

9 Program Preferences

Submit a discussion on how the Proposal assists in meeting the Program Preference(s) described in Section II.F of the 2012 Guidelines. The discussion must identify the specific Program Preference(s) that the Proposal will meet; the certainty that the Proposal will meet the Program Preference(s); and the breadth and magnitude to which the Program Preference(s) will be met. Include graphics or maps as necessary to demonstrate how your proposal meets the preferences. Must be no more than 10 pages in length using a minimum 10-point type font.

A summary of Program Preferences and Statewide Priorities met by the three projects included in this grant application is presented in

Preference or Priority	Addressed	Certainty	Breadth & Magnitude
Program Preferences			
Includes regional projects or programs	No		
Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the RWQCB region or subdivision; or other region or sub-region specifically identified by DWR	Yes	High. The HDWD Water Treatment Plant is located in the Warren Basin, interconnected and upgradient to the Joshua Basin Water District in the Joshua Tree Basin.	Tertiary-treated wastewater from the proposed HDWD Water Treatment Plant will be percolated to the aquifer system just upgradient from the Joshua Basin. Over time, with full project development, these basins are expected to partially refill and re-establish hydrologic connection. These long-term effects have been modeled by the USGS and others. Water level and water quality monitoring are included as part of the management plan.
Effectively resolve significant water-related conflicts within or between regions	Yes	High. Balancing supply and demand through water reclamation and removal of contaminants from the drinking water aquifer under this proposal implements key provisions of the Mojave Basin Area Judgment and Warren Basin Adjudication.	The framework for resolution of over 30 years of water use disputes was defined by the 1996 Mojave Basin Area Judgment and Warren Basin Adjudication. Failure to implement water reclamation and removal of contaminants from the drinking water would result in continued overdraft and further legal disputes.



Preference or Priority	Addressed	Certainty	Breadth & Magnitude
Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program	Yes	Probable. Large groundwater storage potential and demand reduction allows for change of timing of SWP deliveries to MWA to improve in-Delta habitat and reduce risks from Delta levee failure	Reclamation of approximately 5,880 acre-feet per year of MWA supply for projects proposed for grant funding.
Address critical water supply or water quality needs of disadvantaged communities within the region	Yes	High. Most of the communities served by these projects are considered disadvantaged. Implementation of proposed projects is certain to benefit these areas.	<p>HDWD Wastewater Treatment Plant Phase 1 is the first phase of regional project which will reclaim and recharge the drinking water aquifer currently impacted by nitrate contamination and used by the disadvantaged community of Yucca Valley.</p> <p>VVWRA Water Reclamation Plants will provide affordable reclaimed water to the disadvantaged community of Hesperia.</p>
Effectively integrate water management with land use planning	Yes	High. Provides reclaimed water to park and other irrigated land users appropriate for its supply.	Up to 4,480 acre-feet per year as part of the VVWRA project.
For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects or b) provide multiple benefits	No		

Statewide Priorities

Drought Preparedness	Yes	High. Projects improve quality and reduce dependence on imported water supplies to ensure adequate supplies are available to meet critical needs during periods of drought.	HDWD Wastewater Treatment Plant Phase 1 is the first phase of a regional project that will reclaim and recharge the drinking water aquifer currently impacted by nitrate contamination.
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Preference or Priority	Addressed	Certainty	Breadth & Magnitude
			VVWRA Subregional Reclamation Project Water Reclamation Plants will reclaim and reuse local supplies, offsetting demand for potable supplies and reducing SWP imports by up to 4,480 acre-feet per year.
Use and Reuse Water More Efficiently	Yes	High. All water reclaimed by the HDWD Water Treatment Plant project will be returned to the drinking water aquifer. VVWRA projects direct reclaimed water to appropriate irrigation uses, reducing the need for imported supplies.	Phase 1 of the HDWD Water Treatment Plant project will reclaim 1,400 acre-feet per year. Subsequent phases will reclaim up to 4,500 af/yr. The VVWRA Wastewater Reclamation Plants will reclaim up to 4,480 acre-feet per year at startup and 8,960 acre-feet per year at full capacity.
Climate Change Response Actions	Yes	VVWRA Subregional Reclamation Plants will result in substantial reductions in energy use for pumping and consequently GHG emissions.	Up to 4.2MWhr per year and 3,000 tons of CO2 reductions.
Expand Environmental Stewardship	Yes		Phase 1 of the HDWD Water Treatment Plant project will reclaim 1,400 acre-feet per year. Subsequent phases will reclaim up to 4,500 acre-feet per year. The VVWRA Wastewater Reclamation Plants will reclaim up to 4,480 acre-feet per year at startup and 8,960 acre-feet per year at full capacity.
Practice Integrated Flood Management	Yes	Moderate. The HDWD Wastewater Treatment Plant will be designed to retain and manage storm flows on site.	The HDWD project site will retain and manage on-site storm flows, and is adjacent to local floodways that will be configured to facilitate flood management and protect facilities.

Preference or Priority	Addressed	Certainty	Breadth & Magnitude
Protect Surface Water and Groundwater Quality	Yes	High. The HDWD Wastewater Treatment Plant will reclaim waste flows, and recharge tertiary-treated effluent to the groundwater system, and will allow abandonment of septic systems linked to nitrate contamination of the groundwater.	<p>Phase 1 of the HDWD Water Treatment Plant project will reclaim 1,400 af/yr treated to tertiary levels that include nitrate removal. Subsequent phases will reclaim up to 4,500 af/yr. Phase 1 will allow abandonment of septic systems, and ultimate project will remove 5,500 connections from septic tank discharges.</p> <p>The TDS and biochemical oxygen demand of the project effluent will be improved by about 20 mg/L compared to the effluent currently used for groundwater recharge. The expected values of recycled water from the Subregional Facilities meet drinking water standards for TDS, nitrate and total halomethanes. The expected TDS concentration is within the range of water quality from Apple Valley Ranchos, Victorville, and CSA 42, though greater than Hesperia and CSA 64. Expected THMs concentrations are an improvement in the Subregional Facilities recycled water compared to the range from Apple Valley Ranchos, Victorville and CSA 64. All water quality standards will be met.</p>
Improve Tribal Water and Natural Resources	No	None. There are not tribal entities in the Plan area.	
Ensure Equitable Distribution of Benefits	Yes	High. All water users in the HDWD area utilize the same drinking water aquifers, and all will benefit from the supply enhancement and water reclamation projects.	All water users will benefit from regional aquifer elevation and quality improvements in the Warren, Upper Mojave River Valley, and Copper Mountain Valley groundwater basins.



Table 9-1 - Program Preferences and Statewide Priorities

Preference or Priority	HDWD	VVWRA	Overall
Program Preferences			
Include regional projects or programs (CWC §10544)			
Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the RWQCB region or subdivision; or other region or sub-region specifically identified by DWR	X		X
Effectively resolve significant water-related conflicts within or between regions	X	X	X
Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program		X	X
Address critical water supply or water quality needs of disadvantaged communities within the region	X	X	X
Effectively integrate water management with land use planning	X		X
For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects pursuant to PRC §5096.824 or §75034 or b) provide multiple benefits			
Statewide Priorities			
Drought Preparedness	X	X	X
Use and Reuse Water More Efficiently	X	X	X
Climate Change Response Actions		X	X
Expand Environmental Stewardship	X	X	X
Practice Integrated Flood Management	X		X
Protect Surface Water and Groundwater Quality	X	X	X
Improve Tribal Water and Natural Resources			
Ensure Equitable Distribution of Benefits	X		X

A description of the certainty that the Preferences and Priorities that are addressed by the three proposed project, the certainty that the Preference or Priority will be met, and the breadth and magnitude to which they will be met are presented in Table 9-2.

Table 9-2 Certainty, Breadth and Magnitude of Program Preferences and Statewide Priorities Met

Preference or Priority	Addressed	Certainty	Breadth & Magnitude
Program Preferences			
Includes regional projects or programs	No		
Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the RWQCB region or subdivision; or other region or sub-region specifically identified by DWR	Yes	High. The HDWD Water Treatment Plant is located in the Warren Basin, interconnected and upgradient to the Joshua Basin Water District in the Joshua Tree Basin.	Tertiary-treated wastewater from the proposed HDWD Water Treatment Plant will be percolated to the aquifer system just upgradient from the Joshua Basin. Over time, with full project development, these basins are expected to partially refill and re-establish hydrologic connection. These long-term effects have been modeled by the USGS and others. Water level and water quality monitoring are included as part of the management plan.
Effectively resolve significant water-related conflicts within or between regions	Yes	High. Balancing supply and demand through water reclamation and removal of contaminants from the drinking water aquifer under this proposal implements key provisions of the Mojave Basin Area Judgment and Warren Basin Adjudication.	The framework for resolution of over 30 years of water use disputes was defined by the 1996 Mojave Basin Area Judgment and Warren Basin Adjudication. Failure to implement water reclamation and removal of contaminants from the drinking water would result in continued overdraft and further legal disputes.
Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program	Yes	Probable. Large groundwater storage potential and demand reduction allows for change of timing of SWP deliveries to MWA to improve in-Delta habitat and reduce risks from Delta levee failure	Reclamation of approximately 5,880 acre-feet per year of MWA supply for projects proposed for grant funding.
Address critical water supply or water quality needs of disadvantaged communities within the region	Yes	High. Most of the communities served by these projects are considered disadvantaged. Implementation of proposed projects is certain to benefit these areas.	HDWD Wastewater Treatment Plant Phase 1 is the first phase of regional project which will reclaim and recharge the drinking water aquifer currently impacted by nitrate contamination and used by the disadvantaged community of Yucca Valley.



Preference or Priority	Addressed	Certainty	Breadth & Magnitude
			VVWRA Water Reclamation Plants will provide affordable reclaimed water to the disadvantaged community of Hesperia.
Effectively integrate water management with land use planning	Yes	High. Provides reclaimed water to park and other irrigated land users appropriate for its supply.	Up to 4,480 acre-feet per year as part of the VVWRA project.
For eligible SWFM funding, projects which: a) are not receiving State funding for flood control or flood prevention projects or b) provide multiple benefits	No		

Statewide Priorities

Drought Preparedness	Yes	High. Projects improve quality and reduce dependence on imported water supplies to ensure adequate supplies are available to meet critical needs during periods of drought.	<p>HDWD Wastewater Treatment Plant Phase 1 is the first phase of a regional project that will reclaim and recharge the drinking water aquifer currently impacted by nitrate contamination.</p> <p>VVWRA Subregional Reclamation Project Water Reclamation Plants will reclaim and reuse local supplies, offsetting demand for potable supplies and reducing SWP imports by up to 4,480 acre-feet per year.</p>
Use and Reuse Water More Efficiently	Yes	High. All water reclaimed by the HDWD Water Treatment Plant project will be returned to the drinking water aquifer. VVWRA projects direct reclaimed water to appropriate irrigation uses, reducing the need for imported supplies.	<p>Phase 1 of the HDWD Water Treatment Plant project will reclaim 1,400 acre-feet per year. Subsequent phases will reclaim up to 4,500 af/yr.</p> <p>The VVWRA Wastewater Reclamation Plants will reclaim up to 4,480 acre-feet per year at startup and 8,960 acre-feet per year at full capacity.</p>

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Climate Change Response Actions	Yes	VVWRA Subregional Reclamation Plants will result in substantial reductions in energy use for pumping and consequently GHG emissions.	Up to 4.2MWhr per year and 3,000 tons of CO2 reductions.
Expand Environmental Stewardship	Yes		Phase 1 of the HDWD Water Treatment Plant project will reclaim 1,400 acre-feet per year. Subsequent phases will reclaim up to 4,500 acre-feet per year. The VVWRA Wastewater Reclamation Plants will reclaim up to 4,480 acre-feet per year at startup and 8,960 acre-feet per year at full capacity.
Practice Integrated Flood Management	Yes	Moderate. The HDWD Wastewater Treatment Plant will be designed to retain and manage storm flows on site.	The HDWD project site will retain and manage on-site storm flows, and is adjacent to local floodways that will be configured to facilitate flood management and protect facilities.
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Preference or Priority	Addressed	Certainty	Breadth & Magnitude
Improve Tribal Water and Natural Resources	No	None. There are not tribal entities in the Plan area.	The TDS and biochemical oxygen demand of the project effluent will be improved by about 20 mg/L compared to the effluent currently used for groundwater recharge. The expected values of recycled water from the Subregional Facilities meet drinking water standards for TDS, nitrate and total halomethanes. The expected TDS concentration is within the range of water quality from Apple Valley Ranchos, Victorville, and CSA 42, though greater than Hesperia and CSA 64. Expected THMs concentrations are an improvement in the Subregional Facilities recycled water compared to the range from Apple Valley Ranchos, Victorville and CSA 64. All water quality standards will be met.
Ensure Equitable Distribution of Benefits	Yes	High. All water users in the HDWD area utilize the same drinking water aquifers, and all will benefit from the supply enhancement and water reclamation projects.	All water users will benefit from regional aquifer elevation and quality improvements in the Warren, Upper Mojave River Valley, and Copper Mountain Valley groundwater basins.



