

## Mojave Region IRWM Plan Potential Projects (Project Summary)

Project No.	Original Project No.	Project Category	Project Title	Lead Agency/ Organization	Project Description	Project Type	Estimated Project Cost	Project Benefits
3R	3	Water Supply / Recharge	Ames/Reche Groundwater Storage and Recovery Program - Phase II Expansion	Mojave Water Agency, Bighorn-Desert View Water Agency, Hi-Desert Water District	Expand the Ames/Reche Recharge Facility to accommodate the maximum potential delivery capacity of 3,000 acre-feet per year (AFY) (currently permitted for 1,500 AFY).	Conceptual	\$100K - \$1M	1,000+ acre-feet (AF) groundwater recharge
13R	13	Environmental & Recreation	Camp Cady: Tamarisk removal and riparian restoration program	Mojave Desert Resource Conservation District (MDRCD)	Invasive species (tamarisk) removal, expansion/improvement of endangered Mohave tui chub habitat and implementation of a sustainable engineered riparian habitat irrigation system.	Implementable Project	\$100K - \$1M	1-100 AF water savings; 500-1,000 acres habitat restoration.
18R	18	Conservation & Education	Commercial/Industrial/ Multi-Family Cash for Grass Program	Alliance for Water Awareness and Conservation	This project would expand the scope of turf removal projects in the Mojave Region to increase water savings throughout the region. The current \$10,000 rebate cap for commercial, industrial, and multi-family units has discouraged larger scale landscape conservation projects. The savings this project is expected to provide is approximately 55 gallons of water saved per year per square foot of grass removed.	Implementable Program	\$100K - \$1M	1,000+ AF water savings.
19	19	Individual or Small System Improvements	Conceptual Planning for Hinkley's Community Drinking Water System	MWA/Lahanton Regional Water Quality Control Board (RWQCB) /Department of Public Health (DPH) grant	Evaluate the concept of a community water system that draws water from a source of water that is not affected by the chromium plume. The water source must not be affected by plume expansion, remedial byproducts, or groundwater drawdown for the lifetime of the source and must be able to meet the water quality requirements.	Conceptual	N/A	Improved water supply for DAC.
21	21	Other	Dairy Nitrate Reduction	Mojave Desert Resource Conservation District (MDRCD)	Obtain funding – to be matched with NRCS/USDA funding – a possible 25% contribution – to: 1) Help dairies pay to haul manure off-site 2) Help fund infrastructure designed to apply waste pond water directly to adjacent fields via irrigation systems, etc. 3) Feasibility study to determine alternate uses of manure for fuels	Implementable	\$250K-\$1M	Protection of groundwater quality.
22	22	Water Supply / Recharge	Deep Creek Off-River Recharge And Storage Basins	Mojave Water Agency	Off River recharge and storage basins on the Deep Creek Properties: In conjunction with current recharge in the Mojave River, off river basins could be constructed that can be filled from the Morongo basin pipeline.	Conceptual Design	\$100K - \$1M	N/A
27	27	Flood Management	Dry Well Installation Program, Town wide, Town of Apple Valley	Town of Apple Valley	The proposed project consists of the construction of a series of dry well structures along natural flood water pathways, town wide, in the areas hardest hit by surface runoff flooding. The dry wells will make use of natural low-lying areas to capture storm water runoff, reduce flooding, and promote and maximize groundwater recharge.	Implementable Program	\$1M	Improved flood management and groundwater recharge.
29	29	Flood Management/ Recharge	Forks Dam Storm Water Detention	Mojave Water Agency	The project proposes that appropriate infrastructure could capture a significant portion of stormwater flow out of Afton Canyon and allow it to recharge area groundwater systems. This could be accomplished through various diversion structures along the river or make use of the existing Forks Dam to impound storm water. Impounded storm water could be slowly released from the Forks Dam at a rate that would allow percolation rather than run-off though Afton Canyon.	Conceptual	\$1M- >\$10M	The value of average lost storm water.
31	31	Wastewater / Recycled Water	Helendale Community Services District (CSD) - WWTP Effluent Distribution System	Helendale Community Services District	Design and construction of "Purple Pipe" pipeline system to convey effluent water to nearby Golf Course Irrigation system that currently uses pumped groundwater.	Conceptual	\$100K - \$1M	1,000+ AF water savings.

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32	32	Wastewater / Recycled Water	Helendale CSD Tertiary Treatment Upgrade	Helendale Community Services District	The project is designed to produce recycled tertiary water for use within the District service area by improving the WWTP processes to provide unrestricted Title 22 recycled water. The delivery phase is two-stage with minor delivery to Helendale Community Park for landscape irrigation and delivery to the Silver Lakes Association for golf course irrigation which would require an extensive pump station and force main. The next phase is recycled water storage required to store water during the wet months for use in the dry months and for use by the onsite farming operation.	Implementable Project	\$3,523,500	Increased recycled water supply and groundwater protection.
34	34	Other	Hydroelectric Facility at Deep Creek to generate power for R3 ground water wells	Mojave Water Agency	The Deep Creek Outlet to the Mojave River can generate electrical power for use by the Agency to power the R3 groundwater wells. Two options are possible: 1) construct Groundwater wells at Deep Creek FCF and extend the R3 pipeline to these wells. Our run Conduit and conductors from Deep Creek to the R3 Groundwater wells.	Conceptual	>\$10M	Electrical power generation.
35	35	Flood Management	Indian Cove Stormwater Capture and Recharge Project	Twentynine Palms Water District/Joshua Basin Water District	This project could mitigate past over-drafting and prevent future declines in water levels within this shared basin through stormwater capture and recharge in the Indian Cove groundwater basin.	Conceptual -	\$100K - \$1M	1-100 AF water savings; 1-100 AF new water supply.
36R	36	Individual or Small System Improvements	Infrastructure Improvements Projects	Joshua Basin Water District	Design and Construction of infrastructure replacements to improve efficiency and increase conservation of resources. Particular emphasis on water booster station improvement to reduce energy impacts (i.e. reduce in-rush impacts on pump start-up and increased efficiency of equipment.	Planning, Design, Construction	\$1M - \$10M	1-100 AF water savings; 1-100 AF groundwater recharge; reduction in energy consumption.
38R	38	Wastewater / Recycled Water	Central Wastewater Treatment Plant Project	Joshua Basin Water District	Design and construction of required central WWTP to include plant siting, WWTP design, trunk sewer alignment and design, environmental compliance, permitting and construction. Central WWTP provides long-term control of nitrate contamination in groundwater basin, as well as other contaminants identified in past studies.	Conceptual -	>\$10M	100-1,000 AF new recycled water supply; groundwater quality protection.
40R	40	Conservation & Education	Graywater & Rainwater Harvesting Project	Joshua Basin Water District	Development of design standards and funding of on-site collection facilities for capture of graywater and rainwater by individual property owners located in the JBWD service area. Public education is an important component of the project and will include printed materials and demonstration models of graywater and rainwater collection facilities.	Conceptual	\$100K - \$1M	1-100 AF water savings; 1-100 AF new water supply; 1-100 AF reduction in groundwater overdraft; reduction in flood damage
41R	41	Flood Management	Stormwater Recovery Project	Joshua Basin Water District	This project would capture and retain stormwater from local arroyos into the new recharge basin to enhance percolation potential into the groundwater basin. Includes studies to determine quantities of stormwater that could be recharged, engineering feasibility for retention and percolation and environmental review.	Feasibility Study	\$1M-\$10M	100-1,000 AF new water supply; 100-1,000 AF groundwater recharge; flood damage prevention
42R	42	Individual or Small System Improvements	Johnson Valley Pressurized Water System	Bighorn-Desert View Water Agency	This project would bring a pressurized water distribution system to the Agency's service area to improve quality of life, public health and provide for enhanced fire protection. Project should include additional studies for locating water supply wells (building on historical data and the existing conceptual model report), evaluate if existing monitoring Well No. JVHI can be deepened and converted to a production well and CEQA/NEPA studies.	Conceptual	>\$10M	1-100 AF new water supply.
49	49	Environmental & Recreation	Mojave River Walk Trail	City of Victorville	Walking / biking trail along the Mojave River. Combined recreational and public education project involving multiple participating agencies.	Conceptual	\$5.5M - \$12M	Encourages environmental resource stewardship.

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54	54	Water Supply / Recharge	Oro Grande Wash Groundwater Recharge Project	Mojave Water Agency	The Oro Grande Wash Groundwater Recharge Project has an ultimate delivery capacity for approximately 8,000 AF. The trunk facilities are designed to flow the full capacity. The Flow control facility and pipeline into the wash is designed to flow half of the capacity into a joint use San Bernardino County Flood Control Detention/Recharge Basin. This project (Phase 2 of the Oro Grande Wash Project) is to construct a second pipeline to the Wash and to another groundwater recharge area between Amethyst and Bear Valley Road.	Implementable Project	\$2M-\$3M	Increased groundwater recharge.
56R	56	Water Supply / Recharge	Alto Subarea Regional Aquifer Storage and Restoration (ASR2)	Mojave Water Agency	The Alto Subarea Regional Aquifer Storage and Restoration (ASR2) project would use water from the Mojave Water Agency R-Cubed infrastructure to inject potable water into existing municipal wells in the regional aquifer. Injection would be timed to periods when these wells would not normally be in service (fall-winter). Injected water would be available for immediate use by purveyors during normal demand periods (spring-summer). This project uses existing equipment with very little new infrastructure. Costs incurred would be for minimal retrofitting at wellheads, periodic well cleaning, and injected water.	Conceptual; Implementable Project	N/A	Improves water banking; enhances flood control and riparian restoration.
57	57	Wastewater / Recycled Water	Recycled Water Distribution System	City of Hesperia	Construct a water distribution system for the conveyance of recycled water from the proposed Subregional Treatment Plant in the City of Hesperia. The system would include a non-potable reservoir near the Subregional site, booster pumps, and approximately seven miles of "purple" pipeline to convey recycled water to the Hesperia Golf Club and several other users throughout the City.	Conceptual Design	\$1M - \$10M	1000+ AF new recycled water supply; 1000+ AF groundwater recharge
58	58	Water Supply / Recharge	Regional Aquifer Recharge Capacity	Mojave Water Agency	MWA has very little off-river aquifer recharge capacity. MWA needs to be able to accept a large quantity of water in a relatively short (wet) period. This could be accomplished through a variety of infrastructure. Once such infrastructure combination could include surface water impoundment for later distribution to recharge ponds, ASR injection wells, etc... In addition this project could easily be expanded to a water bank with an aqueduct pump-back component for "buy low/sell high" of banked water.	Conceptual	>\$10M	1-100 AF groundwater recharge; reduction in flood damage.
59	59	Flood Management	Regional Flood Control/Flood Management Plan	Mojave Water Agency	Prepare a multi-jurisdictional, regional flood control / flood management plan that integrates flood data and information, coordinates flood control efforts and infrastructure, and seeks to integrate flood management and water supply projects across the Mojave IRWM Region.	Conceptual	\$100K - \$1M	Benefits to public access/open space/habitat; reduction in flood damage.
60R	60	Other	Reorganization between two adjacent small water agencies (BDVWA and CSA 70 Zone W-1 [Landers])	Bighorn-Desert View Water Agency	Initiate reorganization through Local Agency Formation Commission (LAFCO). Provide for LAFCO processing fees, boundary map, preparation of TFM Report (Technical, Financial and Managerial) plan for operation of consolidated entities and evaluate physical infrastructure tie-in. Possible need for Master Plan identifying infrastructure improvements and build-out requirements.	Implementable Project	<\$100K	
62R		Baja / Ag Issues	Water Conservation Ordinance	County of San Bernardino	A water conservation ordinance in the unincorporated areas of San Bernardino County, within the MWA Jurisdictional Boundary. The MWA has said that the Judgment alone may not be adequate to address all of the water conservation measures that need to be taken to balance water supply and demands in the Baja Subarea. At a Silver Valley Farm Bureau meeting stakeholders were approached about signing into the stipulated agreement. At that time, County Ordinance 810.0605-810.0610 was referred to, to be our protection against unauthorized production. This ordinance was removed in 2007. A new ordinance could help to ensure an equitable share of the benefits made possible by the Physical Solution.	Implementable Project	<\$100K	
63	63	Flood Management	Sheep Creek Wash Storm Water	Phelan Piñon Hills Community Services District	The Sheep Creek Wash Storm Water Retention project is intended to capture storm water and recharge the Oeste Basin, in order to help minimize storm water damage and increase groundwater supplies. This conceptual plan would require diverting storm water flows from Sheep Creek Wash to a proposed recharge basin. Storm water flows would be monitored at the inlet of the basin. A proposed monitoring well will also be used to monitor static levels.	Conceptual	\$1M-\$10M	100-1,000 AF new recycled water supply; 100-1,000 AF groundwater recharge; reduction in flood damage.

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64	64	Flood Management	Silver Lakes Association Stormwater Debris - Retention Basin	Silver Lakes Association	Design and construction of a reinforced concrete storm water debris interceptor where Buckthorn Wash bisects the Silver Lakes Golf Course. Approx. size (LWD): 60-feet x 10-feet x 6-feet.	Conceptual, Design, Construct	<\$100K	Reduction in flood damage.
65	65	Water Supply / Recharge	State Water Project Utilization & Efficiency Strategy	Mojave Water Agency	Conceptual program with an overall goal to make the best use of the Region's State Water Project resources for maximum benefit to the Region. This would be an ongoing program with many possible elements and would explore a variety of opportunities to achieve the goal, including transfers, exchanges, purchases and sales of SWP water in concert with conjunctive use, groundwater and surface water storage programs, etc.	Conceptual	N/A	1,000+ AF new water supply; 1,000+ AF groundwater recharge.
66R	66	Water Supply / Recharge	State Water Project Water Treatment Plant in conjunction with R3 project	Mojave Water Agency	Construct a Water treatment plant to treat State Water Project Water and deliver directly into the potable R3 water delivery system. This can be done instead of pumping groundwater wells.	Conceptual	>\$10M	1,000+ AF new water supply; 1,000+ AF groundwater recharge.
68R	68	Flood Management	Storm Water Retention and Percolation in Hondo Wash Ruby Wash	Bighorn Desert View Water Agency	Retain storm flows in Hondo Wash and other drainages in the area to enhance percolation potential into Ames groundwater basin (Pipes Subbasin) and provide a mechanism for flood control that does not currently exist. Includes studies to determine quantities of flow that could be captured annually, engineering feasibility for retention and percolation, and environmental impact overview (Initial Study). Water could be retained behind shallow berms or even dam structures along narrow sections of the wash.	Conceptual	\$100K - \$1M	1-100 AF water savings; 1-100 AF new water supply; 1-100 AF groundwater recharge; reduction in flood damage.
72	72	Individual or Small System Improvements	Twentynine Palms Fluoride Treatment Plant Expansion	Twentynine Palms Water District	In the Mesquite Springs aquifer of the Twentynine Palms Groundwater basin, a second Fluoride Treatment Plant is needed for system redundancy. Project engineering will determine the size and volume of the plant that will produce the most cost-effective results for additional source development within the aquifer, protecting safe yield and preventing drawdown of the Indian Cove and Forty-nine Palms aquifers.	Study, Design, Construction	\$1M-\$10M	100-1,000 AF new water supply; 100-1,000 AF groundwater recharge.
73	73	Wastewater / Recycled Water	Twentynine Palms Groundwater Protection Plan Septic System Management Element (SSME)	Twentynine Palms Water District/City of Twentynine Palms	In order to protect the groundwater quality within Twentynine Palms, the Groundwater Protection Plan has identified a Septic System Management Program for monitoring and maintenance of the community's only supply of water, groundwater. Indoor conservation and the reduction of outflow to septic systems will be a significant focus of the septic maintenance and informational outreach goals.	Implementable Project	\$1M - \$10M	1-100 AF water savings.
74R	74	Individual or Small System Improvements	Water Infrastructure Restoration Program: Pipeline Installation/ Replacement Project	Bighorn-Desert View Water Agency	The existing BDVWA infrastructure has deficiencies which prevent it from meeting fire flow due to heavy reliance on 6-inch water mains and Class B fire hydrants; an inability to refill most reservoirs overnight after a 500-gallons per minute fire; and inefficient operation of two zones (E-2 and E-3) due to the manner in which they were originally constructed. Project would improve pressure, fire protection and public safety.	Conceptual	\$1M - \$10M	N/A
82	82	Water Supply / Recharge	Wrightwood Imported Water Project	Golden State Water Co - Wrightwood	Installation of a well near Desert Front Road, including a pump station and transmission main to import water from the lower elevations south of the town into the higher elevations in the north. Includes study, design and facilities.	Study, Design, Construction	>\$10M	N/A
86	86	Individual or Small System Improvements	Alta Loma Reservoir Replacement	Hi-Desert Water District	Increase of 1 MG in water storage capacity to ensure adequate emergency storage (current 250k deficit).	Conceptual	\$1M - \$10M	Increase of 1 MG in water storage capacity.
92R	92	Wastewater / Recycled Water	Wastewater Reclamation Project	Hi-Desert Water District	The project will provide centralized treatment of wastewater generated within the Town at a level consistent with that of the local discharge requirements of both the Regional Board and the CDPH. Wastewater will be collected and conveyed through a series of pipelines that make up the WRP's collection system. Once delivered to the treatment facility, the treated wastewater will be discharged into the East Hydrogeologic Subunit of the Warren Subbasin providing a future source of extractable groundwater.	Implementable Program	\$125,000,000	Groundwater quality protection.

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93	93	Wastewater / Recycled Water	Apple Valley & Hesperia Subregional Water Reclamation Facilities	Victor Valley Wastewater Reclamation Authority	Two scalping facilities that will treat liquids from existing collection system and reuse for irrigation purposes. Once complete, each facility will be able to process up to 1 million gallons per day (MGD) with the opportunity to expand each to 4 MGD.	Implementable Project	\$58,800,620	Increased treatment and reuse of recycled water.
94R	94	Individual or Small System Improvements	Fluoride and Arsenic Treatment	City of Adelanto	Construct an Arsenic and Fluoride Treatment System for Potable Well 8A, 5A and 4. Wells are in violation of current Environmental Protection Agency (EPA) Maximum Contaminant Levels (MCL's).	Conceptual	\$100K - \$1M	
95	95	Wastewater / Recycled Water	Adelanto Pearmain Relief Sewer Line	City of Adelanto	The project would consist of the installation of 12 to 18 inch sewer main and manholes from the waste water treatment plant on Auburn to the intersection of Air Expressway and Pearmain. The project would also connect new County HS that is built but not opened due to lack of County funding.	Implementable Program	\$1.35M	Improved sewer system connection and potential additional recycled water.
97	97	Wastewater / Recycled Water	Adelanto Reclaimed Water Delivery Infrastructure	City of Adelanto	Adelanto recently completed expansion of WWTP from 2.5 mgd to 4 mgd. This project is a feasibility study to consider options for expanding the WWTP to tertiary and evaluating potential rw users for viability both hydraulically and need.	Conceptual	\$1M - \$10M	100-1,000 AF water savings; 100-1,000 AF new recycled water supply; Env. Stewardship/awareness; wastewater pollution prevention.
98R	98	Wastewater / Recycled Water	Rehabilitation of Sewage Lift Station	City of Adelanto	Install new larger sewage lift station pit and pump station. Install new pumps and SCADA to same. Install new liner, SCADA communications. Work needed to prevent Sanitary Sewer Overflows.	Conceptual	\$100K - \$1M	Wastewater pollution prevention.
101	101	Flood Management	Cushenbury Flood Detention Basin	Mojave Water Agency	The project is proposed to capture runoff from the San Bernardino Mountains in the Lucerne Valley Subbasin. The project would divert storm flows to detention basins with high rates of percolation to decrease losses from evaporation.	Conceptual	\$100K - \$1M	100-1,000 AF new water supply; 100-1,000 AF groundwater recharge; reduction in flood damage.
102	102	Wastewater / Recycled Water	Local Wastewater Treatment Plant (Lucerne)	San Bernardino County	Wastewater treatment in the region is currently provided by individual septic tank systems. It is likely that at some point in the future, a municipal wastewater treatment facility will have to be built. (description from 2004 RWMP)	Conceptual	>\$10M	100-1,000 AF new recycled water supply; env. Stewardship.
103	103	Water Supply / Recharge	Lucerne Valley Recharge Ponds	Mojave Water Agency	This project provides an opportunity for recharge in the Este Subarea. Recharge sites have been contemplated both east and west of the Helendale Fault. The 1994 RWMP recommended constructing a facility east of the fault because the majority of pumping occurs east of fault. MWA has purchased land for a recharge facility, prepared preliminary construction plans, and performed the necessary environmental reviews.	Implementable Project	\$1M - \$10M	1,000+ AF new water supply; 1,000+ AF groundwater recharge.
105	105	Wastewater / Recycled Water	Wrightwood Sewer Plan	MWA/Lahanton RWQCB/DPH grant	The project is to develop a sewer plan for the Wrightwood Community.	Conceptual	\$1M-\$10M	100-1,000 AF water savings; 100-1,000 AF new water supply; 1-100 AF recycled water; 100-1,000 AF groundwater recharge.

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106	106	Water Supply / Recharge	Sheep Creek Recharge Basin and Two Wells	Phelan Piñon Hills Community Services District	This project consists of the construction of a recharge basin along with 2 pumping wells. The District is looking at utilizing the Sheep Creek California Aqueduct turn-out to extract State Water Project water to recharge the proposed basin utilizing the proposed pipeline. The two proposed wells will be used to pump water into our distribution system and will serve to monitor static and pumping levels of the ground water.	Conceptual	\$1M - \$10M	1,000+ AF new recycled water supply; 1,000+ AF groundwater recharge.
115	115	Environmental & Recreation	Land and Water Rights Acquisition	California Department of Fish & Wildlife	Acquire voluntary water transfers or water rights to reduce water use. Acquire riparian habitat along the Mojave River either in fee title or through the purchase of a conservation easement.	Implementable Project	\$1M - \$10M	N/A
116	116	Water Supply / Recharge	Replacement Water Supply for Perchlorate/Nitrate Affected Groundwater - Barstow Area	MWA/Lahanton RWQCB/DPH grant	Perform a feasibility study to determine the most cost effective and sustainable manner to design, construct and operate an alternative water supply for residents adversely affected by perchlorate and nitrate polluted groundwater in an unincorporated area northeast of Barstow.	Feasibility Study	\$100K - \$1M	1-100 AF new water supply.
117	117	Other	Water Supply and Quality	San Bernardino County Special Districts Department	Water quality and supply projects to meet existing and emerging regulatory requirements. Development of strategically constructed facilities to support and mitigate regional water quality and supply issues.	Conceptual; Feasibility	>\$10M	100-1,000 AF recycled water supply; 100-1,000 AF groundwater recharge.
118	118	Conservation & Education	Weather Based Irrigation/Completion of Demonstration Garden Project	Barstow Community College	This proposed project introduces Smart Controllers to maximize irrigation control of water use during the extreme environment condition and helps to manage water use in a normal environment as well. Smart Controllers would create an efficient schedule and give the ability to accommodate micro bursts and downpours of rain. The completion of the Barstow Community College garden project will give way to a High Desert regional concept.	Implementable Project	\$50K - \$100K	Water conservation and demand reduction.
121	121	Individual or Small System Improvements	Rehabilitate pre-1960 pipelines	Lake Arrowhead Community Services District (CSD)	Rehabilitation of miles of old wastewater pipelines.	Implementable Project	>\$10M	Water quality improvement/protection; potential 300 acres restoration.
122	122	Wastewater / Recycled Water	Effluent Outfall Replacement Project	Lake Arrowhead CSD	Replace and upsize the existing effluent outfall pipeline, which travels approximately ten (10) miles and drops 1,200 feet in elevation to property owned by Lake Arrowhead CSD in Hesperia.	Conceptual	>\$10M	1,000+ AF new water supply; 1,000+ AF groundwater recharge; reduction in flood damage.
125		Flood Control	Gage Tributary Washes	MWA	There has been ongoing discussion for years regarding storm water flow volume and basin contribution from ungagged desert washes. Simple gages could be installed at road under-crossings. These crossings often have concrete lined channels which makes them ideally suited as ready-made weirs for ephemeral stream gages. Place a pressure transducer in a one-foot steel pipe with holes drilled in it and bolt it to the side of the concrete channel and key washes could be accurately gaged for storm flow.	Conceptual; Implementable	<\$100K	Quantify flow in desert washes.
126		Conservation & Education	Community Park and Demo Garden	Helendale CSD	Helendale Community Park is only partially constructed. Current irrigation is using temporary agricultural pipe connected to our Ag well to irrigate a small section of grass. Project installs and maintains grass fields which will mitigate the blow sand and provide a community park play area for under-served children within the CSD boundary.	Implementable	<\$100K	13-21 AF water savings; air quality improvement due to the reduction of migrating blow sand.

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127		Individual or Small System Improvements	Water Well No. 10	Helendale CSD	Design and construction of new water supply well (Designated as Well #10) to replace old low-volume production wells which also are showing Gross Alpha emitters as well as arsenic contamination. The project includes the purchase of a well site, drilling of the well, full equipping and testing, easements for a transmission line from well site to connect to current southern terminous of the District water system.	Conceptual	\$1M-\$10M	100-1,000 AF new water supply; 1-100 AF reduction in groundwater overdraft.
128		Water Quality	Transition Zone Water Quality Study	MWA	Water quality constituents have impacted beneficial use of groundwater in the region around the Helendale fault. Water quality anomalies were further identified in the 2003 URS Transition Zone Report and the 2007 Schlumberger Salt Model Report. The dataset has matured since these earlier studies were completed and this would be a good point to take another look at the data and try to further our understanding of the groundwater chemistry affecting this area. Work could include water quality testing, drilling and well installation, geophysical investigations, and any other scientific techniques that may result in a better understanding of the water quality conditions in the region.	Conceptual	<\$100K	Improve local agency understanding of water quality issues in the Transition Zone.
129		Individual or Small System Improvements	Well Abandonment	HDWD	HDWD has identified 40 private and public wells within the Warren Valley Subbasin that require either destruction or protective measures to be installed. This project focuses on providing funding to well owners to complete the necessary work in an effort to protect the groundwater basin.	Implementable	\$100K - \$1M	Provides groundwater protection measures that benefit agency.
1001	**	Wastewater / Recycled Water	Sewer Lift Station or Reverse Osmosis (RO) Treatment Plant	City of Victorville	The lift station is preferred over the RO plant due to the ongoing operational and maintenance costs associated with RO. The RO project could integrate with other recycled water projects in the region, such as with the City of Adelanto; however, VSD 4 lift station is preferred over this project due to the ongoing operational and maintenance costs associated with reverse osmosis. Integrates Projects 17 and 61.	Conceptual; Implementable	\$1M-\$10M	1,000+ AF water savings; 1,000+ recycled water supply.
1002	**	Judgment/Water Rights Issues	Evaluate and consider potential modifications to the Judgment for the Baja Subarea	Mojave Water Agency	General project concept is to evaluate and consider potential modifications to the Mojave Basin Area Judgment for the Baja Subarea. The goal would be to maintain an equitable approach to water resource planning and development for all stakeholders in the Baja area and not deprive Baja of an equitable share of benefits made possible by the Physical Solution and Judgment. Further evaluation and consideration would be required by the Watermaster and the Court. The following general ideas were received through the IRWMP process and are summarized into two main groups for evaluation purposes. 1. Explore other ideas for Production Safe Yield as defined in the Judgment as an alternative sustainable target for management of Free Production Allowance in Baja. An evaluation may include changes to production rights and alternative Rampdown approaches. 2. Explore the potential for strategies to sell, lease or share Free Production Allowances among parties that could alleviate rampdown impacts to certain groups or types or agricultural operations. Integrates Projects 2, 11R, 20R, 46R, 67R, 76R and 104.	Conceptual	N/A	N/A
1003	**	Individual or Small System Improvements	Assistance Program for Small Drinking Water Systems	Mojave Water Agency, San Bernardino County Environmental Health Services	Program would identify water supply, water quality and infrastructure needs of small drinking water systems within the IRWM Region. Small systems needs may include but not limited to: Water quality treatment systems, fireflow protection, replacing aging infrastructure, install new infrastructure, interconnection with other purveyors, well drilling, scada systems, feasibility studies, etc. This program would help connect small systems to available funding by identifying funding sources, assisting with grant applications and paperwork, etc. Sources of funding could include State and Federal funds from a variety of programs designed to help small systems in the identified challenges listed. Integrates Projects 6, 7, 15, 44, 45R 52, 69, 80, 83, 84, 85, 100, and 120.	Conceptual	\$100K - \$10M	N/A

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Project No.	Original Project No.	Project Category	Project Title	Lead Agency/ Organization	Project Description	Project Type	Estimated Project Cost	Project Benefits
1004	**	Baja / Ag Issues	Baja Sustainability Initiative #1 (Agricultural Water Conservation and Base Annual Production Right (BAP) Acquisition Program)	Mojave Water Agency	This Agricultural Water Conservation program will be accomplished through several different means. It includes components of a Voluntary program funded entirely from local, state, federal and/or water fee dollars that purchase base annual production rights (BAP) from stipulated parties under the Mojave Basin Area Judgment. All BAP will be purchased by the Mojave Water Agency and be permanently retired. Each producer's percentage share of BAP will determine the eligible amount of BAP that can be sold to MWA. Also, a Crop Conversion program that would incentivize converting from water intensive crops like Alfalfa to other water efficient crops, with the ultimate goal of reducing costs to the point of making direct delivery of SWP viable and economically feasible. Integrates Projects 1, 10, 25, 55R, and 70R.	Implementable Project	\$1M - \$10M	1000+ AF water savings; 1000+ AF new water supply; 1000+ AF groundwater recharge
1005	**	Conservation & Education	Regional Demonstration Garden Program - Multiple Locations	Mojave Water Agency, Newberry Springs Community Services District (CSD), City of Victorville	Construction of a variety of demonstration gardens to engage and educate visitors and communities in solutions for creating beautiful and environmentally smart landscapes. Design would include development aimed at local biomes, taking in climate and soil types, and the need to demonstrate gardening, smart agriculture, irrigation infrastructure, etc. These gardens would be similarly improved in regards to education and information availability, for example, signage, information kiosks, educational material, and QR readers. Integrates Projects 5, 23, 33, and 123.	Conceptual and Implementable	<\$100k	100-1,000 AF water savings.
1006	**	Individual or Small System Improvements	Capital Water Main Replacement Program	Hi-Desert Water District	This project would include the replacement of 46,940 lineal feet of old; undersized steel water mains with that of PVC constructed water mains. During installation, new, properly spaced isolation valves and fire hydrants would also be installed along with service lines. Construction of this infrastructure would be in various areas within the Town of Yucca Valley. Integrates Projects 87-91.	Conceptual	\$3,520,500 - \$4,694,000	Increased water supply efficiency.
1007	**	Baja / Ag Issues	Baja Sustainability Initiative #2 (Baja Major Storm Diversion Network)	Mojave Water Agency	A major storm event diversion network to capture storm flows and transfer them to retention ponds that could then be disbursed on the south side of the valley to help facilitate recharge and recovery in areas that are unable to receive any natural benefit from storm flows that run down the river. A reduction in the velocity of the storm flows could also greatly assist in the prevention of scouring Cady Riparian Habitat. This would also include investigation into the possible utilization of pit at Kewitt, possible installation of weirs and irrigation channels to divert flood waters to percolation ponds, injection wells. Integrates Projects 8, 9, 43, 47, and 75.	Conceptual	\$1M-\$10M	1,000+ AF new water supply; 1,000+ AF groundwater recharge; reduction in flood damage.
1008	**	Water Supply / Recharge	R-Cubed Enhanced Purveyor Supply System	Mojave Water Agency	Design and install conveyance from R-Cubed to purveyors not currently connected to R-Cubed. This may be through direct conveyance or via interconnections with purveyors currently receiving R-Cubed water to "wheel" water to purveyors adjacent to their systems. The project includes study, design and facilities. Integrates Projects 37, 96, 124.	Conceptual	\$100K - \$1M	Increased water supply and reliability.
1009	**	Baja / Ag Issues	Baja Sustainability Initiative #3 (Channel Dredging, Flood Control, Riparian Protection and Vegetation Removal)	Mojave Desert Resource Conservation District (MDRCD)	The Mojave River is choked with vegetation causing channel capacities to be exceeded during major flood events. Removing the vegetation and/or excavating the channel would increase the carrying capacity and decrease the flood risk for select areas. By allowing flood water to flow without restrictions, areas downstream might have a higher probability to be naturally recharged during small and large storm events. Design and reinstate a channel(s) through project area to carry storm flows to reduce flooding of improved parcels. Integrates Projects 16 and 53.	Design/Implementable	N/A	1,000+ AF new water supply; 1,000+ AF groundwater recharge.
1010	**	Conservation & Education	JBWD CUWCC Compliance Project	Joshua Basin Water District	Urban water management planning requires planning, design and implementation of a variety of best management practices for the purposes of increasing conservation, educating the community on water issues, and reducing wasteful water practices. A large component of the proposed project is a system-wide leak detection program. Integrates Projects 39 and 99.	Conceptual	\$100K - \$1M	1-100 AF water savings; 1-100 AF reduction in groundwater overdraft; public awareness.
1011	**	Water Supply / Recharge	Antelope Valley Wash / Rancho Basin Recharge Ponds	City of Hesperia, MWA	The Ponds would provide groundwater recharge upgradient from Hesperia Water District wells. The Hesperia Master Plan of Drainage identifies a 65 acre site for a storm water detention basin in the Antelope Valley Wash south of the newly constructed Rancho Road. In addition to storm water detention, the site would be able to accommodate groundwater recharge. Integrates Projects 4 and 109.	Conceptual Design	\$1,700,000	1,000+ AF groundwater recharge; reduction in flood damage.



## Mojave Region IRWM Plan Potential Projects (Project Summary)

Project No.	Original Project No.	Project Category	Project Title	Lead Agency/ Organization	Project Description	Project Type	Estimated Project Cost	Project Benefits
1012	**	Water Supply / Recharge	Cedar Street / Bandicoot Detention Basin	City of Hesperia, MWA	The Basin would provide groundwater recharge upgradient from Hesperia Water District wells. The Hesperia Master Plan of Drainage identifies a 120 acre site for a storm water detention basin at the east end of Cedar Street and southwesterly of the California Aqueduct. In addition to storm water detention, the site would be able to accommodate groundwater recharge. Integrates Projects 14 and 107.	Conceptual Design	\$2,000,000	1,000+ AF groundwater recharge; reduction in flood damage.
1013	**	Baja / Ag Issues	Baja Sustainability Initiative #4 (Well Assistance Program)	Baja Sub-Advisory Committee	Financial assistance program to provide low interest loans and grants to help low income individuals finance the costs for construction, refurbishment or service of their individual household water wells. May also include requests for financial assistance for SPW from Mojave River Pipeline. Integrates Projects 26 and 81R.	Conceptual	\$100K - \$1M	1-100 AF new water supply.
1014	**	Conservation & Education	Water University	Mojave Water Agency, Alliance for Water Awareness and Conservation, JBWD	The Water University Program is a comprehensive educational and outreach program targeting teachers, real estate professionals, the business community, as well as the general public. This four-component program would offer curriculum for teachers to use in their classrooms for use in science and social studies classes. The second education component targets Fire Departments with education materials and presentations for greater water efficiencies. The third component targets businesses and the real estate community with water conservation information. The fourth component targets irrigation supervisors and contractors by offering a certificate program in water efficiency. Integrates Projects 30, 78, and 79.	Implementable Project		
1015	**	Flood Management - County	SB County Integrated Flood Projects	SB County Flood Control District	Flood projects throughout the Region all completed by SB County Flood Control District. Integrates Projects 108, 110-114.	Conceptual and Design		Reduction in flood damage.

\*\* Projects that are highlighted yellow are Integrated Projects, with the combined projects listed under the "Comments/Review Questions" Column for the Project.

\* Projects highlighted in purple have been added/changed since the November 5, 2013 Stakeholders meeting.

## Mojave Region IRWM Plan Potential Projects (Project Submittals Screened Out)

Project No.	Original Project No.	Project Category	Project Title	Lead Agency/ Organization	Project Description	Reason for Recommendation
The Project Team recommends that the following project submittals not be included in the Mojave IRWM Plan. Reasons for the recommendation are shown in the far right column.						
12		Water Supply / Recharge	Cadiz Valley Water Conservation, Recovery, and Storage Project	Cadiz Inc.	The project will implement a comprehensive, long-term groundwater management program for the groundwater basin underlying the Cadiz property. The project would produce 50,000 acre-feet per year of conserved water.	Did NOT resubmit project, so withdrew.
24R	24	Environmental & Recreation	Desert Wash Protection Watershed Enhancement	Submitted by Jenny Wilder, Apple Valley resident	This project would review all major and minor washes in the region to help prevent development from impacting down "stream" areas. Many desert washes in their natural undisturbed state are riparian areas that encourage percolation (act like a sponge), slowing down the flow of the water. When these washes are disturbed and/or narrowed, the flow increases and takes with it a lot of sand, causing flood damage downstream.	No sponsor.
28		Judgment/Water Rights Issues	Fair Taxation of Water Rights Acquired Outside the Original Adjudication	Submitted by Pauline Hass	Have the State Board of Equalization rewrite and lower the taxation of water rights acquired outside the original adjudication.	Did NOT resubmit project, so withdrew.
48R	48	Environmental & Recreation	Mojave River Dam-Deep Creek Spillway Wetlands restoration	Submitted by Jenny Wilder, Apple Valley resident	This is a site specific project at the end of Deep Creek Road. This project would integrate well with the Deep Creek Nature Center just being built and some of the other educational projects.	No sponsor.
50		Water Supply / Recharge	Morongo Basin Cooperative Projects	Joshua Basin Water District	Through a series of regional planning meetings, identify, design and implement a variety of projects with regional benefit, including water system inerties, regional education and conservation programs, potential regional water storage & recovery projects, wastewater management strategies, and other identified project for regional benefit.	Applicant requested to withdraw submittal.
51		Other	Multi-Jurisdictional Technology Integration Project	Joshua Basin Water District	Adjacent agencies have various forms of technologies (GIS, SCADA, CMMS, etc.) that can be standardized and integrated regionally to facilitate better communication and response in the event of a regional emergency. Project increase agency cooperation in normal operations as well by increasing regional communication.	Applicant requested to withdraw submittal.
77		Individual or Small System Improvements	Water Treatment Plant	Golden State Water Co - Barstow	Build water treatment plant in the Barstow area.	Did NOT resubmit project, so withdrew.
119		Baja / Ag Issues	Direct Delivery of State Project Water to NRG Energy		Raw water distribution network Mojave River Pipeline in Daggett and extending to NRG Energy. Would provide for the direct delivery of State Water Project (SWP) water to reduce groundwater pumping.	No sponsor.

Mojave Region IRWM Plan Potential Projects (Preliminary Ranking by Priority Objectives)

Project No.	Original Project No.	Project Category	Project Title	Lead Agency/ Organization	Comments/ Review Questions	Project Type	Prioritized Objectives														Primary Objectives	Importance	Urgency	Tier for Ranking	Get Real Rank							
							1 Balance Supply & Demand	3 Maintain Stable GW Basins	7 Support & Assist DAC's	2 Improve Water Use Efficiency	4 Reduce Reliance on Delta	5 Optimize Use of Assets	8 Improve Environmental Stewardship	9 Improve Floodplain Mgmt.	10 Preserve Water Quality	11 Obtain Financial Assistance	12 Improve Public Awareness	13 Establish Reliable Maintenance Funding	14 Increase Use of Recycled Water	6 Prevent Land Subsidence												
18R	18	Conservation & Education	Commercial/Industrial/ Multi-Family Cash for Grass Program	Alliance for Water Awareness and Conservation		Implementable Program	2	2		1	1					2	1				2,12	H	H	1	1							
60R	60	Other	Reorganization between two adjacent small water agencies (BDVWA and CSA 70 Zone W-1 [Landers])	Bighorn-Desert View Water Agency		Conceptual	4		1	2		1				2	4	2	4						7,5	H	H	1	1			
92R	92	Wastewater / Recycled Water	Wastewater Reclamation Project	Hi-Desert Water District		Implementable Project	2	2	1	2	2	2				1		2								7,10	H	H	1	1		
93	93	Wastewater / Recycled Water	Apple Valley & Hesperia Subregional Water Reclamation Facilities	Victor Valley Wastewater Reclamation Authority	2004 RWMP (VWVRA Subregional Wastewater	Implementable Project	2	2	2	2						2		2	2		1	1				4,14	H	H	1	1		
1011	**	Water Supply / Recharge	Antelope Valley Wash / Rancho Basin Recharge Ponds	City of Hesperia, MWA	Integrates Projects 4 and 109.	Conceptual Design		1				1		1			2										3	H	H	1	1	
19	19	Individual or Small System Improvements	Conceptual Planning for Hinkley's Community Drinking Water System	MWA/Lahanton Regional Water Quality Control Board (RWQCB) /Department of Public Health (DPH) grant	Hinkley Water Supply Augmentation - 2004 Regional Water Management Plan - MWA	Conceptual			1			2			2				2								7	H	H	1	2	
32	32	Wastewater / Recycled Water	Helendale Community Services District (CSD) Tertiary Treatment Upgrade	Helendale Community Services District		Implementable Project	1	1		2	1	1			1	4	2	2		1							10,1,3	H	H	1	2	
95	95	Wastewater / Recycled Water	Adelanto Pearmain Relief Sewer Line	City of Adelanto		Implementable Project		2	1	2		2			1	4	2			2							7,10	H	H	1	2	
106	106	Water Supply / Recharge	Sheep Creek Recharge Basin and Two Wells	Phelan Piñon Hills Community Services District	Sheep Creek Recharge Ponds 2004 RWMP	Conceptual	1	1	1		1	1			4		4			2							7	H	H	1	2	
116	116	Water Supply / Recharge	Replacement Water Supply for Perchlorate/Nitrate Affected Groundwater - Barstow Area	MWA/Lahanton RWQCB/DPH grant		Feasibility Study			1			1			1	4	4	4										7,5	H	H	1	2
1003	**	Individual or Small System Improvements	Assistance Program for Small Drinking Water Systems	Mojave Water Agency, San Bernardino County Environmental Health Services	Integrates Projects 6, 7, 15, 44, 45R, 52, 69, 80, 83, 84, 85, 100, and 120.	Conceptual	2	2	1						2	1		1										7,11	H	H	1	2
1004	**	Baja / Ag Issues	Baja Sustainability Initiative #1 (Agricultural Water Conservation and Base Annual Production Right (BAP) Acquisition Program)	Mojave Water Agency	Integrates Projects 1, 10, 25, 55R, and 70R.	Implementable Program	1	1	1	1		1	1			4	1											1,3,7	H	H	1	2
1012	**	Water Supply / Recharge	Cedar Street / Bandicoot Detention Basin	City of Hesperia, MWA	Integrates Projects 14 and 107.	Conceptual Design		1				1		1		2												3,5,9	H	H	1	2
3R	3	Water Supply / Recharge	Ames/Reche Groundwater Storage and Recovery Program - Phase II Expansion	Mojave Water Agency, Bighorn-Desert View Water Agency, and HDWD		Conceptual	1	1	1	2		2			2	4		4										1,3,7	H	H	1	3
22	22	Water Supply / Recharge	Deep Creek Off-River Recharge And Storage Basins	Mojave Water Agency		Conceptual Design	1	1			1	1			4													1,3	H	H	1	3
29	29	Flood Management/Recharge	Forks Dam Storm Water Detention	Mojave Water Agency		Conceptual	1	1	2		1	1	2		1	4	4		2		2		1					1,3,5	H	H	1	3

Mojave Region IRWM Plan Potential Projects (Preliminary Ranking by Priority Objectives)

Project No.	Original Project No.	Project Category	Project Title	Lead Agency/ Organization	Comments/ Review Questions	Project Type	Prioritized Objectives													Primary Objectives	Importance	Urgency	Tier for Ranking	Get Real Rank			
							1 Balance Supply & Demand	3 Maintain Stable GW Basins	7 Support & Assist DAC's	2 Improve Water Use Efficiency	4 Reduce Reliance on Delta	5 Optimize Use of Assets	8 Improve Environmental Stewardship	9 Improve Floodplain Mgmt.	10 Preserve Water Quality	11 Obtain Financial Assistance	12 Improve Public Awareness	13 Establish Reliable Maintenance Funding	14 Increase Use of Recycled Water						6 Prevent Land Subsidence		
35	35	Flood Management	Indian Cove Stormwater Capture and Recharge Project	Twentynine Palms Water District/JBWD		Conceptual		1	1					2	1	2		1				3,7	H	H	1	3	
42R	42	Individual or Small System Improvements	Johnson Valley Pressurized Water System	Bighorn-Desert View Water Agency		Conceptual	1	1	1			1			2	1	2	1					1,3,7	H	H	1	3
54	54	Water Supply / Recharge	Oro Grande Wash Groundwater Recharge	Mojave Water Agency		Implementable Project	1	1				1	1										1,3	H	H	1	3
56R	56	Water Supply / Recharge	Alto Subarea Regional Aquifer Storage and	Mojave Water Agency		Conceptual; Implementable	1	1	1			1	1	1	2	1	2				1		1,3,7	H	H	1	3
62R	62	Baja / Ag Issues	Water Conservation Ordinance	County of San Bernardino		Implementable	1	1	2	1	2	2	2	2	2	2	2	2	2	2	2	1	1	H	H	1	3
66R	66	Water Supply / Recharge	State Water Project Water Treatment Plant in conjunction with R3 project	Mojave Water Agency		Conceptual	1	1	2			1	1		1	2	2						3	H	H	1	3
73	73	Wastewater / Recycled Water	Twentynine Palms Groundwater Protection Plan Septic System Management Element (SSME)	Twentynine Palms Water District/City of Twentynine Palms		Implementable Program			1	2					1	2	1	1	1	1			7	H	H	1	3
74R	74	Individual or Small System Improvements	Water Infrastructure Restoration Program: Pipeline Installation/ Replacement Project	Bighorn-Desert View Water Agency		Conceptual			1				2			1	1	1	1	1			7	H	H	1	3
94R	94	Individual or Small System Improvements	Fluoride and Arsenic Treatment	City of Adelanto		Conceptual	1					1			1	1	1	1	1	1			1,5,10	H	H	1	3
101	101	Flood Management	Cushenbury Flood Detention Basin	Mojave Water Agency	2004 RWMP	Conceptual	1	2	1			1		1									1,7	H	H	1	3
102	102	Wastewater / Recycled Water	Local Wastewater Treatment Plant (Lucerne)	San Bernardino County	2004 RWMP	Conceptual			1						1					1			7,10	H	H	1	3
103	103	Water Supply / Recharge	Lucerne Valley Recharge Ponds	Mojave Water Agency	2004 RWMP	Implementable Project	1	1	1														1,3,7	H	H	1	3
1002	**	Judgment/Water Rights Issues	Evaluate and consider potential modifications to the Judgment for the Baja Subarea	Mojave Water Agency	Integrates Projects 2, 11R, 20R, 46R, 67R, 76R, and 104.	Conceptual	1	1	2	1	2	1	1		1	1	2	2	2	2	2		1,3	H	H	1	3
1007	**	Baja / Ag Issues	Baja Sustainability Initiative #2 (Baja Major Storm Diversion Network)	Mojave Water Agency	Integrates Projects 8, 9, 43, 47, and 75.	Conceptual	1	1	1			1		1		1	1	1	1	1	1		1,3,7	H	H	1	3
1013	**	Baja / Ag Issues	Baja Sustainability Initiative #4 (Well Assistance Program)	Baja Sub-Advisory Committee	Integrates Projects 26 and 81R.	Conceptual			1							1							7,11	H	H	1	3
13R	13	Environmental & Recreation	Camp Cady: Tamarisk removal and riparian restoration program	MDRCD		Implementable Project			2					1		2	2	2	2	2			8	H	M	2	1
118	118	Conservation & Education	Weather Based Irrigation/Completion of Demonstration Garden Project	Barstow Community College		Implementable Project					1						1						2,12	H	M	2	1
1001	**	Wastewater / Recycled Water	Sewer Lift Station or Reverse Osmosis Treatment Plant	City of Victorville	Integrates Projects 17 and 61.	Conceptual; Implementable	1	1	2			2	1		1					1			5,10,14	H	M	2	1
1006	**	Individual or Small System Improvements	Capital Water Main Replacement Program	Hi-Desert Water District	Integrates Projects 87-91.	Conceptual	2	2	2	2	2	1					1						5,2	H	M	2	1
21	21	Other	Dairy Nitrate Reduction	MDRCD		Implementable Program			2					2	2	1	1	2	2	2			10,11	H	M	2	2
34	34	Other	Hydroelectric Facility at Deep Creek to generate power for R3 ground water wells	Mojave Water Agency		Conceptual							1										5	H	M	2	2
49	49	Environmental & Recreation	Mojave River Walk Trail	City of Victorville		Conceptual			1	2				1			1						12,8,7	H	M	2	2

### Mojave Region IRWM Plan Potential Projects (Preliminary Ranking by Priority Objectives)

Project No.	Original Project No.	Project Category	Project Title	Lead Agency/ Organization	Comments/ Review Questions	Project Type	Prioritized Objectives														Primary Objectives	Importance	Urgency	Tier for Ranking	Get Real Rank					
							1 Balance Supply & Demand	3 Maintain Stable GW Basins	7 Support & Assist DAC's	2 Improve Water Use Efficiency	4 Reduce Reliance on Delta	5 Optimize Use of Assets	8 Improve Environmental Stewardship	9 Improve Floodplain Mgmt.	10 Preserve Water Quality	11 Obtain Financial Assistance	12 Improve Public Awareness	13 Establish Reliable Maintenance Funding	14 Increase Use of Recycled Water	6 Prevent Land Subsidence										
65	65	Water Supply / Recharge	State Water Project Utilization & Efficiency Strategy	Mojave Water Agency		Conceptual	2							1	1			2	2					4,5	H	M	2	2		
72	72	Individual or Small System Improvements	Twentynine Palms Fluoride Treatment Plant Expansion	Twentynine Palms Water District		Study, Design, Construction	1	1	2									1	2						10,3,1	H	M	2	2	
1009	**	Baja / Ag Issues	Baja Sustainability Initiative #3 (Channel Dredging, Flood Control, Riparian Protection and Vegetation Removal)	MDRCD	Integrates Projects 16 and 53.	Design/Implementable		1					1												9,8	H	M	2	2	
1010	**	Conservation & Education	JBWD CUWCC Compliance Project	Joshua Basin Water District	Integrates Projects 39 and 99.	Conceptual	1	1	2	1	2	1							2	1					2,1,3	H	M	2	2	
1014	**	Conservation & Education	Water University	Mojave Water Agency, Alliance for Water Awareness and Conservation, JBWD	Integrates Projects 30, 78, and 79.	Implementable Project			1	2	2								1						12	H	M	2	2	
1015	**	Flood Management - County	SB County Integrated Flood Projects	SB County Flood Control District	Integrates Projects 108, 110-114.	Conceptual and Design			1						1	2									9	H	M	2	2	
128		Water Quality	Transition Zone Water Quality Study	MWA		Conceptual							2						2						10	H	M	2	2	
129		Individual or Small System Improvements	Well Abandonment	HDWD		Implementable			1				2						1						10	H	M	2	2	
27	27	Flood Management	Dry Well Installation Program, Town wide, Town of Apple Valley	Town of Apple Valley		Implementable Program	1	1		2	1	1		1	1				2	2					9,1,3	H	M	2	3	
36R	36	Individual or Small System Improvements	Infrastructure Improvements Projects	Joshua Basin Water District		Planning, Design, Construction	2	2	2		2	1							2						5	H	M	2	3	
38R	38	Wastewater / Recycled Water	JBWD Central Wastewater Treatment Plant Project	Joshua Basin Water District		Conceptual	2	1	2	2	1	1							2	2					5,10	H	M	2	3	
40R	40	Conservation & Education	JBWD Graywater & Rainwater Harvesting Project	Joshua Basin Water District		Conceptual	2	2	2	2	1	1		2					2	1					5,12	H	M	2	3	
41R	41	Flood Management	JBWD Stormwater Recovery Project	Joshua Basin Water District		Feasibility Study	1		2					1	1				2						4,5,9	H	M	2	3	
58	58	Water Supply / Recharge	Regional Aquifer Recharge Capacity	Mojave Water Agency		Conceptual	1	1					2	2	2										1	4,5	H	M	2	3
59	59	Flood Management	Regional Flood Control/Flood Management Plan	Mojave Water Agency		Conceptual	2						2	1	2				2						9,5	H	M	2	3	
63	63	Flood Management	Sheep Creek Wash Storm Water	Phelan Piñon Hills Community Services District		Conceptual	2	1	1	2	1	1		1	1				2						9,5,7	H	M	2	3	
64	64	Flood Management	Silver Lakes Association Stormwater Debris - retention basin	Silver Lakes Association		Conceptual, Design, Construct								1	1				2						9,10	H	M	2	3	
68R	68	Flood Management	Storm Water Retention and Percolation in Hondo Wash Ruby Wash	Bighorn Desert View Water Agency		Conceptual	1	2	1	2	1	1		1	2				2	2					9,5,7	H	M	2	3	
82	82	Water Supply / Recharge	Wrightwood Imported Water Project	Golden State Water Co - Wrightwood		Study, Design, Construction	1	2	2	2	2	1		2	2				2	2					5	H	M	2	3	
86	86	Individual or Small System Improvements	Alta Loma Reservoir Replacement	Hi-Desert Water District		Conceptual													2						5	H	M	2	3	

### Mojave Region IRWM Plan Potential Projects (Preliminary Ranking by Priority Objectives)

Project No.	Original Project No.	Project Category	Project Title	Lead Agency/ Organization	Comments/ Review Questions	Project Type	Prioritized Objectives													Primary Objectives	Importance	Urgency	Tier for Ranking	Get Real Rank		
							1 Balance Supply & Demand	3 Maintain Stable GW Basins	7 Support & Assist DAC's	2 Improve Water Use Efficiency	4 Reduce Reliance on Delta	5 Optimize Use of Assets	8 Improve Environmental Stewardship	9 Improve Floodplain Mgmt.	10 Preserve Water Quality	11 Obtain Financial Assistance	12 Improve Public Awareness	13 Establish Reliable Maintenance Funding	14 Increase Use of Recycled Water						6 Prevent Land Subsidence	
97	97	Wastewater / Recycled Water	Adelanto Reclaimed Water Delivery Infrastructure	City of Adelanto		Conceptual			2		2					1	+	+		1		10,14	H	M	2	3
98R	98	Wastewater / Recycled Water	Rehabilitation of Sewage Lift Station	City of Adelanto		Conceptual										1	+					10	H	M	2	3
105	105	Wastewater / Recycled Water	Wrightwood Sewer Plan	MWA/Lahanton RWQCB/DPH grant		Planning	2	2				2	1			1	+					10,1	H	M	2	3
115	115	Environmental & Recreation	Land and Water Rights Acquisition	California Department of Fish & Wildlife		Implementable Program	1	1	2	1	2	2	1	2	1	+	+	+	+	+	2	8,2	H	M	2	3
117	117	Other	Water Supply and Quality	San Bernardino County Special Districts Department		Conceptual; Feasibility			1			2				1	+		+	2		10,7	H	M	2	3
121	121	Individual or Small System Improvements	Rehabilitate pre-1960 pipelines	Lake Arrowhead Community Services District (CSD)		Implementable Project	+	+	2	+	+	2		2	+	1	+	+	+	+	+	10	H	M	2	3
122	122	Wastewater / Recycled Water	Effluent Outfall Replacement Project	Lake Arrowhead CSD		Conceptual	1	1	2	+	+	1	2	+	1	+	+	+	+	1	+	10,14	H	M	2	3
1005	**	Conservation & Education	Regional Demonstration Garden Program - Multiple locations	Mojave Water Agency, Newberry Springs Community Services District (CSD), City of Victorville	Integrates Projects 5, 23, 33, and 123.	Conceptual and Implementable	2	2	1	2		1			2	+	1					12,2,8	H	M	2	3
1008	**	Water Supply / Recharge	R-Cubed Enhanced Purveyor Supply System	Mojave Water Agency	Integrates Projects 37, 96, 124.	Conceptual	2	2	2			1					+					5	H	M	2	3
125		Flood Control	Gage Tributary Washes	MWA		Conceptual and Implementable	2					1	2	2	2							5	H	M	2	3
126		Conservation & Education	Community Park and Demo Garden	Helendale Community Services District		Implementable	+	+		1		2			+	+	1	2				12	H	M	2	3
127		Individual or Small System Improvements	Water Well No. 10	Helendale Community Services District		Conceptual	+	+				2			1	+	+	+				10	H	M	2	3
57	57	Wastewater / Recycled Water	Recycled Water Distribution System	City of Hesperia		Conceptual Design			2						1					1		14,10	M	M	3	2
31	31	Wastewater / Recycled Water	Helendale Community Services District (CSD) - WWTP Effluent Distribution System	Helendale Community Services District		Conceptual	+	+		2	+				2	+	+			1		14,10	M	M	3	3

\*\* Projects that are highlighted yellow are Integrated Projects, with the combined projects listed under the "Comments/Review Questions" Column for the Project.

Notes: 1. Project Numbers >#103 were submitted in Round #2.  
 2. Project Numbers >1,000 are Integrated Projects.  
 3. Any Project Submittals that were Revised after Round #1, have their Project Numbers changed to ##R to indicate a revision has been made. For example, Project #10 became Project #10R.  
 4. Each project's contribution to Plan Objectives is shown under the Prioritized Objectives section. A number 1 shown under a specific Plan Objective indicates the proposed project makes a primary contribution to that objective. A number 2 indicates the proposed project makes a secondary contribution to that objective. The Consultant Team reviewed the project submittals and adjusted correlation between projects and Plan Objectives for consistency. Numbers shown in red with strikeout indicate the project submittal did not support contribution to that particular Plan Objective. Numbers shown in green with underline indicates project submittal suggests contribution to that particular Plan Objective even though the project proponent did not mark it. Numbers shown in blue with a double underline indicate that the level of contribution was adjusted.  
**Get Real Ranking** completed by Project Team and is defined as "a holistic view of the project's readiness to proceed with respect to financial backing and level of support" with a "1" being "yes, the project will proceed." A "2" being "maybe the project will proceed. There is momentum and interest in the project." And a "3" being "not sure if the project will go forward yet."  
 \* Projects highlighted in purple have been added/changed since the November 5, 2013 Stakeholders meeting.

## Projects Arranged by Proposed Priority

<p><b>Tier 2 (L,H)</b></p>	<p><b>Tier 1 (M,H)</b></p>	<p><b>Tier 1 (H,H)</b></p> <p style="text-align: center;"><b>GRI = 1</b></p> <p>18R – Commercial / Industrial / Multi-Family Cash for Grass Program</p> <p>60R – Reorganization between 2 Small Water Agencies (BDVWA and CSA 70 Zone W-1 [Landers])</p> <p>92R – Wastewater Reclamation Project (Hi-Desert WD)</p> <p>93 – Apple Valley &amp; Hesperia Subregional Water Reclamation Facilities - VVWRA</p> <p>1011 – Antelope Valley Wash / Rancho Basin Recharge Ponds</p> <p style="text-align: center;"><b>GRI = 2</b></p> <p>19 – Conceptual Planning for Hinkley’s Community Drinking Water System</p> <p>32 – Helendale CSD Tertiary Treatment Upgrade</p> <p>95 – Adelanto Pearmain Relief Sewer Line</p> <p>106 – Sheep Creek Recharge Basin &amp; Two Wells</p> <p>116 – Replacement Water Supply for Perchlorate / Nitrate Affected GW – Barstow Area</p> <p>1003 – Assistance Program for Small Drinking Water Systems</p> <p>1004 – Baja Sustainability Initiative #1 (Ag Water Conservation &amp; Base Annual Production Right Acquisition Program)</p> <p>1012 – Cedar Street / Bandicoot Detention Basin (City of Hesperia)</p>
<p><b>Tier 4 (L,M)</b></p>	<p><b>Tier 3 (M,M)</b></p> <p style="text-align: center;"><b>GR=2</b></p> <p>57 – Recycled Water Distribution System (City of Hesperia)</p>	<p><b>Tier 2 (H,M)</b></p> <p style="text-align: center;"><b>GRI=1</b></p> <p>13R – Camp Cady: Tamarisk Removal &amp; Riparian Restoration Program</p> <p>118 – Weather Based Irrigation / Completion of Demonstration Garden Project (Barstow CC)</p> <p>1001 – Sewer Lift Station or Reverse Osmosis Treatment Plant (City of Victorville)</p> <p>1006 – Capital Water Main Replacement Program (Hi-Desert WD)</p> <p style="text-align: center;"><b>GRI=2</b></p> <p>21 – Dairy Nitrate Reduction</p> <p>34 – Hydroelectric Facility at Deep Creek for R3 Wells</p> <p>49 – Mojave River Walk Trail</p>

		<p>65 – State Water Project Utilization &amp; Efficiency Strategy                  72 – Twentynine Palms Fluoride Treatment Plant Expansion                  1009 – Baja Sustainability Initiative #3 (Channel Dredging, Flood Control, Riparian Protection &amp; Vegetation Removal)                  1010 – Joshua Basin WD CUWCC Compliance                  1014 – Water University                  1015 – SB County Integrated Flood Projects                  128 – Transition Zone Water Quality Study                  129 - Well Abandonment</p>
<p><b>Tier 4 (L,L)</b></p>	<p><b>Tier 4 (M,L)</b></p> <p><b>GR=3</b>                  31 – Helendale CSD – WWTP Effluent Distribution System</p>	<p><b>Tier 3 (H,L)</b></p> <p><b>GR=3 from (H,H)</b></p> <p>3R – Ames/Reche GW Storage &amp; Recovery Program – Phase II Expansion                  22 – Deep Creek Off-River Recharge and Storage Basins                  29 – Forks Dam Storm Water Detention                  35 – Indian Cove Stormwater Capture &amp; Recharge                  42R – Johnson Valley Pressurized Water System                  44 – Lucerne Valley Small Water Systems Feasibility Study                  54 – Oro Grande Wash GW Recharge Project                  56R – Alto Subarea Regional Aquifer Storage &amp; Restoration (ASR2)                  62R – Water Conservation Ordinance                  66R – State Water Project Water Treatment Plant with R3                  73 – Twentynine Palms GW Protection Plan Septic System Mgmt. Element (SSME)                  74R – Water Infrastructure Restoration Program: Pipeline Installation / Replacement (Bighorn-Desert View)                  94R – Fluoride and Arsenic Treatment (City of Adelanto)                  101 – Cushenbury Flood Detention Basin                  102 – Local Wastewater Treatment Plant (Lucerne)                  103 – Lucerne Valley Recharge Ponds                  1002 – Policies Requiring Mods to the Mojave Basin Area Judgment                  1007 – Baja Sustainability Initiative #2 (Baja Major Storm Diversion Network)                  1013 – Baja Sustainability Initiative #4 (Well Assistance Program)</p> <p><b>GRI = 3 from (H,M)</b></p> <p>27 – Dry Well Installation Program (Town of Apple Valley)                  36R – Infrastructure Improvement Projects (Joshua Basin)                  38R – Joshua Basin WD Central WW Treatment Plant                  40R – Joshua Basin WD Graywater &amp; Rainwater Harvesting</p>



	<p>41R – Joshua Basin WD Stormwater Recovery                      58 – Regional Aquifer Recharge Capacity                      59 – Regional Flood Control / Flood Management Plan                      63 – Sheep Creek Wash Storm Water                      64 – Silver Lakes Assoc. Stormwater Debris Retention Basin                      68R – Storm Water Retention and Percolation in Hondo Wash Ruby Wash                      82 – Wrightwood Imported Water                      86 – Alta Loma Reservoir Replacement                      97 – Adelanto Reclaimed Water Delivery Infrastructure                      98R – Rehabilitation of Sewage Lift Station (City of Adelanto)                      105 – Wrightwood Sewer Plan                      115 – Land &amp; Water Rights Acquisition (California Dept. of Fish &amp; Wildlife)                      117 – Water Supply and Quality (San Bernardino County Special Districts Dept.)                      121 – Rehabilitate pre-1960 Pipelines (Lake Arrowhead CSD)                      122 – Effluent Outfall Replacement Project (Lake Arrowhead CSD)                      125 – Gage Tributary MWA Washes                      126 – Community Park and Demo Garden                      127 - Water Well No. 10                      1005 – Regional Demonstration Garden Program – Multiple Locations                      1008 – R-Cubed Enhanced Purveyor Supply System</p>
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Highlighted Projects have changed ranking/been added since the November 5, 2013 Stakeholder Meeting.

## Mojave Region IRWM Plan Project Number and Title

Project No.	Original Project No.	Project Integrated into Larger Project?	Project Title	Lead Agency/Organization
1	1	y, 1004	Agricultural Water Conservation Program	Mojave Water Agency (MWA)
2	2	y, 1002	Allocation of water ?	Submitted by Dean VanBasetlaar
3R	3	n	Ames/Reche Groundwater Storage and Recovery Program - Phase II Expansion	MWA, Bighorn-Desert View Water Agency (BDVWA), and Hi-Desert Water District (HDWD)
4	4	y, 1011	Antelope Valley Wash Detention/Recharge Ponds	City of Hesperia/MWA
5	5	y, 1005	Aquaponics Demonstration Gardens	MWA
6	6	y, 1003	Arsenic and Metering Project	Bar-Len Mutual Water Company
7	7	y, 1003	Assistance Program for Small Drinking Water Systems	MWA
8	8	y, 1007	Baja Major Storm Diversion Network	MWA
9	9	y, 1007	Baja Storm Water Diversion and Retention Project	Baja Sub-Advisory Committee
10	10	y, 1004	Baja Subarea Base Annual Production Right (BAP) Acquisition Program	Baja Sub-Advisory Committee
11R	11	y, 1002	Baja Water Budget	
12	12	n	Cadiz Valley Water Conservation, Recovery, and Storage Project	Cadiz Inc.
13R	13	n	Camp Cady: Tamarisk removal and riparian restoration program	Mojave Desert Resource Conservation District (MDRCD)
14	14	y, 1012	Cedar Street Detention/Recharge Basin	City of Hesperia/MWA
15	15	y, 1003	Center Water Company Wells, Infrastructure & Storage Project	Center Water Company
16	16	y, 1009	Channel Dredging and Vegetation Removal	Baja Sub-Advisory Committee
17	17	y, 1001	City of Victorville VSD 4 Sewer Lift Station	City of Victorville
18R	18	n	Commercial/Industrial/ Multi-Family Cash for Grass Program	Alliance for Water Awareness and Conservation
19	19	n	Conceptual Planning for Hinkley's Community Drinking Water System	MWA/Lahanton Regional Water Quality Control Board (RWQCB) /Department of Public Health (DPH) grant per
20R	20	y, 1002	Continual rampdowns in the Baja Sub Basin	
21	21	n	Dairy Nitrate Reduction	MDRCD
22	22	n	Deep Creek Off-River Recharge And Storage Basins	MWA
23	23	y, 1005	Desert Demonstration Garden	Newberry Community Services District
24R	24	n	Desert Wash Protection -Watershed Enhancement	
25	25	y, 1004	Direct Delivery of State Project Water to Agricultural Uses (Baja Sustainability Initiative #1)	MWA
26	26	y, 1013	Domestic Water Well System Assistance Program	
27	27	n	Dry Well Installation Program, Town wide, Town of Apple Valley	Town of Apple Valley
28	28	n	Fair Taxation of Water Rights Acquired Outside the Original Adjudication	
29	29	n	Forks Dam Storm Water Detention	MWA
30	30	y, 1014	Groundwater Education Program	Baja Sub-Advisory Committee
31	31	n	Helendale Community Services District (CSD) - WWTP Effluent Distribution System	Helendale Community Services District
32	32	n	Helendale CSD Tertiary Treatment Upgrade	Helendale Community Services District
33	33	y, 1005	High Desert Demonstration Gardens	MWA
34	34	n	Hydroelectric Facility at Deep Creek to generate power for R3 ground water wells	MWA
35	35	n	Indian Cove Stormwater Capture and Recharge Project	Twentynine Palms Water District/Joshua Basin Water District (JBWD)
36R	36	n	Infrastructure Improvements Projects	JBWD
37	37	y, 1008	Interconnection with Apple Valley Ranchos Water Company	Golden State Water Co - Apple Vly South
38R	38	n	Central Wastewater Treatment Plant Project	JBWD
39	39	y, 1010	JBWD CUWCC Compliance Project - Leak Detection	JBWD
40R	40	n	Graywater & Rainwater Harvesting Project	JBWD
41R	41	n	Stormwater Recovery Project	JBWD
42R	42	n	Johnson Valley Pressurized Water System	BDVWA
43	43	y, 1007	Kane Wash Spreading Basins	MWA

## Mojave Region IRWM Plan Project Number and Title

Project No.	Original Project No.	Project Integrated into Larger Project?	Project Title	Lead Agency/Organization
44	44	y, 1003	Lucerne Valley Small Water Systems Feasibility Study	Lucerne Valley Economic Development Association (LVEDA)
45R	45	y, 1003	Mesa Tank #4, Well #5, Well Generators, Booster Station Generator, etc.	Apple Valley Heights County Water District
46R	46	y, 1002	Mojave Water Basin Judgment and how it affects Baja	
47	47	y, 1007	Mojave River Baja Subarea Flood Control Basin Storage	MWA
48R	48	n	Mojave River Dam-Deep Creek Spillway Wetlands restoration	
49	49	n	Mojave River Walk Trail	City of Victorville
50	50	n	Morongo Basin Cooperative Projects	JBWD
51	51	n	Multi-Jurisdictional Technology Integration Project	JBWD
52	52	y, 1003	New Well - Kiowa Well No. 1	Golden State Water Co - Apple Vly South
53	53	y, 1009	Oro Grande Region Flood Control - Riparian Protection	MDRCD
54	54	n	Oro Grande Wash Groundwater Recharge Project	MWA
55R	55	y, 1004	Pipeline	Farmers Home Administration
56R	56	n	Alto Subarea Regional Aquifer Storage and Restoration (ASR2)	MWA
57	57	n	Recycled Water Distribution System	City of Hesperia
58	58	n	Regional Aquifer Recharge Capacity	MWA
59	59	n	Regional Flood Control/Flood Management Plan	MWA
60R	60	n	Reorganization between two adjacent small water agencies (BDVWA and CSA 70 Zone W-1 [Landers])	BDVWA
61	61	y, 1001	Reverse Osmosis Package Treatment Plant	City of Victorville
62R	62	n	Water Conservation Ordinance	County of San Bernardino
63	63	n	Sheep Creek Wash Storm Water	Phelan Piñon Hills Community Services District
64	64	n	Silver Lakes Association Stormwater Debris - Retention Basin	Silver Lakes Association
65	65	n	State Water Project Utilization & Efficiency Strategy	MWA
66R	66	n	State Water Project Water Treatment Plant in conjunction with R3 project	MWA
67R	67	y, 1002	Stipulated Pistachio Orchards	
68R	68	n	Storm Water Retention and Percolation in Hondo Wash Ruby Wash	BDVWA
69	69	y, 1003	Supervisory Control and Data Acquisition (SCADA) System for Operations and Security	BDVWA
70R	70	y, 1004	Supplemental Water	
71	71	n	The Baja Sustainability Initiative	MWA
72	72	n	Twentynine Palms Fluoride Treatment Plant Expansion	Twentynine Palms Water District
73	73	n	Twentynine Palms Groundwater Protection Plan Septic System Management Element (SSME)	Twentynine Palms Water District/City of Twentynine Palms
74R	74	n	Water Infrastructure Restoration Program: Pipeline Installation/ Replacement Project	BDVWA
75	75	y, 1007	Water retention in the lower basin	
76R	76	y, 1002	Water Transfers	
77	77	n	Water Treatment Plant	Golden State Water Co - Barstow
78	78	y, 1014	Water University	Alliance for Water Awareness and Conservation
79	79	y, 1014	Watershed Educational Awareness Project	MWA
80	80	y, 1003	Wellhead Treatment - Uranium	BDVWA
81R	81	y, 1013	Wells/declining water levels	
82	82	n	Wrightwood Imported Water Project	Golden State Water Co - Wrightwood
83	83	y, 1003	Yermo CSD - Upgrade Water Comp (?)	Yermo Community Services District
84	84	y, 1003	Yermo Hellbro	Yermo Community Services District
85	85	y, 1003	Yermo Marine Two	Yermo Community Services District
86	86	n	Alta Loma Reservoir Replacement	HDWD
87	87	y, 1006	Capital Water Main Replacement Program - Airline Project	HDWD
88	88	y, 1006	Capital Water Main Replacement Program - Antelope Project	HDWD
89	89	y, 1006	Capital Water Main Replacement Program - Balsa Ave. Project	HDWD
90	90	y, 1006	Capital Water Main Replacement Program - Gates of Spain Project	HDWD
91	91	y, 1006	Capital Water Main Replacement Program - Pinion Dr. Project -	HDWD
92R	92	n	Wastewater Reclamation Project	HDWD

## Mojave Region IRWM Plan Project Number and Title

Project No.	Original Project No.	Project Integrated into Larger Project?	Project Title	Lead Agency/Organization
93	93	n	Apple Valley & Hesperia Subregional Water Reclamation Facilities	Victor Valley Wastewater Reclamation Authority (VWVRA)
94R	94	n	Fluoride and Arsenic Treatment	City of Adelanto
95	95	n	Adelanto Pearmain Relief Sewer Line	City of Adelanto
96	96	y, 1008	Adelanto R-Cubed Connection	City of Adelanto
97	97	n	Adelanto Reclaimed Water Delivery Infrastructure	City of Adelanto
98R	98	n	Rehabilitation of Sewage Lift Station	City of Adelanto
99	99	y, 1010	JBWD CUWCC Compliance Project	JBWD
100	100	y, 1003	Thunderbird CWD Fluoride/Nitrate Treatment Plant	Thunderbird County Water District
101	101	n	Cushenbury Flood Detention Basin	MWA
102	102	n	Local Wastewater Treatment Plant (Lucerne)	San Bernardino County
103	103	n	Lucerne Valley Recharge Ponds	MWA
104	104	y, 1002	Baja Subarea Rampdown Equity	??
105	105	n	Wrightwood Sewer Plan	MWA/Lahanton RWQCB/DPH grant
106	106	n	Sheep Creek Recharge Basin and Two Wells	Phelan Piñon Hills Community Services District
107	107	y, 1012	Bandicoot Basin / Cedar Street Detention Basin	San Bernardino County Flood Control District
108	108	y, 1015	Oak Hills Basin / Hesperia Basin 2	San Bernardino County Flood Control District
109	109	y, 1011	Ranchero Basin / Antelope Valley Wash Recharge Ponds	San Bernardino County Flood Control District
110	110	y, 1015	Tussing - Juniper Basin	San Bernardino County Flood Control District
111	111	y, 1015	Donnell Basin	San Bernardino County Flood Control District
112	112	y, 1015	Seneca/Bus Barn Basin	San Bernardino County Flood Control District
113	113	y, 1015	Mesa Linda Basin	San Bernardino County Flood Control District
114	114	y, 1015	Amethyst Basin / Oro Grande Wash	San Bernardino County Flood Control District
115	115	n	Land and Water Rights Acquisition	CDFW
116	116	n	Replacement Water Supply for Perchlorate/Nitrate Affected Groundwater - Barstow Area	MWA/Lahanton RWQCB/DPH grant
117	117	n	Water Supply and Quality	San Bernardino County Special Districts Department
118	118	n	Weather Based Irrigation/Completion of Demonstration Garden Project	Barstow Community College
119	119	n	Direct Delivery of State Project Water to NRG Energy	
120	120	y, 1003	Bighorn-Desert View Water Agency Infrastructure, Emergency Preparedness and Storage Projects	BDVWA
121	121	n	Rehabilitate pre-1960 pipelines	Lake Arrowhead Community Services District (CSD)
122	122	n	Effluent Outfall Replacement Project	Lake Arrowhead CSD
123	123	y, 1005	Demonstration Garden Conceptual Projects	City of Victorville
124	124	y, 1008	Pipeline Interconnection - Apple Valley North and Apple Valley South Water Systems	Golden State Water Co
125	125	n	Gage Tributary Washes	MWA
126		n	Community Park and Demo Garden	Helendale CSD
127		n	Water Well No. 10	Helendale CSD
128		n	Transition Zone Water Quality Study	MWA
129		n	Well Abandonment	HDWD
1001	**	n/a	Sewer Lift Station or Reverse Osmosis (RO) Treatment Plant	City of Victorville
1002	**	n/a	Evaluate and consider potential modifications to the Judgment for the Baja Subarea	MWA
1003	**	n/a	Assistance Program for Small Drinking Water Systems	MWA, San Bernardino County Environmental Health Services
1004	**	n/a	Baja Sustainability Initiative #1 (Agricultural Water Conservation	MWA
1005	**	n/a	Regional Demonstration Garden Program - Multiple locations	MWA, Newberry Springs Community Services District (CSD), City of Victorville
1006	**	n/a	Capital Water Main Replacement Program	HDWD
1007	**	n/a	Baja Sustainability Initiative #2 (Baja Major Storm Diversion Network)	MWA
1008	**	n/a	R-Cubed Enhanced Purveyor Supply System	MWA
1009	**	n/a	Baja Sustainability Initiative #3 (Channel Dredging, Flood Control, Riparian Protection and Vegetation Removal)	MDRCD
1010	**	n/a	JBWD CUWCC Compliance Project	JBWD
1011	**	n/a	Antelope Valley Wash / Ranchero Basin Recharge Ponds	City of Hesperia/MWA
1012	**	n/a	Cedar Street / Bandicoot Detention Basin	City of Hesperia/MWA
1013	**	n/a	Baja Sustainability Initiative #4 (Well Assistance Program)	Baja Sub-Advisory Committee
1014	**	n/a	Water University	MWA, Alliance for Water Awareness and Conservation, JBWD
1015	**	n/a	SB County Integrated Flood Projects	SB County Flood Control District

\*\* Indicates an Integrated Project.

Projects highlighted in this color indicate that the projects have been recommended to be screened out and not included in the list of projects in the adopted IRWM Plan.

## Mojave Region IRWM Plan Project Number and Title

Project No.	Original Project No.	Project Integrated into Larger Project?	Project Title	Lead Agency/Organization
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Projects highlighted in this color indicate that the projects are new since the last version.

# Summary of Proposed Governance Structure for Implementation of the Mojave IRWM Plan

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## *Mojave Integrated Regional Water Management Plan*

The Propositions 84 & 1E IRWM Guidelines published by the California Department of Water Resources (DWR) in November 2012 state:

“The IRWM Plan must document a governance structure that ensures the IRWM Plan will be updated and implemented beyond existing State grant programs.”

There are more specific requirements (referred to as the Governance Standard) described in the Guidelines that clarify what this statement means.

“The intent of the Governance Standard is to ensure that an IRWM Plan has the structures and procedures that maximize functionality, participation in the Plan, and plan longevity.”

## Highlights of Proposed Governance Structure for Plan Implementation

This portion of the document contains a high level summary of the proposed governance structure for implementation of the Mojave IRWM Plan.

- Continue with a Mojave Regional Water Management Group formed by a memorandum of understanding (MOU). Each existing member of the Regional Water Management Group formed to develop the IRWM Plan will be invited to participate as a member of the RWMG for implementation. Current members include:
  - Mojave Water Agency (MWA) (statutory authority for water management)
  - Victor Valley Wastewater Reclamation Authority (statutory authority for water management)
  - MWA Technical Advisory Committee
  - Mojave Desert Resource Conservation District (statutory authority for water management)
  - Morongo Basin Pipeline Commission (statutory authority for water management)
- Continue with a Coordinating Committee made up of one primary and one alternate representative designated by each member organization of the RWMG.

- Establish an IRWM Plan Implementation Support Team (similar to the Project Team that has helped develop the Plan):
  - The Implementation Support Team will consist of members of the Coordinating Committee and other staff or representatives from agencies and organizations responsible for various aspects of integrated water management in the Mojave Region.
  - The Mojave Water Agency will provide a professional staff person to serve as the Team Leader for the Implementation Support Team.
  - Members of the Implementation Support Team will be selected to serve by the Coordinating Committee with input from the Stakeholder Group.
  - Members of the Implementation Support Team must be knowledgeable about one or more aspects of integrated water management and must commit to regular participation in Implementation Support Team meetings.
- The decisions authorized by the member agencies of the RWMG will continue to be made using the decision making approach employed during development of the Mojave IRWM Plan:
  - Strive for Facilitated Broad Agreement – all interested participants will be invited to participate as equals during Stakeholder Input Meetings to discuss content, processes, and decisions related to implementation of the Mojave IRWM Plan. When decisions are needed, the facilitator of the meeting will assess whether broad agreement has been reached. If not, discussions will continue to try and reach broad agreement. The Implementation Support Team may choose to have a Team member facilitate Stakeholder meetings or retain an outside facilitator as needed.
  - If for some reason broad agreement cannot be reached on a particular topic during a Stakeholder meeting, the Implementation Support Team Leader may request that the Coordinating Committee conduct a vote to decide how to proceed. When a vote is requested, each member of the RWMG will have one vote and a simple majority vote will determine the outcome.
- The Coordinating Committee or Implementation Support Team may form subcommittees to focus on specific topics.

### **What the Coordinating Committee and Implementation Support Team Will Do**

The main purpose of the Coordinating Committee and Implementation Support Team is to provide leadership and focus toward long-term collaboration and cooperation among implementing agencies and organizations to meet the Plan objectives. The primary roles of the Coordinating Committee (on behalf of the RWMG) and Implementation Support Team include:

- Promote progress toward accomplishing IRWM Plan Objectives.
- Conduct Stakeholder meetings related to Plan implementation, performance tracking, and Plan updates.
- Cooperate with project proponents to help implement projects listed in the IRWM Plan.

- Foster continued and effective communication among stakeholders within the Region that support implementation of the Mojave IRWM Plan.
- Maintain the MyWaterPlan.com website.
- Update the Mojave IRWM Plan as needed.
- Track grant and other funding opportunities to help project proponents implement projects included in the Mojave IRWM Plan; Lead grant application efforts with appropriate project proponents.
- Coordinate with neighboring IRWM efforts, state agencies, and federal agencies.
- Track and report on progress toward meeting the Plan Objectives.
- Manage and share data and information relevant to Plan implementation.

## Participants, Roles, and Activities

Some of the key groups that will be involved in implementation of the Mojave IRWM Plan are:

- The Mojave Regional Water Management Group (RWMG) – a group of five organizations with authority to manage or advise management of water or related resources within the Region who are signatories to an MOU to establish the RWMG as described above.
- The Mojave Coordinating Committee (CC) – a committee of designated representatives (primary and alternate) of each organization within the RWMG. The CC will select a Chair and Vice-Chair each year. The Chair (and in the absence of the Chair, the Vice-Chair) will be responsible to lead the efforts of the CC during the year. The Chair and Vice-Chair will be selected each year by unanimous approval of the Coordinating Committee.
- The Implementation Support Team (IST) – a team that will consist of the Coordinating Committee and other staff or representatives from members of agencies and organizations responsible for various aspects of integrated water management in the Region. The Mojave Water Agency will provide a professional staff person to serve as the *Team Leader* for the Implementation Support Team. Members of the Implementation Support Team will be selected by the Coordinating Committee with input from the Stakeholder Group. Members of the Implementation Support Team must be knowledgeable about one or more aspects of integrated water management and must commit to regular participation in Implementation Support Team meetings.
- The Stakeholder Group – a collection of people who choose to participate in the Mojave IRWM Plan implementation activities.
- Subcommittees – the CC or IST may choose to organize one or more small group(s) of people chartered to focus on a particular topic related to implementation of the Mojave Plan.
- Project Proponents – agencies or organizations who are serving as a project proponent / project implementer in the Mojave Plan.



**Table 1 – Activities, Participants, and Roles for Implementing the Mojave IRWM Plan**

Activities	RWMG	CC	Implementa tion Support Team	Stakeholder Group / Subcommittees	Project Proponents
<b>1. Promote Progress on Plan Objectives</b>					
Foster Collaboration	Authorize	Lead	Lead	Participate	Participate
Gather Data Related to Progress	"	Support	"	"	"
Synthesize Data Related to Progress	"	"	"	"	"
Report On Plan Progress	"	"	"	"	"
<b>2. Conduct Stakeholder Meetings</b>					
Schedule Meetings	Authorize	Participate	Lead	Support	Support
Prepare Agendas	"	"	"	"	"
Prepare Content	"	"	"	"	"
Facilitate Meetings	"	"	"		
Prepare Meeting Summaries	"	"	"		
<b>3. Engage Public</b>					
Maintain Email List	Authorize	Support	Lead	Support	Support
Develop Content	"	"	"	"	"
Send Announcements / Invitations	"	"	"	"	"
<b>4. Maintain Mojave IRWM Plan Website<sup>(b)</sup></b>					
Update Content	Authorize	Support	Lead	Support	Support
Administer Site	"	"	"	"	"
<b>5. Update Mojave IRWM Plan</b>					
Receive Project Submittals	Authorize	Support	Lead	Support	Submit Potential Projects
Review and Update Objectives	Authorize	Participate and Decide if Necessary <sup>(a)</sup>	Lead	Participate	Participate
Revise Project List	"	"	"	"	"
Revise Project Priorities	"	"	"	"	"
Revise Plan Content	"	"	"	"	"
<b>6. Pursue Grant Funds for Implementation</b>					
Identify Grant Opportunities	Authorize	Participate	Lead	Support	Support
Select Projects for Inclusion in Grant Applications	Authorize	Participate and Decide if Necessary <sup>(a)</sup>	Lead	Participate	Participate
Prepare and Submit Grant Applications <sup>(b)</sup>	Authorize	"	Lead	Participate	Participate
Identify One or More Willing Fiscal Agent(s) to Manage Grant Funds (If Received) on Behalf of the RWMG <sup>(b)</sup>	Authorize	Lead	Lead	Support	One or More Agency Or Organization Serve As Fiscal Agent
<b>7. Coordinate with Related Efforts</b>					
Coordinate with Neighboring IRWM Regions	Authorize	Support	Lead	Support	Support

Activities	RWMG	CC	Implementa tion Support Team	Stakeholder Group / Subcommittees	Project Proponents
Coordinate with Local, State, and Federal Agencies	"	"	"	"	"
<b>8. Foster Effective Communication</b>					
Facilitate Efficient and Effective Communication Within Implementing Agencies and Stakeholders	Authorize	Participate	Lead	Support	Support
Facilitate Efficient and Effective Communication Outside of Mojave Region	"	"	"	"	"
<b>9. Manage and Share Related Data and Information</b>					
Identify Data and Operational Data That Should Be Measured and Managed To Meet Plan Objectives	Authorize	Support	Lead	Support	Support
Gather The Needed Data and Information		Support	Coordinate with Existing Agencies	Support	Support
Store and Manage Needed Information		"	"	"	"
<b>10. Finance Implementation Coordination Activities</b>					
Set Annual Operating Budget for Implementation Coordination	Authorize and possibly provide funds	Provide Guidance	Lead	Support	Support
Manage Expenditures of Implementation Coordination Activities	Authorize and Invite Financial Participation as Needed	Provide Guidance	Lead		

- (a) "Decide if Necessary" means that the project team and the stakeholders were not able to reach broad agreement and the CC will decide based on majority vote.
- (b) Considered "optional" – this role is not specifically required by DWR 2012 IRWM Guidelines.

## Public Involvement Processes

- The Implementation Support Team will conduct Stakeholder Input meetings at least once per quarter to discuss relevant topics of progress on implementation of the Mojave IRWM Plan. The Coordinating Committee or Implementation Support Team may convene additional meetings as desired to support fulfilling the objectives of the Plan.
- Due to the large geographic extent of the Region, the Implementation Support Team will provide an opportunity for stakeholders to participate remotely in the Stakeholder meetings. The opportunity for stakeholders to participate in Stakeholder meetings from a remote location could include conference calls, web interface, or other technologies that allow for reasonable interaction while the meeting is in progress.
- The Implementation Support Team will maintain and update content to the Mojave IRWM Plan website.
- The Implementation Support Team will maintain a contact e-mail and phone number for people to send comments or ask questions about the Mojave IRWM Plan.
- The Implementation Support Team will maintain the Mojave stakeholder e-mail list and send updates and meeting invitations as appropriate.
- The Implementation Support Team will coordinate the activities of subcommittees (if any are formed) including tracking of subcommittee membership, scope of subcommittee activities, and maintaining documentation of subcommittee recommendations to the Implementation Support Team.

## Decision Making

- Decisions authorized by the Regional Water Management Group will continue to be made using facilitated broad agreement as during the development of the Plan.
- All interested participants will be invited to participate as equals during Stakeholder Input Meetings to discuss implementation activities to meet the objectives in the IRWM Plan. The Implementation Support Team will set agendas, interact with stakeholders, and foster collaborative decisions as described in Table 1.
- If for some reason broad agreement cannot be reached between the Implementation Support Team and the Stakeholder Group related to specific items within a reasonable amount of time and effort, the Implementation Support Team Leader may request that the Coordinating Committee conduct a vote to decide how to proceed. When a vote is requested, each member of the RWMG will have one vote and a simple majority vote will determine the outcome.

## Balanced Access and Opportunity for Participation

- The Implementation Support Team will conduct outreach, create content and facilitate Stakeholder Input meetings and communicate the results of any Subcommittee work. During the Stakeholder Input meetings all interested participants are invited to participate as equals in the interaction to reach broad agreement on the implementation of the Plan.

- The Implementation Support Team will continue to foster dialog with community members and representatives of disadvantaged communities within the Region as needed to support meeting the objectives of the Plan.
- The Implementation Support Team will post meeting materials and other relevant information and invite review and comment from any interested person or organization.

### **Internal and External Communication**

- The Implementation Support Team will prepare communication materials for distribution, posting on the project website, and for use in meetings with governing boards and other interested parties.
- The Implementation Support Team will conduct Stakeholder Input Meetings at least quarterly that are announced and open to any stakeholder.
- Implementation Support Team members will meet and coordinate with neighboring IRWM planning efforts, other local, state, and federal agencies as they relate to accomplishing the objectives in the Mojave IRWM Plan.

### **Long-term Implementation of the IRWM Plan**

Implementation of the Mojave IRWM Plan will rely on actions taken by existing agencies and organizations within the Region. The RWMG as represented by the Coordinating Committee and in cooperation with the Implementation Support Team will provide leadership for fostering cooperation, continuing coordination, tracking of Plan performance, and updating of the Mojave IRWM Plan. The Coordinating Committee and Implementation Support Team may form stakeholder subcommittees to help focus collaboration and progress on specific topics or objectives. (Note: the tracking of Plan Performance does not replace required regulatory reporting by specific agencies within the region and the Plan Performance tracking is being done to monitor progress on Plan implementation and provide information that can be useful for continuing implementation of, updating or amending the Plan.)

### **Coordination with Neighboring IRWM Efforts, State Agencies, and Federal Agencies**

Members of the Implementation Support Team will engage with neighboring IRWM efforts and continue to communicate with DWR and other state and federal agencies that have interests or could impact meeting the objectives of the Plan.

### **Making Changes to the IRWM Plan**

- The Implementation Support Team will review the Mojave IRWM Plan at least once every five years to determine if the content of the Plan needs to be changed in a significant way other than the periodic updates or amendments of the objectives and projects as described below.
- If significant changes are needed, the Coordinating Committee and Implementation Support Team will lead the process for revising the Plan. Once substantial revisions are made, the

Implementation Support Team will request that Regional Water Management Group members and project proponents adopt the revised plan.

## **Updating or Amending the IRWM Plan**

- The Implementation Support Team will invite stakeholders and project proponents at least once per year to submit additional projects for consideration to be included in the IRWM Plan or updates to projects already included in the IRWM Plan. The Implementation Support Team will publicize the opportunity and process to submit new projects (or updates) for consideration. The Implementation Support Team will present and discuss the potential amendments to the project list within the Mojave Plan in one or more Stakeholder Input Meetings.
- Changes to the project list or Plan objectives will be decided as described above and published as Plan Amendments. The Implementation Support Team will request that members of the Regional Water Management Group and project proponents adopt the Plan Amendments as an addendum to the previously adopted Mojave IRWM Plan.

## **Pursue Grant Funds for Implementation**

- The Implementation Support Team will research, identify and support pursuit of grant funds that could help implement the projects and meet the objectives included in the Mojave Integrated Regional Water Management Plan.
- The Regional Water Management Group will not serve as a fiscal agent for grant funds, but rather will identify a willing agency or organization with the appropriate authority and financial conditions to serve as a fiscal agent on behalf of the Region for each specific grant opportunity that is pursued.
- The fiscal agent(s) may distribute grant funds to other project proponents within the Region according to the specific terms of the grant program that provides funds. The project proponents whom receive grant funds will be responsible to complete their project(s) as described in the relevant grant application and/or grant agreement. The fiscal agent will not be responsible to fund or complete projects for other project proponents outside of the specific commitments made in a particular grant agreement.
- The Implementation Support Team will track the amount of grant funds brought into the Region to support implementation of the Mojave IRWM Plan and the specific projects being funded (or partially funded) with grant funds. The Implementation Support Team will include this information in their annual report of Plan performance.

## **Finance Implementation Coordination Activities**

- The Implementation Support Team will establish an annual operating budget to fulfill the roles of the Implementation Support Team. This budget will be presented and discussed at a Stakeholder Meeting.

- Members of the RWMG (and potentially other agencies/organizations within the Region) may provide funds or in-kind services to fulfill the roles of the Coordinating Committee and the Implementation Support Team.
- The Coordinating Committee and Implementation Support Team may direct the expenditure of implementation coordination funds for any of the roles defined for the Coordinating Committee or Implementation Support Team, subject to the specific guidance given by the funding organization(s).

# Plan Performance Monitoring Objectives for the Mojave IRWM Plan

## *Mojave Integrated Regional Water Management Plan*

Summary of Objective	Quantitative Measurement	Target	Approach
1. Balance average annual future water demands with available future supplies to ensure sustainability throughout the Region between now and the 2035 planning horizon and beyond.	Measured by forecasted average annual demand (adjusted by expected levels of conservation) at different times through the planning period compared with forecasted average annual available water supplies at different times through planning period.	Water supply and demands are balanced throughout Region over entire planning period.	Compare every five years when Urban Water Management Plan (UWMP) is complete. 2015 is next date for comparison.
2. Continue improving regional water use efficiency by implementing a portfolio of conservation actions that are regionally cost-effective.	<p>a. Continue reducing urban per-capita water use through all available actions that are regionally cost-effective. Measured by time series of annual per-capita water use.</p> <p>b. Increase agricultural water use efficiency by moving towards efficient water management practices for sustainable agriculture. Measured by the number of farms utilizing viable best management practices, including irrigation practices, equipment, and crop types.</p> <p>c. Increase industrial water use efficiency by moving towards applicable best management practices. Measured by the number of industries utilizing viable best water conserving management practices, equipment and technologies.</p>	<p>a. [Set target(s) related to urban use]</p> <p>b. [Set targets related to agricultural use]</p> <p>c. [Set targets related to industrial use]</p>	<p>a. [How to track?]</p> <p>b. [How to track?]</p> <p>c. [How to track?]</p>

Summary of Objective	Quantitative Measurement	Target	Approach
3. Maintain stability in previously overdrafted groundwater basins and reduce overdraft in groundwater basins experiencing ongoing water table declines.	Measured by long-term stability of groundwater levels in the regional monitoring well network and mass water balance calculations by subarea.	[Set meaningful stability measure and target(s)]	[Describe how to track and report.]
4. Address the State policy goal of reducing reliance on the Delta by meeting water demands with alternative sources of supply during times when State Water Project (SWP) supplies are reduced or unavailable due to droughts, outages, environmental and regulatory restrictions, or other reasons.	Measured by comparing banked or reserve water supplies with water needs to meet a 6-year drought or 3-year outage on the SWP.	[Set quantitative targets for banked or reserve water supplies.]	[Report annual banked and reserve water supplies and compare to targets.]
5. Optimize the use of the Region’s water related assets to maximize available supplies to meet projected demands while mitigating against risks. Water related assets to be optimized include financial resources, groundwater storage programs, available imported water supplies, transfer and exchange opportunities, available physical infrastructure, and management policies.	<ul style="list-style-type: none"> <li>a. Measured by available SWP supplies stored, used locally, transferred or exchanged vs. available SWP supplies unused or lost.</li> <li>b. Measured by financial resources that originate outside of the Region and are made available to improve integrated water management within the Region.</li> <li>c. Measured by long-term cost savings created by improvements in operational efficiency, reduced energy consumption, reduced system failures and repairs, etc.</li> </ul>	<ul style="list-style-type: none"> <li>a. [Set target for SWP use]</li> <li>b. [Set target for financial resources that originate outside Region]</li> <li>c. [Set target(s) for long-term cost savings]</li> </ul>	<ul style="list-style-type: none"> <li>a. [Report annually]</li> <li>b. [Report annually]</li> <li>c. [Report annually]</li> </ul>
6. Prevent land subsidence throughout the Region.	Measured by monitoring land surface changes, every five years, in areas of known historic subsidence.	[Set meaningful target(s).]	[Report on ? interval.]



Summary of Objective	Quantitative Measurement	Target	Approach
7. Provide support and assistance to disadvantaged communities and help facilitate projects and programs that benefit those communities.	Measured by the number of projects and programs implemented and the investments made on an ongoing basis that benefit disadvantaged communities.	[Set target for number of projects and programs; Set target for \$ invested]	[Describe how to track and report.]
8. Improve environmental stewardship related to waterways and water management in the Region.	<ul style="list-style-type: none"> <li>a. Measured by acres of sensitive environmental/habitat areas restored or new sensitive environmental/habitat areas set aside for protection.</li> <li>b. Measured by the number of new recreational or educational projects that are connected to environmental stewardship programs.</li> <li>c. Measured by protection and restoration of riparian habitat areas as identified in Exhibit H of the Mojave Basin Area Judgment.</li> </ul>	<ul style="list-style-type: none"> <li>a. [Set target(s)]</li> <li>b. [Set target(s)]</li> <li>c. [Describe target(s)]</li> </ul>	<ul style="list-style-type: none"> <li>a. [Describe how to track and report]</li> <li>b. [Describe how to track and report]</li> <li>c. [Describe how to track and report]</li> </ul>
9. Improve floodplain management throughout the Plan area.	<ul style="list-style-type: none"> <li>a. Increase coordination between agencies to establish programs and projects related to floodplain management that have multiple benefits/multiple uses. Measured by the number of new multi-benefit/multi-use floodplain projects or programs established.</li> <li>b. Coordination between multiple agencies to reduce risk of flood damage through proactive operations along the flood prone areas. Measured by reduction in monetary impact of flood damage compared to damage caused by historical floods of similar magnitude.</li> </ul>	<ul style="list-style-type: none"> <li>a. [Set target(s) for coordination; Set target(s) for projects and programs]</li> <li>b. [Set target(s) for coordination, flood risk reduction, and monetary impacts]</li> </ul>	<ul style="list-style-type: none"> <li>a. Describe how to measure and report</li> <li>b. Describe how to measure and report</li> </ul>

Summary of Objective	Quantitative Measurement	Target	Approach
10. Preserve water quality as it relates to local beneficial uses of water supplied by each source, including groundwater, stormwater, surface water, imported water, and recycled water.	a. Measured by policies and programs culminating from regional collaboration of multiple stakeholders resulting in sound public policies that protect water quality. b. Regular summaries of key water quality constituents for various water supplies as they relate to the local beneficial uses.	a. [Set target(s) for collaborative policies and programs] b. [Describe target(s) for key water quality constituents]	a. [Describe how to measure and report] b. [Describe how to measure and report]
11. Obtain financial assistance from outside sources to help implement this Plan across a range of project sizes during the planning horizon.	a. Obtain outside financial assistance for small water systems <sup>1</sup> , measured by the number of small systems that acquired outside funding and the amount of funding acquired. b. Obtain outside financial assistance for other projects and programs (not within small water systems), measured by the amount of outside funds acquired.	a. [Set target(s) for outside financial assistance] b. [Set target(s) for outside financial assistance]	a. [Describe how to measure and report] b. [Describe how to measure and report]

<sup>1</sup>For the purposes of measuring benefit towards this objective, water systems will be considered “small” if they deliver less than 3,000 AF per year or have fewer than 3,000 service connections.

Summary of Objective	Quantitative Measurement	Target	Approach
12. Improve public awareness of water supply, conservation, water quality, and environmental stewardship challenges and opportunities throughout the planning horizon.	<ul style="list-style-type: none"> <li>a. Measured by the results of regular surveys that gauge awareness regarding these topics.</li> <li>b. Measured by documented outreach to all stakeholder types as listed in the IRWM guidelines.</li> <li>c. Measured by the number of new recreational or educational projects that are connected with environmental stewardship efforts.</li> </ul>	<ul style="list-style-type: none"> <li>a. [Set awareness target(s)]</li> <li>b. [Set outreach targets]</li> <li>c. [Set target(s) for connected projects]</li> </ul>	<ul style="list-style-type: none"> <li>a. [Describe how to measure and report]</li> <li>b. [Describe how to measure and report]</li> <li>c. [Describe how to measure and report]</li> </ul>
13. Identify and establish reliable funding sources to maintain, modernize and improve water infrastructure to ensure a high quality, resilient and reliable water supply.	<ul style="list-style-type: none"> <li>a. Measured regularly by the estimated cost of deferred maintenance.</li> <li>b. Measured by the number of water systems that improve operations to withstand or reduce the number of system failures and improve system efficiencies.</li> </ul>	<ul style="list-style-type: none"> <li>a. [Set target(s) for reduced deferred maintenance]</li> <li>b. [Set target(s) for operational improvement]</li> </ul>	<ul style="list-style-type: none"> <li>a. [Describe how to measure and report]</li> <li>b. [Describe how to measure and report]</li> </ul>
14. Increase the use of recycled water in the Region while maintaining compliance with the Mojave Basin Area Judgment as applicable.	Measured by changes in the volume of recycled water being used in the Region.	[Set target(s) for recycled water use]	[Describe how to measure and report]



# Handout 4: Summary of Requested Review, Comments and Input

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## *Mojave Integrated Regional Water Management Plan*

Thank you for helping develop the Mojave IRWM Plan. Your input is appreciated and essential to development of a successful and meaningful document. If you would like to provide comments and suggestions to the draft materials presented during Meeting 6, please send your questions, comments, or suggestions to the Plan Development Team by **Tuesday, December 24, 2013** to [comments@mywaterplan.com](mailto:comments@mywaterplan.com) on the following items (when submitting comments, please submit as a Word document or as email text with the handout # or section #, page #, and paragraph # included for each comment.):

### Review Handouts 1a – 1e: Project Summaries

- If you are a project proponent, please review summaries to see if they are factually correct.
- Are the recommended priorities (urgency and importance) appropriate for each project? If no, what priority do you recommend and why?
- Are there any projects on the proposed project list that you believe should not be included in the Mojave IRWM Plan? If yes, please state why.

### Review Handout 2: Proposed Governance

- Is the proposed governance approach for implementing the Mojave IRWM Plan clear? If no, what areas need clarification?
- Does the proposed governance approach cover all of the items that you believe need to be covered? If no, what else do you recommend?
- Do you agree with the proposed governance approach? If no, what specific revisions do you recommend?