

ATTACHMENT 7: PROGRAM PREFERENCES

Section II.F of the 2014 IRWM Drought Guidelines describes Program Preferences and Statewide Priorities as set forth in Public Resources Code (PRC) §75026.(b) and California Water Code (CWC) §10544. These preferences and priorities are summarized in the table below. The projects included in this application address all eight of the aforementioned Program Preferences on a local, regional, or statewide scale, in addition to the Human Right to Water Policy. The Human Right to Water Policy (AB 685 (2012)/CWC § 106.3) states that every human being has the right to clean, affordable, and accessible water for human consumption, cooking, and sanitary purposes. For the purpose of this application, the following terms are used to define the breadth and magnitude to which each project addresses Program Preferences, Statewide Priorities and the Human Right to Water Policy:

- Local: Project benefits are focused locally within the project area.
- Regional: Project benefits extend throughout the Westside-San Joaquin IRWM Region (Region).
- Statewide: Project benefits are widespread and will benefit not only the Region but other areas throughout California.

Details regarding how this application addresses the Human Right to Water Policy are provided in the first section below. Table 1 illustrates how the projects included in this application address the Program Preferences and Statewide Priorities. Detailed information describing how the projects address the program preferences is included in the narrative that follows.

Human Right to Water Policy

The Human Right to Water Policy (AB 685 (2012)/CWC § 106.3) states that every human being has the right to clean, affordable, and accessible water for human consumption, cooking, and sanitary purposes. As a region, the Westside-San Joaquin Region has an overarching goal to improve water supply reliability and improve drainage and water quality for agriculture, municipal and environmental uses. In working towards achieving these goals, the Region is continually striving to fulfill the mission of the Human Right to Water Policy.

The projects in this application all address the Human Right to Water Policy by extending the use of groundwater supplies on which most of the communities depend; thereby helping to ensure that more potable supplies are available for uses should the drought extend into 2015.

Program Preferences and Statewide Priorities

The following discusses how the projects contained in this application address program preferences.

Program Preference: Include Regional Projects

All Westside-San Joaquin IRWM projects contained in this application are regional in nature as they address groundwater elevation impacts resulting from the ongoing drought and increased groundwater use to meet demands. The underlying groundwater basin, the Delta-Mendota Subbasin of the San Joaquin Valley Groundwater Basin, spans under most of the Westside-San Joaquin IRWM Region (the northern-most part of the region overlies the Tracy Subbasin of the same groundwater basin), and therefore projects that aid in the coordinated management of groundwater resources are, by definition, regional in nature. These projects also all have the same goal: extending groundwater and local surface water to maximize potable supplies. This is achieved by minimizing the use of higher quality groundwater by either offsetting current potable water use for non-potable irrigation with non-potable

water supplies (**SLWD Kaljain Pumping Plant and Conveyance System, Patterson Nonpotable Water System, and PID Agricultural Drainage Recirculation and Intertie Expansion Project**) or by reducing water demands (**Patterson Turf Removal Project**). Groundwater augmentation also extends groundwater supplies and is achieved via the **Orestimba Creek Recharge and Recovery Project**.

The **North Valley Regional Recycled Water Program** is an inter-regional project being implemented by the Cities of Turlock, Modesto, and Del Puerto Water District (DPWD) to provide recycled water, an alternate water supply, to DPWD to augment CVP supplies from the Delta. Recycled water will also be provided to the U.S. Bureau of Reclamation (USBR) for certain federal and state south of the Delta wildlife refuges for habitat management.

Program Preference: Effectively Integrate Water Management Programs in a Hydrologic Region

As previously mentioned, all projects contained in this application are focused on extending groundwater supplies. The projects achieve this by providing alternative non-potable water supplies for non-potable uses (**SLWD Kaljain Pumping Plant and Conveyance System, Patterson Nonpotable Water System, and PID Agricultural Drainage Recirculation and Intertie Expansion Project**), reducing water demands (**Patterson Turf Removal Project**) or by augmenting groundwater recharge through stormwater capture and recharge (**Orestimba Creek Recharge and Recovery Project**). Through the implementation of this suite of projects, the Westside-San Joaquin IRWM Region is integrating their programs to achieve a regional goal of groundwater sustainability and integrates multiple Resource Management Strategies (RMS) including Agricultural Water Use Efficiency, Urban Water Use Efficiency, Conveyance, System Reoperation, Water Supply Reliability, Matching Quality to Use, Conjunctive Management and Groundwater, and Watershed Management.

The **North Valley Regional Recycled Water Program**, the inter-regional project with the East Stanislaus IRWM Region, also integrates multiple RMS, including Water Recycling, Water Supply Reliability, Conveyance, and Matching Quality to Use.

Program Preference: Effectively Resolve Significant Water-Related Conflicts

With the decreasing availability of surface water supplies and reduced or 0% delivery of SWP and CVP water South-of-the Delta, groundwater use has increased significantly to meet demands. If the drought continues into 2015, groundwater supplies will be stretched further, creating conflicts for even-more limited supplies. The projects contained in this application will reduce drought-induced water-related conflicts with respects to imported water by providing an alternative non-potable water supply for non-potable uses (**SLWD Kaljain Pumping Plant and Conveyance System, Patterson Nonpotable Water System, PID Agricultural Drainage Recirculation and Intertie Expansion Project and the North Valley Regional Recycled Water Program**), reducing water demands (**Patterson Turf Removal Project**) or by augmenting groundwater recharge through stormwater capture and recharge (**Orestimba Creek Recharge and Recovery Project**).

Program Preference: Contribute to Attainment of One or More of the CALFED Bay-Delta Program Objectives

All the projects contained in this application contribute to attainment of the CALFED Bay-Delta Program Water Supply Reliability Objective, which includes water use efficiency and the matching of water quality to water need.

Program Preference: Address Critical Water Supply or Water Quality Needs of DACs

As previously noted, the Westside-San Joaquin Region overlies, for the most part, the Delta-Mendota Groundwater Subbasin. Groundwater levels in this subbasin are beginning to drop as local communities and agriculture are turning to groundwater to make up for shortfalls in surface water diversions and South-of-Delta CVP and SWP deliveries. If the drought continues in 2015, this situation will get worse, impacting the ability of local communities to extract and treat groundwater for potable supply.

As described in Attachment 8, the entire Westside-San Joaquin Region is considered disadvantaged, except for the very northern portion of the Region. Therefore, declining groundwater levels impact the ability of DACs to address critical water supply needs. The projects contained in this application will extend groundwater supplies by providing an alternative non-potable water supply for non-potable uses (**SLWD Kaljain Pumping Plant and Conveyance System, Patterson Nonpotable Water System, and PID Agricultural Drainage Recirculation and Intertie Expansion Project**), reducing water demands (**Patterson Turf Removal Project**) or by augmenting groundwater recharge through stormwater capture and recharge (**Orestimba Creek Recharge and Recovery Project**), thus directly addressing the critical water supply needs of DACs.

The service area of DPWD is almost entirely disadvantaged. This area's economy relies on CVP-delivered water supplies to support highly productive agricultural crops. With a 0% CVP contract allocation this year, DPWD is in need of water to meet agricultural demands. The **North Valley Regional Recycled Water Program** will provide critical water supply benefits to the DACs in the DPWD service area by providing recycled water to agricultural users dependent on growing crops for economic sustainability. See Attachment 8 for more detail.

Program Preference: Effectively Integrate Water Management with Land Use Planning

All projects in this application integrate land use planning with water management. The **SLWD Kaljain Pumping Plant and Conveyance System, PID Agricultural Drainage Recirculation and Intertie Expansion Project** and **North Valley Regional Recycled Water Program** provide a new, non-potable water supply to offset groundwater use and CVP delivery reliance. Because these projects address water supply reliability for irrigation, they are naturally integrated with land use planning as it relates to the local agricultural industry and supporting the agricultural communities as identified in the Region's various General Plans. The **Patterson Nonpotable Water System** and **Patterson Turf Removal Project** provide water use efficiency and non-potable water supplies for parks, medians, and other city-wide landscaping, thereby preserving recreation and aesthetic benefits for this City for green-spaces designated in their General Plan. Finally, the **Orestimba Creek Recharge and Recovery Project** would integrate land use planning with stormwater runoff management, providing a groundwater recharge benefit.

Program Preference: Reduce Reliance on the Sacramento-San Joaquin Delta for Water Supply

The Westside-San Joaquin Region is heavily dependent on CVP water as part of its supply. The **SLWD Kaljain Pumping Plant and Conveyance System, PID Agricultural Drainage Recirculation and Intertie Expansion Project**, and **North Valley Regional Recycled Water Program** provide a new, non-potable water supply, offsetting demands on CVP supplies and therefore reducing reliance on the Delta. The **Orestimba Creek Recharge and Recovery Project** would augment groundwater supplies, providing additional groundwater capacity for use in agricultural irrigation in lieu of CVP supplies, thereby reducing reliance on the Delta.

Program Preference: Address Statewide Priorities

All of the projects in this grant application address one or more of the Statewide Priorities (Table 2). Overall, all Statewide Priorities are addressed except Improve Tribal Water/Natural Resources (there are no federally- or state-recognized Native American communities in the Westside-San Joaquin Region). Six Statewide Priorities are addressed directly by projects as follows:

- Drought Preparedness – **All projects in this application** address this Statewide Priority by extending and/or augmenting groundwater supplies and reducing overdraft potential.
- Use and Reuse Water More Efficiently – **All projects in this application** ensure that water supplies in the Region are used and/or reused efficiently. This is accomplished by either creating a new, non-potable water supply (**SLWD Kaljain Pumping Plant and Conveyance System, PID Agricultural Drainage Recirculation and Intertie Expansion Project, and Patterson Nonpotable Water System**), using existing supplies more efficiently (**Patterson Turf Removal Project**) or by augmenting groundwater through stormwater runoff capture and recharge (**Orestimba Creek Recharge and Recovery Project**)
- Climate Change Response Actions – **All projects in this application** provide climate change response actions. The **Orestimba Creek Recharge and Recovery Project** captures runoff from flashier storm events and augments groundwater through recharge of that runoff. The **SLWD Kaljain Pumping Plant and Conveyance System, Patterson Nonpotable Water System, PID Agricultural Drainage Recirculation and Intertie Expansion Project, and North Valley Regional Recycled Water Project** all create new supplies that are more drought-resistant, improve water supply resiliency, and match water quality to water demand needs. Finally, the **Patterson Turf Removal Project** provides climate change resiliency by replacing turf with drought-tolerant plants. Many of these projects either reduce groundwater pumping or augment groundwater, countering falling groundwater elevations regionally. This translates to reduced pumping and energy demands and an associated reduction in greenhouse gas emissions.
- Expand Environmental Stewardship – **Patterson Turf Removal Project** will remove turf from City landscaping and replace the turf with native and drought-resistance landscaping, creating habitat for some of California’s native species, including, but not limited to, native bees. The **North Valley Regional Recycled Water Program** will supply recycled water to USBR wildlife refuges south of the Delta, helping to enhance habitat and wildlife management.
- Practice Integrated Flood Management – The **Orestimba Creek Recharge and Recovery Project** captures runoff from flashier storm events and augments groundwater through recharge of that runoff. This project, at build-out, will have the ability to divert stormwater runoff from Orestimba Creek into recharge ponds, helping to both offset potential localized flooding and promoting groundwater augmentation. The **PID Agricultural Drainage Recirculation and Intertie Expansion Project** will also help manage and integrate stormwater runoff management by managing stormwater overflows from agricultural lands.
- Protect Surface/Groundwater Quality - **All projects in this application**, save the North Valley Regional Recycled Water Program, address this Statewide Priority by reducing groundwater pumping which, in turn, helps reduce falling groundwater levels and potential associated water quality impacts resulting from the movement of poorer quality shallow water into deeper, higher-quality zones and/or the concentration of pollutants in the aquifer as a result of the decrease of water in storage. Additionally, the **Orestimba Creek Recharge and Recovery Project** will recharge stormwater runoff, which is generally lower in salts than shallow groundwater in

the project area. This will provide a direct water quality benefit to the underlying groundwater subbasin.

- Ensure Equitable Distribution of Benefits – **All projects in this application** ensure the equitable distribution of benefits in the Region. All communities in the IRWM Region, and many of the irrigation districts, are wholly dependent on groundwater and/or CVP water as their primary water supply. As such, any project that helps to reduce groundwater pumping and the associated potential for overdraft and/or water quality impacts and/or aids in proving supplies to agricultural (which underpin the local economy) will aid the Region as whole and ensure the equitable distribution of benefits. The **North Valley Regional Recycled Water Program** addresses water supply reliability for the DACs in the DPWD service area. Recycled water will help prevent crop loss and damage which affects the already burdened economy in the service area, helping to ensure equitable distribution of benefits.

Table 1: Comparison of Projects with Program Preferences and Statewide Priorities

		Projects						Degree of Certainty Preferences Will Be Addressed	Magnitude and Breadth to Which Preference will be Addressed	
		DPWD/CCID Orestimba Creek Recharge and Recharge Project	SLWD Kaljain Pumping Plant and Conveyance System	Patterson Nonpotable Water System, Phase III Project	Patterson Turf Removal Project	PID Agricultural Drainage Recirculation and Intertie Expansion	North Valley Regional Recycled Water Program (inter-regional)			
Program Preferences	Include Regional Projects	●	●	●	●	●	●	High	Region	
	Integrate Water Management	●	●	●	●	●	●	High	Region	
	Resolve Water-Related Conflicts	●	●	●	●	●	●	High	Local, Region	
	Bay-Delta Objectives	●	●	●	●	●	●	High	State	
	Benefits to DACs	●	●	●	●	●	●	High	Region	
	Integrate with Land Use Planning	●	●	●	●	●	●	High	Local, Region	
	IRWM Plan to Reduce Delta Reliance	●	●		●	●	●	High	Region	
	Statewide Priorities	●	●	●	●	●	●	High	Local, Region	
	Drought Preparedness	●	●	●	●	●	●	--	--	
	Use and Reuse Water More Efficiently	●	●	●	●	●	●	--	--	
	Climate Change Response Actions	●			●		●	--	--	
	Expand Environmental Stewardship				●		●	--	--	
	Practice Integrated Flood Management	●		●		●		--	--	
	Protect Surface/Groundwater Quality	●	●	●	●	●		--	--	
	Improve Tribal Water/Natural Resources	There are no federal- or state-recognized Native American communities in the Westside-San Joaquin IRWM Region.								
	Ensure Equitable Distribution of Benefits	●	●	●	●	●	●	--	--	
Human Right to Water Policy	●	●	●	●	●		High	Local, Region		