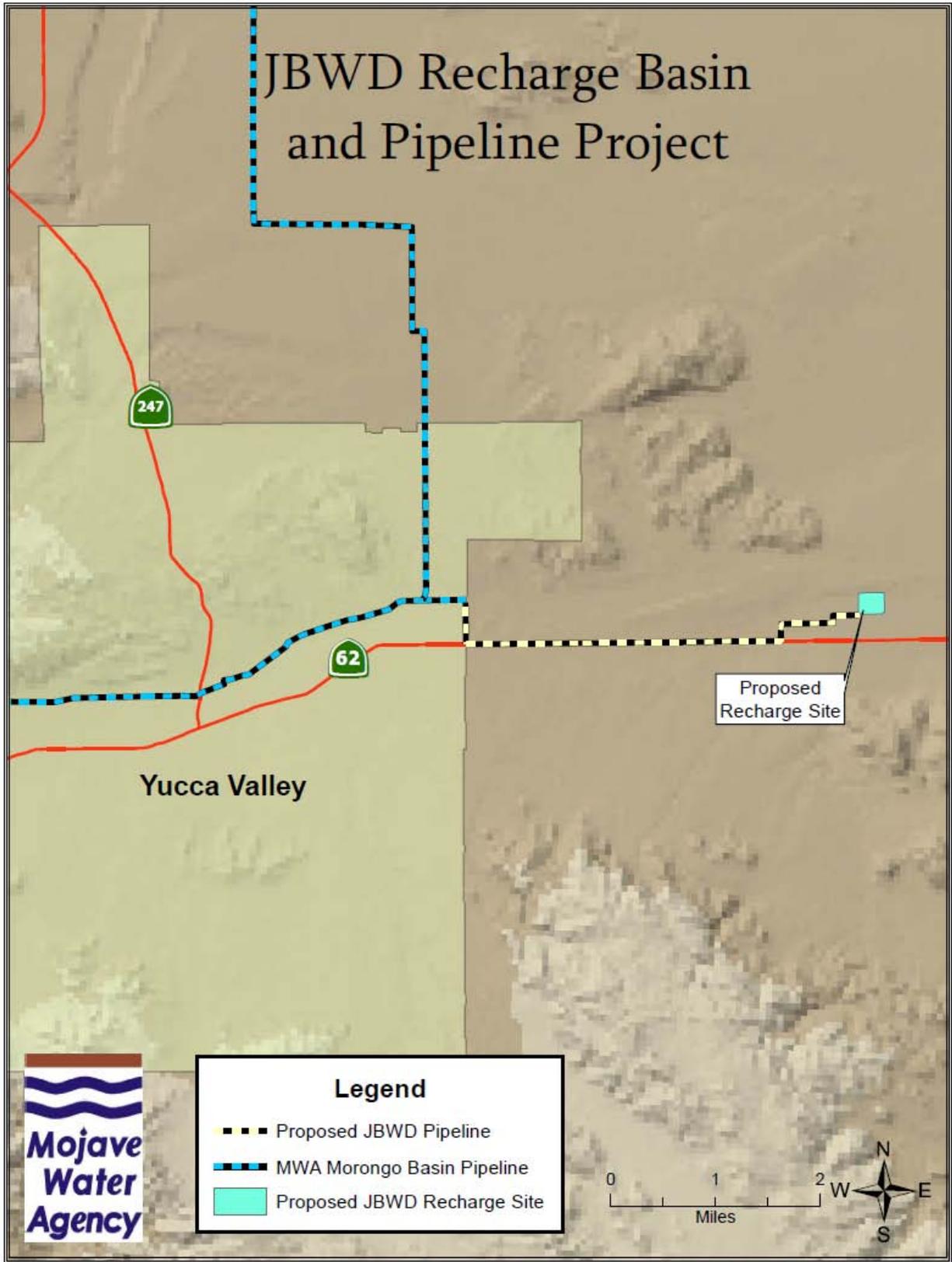
### *Legislative Information*

**Assembly District:** 65th Assembly District

**Senate District:** 18th Senate District

**US Congressional District:** District 41 (CA)

Figure 2 - Location Map: Joshua Basin Water District Recharge Basin and Pipeline Project



# HI-DESERT WATER DISTRICT WASTEWATER TREATMENT AND WATER RECLAMATION PROJECT

## Project Benefits Information

Project Benefit Type	Benefit Type	Measurement		Description
Primary	Water Quality Infrastructure-New wastewater treatment plant	140	average acre-ft per year	Construct Phase 1a of the HDWD Wastewater Treatment Plant
Primary	Conveyance-Water Quality Improvement	140	average acre-ft per year	Construct wastewater collection system
Primary	Water Use Efficiency - Recycling-Water Quality Improvement	140	average acre-ft per year	Recharge aquifer with tertiary treated effluent and eliminate septic systems
Tertiary	Flood Protection	40	ac	On-site stormflow detention and detention of stormflows upstream of disadvantaged community

## Budget

The following budget items should be taken from Table 7, Exhibit B where applicable.

Hi-Desert Water District Wastewater Treatment and Water Reclamation Project	
<b>Other State Contribution:</b>	\$0
<b>Local Contribution*:</b>	\$5,193,250
<b>Federal Contribution:</b>	\$3,689,750
<b>In-kind Contribution:</b>	\$0
<b>Amount Requested:</b>	\$4,000,000
<b>Total Project Cost:</b>	<b>\$12,883,000</b>
*includes \$5,193,250 State Revolving Fund loan	

## Geographic Information

**Latitude/Longitude:** Joshua Basin Water District is centered on 34°07'37"N 116°19'07"W

**Location:** Joshua Basin Water District, 61750 Chollita Road, Joshua Tree, CA 92252

**County:** San Bernardino County

**Groundwater Basins:** Joshua Tree, Copper Mountain Valley



**Hydrologic Regions:** Colorado River

**Watershed:** Portions of the Colorado River hydrologic region, which drain to terminal dry lakes in the Joshua Tree (170) watershed.

### *Legislative Information*

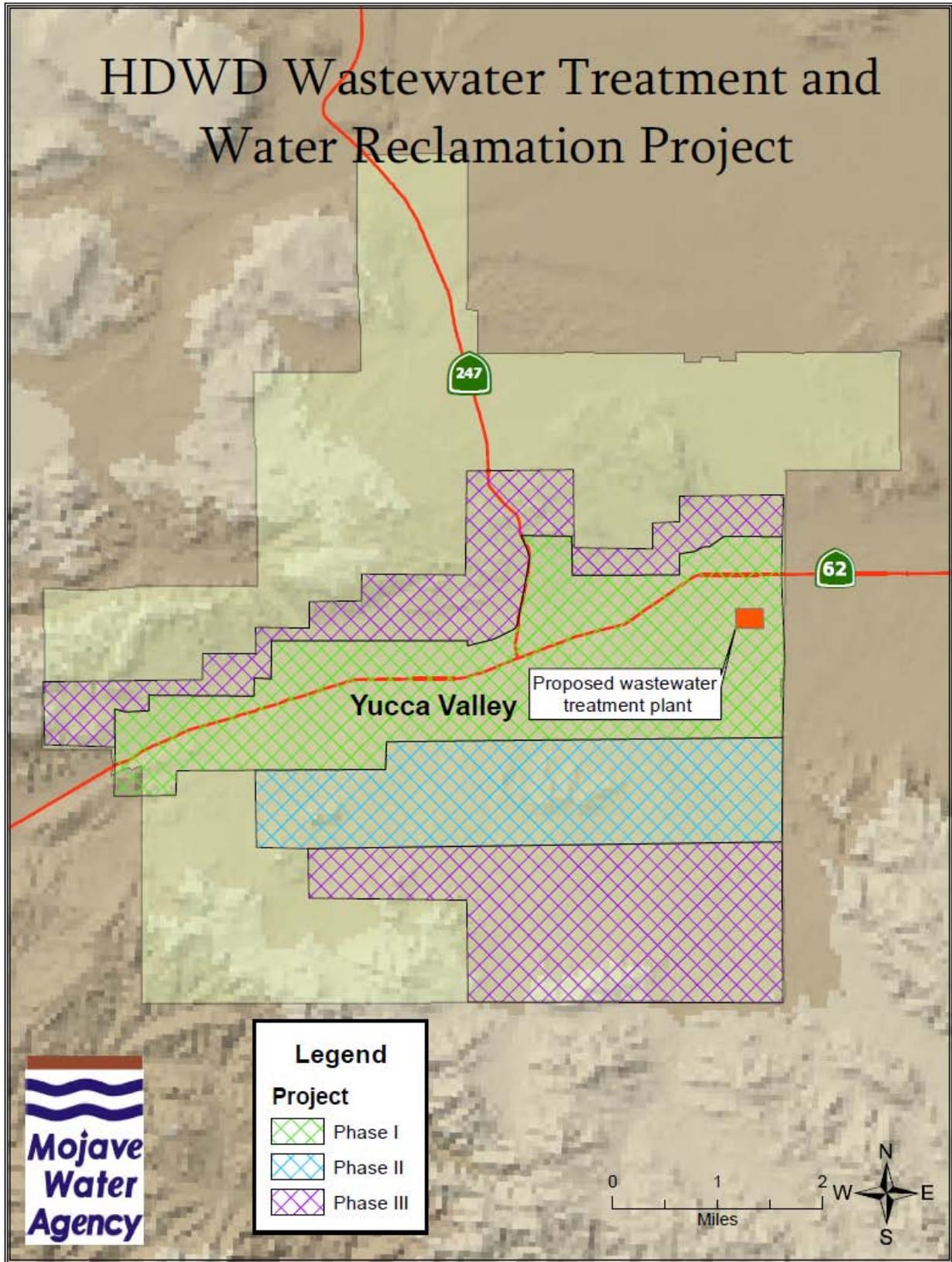
**Assembly District:** 65th Assembly District

**Senate District:** 18th Senate District

**US Congressional District:** District 41 (CA)



Figure 3 - Location Map: Hi-Desert Water District Water Treatment and Water Reclamation Project



# MOJAVE WATER AGENCY TURF REMOVAL WATER CONSERVATION INCENTIVE PROGRAM

## Project Benefits Information

Project Benefit Type	Benefit Type	Measurement		Description
Primary	Water Use Efficiency - Conservation-Water Demand/Conservation	1,012	average acre-ft per year	Remove high-water-use turf grass and replace low- or zero-water xeriscape
Secondary	Other-Water Conservation Studies	1		Implement long-term monitoring protocols to document long-term effectiveness of program and share this information with agencies statewide
Tertiary	Flood Protection	138	ac	Provide landscape architecture consultation to retain and percolate rainfall on-site, reducing flows to flood-prone areas

## Budget

Mojave Water Agency Turf Removal Conservation Incentive Program	
Other State Contribution:	\$0
Local Contribution:	\$1,000,000
Federal Contribution:	\$0
In-kind Contribution:	\$95,000
Amount Requested:	\$2,000,000
<b>Total Project Cost:</b>	<b>\$3,095,000</b>

## Geographic Information

**Latitude/Longitude:** The turf removal program centered on 34°41'24"N 117°04'10"W.

**Location:** The grant program will be administered from the Mojave Water Agency, 22450 Headquarters Drive, Apple Valley, California 92307, near the center of the turf removal area.

**County:** San Bernardino

**Groundwater Basins:** Coyote Lake Valley, El Mirage Valley, Harper Valley, Lower Mojave River Valley, Middle Mojave River Valley, Upper Mojave River Valley

**Hydrologic Regions:** South Lahontan



**Watershed:** The MWA Turf Removal Conservation Incentive Program will be offered in most of the Mojave River (161) watershed.

### *Legislative Information*

**Assembly District:** 36<sup>th</sup>, 59th Assembly Districts

**Senate District:** 17<sup>th</sup>, 18th Senate Districts

**US Congressional District:** District 25 (CA)



Figure 4 - Location Map: Mojave Water Agency Turf Removal Conservation Incentive Program

