ATTACHMENT: 6

Program Preferences

East Contra Costa County Integrated Regional Water Management

Proposition 84 2015 Implementation Grant Application

List of Acronyms and Abbreviations

AB	Assembly Bill
AF	acre-feet
AFY	acre-feet per year
CCWD	Contra Costa Water District
City	City of Brentwood
CVP	Central Valley Project
DAC	Disadvantaged Community
Delta	Sacramento-San Joaquin River Delta
District	Delta Diablo
DWR	California Department of Water Resources
GWMP	groundwater management plan
IRWM	Integrated Regional Water Management
IRWMP	Integrated Regional Water Management Plan
MG	million gallons
MGD	million gallons per day
Prop 84	Proposition 84
Proposal	East Contra Costa County Sustainable Delta Water Management Proposal
PSP	Proposal Solicitation Package
RWF	Recycled Water Facility
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
WTP	water treatment plant

Introduction

The East Contra Costa County (ECCC) Sustainable Delta Water Management Proposal (Proposal) and its three high-priority projects comprise a geographically diverse and well-integrated implementation program with multiple water supply, water quality, habitat improvement, and socio-economic benefits. This attachment demonstrates that this Proposal includes significant, dedicated, and well-defined projects that meet multiple Program Preferences of the California Department of Water Resources' (DWR's) 2015 IRWM Implementation Grant Solicitation Guidelines. This attachment describes the specific Program Preferences met by each of the projects, the certainty that the projects meet the Program Preferences, and the breadth and magnitude to which the Program Preferences are met. **Table 6-1** lists the projects by identification number and identifies which Program Preferences are met by the project. **Table 6-2** (located on the last page of this Attachment) is based on Table 1 of the IRWM Grant Program 2015 Implementation Guidelines and provides more detail about which specific statewide priorities are met by each project.

Table 6-1. IRWM Plan Program Preferences by Project

Project ID #/Name	Inclusion of Regional Projects or Programs	Integrative Project within a Hydrologic Region Identified	Resolves Regional Water-related Conflicts	Supports One or More CALFED Bay-Delta Program Objectives	Addresses Critical Water Supply/ Water Quality Needs of a DAC	Integrates Water Management with Land Use Planning	Helps Reduce Reliance on the Sacramento-San Joaquin Delta for Water Supply	Addresses Statewide Priorities*
1: East Contra Costa County Lawn to Garden Rebate Program	♦	♦	♦	♦		♦	♦	♦
2: Brentwood Non-Potable Water Distribution System – Phase III		♦	♦	♦		♦	♦	♦
3: Delta Diablo Recycled Water Supply Expansion and Residential Fill Station Project		♦	♦	♦	♦		♦	♦

* See Table 6-2 for details.

Project 1: East Contra Costa County Lawn to Garden Rebate Program

Certainty for Meeting the Program Preferences

The East Contra Costa County Lawn to Garden Rebate program provides incentives to its customers to reduce non-essential potable water. When a customer converts front lawns to water-wise gardens, they will immediately reduce their potable water demand. These changes to lawns and public spaces will provide direct, immediate, and long-term drought relief for the region, and reduce water supply demands on the Sacramento-San Joaquin River Delta.

Therefore, there is a high degree of certainty that the Proposed Project will meet the Program Preferences.

Breadth and Magnitude of Meeting Program Preferences

The proposed project has regional breadth and will immediately lessen the dependency on water supply from the Delta and improve fishery flows by reducing Delta diversions. Other benefits include lessening energy demands and lowering greenhouse gas emissions from potable water treatment, and improving water quality by reducing treated water discharges to the Delta. By promoting landscape efficiency, this program will provide year-round benefits in particular during hot summer months when landscape watering increases and the when the Delta is most vulnerable.

With the goal to reduce supply demands from the Delta by 2020, this Project will result in direct potable water conservation for at least 10 years and will save a total of 118 acre-feet (AF) of potable supply.

Human Right to Water Policy

The Contra Costa Water District (CCWD) is a retail and water provider, serving approximately 500,000 people and industries in Contra Costa County. The CCWD has a long-term view to provide high quality and reliable water supply for all residents and businesses within their service area. This project addresses the Human Right to Water Policy (AB685/CWC106.3) by continuing to reduce the supply demands on the Delta, which will ensure there is adequate potable supply for Delta water users, particularly during droughts. This project will have direct benefits related to water supply for up to 10 years.

This project will increase the reliability of CCWD's supply of safe, clean, affordable, and accessible water, benefiting all of its customers, including those who are low-income and residents of disadvantaged communities. This Project is well aligned with the goals of AB 685.

DAC Water Supply or Water Quality Needs

The project will be implemented in the cities of Antioch, Oakley, and portions of Brentwood, including within identified disadvantaged community (DAC) areas. The project will address water-related needs of DACs in the project area, including water-supply reliability during drought periods. However, less than 25% of these benefits will directly affect DACs.

Project 2: Brentwood Non-Potable Water Distribution System – Phase III

Certainty for Meeting the Program Preferences

The proposed project will allow the City of Brentwood to convert four regions of their service area from potable water to non-potable water. The project will also improve the health of the Delta by pumping less water out for irrigation and discharging less treated non-potable water into Marsh Creek, a tributary to the Delta, which will help reduce the salinity of the Delta. Since some of the City's water supply is from groundwater, using recycled water will conserve valuable groundwater supplies and prevent land subsidence from occurring. The project will reduce the reliance on the Delta and groundwater for water supply, supply non-potable water to more customers, and reduce chloride discharge into the Delta.

Therefore, there is a high degree of certainty that the proposed project will meet the Program Preferences.

Breadth and Magnitude of Meeting Program Preferences

The proposed project has regional breadth and will continue to provide benefits over the course of its 50-year projected life span. The project will offset potable water demand by providing non-potable water to a larger area in the city limits. The project pipelines will allow for distribution of non-potable supply to more customers and will offset the supply on the Delta. After the first year of the project installation, the project will reduce the City's potable water usage by 73.65 AFY. Over the course of 50 years, the project will reduce the City's potable water usage by 3,682.66 AF.

Additionally, this project will prevent 80,000 pounds of chloride from being discharged to Marsh Creek, since the volume of water being discharged will be reduced. Over the course of 50 years, this project will prevent a total of 3,466,500 pounds of chloride from being discharged into Marsh Creek and the Delta.

Human Right to Water Policy

This project addresses the Human Right to Water Policy (AB685/CWC106.3) by providing cleaner and more reliable sources of water for irrigation, without relying on the Delta or groundwater. By providing recycled water at no cost to customers from the recycled water filling stations and through the proposed pipeline, this project will provide a reliable water source for irrigation and decrease the need for water restrictions on potable use, especially in summer months.

This project will increase the reliability of the City's supply of safe, clean, affordable, and accessible water, benefiting all of its customers, including those who are low-income and residents of disadvantaged communities. This Project is well aligned with the goals of AB 685.

DAC Water Supply or Water Quality Needs

There are two DAC block groups located in the city limits. Though the proposed pipeline project is not located in a DAC, the long-term drought preparedness benefits of the proposed project will benefit the entire City service area, including DACs. However, the percentage of DACs in the City's service area is less than 25%.

Project 3: Delta Diablo Recycled Water Supply Expansion and Residential Fill Station Project

Certainty for Meeting the Program Preferences

The proposed project includes constructing an emergency back-up generator for Delta Diablo's Recycled Water Facility (RWF) and residential recycled water fill stations. A storage tank will now be used to operationally maximize recycled water output to increase usage and provide consistent, permanent potable water offset for customers throughout Delta Diablo's service area.

Delta Diablo currently produces 14,337 AFY of recycled water. This water is primarily used for irrigation, but on peak days or in an emergency situation where there is no power, recycled water demands are not met. This project will include the construction of the emergency generator, and make use of the existing 2MG water tank that is currently being kept full for emergency storage instead of providing operational storage to maximize the system output for peak demands. Additionally, providing recycled water for irrigation free of charge to residential customers will provide direct, immediate, and long-term drought relief for the region, and reduce water supply demands on the Sacramento-San Joaquin River Delta, supply non-potable water to more customers, and reduce nitrogen discharge into the Delta.

As a result of this project, more recycled water will be available to customers, energy costs will be lowered as the pump station will not be used, and less nitrogen will be discharged into the Delta.

Therefore, there is a high degree of certainty that the proposed project will meet the Program Preferences.

Breadth and Magnitude of Meeting Program Preferences

The proposed project has regional breadth and will continue to provide benefits over the course of its 20-year projected life span. The project will provide consistent, permanent potable water offset and reduced reliance on Delta water supply. The project will enable Delta Diablo to provide 208 AFY of recycled water to customers, thereby reducing Delta water use for irrigation, and reducing wastewater discharges to the Delta and associated pollutant loading. By exercising and drawing down the storage tank during off-peak times, there will be a decrease in energy usage by 142,000 kwh/year and associated greenhouse gas emissions will also be reduced.

The project improves water supply reliability, reduces wastewater discharges and pollutant loading, and expands recycled water supply in the region. This project will benefit the region by reducing reliance on Delta and groundwater supplies. The installation of the emergency generator will allow the District to reach more customers by maximizing existing distribution infrastructure and lowering energy consumption at the Delta Diablo's Recycled Water Facility.

Human Right to Water Policy

By providing a free source of water for irrigation and reducing monthly water bills for the community, the general public will have greater access to clean and affordable water for irrigation and will preserves potable water to meet potable demands in the region. This project will benefit all of its customers, including those who are low-income and residents of disadvantaged communities. This Project is well aligned with the goals of AB 685.

DAC Water Supply or Water Quality Needs

Approximately 31% of Delta Diablo's service area is characterized as a DAC. The proposed residential recycled water fill station will have an immediate impact on the community, including DACs, by providing a free source of irrigation water. The project will directly benefit DACs of Bay Point, Pittsburg, and Antioch by providing free irrigation water and reducing monthly water bills.

Table 6-2. Consistency of Projects with Statewide Priorities

Project ID #	Drought Preparedness						Use and Reuse Water More Efficiently						Climate Change Response Actions								Expand Environmental Stewardship			Practice Integrated Flood Management					Protect Surface Water and Groundwater Quality			Improve Tribal Water and Natural Resources	Ensure Equitable Distribution of Benefits						
													Adaptation				Reduce GHGs		Reduction of Energy Consumption																				
	Promote water conservation, conjunctive use, reuse, & recycling	Improve landscape and agricultural irrigation efficiencies	Achieve long-term reduction of water use	Efficient groundwater basin management	Establish system interties	Yields a new water supply	Increase urban & agricultural water use efficiency measures	Capture, store, treat, & use urban stormwater runoff	Incorporate/implement LID design features, techniques, & practices	Improve the water supply reliability of the Sacramento-San Joaquin Delta	Reduce reliance on the Sacramento-San Joaquin Delta	Expand water supply reliability consistent with adopted plans	Advance and expand conjunctive management	Use and reuse water more efficiently	Water management system modifications to address anticipated climate change impacts	Establish migration corridors, re-establish river-floodplain hydrologic continuity, reintroduce anadromous fish, and enhance & protect upper watershed forests and meadows	Reduce energy consumption of water systems and uses	Use cleaner energy sources to move and treat water	Water use efficiency	Water recycling	Water system energy efficiency	Reuse runoff	Watershed, floodplain & instream function improvement	Sustaining water & flood management ecosystems	Protect, restore & enhance Delta ecosystem	Better emergency preparedness and response	Improved flood protection	More sustainable flood & water management systems	Enhanced floodplain ecosystems	LID techniques that store & infiltrate runoff while protecting groundwater	Protect and restore surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses	Salt/nutrient management planning as a component	Include access to safe drinking water to small DACs and for areas that have been identified as nitrate high-risk areas	Development of Tribal Consultation, collaboration, and access to funding for water programs and projects	Increase the participation of small and disadvantaged communities in the IRWM process	Develop multi-benefit projects considering affected disadvantaged communities and vulnerable populations	Projects that address safe drinking water and wastewater treatment needs of DACs	Address and consider the Human Right to Water needs	Address critical water supply or quality needs of California Native American Tribes	Help meet State policies intended to provide access to safe, clean, and affordable water
1	♦	♦	♦				♦			♦	♦	♦		♦			♦		♦		♦			♦	♦				♦								♦
2	♦	♦	♦				♦			♦	♦	♦		♦			♦		♦	♦	♦			♦	♦				♦	♦							♦
3	♦	♦	♦				♦			♦	♦	♦		♦			♦		♦	♦	♦			♦	♦				♦				♦	♦	♦	♦	♦