Introduction

Projects in this Proposal have multiple benefits that address the Human Right to Water and Integrated Regional Water Management (IRWM) Program Preferences, including CALFED objectives and Statewide Priorities. The following discusses how this Proposal assists in meeting the Program Preferences described in the 2015 IRWM Guidelines and identifies specific Program Preferences and the Projects that will meet the listed preferences. Also described in this attachment are issues related to the Human Right to Water Policy and the Mojave IRWM Region's effort to address the goal of the Human Right to Water Policy. The Projects that assist in meeting the Human Right to Water goals describe how they accomplish this. Lastly, in this Proposal, all three Projects address a critical water supply and/or water quality need of the disadvantaged communities (DACs) which is identified. Projects in this Proposal are numbered as follows:

1. Mojave Region Commercial, Industrial and Institutional (CII) Turf Phase II Removal Program
2. Hi-Desert Sewer Collection System Phase 1A
3. Leak Detection Services for Mojave Region 100% DAC Small Water Systems Phase 1 Program

Human Right to Water

The Mojave IRWM Region and the project proponents are committed to the Human Right to Water Policy. The Mojave IRWM Region, in collaboration with the Region's stakeholders and Regional Water Management Group, identified objectives specifically relating to improving regional water use efficiency by implementing conservation actions, addressing 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, and finally, increase the use of recycled water in the Region while maintaining compliance with the Mojave Basin Area Judgment. As defined in its IRWM Plan, the Region is already considering the human right to water because it uses the following human rights principles:

1. Governs by non-discrimination and equality
2. Includes meaningful public participation
3. Requires accountability of project proponents

The Mojave IRWM Region has been specifically addressing the goal of the Human Right to Water by doing the following:

1. Addressing drinking water contamination
2. Improving drinking water infrastructure needed to maintain/improve water quality
3. Improving infrastructure needed to ensure adequate drinking water supply

The Region's water is considered an important resource and its quality is of vital importance to all users. The Mojave Water Agency (MWA) service area further embodies this Policy through its mission statement, "To manage the region's water resources for the common benefit to assure stability in the sustained use by the citizens we serve."

All three of the proposed projects bolster the supply reliability of the Mojave Region water supplies, and therefore the Projects all address the Human Right to Water goal.

Mojave Region CII Turf Phase II Removal Program

Include Regional Projects/Programs. This Project will help improve water use efficiency across the Mojave IRWM Region. Additionally, this Project will take advantage of MWA's strong working relationships with its water retailers as well as the Alliance for Water Awareness and Conservation, a collaborative group of over twenty agencies, to coordinate efforts.

Effectively Integrate Water Management within Hydrologic Region. This Project helps reduce water demands in the CII sector, by building on the existing turf removal program, which focuses on commercial/industrial and large residential water users. This water demand management strategy is directly tied with water supply enhancement as the Project will help free up potable water for essential drinking water needs.

Effectively resolve significant water-related conflicts within or between regions. Efforts that involve collaboration and strong working relations among multiple entities, such as will occur with this Project, are critical in resolving water-related conflicts within and between regions. This Project will reduce water demand that will alleviate strains on regional water supplies, currently stressed from drought conditions.

Contribute to attainment of one or more objectives of CALFED. Due to the reliance of the Mojave Region on SWP water supplies, this Project can help address the first three objectives (Water Quality, Ecosystem Quality, and Water Supply) by reducing demands on water originating from the Delta, thereby reducing stresses on the entire Delta system.

Address Critical Water Supply/Quality Needs of DACs within the Region. Over 79 percent of the Mojave Region consists of DACs. By reducing water demands, water supplies can be freed up to meet demands throughout the Region, benefitting DACs as well as non-DACs equally.

Effectively Integrate Water Management with Land Use Planning. Landscape irrigation makes up the largest demand on overall supplies. This Project directly integrates water management and land use planning by facilitating CII turf removal to reduce potable demands.

Part of an IRWM Plan that Helps the Region Reduce Reliance on the Delta for Water Supplies. This Project helps address the IRWM Plan objective to reduce reliance on the Delta by enabling turf removal that can result in water savings of 1,541 acre-feet over the ten-year lifetime of this Project.

Address Statewide Priorities of:

a. Drought preparedness: This Project provides drought preparedness by achieving an immediate, yet long-term, reduction in water use, which enhances supply reliability and the ability to meet demands during water shortages.

b. Use and reuse water more efficiently: This Project focuses on reducing water demands of CII water users with turf landscapes, thereby increasing water use efficiency across the Mojave Region.

c. Climate change response actions: This Project increases water use efficiency by reducing demands for turf irrigation. This enhanced efficiency increases supply reliability and contributes to reduced energy requirements and greenhouse gas (GHG) emissions related to water imports, necessary to replenish supplies.

d. Expand environmental stewardship: Reducing demands on water supplies and excess irrigation runoff can help improve regional watershed health and reduce impacts to quality and supplies of surface water systems.

e. Practice integrated flood management: By enabling turf removal and reductions in irrigation needs, this Project can reduce urban runoff from excess irrigation, thereby contributing to enhanced integrated flood management.

f. Protect surface water and groundwater quality: Urban runoff from irrigation water can impact water quality by transporting and concentrating pollutants. Reducing the need for irrigation by removing turf, can therefore help protect water quality.

g. Improve tribal water and natural resources: There is one known Tribe within the Mojave Region that the Project could benefit tribal water and natural resources for the Tribe, which is the Twenty-Nine Palms Band of Mission Indians of California.

h. Ensure equitable distribution of benefits: By reducing water demands, water supplies can be freed up to provide continued access to safe, clean, affordable water within the Mojave Region, for DACs as well as for non-DACs.

Breadth and Magnitude of Program Preference and Statewide Priority Achieved. The certainty of achieving the above preferences is high assuming funding is made available for implementation. Water savings achieved by implementing turf water conservation programs are well documented.

Hi-Desert Sewer Collection System Phase 1A

Include Regional Projects/Programs. This Project will construct a wastewater collection system that will collect wastewater currently being discharged via septic systems for the Hi-Desert Water District (HDWD). This will stop the groundwater contamination that is occurring and allow the groundwater to be used for potable water again as it once was before 2003 – helping the HDWD to reduce their reliance on the MWA and the SWP systems. Due to the strong reliance on wholesale, imported water supplies to meet demands, this Project will have wide-reaching benefits by reducing stresses on SWP supplies available to the entire Region.

Effectively Integrate Water Management within Hydrologic Region. This Project will replace leaking septic systems with a wastewater collection system. As a result, this Project integrates various areas of water resource management strategies, including water quality, supply enhancement and reliability, as well as local conveyance efficiency.

Effectively resolve significant water-related conflicts within or between regions. By eliminating the source of groundwater contamination and thereby improving the quality of the only natural groundwater source that is available, this Project will increase groundwater supply thereby reducing strains on local and regional water supplies, which are limited and a source of intra- and interregional conflict with or without the drought.

Contribute to attainment of one or more objectives of CALFED. Due to the reliance of the Mojave Region on SWP water supplies, this Project can help address the first three objectives (Water Quality, Ecosystem Quality, and Water Supply) by reducing demands on water originating from the Delta, thereby reducing stresses on the entire Delta system.

Address Critical Water Supply/Quality Needs of DACs within the Region. One hundred percent of the District's service area consists of DACs. By improving the water quality of the groundwater so it becomes a source of supply once again, regional water supplies can be freed up to meet water demands throughout the region, benefitting the DACs as well as non-DACs equally.

Effectively Integrate Water Management with Land Use Planning. This Project is part of the Mojave IRWM Plan which has involved wide participation and input from local land use planning agencies. This Project integrates water management with land use planning as it helps reduce overall water demands, which is imperative to meet future demands of growing populations.

Part of an IRWM Plan that Helps the Region Reduce Reliance on the Delta for Water Supplies. This Project helps address the IRWM Plan objective of reducing reliance on the Delta as it improves water quality in the groundwater basin, thereby reducing demands on backup supplies that are supplied via SWP water from the Delta.

Address Statewide Priorities of:

a. Drought preparedness: This Project provides drought preparedness by improving the water quality of the groundwater, which can then be used as a supply source to enhance supply reliability and the ability to meet demands during water shortages.

b. Use and reuse water more efficiently: This Project increases water use efficiency by improving the water quality of existing water supply source so it can be used again.

c. Climate change response actions: This Project increases water use efficiency by improving water quality, thereby adding back the groundwater basin as a water supply source. This new local source will result in less demand on the high-energy (high GHG emissions) backup of the SWP to reduce the total overall energy required for the region.

d. Expand environmental stewardship: Improving water quality can help improve regional watershed health by reducing stresses on other water resources.

e. Practice integrated flood management: N/A

f. Protect surface water and groundwater quality: The Project improved the water quality of the groundwater basin.

g. Improve tribal water and natural resources: There are no tribal lands within the HDWD service area; however Project benefits have the potential to equally benefit tribal water and natural resources in adjacent areas.

h. Ensure equitable distribution of benefits: By improving water quality, new water supplies can be made available to provide continued access to safe, clean, affordable water within the Mojave Region, for DACs as well as for non-disadvantaged communities.

Breadth and Magnitude of Program Preference and Statewide Priority Achieved. The certainty of achieving the above preferences is high assuming funding is made available for implementation. Improvements of water quality achieved by constructing a sewer collection system are well documented.

Leak Detection Services for Mojave Region 100% DAC Small Water Systems Phase 1 Program

Include Regional Projects/Programs. This Project will help improve water use efficiency across the Mojave IRWM Region. Additionally, this Project will encourage stronger working relationships with MWA and its water retailers as well as DACs.

Effectively Integrate Water Management within Hydrologic Region. This Project helps reduce water demands of the various DAC Small Water Systems within the Region by identifying the leaks and then correcting the leaks (Phase 2). This water demand management strategy is directly tied with water supply enhancement as the Project will help free up potable water for essential drinking water needs.

Effectively resolve significant water-related conflicts within or between regions. Efforts that involve collaboration and strong working relations among multiple entities, such as will occur with this Project, are critical in resolving water-related conflicts within and between regions. This Project will reduce water demand that will alleviate strains on regional water supplies, currently stressed from drought conditions.

Contribute to attainment of one or more objectives of CALFED. Due to the reliance of the Mojave Region on SWP water supplies, this Project can help address the first three objectives (Water Quality, Ecosystem Quality, and Water Supply) by reducing demands on water originating from the Delta, thereby reducing stresses on the entire Delta system.

Address Critical Water Supply/Quality Needs of DACs within the Region. Over 79 percent of the Mojave Region consists of DACs. The 26 Small Water Systems included in this Project are all 100% DAC. By reducing water demands, water supplies can be freed up to meet demands throughout the Region, benefitting DACs as well as non-DACs equally.

Effectively Integrate Water Management with Land Use Planning. This preference does not apply.

Part of an IRWM Plan that Helps the Region Reduce Reliance on the Delta for Water Supplies. This Project helps address the IRWM Plan objective to reduce reliance on the Delta by identifying potential leaks and then correcting the then for a result in water savings.

Address Statewide Priorities of:

a. Drought preparedness: This Project provides drought preparedness by achieving an immediate, yet long-term, reduction in water use, which enhances supply reliability and the ability to meet demands during water shortages.

b. Use and reuse water more efficiently: This Project focuses on identifying and then correcting leaks in small water systems for DACs, thereby increasing water use efficiency across the Mojave Region.

c. Climate change response actions: This Project increases water use efficiency by reducing demands for water. This enhanced efficiency increases supply reliability and contributes to reduced energy requirements and GHG emissions related to water imports, necessary to replenish supplies.

d. Expand environmental stewardship: Reducing leaks and water waste can help improve regional watershed health and will reduce impacts to groundwater resources by reducing demand and thus contributing to overdraft correction. This in turn will help maintain riparian flows in the Upper Mojave Narrows and Camp Cady areas, which are vital to local critical habitats.

e. Practice integrated flood management: N/A

f. Protect surface water and groundwater quality: The Project will enable the Mojave Region to reduce water waste via leak detection and ultimate system rehabilitation, therefore preventing potential system breaks that could result in bacterial contamination.

g. Improve tribal water and natural resources: There is one known Tribe within the Mojave Region that the Project could benefit tribal water and natural resources for the Tribe, which is the Twenty-Nine Palms Band of Mission Indians of California.

h. Ensure equitable distribution of benefits: By reducing water demands, water supplies can be freed up to provide continued access to safe, clean, affordable water within the Mojave Region, for DACs as well as for non-DACs.

Breadth and Magnitude of Program Preference and Statewide Priority Achieved. The certainty of achieving the above preferences is high assuming funding is made available for implementation. Water savings achieved by addressing leaks through various types of leak detection programs and subsequent system repairs and rehabilitation is well documented.

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