

San Francisco Bay Area Regional Priority Projects and Programs Attachment 11 – Program Preferences

This attachment discusses how the Proposal assists in meeting the Proposition 84 Program Preferences.

A. Include regional projects or programs

Certainty that the Proposal will meet the Program Preference: **HIGH**

This Proposal includes five high priority regional programs for implementation in the San Francisco Bay Area IRWM Region. These regional programs were developed through a collaborative planning process conducted by the Bay Area IRWM Coordinating Committee, Planning and Process and Project Screening Subcommittees and IRWMP stakeholders. The programs included in this Proposal have been identified as highest priority regional projects for the Bay Area. It should be noted that the largest programs in this Proposal are the Regional Recycled Water Program, which represents one of the best strategies for addressing long-term drought preparedness, and is consistent with one of DWR's recommendation that "Recycled water is a drought-proof water management strategy that may also be an energy efficient option in some regions".¹ Similarly, the Regional Water Conservation Program will also directly address long-term drought preparedness.

Breadth and Magnitude to which the Program Preference will be met

Each program in this Proposal incorporates multiple water management elements. Together, these programs address all of the regional objectives set forth in the San Francisco Bay Area IRWMP. The programs will be implemented throughout the Bay Area on a region-wide scale.

The following sections discuss how each regional program that comprises the Proposal will meet Program Preferences.

1. Bay Area Regional Recycled Water Program

B. Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR

Certainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Recycled Water Program effectively integrates the implementation of ten recycled water projects (refer to Attachment 3 Work Plan for project listing) within the San Francisco Bay Hydrologic Region, which is defined as Region 2 by the RWQCB. These projects have been identified as a result of two overarching planning efforts, BARWRP and NBWRA (as described in Attachment 3 Work Plan), which span the entire region. There are ten implementation agencies (refer to Attachment 3 Work Plan for list of agencies) in this Program and they provide recycled water services to a large majority of the Bay Area region's communities and populations.

Breadth and Magnitude to which the Program Preference will be met

The Regional Recycled Water Program will encompass ten recycled water projects as listed above, and will be implemented on a regional scale throughout the Bay Area. The reduction in potable water demand that will be offset by the use of recycled water from this Program is estimated at 3,210 acre-feet per year (AFY).

C. Effectively resolve significant water-related conflicts within or between regions

Certainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Recycled Water Program will effectively resolve significant regional water-related conflicts by reducing conflict over balancing beneficial uses of the Tuolumne River, Russian River and Eel River, Alameda Creek, Mokelumne River diversions, groundwater extractions, and Statewide conflict over Delta resources by reducing overall potable demand by 3,210 AFY.

¹ DWR, 2009. Managing an Uncertain Future-Climate Change Adaptation Strategies for California's Water, Strategy 3, Page 14.

Breadth and Magnitude to which the Program Preference will be met

This program addresses a breadth of significant water-related conflicts, not only in terms of balancing water supply needs with other beneficial uses such as environmental, in-stream uses, but also helps to reduce the pressure on imported supplies during emergencies. Additionally, the potable water demand reductions generated by the recycled water program can also lead to avoided future capital projects, which could create conflicts in the region due to the high cost and physical impacts of the capital projects. The reductions in potable water demand as a result of the program will not only reduce water-related conflicts in the Bay Area region, but also Statewide from the reduced need for Delta diversions.

D. Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta ProgramCertainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Recycled Water Program will contribute to a high certainty of the attainment of the Water Quality and Water Supply Reliability objectives of the CALFED Bay-Delta Program. The potable water offset of 3,210 AFY from the program will help reduce diversions from the Bay-Delta and upstream of the Bay-Delta. The program will contribute towards Water Supply Reliability by reducing the mismatch between Delta water supplies, and current and projected beneficial uses for the Bay-Delta ecosystem. The reduction in potable demand as a result of the program will reduce wastewater generation and urban runoff, which will lead to a reduction of pollutant loading to the Bay-Delta. This will contribute towards the Water Quality objective of continuous improvement of Delta water quality for all uses.

Breadth and Magnitude to which the Program Preference will be met

The Regional Recycled Water Program meets two of the four CALFED Bay-Delta objectives: Water Supply Reliability and Water Quality. This program will be implemented by 10 public water agencies throughout the Bay Area on a regional level, and will lead to an overall potable supplies offset of 3,210 AFY.

E. Address critical water supply or water quality needs of disadvantaged communities within the regionCertainty that the Proposal will meet the Program Preference: **NOT APPLICABLE**

The Regional Recycled Water Program will address regional water supply and water quality needs, but does not specifically address critical water supply or water quality needs of disadvantaged communities within the Bay Area.

F. Effectively integrate water management with land use planningCertainty that the Proposal will meet the Program Preference: **MEDIUM**

The planning of recycled water service areas are coordinated to a certain extent with land use agencies and developers on the identification of potential customers and recycled water landscape or quality requirements.

Breadth and Magnitude to which the Program Preference will be met

This program preference will be met at the individual recycled water project level.

G. Address Statewide PrioritiesCertainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Recycled Water Program will address the following Statewide Priorities with a high level of certainty:

Drought Preparedness: The Regional Recycled Water Program will offset demand on potable supplies. The reduced demand on the potable supply for non-potable uses will result in increased availability of potable water in times of drought.

Use and Reuse Water More Efficiently: A fundamental goal of the Regional Recycled Water Program is increased reuse of water; the project also provides increased urban water use efficiency by replacing potable water with recycled water for landscape irrigation, and other industrial non-potable uses.

Climate Change Response Actions: Potable water delivered to the Bay Area is pumped from the Delta as well as other sources located outside of the Bay Area. The local production and use of recycled water will reduce the amount of imported water required to be pumped, which will result in lower energy consumption and reduced greenhouse gas (GHG) production.

Expand Environmental Stewardship: The Regional Recycled Water Program will expand environmental stewardship by reducing pumping from the Delta, thereby contributing to improved water quality within the Delta, by reducing effluent discharges to Bay waters, and by increasing water available for beneficial uses through reduced dependency on imported water supplies from a variety of sources as described in Attachment 3 Work Plan.

Protect Surface Water Quality: Regional recycled water projects will reduce potable water demand thereby reducing wastewater loads and discharges to the Bay, and also reduce diversions from the Delta, which will help to protect and restore Delta supplies.

Breadth and Magnitude to which the Program Preference will be met

This Program addresses five out of a total of eight Statewide Priorities as shown above. The magnitude to which the Statewide Priorities will be met will be on a regional basis.

2. Bay Area Regional Water Conservation Program

B. Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR.

Certainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Water Conservation Program integrates water conservation programs within the San Francisco Bay Hydrologic Region, which is defined as Region 2 by the RWQCB. The program will integrate five conservation elements (refer to Attachment 3 Work Plan for listing) aimed at providing multiple benefits including: water use efficiency, improved landscape irrigation efficiency, long-term reduction of water use, and reduced energy and water supply demand. There are 12 implementation agencies (refer to Attachment 3 Work Plan for list of agencies) in this Program and they provide water conservation and education services to a large majority of the Bay Area region's communities and populations. Combined, these agencies bring a wealth of experience and have established ongoing water conservation programs of a similar scale.

Breadth and Magnitude to which the Program Preference will be met

The Regional Water Conservation Program will encompass five conservation elements (refer to Attachment 3 Work Plan for listing), and will be implemented on a regional scale throughout the Bay Area. The maximum reduction in potable water demand from the implementation of this program is estimated at 2,500 acre-feet per year (AFY).

C. Effectively resolve significant water-related conflicts within or between regions

Certainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Water Conservation Program will effectively resolve significant regional water-related conflicts by reducing conflict over balancing beneficial uses of the Tuolumne River, Russian River and Eel River, Alameda Creek, Mokelumne River diversions, groundwater extractions, and Statewide conflict over Delta resources by reducing overall potable demand by 2,500 AFY.

Breadth and Magnitude to which the Program Preference will be met

This program addresses a breadth of significant water-related conflicts, not only in terms of balancing water supply needs with other beneficial uses such as environmental, in-stream uses, but also helps to reduce the pressure on imported supplies during emergencies. Additionally, the water demand reductions from the conservation program can also lead to avoided future capital projects, which could create conflicts in the region due to the high cost and physical impacts of the capital projects. In terms of magnitude, the reductions in potable water demand as a result of the program will not only reduce water-related conflicts in the Bay Area region, but also Statewide from the reduced need for Delta diversions.

D. Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program

Certainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Water Conservation Program will contribute to a high certainty of the attainment of the Water Quality and Water Supply Reliability objectives of the CALFED Bay-Delta Program. The water savings from the program will help reduce diversions from the Bay-Delta and upstream of the Bay-Delta. The technologies promoted in this program are well-proven in terms of water use efficiency, and will collectively lead to a reduction in potable demand of 2,500 AFY. The program will contribute towards Water Supply Reliability by reducing the mismatch between Delta water supplies, and current and projected beneficial uses for the Bay-Delta ecosystem. The reduction in overall potable demand as a result of the program will reduce wastewater generation and urban runoff, which will lead to a reduction of pollutant loading to the Bay-Delta. This will contribute towards the Water Quality objective of continuous improvement of Delta water quality for all uses.

Breadth and Magnitude to which the Program Preference will be met

The Regional Water Conservation Program meets two of the four CALFED Bay-Delta objectives: Water Supply Reliability and Water Quality. This program will be implemented by 12 public water agencies throughout the Bay Area on a regional level, and will lead to an overall water savings of 2,500 AFY.

E. Address critical water supply or water quality needs of disadvantaged communities within the regionCertainty that the Proposal will meet the Program Preference: **NOT APPLICABLE**

The Regional Water Conservation Program is a Bay Area-wide program that will be implemented in all nine counties and will address regional water supply and water quality needs, but does not specifically address critical water supply or water quality needs of disadvantaged communities within the Bay Area.

F. Effectively integrate water management with land use planningCertainty that the Proposal will meet the Program Preference: **MEDIUM**

The Water-Efficient Landscape Education and Landscape Rebate program elements within the program will integrate water conservation with land use planning by supporting the conversion of existing water-intensive lawns to water-efficient landscapes. These program elements will also contribute towards implementation of DWR's Model Landscape Ordinance, which will require land use agencies to apply a set of criteria for evaluating the application and review of landscape plans for new construction.

Breadth and Magnitude to which the Program Preference will be met

Two elements within the Regional Water Conservation Program address this Program Preference. The Water-Efficient Landscape Education program will result in 47 AFY of water savings region-wide and the Water-Efficient Landscape Rebate program will result in the replacement of 3.8 million square feet of lawn (equivalent to 80 football fields) region-wide.

G. Address Statewide PrioritiesCertainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Water Conservation Program will address the following Statewide Priorities with a high level of certainty:

Drought Preparedness: Regional water conservation practices that comprise this project will effectively address long-term drought preparedness by contributing to sustainable water supply and reliability during water shortages.

Use and Reuse Water More Efficiently: The technologies and measures included in the conservation program increase water use efficiency and reduces overall potable water demand. This will increase water supply reliability for the Bay Area and the capacity to adapt to climate change.

Climate Change Response Actions: Regional water conservation will lead to the use and reuse of water more efficiently. The program will not only reduce overall potable water demand but wastewater loads as well, and can reduce energy demand and GHG emissions.

Expand Environmental Stewardship: All of the conservation program elements support environmental stewardship. The toilet and washer rebate programs reduce water use and energy use by reducing the amount of water and wastewater pumped and treated. The water-efficient landscape rebates, the water-efficient landscape education and weather based irrigation controller programs all promote water use efficiency in the landscape. The programs also promote eliminating runoff onto pavement, holistic approaches to improving soils, reducing green waste, and eliminating the use of chemical fertilizers, herbicides and pesticides.

Protect Surface Water Quality: Regional conservation strategies implemented as a result of this project will reduce potable water demand thereby reducing wastewater loads and discharges to the Bay, and the water-efficient landscaping programs specifically will reduce urban runoff and discharges into creeks and local water bodies.

Ensure Equitable Distribution of Benefits: Several of the participating agencies will use grant funding to expand programs that serve disadvantaged communities in their service areas, such as the SFPUC's HET direct install program to low-income customers, Solano County Water Agency's HET direct install to low-income housing units in Fairfield, Vacaville, and Vallejo; and BAWSCA's plans to expand East Palo Alto's participation in the regional clothes washer program to also join a HET program. All of the programs will assist water customers to reduce their water use and thereby reduce their water bills.

Breadth and Magnitude to which the Program Preference will be met

This Program addresses six out of a total of eight Statewide Priorities as shown above. The magnitude to which the Statewide Priorities will be met will be on a regional basis.

3. Bay Area Wetland Ecosystem Restoration Program (WERP)**B. Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR.**Certainty that the Proposal will meet the Program Preference: **HIGH**

The Wetland Ecosystem Restoration Program integrates a suite of restoration construction projects within the San Francisco Bay Hydrologic Region, which is defined as Region 2 by the RWQCB. The program will integrate three wetland and tidal marsh restoration projects (refer to Attachment 3 Work Plan for project listing). There are numerous implementation agencies (refer to Attachment 3 Work Plan for list of agencies) in this Program, including the Department of Fish and Game, US Fish and Wildlife Service, and the State Coastal Conservancy, which have extensive experience implementing restoration projects.

Breadth and Magnitude to which the Program Preference will be met

The Wetland Ecosystem Restoration Program will implement three of the highest-priority restoration construction projects ready to implement along the Bay shoreline of three counties in the Bay Area. The program will restore a total of 1,946 acres of tidal marsh, 106 acres of seasonal wetlands, and create 280 acres of shallow water pond habitat in the Bay Area.

C. Effectively resolve significant water-related conflicts within or between regionsCertainty that the Proposal will meet the Program Preference: **NOT APPLICABLE**

This program does not resolve significant water-related conflicts within or between regions.

D. Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta ProgramCertainty that the Proposal will meet the Program Preference: **HIGH**

The Wetland Ecosystem Restoration Program will contribute to a high certainty of the attainment of the Water Quality and Ecosystem Restoration objectives of the CALFED Bay-Delta Program. The projects will restore tidal marsh that will help to filter pollutants from point and non-point discharges before they enter the Bay, thereby improving water quality in the Bay and meeting the Water Quality objective. The projects will meet the Ecosystem Restoration objective because they will restore tidal marsh habitat, improve tidal exchange and hydrology of a degraded tidal system, and create shallow water migratory bird habitat and nesting islands that will provide sustainable habitat for the endangered, threatened and special status species.

Breadth and Magnitude to which the Program Preference will be met

The Wetlands Ecosystem Restoration Program meets two of the four CALFED Bay-Delta objectives: Water Quality and Ecosystem System Restoration. The program will be implemented in the Bay shoreline of three counties (Sonoma, San Mateo and Santa Clara), and will restore a total of 1,946 acres of tidal marsh, 106 acres of seasonal wetlands, and create 280 acres of shallow water pond habitat in the Bay Area.

E. Address critical water supply or water quality needs of disadvantaged communities within the regionCertainty that the Proposal will meet the Program Preference: **NOT APPLICABLE**

The Wetlands Ecosystem Restoration Program will address regional water quality needs, but does not specifically address critical water supply or water quality needs of disadvantaged communities within the Bay Area.

F. Effectively integrate water management with land use planningCertainty that the Proposal will meet the Program Preference: **HIGH**

The Wetlands Ecosystem Restoration Program is surrounded by predominantly urban land uses. The program presents a unique opportunity to achieve some of the long-term regional goals for the Bay shoreline, as described in various regional land use plans and policies (e.g. the Baylands Ecosystem Habitat Goals Report, 1999; SF Bay Conservation and Development Commission; RWQCB Basin Plan, CALFED Bay-Delta Final EIS/EIR; City and County General Plans).

Breadth and Magnitude to which the Program Preference will be met

This Program addresses the integration of wetlands ecosystem restoration projects with land use planning. In terms of magnitude, the program will be implemented in the Bay shoreline of three counties (Sonoma, San Mateo and Santa Clara).

G. Address Statewide PrioritiesCertainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Water Conservation Program will address the following Statewide Priorities with a high level of certainty:

Climate Change Response Actions: The projects in the WERP program have all been engineered with a variety of strategies to prolong functioning in the face of sea level rise, improve buffering of future storm impacts, and increase the capacity for carbon sequestration.

Expand Environmental Stewardship: The projects will lead to the restoration of wetland ecological functions on about over 2,300 acres of degraded wetlands at three project sites along the Bay shoreline and will utilize post-construction monitoring and adaptive management to inform future wetland restoration throughout the region.

Practice Integrated Flood Management: The projects will address site-specific flood management issues and improve flood protection. Each tidal restoration project will attenuate local storm surges and has been designed to maintain or improve drainage in adjacent creeks and sloughs.

Protect Surface Water Quality: The projects will improve water quality within the wetlands and discharges to the Bay by filtering pollutants, increasing tidal flushing and circulation.

Breadth and Magnitude to which the Program Preference will be met

This Program addresses four out of a total of eight Statewide Priorities as shown above. The magnitude to which the Statewide Priorities will be met will be on a regional basis.

4. Regional Green Infrastructure Capacity Building Program**B. Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR.**Certainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Green Infrastructure Capacity Building Program integrates three stormwater management and rainwater harvesting projects within the San Francisco Bay Hydrologic Region, which is defined as Region 2 by the RWQCB. The program will implement three demonstration projects in the northern, southern and eastern sub-regions of the Bay Area (refer to Attachment 3 Work Plan for project listing). Results from the pilot evaluations will then be used to inform and expand development of green infrastructure projects to all parts of the region. The San Francisco Estuary Partnership (SFEP) will oversee the program. SFEP has successfully managed similar green infrastructure projects in the region and is well-positioned to be a unifying voice and advocate for promoting green infrastructure and reducing pollution from stormwater runoff in the Bay Area.

Breadth and Magnitude to which the Program Preference will be met

The Regional Green Infrastructure Capacity Building Program is designed to benefit the Bay Area region as a whole and will help local jurisdictions with stormwater Municipal Regional Permit (MRP) and Phase 2 compliance.

C. Effectively resolve significant water-related conflicts within or between regionsCertainty that the Proposal will meet the Program Preference: **NOT APPLICABLE**

This program does not resolve significant water-related conflicts within or between regions.

D. Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta ProgramCertainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Green Infrastructure Capacity Building Program will contribute to a high certainty of the attainment of the Water Quality and Water Supply Reliability objectives of the CALFED Bay-Delta Program. The Napa Valley Rainwater Harvesting Project will offset potable water demand for irrigation with rainwater, thereby reducing overall demand and diversions from the Bay-Delta. The program will contribute towards Water Supply Reliability

by reducing the mismatch between Delta water supplies, and current and projected beneficial uses for the Bay-Delta ecosystem. The green street projects and rainwater harvesting projects will store and infiltrate runoff. This will lead to a reduction of pollutant loading (mercury and PCBs from sources such as older urban and industrial areas) to the Bay-Delta, and contribute towards the Water Quality objective of continuous improvement of Delta water quality for all uses.

Breadth and Magnitude to which the Program Preference will be met

The Regional Green Infrastructure Capacity Building Program meets two of the four CALFED Bay-Delta objectives: Water Supply Reliability and Water. This program will be implemented in seven cities along San Pablo Avenue in Contra Costa and Alameda Counties, Hacienda Avenue in the City of Campbell and in Napa County within the Bay Area hydrologic boundary.

E. Address critical water supply or water quality needs of disadvantaged communities within the region

Certainty that the Proposal will meet the Program Preference: **MEDIUM**

A number of cities along the San Pablo Spine project have disadvantaged communities. One of the critical water quality issues in DACs in the San Francisco Bay is flooding and stormwater pollution due to under-designed stormwater systems which put residences, businesses and brown fields in inundation zones. The stormwater treatment units will treat approximately 14 AFY of polluted stormwater runoff, lowering the public exposure to pollutants.

Breadth and Magnitude to which the Program Preference will be met

The Regional Green Infrastructure Capacity Building Program addresses critical water quality needs in DACs that are caused by flooding and stormwater discharges into the community, and the exacerbating impacts of climate change on sea level rise leading to increased flooding. The program will address critical water quality problems of DACs located within the cities along San Pablo Avenue (Cities of San Pablo, Richmond, El Cerrito, Albany, Berkeley, Emeryville, and Oakland).

F. Effectively integrate water management with land use planning

Certainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Green Infrastructure Capacity Building Program effectively integrates water management with land use planning with a high level of certainty. The San Pablo Avenue and Hacienda Avenue green streets projects are being proposed by cities and their land use planning agencies, the regional planning agency (ABAG), in cooperation with local stormwater management programs, the San Francisco Bay Regional Water Quality Control Board (RWQCB), Caltrans and many other agencies.

Breadth and Magnitude to which the Program Preference will be met

This Program addresses the integration of stormwater management projects with land use planning. In terms of magnitude, the program will be implemented in the East Bay (San Pablo Avenue in seven cities), South Bay (Hacienda Avenue in the City of Campbell), and in the North Bay (Napa County within the IRWMP boundary).

G. Address Statewide Priorities

Certainty that the Proposal will meet the Program Preference: **HIGH**

The Regional Green Infrastructure Capacity Building Program will address the following Statewide Priorities with a high level of certainty:

Drought Preparedness: Regional green infrastructure projects will effectively address long-term drought preparedness by promoting water reuse through rainwater harvesting, which will reduce overall potable demand and contribute to sustainable water supply and reliability during water shortages.

Use and Reuse Water More Efficiently: The technologies and measures included in the green infrastructure projects will capture, store and reuse rainwater, thus reducing overall potable demand; and also incorporate and implement LID features (i.e. green streets) to reduce or eliminate stormwater runoff.

Climate Change Response Actions: Regional green infrastructure will lead to the use and reuse of water more efficiently. The program will not only reduce overall potable water demand but wastewater loads as well, and can reduce energy demand and GHG emissions.

Expand Environmental Stewardship: The green infrastructure projects will promote environmental stewardship by expanding recognition of the multiple benefits of green infrastructure and LID, and the projects will also lead to the improvement of local watersheds by reducing stormwater runoff into creeks and waterbodies.

Practice Integrated Flood Management: The green infrastructure projects promote and practice integrated flood management through the use of LID techniques that store and infiltrate runoff, thus reducing stormwater discharges and improving flood protection.

Protect Surface Water Quality: The green infrastructure projects will capture, store and reuse rainwater and incorporate and implement LID features (i.e. green streets) to reduce or eliminate stormwater runoff and pollutant loading to surface waters, therefore improving surface water quality.

Ensure Equitable Distribution of Benefits: The San Pablo Avenue Spine project is a multi-benefit integrated stormwater management project that will bring benefits to the DACs located along the street. These benefits include reduced flooding and stormwater pollution and neighborhood greening.

Breadth and Magnitude to which the Program Preference will be met

This Program addresses seven out of a total of eight Statewide Priorities as shown above. In terms of magnitude, the Program Preferences will be met for the pilot projects in the East Bay (San Pablo Avenue in seven cities), South Bay (Hacienda Avenue in the City of Campbell), and in the North Bay (Napa County within the IRWMP boundary).

5. Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities (DAC) Program

B. Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR.

Certainty that the Proposal will meet the Program Preference: HIGH

The Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities (DAC) Program integrates nine water management projects within the San Francisco Bay Hydrologic Region, which is defined as Region 2 by the RWQCB. The program will integrate a suite of water management projects aimed at building the capacity of local agencies and organizations to address critical water quality issues caused by flooding and stormwater discharges in low-lying vulnerable DACs in the Bay Area (refer to Attachment 3 Work Plan for project listing). To ensure effective integration of the projects, the San Francisco Estuary Partnership (SFEP) will be providing the administration, oversight and participation of the Bay Area Watershed Network (BAWN) in the implementation and dissemination of results of the projects in this Program. BAWN will organize the involvement of the flood control and watershed communities in the Program.

In addition, several projects enable greater integration with existing water management projects. Specifically, the DAC Richmond Shoreline and City of San Pablo Flood Project (Project E) will contribute to a Bay Area-wide effort to provide stream restoration design guidance for the different sub-regions of the Bay. The restoration of wetlands along the floodplain and riparian corridor of Rheem Creek will address a priority area identified in the Bay Area Wetland Ecosystem Goals.² The SF Estuary Steelhead Monitoring Program (Project I) will lead to a first-ever regional steelhead trout monitoring program for watersheds tributary to the San Francisco Estuary.

Breadth and Magnitude to which the Program Preference will be met

The Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities Program will integrate a broad breadth of water management projects and programs within the Bay Area hydrologic region. This program consists of several project types, including: watershed stakeholder capacity building and collaboration; habitat restoration and water quality improvement; and integrated flood management through floodplain, and flood/stormwater infrastructure mapping. The magnitude to which the Program will integrate water management projects and programs within the Bay Area hydrologic region varies from local to regional. However, results from each project will be consolidated and made available at a regional level.

C. Effectively resolve significant water-related conflicts within or between regions

Certainty that the Proposal will meet the Program Preference: MEDIUM

The Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities Program will effectively resolve significant water-related conflicts within the Bay Area region in terms of reducing the disproportionate exposure of DACs to stormwater and flood pollution and water quality impairments. The formation of watershed partnerships as a result of this project will help to develop

² <http://ceres.ca.gov/wetlands/sfbaygoals/docs/goals1997/goalsproject/about.html>

collaborative working relationships among local agencies, property owners and residents, which is currently absent in many DACs because these areas are poorer and do not have the resources to coordinate or develop planning efforts. The formation of watershed partnerships are a central need to resolve the perceived conflicts between the needs of flood damage reduction and habitat restoration to improve water quality.

Breadth and Magnitude to which the Program Preference will be met

This program will be implemented in DACs on a regional Bay Area-wide basis, and will bring together all the competing interests among relevant local, State and federal agencies, local community groups and residents in a collaborative, inclusive way, to develop an overall vision and process for integrated planning and implementation of restoration projects that will address a variety of water-related conflicts.

D. Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program

Certainty that the Proposal will meet the Program Preference: **HIGH**

The Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities Program will contribute to attainment of the Water Quality and Ecosystem Restoration objective of the CALFED Bay-Delta Program. The program addresses water quality issues in DACs and is consistent with CALFED's ecosystem restoration goal "to improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta system to support sustainable populations of diverse and valuable plant and animal species." In addition, the projects also contribute to the goal of CALFED's Watershed Program element of providing financial and technical assistance for watershed activities that help to promote collaboration and integration among community-based watershed efforts, through the development of local watershed partnerships.

Breadth and Magnitude to which the Program Preference will be met

This program meets one of CALFED Bay-Delta Program's objectives: Water Quality and Ecosystem Restoration. In terms of magnitude, the program will be implemented in identified DACs throughout the Bay Area.

E. Address critical water supply or water quality needs of disadvantaged communities within the region

Certainty that the Proposal will meet the Program Preference: **HIGH**

The Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities Program will address critical water quality needs of disadvantaged communities within the region. This program is intended to expressly address the needs of DACs as identified by local stakeholders. Water quality issues in DACs in the San Francisco Bay are most frequently associated with overbank flows, poor drainage and under-designed stormwater systems which put residences, businesses and brown fields in inundation zones. This creates polluted water hazards where people live and work. The projects will help to address water quality needs of DACs in the Bay Area region in the following ways:

- Risk assessment and flood/stormwater infrastructure inventory will highlight the needs for infrastructure improvement projects to the agencies. These projects, when implemented will reduce flooding occurrences and severity and improve local water quality.
- On-the-ground restoration of creeks and wetlands in DACs will improve water quality through removal of invasive plant species and revegetation of native plants that will contribute to lower water temperatures.
- Stream restoration curves and restoration design guidance will provide reliable and consistent guidance to DACs for the development of project designs and implementation actions for addressing water quality issues.

Breadth and Magnitude to which the Program Preference will be met

This Program addresses critical water quality needs in DACs that are caused by flooding and stormwater discharges into the community, and the exacerbating impacts of climate change on sea level rise leading to increased flooding. The program will address critical water quality problems of DACs located throughout the Bay Area, as shown in Figure 1 in the Work Plan, Page 3.5-21.

F. Effectively integrate water management with land use planning

Certainty that the Proposal will meet the Program Preference: **MEDIUM**

The Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities Program will effectively integrate water management with land use planning by developing floodplain and habitat restoration project designs in collaboration with local stakeholders, including residents, businesses and local agencies to ensure that the projects are complementary to, or can help inform land

use plans. The project will develop flood hazard mapping and assessment data that will be extremely useful and critical for future land use planning efforts, which will need to address the impacts of increased flooding from sea level rise. In addition, detailed mapping of existing flood and stormwater infrastructure will help to identify deficiencies within the DACs, which can lead to development of capital improvement projects that incorporate land use-based strategies such as Low Impact Development (LID) techniques.

Breadth and Magnitude to which the Program Preference will be met

This Program addresses the integration of floodplain and habitat restoration projects with land use planning. In terms of magnitude, the program will be implemented in identified DACs throughout the Bay Area.

G. Address Statewide Priorities

Certainty that the Proposal will meet the Program Preference: **HIGH**

The Integrated Water Quality Improvement, Flood Management and Ecosystem Restoration in Bay Area Disadvantaged Communities Program will address the following Statewide Priorities with a high level of certainty:

Climate Change Response Actions: Climate change response will entail identifying hydraulic constrictions of waterways and stormwater systems near the Bay or ocean which will have practical results on decreasing inundation zones. The increase of floodplain and wetland areas and stream restoration will directly benefit the disadvantaged communities' capacity for resilience in the face of climate change. Fisheries restoration and stream channel design guidance information will result in better integrated plans which will help communities get through increasingly difficult permit programs in order to successfully reach the implementation phase of projects.

Expand Environmental Stewardship: Environmental stewardship will be expanded in several ways: by utilizing students and teachers from DACs who will conduct restoration activities, and establishing local watershed partnerships to develop community support and participation for needed multi-objective flood management projects and provide positive links between community and regulatory agencies.

Practice Integrated Flood Management: The program includes projects that will lead to the design of multi-objective flood risk abatement and restoration projects that will improve flood protection, create more sustainable flood management systems, and enhance floodplain ecosystems. The program will also develop flood mapping and risk assessment tools for integrated flood management.

Protect Surface Water Quality: The program will identify infrastructure deficiencies that are currently causing flood and stormwater pollution of surface waters in the DACs, which will lead to the design of improvement projects that will in turn improve and protect surface water quality.

Ensure Equitable Distribution of Benefits: This program will ensure that a meaningful percentage of IRWMP funds for the Bay Area will benefit DACs. The program increases the DAC involvement in the Bay Area IRWMP and provides an incentive for the watershed community to remain engaged in efforts to integrate water management programs with entities they need to develop working relationships with. This program will implement multi-benefit projects (flood and stormwater management, natural habitat improvement, increased recreational opportunities, improved surface water quality) with consideration of affected DACs and vulnerable populations in the Bay Area region.

Breadth and Magnitude to which the Program Preference will be met

This Program addresses five out of a total of eight Statewide Priorities as shown above. The magnitude to which the Statewide Priorities will be met will be on a regional basis.