

Attachment 3. Work Plan

The following attachment outlines the proposed Work Plan. This Work Plan documents the process the East Contra Costa County IRWM Region will take to enhance and adopt a revised Integrated Regional Water Management Plan, compliant with the plan standards as outlined in the California Department of Water Resources' *Proposition 84 & Proposition 1E Integrated Regional Water Management Guidelines* (August 2010).

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Acronyms and Abbreviations

CCWD	Contra Costa Water District
CEQA	California Environmental Quality Act
DAC	Disadvantaged Community
DDSD	Delta Diablo Sanitation District
DWR	California Department of Water Resources
EA	Environmental Assessment
ECCC Region	East Contra Costa County IRWM Region
ECWMA	East County Water Management Association
ESA	Endangered Species Act
FEIRWMP	Functionally Equivalent Integrated Regional Water Management Plan
GMP	Groundwater Management Plan
IRWM	Integrated Regional Water Management
IRWMP	Integrated Regional Water Management Plan
IS	Initial Study
ISD	Ironhouse Sanitary District
mgd	million gallons per day
NEPA	National Environmental Policy Act
O&M	operations and maintenance
Prop. 84 Guidelines	2010 Proposition 84 IRWM Guidelines
RAP	Regional Acceptance Process
Reclamation	U.S. Department of the Interior, Bureau of Reclamation
RMS	Resource Management Strategy
RWF	Recycled Water Facility
RWMG	Regional Water Management Group
RWMP	Recycled Water Master Plan
SOR	System Optimization Report
SWRCB	State Water Resources Control Board
TDS	total dissolved solids
USFWS	U.S. Fish and Wildlife Service
WWTP	wastewater treatment plant

Attachment 3. Work Plan

This Work Plan consists of three primary sections. Section 1 gives the current status of the Integrated Regional Water Management Plan (IRWMP) for the East Contra Costa County IRWM Region (ECCC Region). Section 2 describes detailed tasks that will be completed as part of this grant proposal. Section 3 describes how the IRWMP will meet the Program Preferences identified in the 2010 California Department of Water Resources (DWR) Proposition 84 IRWM Guidelines (Prop. 84 Guidelines).

1. CURRENT STATUS IN MEETING IRWMP STANDARDS

In early 2011, the ECCC Region was awarded a Round 1 Planning Grant to complete an update of its 2005 Functionally Equivalent Integrated Regional Water Management Plan (FEIRWMP) to meet Prop. 84 Guidelines. With the exception of some data collection and outreach, this work did not start until early 2012 when the grant agreement with DWR was signed.

However, since the submittal of its Round 1 Planning Grant, the ECCC Region has progressed on some of its most important planning efforts and identified various outreach efforts that in the long term will be of great benefit to continued IRWMP implementation. This Work Plan describes the various tasks that the ECCC Region is proposing to continue these important planning efforts to enhance the IRWMP Update that is underway.

1.1. History

East Contra Costa County has a history of successful regional planning. This planning culminated in development of the FEIRWMP. The FEIRWMP tied together a series of regional plans, including the following:

- *Phase II, East County Water Supply Management Study*, 1996
- *Contra Costa County Stormwater Management Plan*, 1999
- *Contra Costa Water District Future Water Supply Study Final Report*, 1996
- *Delta Regional Drinking Water Quality Management Plan*, 2005
- *Draft East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan*, 2005 (finalized in October 2006, after the FEIRWMP was produced)

The FEIRWMP brought together 11 water management agencies, all members of the East County Water Management Association (ECWMA), identified water management objectives and strategies, and helped prioritize a list of implementation projects. The FEIRWMP helped the region to obtain a Proposition 50 Implementation Grant for 10 high priority projects.

In 2009, the region successfully submitted a Regional Acceptance Process (RAP) and became a fully recognized region (shown in Figures 1 and 2). The member agencies of ECWMA formed a Regional Water Management Group (RWMG), responsible for implementing and updating the ECCC Region's IRWMP. In 2010, the East Contra Costa County Habitat Conservancy was added to the group. RWMG members and their primary functions are shown in Table 1.

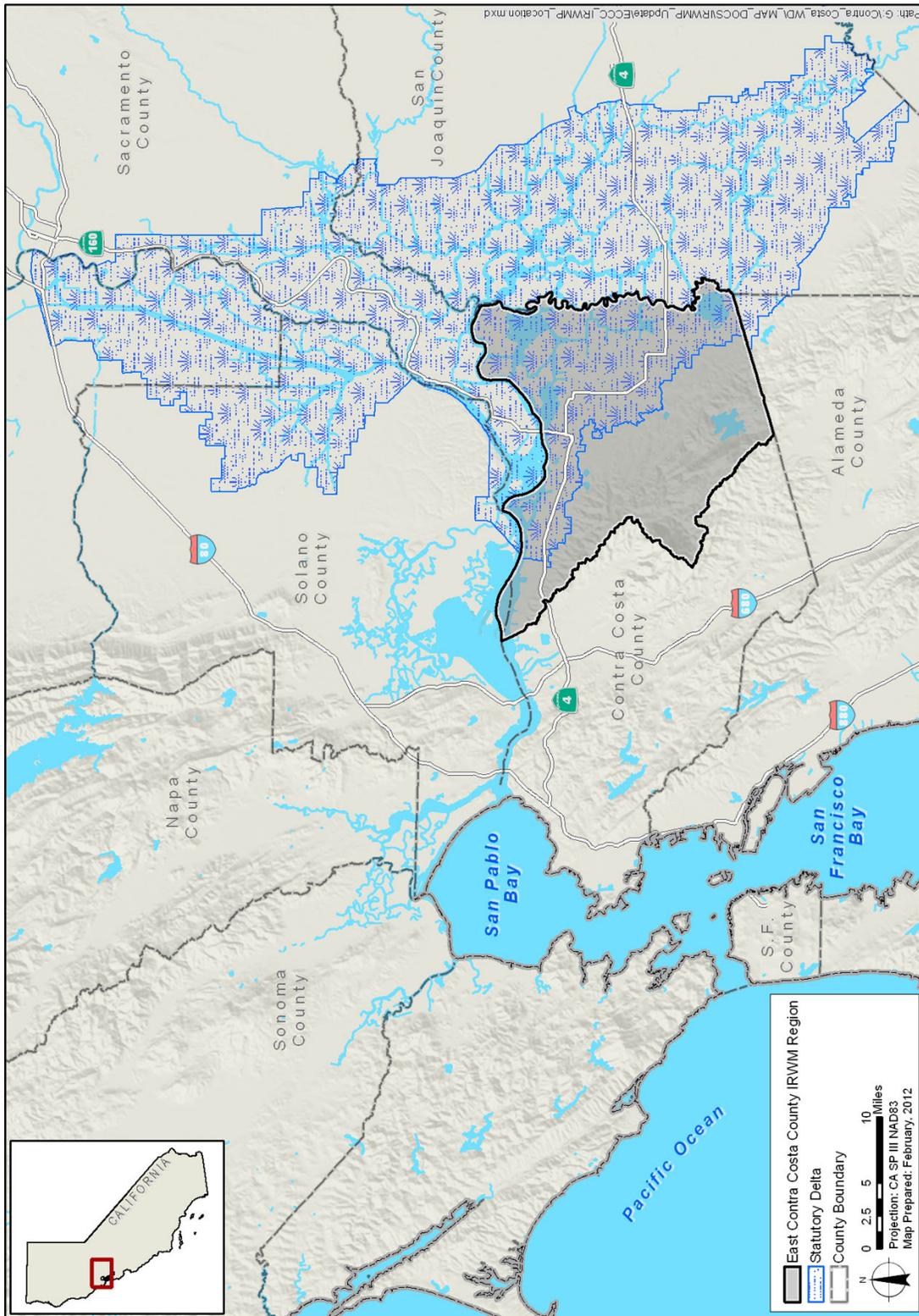


Figure 1. Location of East Contra Costa County Region

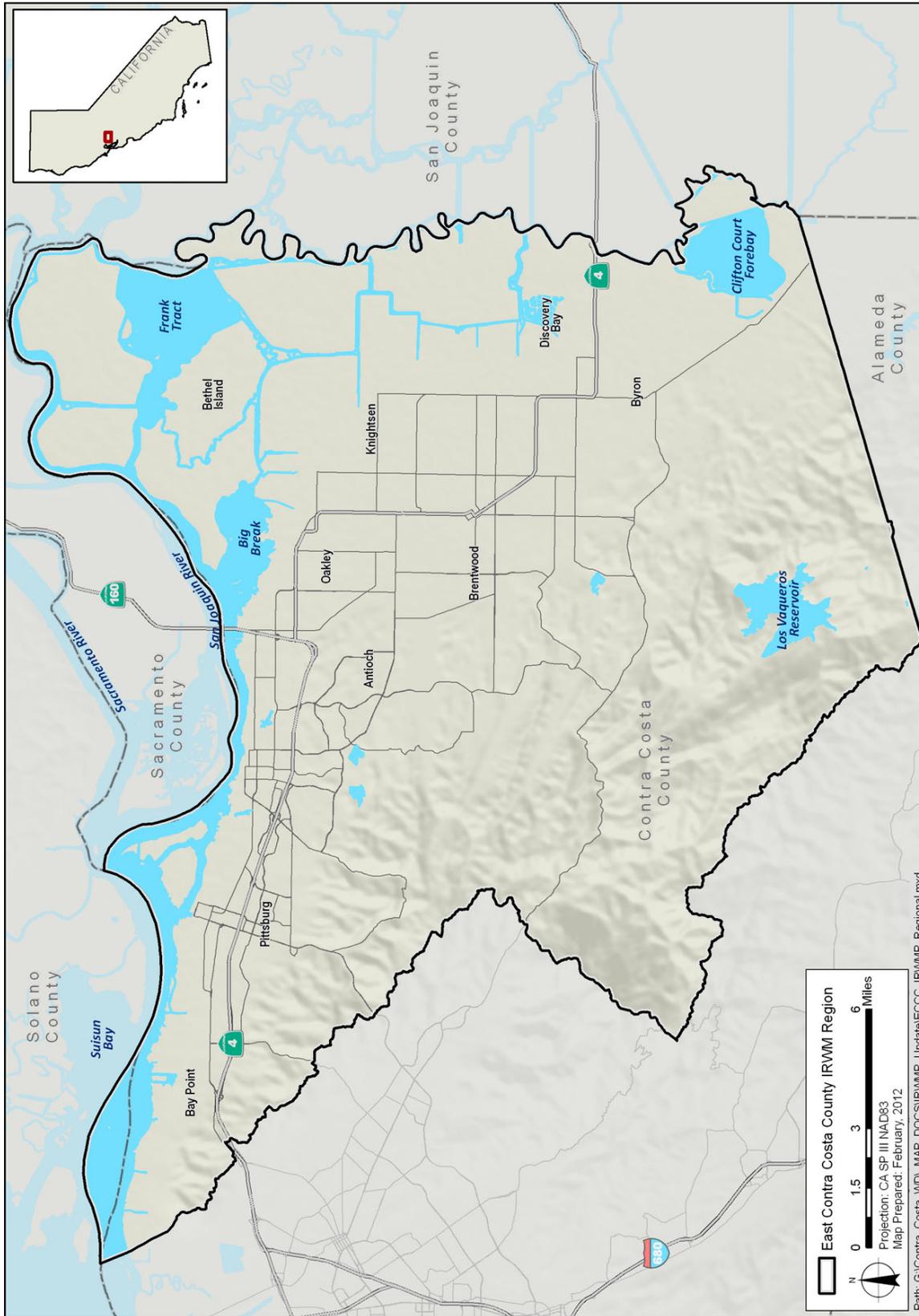


Figure 2. East Contra Costa County Region Map

Table 1. Regional Water Management Group Members and Primary Functions

Member Agency	Water Supply and Quality	Wastewater	Recycled Water	Stormwater/ Flood Management	Watershed and Habitat
City of Antioch	√	√		√	√
City of Brentwood	√	√	√	√	√
Byron-Bethany Irrigation District	√				
Contra Costa County Flood Control				√	
East Contra Costa County Habitat Conservancy	√				√
Contra Costa Water District	√			√	√
Delta Diablo Sanitation District		√	√		
Diablo Water District	√				
Discovery Bay Community Services District	√	√		√	
East Contra Costa Irrigation District	√				
Ironhouse Sanitary District		√	√		
City of Pittsburg	√	√		√	√

With completion of the FEIRWMP and acceptance of the RAP application, members of the RWMG have continued to meet to coordinate ongoing implementation projects, update planning and project development, conduct outreach activities, and identify grant funding opportunities.

1.2. Need for IRWMP Update

As stated previously, the ECCC Region was awarded a Round 1 Planning Grant to update its IRWMP. The update, which is currently underway, is also being supported through in-kind labor by the member agencies. The scope of work for this update is described in more detail in Section 3 of this Work Plan.

Reasons for the update include the following:

- Now that the ECCC Region is fully recognized through the RAP, the FEIRWMP should reflect a more formal integrated planning process and should be developed into a standards-compliant IRWMP.
- The IRWMP is a living document and must be updated to reflect current planning, project implementation, guidelines, regulations, objectives, and challenges of the region.
- Updates of the IRWMP were always envisioned as occurring on a semiregular basis and because the FEIRWMP was adopted in 2005, the need for an update is clear.
- The IRWMP needs to reflect recent studies and plans from the region, including 2010 *Urban Water Management Plans* and the 2009 RAP.
- An update is required as a condition of the region’s 2011 Proposition 84 Implementation Grant.

- The August 2010 Proposition 84 IRWM Guidelines include new and revised requirements for IRWMPs that need to be incorporated.

Table 2 summarizes the status and planned update or revision of each of the IRWMP Standards, as defined in the Prop. 84 Guidelines.

Table 2. Status of IRWMP Standards

IRWMP Standard	Status
Governance	This standard will be met by incorporating the discussion of the governance structure from the 2009 RAP submittal into the IRWMP Update. The governance provides the structure for participation in IRWMP development and implementation.
Region Description	This standard will be met with minor updates to the existing 2005 FEIRWMP to reflect current conditions and the latest information and data from recent studies and plans.
Objectives	This standard will be met after substantial revisions are made to the original objectives to reflect the ECCC Region's current and future challenges. New guidelines require that the objectives be measurable; therefore, the objectives will also include metrics to allow the region to track how well it is meeting its objectives.
Resource Management Strategies	This standard will be met after substantial revisions are made to the 2005 FEIRWMP Water Management Strategies. The Region will select the appropriate Resource Management Strategies from the <i>California Water Plan</i> when developing objectives and projects.
Integration	This standard will be met after substantial revision to the existing 2005 FEIRWMP to reflect current conditions, including the 2009 RAP, to describe how the RWMG will pursue project implementation integration.
Project Review Process	This standard will be met after substantial revision of the project review process presented in the 2009 RAP. Revisions will be incorporated based on such aspects as the latest challenges facing the region, updated objectives, appropriate RMS, and benefits to disadvantaged communities.
Impacts and Benefits	This standard will be met after substantial revisions. Impacts and benefits will consider the new, prioritized list of projects.
Plan Performance and Monitoring	This standard will be met with minor updates to the existing 2005 FEIRWMP to reflect current conditions and updated measureable objectives and projects.
Data Management	This standard will be met with substantial revisions to the existing 2005 FEIRWMP to reflect current conditions and updated objectives and projects. It will also incorporate data management from new groundwater tasks that develop groundwater data collection programs to begin in 2012.
Finance	This standard will be met with substantial revisions to the existing 2005 FEIRWMP to reflect current conditions and updated objectives and projects. It will also incorporate a summary of new groundwater analyses to be performed in 2012.
Technical Analysis	This standard will be met with minor updates to the existing 2005 FEIRWMP to reflect current conditions and updated objectives and projects.
Relation to Local Water Planning	This standard will be met with minor updates to the existing 2005 FEIRWMP to reflect current conditions and the latest information and data from recent local water management plans.

Table 2. Status of IRWMP Standards (contd.)

IRWMP Standard	Status
Relation to Local Land Use Planning	This is a new standard that will need to be addressed in the IRWMP Update to describe the relationship between local land use planning and water management planning. It will need to reflect the General Plans of the cities and county, including recent updates.
Stakeholder Involvement	This standard will be met with substantial revision to the existing 2005 FEIRWMP. It will include a description of stakeholder involvement in development of the IRWMP Update, including formulating objectives and projects. An expanded web site and new methods to involve Disadvantaged Communities will also be included.
Coordination	This standard will be met with minor updates to the existing 2005 FEIRWMP to reflect current conditions and updated objectives and projects.
Climate Change	This is a new standard that will be met through development of a climate change vulnerability assessment, as shown in the <i>Climate Change Handbook for Regional Water Planning</i> . It will include a list of prioritized vulnerabilities and a methodology for further data gathering and analyses of those vulnerabilities.

Key:
 FEIRWMP = Functionally Equivalent Integrated Regional Water Management Plan
 IRWMP = Integrated Regional Water Management Plan
 RAP = Regional Acceptance Process
 RMS = Resource Management Strategies

1.3. Need for Proposed Work Plan

In the interim between the Round 1 Planning Grant Application and the opportunity for a Round 2 Planning Grant Application, the ECCC Region has progressed in its planning efforts and determined the need for additional tasks that would greatly enhance its IRWMP Update. These tasks, which are described in detail in this Work Plan, include the following:

1. Improved outreach and collaboration including an enhanced web site, expanded outreach to Disadvantaged Communities (DAC), and increased regional collaboration.
2. Expanded recycled water planning for evaluating recycled water use on a more regional basis.
3. A study to determine how best to optimize water supplies and facilities for the ECCC Region as a whole.

This Work Plan also includes a plan to incorporate the results and outcomes of the tasks into the IRWMP and administration of the grant and projects. The tasks are described in detail in this Work Plan, including more information about why these tasks are needed and how they would benefit the IRWMP Update currently underway.

Like the State of California, the ECCC Region is committed to promoting equitable distribution of project benefits, and especially to addressing the critical water supply needs of underprivileged areas. A DAC is defined as a community with an annual median household income that is less than 80 percent of the statewide median household income. The ECCC Region contains a significant proportion of DACs, as shown in Figure 3. Throughout the Work Plan, there is an emphasis on outreach to and involvement from DACs, not only to avoid adverse effects, but also to proactively seek opportunities to provide benefits to those areas through the IRWM process.

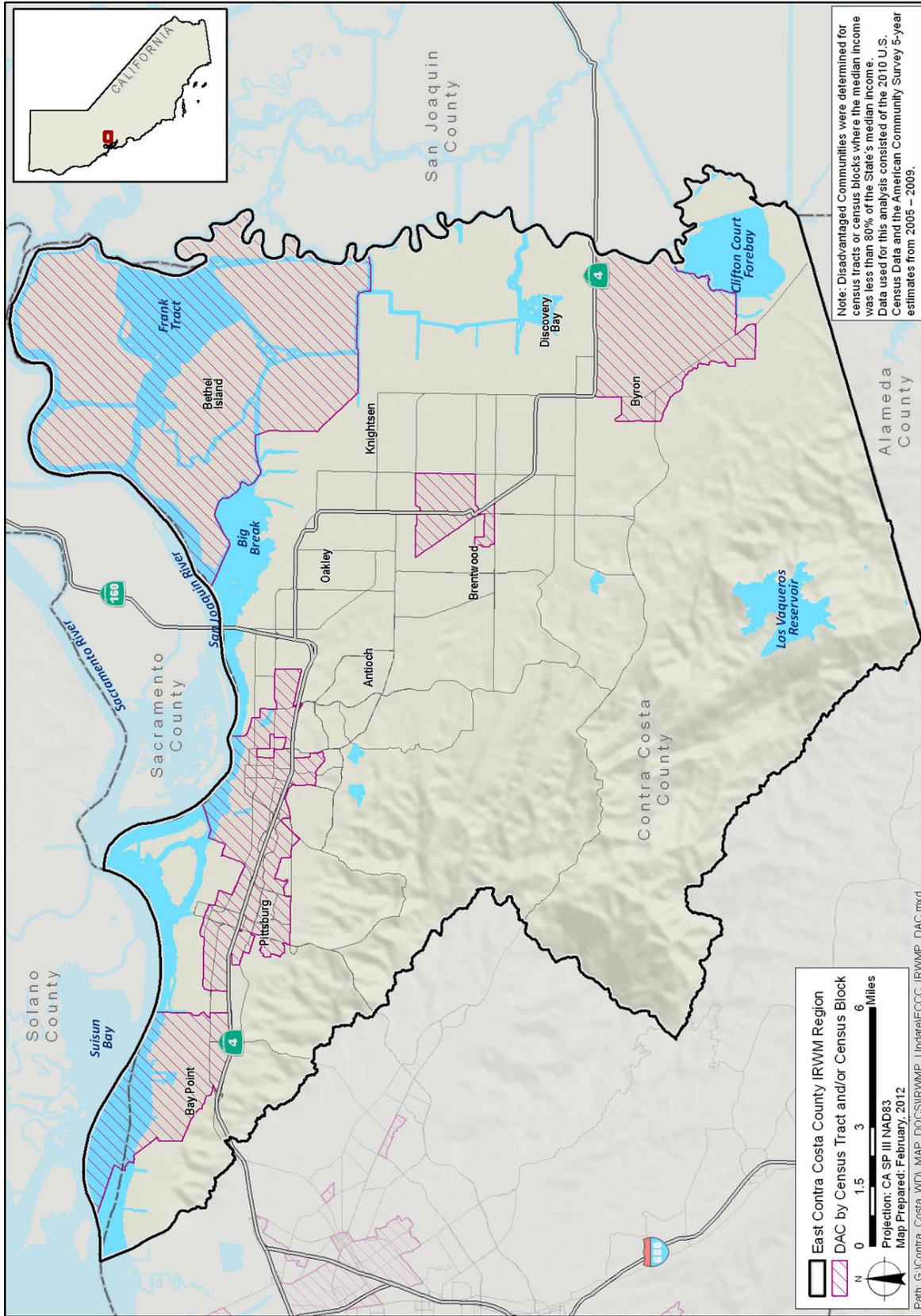


Figure 3. Disadvantaged Communities in East Contra Costa County Region

1.3.1. Enhanced Web Site and Additional Outreach and Collaboration

An enhanced web site and additional outreach would provide more accessibility to the IRWM process for stakeholders and the general public, including DACs. The current IRWMP Update scope of work calls for development of a simple web site and outreach to stakeholders, including DACs. These activities will help lead to a compliant IRWMP Update. However, the RWMG believes that an enhanced web site and more targeted outreach to organizations such as Contra Costa County's Municipal Advisory Councils, would provide better involvement from stakeholders, particularly DACs.

The enhanced web site would have additional features, such as better access to the project database information, interactive maps, enhanced context and background information, and a more user-friendly interface. With these improvements, the web site would facilitate better information dissemination to the RWMG, stakeholders, DWR, and the general public.

Targeted outreach to Municipal Advisory Councils would allow for direct and structured outreach to greater parts of the unincorporated areas of the region. The purpose of Municipal Advisory Councils is to advise the County Board of Supervisors on land use and planning matters affecting their communities of interest. All four of the Municipal Advisory Councils in the ECCC Region contain DACs within their boundaries or in their adjacent Special Notification Areas, as shown in Figure 4, and are therefore a natural conduit for the IRWM process to reach DACs outside incorporated areas such as the Cities of Pittsburg and Antioch.

Increased collaboration would provide a new venue for participation for those smaller, resource-limited agencies that have expressed interest in the IRWM process but have been unable to engage in the past because of staffing constraints. Collaboration would foster more equitable distribution of projects across the ECCC Region and promote sustainable long-term involvement.

1.3.2. Regional Recycled Water Planning

This task will continue to develop recycled water planning to better define the regional recycled water setting, better develop potential projects for implementation through the IRWM process, and in the process help to address the region's objectives while continuing the progression of regional planning in the ECCC Region. Integration of this task into the IRWMP is discussed in Task 4 of this Work Plan.

1.3.3. Regional Capacity Study

This task will evaluate and optimize regional water treatment plant operations, untreated water supply and delivery processes in order to improve water supply reliability and reduce the cost of water treatment for the project participants in the ECCC Region. An additional goal is to evaluate opportunities for regional Bay Area water deliveries including treated and untreated water deliveries as well as water treatment plant improvements. The study will consider optimizing water treatment plants in the ECCC Region to determine if average capacity utilization rates can be increased while satisfying peak day water demands.

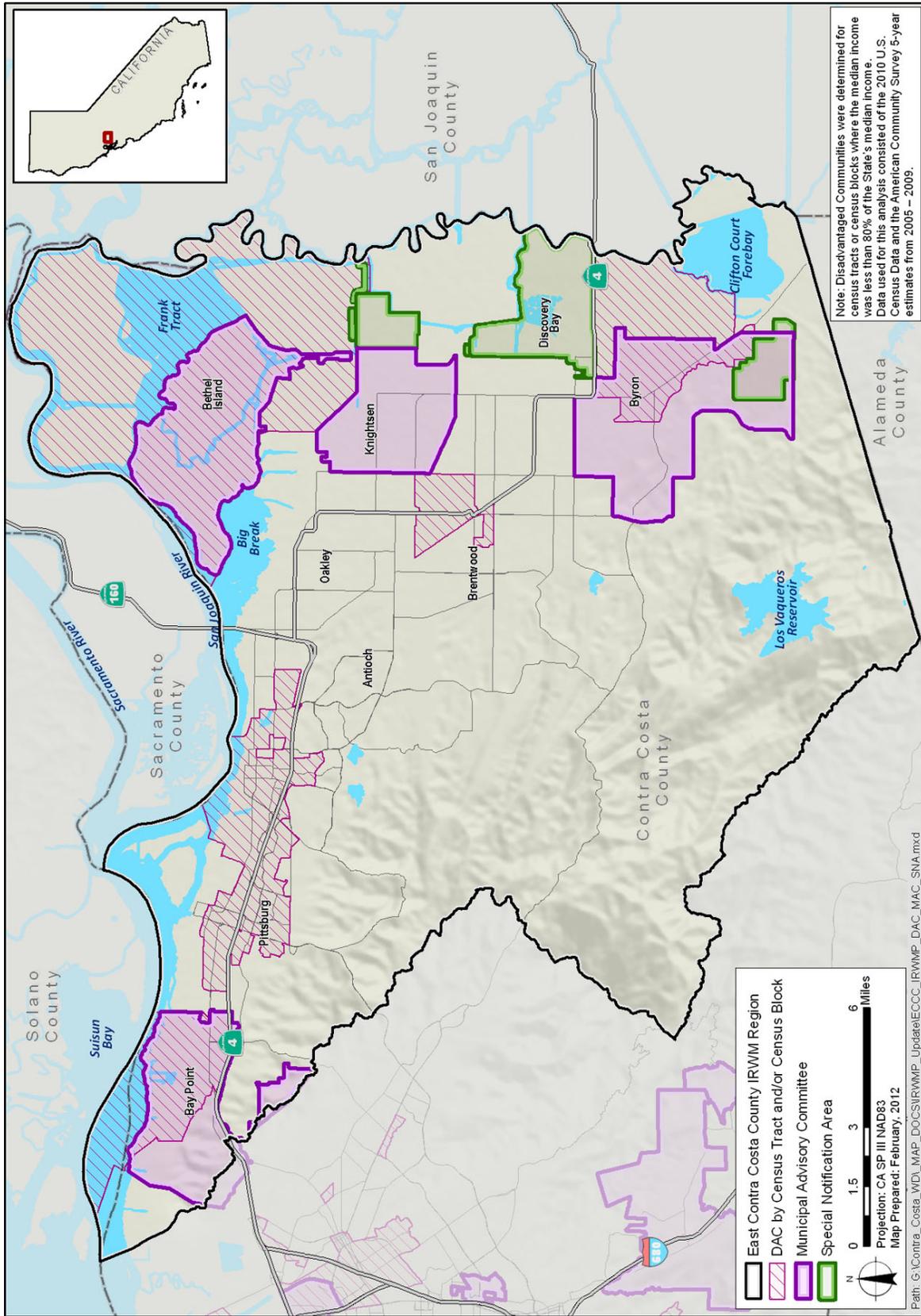


Figure 4. Municipal Advisory Councils and Disadvantaged Communities in East Contra Costa County Region

1.3.4. Regional Collaboration in Recycled Water Use Expansion and Water System Optimization

The ECCC Region's water supply is facing many challenges such as uncertainty in the Delta, increased water conservation requirements, and aging infrastructure. One of the biggest challenges affecting water supply reliability is climate change. DWR understands water managers will have to deal with the effects of climate change in their water resources planning and, thus, they participated in development of the *Climate Change Handbook for Regional Water Planning* (Climate Change Handbook). The Climate Change Handbook describes the anticipated impacts to water supply from climate change including a decrease in snowpack, shift in snowmelt runoff, reduction in precipitation, increased invasive species within the Delta, difficulties with meeting environmental flow restrictions, sea water intrusion, and increase of droughts.

The ECCC Region recognizes these challenges facing its water resources. Therefore, in the FEIRWMP, the RWMG identified objectives and water management strategies related to water supply reliability and expansion of recycled water use. Since the submittal of its Round 1 Planning Grant, the region has progressed in focused, topic-specific planning efforts to improve its water supply reliability. These efforts, increasing recycled water use and optimizing system operations, are also mentioned as adaptation strategies and mitigations in the Climate Change Handbook.

Delta Diablo Sanitation District (DDSD) and Ironhouse Sanitary District (ISD), two key members of the RWMG, are leading the recycled water planning efforts. These efforts are ongoing and are partially funded by grants from the U.S. Department of the Interior, Bureau of Reclamation (Reclamation). The first step in the system optimization efforts is a Regional Capacity Study co-led by Contra Costa Water District (CCWD) and the City of Antioch that includes participation from five RWMG members and eight other stakeholders in the region. This regional capacity study is also partially funded from a Reclamation grant.

Completion of these efforts would greatly benefit the region and its IRWMP by better defining the portfolio of water supplies and their regional interconnectedness. Additionally, these planning activities may identify projects for potential implementation appropriate for inclusion in the IRWM planning process. Consequently, these efforts would need to be coordinated with and incorporated into the IRWMP Update. A Round 2 Planning Grant to support these focused planning efforts would help the ECCC Region to better address its objectives, define regional constraints and opportunities, and continue the progression of regional planning in the ECCC Region.

Other benefits of these efforts include the following:

- Each study would include a specific step to evaluate potential benefit to DACs for any alternative plan considered, thus increasing water supply reliability of significant portions of the region, including DACs.
- Expansion of recycled water use will also help the State Water Resources Control Board (SWRCB) meet its goals of an additional 1 million acre-feet of recycled water use by 2020 and 2 million acre-feet by 2030.

- Optimization of the region's treated and untreated water supplies and related infrastructure would benefit the entire region by offsetting or augmenting existing surface water or groundwater supplies, and would also promote better use of existing assets rather than developing or constructing new ones.
- A goal of the Regional Capacity Study is to improve energy efficiency, which would help mitigate the effects of climate change due to the potential reduction in greenhouse gasses.

2. GRANT WORK PLAN CONTENT

The ECCC Region is submitting this Prop. 84 Planning Grant Application to obtain grant funds to conduct focused, topic-specific, IRWM-related planning activities and enhance the ECCC Region's IRWMP Update. The IRWMP Update currently underway will meet current Plan Standards and address the Region's needs and objectives, providing appropriate solutions based on current conditions. However, additional planning activities would substantially enhance the IRWMP Update.

This grant proposal includes the following specific tasks that would be completed by the RWMG:

- Task 1 – Additional Outreach and Collaboration
- Task 2 – Regional Recycled Water Planning
- Task 3 – Regional Capacity Study
- Task 4 – Integration of Tasks into IRWMP
- Task 5 – Grant Administration

Results of these tasks would benefit the IRWMP by providing increased effective outreach activities to the public and stakeholders, specifically DACs, a more collaborative regional approach, and a better regional understanding of water and recycled water supplies and related potential projects.

The following scope of work is presented in detail, demonstrating the overall feasibility of the Work Plan with the end result of an enhanced ECCC IRWMP Update. Implementation of this proposed scope of work will more closely align the IRWMP Update with the Program Preferences and Statewide Priorities.

2.1. Task 1: Additional Outreach and Collaboration

Task 1 Features

- ✓ Enhances outreach to DACs
- ✓ Addresses Program Preferences
 - Include regional projects or programs
 - Effectively integrate water management programs and projects
 - Effectively resolve significant water-related conflicts within or between regions
 - Address critical water supply or water quality needs of DACs within the IRWM region
- ✓ Addresses Statewide Priorities
 - Ensure equitable distribution of benefits

2.1.1. Purpose

Because the IRWM process is intended to be collaborative and transparent, it is critical to provide multiple platforms for stakeholders to interact with the process and contribute to the IRWMP. The purpose of this task is to provide enhanced outreach and accessible communications, especially to DACs, with a goal of increasing active participation above minimal levels observed in previous IRWM-related activities. An additional purpose of this task is to increase member agency collaboration to fully integrate water-related planning within the ECCC Region.

2.1.2. Task Description

Task 1 consists of three parts: Expanded DAC Outreach, Web Site Enhancement, and Increased Regional Collaboration. These tasks are described below.

Task 1a: Expanded DAC Outreach

The IRWMP Update currently underway includes updating the DACs identified from the 2005 FEIRWMP, and contacting local, regional, and statewide DAC-focused organizations that may assist with DAC outreach strategies and/or represent DACs. Outreach activities target specific steps in the IRWMP update process, including attending and providing feedback at public workshops and developing projects that specifically benefit DACs.

Under Task 1a of this Work Plan, additional DAC outreach would be performed through Contra Costa County's Municipal Advisory Councils. The Municipal Advisory Council Policies (September 15, 2008) state the following:

In recognition of the need by unincorporated communities for increased influence with their county boards of supervisors, municipal advisory councils have been organized in some counties under authorization of a 1971 legislative statute. Such a council is an advisory body of local citizens appointed by the board of supervisors with the purpose of representing the community to the board. Although a municipal advisory council is a governing body, it has no fiscal authority or administrative organization. Because it lacks authority to implement its position directly, it seeks to accomplish its goals through county government. These councils face two ways: toward the county, offering the views of the community; and toward the community, supplying information about county

proposals and a place where individuals can air opinions on community problems and perhaps receive assistance and guidance. The councils hold public meetings, survey community opinion, and speak for the community to the board of supervisors.

In 2008, the county formalized the boundaries and policies of Municipal Advisory Councils, defining their role as follows: “Municipal Advisory Councils advise the Board of Supervisors on land use and planning matters affecting their communities of interest.” Municipal Advisory Council members are appointed by the County Board of Supervisors.

All four of the Municipal Advisory Councils in the ECCC Region (Bay Point, Bethel Island, Byron, and Knightsen) contain DACs either within their boundaries or in their adjacent Special Notification Areas, as shown in Figure 4. Municipal Advisory Councils are a structured venue to represent the interests of certain DACs and to provide an additional forum for DAC participation. RWMG would notify the Municipal Advisory Councils of the public workshops and attend Municipal Advisory Council meetings to describe the IRWM process and facilitate focused discussions about how to best serve DACs. First, RWMG would attend a meeting for each Municipal Advisory Council after the kickoff public workshop during the call for projects and would provide an IRWM overview, status, and discussion of the call for projects and the importance of developing and submitting projects that may benefit DACs. Next, RWMG would attend a meeting for each Municipal Advisory Council during the activities in Tasks 2 and 3 to summarize the work being done and provide an opportunity for input.

Task 1b: Web Site Enhancement

The IRWMP Update currently underway includes a functional web site that uses Microsoft’s SharePoint software and has the following:

- Home page that lists announcements and describes how to contact the site administrator.
- Publicly accessible Documents page that provides links for any user to download related documents.
- Publicly accessible Schedule page that includes a link to download a schedule in PDF format.
- Publicly accessible Contact page that lists a contact person for questions regarding the IRWMP process.
- Projects page where users can browse project information.
- New project form, where users submit new projects into the database, subject to e-mail verification and review by a site administrator.

The look and feel of the SharePoint-based web site will be basic, with plain text and a user interface resembling the folder structure of Microsoft Windows (see Figure 5 for an example).

Under Task 1b of this Work Plan, RWMG would create a web site that would have broader functionality, greater appeal, and increased accessibility to the public, including DACs and stakeholders. Graphical treatments would enhance the look and feel of the web site, making its visual appeal similar to web sites for other IRWM regions statewide (see Figure 6 for an example).

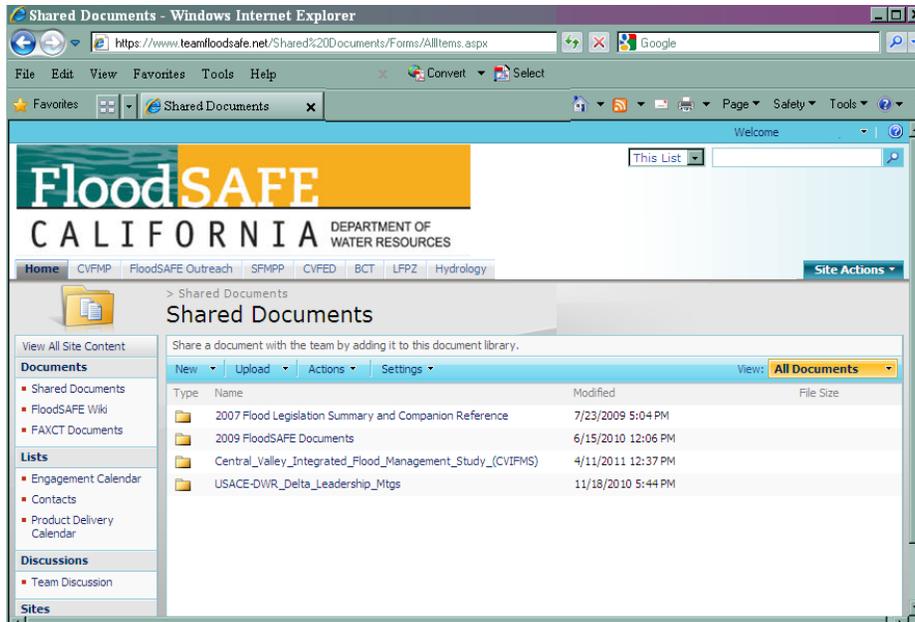


Figure 5. Typical Look and Feel of a SharePoint Web Site

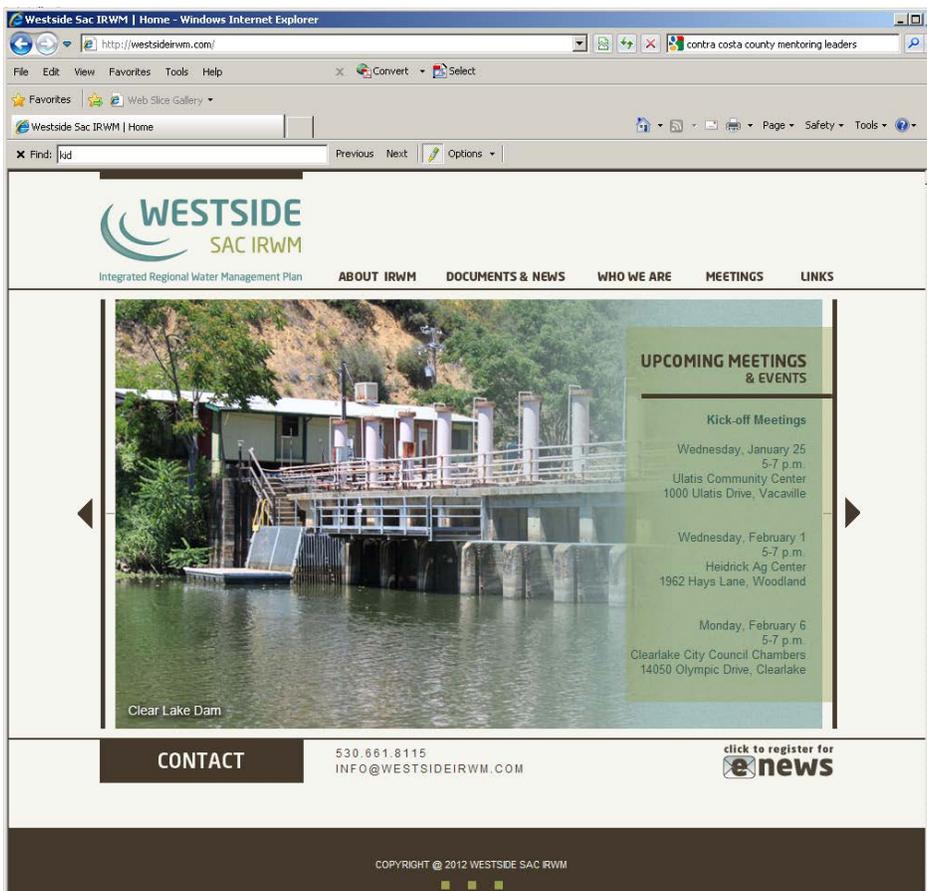


Figure 6. Look and Feel of Westside Sacramento IRWM Region's Web Site

The content of the web site would be expanded to include additional features, as described below:

- A user-friendly regional map would be created to display IRWMP project data to the public, while demonstrating the regional distribution of projects and programs. Ready access to the locations and types of projects proposed in the region would facilitate project coordination, regional collaboration, and public involvement. Additionally, the interface would foster a living process for IRWM planning that allows continued adding and updating of projects.
 - Users would still submit projects through a web-based form, with automatic verification of their email address and a gateway approval step to allow the project to be reviewed by RWMG before the project is entered into the database (to avoid inappropriate entries).
 - Project location would be entered as a point, specified by the user, on a map.
 - Any user could view all projects upon an interactive map that would connect to the web site's project database.
 - Any user could view summary project information by hovering over the project location on a map, or more detailed project information by clicking on the project location.
- In addition to the map tool, any user could view all projects in a user-friendly detailed list format. Filtering and searching features would allow the user to view projects based on varying characteristics (for example, viewing by objective, project status, or organization proposing a project).
- The same pages under the existing work would also be included, with additional improvements:
 - The Home page would include a narrative description of the IRWM process and the ECCC Region.
 - In addition to links to download related reports, the Documents page would include a description of each report, providing context and its relevance to the IRWM process.
 - The Projects page would include detailed instructions to the user explaining how to submit projects, the general process of how projects will be prioritized, and when and how to receive the prioritized project listing.
- A new page would be added to describe each of the member agencies, their roles and service areas within the region, and links to their web sites, if applicable.
- A new page would be added to describe the current status (IRWMP Update) and opportunities for public and stakeholder participation. This page would also describe current activities related to recycled water and groundwater.
- A new page would be added for Frequently Asked Questions.

Task 1c: Increased Regional Collaboration

In 2005, the 11 RWMG member agencies developed and adopted an FEIRWMP, which tied together a series of existing regional and local plans. Since the 2005 FEIRWMP, the region has become a fully recognized region through the RAP and is currently updating the FEIRWMP into a fully integrated and compliant IRWMP. In 2010, the East Contra Costa County Habitat Conservancy was added to the group.

The current RWMG roster of 12 member agencies is very diverse, ranging from municipalities to special districts, and from large agencies with dozens to hundreds of staff members to very small agencies with fewer than five staff members. Involvement from all member agencies has been actively sought. In recent planning efforts, including development of the 2005 FEIRWMP and monthly coordination meetings, agencies with more staff resources have generally been more involved than agencies with less staff resources. The smaller agencies have expressed interest and support in the IRWM process and have participated to a limited extent, but their constrained staff resources have made regular participation challenging. In particular, Byron-Bethany Irrigation District, Town of Discovery Bay Community Services District, and East Contra Costa Irrigation District have historically been least available to participate, while several other agencies participate only occasionally, as time permits.

Task 1c would provide additional venues for participation to increase the involvement of smaller, staff-limited agencies within the ECCC Region. For the IRWMP Update currently underway, four stakeholder workshops are scheduled: Regional Objectives and Conflicts, Project Prioritization Process, Project Review, and Climate Change. The regional benefit of the IRWM process would be greatest if all 12 member agencies could participate in all four workshops. However, agencies with limited staff resources are not likely to be able to attend all, if any, of the workshops. This task includes developing four separate presentations that summarize the discussions at each of the four workshops. Each presentation would be developed within 3 business days of the workshop. Then, within the next 2 weeks, the presentation would be brought to up to four agencies that were not able to attend the workshop. The presentations would describe the topic presented at the workshop, the relevant discussion, and the decisions made, and would provide a venue for the agency's input. In developing the budget for this task, it was assumed that for each of the four topics, RWMG would spend 1 day to prepare each presentation and 2 days traveling to visit up to four agencies.

Currently, the list of projects for implementation in the 2005 FEIRWMP does not include projects from the resource-limited agencies that have not been able to participate regularly and, as a result, these agencies may not understand the full potential of the IRWM planning process to benefit the entire ECCC Region. Performing the activities described in this task would facilitate focused discussions to help the smaller agencies identify projects that meet the plan objectives, submit the projects through the IRWM planning process, and influence the prioritization process. Therefore, this task would promote an equitable distribution of projects throughout the ECCC Region.

In addition to benefitting the IRWMP Update underway, this regional collaboration effort would bring the resource-limited agencies "up to speed" with the IRWM planning process. In turn, when the process concludes and the agencies understand how IRWM can benefit all stakeholders in the ECCC Region, it is anticipated that these agencies would proactively engage in the process in the future, fostering a sustainable and beneficial long-term collaboration.

2.1.3. Benefit to DACs

Task 1 would directly benefit DACs, presenting multiple opportunities to interact with DACs and the Municipal Advisory Councils that represent them, as well as improving access to information through web site improvements. Collaboration with Municipal Advisory Councils would be a focused effort to elicit specific information for the IRWMP Update. However, building these connections and engaging the Municipal Advisory Councils in active participation in the IRWM planning process, along with a robust web site to enhance information availability, would facilitate sustained DAC involvement in the IRWM planning process into the future.

2.1.4. Deliverables

Task 1a would include RWMG attendance and presentation at eight Municipal Advisory Council meetings. Two meetings would be attended for the Bay Point, Bethel Island, Byron, and Knightsen Municipal Advisory Councils.

Task 1b would result in a web site for the ECCC Region to be used for communicating with stakeholders and the public and submission of projects by stakeholders and the public for consideration in the IRWM planning process.

Task 1c would include a presentation for each of the four workshop topics, and a focused, interactive discussion at up to four agencies for each topic.

2.1.5. Additional Assumptions

The level of effort and budget proposed herein would be added to the level of effort and budget funded under the current IRWMP Update to complete a single enhanced web site. In developing the level of effort and budget, it was assumed that the SharePoint site would not be created initially, but that funds would be redirected to this task. If the SharePoint site is created, and an HTML site, as described above is desired, additional funds would be needed.

The scope and budget for the web site development include the following technical assumptions:

- The site would use the Google Earth or Bing Maps mapping platform. License fee would not apply because the organization is not for profit.
- Costs would include 2 years of third party web hosting and the registration of a domain name.
- The site would use a SQL database for storing project data.
- Site administrators would use a shared password to access restricted portions of the web site, where user submitted projects are reviewed and approved.
- Only project data would be maintained through the web interface. Other, infrequently changed, data, such as document libraries, schedules, and contact information, would be updated by a web developer.

2.2. Task 2: Regional Recycled Water Planning

Task 2 Features

- ✓ Enhances outreach to DACs
- ✓ Addresses Program Preferences
 - Include regional projects or programs
 - Effectively integrate water management programs and projects within a hydrologic region
 - Effectively resolve significant water-related conflicts within a region
 - Contribute to attainment of one or more objectives of the CALFED Bay-Delta Program
 - Address critical water supply needs of DACs within the IRWM region
 - Effectively integrate water management with land use planning
- ✓ Addresses Statewide Priorities
 - Drought preparedness
 - Use and reuse water more efficiently
 - Climate change response actions
 - Expand environmental stewardship
 - Protect surface and groundwater quality
 - Ensure equitable distribution of benefits

2.2.1. Purpose

The ECCC Region recognizes recycled water as a reliable, drought-proof supply that can reduce dependence on more vulnerable surface water supplies. All three wastewater agencies within the ECCC Region (see Table 1) maintain a sharp focus on continually improving their recycled water capabilities. Development of recycled water supplies meets many objectives identified in the 2005 FEIRWMP that remain relevant today and are expected to be included (although made measurable to meet new the Prop. 84 Guidelines) in the IRWMP Update. These objectives include the following:

- Maximize dry year supplies
- Maximize water supply reliability
- Meet future demands
- Maximize use of local supplies/reduce dependence on imported supplies
- Protect and enhance source water quality
- Reduce pollutant discharges
- Maximize environmental sustainability

The purpose of this task is to continue development of recycled water planning to better define the regional recycled water setting, better develop potential projects for implementation through the IRWM planning process, and, in the process, help to address the region's objectives while continuing the progression of regional planning in East Contra Costa County. Integration of this task into the IRWMP is discussed in Task 4 of this Work Plan.

2.2.2. *Task Description*

Task 2 consists of three parts:

- Regional recycled water collaboration within the ECCC Region
- *Recycled Water Feasibility Study Report and Master Plan Report* for DDS
- *Recycled Water Feasibility Study Report* for ISD

These elements are not included in the current IRWMP Update, and are described below.

Task 2a: Regional Recycled Water Collaboration

DDS, ISD, and the City of Brentwood are the three wastewater agencies within the ECCC Region, and their service areas are shown in Figure 7. These agencies have a history of collaborative recycled water planning, most recently in preparing the East County Industrial Recycled Water Facilities Plan (2009), which evaluated recycled water demands for industrial uses and regional approaches to providing supply to customers. During development of this project, the regional recycled water agencies and water supply agencies collaborated regularly to identify and evaluate integrated regional solutions. This collaboration provided direct benefit to the overall facilities plan for industrial recycled water, and is perceived to have benefitted the region overall.

Task 2a would revive regional recycled water collaboration in the ECCC Region. DDS and ISD are undertaking master planning and/or feasibility study activities related to their recycled water programs (Tasks 2b and 2c), and the City of Brentwood is also in the early stages of recycled water planning. To take advantage of the common time frame for recycled water development across the region, the wastewater agencies would participate in a structured, monthly conference calls to discuss the regional aspects of their recycled water programs. Topics to be discussed would include the following:

- Recycled water project identification and development
- Opportunities for regional efficiency
- Stakeholder and DAC outreach strategies and lessons learned
- Regulatory aspects
- Implementation challenges

Recycled water collaboration would be summarized at the ECCC Region's RWMG meetings to foster ongoing coordination with the IRWM planning process.

Task 2b: Recycled Water Feasibility Study Report and Master Plan Report for DDS

DDS is interested in expanding and optimizing the recycled water system through development of a comprehensive Recycled Water Master Plan (RWMP). This plan will cover the DDS service area, which includes the City of Antioch, City of Pittsburg, and unincorporated community of Bay Point. The service area is located in eastern Contra Costa County at the confluence of the Sacramento and San Joaquin rivers, and is dependent on the Delta for water supply. This is a regional planning effort with results directly applicable to meeting regional objectives of the ECCC IRWMP.

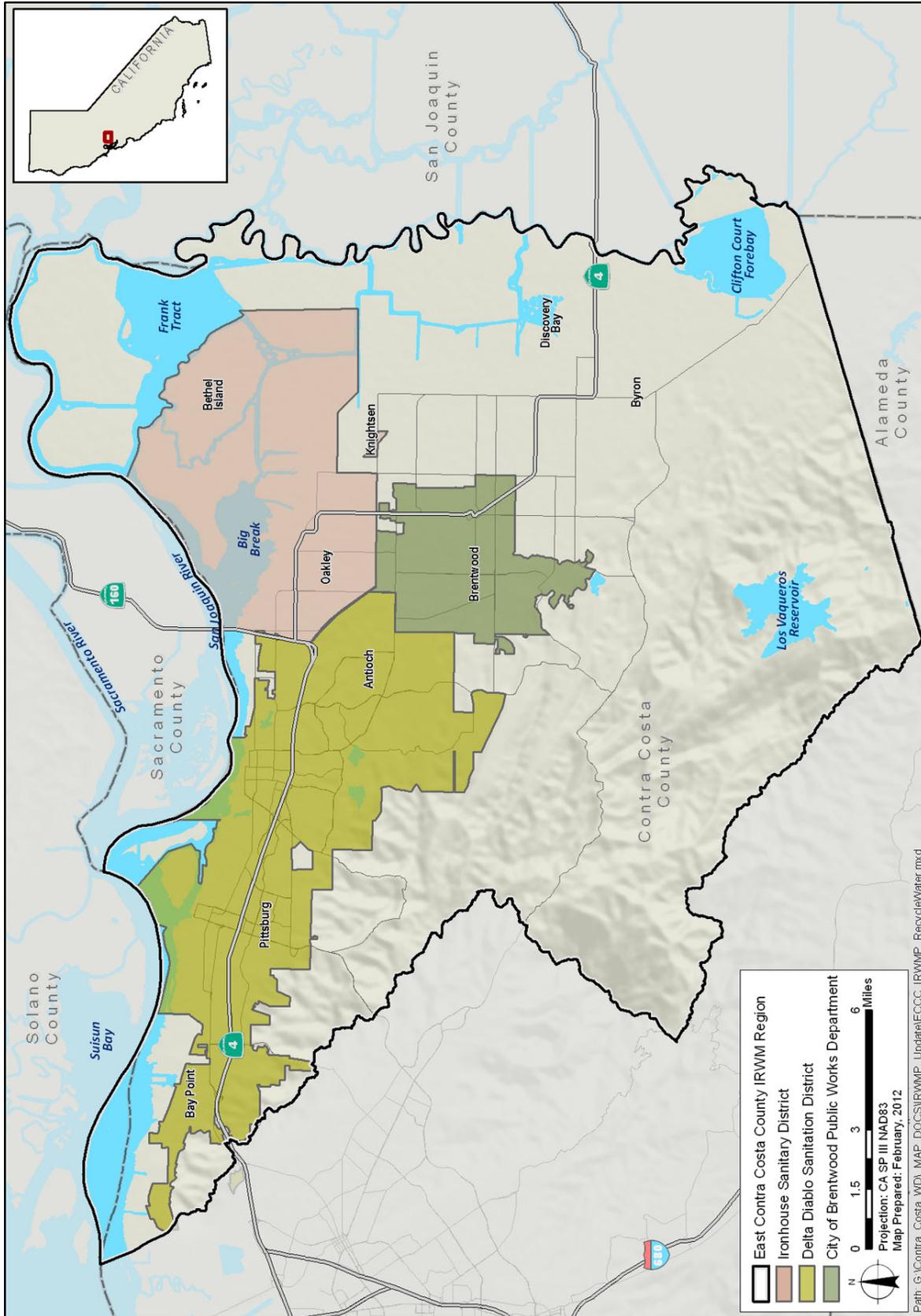


Figure 7. Recycled Water Agencies in East Contra Costa County Region

The RWMP will identify and evaluate specific projects to increase production, expand distribution, and optimize operations. The RWMP will identify potential user demands and determine necessary infrastructure to serve new users; infrastructure may include new pipelines, pump stations, storage, and treatment. The end result will be a Capital Improvement Program for recycled water projects through build-out of the DDS service area, with recommended projects for implementation in the near, intermediate, and long term. The RWMP will be flexible so that it can be periodically updated to reflect changing conditions. The RWMP will also analyze advanced treatment alternatives, which have the potential to facilitate more cycles of recycled water use in cooling towers and increase the number of industrial customers.

Water recycling is an important water management strategy in the IRWMP, and the RWMP will help to meet several IRWMP regional planning objectives. Increasing recycled water production will increase water supply for the region. Advanced treatment may provide both increased supply and improved water quality, helping to protect groundwater quality. Increasing recycled water use will reduce wastewater discharges to New York Slough. Recycled water provides drought supply reliability, and can offset Delta and potable water supplies. Incorporating the RWMP into the IRWMP will allow integration of projects on a regional scale to achieve greater benefits to communities, habitat, and wastewater treatment.

The following sections describe in more detail the work expected under each task for the DDS RWMP.

Task 2b-1: Compile Background Information and Previous Work

Before developing a comprehensive, coordinated plan for DDS's recycled water program as a whole, the starting point must be defined; DDS has completed several projects and studies that will establish that starting point. Over the past 10 years, DDS has embarked on an ambitious recycled water program intended to maximize beneficial reuse of formerly discharged wastewater effluent. Under this task, all previous work will be gathered that has been done to establish a baseline, in terms of both existing facilities and the various proposed future expansion plans for those facilities. The task will also include a comprehensive list of all water users previously identified as potential recycled water users in DDS's service area.

The most relevant previous studies and projects that DDS has completed related to recycled water are as follows:

- Recycled Water Facility (RWF) planning, design, and construction
- Pittsburg Recycled Water Project planning, design, and construction
- Antioch Recycled Water Project planning, design, and construction
- *East Contra Costa County Industrial Reuse Study*
- *Recycled Water Project Hydraulic Model Technical Report and Update*
- *Recycled Water Facility – Filter Loading Evaluation for Water Reuse Study*
- *Recycled Water Facility Reliability Study*
- *Recycled Water Demand Technical Memorandum* (as part of the *DDS Wastewater Treatment Master Plan*)

- *Alternative Energy Feasibility Study*
- *Total Dissolved Solid (TDS) Reduction Advanced Treatment Feasibility Study*

The project team will also make use of existing wastewater treatment plant (WWTP) and RWF plans and studies as they relate to the RWMP. Each of the projects and studies listed above focuses on only portions of DDS's recycled water system, although some of the most recent efforts (e.g., the *Hydraulic Model Technical Report* and the *Recycled Water Demand Technical Memorandum*) began to compile information on components of the whole system.

This task will also include work to engage with recycled water stakeholders, including current users, potential new users, and area economic development and planning staff. The DDS service area consists of the Cities of Pittsburg, Antioch, and Bay Point, which are largely composed of DACs (see Figure 8). Therefore, DACs will be represented and involved in the recycled water planning process through outreach to these cities.

The project team will organize meetings with these stakeholders to identify the most up-to-date information on existing and potential water demands, as well as the most likely plans for the future. The project team will also identify potential new development that may specifically benefit from access to recycled water.

This task will include up to two stakeholder meetings. The meetings will bring together as many of the stakeholders together in one place to obtain information on their potential demands, requirements for retrofits, and any plans for potential new users. The project team will follow up with individual stakeholders after the meetings to fill in any data gaps. This outreach will be continued under Subtask 2b-10.1.

Task 2b-2: Update and Refine Recycled Water Program Goals and Objectives

Before embarking on plans to expand DDS's recycled water system, the District plans to create a framework and strategic vision for its recycled water program from which new projects will be prioritized and selected for implementation. This framework that will allow for a coordinated and comprehensive program that works with, and in some cases enhances, existing users and facilities. The first step in developing the framework is to define the goals and objectives of the recycled water program.

This task will focus on developing the strategic vision for the recycled water program and will define the goals and objectives of the program. The vision, goals, and objectives will be developed through an internal workshop involving key stakeholders who will influence the direction and success of the program.

Task 2b-3: Water Reuse Opportunities and Alternative Water Supplies

This task will include work to identify potential new users, identify excess capacity and timing of that capacity, quantify wastewater supply available for reuse, and identify other water supplies that could be used if and when recycled water is not available.

The DDS service area consists of the Cities of Pittsburg, Antioch, and Bay Point, which are largely composed of DACs (see Figure 8). Therefore, potential projects that provide recycled water as an alternative or supplemental water supply within the service area will help address the critical water supply needs of DACs.

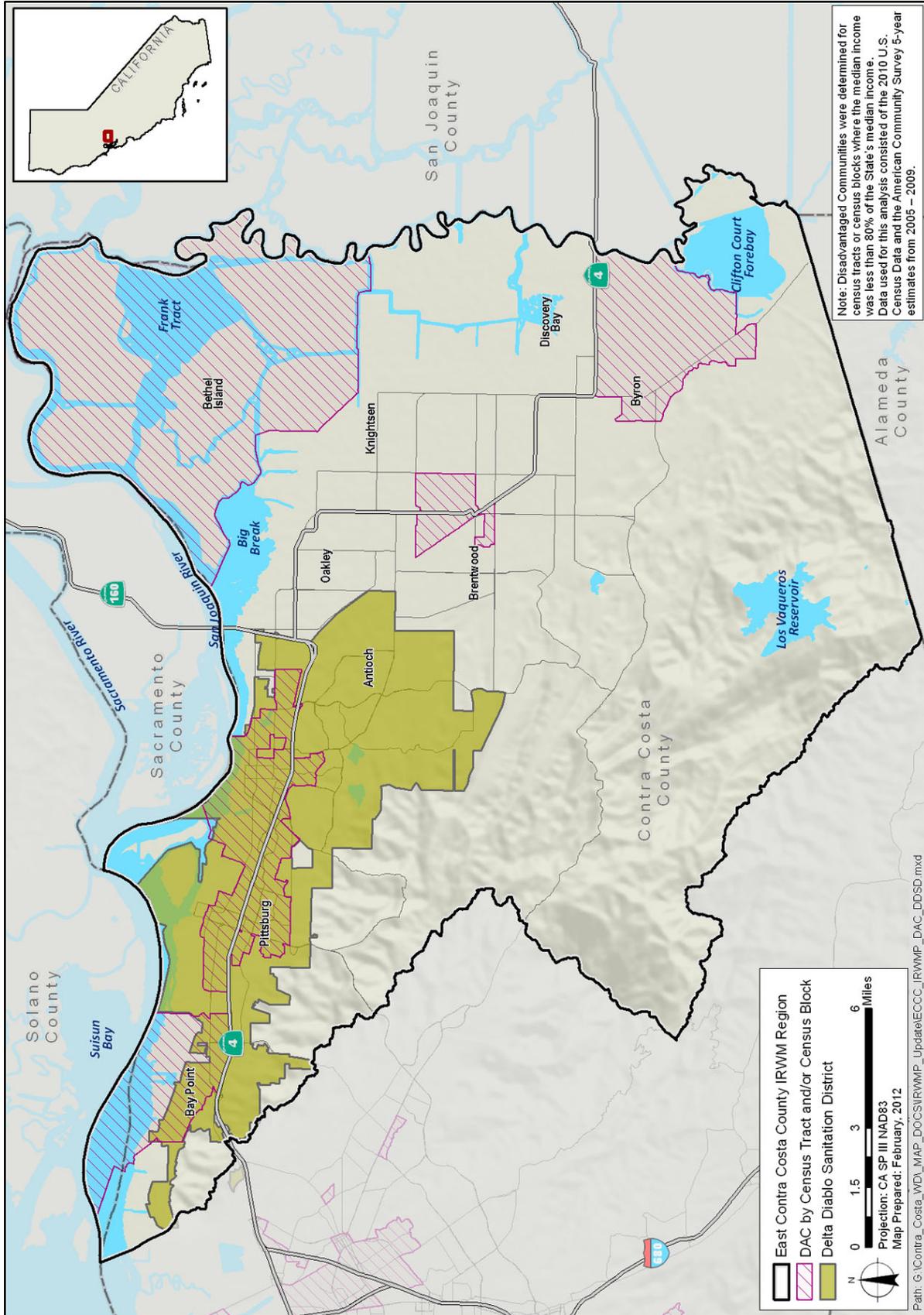


Figure 8. Disadvantaged Communities in Delta Diablo Sanitation District Service Area

Subtask 2b-3.1 Recycled Water User Identification and Coordination

Building on the previous work compiled and summarized under Task 2b-1, work under this task will include an updated, comprehensive market assessment for DDS's entire service area. In particular, some previously unidentified and new commercial and industrial customers have expressed interest in recycled water service. Some potential users have demands that will need updating due to changes in irrigation area, such as replacing turf grass with artificial turf at some parks and schools. The nearby Dow wetlands preservation project has indicated a desire to use recycled water.

The project team will identify potential recycled water customers for the DDS recycled water system and coordinate with those users or stakeholders (such as the Cities of Pittsburg and Antioch) with knowledge of the potential demand for those users.

The basis for the market assessment will be the customers and their associated demands, as previously identified in prior work and input from stakeholders, collected as part of the stakeholder meetings in Task 2b-1.

Each potential user will be classified by user type, and their demands established for peak month, average day peak month, and peak day. Customers will be prioritized for potential phasing and hydraulic modeling to be performed under Task 2b-5.

Subtask 2b-3.2 Define Demand Profiles

The 24-hour demand profiles for some specific users (e.g., power plants, golf courses) and categories of other users (e.g., parks) will be developed. During previous planning and design work, assumptions were required regarding when users would turn on their recycled water service; now that several users with different demand profiles have been added to the distribution system, the overall demand profile of the system is more clearly defined. Defining the demand profile of users and the system as a whole during different times of year is required to identify when the RWF and distribution system have excess capacity to allow for service to more users.

Subtask 2b-3.3 Available Wastewater Supply

The availability of wastewater for reuse is a key consideration for expanding recycled water use in DDS's service area. Previous studies have examined wastewater flow projections to the WWTP, and others have introduced the concept of importing tertiary effluent from other wastewater agencies. This subtask will update projections of wastewater flow to the WWTP through buildout, relying on previous work, and updating the analysis where new information is available.

Subtask 2b-3.4 Identification of Alternative Water Supply Sources

This subtask will identify available alternatives for water supply that can serve as supplements and/or alternatives to recycled water. The project team will investigate previous work that involved estimating water demands and identifying possible water supply alternatives as part of other water planning reports, such as CCWD's *Future Water Supply Study*, planning studies for the Bay Area Regional Desalination Facility, Urban Water Management Plans for CCWD and the municipalities in DDS's service area, IRWM planning activities, and previous recycled water studies. Identified water supply alternatives will be evaluated to determine their cost, benefits, and impacts relative to expanded recycled water use. The products of this subtask will

be quantities of available alternative water supplies, estimated unit costs for production of alternative water supplies, and a summary of previous planned water infrastructure projects required to meet demands.

Task 2b-4: Identify Regulatory Framework and Constraints

Subtask 2b-4.1 Current and Future Regulatory Framework

The regulatory framework for recycled water treatment, conveyance, and use is well established in California, but for the RWMP to be effective for future planning, it must contain an analysis of likely future regulations and other drivers of change for DDS's recycled water system. Some potential new regulations may involve high water quality limitations for such constituents as nutrients, total dissolved solids (TDS), and constituents of emerging concern. The addition of advanced treatment may trigger new discharge limitations for these constituents, due to higher salt and ammonia concentrations in the brine. Other statewide initiatives (such as the State's 20x2020 Plan) are encouraging the expansion of recycled water use, and future regulations may standardize some of the processes required for project implementation. Air quality regulations for cooling towers may also indirectly affect recycled water use because TDS in recycled water can contribute to PM10 and PM2.5 formation. Under this task, the project team will review pending and potential future regulations and explain the likely implications of the latest regulations, including potential treatment requirements, additional permitting and reporting, and incentives for expanding recycled water use.

Subtask 2b-4.2 Legal and Institutional Requirements

This task will also cover the topic of legal and institutional requirements for DDS's recycled water program. This topic is of particular interest because of agreements DDS has in place with CCWD regarding the implementation of recycled water. In addition, DDS has agreements with Calpine to provide a certain minimum level of service and reliability, which includes giving Calpine preference over other users in the system.

A major focus of this task will be to prepare a plan to work with CCWD to develop agreements that will allow for expansion of recycled water use beyond the limits in the existing agreements. Achieving new agreements with CCWD will be crucial to successful implementation of future projects and it will continue a pattern of regional cooperation and integration between DDS and CCWD.

Task 2b-5: Recycled Water System Alternatives Analysis

The alternatives analysis task will be organized into three major subtasks: 2b-5.1 Treatment, 2b-5.2 Distribution Alternatives Analysis, and 2b-5.3 Capital Improvement Program and Phasing Plan. Activities for 2b-5.1 and 2b-5.2 will include development of alternatives, cost estimates, economic analysis, phasing recommendations, and selection of recommended alternatives.

Subtask 2b-5.1 Treatment Alternatives Analysis

Treatment analysis will start by reviewing the existing RWF and identifying deficiencies and areas for optimization, such as power. A recent analysis of existing conditions and deficiencies was completed in the RWF Reliability Study (2010), and advanced treatment alternatives were developed as part of the TDS Reduction Feasibility Study (2011). Using the analysis as the

baseline, the next step will be to perform a water balance of the WWTP and RWF in order to evaluate hourly recycled water supply versus demands for current (2011) flows through buildout. This information will provide a more precise picture of when excess treatment capacity is available, and when additional operational storage will enhance the RWF's ability to deliver recycled water to customers.

The next step of this analysis will be to develop treatment system requirements and design criteria. Using the regulatory framework developed as part of Task 2b-4, WWTP effluent quality data, recycled water quality requirements of existing and potential customers, and projected capacity requirements, criteria, and guidelines will be used to develop treatment alternatives. Alternatives will be categorized into "near-term" and "future" options. "Near term" is defined as within 10 years, while future is anything outside that window. Near-term project alternatives will build off the alternatives developed in the *TDS Reduction Advanced Treatment Feasibility Study* (2011). Alternatives will include required equipment for addition of new treatment processes (e.g., microfiltration/reverse osmosis, electrodialysis) as well as associated waste streams (e.g., brine) and return flows (e.g., backwash flows). Subtasks 2b-5.3 and 2b-6 will cover the implementation plan for the preferred near-term alternative.

Long-term (future) recycled water supplies will likely need to be of higher quality with respect to certain constituents, such as TDS and ammonia, that are currently not removed in the treatment processes. These alternatives will be developed on a high-level planning basis and may include, but will not be limited to, addition of a third treatment train to match existing treatment trains, a microfiltration third train, a membrane bioreactor system, and/or expansion of advanced treatment for removing constituents of emerging concern and other organic compounds.

Each near-term treatment alternative will be evaluated for level of treatment/quality of recycled water effluent, ability to meet anticipated future regulations, capital cost, energy efficiency, staff training requirements (if expanded trains are a new technology), and operations and maintenance (O&M) costs. Evaluation criteria and scoring will be developed for each of these categories to guide selection of the preferred alternative(s). The alternatives will also be compared using an economic analysis to determine their effectiveness at meeting multiple benefits.

The economic analysis for the treatment process alternatives will compare the cost of each alternative to the value of benefits derived from that alternative, including avoided cost of potable water purchase, avoided cost of developing new potable water supplies, valuation of supply reliability, and quantification of environmental benefits.

Subtask 2b-5.2 Distribution Alternatives Analysis

The project team will perform a distribution system analysis to develop alternatives that will optimize the existing facilities, and potential addition of new facilities where opportunities are identified. Work will include the following:

- Develop Assumptions and Evaluation Criteria
 - Review and update previously developed recycled water system and modeling criteria, as needed.
 - Review goals and objectives identified for the program under Task 2b-2.

- Alternatives Development
 - The project team will identify existing recycled water system deficiencies and limitations and identify potential solutions to these deficiencies and limitations, as well as ways to optimize the system and reduce energy usage.
 - The project team will develop a list of initial feasible alternatives that include customers and demands identified in Subtasks 2b-3.1 and 2b-3.2 and address system deficiencies and limitations by incorporating potential solutions, optimization, and reduction of power consumption.
 - The project team will hold a workshop to discuss the initial alternatives and develop a short list of alternatives for further evaluation. Up to three alternatives will be identified for further analysis and hydraulic modeling. The alternatives will include existing and new system infrastructure and existing and potential future customers and their associated demands.
 - Each alternative will be developed in detail to select pipeline alignments using new and existing pipelines (where applicable) to serve the customers included in the alternative. The distribution alternatives may include features such as additional pump stations, separate distribution systems, additional pressure zones, and in-system storage.
 - Each of the alternatives will then be modeled using hydraulic modeling software to size pipelines, storage, and pumping facilities to meet the design criteria established for the distribution system and to confirm compliance with system requirements and design criteria.
 - Cost estimates and advantages and disadvantages will be developed for each alternative.
- Alternative Screening
 - Alternatives will be screened using a comparison matrix with cost and non-cost factors. One factor to be considered is the extent to which each alternative addresses critical water supply needs of DACs.
 - The project team will hold a workshop to discuss development of the short-listed alternatives, including cost, advantages and disadvantages, screening process and results, and apparent best alternative.

Subtask 2b-5.3 Capital Improvement Program and Phasing Plan

An implementation phasing plan will be developed to determine how the plant and distribution system will be expanded and which triggers (e.g., plant flows, demands) will be used to establish timing of implementation phases. Phasing triggers will likely include WWTP average dry weather influent flows, recycled water customer demands, and available funding for recycled water expansion and optimization projects. These triggers will be used to determine timing for implementation of the phases. A Capital Improvements Program will be developed for the recommended alternative(s), and will include near-term projects that will be implemented shortly after adoption of the phasing plan.

Task 2b-6: Feasibility Study Report

This task will summarize results of the previous tasks and include an implementation plan for the selected alternative projects to be implemented in the near-term (within 10 years) time frame. The report will include the following sections:

- Executive Summary
- Introduction (including results of Task 2b-1)
- Problems and Needs (including results of Tasks 2b-1 and 2b-2)
- Water Reuse Opportunities (including results of Tasks 2b-1 and 2b-3)
- Alternatives Analysis (including results of Tasks 2b-5 and 2b-8)
 - Description of Alternatives (Task 2b-5)
 - Economic Analysis of Alternatives (Task 2b-5)
 - Environmental Analysis of Alternatives (Task 2b-8)
- Legal and Institutional Requirements (including results of Task 2b-4)
- Financial Capability of Sponsor
- Research Needs (discussion of pilot testing, if required; otherwise, this section is not required)

Task 2b-7: Recycled Water Master Plan Report

The results of all previous tasks will be compiled and organized in the RWMP Report. The report will include sections for each of the above tasks and culminate in a Capital Improvements Program and Phasing Plan that will guide implementation of DDSD's recycled water projects in the near and long term. Recommended projects will include some that can be implemented in the immediate time frame to improve operations, increase energy efficiency, and serve new users. All project alternatives are expected to involve proven technologies and conventional system components; however, potential pilot testing of treatment technologies may be discussed, if deemed worthwhile during the course of developing the RWMP. An implementation schedule will be developed for these near-term projects.

The RWMP will also include an implementation funding plan illustrating DDSD's financial capability to pay for implementing the Capital Improvements Program. The plan will describe sources of funds for capital cost of construction, and ongoing costs related to O&M and replacement costs.

The report will be structured so that it can be periodically updated to reflect successful implementation of projects, updated cost estimates, and new information or conditions (e.g., new users).

Task 2b-8: Environmental Analysis (Initial Study)

Under this task, the project team will prepare appropriate environmental documentation covering the projects recommended for implementation in the Feasibility Study and RWMP completed in Subtasks 2b-6 and 2b-7. The near-term recommended buildout recycled water treatment and

distribution alternatives will be evaluated at a project level, while the overall RWMP will be addressed in the environmental document at a program level. The team will complete necessary environmental assessments, including background research, literature review, database searches, and site surveys, in preparation for meeting compliance requirements for the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). As part of the RWMP, only an Initial Study (IS) will be completed to determine the likely level of effort needed to comply with both CEQA and NEPA requirements for the recommended projects. Specific project-level environmental documentation will be prepared for each recommended project separately as it is implemented. This work will be done in close coordination with Reclamation, serving as the Federal lead agency.

Subtask 2b-8.1: Project Description

Based on the RWMP Report, the project team will prepare a project description appropriate for use in CEQA and NEPA documentation. The project description will outline program need, describe existing infrastructure and operations, and describe of construction and operation activities for the near-term recommended project.

Subtask 2b-8.2: Site Visits and Environmental Investigations

The project team will conduct site visits, as necessary, to document existing conditions in the vicinity of the recommended project. The project team will also conduct environmental research and investigations to provide required information. The project team will prepare stand-alone biological and cultural resources technical studies that can be used for Endangered Species Act (ESA) Section 7 and National Historic Preservation Act Section 106 Consultation, as necessary. The project team will also prepare construction-related traffic and air quality technical studies that can be used for a Clean Air Act General Conformity Determination.

Subtask 2b-8.3: Coordination with Reclamation and SWRCB

The project team will coordinate with Reclamation NEPA staff and SWRCB CEQA staff to confirm the preferred approach to NEPA and CEQA Plus compliance and identify potential environmental impacts to be addressed in the IS/Environmental Assessment (EA). The project team will host a joint meeting or conference call between DDSD, SWRCB, and Reclamation to discuss key environmental issues, and to ensure coordination between Reclamation staff and SWRCB staff in preparation of environmental documents.

Subtask 2b-8.4: Administrative Draft Initial Study

The project team will prepare a draft CEQA Checklist/IS and NEPA EA Checklist for each of the near-term recommended projects. These documents will be submitted to DDSD, SWRCB, and Reclamation for review and comment. The IS/EA will provide a summary level review and preliminary significance conclusions for each CEQA/NEPA resource topic listed below. Because of the location of the project within existing disturbed areas in either the WWTP or existing streets, detailed analysis is not expected to be necessary to support the conclusion that the project would not have significant impacts on aesthetics (i.e., project-specific renderings of new storage facilities or pump stations are not included in the scope), recreation, utilities and service systems, public services, geology and soils, mineral and energy resources, or agricultural resources. Issues of concern will be evaluated in greater detail.

Air Quality and Greenhouse Gas Emissions. The RWMP is not expected to increase operational emissions, but would result in short-term emissions during construction. The project team will evaluate construction emissions based on the extent and duration of construction and will compare emissions to significance thresholds established by the Bay Area Air Quality Management. Construction-related air quality technical studies will be used for a Clean Air Act General Conformity Determination.

Hazards/Hazardous Materials. The project team will address the potential to encounter hazardous materials in during construction-related soil excavation activities. To address whether proposed construction activities, including new pipelines, would be located on a “Cortese List” site, the project team will review the CalEPA EnviroStor and GeoTracker databases and lists of solid waste and hazardous waste facilities in the project area. It is assumed that the RWMP would not require increased use or storage of hazardous chemicals at the WWTP.

Noise. For purposes of evaluating noise impacts, it is assumed that any new or modified pumping facilities would either be located at the WWTP, or at a location sufficiently distant from sensitive noise receptors such that operational noise impacts would not be significant. Construction-period noise impacts will be described, but are not expected to be significant because of their short duration.

Traffic and Transportation. Construction-period vehicle traffic will be estimated and the short-term impacts of potential lane closures associated with pipeline construction will be described.

Biological Resources. Results of the Biological Assessment completed in Subtask 2b-8.2 will be summarized and mitigation measures, if necessary, incorporated in the IS/EA. It is assumed that impacts on sensitive species can be avoided because of the location of facilities in paved, disturbed areas.

Cultural Resources. The cultural resources report completed in Subtask 2b-8.2 will be summarized and the evaluation of impacts and mitigation measures will be presented in the IS/EA

Cumulative Impact Analysis. The project team shall identify cumulative and unavoidable impacts resulting from the RWMP.

Identification of Mitigation/Significant Impacts. The project team will determine whether mitigation measures and associated monitoring would be required as a direct result of the impacts identified in preparing the IS/EA. If mitigation appears necessary, the project team will determine if changes to the project description can be made so that mitigation would not be required. Because no mitigation is expected to be necessary, preparation of a Mitigation Monitoring and Reporting Plan is not included in the scope.

It is expected that the IS/EA will be used to make a determination that a Mitigated Negative Declaration and Finding of No Significant Impact can be issued.

Subtask 2b-8.5 Screencheck Draft IS/EA

The project team will incorporate comments and, within 3 weeks, submit an electronic copy of a Screencheck for review by DDS, Reclamation, and SWRCB, who will have up to 2 weeks to review and provide comments.

Subtask 2b-8.6 Draft IS/EA

After making any minor revisions to the Screencheck document, the project team will prepare a draft IS/EA for publication.

Subtask 2b-8.7 Respond to Comments on IS/EA

At the end of the public review period, the project team will incorporate responses to any comments received on the IS/EA within 3 weeks. The project team will also prepare a Mitigation Monitoring and Reporting Program for adoption at the time of project approval.

Subtask 2b-8.8 Section 7 and Section 106 Compliance

Biologists and regulatory specialists on the project team will assist Reclamation and DDS in completing informal consultation with the U.S. Fish and Wildlife Service (USFWS) to demonstrate compliance with Section 7 of the ESA. Informal consultation with USFWS is expected to be sufficient to demonstrate that the project as designed will avoid effects to listed species, and will be facilitated by the Biological Assessment prepared under Subtask 2b-8.2. A review of proposed facility site improvements is expected to confirm the lack of suitable habitat for listed species. Should either DDS review of the project design or the USFWS informal consultation process determine that potential exists for effects to listed species, the project team will work with Reclamation and DDS to develop a strategy for Section 7 compliance (i.e., approach to research, analysis, and documentation of species effects) pursuant to the formal consultation process. Initiation of Section 7 formal consultation would necessitate a supplemental scope of work.

Cultural resources and regulatory specialists on the project team will work with Reclamation in developing a strategy for assuring compliance with Section 106 of the National Historic Preservation Act, and will provide supporting research and documentation so that Reclamation can complete consultation with the State Historic Preservation Officer.

Because the project consists of a master plan with programmatic elements, Reclamation may want to consider Section 106 compliance through developing a programmatic agreement with the State Historic Preservation Officer and the Advisory Council on Historic Preservation. A programmatic agreement may be the appropriate vehicle by which to comply with Section 106 because a programmatic agreement is intended to serve as an agreement to implement an agency program or resolve adverse effects of complex or multiple undertakings (36 CFR 800.14(b)). A programmatic agreement should be used when effects cannot be fully determined before approval of an undertaking. The programmatic agreement provides for an alternative process for how affected historic properties (cultural resources eligible for the National Register of Historic Places) will be addressed that will differ from the standard Section 106 process (36 CFR 800.6(a)(1)(i)). Preparation of a programmatic agreement is not included in this scope of work, but could be completed in the future, if requested by Reclamation.

Task 2b-9: Project Management and Reporting

This task will cover the crucial elements of project management and reporting on progress to Reclamation. The RWMP will include up to six meetings, including kick-off meeting, progress meetings, and a workshop to discuss the draft Master Plan. This task will also include coordination with DDS staff for preparation of semiannual program performance reports.

Task 2b-10: Other Services

This task includes additional activities beyond the scope of work defined above to allow for more analysis and stakeholder coordination. The activities below are included in the consultant budget, but any individual subtask under Task 2b-10 will require explicit authorization from DDS staff in writing (via e-mail or letter) before work by the consultant team begins.

Subtask 2b-10.1 Additional Stakeholder Outreach

Task 2b-1 includes coordination and outreach with stakeholders to define new potential recycled water demands. Under Subtask 2b-10.1, the project team would provide further stakeholder outreach and coordination to identify new potential recycled water users, capture data for potential demands, meet with individual stakeholders, and define requirements for potential new users. As mentioned, DDS's service area consists of the Cities of Pittsburg, Antioch, and Bay Point, which are largely composed of DACs (see Figure 8). Therefore, DACs would be represented and involved in the recycled water planning process through outreach to these cities.

Subtask 2b-10.2 Preliminary Permitting Activities

This task would include initiation of permit applications for the recommended near-term project alternative. Before the project alternative is developed, it is uncertain which permits will be required, but could potentially include, but would not be limited to, a Contra Costa Canal crossing permit, Caltrans highway crossing permit, railroad crossing or encroachment permits, California Department of Fish and Game Streambed Alteration Agreement, or U.S. Army Corps of Engineers 404 permit. Many permits require projects to be close to completion of final design before submittal of permit applications, but any preliminary activities, including preconstruction photos, research of permit requirements and required documents, coordination with permitting agencies, incorporation of permit requirements into the project description, and other related activities, would be covered by this task.

Subtask 2b-10.3 Additional Alternatives Analysis

Subtask 2b-5.2 includes a level of effort to analyze three distribution system alternatives. This task would contain the budget needed for the project team to analyze one additional alternative.

Subtask 2b-10.4 Additional Environmental Analysis

The level of effort estimated under Task 2b-8 includes a site visit and investigations for a pipeline/area of potential effect length of up to 3 miles. This task would contain funds that may be used for additional site investigation and analysis in excess of that amount.

Task 2c: Recycled Water Feasibility Study Report for ISD

ISD is a special district in eastern Contra Costa County that provides wastewater collection and treatment services to the communities of Oakley, Bethel Island, and unincorporated areas in between. ISD treats approximately 2.5 million gallons per day (mgd). Currently, the treated wastewater is applied to agricultural lands owned by ISD and discharged into the San Joaquin River. ISD recently constructed a new 4.3 mgd membrane bioreactor WWTP. The ISD WWTP produces the highest quality effluent in the Region. The plant fully nitrifies and denitrifies, and provides an effluent quality that meets the requirements for unrestricted reuse per Title 22.

The goals and objectives of providing recycled water within the ISD service area are as follows:

- Reduce dependence on Delta supplies
- Improve water supply reliability
- Reduce discharge of treated wastewater into surface waters
- Recreation and public access
- Meet regional recycling water usage goals

ISD is finalizing an RWMP. In this plan, a demand of 1,840 acre-feet per year for recycled water has been determined within the ISD service area. Following completion of this plan, ISD will prepare a Feasibility Report to further define which recycled water projects are the most cost-effective and feasible to implement.

Major tasks to be undertaken in the Feasibility Report are described below.

Task 2c-1: Prepare Recycled Water Master Plan

ISD is preparing an RWMP to identify potential recycled water customers in its service area and begin to develop distribution system to serve its customers. The RWMP is a base for preparing a more detailed recycled water Feasibility Report, focusing on phasing and optimizing the water recycling project identified in the preliminary document. The tasks included in preparing the RWMP are Data Collection and Review, Market Assessment, Project Development and Evaluation, and Plan Preparation.

Task 2c-2: Water Quality and Market Development

Potential recycled water source water, treatment process technologies, seasonal and daily supply flows, and expected recycled water quality will be evaluated. Also, an evaluation of customer recycled water quality (e.g., TDS) needs will be included.

The recycled water market will be refined by ascertaining key customers willingness to use recycled water in lieu of potable water for irrigation and/or industrial process uses. Also, the recycled water market evaluation will be expanded to include environmental uses for recycled water (e.g., to improve flow conditions of natural stream channels, to provide water or habitat for threatened or endangered species).

Task 2c-3: Alternatives Refinement and Economic Analysis

Alternatives identified in the RWMP will be refined and further examined to identify the objectives met, quantitative and qualitative benefits of each project, facilities needed to implement each project, and a preliminary cost estimate to compare among the alternatives. Among other criteria, alternatives will be evaluated for how well they promote and apply a regional or watershed perspective to water resources management and whether they can help address critical water supply needs for DACs.

Task 2c-4: Recommended Project Refinement

A Recommended Project will be selected for further development and evaluation. Analysis will include a more detailed review of distribution system configuration (including easements, rights-

of-way, critical crossings, traffic issues, etc.). A refined capital cost estimate and O&M cost estimate for each project phase is to be provided. Phasing of the project is also to be evaluated. Analysis of the Recommended Project's effects on new or expanded water supplies, natural watercourses, aquifer withdrawals, Federal water supply facilities and/or wastewater facilities will be included in this task.

Task 2c-5: Environmental and Water Quality

The Recommended Project will be evaluated for effect on physical factors (including natural resources and the local watershed), biological factors (including impacts to endangered or threatened species), social factors (including public safety and health), historical/cultural resources, and economic factors, including levels of significance.

The project team will analyze the potential for the project to (1) improve the quality of surface or groundwater, (2) improve flow conditions of natural stream channels, and (3) provide water or habitat for threatened or endangered species. Specific issues that are anticipated to be reviewed in the Feasibility Study include the benefits of offsetting groundwater and surface water use with recycled water, and the environmental benefits of using of recycled water.

Task 2c-6: Legal and Institutional Issues

The Recommended Project will be evaluated for potential water rights issues, legal and institutional requirements for implementation, need for multijurisdictional agreements, permits needed for implementation, and potential unresolved issues that could impede implementation to develop a plan for resolving any issues.

Task 2c-7: Implementation/Financing Plan

The project team will develop an implementation schedule for the Recommended Project. Based on the estimated costs for project implementation, an evaluation of potential mechanisms to fund the Recommended Project will be conducted. The average incremental impact of the recycled water project on rates and charges will be developed.

Task 2c-8: Report Preparation

The information developed in Tasks 2c-1 through 2c-6 will be organized and documented in a Project Report. Once all comments from ISD have been addressed, the revised draft Project Report will be sent to Reclamation and DWR for approval. The project team will incorporate comments from Reclamation and DWR and issue a final Project Report.

Task 2c-9: Project Coordination and Management

ISD will coordinate and communicate with the consultant team throughout the duration of the project. A kickoff meeting will be held with the project team in addition to periodic progress meetings with the project team during the course of the study. The consultant will also provide ISD with monthly status updates for the project, including monthly progress reports and invoices. This task is also for ISD's management of the consultant and regular communication to the ISD Board of Directors.

2.2.3. *Benefit to DACs*

DDSD's service area consists of the Cities of Pittsburg, Antioch, and Bay Point, which are largely composed of DACs (see Figure 8). Therefore, DACs will be represented and involved in the recycled water planning process in Task 2b through outreach to these cities. Additionally, potential projects that provide recycled water as an alternative or supplemental water supply within the DDSD service area will help address the critical water supply needs of DACs. Alternatives formulated in the master planning process will be evaluated based on a number of criteria, including the extent to which each alternative addresses critical water supply needs of DACs.

DDSD's recycled water program will ultimately benefit DACs in its service area by providing an increased, reliable water supply. The Cities of Pittsburg, Antioch, and Bay Point will benefit from landscape irrigation demands being met with lower cost recycled water, allowing preservation of higher cost potable water for other beneficial uses. The cities and their communities may further benefit because a high quality, economically priced, and available recycled water supply may promote increased industrial growth in the region. It should be noted that DACs in the DDSD service area are the DACs which are not overlaid by Municipal Advisory Councils, and would therefore not benefit under Task 1a.

ISD's planned recycled water system is for the City of Oakley, whereas the DACs in ISD's service area are east in the Bethel Island areas. While DACs will not be directly served with recycled water supplies as a result of the Task 2c analysis, recycled water will replace potable water supplies currently served to Oakley by Diablo Water District, presenting an opportunity to make water deliveries to DACs in Bethel Island more reliable, once Diablo Water District water becomes available to Bethel Island residents.

Task 2a will promote regular discussions about DAC outreach, involvement, and benefits, keeping the topic relevant and at the forefront of the planning strategy.

2.2.4. *Deliverables*

Task 2a would result in monthly conference calls on regional recycled water planning within the ECCC Region.

Task 2b will result in the following documents related to DDSD's recycled water program:

- Feasibility Study Report (Administrative Draft, Draft, Final)
- Recycled Water Master Plan Report (Draft, Final)
- Biological Assessment (Draft, Final)
- Cultural Resources Inventory Report (Draft, Final)
- Initial Study/Environmental Assessment (Screencheck Draft, Draft, Screencheck Final, Final)
- Permitting Strategy Technical Memorandum (Draft, Final), if this additional permitting subtask is performed

Task 2c will result in the following documents related to ISD's recycled water program:

- Recycled Water Feasibility Study Report (Draft, Final)

2.2.5. *Additional Assumptions*

Results and outcomes of this task will be incorporated into the IRWMP Update in Task 4.

2.3. Task 3: Regional Capacity Study

Task 3 Features

- ✓ Enhances outreach to DACs
- ✓ Addresses Program Preferences
 - Include regional projects or programs
 - Effectively integrate water management programs and projects within a hydrologic region
 - Effectively resolve significant water-related conflicts within a region
 - Contribute to attainment of one or more objectives of the CALFED Bay-Delta Program
 - Address critical water supply needs of DACs within the IRWM region
 - Effectively integrate water management with land use planning
- ✓ Addresses Statewide Priorities
 - Drought preparedness
 - Use and reuse water more efficiently
 - Climate change response actions
 - Expand environmental stewardship
 - Protect surface and groundwater quality
 - Ensure equitable distribution of benefits

2.3.1. *Purpose*

The purpose of this task is to evaluate and optimize regional water treatment plant operations, untreated water supply, and delivery processes to improve water supply reliability and reduce the cost of water treatment for project participants in the ECCC Region. An additional goal is to evaluate opportunities for regional Bay Area water deliveries including treated and untreated water deliveries as well as water treatment plant improvements. The study will consider optimizing water treatment plants in the ECCC Region to determine if average capacity utilization rates can be increased while satisfying peak day water demands. The task will also look at various possibilities that would allow untreated water deliveries to be exchanged for treated water deliveries and how these plans may be compatible with a future regional water supply project such as the Regional Desalination Project.

The Regional Capacity Study will provide an independent consultant review of system-wide efficiency, compiling this information for use by all project participants. The purpose of this task is to continue development of regional water efficiency to better define the regional water supply setting, better develop potential projects for implementation through IRWM planning, and in the process, help to address the region's objectives while continuing the progression of regional planning in East Contra Costa County. The project will promote collaboration among the ECCC agencies, identify and reduce the potential for conflicts, and directly benefit the Delta. The resulting System Optimization Report (SOR) will identify recommended actions. Integration of this task into the IRWMP is discussed in Task 4 of this Work Plan.

2.3.2. *Task Description*

Under this task, RWMG agencies will develop a review process to optimize water treatment plant capacity within the ECCC Region.

Project participating agencies, shown in Figure 9, include the following:

- City of Antioch (Co-Lead Agency)
- City of Brentwood
- City of Pittsburg
- Contra Costa Water District (Co-Lead Agency, Contract Manager)
- Diablo Water District

CCWD provides treated water to Bay Point, which is served by the Golden State Water Company. Bay Point is a DAC and is represented by the Bay Point Municipal Advisory Council (see Task 1a).

Project stakeholders include the following:

- Byron-Bethany Irrigation District
- Contra Costa County (including Flood Control and East Contra Costa County Habitat Conservancy)
- Delta Diablo Sanitation District
- Discovery Bay Community Services District
- East Contra Costa Irrigation District
- Ironhouse Sanitary District

Project stakeholders outside of the ECCC Region that will be considered in the Regional Capacity Study include the following:

- Central Contra Costa Sanitary District
- City of Martinez
- East Bay Municipal Utility District
- Alameda County Flood Control and Water Conservation (Zone 7)
- Santa Clara Valley Water District
- Alameda County Water District
- San Francisco Public Utilities Commission
- Bay Area Water Supply and Conservation Agency
- San Luis & Delta Mendota Water Authority

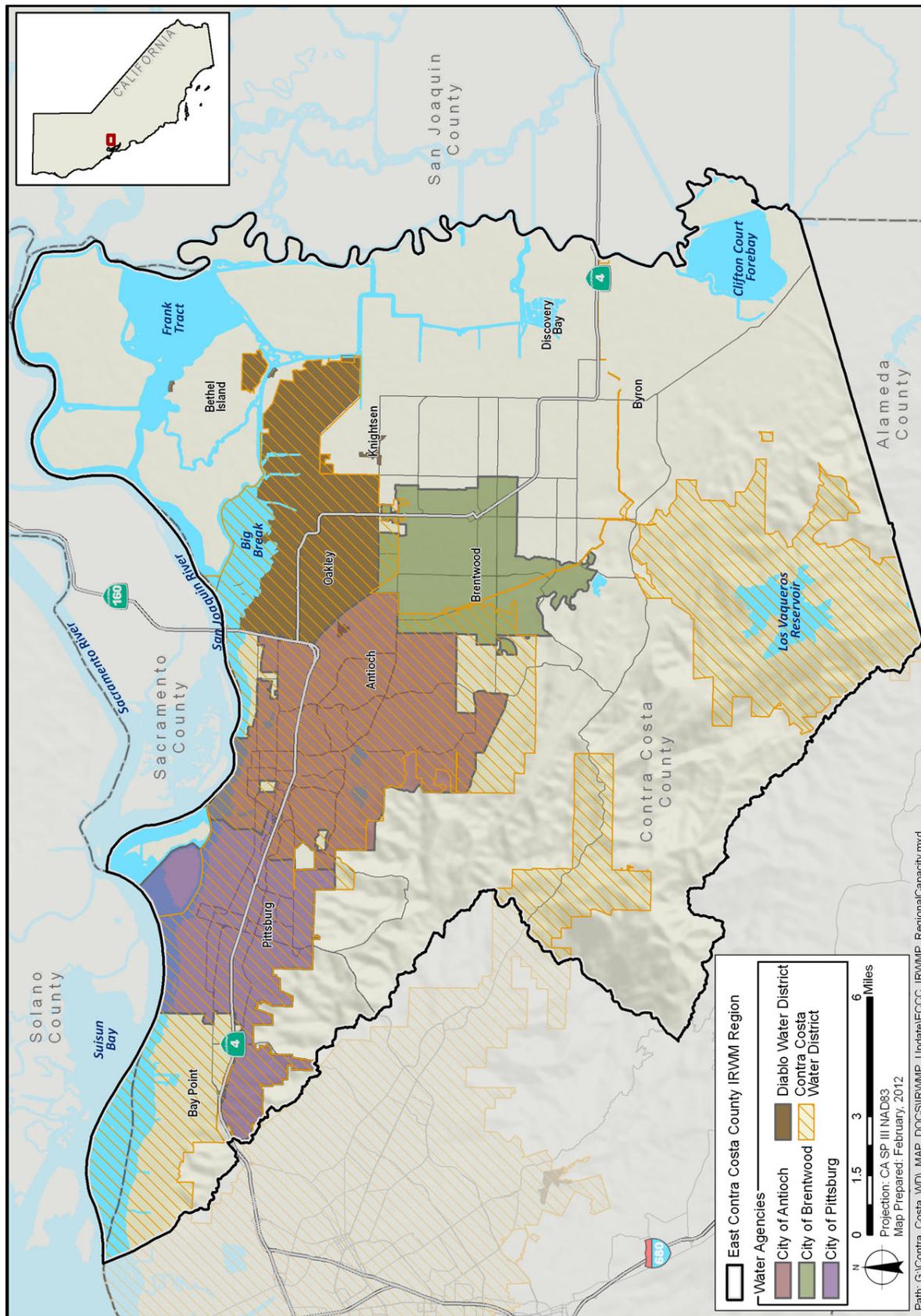


Figure 9. Project Participating Agencies in Regional Capacity Study

Task 3a: Project Management

This task will include activities related to project management. CCWD and the City of Antioch will take the lead, jointly coordinating with the other project participating agencies and stakeholders to schedule meetings and workshops and solicit input on the project. As lead contracting agency, CCWD will lead development of work plans and management of overall scope, schedule, and budget. CCWD will maintain the master project schedule and monitor whether project milestones are completed on schedule. Also included in this task are preparation of presentation materials and meeting summaries for any meetings or workshops, invoices and monthly progress reports, and the final performance report. CCWD will oversee the performance of the consultant team that will be under contract to CCWD and supporting the Regional Capacity Study.

Task 3b: Review of Available Information

The project participating agencies will gather background information from available reports and water treatment O&M data. Following is a partial list of available reports that will provide useful information to the Regional Capacity Study:

- *CCWD Future Water Supply Study*, August 1996
- *CCWD Future Water Supply Study Update*, December 2002
- *CVP Municipal and Industrial Water Shortage Policy*, September 2001
- *Long-Term Renewal Contract Between the United States and the Contra Costa Water District Providing for Water Service and for Facilities Repayment*, May 2005
- *ECCC Region Functionally Equivalent Integrated Regional Water Management Plan*, July 2005
- *CCWD Urban Water Management Plan*, June 2011
- *ECCC Region Integrated Regional Water Management Plan Update*, anticipated January 2013

Task 3c: Identify and Evaluate Potential Improvements

The project team will finalize identification and prioritization of water management issues including:

- Projected water demands within the region on an average day, seasonal and peak day basis.
- The relationship of recycled water planning and water conservation planning on projected average and peak water demands in the region.
- Expected average and peak day water treatment plant capacity plans.
- The amount of untreated water capacity in the area and the amount of untreated water capacity interconnections.
- The amount of treated water interconnections within the ECCC Region as well as treated water interconnections on an interregional basis.

- The potential to exchange untreated water for treated water outside of the region.
- The amount of treated and untreated water conveyance.

The above analysis will support improvements in:

- Regional water supply reliability
- Water quality
- Lowering cost of service
- Potential revenue enhancement
- Sustainability of water supplies

The project will include 4 workshops with all of the project participants and affected stakeholders. The workshops are intended to provide participants and stakeholders with the opportunity to fully collaborate on all aspects of the Regional Capacity Study.

The consultant team will facilitate Workshop 1 to finalize the purpose and goals for the Regional Capacity Study, review a summary of available background data, evaluate data and information gaps, and brainstorm the best ways to meet the optimization goals. The consultant team will facilitate Workshop 2 to review ideas for potential improvements or operational changes to optimize water management, discuss climate change impacts, and screen ideas for improvements.

The project team will perform computer modeling addressing water demands (average and peak day), water treatment plant capacity, treated and untreated water conveyance systems including interconnections, and water supply availability and constraints (including water quality). The model will seek to demonstrate potential improvements that could result from regional planning and system optimization. For example, it may be possible to improve regional water treatment utilization rates and source water quality by collaborating regionally to provide additional treated water supplies in exchange for access to interregional untreated water supplies that could be stored at the expanded Los Vaqueros Reservoir.

The project team will evaluate the relative costs and benefits of the potential improvements for each of the project participating agencies. Among other criteria, recommended improvements will be evaluated on how well they promote and apply a regional or watershed perspective to water resources management, whether they can help address critical water supply needs for DACs, and whether they can assist the region in addressing climate change. The consultant team and project participating agencies will jointly develop a draft plan of action for implementing recommended improvements, including scope, schedule, budget, and source of funding.

Task 3d: Preparation of Draft SOR Report

The SOR will summarize results of Task 3c, including evaluation of efficiency, costs and benefits, plan of action, and recommended actions. The consultant team will facilitate internal technical review of the administrative draft SOR among the project participating agencies. The consultant team will facilitate Workshop 3, an overview of the Draft SOR that will be presented to project participating agencies, Reclamation, DWR, and project stakeholders/other Bay Area water agencies as appropriate.

Task 3e: Preparation of Final SOR Report

The consultant team will take the lead in addressing written comments received from reviewers and incorporating the comments into the SOR, with support and oversight from the project participating agencies. The Final SOR will also include an executive summary. The consultant team will facilitate Workshop 4, an overview of the Final SOR, presented to project participating agencies, Reclamation, DWR, and project stakeholders/other Bay Area water agencies, as appropriate. The consultant team, with assistance from project participating agencies, will prepare a project summary fact sheet and presentation slides suitable for distribution to interested stakeholders and for posting on CCWD’s, DWR’s, and Reclamation’s web sites, as appropriate.

2.3.3. Benefit to DACs

The project will be coordinated with Task 1a, involving outreach to DACs through Contra Costa County’s Municipal Advisory Councils in the ECCC Region. Information on the Regional Capacity Study will be included in updates provided at Municipal Advisory Council meetings. Feedback received from DAC stakeholders will be incorporated into evaluation of the potential improvements identified by the project. In addition to addressing the critical water supply needs of DACs, regional treated water system improvements and/or capacity improvements could also benefit DACs in the ECCC Region by providing more economic treated water service.

2.3.4. Deliverables

Task 3 would result in the following deliverables:

- SOR (Administrative Draft, Draft, Final)
- Four workshops, facilitated by the consultant team: Goals (Task 3-3), Potential Improvements (Task 3-3), Draft SOR (Task 3-4), Final SOR (Task 3-5).

2.3.5. Additional Assumptions

Results and outcomes of this task will be incorporated into the IRWMP Update in Task 4.

2.4. Task 4: Integration of Tasks into IRWMP

Task 4 Features

- ✓ Addresses Program Preferences and Statewide Priorities as a Completed IRWMP

2.4.1. Purpose

The purpose of this task is to integrate the above focused, topic-specific planning tasks for additional outreach and collaboration, regional recycled water planning, and the Regional Capacity Study into a standards-compliant IRWMP that will be adopted through the IRWMP Update currently underway.

2.4.2. Task Description

This task would include summarizing the efforts undertaken in Tasks 1 through 3 and integrating the information into a standards-compliant IRWMP that will be adopted through the IRWMP

Update currently underway. In addition to updating the document with additional information, the more fully developed projects that may emerge from the planning tasks above would need to be reevaluated using the project review process, resulting in a re-prioritized list of projects.

Standards that would need to be updated are described in Table 3.

Table 3. IRWMP Standards Enhanced by Tasks 1 Through 3

IRWMP Standard	Potential Enhancement
Governance	No anticipated change.
Region Description	Enhance with better understanding of recycled water (Task 2) and surface water (Task 3) supplies and their regional interconnectedness.
Objectives	No anticipated change.
Resource Management Strategies	Update description of relevant Resource Management Strategies that fall under related categories, such as Improve Operational Efficiency and Transfers (Task 3), Increase Water Supply (Task 2), Improve Water Quality (Task 2), and Practice Resources Stewardship (Task 2).
Integration	Enhance with better integration through communications (Task 1) and regional integration of specific topics, namely recycled water (Task 2) and surface water supplies (Task 3).
Project Review Process	Update prioritized list of projects with fully developed projects that may arise from Tasks 1 through 3.
Impacts and Benefits	Update with reprioritized list of projects and additional information on project impacts and benefits developed in Tasks 1 through 3.
Plan Performance and Monitoring	No anticipated change.
Data Management	Update based on enhanced web site (Task 1).
Finance	Update based on additional information for implementation and financing of recycled water projects from Tasks 1 through 3.
Technical Analysis	Update descriptions of technical analyses with summaries of work done under Tasks 2 and 3.
Relation to Local Water Planning	No anticipated change.
Relation to Local Land Use Planning	No anticipated change.
Stakeholder Involvement	Update based on increased stakeholder involvement conducted in Tasks 1 through 3.
Coordination	Add regional outreach strategies (Task 1), recycled water communication strategies (Task 2), and water supply communication strategies (Task 3).
Climate Change	Describe potential efficiencies that could be gained from regional capacity study (Task 3). Delta water supplies are expected to be adversely impacted by Climate Change. Improvement plans to address climate change risks will be included within Task 3.

Key:

IRWMP = Integrated Regional Water Management Plan

RMS = Resource Management Strategies

The IRWMP Update currently underway includes a formal adoption step by all participating RWMG member agencies. Under Task 4, the IRWMP Update would be further revised, as described above, to reflect the tasks completed under this scope of work. Then, the more complete document would be formally adopted by the member agencies.

Attachment 5, “Schedule,” contains additional information on the interaction between the IRWMP Update currently underway, the proposed tasks herein, and IRWMP adoption.

2.4.3. Deliverables

This task would result in an updated, enhanced IRWMP, adopted by the signatory agencies.

2.4.4. Additional Assumptions

The schedule assumes that the effective agreement date of the Round 2 Planning Grant is August 6, 2012.

2.5. Task 5: Grant Administration

2.5.1. Purpose

The purpose of this task is to perform administrative duties related to the grant.

2.5.2. Task Description

Task 5 consists of three subtasks: administering the agreement with DWR, administering the consultant contract(s), and performing quarterly and final reporting to DWR. Each is described below.

Task 5a: Prop. 84 Funding Agreement Administration

Upon grant award, CCWD would coordinate and execute the funding agreement with DWR.

Task 5b: Consultant Contract Administration

CCWD would administer, sign, and track any contracts with consultants or other agencies to complete the other tasks for this project. All funding would be funneled through CCWD. Contract administration would include invoicing, tracking progress, verifying that tasks are completed on time and within budget, reporting, performing contract management, claim preparation and submittal, and any other tasks necessary for administering the grant.

Task 5c: Quarterly and Final Reporting

This subtask would include preparation of quarterly reports and a final report, as required by DWR. The quarterly reports may include, but would not be limited to, the following information:

1. Time period covered by the request.
2. Description of activities since the previous report.
3. Status of the project relative to the schedule.
4. Estimate of the percentage of work completed.
5. Records of expenditures.
6. Percentages of State and total funding expended to date.
7. Key issues that need to be resolved.

Once the project is complete, CCWD would submit a final report summarizing completion of the project. CCWD would keep all records and documents pertaining to the project for a minimum of 3 years after project completion.

2.5.3. Deliverables

This task would result in an executed contract with DWR, executed contract(s) with consultant(s), consultant invoice and progress reports, and quarterly and final reports to DWR.

2.5.4. Additional Assumptions

None.

3. ADDITIONAL IRWMP WORK

Additional work is currently underway to produce a standards-compliant IRWMP. In 2011, DWR awarded a Prop. 84 Round 1 Planning Grant to the ECCC Region; the contract was awarded in January 2012. Work is currently underway to revise the region's 2005 FEIRWMP and create a fully integrated IRWMP that meets current Plan Standards and fully addresses the Region's needs, objectives, and provides appropriate solutions based on current conditions.

3.1. Description of Work Being Completed

A brief description of the tasks being completed under the Prop. 84 Round 1 Planning Grant is provided below.

3.1.1. *Round 1 Planning Grant Task 1 – Update and Integrate IRWMP*

Task 1 includes revising and updating the 2006 FEIRWMP to be fully compliant with the DWR IRWM Guidelines. This involves updating certain sections with available information, revising certain sections to reflect current conditions, and creating new sections for Climate Change and Relation to Land Use Planning. All sections will be compiled into a complete IRWMP, incorporating information developed in Tasks 2 through 5 below. The IRWMP will be made available for public review, finalized based on public comments received, and adopted.

3.1.2. *Round 1 Planning Grant Task 2 – Develop Pittsburg Plain Groundwater Management Program*

A Groundwater Management Plan (GMP) is under development for the Pittsburg Plain Groundwater Basin, one of the basins underlying the ECCC Region. Basin management objectives will be developed based on an understanding of the regional groundwater supply setting. A conceptual hydrogeologic model developed under this task as a tool to generate water elevation maps will be used to develop a groundwater monitoring program and implementation plan to be included in the GMP. The GMP will be consistent with requirements in the California Water Code. Activities are overseen by a Groundwater Technical Committee.

3.1.3. *Round 1 Planning Grant Task 3 – Data Gap Analysis for East County Portion of Tracy Subbasin*

The purpose of this task is to review and update the 1999 groundwater study from the Tracy Subbasin and develop monitoring and data management recommendations that would allow RWMG to determine the safe yield of the basin once sufficient data are collected. Results of this task will be documented in a Data Gap Plan. Activities are overseen by a Groundwater Technical Committee.

3.1.4. *Round 1 Planning Grant Task 4 – Develop Salinity and Nutrient Management Program*

A Salt and Nutrient Management Program Summary will provide a framework to manage salts, nutrients, and other significant chemical compounds on a basin-wide basis for the Pittsburg Plain Groundwater Basin. RWMG is identifying and characterizing salt and nutrient sources, current groundwater quality monitoring programs, and existing groundwater quality data. A relational model developed under this task will be used to identify and evaluate best management practices

to reduce salt and nutrient loading. Activities are overseen by a Groundwater Technical Committee.

3.1.5. Round 1 Planning Grant Task 5 – Public Outreach

Outreach activities consist of 3 public workshops, outreach to DACs, and creation of a web site. The workshops include (1) a kickoff to inform the public and stakeholders of the process and to announce opportunities for participation, such as the call for projects, (2) a progress meeting to present the status of the project and the work done to date, and (3) a meeting to obtain input on the Draft IRWMP. Outreach to DACs includes contacting local, regional, and statewide DAC-focused organizations that may provide assistance with DAC outreach strategies and/or representative identification, with DAC outreach targeting attendance and participation at workshops and development of projects that benefit DACs. The web site will be publicly accessible and will use Microsoft's SharePoint software, providing access to documents, schedule, and contact information. Projects may be submitted or viewed with a user login.

3.1.6. Round 1 Planning Grant Task 6 – Funding Administration

Task 6 includes day-to-day management and administrative overhead for the project. Work items, such as execution of the funding agreement with DWR, administration of consultant contracts, coordination with other agencies, development and execution of agreements, and processing invoices and grant payment are included in Task 6.

3.2. Funding Sources for Work Being Completed

The additional work currently underway is supported by DWR through a Prop. 84 Round 1 Planning Grant, awarded in January 2012. The RWMG agencies are providing a 25 percent cost share for the State grant through matching funds and in-kind services.

3.3. Timing of Work Being Completed

Work began shortly after the contract was awarded. Analyses for the technical tasks (Tasks 1 through 4) will occur in parallel over the first three quarters of 2012. Once the technical analyses are complete, they will be documented in an IRWMP Update, which will be drafted by the end of 2012, and ready for adoption in the first quarter of 2013. Outreach (Task 5) and Funding Administration (Task 6) will take place over the duration of the work. It is anticipated that the work will be completed by March 2013. If DWR awards the ECCC Region a second grant for the work proposed in this application, formal adoption of the IRWMP Update would be delayed until the work under both contracts is complete to streamline the adoption process.

Attachment 5, "Schedule," shows the planned time frame for work under the Prop. 84 Round 1 Planning Grant.