

COASTAL CONSERVANCY

Staff Recommendation
November 9, 2006

**ADOPTION OF THE SAN FRANCISCO BAY AREA INTEGRATED REGIONAL
WATER MANAGEMENT PLAN**

File No. 04-067

Project Manager: Jeff Melby

RECOMMENDED ACTION: Adoption of the San Francisco Bay Area Integrated Regional Water Management Plan.

LOCATION: San Francisco Bay Watershed, including the nine counties of the San Francisco Bay Area (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma).

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

Exhibit 1: Project Location

Exhibit 2: September 15, 2004 and March 2, 2006
Staff Recommendations

Exhibit 3: Bay Area IRWMP Executive Summary

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160–31165 of the Public Resources Code:

“The State Coastal Conservancy hereby adopts the *San Francisco Bay Area Integrated Regional Water Management Plan* (“IRWMP”, a copy of which is maintained at www.bayareairwmp.net), a planning study based on data compilation that specifies goals and objectives for the San Francisco Bay Area and identifies priority projects which may be implemented with grant funding from Chapter 8 of Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002. By adopting the IRWMP, the Conservancy acknowledges support for the implementation and continued development of the IRWMP to meet the IRWMP goals and objectives. However, the Conservancy is not making any commitment to expend funds or to implement any project identified in the IRWMP, except to the extent that the Conservancy has previously authorized implementation of a specific project or projects. The Conservancy shall determine, in its sole discretion and through a project-specific authorization, whether the Conservancy will fund or implement any IRWMP-identified project in the future, based on

assessment of the merits of the project, its consistency with Conservancy enabling legislation, environmental review as required by the California Environmental Quality Act, and any other factors the Conservancy deems relevant. Adoption of the IRWMP does not preclude the Conservancy from funding or engaging in any other planning activities for the San Francisco Bay Area, from undertaking projects not identified in the IRWMP, or from efforts to secure funding for Conservancy projects from any source.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed adoption is consistent with Chapter 4.5 of Division 21 of the Public Resources Code (Sections 31160 *et seq.*), regarding the Conservancy’s mandate to address the resource and recreational goals of the San Francisco Bay Area.
2. The proposed adoption is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy Board on January 24, 2001.”

PROJECT SUMMARY:

The Bay Area IRWMP is a multi-stakeholder, nine-county effort to coordinate a strategic approach to regional water management. The Plan builds on water resources needs and planning strategies identified throughout the Bay Area, leveraging regional cooperation to more effectively address the needs identified. Adoption of the San Francisco Bay Area Integrated Regional Water Management Plan (IRWMP or the Plan, available for review at www.bayareairwmp.net) would enable the Conservancy and other stakeholders in the Bay Area (Exhibit 1) to be eligible for Proposition 50 project funding. The Integrated Regional Water Management (IRWM) Grant Program Guidelines mandate that the Plan be formally adopted, as evidenced by a resolution or other written documentation, by the governing bodies of the agencies and organizations that participated in the development of the Plan and have responsibility for implementation of the Plan. Adoption signifies concurrence with the regional goals and objectives of the Plan.

The Conservancy has been involved in the development of the Watershed Management and Habitat Protection and Restoration (Watershed) and the Flood Protection and Stormwater Management (Flood/Stormwater) “functional area” components of the Bay Area IRWMP, in the integration of those components into the IRWMP, and in the overall development of the IRWMP. Following adoption, the Bay Area IRWMP will be carried out through implementation of priority projects identified in the Plan by various project proponents. Adoption of the Plan does not commit the Conservancy to carry out any specific project identified in the IRWMP, nor does it eliminate the usual discretion of the Conservancy to determine what project or projects to fund or whether or not to fund a particular project. However, adoption of the IRWMP would indicate Conservancy concurrence with the IRWMP regional goals and objectives.

IRWMPs are intended to provide a new model for water resources management in California. The Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002

(“Proposition 50”), found at Water Code Section 79560 *et seq.*, passed by California voters in November 2002, authorized the issuance of general obligation bonds in the amount of \$3.4 billion to fund a variety of specified water and wetlands projects. It set aside \$380 million for IRWMP-related grants, which has led to similar planning efforts throughout the state. The intent of the IRWM grant program, administered jointly by the California Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB), is to encourage integrated regional strategies for management of water resources and to provide funding, through competitive grants, for projects that utilize multiple strategies, resulting in multiple benefits. These benefits include improved water supply reliability, long-term attainment and maintenance of water quality standards, eliminated or reduced pollution in impaired water and sensitive habitat areas, planning and implementation of multipurpose flood control programs, and drinking water and water quality projects that serve disadvantaged communities.

The IRWMP builds on the Watershed component (previously referred to as the Watershed Management and Habitat Protection and Restoration Plan, WMHPRP, or Watershed Plan) developed through Conservancy funding authorized on September 15, 2004 and on March 2, 2006 (attached as Exhibit 2). Under those authorizations, the latter of which included acceptance of an IRWM planning grant from DWR, the Conservancy entered into contracts with consultants, the Center for Collaborative Policy, and the Association of Bay Area Governments/San Francisco Estuary Project (ABAG/SFEP) to develop the Watershed component and to integrate it into the Bay Area IRWMP. The Watershed component:

- includes an inventory of existing information about watersheds and wetland habitats in the region;
- identifies challenges to their management, protection and restoration in relation to water quality, water supply and flood protection issues; and
- identifies and prioritizes multi-objective projects for implementation using Proposition 50 and other funding sources.

The Bay Area IRWMP must be adopted by January 1, 2007 in order to be eligible for project implementation grant funding under the IRWM (Proposition 50, chapter 8) grant program. In addition to the Conservancy, the following eighteen Bay Area agencies participated in the development of and are expected to adopt the IRWMP:

- Alameda County Water District
- ABAG
- Bay Area Clean Water Agencies
- Bay Area Water Supply and Conservation Agency
- City of Napa
- City of Palo Alto
- City of San Jose
- Contra Costa County Flood Control and Water Conservation District
- Contra Costa Water District
- East Bay Municipal Utility District
- Marin Municipal Water District
- North Bay Watershed Association
- San Francisco Public Utilities Commission
- Santa Clara Basin Watershed Management Initiative
- Santa Clara Valley Water District
- Solano County Water Agency
- Sonoma County Water Agency
- Zone 7 Water Agency

ABAG, a Joint Powers Agency of the cities and counties in the Bay Area, will provide a direct link with these agencies to obtain endorsement of the IRWMP. Other entities, such as environmental groups, and state agencies, including the Bay Area Regional Water Quality Control Board and the California Bay-Delta Authority, have also participated in the development of the IRWMP.

The IRWMP has four major “functional area” components: 1) water supply/water quality; 2) wastewater/recycled water; 3) stormwater management/flood control; and 4) watershed management/habitat protection and restoration. A technical coordinating committee, composed of members preparing each of the four components, including the Conservancy, was formed to compile the four components into a single, integrated IRWMP. As a living document, the IRWMP will be updated periodically.

The IRWMP includes 1) an assessment of regional water management needs; 2) identification of opportunities for regional coordination and collaboration among various entities that have not historically been partners; and 3) recommendations for priority multi-objective projects encompassing water supply reliability, water recycling, water conservation, water quality improvement, storm water capture and management, flood management, recreation and access, wetlands enhancement and creation, and environmental and habitat protection and improvement.

Regional goals were developed that characterize the common water resources management interests of entities across functional areas and geographic boundaries, both internal and external to IRWMP development. These regional goals, listed below, also reflect the specific objectives set forth in each of the functional area documents:

- Contribute to the promotion of economic, social, and environmental sustainability
- Contribute to improved supply reliability
- Contribute to the protection and improvement of hydrologic function
- Contribute to the protection and improvement of the quality of water resources
- Contribute to the protection of public health & safety; and property
- Contribute to the creation, protection, enhancement, and maintenance of environmental resources and habitat

The objectives associated with the above goals are included in the Executive Summary of the Bay Area IRWMP, provided in Exhibit 3.

The IRWMP contains well reasoned, publicly supported recommendations for priority projects that, when implemented, will assist the region in meeting state and federal environmental laws and regional plans related to protection and restoration of habitat for special status and other species, and in improving water quality. The IRWMP will also improve regional competitiveness for State and federal grant funding, as representatives of state resource agencies and state legislators have suggested that state grants and other funding criteria will increasingly involve integrated regional water management planning.

Project History:

Recent legislation and grant programs have identified the need for, and required or encouraged, integrated regional water management planning. For example:

- The Integrated Regional Water Management Act of 2002 (SB 1672, Costa) was designed to facilitate the development of integrated regional water management plans, thereby maximizing the quality and quantity of water available to meet the state's water needs by providing a framework for local agencies to integrate programs and projects that protect and enhance regional water supplies.
- In November 2002, California voters passed Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002. The IRWM grant program implements Chapter 8 of Proposition 50 (Integrated Regional Water Management projects), California Water Code Section 79560 *et seq.* The intent of Chapter 8 of the Proposition 50 is to provide funding for competitive grants for projects to protect communities from drought, protect and improve water quality, and improve local water security by reducing dependence on imported water. DWR and SWRCB have issued guidelines for preparation and evaluation of IRWMPs that place great emphasis on identifying projects that integrate multiple objectives.
- The Watershed, Clean Beaches, and Water Quality Act (Division 20.4, section 30901 *et seq.* and Division 21, Chapter 5.5, section 31220 of the Public Resources Code) established the Integrated Watershed Management Program to coordinate and integrate statewide watershed, funding, projects, and programs.

In response to the State's emerging emphasis on integrated regional water management planning, Bay Area public agencies involved with water resource management agreed to develop an IRWMP for the Bay Area. Given the Conservancy's and its partner's integral roles in watershed management, habitat protection and restoration in the Bay Area, the Conservancy was requested to participate in development of the Bay Area IRWMP. On September 15, 2004, the Board authorized funding for development of the Bay Area Watershed component (WMHPRP). Subsequently, through a competitive selection process, the Conservancy was selected by DWR for funding of \$451,230 for preparation of the Watershed and Flood/Stormwater components of the Bay Area IRWMP and for the integration of these components into the IRWMP.

PROJECT FINANCING:

Adoption of the IRWMP does not involve financing.

The Project Financing sections from the previous project Staff Recommendations in Exhibit 2 provide historical financing information.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The IRWMP (the project), including its development and proposed adoption, was undertaken pursuant to Chapter 4.5 of the Conservancy's enabling legislation, Public Resources Code Sections 31160-31165, to address resource goals in the Bay Area.

Public Resources Code Section 31162 authorizes the Conservancy to undertake projects and award grants in the nine-county San Francisco Bay Area that meet specified goals. Under §31162(b), the Conservancy may act to protect, restore, and enhance natural habitats and connecting corridors, watersheds, scenic areas, and other open-space resources of regional significance. The project achieves these objectives by identifying multi-objective, priority projects in need of funding, involving protection, restoration, and enhancement of natural habitats and connecting corridors, watersheds, and open space.

Consistent with the goals specified in §31162(c), development and adoption of the IRWMP and its watershed component, in particular, implements the policies and programs of the *San Francisco Bay Plan*, as described in the "Consistency with the San Francisco Bay Plan" section of this staff recommendation.

The project is also consistent with §§31163(a) and (b), that direct the Conservancy to participate in and support interagency actions and public/private partnerships in the San Francisco Bay Area for the purpose of implementing long-term resources and outdoor recreational goals.

Finally, the project satisfies all of the criteria for determining project priority under §31163(c), as follows: it (1) is supported by adopted regional plans (*San Francisco Bay Plan*, *San Francisco Baylands Ecosystem Habitat Goals Report*, and the *Water Quality Control Plan* for the San Francisco Bay Basin); (2) is multi-jurisdictional (spanning nine counties) and serves a regional constituency; (3) can be implemented in a timely way (Plan adoption will allow projects to be eligible for funding within the next year); (4) provides opportunities for benefits that could be lost if the project is not quickly implemented (integrated, long-term planning is necessary to leverage funds and achieve watershed and habitat goals in a timely manner).

**CONSISTENCY WITH CONSERVANCY'S
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 9 Objective A** of the Conservancy's Strategic Plan, the project helps the Conservancy maintain an updated list of identified high-priority areas, including projects that protect and restore natural habitats and other open-space lands of regional significance, for the Bay Program.

Consistent with **Goal 10, Objective B**, the project develops a plan for all watersheds draining to the San Francisco Bay, which includes restoration and enhancement projects.

**CONSISTENCY WITH CONSERVANCY'S
PROJECT SELECTION CRITERIA & GUIDELINES:**

The project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** No funding is required for adoption of the Plan.
3. **Support of the public:** This project is supported by ABAG, representing cities and counties of the Bay Area and nearly all of the region's population.
4. **Location:** The plan addresses the nine-county San Francisco Bay Area, all within the jurisdiction of the San Francisco Bay Area Conservancy Program.
5. **Need:** Grants awarded to eligible projects through the Proposition 50 IRWM grant program are required to be consistent with an adopted IRWMP. Adoption of a Bay Area IRWMP would facilitate funding eligibility for water-related projects in the Bay Area to be implemented by the Conservancy or its partners.
6. **Greater-than-local interest:** The IRWMP will facilitate on-going coordination, collaboration and communication among various water resource related entities throughout the San Francisco Bay Area.

Additional Criteria

7. **Urgency:** The Bay Area IRWMP must be adopted by January 1, 2007 in order for the region to be eligible for project implementation grant funding under the IRWMP (Proposition 50, chapter 8) grant program.
8. **Resolution of more than one issue:** The IRWMP identifies multi-objective projects for implementation (e.g., habitat restoration, water quality improvement, flood control, and enhanced recreational opportunities).
9. **Leverage:** Adoption of the IRWMP will make certain Conservancy projects eligible for IRWMP implementation funding, thereby leveraging the Conservancy's funding.
10. **Conflict resolution:** The IRWMP facilitates coordination, collaboration and communication among various water resource related entities throughout the San Francisco Bay Area, and thereby enhances resolution of water-related conflicts.
11. **Innovation:** The Bay Area IRWMP initiates a new paradigm for coordinating efforts to protect and enhance water resources and facilitate identification and implementation of critical multi-objective, multi-agency projects.
12. **Readiness:** The Bay Area IRWMP is completed and ready to be adopted.
15. **Cooperation:** The Conservancy and its partners have worked closely with various Bay Area entities (e.g., agencies, nongovernmental organizations) in developing the IRWMP.

CONSISTENCY WITH SAN FRANCISCO BAY PLAN:

The project is consistent with the following policies of BCDC's San Francisco Bay Plan:

Part III

Water Quality

1. Bay water pollution should be prevented to the greatest extent feasible. The Bay's tidal marshes, tidal flats, and water surface area and volume should be conserved and, whenever possible, restored and increased to protect and improve water quality. Fresh water inflow into the Bay should be maintained at a level adequate to protect Bay resources and beneficial uses.
2. Water quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the San Francisco Bay Regional Water Quality Control Board's *Water Quality Control Plan, San Francisco Bay Basin* and should be protected from all harmful or potentially harmful pollutants.

COMPLIANCE WITH CEQA:

The IRWMP is a planning activity that identifies possible future actions that have not been approved, adopted, or funded. Therefore, this project is categorically exempt from California Environmental Quality Act (CEQA) review under 14 California Code of Regulations Section 15262. Similarly, the project is statutorily exempt from CEQA review under Section 15306, which exempts basic data collection, research, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource.

Adoption of the IRWMP indicates concurrence with the IRWMP regional goals and objectives. This adoption is not a direct commitment of resources, but rather an agreement with regional priorities. In addition, as made clear by the proposed resolution, the Conservancy is not legally bound by adoption of the Plan to undertake any aspect of the Plan or to take any other action, nor is it limited in any way in connection with any other Conservancy activities within the San Francisco Bay Area (or elsewhere) by reason of adoption. As such, programmatic environmental analysis under CEQA is not triggered.

Implementation of each proposed project included in the Plan will be the responsibility of the project proponent and any applicable project partners. There is no joint commitment or responsibility by the IRWMP participants to implement any or all of the projects. Furthermore, the project proponents and applicable project partners have discretionary authority over project design and implementation, and may elect not to implement a project based on changing regional conditions and needs. If implementing a project, project proponents bear sole responsibility for ensuring CEQA requirements for the project are met.

Upon Conservancy approval of the proposed project, staff will file a Notice of Exemption.



Exhibit 1: The nine counties of the San Francisco Bay Area (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma).

COASTAL CONSERVANCY

Staff Recommendation
September 15, 2004

Bay Area
Watershed Management/Habitat Protection and Restoration Plan
File No. 04-067
Project Manager: Jeff Melby

RECOMMENDED ACTION: Authorization to disburse up to \$300,000 of Conservancy funds for preparation of a Watershed Management/Habitat Protection and Restoration Plan for the San Francisco Bay Area region.

LOCATION: San Francisco Bay Watershed, including the nine counties of the San Francisco Bay Area (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma) or portions thereof.

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

Exhibit 1: Project Location

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160 – 31164 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed three hundred thousand dollars (\$300,000) for preparation of a Watershed Management/Habitat Protection and Restoration Plan for the San Francisco Bay Area region.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 4.5 of Division 21 of the Public Resources Code (Sections 31160 *et seq.*), regarding the Conservancy’s mandate to address the resource and recreational goals of the San Francisco Bay Area.
 2. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy Board on January 24, 2001.”
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PROJECT SUMMARY:

This authorization would enable the Conservancy to develop a Watershed Management/Habitat Protection and Restoration Plan (WMHPRP), in cooperation with the Association of Bay Area Governments (ABAG) and others, for the San Francisco Bay Area region. The WMHPRP would include a compilation and assessment of existing information about sub-watersheds and wetland habitats in the region; identify challenges to their management, protection and restoration in relation to water quality, water supply and flood protection issues; and, identify and prioritize multi-objective projects for implementation using Proposition 50 and other funding sources. The WMHPRP would be a stand alone document that will assist the Conservancy in meeting the San Francisco Bay Area Conservancy Program requirements to identify long-term resource goals and guide future funding of projects that protect, restore, and enhance natural habitats and watersheds. It will be further used as the watershed and habitat component of a Bay Area Integrated Regional Water Management Plan (IRWMP).

The Conservancy is preparing a detailed scope of work for the WMHPRP which will be finalized with input from interested parties. The Conservancy will then contract with ABAG and environmental consultants to prepare separate elements. Existing information from various sources, including the *Baylands Ecosystem Habitat Goals* report, watershed/habitat assessments and planning efforts, and new information as it is developed, such as from the Bay Area Open Space Council's forthcoming Uplands Habitat Goals report, will be incorporated. The level of specificity will vary by sub-watershed and county, and the report will identify data and analytical gaps that should be addressed in an updated, more detailed version. Finally, the WMHPRP would identify and prioritize multi-objective priority projects in need of funding that have one of more of the following objectives:

- protection and improvement of water quality
- removal of invasive non-native plants to reduce the negative impacts of these species on water quality, water supply, or ecosystem health
- creation and enhancement of wetlands
- acquisition, protection, and restoration of open space and watershed lands
- watershed management planning and implementation
- environmental and habitat protection and improvement
- fish passage improvements
- recreation and public access: acquisition and development of facilities to promote public access to and participation in the conservation of land, water, and wildlife resources
- training and research facilities for watershed protection and water conservation activities conducted by nonprofit organizations

ABAG is a Joint Powers Agency of the cities and counties in the Bay Area and as such will provide a direct link with these policy bodies to obtain endorsement of the WMHPRP and the IRWMP. ABAG also maintains a computerized geographical information system (GIS) that can be upgraded with existing and newly developed regional data related to watersheds, water quality, groundwater, habitats, watershed and regulatory plans, proposed water resource development projects, and growth projections.

The Conservancy will assist other public agencies in integrating the WMHPRP findings and recommendations into the larger IRWMP. Ten Bay Area public agencies (Alameda County Water District, Association of Bay Area Governments, Bay Area Clean Water Agencies, Bay Area Water Supply and Conservation Agency, Contra Costa Water District, East Bay Municipal Utility District, San Francisco Public Utilities Commission, Santa Clara Valley Water District, Sonoma County Water Agency, Zone 7 Water Agency) have signed a Letter of Mutual Understandings with respect to their joint efforts towards developing an IRWMP. Other entities, such as environmental groups, and state agencies, such as the Bay Area Regional Water Quality Control Board and the California Bay-Delta Authority, will also be invited to participate.

The IRWMP will be divided into four major components: 1) water supply/water quality; 2) wastewater/recycled water; 3) stormwater management/flood control; and 4) watershed management/habitat protection and restoration. A technical coordinating committee, composed of members preparing each of the four components, including the Conservancy, has been formed to compile the four components into a single, integrated IRWMP.

When completed the IRWMP would include 1) an assessment of regional water management needs; 2) identification of opportunities for regional coordination and collaboration among various entities that have not historically been partners; and 3) recommendations for priority multi-objective projects encompassing water supply reliability, water recycling, water conservation, water quality improvement, storm water capture and management, flood management, recreation and access, wetlands enhancement and creation, and environmental and habitat protection and improvement.

The WMHPRP and the IRWMP would each result in well reasoned, publicly supported recommendations for priority projects that, when implemented, will assist the region in meeting state and federal environmental laws and regional plans related to protection and restoration of habitat for special status and other species, and in improving water quality. The IRWMP would also improve regional competitiveness for State and federal grant funding, as representatives of state resource agencies and state legislators have suggested that state grants and other funding criteria will increasingly involve integrated regional water management planning.

Project History:

The WMHPRP is an obvious outgrowth of other significant regional habitat and watershed planning efforts such as the *Baylands Ecosystem Habitat Goals*, the Regional Water Quality Control Board's *Basin Plan*, the Bay Conservation Development Commission's *San Francisco Bay Plan*, the *Santa Clara Basin Watershed Management Initiative*, and others. These plans share some common objectives and geographic focus, but also distinctive differences in scope and level of detail. Recent legislation and grant programs have identified the need for, and required or encouraged, integrated regional water management planning. For example:

- The Integrated Regional Water Management Act of 2002 (SB 1672, Costa) was designed to facilitate the development of integrated regional water management plans, thereby maximizing the quality and quantity of water available to meet the state's water needs by

providing a framework for local agencies to integrate programs and projects that protect and enhance regional water supplies.

- In November 2002, California voters passed Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002. The IRWM grant program implements Chapter 8 of Proposition 50 (Integrated Regional Water Management projects), California Water Code (CWC) Section 79560 *et seq.* The intent of Chapter 8 of the Proposition 50 is to provide funding for competitive grants for projects to protect communities from drought, protect and improve water quality, and improve local water security by reducing dependence on imported water. DWR and SWRCB have issued draft guidelines for preparation and evaluation of IRWMPs that place great emphasis on identifying projects that integrate multiple objectives.
- The Watershed, Clean Beaches, and Water Quality Act (Division 20.4, section 30901 *et seq.* and Division 21, Chapter 5.5, section 31220 of the Public Resources Code) established the Integrated Watershed Management Program to coordinate and integrate statewide watershed, funding, projects, and programs.

In response to the State's emerging emphasis on integrated regional water management planning, Bay Area public agencies involved with water resource management agreed to develop an IRWMP for the Bay Area. Given the Conservancy's and its partner's integral roles in watershed management, habitat protection and restoration in the Bay Area, Conservancy staff believe it is critical for the Conservancy to participate in development of the Bay Area IRWMP.

PROJECT FINANCING:

WMHPRC

Coastal Conservancy	\$300,000
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Other components of IRWMP

Other sources (estimated)	<u>\$700,000</u>
Total Project Cost	\$1,000,000

The anticipated source of Conservancy funds is the fiscal year 2003-2004 appropriation to the Conservancy from the Water Security, Clean Drinking Water, Coastal Beach Protection Fund of 2002 (Proposition 50). Proposition 50 authorizes the use of these funds for the purpose of protecting coastal watersheds through projects to acquire, protect and restore land and water resources that are undertaken pursuant to the Conservancy's enabling legislation. Funds may be used for planning associated with protection, acquisition, and restoration activities (Water Code Section 79570). The proposed project will accomplish these purposes by developing a regional habitat and watershed plan and assisting in the development of an IRWMP for the Bay Area that will identify multi-objective priority projects, including protection, acquisition, and restoration activities, in need of funding.

As also required by Proposition 50, the proposed project is consistent with local and regional watershed plans (Water Code Section 79507). Indeed, the entire thrust of the proposed project is

to develop a document that will not only be used as a planning tool for project development by the Conservancy and its partners, but as the basis for a critical component of an IRWMP that will be adopted by local entities with jurisdiction over public water resources within the San Francisco Bay watershed.

Finally, Conservancy funding for the proposed project is matched by substantial anticipated funding from the ten other involved public entities that will be dedicated to development of other components of the regional water management planning effort.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project would be undertaken pursuant to Chapter 4.5 of the Conservancy's enabling legislation, Public Resources Code Sections 31160-31164, to address resource goals in the Bay Area.

Public Resources Code Section 31162 authorizes the Conservancy to undertake projects and award grants in the nine-county San Francisco Bay Area that meet specified goals. Under §31162(b), the Conservancy may act to protect, restore, and enhance natural habitats and connecting corridors, watersheds, scenic areas, and other open-space resources of regional significance. The proposed project would achieve this objective by identifying multi-objective, priority projects in need of funding, involving protection, restoration, and enhancement of natural habitats and connecting corridors, watersheds, and open space.

Consistent with the goals specified in §31162(c), development of the WMHPRP and IRWMP would implement the policies and programs of the *San Francisco Bay Plan*, as described in the "Consistency with the San Francisco Bay Plan" section of this staff recommendation.

Likewise, under §31162(d), the Conservancy may act to promote, assist, and enhance projects that provide open space and natural areas that are accessible to urban populations for recreational and educational purposes. This project would provide a plan for acquisition and protection of open space resources for recreational purposes.

The project is also consistent with §§31163(a) and (b), that direct the Conservancy to participate in and support interagency actions and public/private partnerships in the San Francisco Bay Area for the purpose of implementing long-term resources and outdoor recreational goals.

Finally, the project satisfies all of the criteria for determining project priority under §31163(c), as follows: (1) is supported by adopted regional plans (*San Francisco Bay Plan*, *San Francisco Baylands Ecosystem Habitat Goals Report*, and the *Water Quality Control Plan* for the San Francisco Bay Basin); (2) is multi-jurisdictional (spanning nine counties) and serves a regional constituency; (3) can be implemented in a timely way (preparation of the WMHPRP and the IRWMP are expected to take less than two years); (4) provides opportunities for benefits that could be lost if the project is not quickly implemented (integrated, long-term planning is necessary to leverage funds and achieve watershed and habitat goals in a timely manner); and (5) includes matching funds (described under Project Financing).

**CONSISTENCY WITH CONSERVANCY'S
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 9 Objective A** of the Conservancy's Strategic Plan, the proposed project would help the Conservancy maintain an updated list of identified high-priority areas for the Bay

Program.

Consistent with **Goal 10, Objective B**, the proposed project would develop a plan for all watersheds draining to the San Francisco Bay.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** This project is supported by ABAG, representing cities and counties of the Bay Area and nearly all of the region's population.
4. **Location:** The plan addresses the nine-county San Francisco Bay Area, all within the jurisdiction of the San Francisco Bay Area Conservancy Program.
5. **Need:** The financial support and participation of the Conservancy are critical for development of the WMHPRP because no other funding sources for this effort have been identified.
6. **Greater-than-local interest:** The IRWMP will facilitate coordination, collaboration and communication among various water resource related entities throughout the San Francisco Bay Area.

Additional Criteria

7. **Urgency:** Grants awarded to eligible projects through the Proposition 50 IRWM grant program are required to be consistent with an adopted IRWMP. The Bay Area does not currently have an IRWMP. Consequently, completion of a Bay Area IRWMP would facilitate funding eligibility for water-related projects in the Bay Area to be implemented by the Conservancy or its partners.
8. **Resolution of more than one issue:** The IRWMP would identify multi-objective projects for implementation (e.g., habitat restoration, water quality improvement, flood control, and enhanced recreational opportunities).
9. **Leverage:** See the "Project Financing" section above.
10. **Conflict resolution:** The IRWMP would facilitate coordination, collaboration and communication among various water resource related entities throughout the San Francisco Bay Area, and thereby enhance resolution of water-related conflicts.

11. **Innovation:** Development of a Bay Area IRWMP would initiate a new paradigm for coordinating efforts to protect and enhance water resources and facilitate identification and implementation of critical multi-objective, multi-agency projects.
12. **Readiness:** The Conservancy is ready to proceed immediately with development of the WMHPRP. Development of the other components of the IRWMP is already in progress.
13. **Realization of prior Conservancy goals:** This project builds on the Conservancy's participation in the development of the *San Francisco Baylands Habitat Goals Report*, which has goals, objectives, and recommendations for restoration in the San Francisco Baylands.
15. **Cooperation:** The Conservancy and its partners will work closely with various Bay Area entities (e.g., agencies, nongovernmental organizations) in developing the IRWMP.

CONSISTENCY WITH SAN FRANCISCO BAY PLAN:

The project is consistent with the following policies of BCDC's San Francisco Bay Plan:

Part III

Water Quality

1. Bay water pollution should be prevented to the greatest extent feasible. The Bay's tidal marshes, tidal flats, and water surface area and volume should be conserved and, whenever possible, restored and increased to protect and improve water quality. Fresh water inflow into the Bay should be maintained at a level adequate to protect Bay resources and beneficial uses.
2. Water quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the San Francisco Bay Regional Water Quality Control Board's *Water Quality Control Plan, San Francisco Bay Basin* and should be protected from all harmful or potentially harmful pollutants.

COMPLIANCE WITH CEQA:

As a planning activity for possible future actions that have not been approved, adopted, or funded, this project is categorically exempt from California Environmental Quality Act (CEQA) review under 14 California Code of Regulations Section 15262. Similarly, the project is statutorily exempt from CEQA review under Section 15306, which exempts basic data collection, research, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource.

Upon Conservancy approval of the proposed project, staff will file a Notice of Exemption.

COASTAL CONSERVANCY

Staff Recommendation

March 2, 2006

**Watershed and Flood Protection/Stormwater Management Components of the Bay Area
Integrated Regional Water Management Plan**

File No. 04-067

Project Manager: Jeff Melby

RECOMMENDED ACTION: Authorization to enter into agreements for a grant to the Conservancy of \$451,230 by the California Department of Water Resources and to disburse up to \$200,000 of additional Conservancy funds for developing and integrating the Watershed Management/Habitat Protection and Restoration and Flood Protection/Stormwater Management components of the Bay Area Integrated Regional Water Management Plan, and authorization to enter a Memorandum of Understanding related to the Bay Area Water Forum and to receive and disburse funds donated by entities participating in the Forum for strategic planning and facilitation support.

LOCATION: San Francisco Bay Watershed, including the nine counties of the San Francisco Bay Area (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma) or portions thereof.

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

Exhibit 1: Project Location

Exhibit 2: September 15, 2004 Staff Recommendation

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160 – 31164 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes:

1. The Conservancy to enter into and the Executive Officer to execute all agreements required for a grant to the Conservancy of four hundred fifty-one thousand, two hundred thirty dollars (\$451,230) from the California Department of Water Resources for the development and preparation of the Watershed Management/Habitat Protection and Restoration and the Flood Protection and Stormwater Management components of the Bay Area Integrated Regional Water Management Plan and to integrate those components into the Plan.

2. Disbursement of additional Conservancy funds in an amount not to exceed two hundred thousand dollars (\$200,000) to further the development and integration of the Watershed Management/Habitat Protection and Restoration and the Flood Protection and Stormwater Management components of the Bay Area Integrated Regional Water Management Plan.
3. The Conservancy to enter into and the Executive Officer to execute a Memorandum of Understanding by which the Conservancy would participate in the Bay Area Water Forum, and the Conservancy to receive and disburse funds donated by other public agencies participating in the Forum for strategic planning and facilitation support.

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorizations are consistent with Chapter 4.5 of Division 21 of the Public Resources Code (Sections 31160 *et seq.*), regarding the Conservancy’s mandate to address the resource and recreational goals of the San Francisco Bay Area.
2. The proposed authorizations are consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy Board on January 24, 2001.”

PROJECT SUMMARY:

This authorization would enable the Conservancy to finalize the development of the Watershed Management and Habitat Protection and Restoration Plan (Watershed Plan or WMHPRP) and the Flood Protection and Stormwater Management (Flood/Stormwater) components of the Integrated Regional Water Management Plan (IRWMP) for the San Francisco Bay Area region and to integrate those components into the IRWMP. Completion of the Bay Area IRWMP will enable the Conservancy to ensure that habitat and watershed resources are a priority consideration and to allow the Bay Region to be eligible for IRWMP project implementation funding.

IRWMPs are intended to provide a new model for water resources management in California. The Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (“Proposition 50”), found at Water Code Section 79560 *et seq.*, passed by California voters in November 2002, authorized the issuance of general obligation bonds in the amount of \$3.4 billion to fund a variety of specified water and wetlands projects. It set aside \$380 million for IRWMP related grants, which has lead to similar planning efforts throughout the state. The intent of the Integrated Regional Water Management (IRWM) grant program, administered jointly by the California Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB), is to encourage integrated regional strategies for management of water resources and to provide funding, through competitive grants, for projects that utilize multiple strategies resulting in multiple benefits. These include, improved water supply reliability, long-term attainment and maintenance of water quality standards, eliminated or reduced pollution in

impaired water and sensitive habitat areas, planning and implementation of multipurpose flood control programs, and drinking water and water quality projects that serve disadvantaged communities.

The IRWMP will build on the Watershed Plan which is being developed through Conservancy funding authorized on September 15, 2004 (attached as Exhibit 2). Under that authorization, the Conservancy entered into contracts with a consulting team and the Association of Bay Area Governments/San Francisco Estuary Project (ABAG/SFEP) to initiate development of the Watershed Plan. The Watershed Plan, when completed, will:

- include an inventory of existing information about watersheds and wetland habitats in the region;
- identify challenges to their management, protection and restoration in relation to water quality, water supply and flood protection issues; and
- identify and prioritize multi-objective projects for implementation using Proposition 50 and other funding sources.

The Watershed Plan will be a stand alone document that will assist the Conservancy in meeting the San Francisco Bay Area Conservancy Program requirements to identify long-term resource goals and guide future funding of projects that protect, restore, and enhance natural habitats and watersheds. It will be further used as the watershed and habitat component of a Bay Area IRWMP.

The Bay Area IRWMP is a multi-stakeholder, nine-county effort to coordinate a strategic approach to regional water management. The Plan will build on water resources needs and planning strategies identified throughout the Bay Area, leveraging regional cooperation to more effectively address the needs identified. The Bay Area IRWMP must be adopted by January 1, 2007 in order to be eligible for project implementation grant funding under the IRWMP (Proposition 50, chapter 8) grant program.

The proposed authorization would enable the Conservancy to execute an agreement for a grant of \$451,230 from DWR for preparation of the Watershed Plan and Flood/Stormwater components of the Bay Area IRWMP and for the integration of these components into the IRWMP. The Conservancy submitted an application to DWR and to SWRCB to obtain an Integrated Regional Water Management Planning Grant pursuant to Proposition 50. Zone 7 Water Agency (Zone 7) submitted a parallel application for a grant of \$387,000 to prepare and integrate the two remaining components of the Bay Area IRWMP - the Water Supply/Water Quality and Wastewater/Recycled Water (Water/Wastewater) components. Through a competitive selection process, the grant applications of the Conservancy and Zone 7 were selected for funding by DWR. Although the Conservancy and Zone 7 separately applied for and were awarded a grant, both parties and DWR subsequently agreed that a combined and comprehensive IRWMP planning effort would best meet the intent of the Proposition 50. Thus, the three parties have agreed to the consolidation of the separate awards to Zone 7 and the Conservancy for the purpose of completing a single IRWMP, and have determined that Zone 7 shall serve as the lead for the purpose of administering the consolidated grant agreement, including contracting for the joint work and receiving grant disbursements from DWR. Although Zone 7 will take on all administrative tasks and receive and disburse all grant funding, the Conservancy must, however,

remain a party to the grant agreement and will remain responsible for completion of the Watershed Plan and Flood/Stormwater components of the IRWMP under the agreement. Under a separate agreement with Zone 7, the Conservancy will be directly involved in oversight, development, review and approval of the Water Plan and Flood/Stormwater components.

The separate work plans contained in the grant applications of the Conservancy and Zone 7 have been combined into a single, integrated scope of work. This work plan is currently being implemented by a consulting team, the Center for Collaborative Policy and San Francisco Estuary Institute (SFEI, under contract with Zone 7, and with oversight by Conservancy staff and the Bay Area IRWMP Technical Coordinating Committee). ABAG/SFEP, under contract with the Conservancy also participates as part of the consulting team. ABAG is a Joint Powers Agency of the cities and counties in the Bay Area and as such will provide a direct link with these policy bodies to obtain endorsement of the Watershed Plan and the IRWMP.

The Conservancy will assist other entities in integrating the Watershed Plan findings and recommendations into the larger IRWMP. The Conservancy and seventeen other Bay Area entities have signed a Letter of Mutual Understandings (LOMU) with respect to their joint efforts towards developing an IRWMP. The seventeen entities are:

- Alameda County Water District
- ABAG
- Bay Area Clean Water Agencies
- Bay Area Water Supply and Conservation Agency
- City of Napa
- City of Palo Alto
- Contra Costa County Flood Control and Water Conservation District
- Contra Costa Water District
- East Bay Municipal Utility District
- Marin Municipal Water District
- North Bay Watershed Association
- San Francisco Public Utilities Commission
- Santa Clara Basin Watershed Management Initiative
- Santa Clara Valley Water District
- Solano County Water Agency
- Sonoma County Water Agency
- Zone 7 Water Agency

Other entities, such as environmental groups, and state agencies, including the Bay Area Regional Water Quality Control Board and the California Bay-Delta Authority, will also be invited to participate. In order to be eligible for grants for project implementation pursuant to the Proposition 50, Chapter 8 IRWM grant program, the IRWMP must be adopted by the LOMU signatories no later than January 1, 2007.

The IRWMP will have four major components: 1) water supply/water quality; 2) wastewater/recycled water; 3) stormwater management/flood control; and 4) watershed management/habitat protection and restoration. A technical coordinating committee, composed of members preparing each of the four components, including the Conservancy, has been formed to compile the four components into a single, integrated IRWMP.

When completed, the IRWMP would include 1) an assessment of regional water management needs; 2) identification of opportunities for regional coordination and collaboration among various entities that have not historically been partners; and 3) recommendations for priority

multi-objective projects encompassing water supply reliability, water recycling, water conservation, water quality improvement, storm water capture and management, flood management, recreation and access, wetlands enhancement and creation, and environmental and habitat protection and improvement.

The Watershed Plan and the IRWMP would each result in well reasoned, publicly supported recommendations for priority projects that, when implemented, will assist the region in meeting state and federal environmental laws and regional plans related to protection and restoration of habitat for special status and other species, and in improving water quality. The IRWMP would also improve regional competitiveness for State and federal grant funding, as representatives of state resource agencies and state legislators have suggested that state grants and other funding criteria will increasingly involve integrated regional water management planning.

DWR grant funding, Zone 7 and others contributions, and earlier Conservancy contributions will provide the bulk of funding for the preparation of the final IRWMP. The additional Conservancy funding of \$200,000 under this proposed authorization would serve two purposes.

First, the funds will be used, if necessary, to advance payments to Zone 7, so that it can pay contractors who are currently undertaking work on the Watershed Plan and Flood/Stormwater components of the IRWMP. The work of these contractors will eventually be paid through disbursement of grant funds by DWR. However, for a variety of reasons, the process of finalizing the grant agreement with DWR has taken far longer than anticipated. In order to complete the IRWMP within the time required, work had to begin prior to the finalization of the DWR grant agreement. It is expected that the DWR grant agreement will be finalized soon. It is also anticipated (but not guaranteed) that under the grant agreement, Zone 7 will be reimbursed for all work done to date. Neither Zone 7 nor its contractors are capable of awaiting reimbursement until the grant agreement is finalized. Zone 7 is advancing its own funds to pay the contractors, and has asked that the Conservancy assist it in advancing funds, if needed to pay the contractors until the DWR grant agreement is in place. Once the DWR grant agreement is finalized and assuming, as expected, that it covers work done before the date the agreement is executed, upon disbursement of the grant funds, Zone 7 would repay the Conservancy for all the funds the Conservancy had advanced.

Second, the additional Conservancy funds will be used to supplement the work under the DWR grant. These funds would be disbursed to the Conservancy's consultant(s) that are currently working on the Watershed Plan effort. The funds will be used to obtain additional necessary input from local governments and other stakeholders regarding integration of watershed/flood/stormwater and other water resource elements to identify multi-benefit projects for implementation. This funding may also be used to fill critical data gaps and to evaluate the effectiveness of the project selection process in identifying and prioritizing such multi-benefit projects, and to provide any applicable improvements to the selection process.

Beyond authorizing a grant from DWR and providing additional Conservancy funding for the IRWMP, the proposed authorization would enable the Conservancy to participate with the Bay Area Water Forum by executing a Memorandum of Understanding which formalizes the Forum participation and to receive funds donated by participating agencies and to disburse those funds

for strategic planning and facilitation support to the Forum. The Bay Area Water Forum (BAWF) provides a venue for all stakeholders in the Bay region including water, wastewater and stormwater agencies, local governments, environmental and business groups, good government and civic organizations, among others, to work cooperatively in support of the IRWMP process and related topics and other water resources planning and management issues on an ongoing basis.

Project History:

On September 15, 2004, the Board authorized funding for development of the Bay Area Watershed Plan as an obvious outgrowth of other significant regional habitat and watershed planning efforts such as the *Baylands Ecosystem Habitat Goals*, the Regional Water Quality Control Board's *Basin Plan*, the Bay Conservation Development Commission's *San Francisco Bay Plan*, the *Santa Clara Basin Watershed Management Initiative*, and others. These plans share some common objectives and geographic focus, but also distinctive differences in scope and level of detail. Recent legislation and grant programs have identified the need for, and required or encouraged, integrated regional water management planning. For example:

- The Integrated Regional Water Management Act of 2002 (SB 1672, Costa) was designed to facilitate the development of integrated regional water management plans, thereby maximizing the quality and quantity of water available to meet the state's water needs by providing a framework for local agencies to integrate programs and projects that protect and enhance regional water supplies.
- In November 2002, California voters passed Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002. The IRWM grant program implements Chapter 8 of Proposition 50 (Integrated Regional Water Management projects), California Water Code Section 79560 *et seq.* The intent of Chapter 8 of the Proposition 50 is to provide funding for competitive grants for projects to protect communities from drought, protect and improve water quality, and improve local water security by reducing dependence on imported water. DWR and SWRCB have issued guidelines for preparation and evaluation of IRWMPs that place great emphasis on identifying projects that integrate multiple objectives.
- The Watershed, Clean Beaches, and Water Quality Act (Division 20.4, section 30901 *et seq.* and Division 21, Chapter 5.5, section 31220 of the Public Resources Code) established the Integrated Watershed Management Program to coordinate and integrate statewide watershed, funding, projects, and programs.

In response to the State's emerging emphasis on integrated regional water management planning, Bay Area public agencies involved with water resource management agreed to develop an IRWMP for the Bay Area. Given the Conservancy's and its partner's integral roles in watershed management, habitat protection and restoration in the Bay Area, the Conservancy was requested to apply for grant funding and participate in development of the Bay Area IRWMP.

PROJECT FINANCING:

Watershed & Flood/Stormwater Components of IRWMP

Coastal Conservancy	
Sept. 15, 2004 authorization	\$339,800
Technical Services	\$150,000
March 2, 2006 authorization	<u>\$200,000</u>
Total Conservancy	\$689,800
DWR Grant to Conservancy	<u>\$451,200</u>
Total	\$1,141,000

Other components of IRWMP

Other sources (estimated)	<u>\$1,200,000</u>
Total Project Cost	<u>\$2,341,000</u>

The anticipated source of Conservancy funds is the fiscal year 2003-2004 appropriation to the Conservancy from the “California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Act of 2002” (Proposition 40) for the San Francisco Bay Area Conservancy Program. This funding source may be used for the development and preservation of land and water resources in accordance with the provisions of the Conservancy’s enabling legislation, Division 21 of the Public Resources Code. The proposed authorization is consistent with the funding source because it will support development of a regional habitat and watershed plan, which will identify, evaluate, record, document, and interpret resource information, through a cooperative approach with numerous interested parties, and will assist in the development of an IRWMP for the Bay Area that will identify multi-objective priority projects, including protection, acquisition, and restoration activities, in need of funding. Further, as discussed below, the project is consistent with Chapter 4.5 of Division 21.

Proposition 40 also requires the Conservancy to give priority to grant projects with matching funds. Conservancy funding for the proposed project is matched by substantial funding from DWR and the other involved public entities that are dedicated to development of other components of the regional water management planning effort.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

This project would be undertaken pursuant to Chapter 4.5 of the Conservancy’s enabling legislation, Public Resources Code Sections 31160-31164, to address resource goals in the Bay Area.

Public Resources Code Section 31162 authorizes the Conservancy to undertake projects and award grants in the nine-county San Francisco Bay Area that meet specified goals. Under §31162(b), the Conservancy may act to protect, restore, and enhance natural habitats and connecting corridors, watersheds, scenic areas, and other open-space resources of regional significance. The proposed project would achieve this objective by identifying multi-objective, priority projects in need of

funding, involving protection, restoration, and enhancement of natural habitats and connecting corridors, watersheds, and open space.

Consistent with the goals specified in §31162(c), development of the WMHPRP and IRWMP would implement the policies and programs of the *San Francisco Bay Plan*, as described in the “Consistency with the San Francisco Bay Plan” section of this staff recommendation.

Likewise, under §31162(d), the Conservancy may act to promote, assist, and enhance projects that provide open space and natural areas that are accessible to urban populations for recreational and educational purposes. This project would provide a plan for acquisition and protection of open space resources for recreational purposes.

The project is also consistent with §§31163(a) and (b), that direct the Conservancy to participate in and support interagency actions and public/private partnerships in the San Francisco Bay Area for the purpose of implementing long-term resources and outdoor recreational goals.

Finally, the project satisfies all of the criteria for determining project priority under §31163(c), as follows: (1) is supported by adopted regional plans (*San Francisco Bay Plan*, *San Francisco Baylands Ecosystem Habitat Goals Report*, and the *Water Quality Control Plan* for the San Francisco Bay Basin); (2) is multi-jurisdictional (spanning nine counties) and serves a regional constituency; (3) can be implemented in a timely way (preparation of the WMHPRP and the IRWMP are expected to take less than two years); (4) provides opportunities for benefits that could be lost if the project is not quickly implemented (integrated, long-term planning is necessary to leverage funds and achieve watershed and habitat goals in a timely manner); and (5) includes matching funds (described under Project Financing).

CONSISTENCY WITH CONSERVANCY'S STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 9 Objective A** of the Conservancy's Strategic Plan, the proposed project would help the Conservancy maintain an updated list of identified high-priority areas for the Bay Program.

Consistent with **Goal 10, Objective B**, the proposed project would further develop a plan for all watersheds draining to the San Francisco Bay.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the “Consistency with Conservancy's Enabling Legislation” section above.
2. **Consistency with purposes of the funding source:** See the “Project Financing” section above.

3. **Support of the public:** This project is supported by ABAG, representing cities and counties of the Bay Area and nearly all of the region's population.
4. **Location:** The plan addresses the nine-county San Francisco Bay Area, all within the jurisdiction of the San Francisco Bay Area Conservancy Program.
5. **Need:** The financial support and participation of the Conservancy are critical for further development of the Watershed Plan and its integration into the IRWMP because no other funding sources for this effort have been identified.
6. **Greater-than-local interest:** The IRWMP will facilitate coordination, collaboration and communication among various water resource related entities throughout the San Francisco Bay Area.

Additional Criteria

7. **Urgency:** Grants awarded to eligible projects through the Proposition 50 IRWM grant program are required to be consistent with an adopted IRWMP. The Bay Area does not currently have an IRWMP. Consequently, completion of a Bay Area IRWMP would facilitate funding eligibility for water-related projects in the Bay Area to be implemented by the Conservancy or its partners.
8. **Resolution of more than one issue:** The IRWMP would identify multi-objective projects for implementation (e.g., habitat restoration, water quality improvement, flood control, and enhanced recreational opportunities).
9. **Leverage:** See the "Project Financing" section above.
10. **Conflict resolution:** The IRWMP would facilitate coordination, collaboration and communication among various water resource related entities throughout the San Francisco Bay Area, and thereby enhance resolution of water-related conflicts.
11. **Innovation:** Development of a Bay Area IRWMP would initiate a new paradigm for coordinating efforts to protect and enhance water resources and facilitate identification and implementation of critical multi-objective, multi-agency projects.
12. **Readiness:** The Conservancy is ready to proceed immediately with development of the WMHPRP. Development of the other components of the IRWMP is already in progress.
15. **Cooperation:** The Conservancy and its partners will work closely with various Bay Area entities (e.g., agencies, nongovernmental organizations) in developing the IRWMP.

CONSISTENCY WITH SAN FRANCISCO BAY PLAN:

The project is consistent with the following policies of BCDC's San Francisco Bay Plan:

Part III

Water Quality

1. Bay water pollution should be prevented to the greatest extent feasible. The Bay's tidal marshes, tidal flats, and water surface area and volume should be conserved and, whenever possible, restored and increased to protect and improve water

quality. Fresh water inflow into the Bay should be maintained at a level adequate to protect Bay resources and beneficial uses.

2. Water quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the San Francisco Bay Regional Water Quality Control Board's *Water Quality Control Plan, San Francisco Bay Basin* and should be protected from all harmful or potentially harmful pollutants.

COMPLIANCE WITH CEQA:

As a planning activity for possible future actions that have not been approved, adopted, or funded, this project is categorically exempt from California Environmental Quality Act (CEQA) review under 14 California Code of Regulations Section 15262. Similarly, the project is statutorily exempt from CEQA review under Section 15306, which exempts basic data collection, research, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource.

Upon Conservancy approval of the proposed project, staff will file a Notice of Exemption.



EXECUTIVE SUMMARY

San Francisco Bay Area water, wastewater, flood protection and stormwater management agencies; cities and counties represented by the Association of Bay Area Governments (ABAG); and watershed management interests represented by the California Coastal Conservancy (CCC) and non-governmental environmental organizations signed a Letter of Mutual Understandings (LOMU) to develop an Integrated Regional Water Management Plan (IRWMP) for the San Francisco Bay Area.

The Bay Area IRWMP represents a significant accomplishment in regional water resources planning. It outlines the region's water resources management needs and objectives, and presents innovative strategies and a detailed implementation plan to achieve these objectives, contributing to sustainable water resources management in the Bay Area.

The overall objectives of the Bay Area IRWMP are to:

- 1) Foster coordination, collaboration and communication among Bay Area agencies responsible for water and habitat-related issues.
- 2) Achieve greater efficiencies and build public support for vital projects.
- 3) Improve regional competitiveness for project funding.

The IRWMP, and this Executive Summary, follow the Integrated Regional Management Grant Program Guidelines (Guidelines) jointly issued by the State Water Resources Control Board and Department of Water Resources on November 18, 2004. The sections included in the IRWMP, and summarized in this Executive Summary, are as follows:

Section A: Regional Water Management Group. This section describes the Bay Area regional water management group, including member agencies and organizations and their management responsibilities related to water.

Section B: Region Description. This section explains why the Bay Area is an appropriate area for integrated regional water management, and describes: internal boundaries within the region, major water-related infrastructure, and major land-use divisions; the quality and quantity of water resources within the region, including surface water, groundwater, reclaimed water, imported water, and desalted water; water supplies and demand for a 20-year planning horizon; important ecological processes and environmental resources; the social and cultural makeup of the regional community; important cultural or social values; and economic conditions and important economic trends.

Section C: Objectives. This section identifies the water resources management challenges facing the region, the common interests that are shared by all Bay Area water resources management entities, and the specific goals and objectives of the IRWMP.

Section D: Water Management Strategies. This section documents the range of water management strategies considered to meet the region's objectives.

Section E: Integration. This section presents the mix of water management strategies selected for inclusion in the Plan and discusses the added value and benefits associated with integrating these strategies.

Section F: Regional Priorities. This section presents short-term and long-term priorities for implementation of the Plan and discusses the process for modifying priorities in response to regional changes.



Section G: Implementation. This section discusses the institutional structure responsible for plan implementation and presents specific actions, projects and studies, ongoing or planned, by which the Plan will be implemented, and identifies the agencies responsible for project implementation.

Section H: Impacts and Benefits. This section presents a screening-level discussion of the impacts and benefits from Plan implementation.

Section I: Technical Analysis and Plan Performance. This section presents the data, technical methods and analysis used in development of the Plan, and discusses performance measures and monitoring systems that will be used to gather performance data and the adaptive management process that will be used to make adjustments based on the performance.

Section J: Data Management. This section presents mechanisms by which data will be managed and disseminated to stakeholders and the public and discusses how data collection will support statewide data needs.

Section K: Financing. This section identifies beneficiaries of Plan implementation, and identifies the capital and operation and maintenance costs and potential funding sources for each of the projects included in the Plan.

Section L: Statewide Priorities. This section identifies the statewide priorities that will be met or contributed to by implementation of the Plan and specific projects.

Section M: Relation to Local Planning. This section discusses how the IRWM Plan relates to planning documents and programs established by local agencies, and demonstrates coordination with local land-use planning decision-makers.

Section N: Stakeholder Involvement. This section identifies stakeholders included in developing the Plan, the manner in which stakeholders were identified, how they participate in planning and implementation efforts, and how they can influence water management decisions.

Section O: Coordination with State and Federal Agencies. This section discusses State and federal agencies involved with strategies, actions, and projects, and identifies areas where State or other agencies may be able to assist in communication, cooperation, or implementation of Plan components or processes.

Each section of the IRWMP begins with a blue callout box highlighting the Guidelines for that section. These callout boxes are intended to focus the reader's attention on the main points of each section. In this Executive Summary, blue boxes are provided to highlight the key messages presented in each section.

Together, these sections establish an effective framework for ongoing water resources management in the Bay Area. This Bay Area IRWMP is dynamic, and continues to change and grow with time. The IRWMP is not intended to serve as a static plan, but as a process for ongoing regional planning. Regional goals, objectives, and priorities will evolve over time, and this Bay Area IRWMP, similarly, will adapt to meet the changing needs of the region. The Bay Area IRWMP, and its continued evolution, are illustrative of the San Francisco Bay Area's commitment to ongoing integrated regional water resources planning.



A Regional Water Management Group

The entities responsible for developing this Plan represent ALL areas of water resources management and all NINE counties of the San Francisco Bay Area.

Developing an Integrated Regional Water Management Plan that covers all aspects of water resources management across a geographic region as large as the Bay Area poses many institutional challenges. By signing a Letter of Mutual Understandings to develop the Bay Area IRWMP, LOMU signatories, in coordination with other interested stakeholders (see Figure ES-1), have overcome these challenges and achieved their stated goals:

- Facilitate regional cooperation in areas of water supply reliability, water recycling, desalination, water conservation, water quality improvements, stormwater capture and management, flood management, recreation and access, wetlands enhancement and creation, and environmental habitat protection and improvement; and
- Foster coordination, collaboration and communication amongst participating agencies to achieve greater efficiencies, enhance public services and build public support for vital plans and projects.
- To improve regional competitiveness for State and federal grant funding.

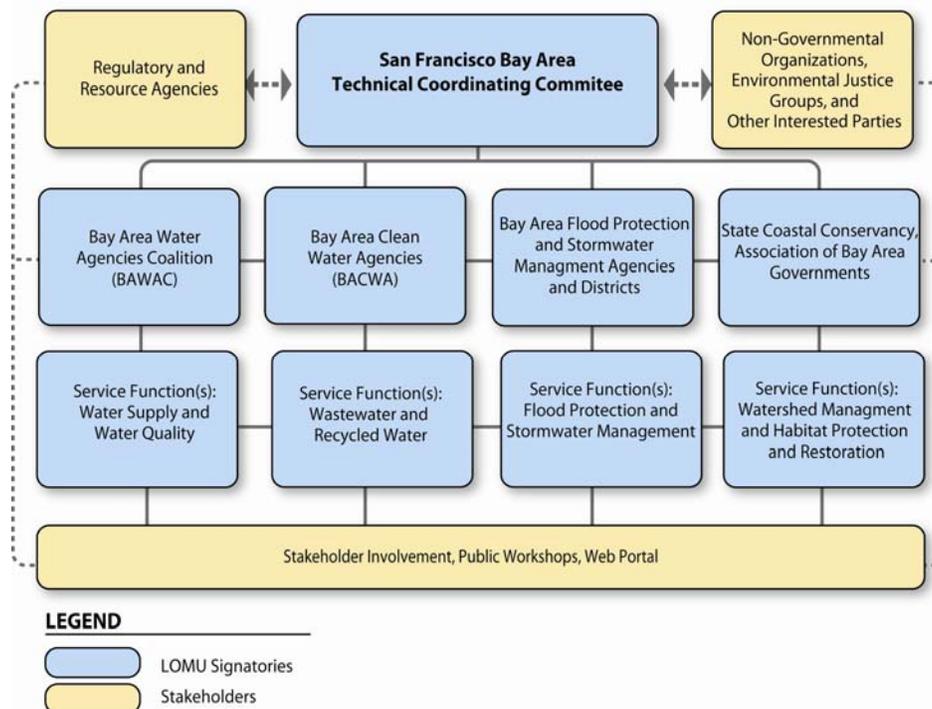


Figure ES-1: Bay Area IRWMP Organizational Chart



B Region Description

About the Region:

The San Francisco Bay Area IRWMP Region is united by its distinctive identity, hydrologic and ecologic connections, national and international renown, and long history of regional planning.

For purposes of this IRWMP, the Bay Area region is defined by the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (Region 2). Although the geographic scope of this region presents inherent complexities, several features make it an appropriate area for integrated regional water management:

- **Distinctive Identity.** Although parts of the Bay Area differ greatly from one another, they are tied together by their connections to the Bay, their interdependent economies, their shared natural resources, and their common cultural experiences. As a result, the Bay Area is an appropriate area for integrated regional water management.
- **Hydrologic and Ecologic Connection.** The Region 2 boundary is a physically based watershed boundary that includes lands that drain to common receiving waters (the Bay and the Ocean). Additionally, the Bay estuary and its supporting local watersheds host a distinct Bay Area natural environment and ecology that includes many important habitats for species of regional, as well as international, significance.
- **National and International Renown.** In addition to being the 5th largest metropolitan area in the United States, The Bay Area is recognized as a global center for innovation and technology.
- **History of Regional Planning.** Water management agencies throughout the Bay Area have a long history of regional cooperation and planning, including but

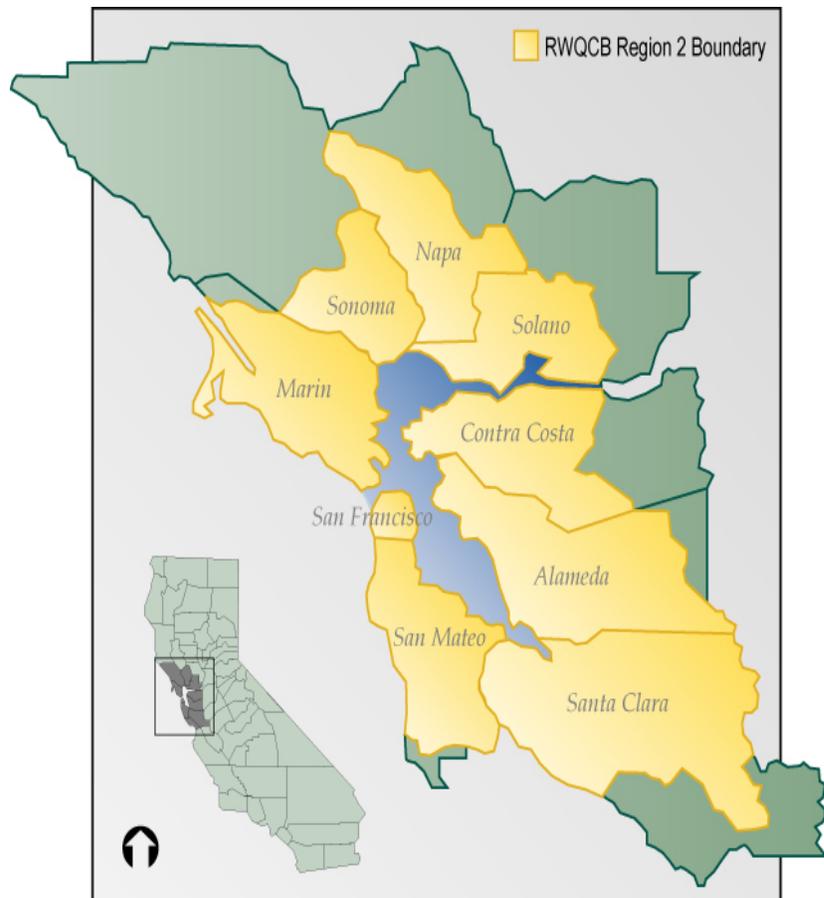


Figure ES-2: Bay Area Region

Bay Area Fast Facts:

- Includes **9** counties and **100** cities
- **5th** largest metropolitan area in the United States
- Home to **7.1 million** people – of which **44%** are minorities
- **24th** largest economy in the world with **3.5 million** jobs



not limited to the Bay Area Water Agencies Coalition, Bay Area Clean Water Agencies, and Bay Area Stormwater Management Association.

Bay Area Water Supplies:

High quality, reliable water supplies are a critical underpinning to the Bay Area's prosperity and continued leadership in economic development and environmental protection.

Bay Area water agencies manage a diverse portfolio of water supplies to meet the needs of the region:

- **Local Supplies:** Local groundwater and surface water supplies
- **Sierra Nevada Supplies:** Tuolumne and Mokelumne River supplies
- **Delta Supplies:** State Water Project (SWP), Central Valley Project (CVP), other delta supplies
- **Other:** Desalination, recycled water, water transfers, and other supplies

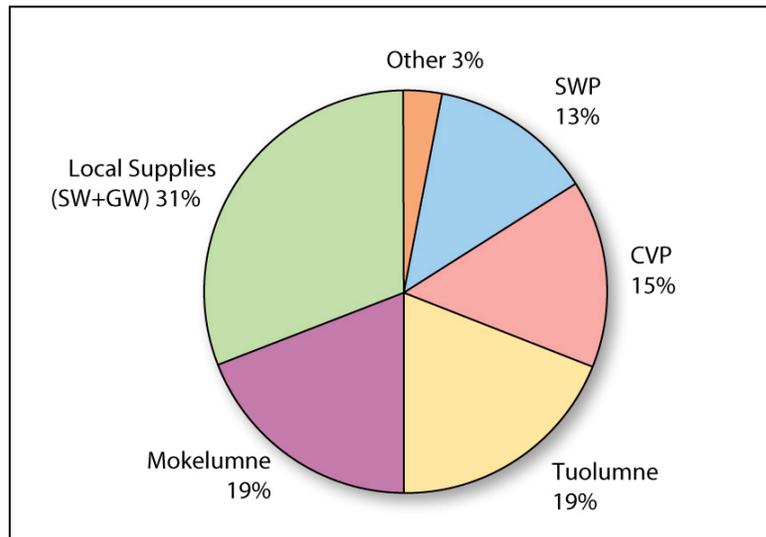


Figure ES-3: Bay Area Water Use by Supply Source

The quality of water supplies used within the Bay Area region varies greatly by source. Mokelumne River and Tuolumne River surface water supplies are of very good quality, with low concentrations of total dissolved solids (TDS), total organic carbon (TOC), chloride, bromide, microbial contaminants, and other water quality parameters. These supplies generally do not exhibit the dramatic seasonal variability observed in Delta supplies. Delta supplies, conversely, exhibit elevated concentrations several water quality parameters including TDS, chloride, bromide, and TOC. Further, Delta supplies exhibit significant variability by location, season, and hydrologic year type. This variability can at times be so severe that some treatment plants must shut down, switch to other supplies sources, or blend with other supplies in order to address the poor water quality. TDS and hardness of groundwater supplies, similarly, vary significantly by basin. Bay Area water agencies are continually striving to address drinking water contaminants of concern (e.g., TDS, TOC, disinfection byproducts, emerging pollutants) through source water protection and advanced treatment strategies.

Supply & Demand:

The Bay Area's existing annual supplies are inadequate to meet projected demands during prolonged drought periods. As the population continues to grow - the gap between available supplies and customer demand will widen in the coming decades unless agencies have the resources to fully implement necessary actions.

Historically, conservation measures have proven to be effective at controlling Bay Area water use. As shown in Figure ES-4, overall water use has only increased 1% since 1986 – despite a 23% increase in population.



However, Bay Area water agencies face a variety of challenges that threaten their ability to provide adequate supplies to meet the needs of their customers in the future:

- Threats to Baseline Supplies.** The reliability of existing Bay Area supplies is threatened by several different factors. *Delta supplies* are threatened by degrading water quality, risk of catastrophic failure, regulatory constraints on exports and local facilities operations. *Surface water supplies* are threatened by reductions in local yield and/or carryover storage due to seismic concerns and sedimentation and

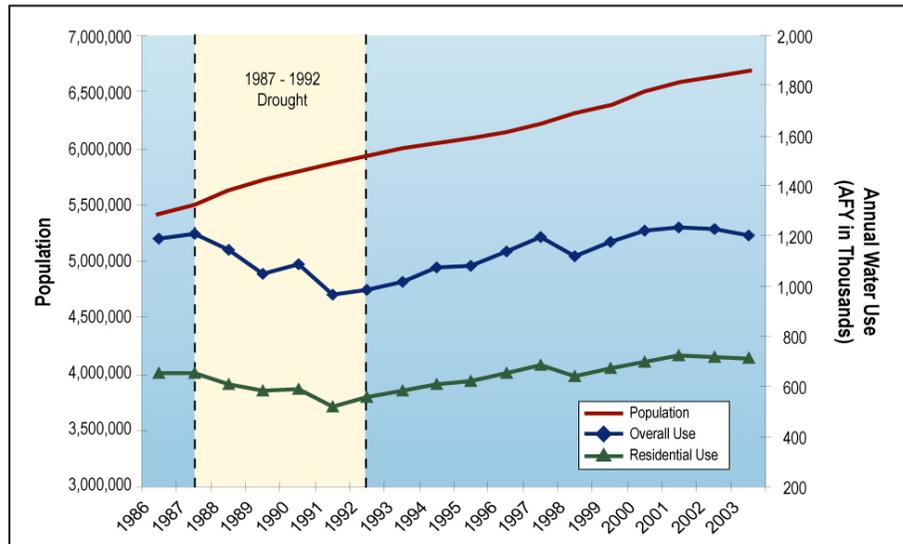


Figure ES-4: Historical Population and Water Use Trends

supply of water to meet regulatory requirements. *Groundwater supplies* are threatened by potential pollution and overdraft.

- Increasing Demands.** The Bay Area continues to be a popular place to live and work. ABAG predicts the population will increase to 8.2 million by 2020.
- Hydrologic Variations.** Many supplies are constrained in drought years. The severity and timing of dry year shortfalls differ greatly among the Bay Area water agencies due to the wide variation in supply sources, the types of use (residential, industrial, etc), and climate variations within the region.
- Infrastructure Vulnerability.** Water infrastructure in the Bay Area is vulnerable to effects from seismic activity, levee failures, sedimentation and system security breaches.

Projected Bay Area supply reductions for future droughts:

- 60% reduction in SWP supplies
- 25% reduction in CVP supplies
- 30% reduction in Tuolumne supplies
- 40% reduction in Mokelumne supplies
- 50% +/- reduction in local supplies

Flooding:
Many creeks in the Bay Area can flood within 30 to 60 minutes of a powerful storm burst – causing million of dollars in damages and catching businesses and residents off guard.

The Bay Area includes flat and highly developed valleys and bayside alluvial plains surrounded by rainfall-collecting steep terrain. This geography is conducive to sudden flooding (see Figure ES-5). Furthermore, the semi-arid climate, where the total annual rainfall is typically concentrated in a few short storms during the winter months, makes flood prediction uncertain.



Because of the topography of alluvial plains, floodwaters escaping some stream channels may flow away from the flooding stream, crossing open areas or flowing through city streets until reaching an adjacent watercourse. This type of flooding compounds and exacerbates local flooding that occurs when storm drains and small channels become blocked or surcharged during storms.

The Bay Area's 14 largest local tributary watersheds encompass 2,477 square miles. Approximately 73 square miles (or 3% of the local watershed lands) are subject to flooding.

Flood protection agencies are faced with several challenges in their efforts to minimize these flood risks:

- Continued development in upland areas and near stream corridors
- Lack of clear jurisdictional responsibility for stream maintenance in many areas
- A costly and time-consuming permitting process for flood protection projects
- Control of invasive species
- Management of floodplains, riparian areas, and areas prone to tidal flooding in a region with very high land values and development pressures
- Need for more effective coordination among jurisdictions that share watershed resources

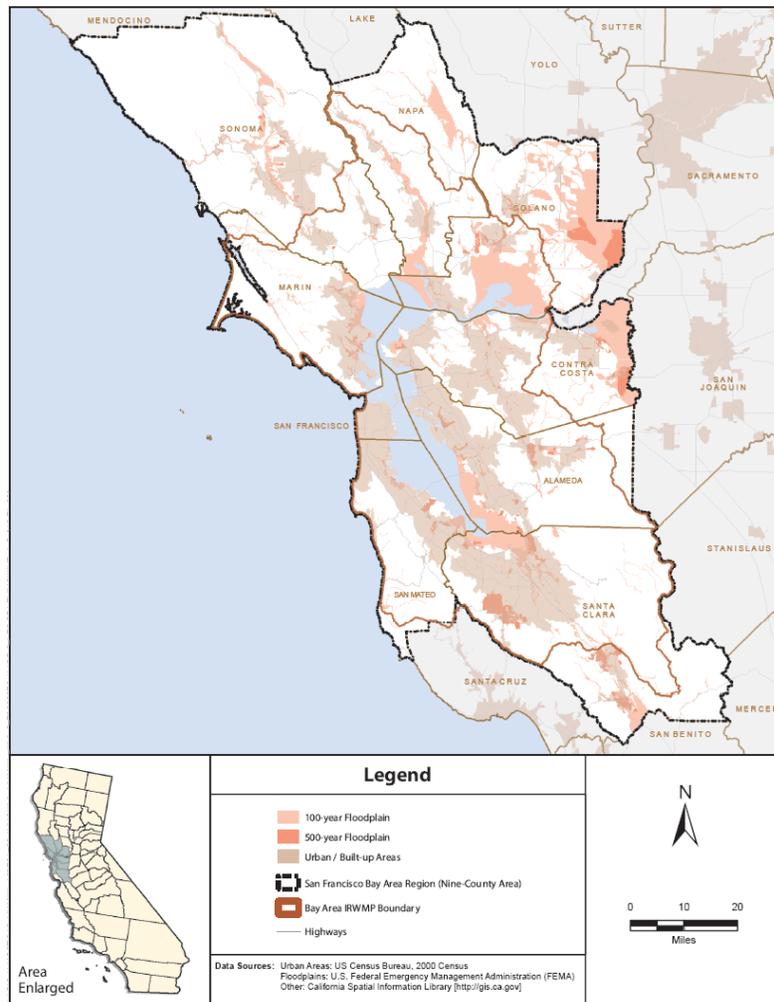


Figure ES-5: Bay Area Locations within the 1% Flood Plain



Environmental Resources:

Bay Area watersheds provide water supply, flood attenuation, groundwater recharge, water quality improvement, wildlife and aquatic habitats, erosion control, and recreation opportunities.

Bay Area watershed habitats include rivers and streams, Montane and Valley foothill riparian areas, lakes and ponds, freshwater and tidal wetlands, and associated uplands habitats. Local watersheds and their associated habitats provide a myriad of water resource and ecological benefits to both humans and wildlife. Headwater tributaries and stream corridors provide and convey freshwater sources for humans and wildlife. Healthy floodplains detain stormflow volumes and reduce flow velocities, as well as provide diverse seasonal wetlands habitats. Wetlands vegetation protects and enhances water quality by removing toxins from influent water, and increases residence time which allows water to seep into the soil and enter underlying aquifers.

Bay Area watersheds are home to 105 wildlife species that have been designated by state and federal agencies as threatened or endangered. Bay Area habitats support special status species including, but not limited to: California red-legged frog, Giant garter snake, Chinook salmon, Coho salmon, Steelhead trout, Bald eagle, Sainson's hawk, San Joaquin kit fox, California tiger salamander, Western Pond Turtle, California freshwater shrimp, California clapper rail, Western snowy plover, California least tern, Salt-marsh common yellowthroat, Salt Marsh harvest mouse, Alameda Whipsnake and San Francisco Garter Snake..



Two-thirds of the State's salmon population pass through the Bay and Delta each year.

Bay Area agencies and organizations pursue a variety of different water resources management mandates: balancing the water needs of sensitive habitats with customer water demands, restoring watershed habitats and natural hydrologic functions, taking advantage of streams as urban and suburban amenities, and ensuring that natural resources and habitats are shielded from potential adverse impacts associated with land and water management. Specific challenges include:

- **Environmental Water Demands.** Environmental water demands encompass the demands on quantity, timing, duration and frequency of flows required by plants, wildlife and fisheries. Diversions of water from streams for other demands can limit survival rates for aquatic and riparian species.
- **Barriers to Recovery of Special Status Fish.** Several special status fish, including steelhead, coho salmon and Chinook salmon, were historically abundant in Bay Area streams. However, land use changes, channel alterations, and the construction of dams, dikes and weirs have severely limited modern fish populations.
- **Control of Invasive Species.** Bay Area riparian habitats are heavily impacted by invasion and spread of some non-native species of plants and animals. Invasive species can reduce soil retention, consume stream flows, reduce surface storage capacity, restrict flow capacity in creeks, and eliminate biodiversity.
- **Development in Flood Plains and Riparian Areas.** High land values and ongoing pressure for urban expansion tends to encourage development in flood plains, riparian areas, and tidal areas. This development generally results in loss of biological resources due to habitat fragmentation.



High land costs are a disincentive to retaining riparian setbacks where natural geomorphic and ecologic processes such as flooding and minor erosion could occur without affecting structures. High land costs also limit the potential to purchase title or easements that would preserve these areas for flooding and other natural stream functions. Additionally, downstream impacts of development in middle and upper watersheds include increased stream discharge, scour and deposition, head-cutting, and downstream flooding, with resulting loss of habitat, threats to public health and safety, and increased costs of flood management.

Water Quality:

Protecting the health of the sensitive watershed is a significant challenge facing the Bay Area – over 160 water bodies within the region are considered to be impaired.

The Regional Water Quality Control Board (RWQCB) has found that the San Francisco Bay and many of its tributaries are impaired, and is currently developing 20 TMDLs (Total Maximum Daily Loads) to address the 160+ impaired water bodies included on the Clean Water Act 303(d) list for the San Francisco Bay region (Table ES-1).

Table ES-1: Bay Area TMDLs¹

Waterbody	Pollutant(s)
Guadalupe River	Mercury
Lagunitas Creek	Sediment, Pathogens ²
Napa River	Sediment, Nutrients, Pathogens ²
Pescadero/Butano Creeks	Sediment
San Francisco Bay	Copper, Mercury, Nickel, PCBs, Exotic Species
San Francisquito Creek	Sediment
Sonoma Creek	Sediment, Nutrients, Pathogens ²
Tomaes Bay	Pathogens
Urban Creeks	Diazinon
Walker Creek	Mercury, Sediment ²

TMDLs account for all pollutant sources, including discharges from wastewater treatment facilities; runoff from homes, agriculture, and streets or highways; “toxic hot spots”; and deposits from the air. The specific urban runoff BMPs and level of implementation that will be required in TMDLs will be determined through TMDL development. The scale of loading reductions anticipated suggests TMDLs will require significant increases in resources applied to urban runoff control and significant changes in scope and approach to urban runoff control programs.

¹ Total Maximum Daily Loads (TMDLs) Existing or Currently Being Developed, March 2003. <http://www.waterboards.ca.gov/funding/docs/tmdlolist.doc>. Accessed: August 25, 2006.

² San Francisco Bay RWQCB. Water Management Initiative Integrated Plan Chapter. October 2004. Page 1-6.

***Demographics***

Water resources management projects in disadvantaged and environmental justice communities can improve water quality, relieve flooding, and provide open space for local residents.

With a population of 7.09 million, the San Francisco Bay metropolitan region is the second largest in California and the fifth largest in the nation. The San Francisco Bay region's population is made up of approximately 2.58 million households. The annual median household income (MHI) across census tracts in the region averages \$83,400.

An understanding of the location of disadvantaged and environmental justice communities can help the region to identify water resources management projects that improve water quality, open space and recreation opportunities, and flooding conditions within these neighborhoods. "Disadvantaged communities" are defined by the IRWMP Grant Program Guidelines as communities with an annual MHI less than 80% of the State MHI. Environmental justice communities are defined as low-income communities and communities of color that have been disproportionately impacted by programs, policies, or activities that have resulted in adverse health or environmental impacts.

Figure ES-6 shows census tracts defined as disadvantaged communities (less than 80% MHI) and census tracts with concentrations of 30% or greater minority populations (Asian, black or African American, or Hispanic origin). To begin to understand the environmental burden these communities may endure, the locations of wastewater treatment facilities and flood-prone areas are also presented in Figure ES-6. Water resources management projects in these neighborhoods should consider potential adverse impacts to these communities.

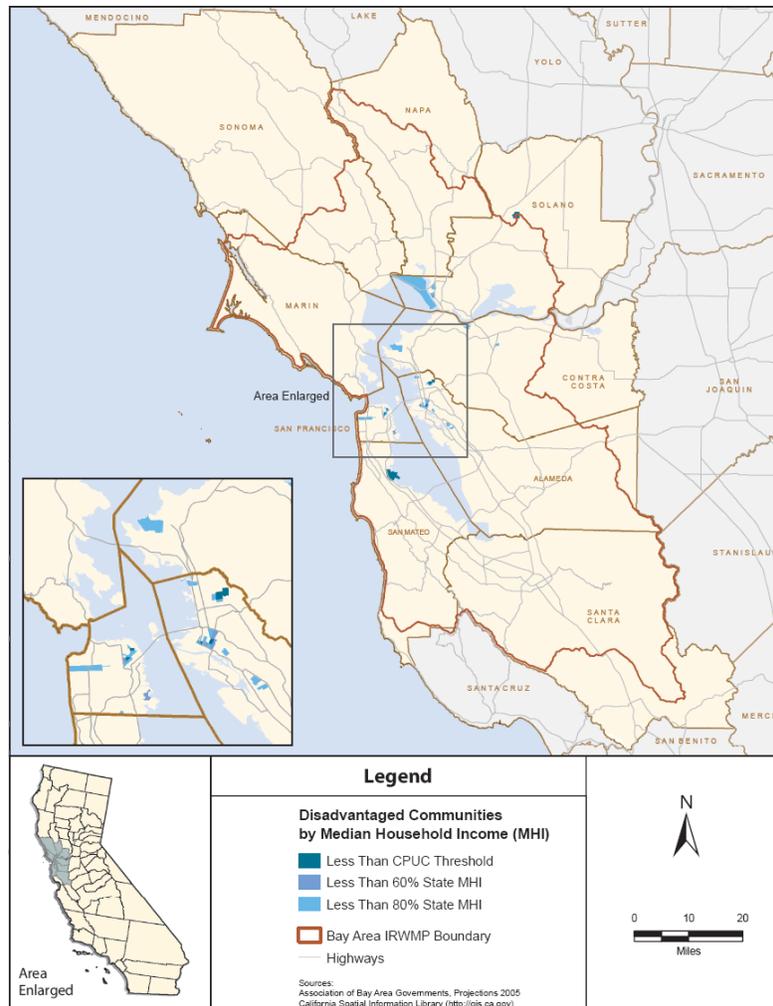


Figure ES-6: Disadvantaged Communities in the Bay Area

Collaboration and Coordination:

Collaboration with resource agencies, additional funding mechanisms and improved interagency coordination are needed to effectively address the water resources management challenges facing the Bay Area.

In addition to the specific water resources challenges described herein, Bay Area water resources management entities face other challenges relating to regulatory compliance, financing/funding, and interagency coordination:

- Regulations are becoming increasingly stringent in all areas of water management
- The permitting process is being delayed by severe funding and staffing limitations at resource protection agencies
- Competing costs and general lack of local funding impede agencies abilities to implement projects
- Water resources management issues do not usually follow jurisdictional boundaries



C Objectives

The Bay Area IRWMP objectives are born out of the common water resource management interests and challenges faced by the region. Collectively, these objectives work towards achieving the Plan’s Vision:

*Working together to enhance sustainable water resources management
to support a high quality of life in the Bay Area*

Given the large geographic scope of the Bay Area region, the process for developing this IRWMP began with the development of baseline Functional Area Documents (FADs) that focused on the following water resources management areas:

- Water Supply and Water Quality (WS-WQ)
- Wastewater and Recycled Water (WW-RW)
- Flood Protection and Stormwater Management (FP-SM)
- Watershed Management, Habitat Protection and Restoration (WM-HP&R)

The process of identifying and developing regional goals and objectives that transcend these functional areas involved (1) compiling the issues, conflicts and challenges from each of the FADs and defining the common water resource management interests; (2) compiling the various goals and objectives identified in each of the FADs to address water management challenges and identifying overarching goals that transcend all function areas of water resource management and (3) revising overarching goals and objectives based on stakeholder input and feedback and developing a vision to guide implementation of the IRWMP.

Common Bay Area Water Resources Management Interests:

- Protecting the Bay – Delta Watershed
- Managing Impacts from an Increasing Population.
- Addressing Aging Infrastructure Needs
- Maintaining a Vital Economy
- Protecting Health, Safety and Property
- Increasing Efficiencies and Value Added through Coordination and Collaboration

The overarching goals and objectives that address Bay Area water management challenges and reflect common interests are presented in Table ES-2.

Table ES-2: Bay Area Regional Goals and Objectives

Regional Goal	Objectives
A. Contribute to the promotion of economic, social, and environmental sustainability	Contribute to:
	▪ Avoiding, minimizing, and mitigating net impacts to environment
	▪ Maintaining and promoting economic and environmental sustainability through sound water resources management practices
	▪ Maximizing external support and partnerships
	▪ Maximizing ability to get outside funding
	▪ Maximizing economies of scale and governmental efficiencies
	▪ Providing trails and recreation opportunities
	▪ Protecting cultural resources
	▪ Increasing community outreach and education for watershed health
	▪ Maximizing community involvement and stewardship
▪ Reducing energy use and/or use renewable resources where appropriate	



Regional Goal	Objectives
	<ul style="list-style-type: none"> ▪ Minimizing solid waste generation/maximize reuse ▪ Engaging public agencies, businesses, and the public in stormwater pollution prevention and watershed management, including decision -making ▪ Achieving community awareness of local flood risks, including potential risks in areas protected by existing projects ▪ Considering and addressing disproportionate community impacts ▪ Balancing needs for all beneficial uses of water ▪ Securing funds to implement solutions
<p>B. Contribute to improved supply reliability</p>	<p>Contribute to:</p> <ul style="list-style-type: none"> ▪ Meeting future and dry year demands ▪ Maximizing water use efficiency ▪ Minimizing vulnerability of infrastructure to catastrophes and security breaches ▪ Maximizing control within the Bay Area region ▪ Preserving highest quality supplies for highest use ▪ Protecting against overdraft ▪ Providing for groundwater recharge while maintaining groundwater resources ▪ Increasing opportunities for recycled water use consistent with health and safety ▪ Maintaining a diverse portfolio of water supplies to maximize flexibility ▪ Securing funds to implement solutions
<p>C. Contribute to the protection and improvement of hydrologic function</p>	<p>Contribute to:</p> <ul style="list-style-type: none"> ▪ Protecting, restoring, and rehabilitating natural watershed processes ▪ Controlling excessive erosion and managing sedimentation ▪ Maintaining or improving in-stream flow conditions ▪ Improving floodplain connectivity ▪ Preserving land perviousness and infiltration capacity ▪ Securing funds to implement solutions
<p>D. Contribute to the protection and improvement of the quality of water resources</p>	<p>Contribute to:</p> <ul style="list-style-type: none"> ▪ Minimizing point and non-point source pollution ▪ Reducing salinity-related problems ▪ Reducing mass loading of pollutants to surface waters ▪ Minimizing taste and odor problems ▪ Preserving natural stream buffers and floodplains to improve filtration of point and non-point source pollutants ▪ Maintaining health of whole watershed, upland vegetation and land cover to reduce runoff quantity and improve runoff quality ▪ Protecting surface and groundwater resources from pollution and degradation ▪ Anticipating emerging contaminants ▪ Eliminating non-stormwater pollutant discharges to storm drains ▪ Reducing pollutants in runoff to the maximum extent practicable ▪ Periodically evaluating beneficial uses



Regional Goal	Objectives
	<ul style="list-style-type: none"> ▪ Continuously improving stormwater pollution prevention methods ▪ Securing funds to implement solutions
<p>E. Contribute to the protection of public health, safety, and property</p>	<p>Contribute to:</p> <ul style="list-style-type: none"> ▪ Providing clean, safe, reliable drinking water ▪ Minimizing variability for treatment ▪ Advancing technology through feasibility studies/demonstrations ▪ Meeting promulgated and expected drinking water quality standards ▪ Managing floodplains to reduce flood damages to homes, businesses, schools, and transportation ▪ Minimizing health impacts associated with polluted waterways ▪ Achieving effective floodplain management by encouraging wise use and management of flood-prone areas ▪ Maintaining performance of flood protection and stormwater facilities ▪ Partnering with municipalities to prepare mitigation action plans that reduce flood risks to the community ▪ Coordinating resources and mutual aid between agencies to enhance agency effectiveness ▪ Securing funds to implement solutions
<p>F. Contribute to the creation, protection, enhancement, and maintenance of environmental resources and habitats</p>	<p>Contribute to:</p> <ul style="list-style-type: none"> ▪ Providing net benefits to environment ▪ Conserving and restoring habitat for species protection ▪ Acquiring, protecting and/or restoring wetlands, streams, and riparian areas ▪ Enhancing wildlife populations and biodiversity (species richness) ▪ Providing lifecycle support (shelter, reproduction, feeding) ▪ Protecting and recovering fisheries (natural habitat and harvesting) ▪ Protecting wildlife movement/wildlife corridors ▪ Managing pests and invasive species ▪ Recovering at-risk native and special status species ▪ Improving structural complexity (riparian and channel) ▪ Designing and constructing natural flood protection and stormwater facilities ▪ Securing funds to implement solutions

D Water Management Strategies

Bay Area water resources management entities employ a wide variety of strategies – above and beyond those presented in Proposition 50 Guidelines - to meet the goals and objectives of this Plan.

As shown in Table ES-3, several water resources management strategies contribute to the goals of the Bay Area IRWMP.



Table ES-3: Regional Goals Addressed by Water Management Strategies

Water Management Strategies Considered in the Bay Area IRWMP		IRWMP Regional Goals					
		A. Contribute to Economic, Social, and Environmental Sustainability	B. Contribute to Protection and Improvement of Hydrologic Function	C. Contribute to Protection and Improvement of the Quality of Water Resources	D. Contribute to Protection of Public Health, Safety, and Property	E. Contribute to Protection, Enhancement, and Maintenance of Environmental Resources and Habitats	F. Contribute to Improved Water Supply Reliability
Required by Proposition 50 Guidelines	Ecosystem Restoration	✓	✓	✓		✓	
	Env. and Habitat Protection and Improvement	✓	✓	✓		✓	✓
	Water Supply Reliability	✓			✓		✓
	Flood Management	✓	✓		✓	✓	
	Groundwater Management	✓	✓	✓			✓
	Recreation and Public Access	✓					
	Storm Water Capture and Management	✓		✓	✓	✓	✓
	Water Conservation	✓					✓
	Water Quality Protection and Improvement	✓		✓	✓	✓	
	Water Recycling	✓					✓
	Wetlands Enhancement and Creation	✓	✓	✓		✓	✓
Other Proposition 50 Strategies	Conjunctive Use	✓		✓			✓
	Desalination	✓		✓			✓
	Imported Water	✓					✓
	Land Use Planning	✓	✓	✓		✓	✓
	NPS Pollution Control	✓		✓		✓	
	Surface Storage	✓					✓
	Watershed Planning	✓	✓	✓		✓	✓
	Water and Wastewater Treatment	✓		✓	✓		✓
Water Transfers	✓					✓	
Additional Strategies	Interties	✓			✓		✓
	Infrastructure Reliability	✓			✓		✓
	Regional Cooperation	✓	✓	✓	✓	✓	✓
	Education and Outreach	✓	✓	✓	✓	✓	
	Monitoring and Modeling	✓	✓	✓	✓	✓	✓
	Groundwater Banking	✓		✓			✓



E Integration

Bay Area water management entities seek to integrate multiple strategies to maximize benefits provided and realize organizational and financial efficiencies.

While implementation of a single water management strategy can assist in achieving the region's water resources management goals, integrating multiple strategies may increase coordination and collaboration within a single agency and among different agencies, yielding benefits and efficiencies greater than those achieved through implementation of a single strategy alone. Specific examples of the value added by integrating water management strategies include:

- **Organizational Benefits.** Combining water management strategies can provide significant benefits, both *within* an individual organization and *among* multiple organizations collaborating on a given project or program. Increased support can be generated as proponents of different projects and aspects of water management are galvanized to accomplish a common goal. Further, bringing together multiple organizations to implement a common project encourages a broad-based support for project implementation that is difficult to achieve at a local level. Collaboration between agencies also eliminates redundancy and allows projects to be completed more quickly and effectively.
- **Geographic Benefits.** Multiple water management benefits can be achieved by grouping projects and programs with similar geographic and spatial considerations. Further, coordinated implementation of projects upstream and downstream within a watershed can provide economies of scale in project planning, by reducing redundancies. This can result in reduced project costs, while building cumulative benefits into the projects.
- **Synergistic Benefits.** Combining water management strategies can also result in synergistic benefits (i.e., benefits provided are greater than the sum of the parts). By combining multiple water management strategies within a single project, greater benefits can be achieved, often at less expense, than by implementing individual water management strategies independently.
- **Financial Efficiencies.** Integration of water management strategies across geographies, within project implementation, and through partnerships between agencies can result in significant financial efficiencies. Multi-benefit, collaborative projects can be widely supported, far reaching, and implemented better, faster, and cheaper than could be accomplished by a single agency focused on a single area of water management.



Marsh restoration projects are great examples of integrating multiple strategies (e.g., water quality improvement, wetlands enhancement, habitat protection, water recycling, and regional cooperation).



F Regional Priorities

Bay Area IRWMP water resource management projects were evaluated based on how well they addressed regional goals, Proposition 50 preferences, Statewide Priorities and other assessment criteria.

Figure ES-7 presents the general locations of the priority projects identified for the Bay Area IRWMP. It is important to note that the entities that participated in the development of this Plan are themselves committed to a host of short-term and long-term priorities that follow the mandate of their organization. These priorities presented herein represent a regional focus, and are not necessarily the same as individual agency priorities. The few projects that are physically located outside of the region’s boundaries have been included within this Plan because the primary beneficiaries of these projects are located within the Bay Area.

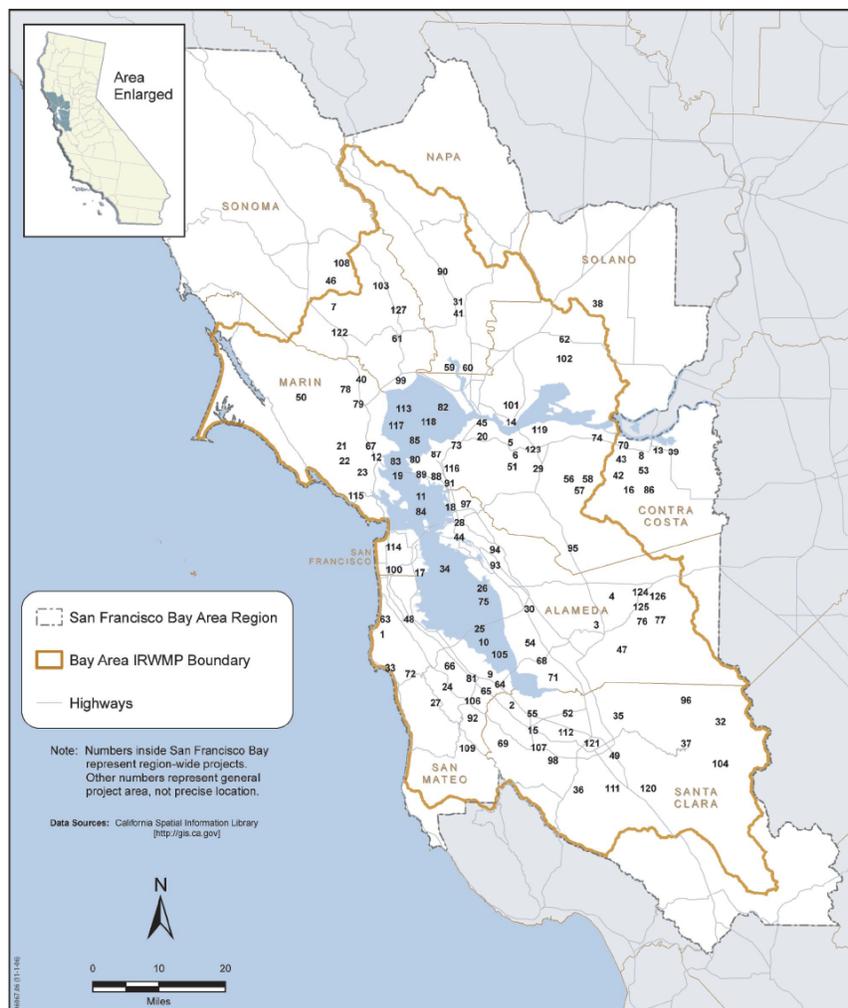


Figure ES-7: Bay Area IRWMP Priority Projects³

³ For full project titles, please refer to Table ES-5.



The process for identifying Bay Area IRWMP priorities involved the following:

1. **Screen Projects for Inclusion in the IRWMP.** This process involved screening projects included within the four FADs, as well as additional projects identified during the development of this Plan, to determine which projects should be advanced to the IRWMP. Screening criteria varied by FAD, but in general projects were advanced to the Plan if they:
 - Involve multiple agencies
 - Achieve stated water management goals and objectives
 - Provide multiple benefits
 - Are ready to proceed
2. **Assemble Projects into Cohorts.** Projects advanced to the IRWMP were divided into two cohorts: Cohort 1 projects are scheduled to have all applicable environmental documentation and permitting complete by 2010; Cohort 2 projects will have these activities completed by 2014.
3. **Establish Assessment Criteria and Evaluate Projects.** The assessment criteria and project evaluation results for the Bay Area IRWMP are summarized in Table ES-4 and Table ES-5, respectively.

Table ES-4: Project Assessment Methodology

Category	Criteria	Assessment Methodology
Bay Area IRWMP Regional Goals	Sustainability	<p>Full circle. If the project fully addresses a regional goal (i.e., the regional goal coincides with the primary objective of the project) the project received a full circle for that goal. No project could receive more than one full circle in the regional goals portion of the assessment.</p> <p>Half circle. If a project addresses multiple regional goals, the project received a full circle for the goal corresponding to its primary objective, and received half circles for the additional goals addressed as secondary objectives.</p> <p>Empty circle. If a project indirectly addresses a regional goal (e.g., it allows another project to proceed which does address a regional goal), then the project received an empty circle for that goal.</p> <p>Blank. If a project does not address a regional goal at all, the project received no symbol for that goal.</p>
	Supply Reliability	
	Hydrologic Function	
	Water Quality – Drinking Water	
	Water Quality – Receiving Water	
	Environmental Resources	
	Protect Public Health, Safety, Property	
Other Regional Assessment Criteria	Funding Match	<p>Full circle. If a ten percent (or higher) funding match is available for the project, the project received a full circle.</p> <p>Blank. If a ten percent (or higher) funding match is not available for the project, the project received a blank.</p>
	Regionalism	<p>Full circle. If the project benefits at least: (1) half the geographic area of the region, (2) two major quadrants of the region, (3) two Bay Area counties, or (4) two major Bay Area watersheds, it received a full circle for regionalism</p> <p>Half circle. If the project benefits up to: (1) half the geographic area of the region, (2) two major quadrants of the region, (3) two Bay Area counties, or (4) two major Bay Area watersheds, it received a half circle for regionalism.</p> <p>Empty circle. If the project benefits one full county or major watershed, it received an empty full circle for regionalism.</p> <p>Blank. If the project benefits less than one full county or less than one major watershed, the project received no symbol for regionalism.</p>



Category	Criteria	Assessment Methodology
	Partnerships	<p>Full circle. If project involves three or more partners, and the partners include both governmental and non-governmental organizations, the project received a full circle for partnerships.</p> <p>Half circle. If project involves three or more partners, the project received a half circle for partnerships.</p> <p>Empty circle. If project involves two partners, the project received an empty circle for partnerships.</p> <p>Blank. If only one entity is sponsoring the project, the project received no symbol for partnerships.</p>
	Meets Objectives of Multiple FADs	<p>Full circle. If the project meets objectives of multiple FADs, it received a full circle.</p> <p>Blank. If the project does not meet objectives of multiple FADs, it received a blank.</p>
Prop 50 Program Preferences	Integration	<p>Full circle. If the project utilizes multiple water management strategies across three or four Functional Areas (FAs), it received a full circle for integration.</p> <p>Half circle. If the project utilizes multiple water management strategies across two Functional Areas (FAs), it received a half circle for integration.</p> <p>Empty circle. If the project utilizes multiple water management strategies within one FA, it received an empty circle for integration.</p> <p>Blank. If the project utilizes a single water management strategy within one FA, it received a blank for integration.</p>
	Supply Reliability	<p>Full circle. If the project fully addresses the Prop 50 program preference (i.e., the program preference coincides with the primary objective of the project) received a full circle for that goal.</p>
	Water Quality	<p>Half circle. If a project addresses multiple Prop 50 program preferences, the project received a full circle for the Prop 50 program preference corresponding to its primary objective, and received half circles for the additional Prop 50 program preference addressed as secondary objectives.</p>
	Pollution/Habitat	<p>Empty circle. If a project addresses the Prop 50 program preference as an incidental benefit (e.g., the program preference is not a goal of the project, though it may incidentally be addressed by the project, or the project allows another project which addresses the program preference to proceed), then the project received an empty circle for that program preference.</p>
	DAC Benefits	<p>Blank. If a project does not address the Prop 50 program preference at all, the project received a blank for that Prop 50 program preference.</p>
Prop 50 Statewide Priorities	Reduce Conflict	<p>Full circle. If the project fully addresses the Prop 50 statewide priority (i.e., the statewide priority coincides with the primary objective of the project) it received a full circle for that goal.</p>
	TMDL	
	WMI	<p>Half circle. If a project addresses multiple Prop 50 statewide priorities, it received a full circle for the Prop 50 statewide priority corresponding to its primary objective, and it received half circles for the additional Prop 50 statewide priority addressed as secondary objectives.</p>
	NPS Pollution Control	
	Delta Water Quality	<p>Empty circle. If a project indirectly addresses a Prop 50 statewide priority (e.g., it allows another project to proceed which does address a regional goal), then the project received an empty circle for that statewide priority.</p> <p>Blank. If a project does not address any Prop 50 statewide priorities at all, the project received a blank for that Prop 50 statewide priority.</p>
	Task Forces	
	Environmental Justice	
	CALFED Goals	

Table ES-5: Project Assessment Results

	Projects	Bay Area IRWMP Regional Goals						Bay Area Regional Assessment Criteria					Prop 50 Program Preferences					Prop 50 Statewide Priorities							
		Sustain-ability	Supply Reliability	Hydrologic Function	Water Quality - Drinking Water	Water Quality - Receiving Water	Env. Resources	Public Health, Safety, Property	Funding Match	Regionalism	Partnerships	Meets Objectives of Multiple FADs	Integration	Supply Reliability	Water Quality	Pollution to Habitat	DAC Benefits	Reduce Conflict	TMDL	WMI	NPS Pollution Control	Bay/Delta Water Quality	Task Forces	Env. Justice	CALFED Goals
COHORT 1 PROJECTS																									
1	Adobe Bridge Culvert Removal Project (City of Pacifica)	○	·	○	·	·	●	●	·	·	·	●	○	·	·	·	·	·	·	·	·	○	·	●	
2	Adobe Creek Upper Reach 5 Restoration (SCVWD)	●	·	●	·	·	●	●	·	●	●	●	·	·	·	·	·	·	●	·	·	●	·	●	
3	Alameda County Partnership for Land Conservation and Stewardship (Alameda County RCD)	●	·	○	·	○	●	·	●	○	●	·	·	○	○	·	·	·	●	○	○	○	·	●	
4	Alameda Creek Fishery Enhancement Project (SFPUC)	○	●	●	·	·	●	·	●	○	●	●	●	·	·	·	●	·	·	·	·	·	·	●	
5	Alhambra Creek Restoration and Environmental Education Collaborative (ACREEC): John Swett Campus (Muir Heritage Land Trust)	●	·	○	·	○	●	·	●	·	●	●	○	·	·	·	·	·	●	○	○	·	●	●	
6	Alhambra Valley Creek Coalition Restoration Project (Urban Creeks Council)	●	·	●	·	●	●	●	·	●	●	●	·	●	●	●	·	·	●	○	○	●	●	●	
7	Annadel State Park Erosion Control: Geary Ranch Road to Trail Conversion (California State Parks)	○	·	·	·	●	●	○	·	○	●	●	○	·	○	○	·	·	●	●	●	·	·	●	
8	Antioch Recycled Water Implementation (DDSD)	●	●	·	·	●	○	○	●	○	●	●	○	●	○	○	○	●	○	○	·	○	●	●	
9	Bair Island Restoration and Management Plan (Don Edwards San Francisco Bay National Wildlife Refuge)	●	·	●	·	·	●	○	●	○	●	·	·	·	○	·	·	·	●	·	·	●	·	●	
10	Bay Area Levee Certification (SCVWD)	○	·	·	○	○	·	●	●	●	●	●	○	·	○	·	●	·	·	·	·	●	●	●	
11	Bay Area Regional Water Conservation Program (SCVWD)	●	●	·	○	○	·	·	●	●	●	·	·	●	·	·	○	○	○	○	○	○	·	○	●
12	Bay Water Desalination Plant (MMWD)	·	●	·	·	·	·	○	●	○	○	·	·	●	·	·	●	○	○	·	●	●	·	●	
13	Beaver Pond Habitat Enhancement Project at the Dow Wetland Preserve (Contra Costa RCD)	●	·	·	·	●	●	·	●	·	●	●	●	·	○	●	·	·	●	●	○	·	·	●	
14	Benicia Water Reuse Project (City of Benicia)	●	●	·	·	●	○	○	●	○	●	●	●	○	○	·	○	○	○	·	○	●	·	●	
15	Calabazas Creek, Miller Avenue to Wardell Road (SCVWD)	○	·	○	·	○	●	●	●	·	●	●	○	·	○	·	·	·	○	·	·	●	·	○	
16	Canal Encasement Phases II and III (CCWD)	○	●	○	●	●	○	●	●	○	●	●	●	●	·	○	●	·	·	●	●	●	·	●	
17	Candlestick Point State Recreation Area Yosemite Slough Restoration Project (California State Parks)	●	·	·	·	○	●	·	●	·	●	●	○	·	·	●	●	·	·	●	○	○	·	●	●
18	Codornices Creek, Kains to San Pablo (Friends of Five Creeks)	·	·	●	·	○	●	○	●	·	●	●	○	·	○	○	○	·	·	●	○	○	·	○	●
19	Community Safe Drinking Water Project (Literacy for Environmental Justice)	●	·	·	●	·	·	●	·	·	○	·	·	●	·	●	·	·	·	·	·	·	●	·	
20	ConocoPhillips High-Purity Recycled Water Project (EBMUD)	○	●	·	·	●	○	○	●	○	○	●	○	●	○	○	○	●	○	○	·	○	●	●	
21	Corte Madera Creek Watershed Infiltration and Storage Assessment	●	·	●	·	○	·	●	·	·	●	●	●	·	·	·	·	·	●	·	·	·	·	●	

Projects	Bay Area IRWMP Regional Goals						Bay Area Regional Assessment Criteria						Prop 50 Program Preferences					Prop 50 Statewide Priorities						
	Sustain-ability	Supply Reliability	Hydrologic Function	Water Quality - Drinking Water	Water Quality - Receiving Water	Env. Resources	Public Health, Safety, Property	Funding Match	Regionalism	Partnerships	Meets Objectives of Multiple FADS	Integration	Supply Reliability	Water Quality	Pollution to Habitat	DAC Benefits	Reduce Conflict	TMDL	WMI	NPS Pollution Control	Bay/Delta Water Quality	Task Forces	Env. Justice	CALFED Goals
(Friends of Corte Madera Creek Watershed)																								
22 Corte Madera Creek Watershed Models (Friends of Corte Madera Creek Watershed)	.	.	○	.	○	.	.	●	.	●	●	○	●	.	.	○	.	○	
23 Corte Madera Creek Watershed Plan (Friends of Corte Madera Creek Watershed)	●	.	○	.	.	○	.	●	.	●	●	○	.	.	.	◐	.	●	○	○	○	○	.	◐
24 CreekWise Creek Care Education Program (San Mateo STOPPP)	●	.	○	.	○	○	.	●	◐	●	●	○	.	○	○	○	.	○	○	○	○	.	○	○
25 Defining Summer Low Flow Channels (SCC)	○	.	◐	.	.	●	○	●	●	●	●	○	○	.	.	●	.	●	
26 Developing and Implementing Options for Mitigating Risks of Public Health Impacts of Eating Fish (Clean Estuary Partnership)	◐	.	.	.	◐	○	●	.	●	●	●	●	.	◐	●	●	.	◐	●	.	◐	●	○	
27 Development of Regional GIS for Watershed Planning (San Mateo C/CAG)	●	.	○	.	.	○	○	●	◐	●	●	○	●	
28 East Bayshore Recycled Water Project - Phase 1B (EBMUD)	◐	●	.	.	◐	○	○	●	○	◐	●	○	●	○	○	○	●	○	○	.	○	●	●	
29 EBMUD-CCWD Raw Water Intertie (CCWD)	○	●	.	○	○	.	◐	●	●	○	.	.	●	○	○	●	●	
30 EBMUD-SFPUC/Hayward Emergency Intertie (EBMUD)	○	●	.	○	○	.	◐	●	●	○	.	.	●	○	○	●	●	
31 Feasibility Study for Dry-Year Water Supply (City of Napa)	.	●	○	●	○	◐	.	.	●	○	
32 Fisheries and Aquatic Habitat Collaborative Effort (SCVWD)	◐	◐	○	.	○	●	.	●	○	●	●	◐	◐	○	.	●	.	●	.	.	●	.	●	
33 Groundwater Optimization Project (MWSD)	◐	●	○	●	.	○	●	○	●	○	○	
34 Groundwater Recharge Opportunities (Sonoma CWA)	◐	○	◐	◐	◐	.	●	●	●	◐	●	○	◐	○	.	.	○	○	◐	◐	◐	.	○	
35 Guadalupe River Watershed Habitat Enhancement (SCVWD)	.	.	○	.	.	●	.	●	.	.	●	○	◐	◐	.	◐	.	◐	
36 Guadalupe Watershed Modeling Towards Mercury Management to Achieve TMDL Goals (San Francisco Estuary Institute)	○	.	○	.	●	●	◐	.	●	●	●	◐	.	◐	●	.	●	●	●	●	.	.	●	
37 Infrastructure Reliability Improvements in Santa Clara County (SCVWD)	◐	●	.	◐	◐	.	◐	●	○	◐	.	.	●	○	○	○	
38 Intertie w/ NBA-Solano Project (Solano CWA)	○	●	.	◐	.	.	◐	●	◐	●	.	.	●	●	.	○	●	●	
39 Ironhouse Sanitary District Wastewater Conveyance to San Francisco Region (Ironhouse Sanitary District)	.	.	.	○	●	○	○	●	.	◐	.	.	○	●	○	.	○	.	.	.	○	.	○	
40 Jack London Lake Restoration and Sedimentation Reduction (California State Parks)	◐	.	●	.	◐	◐	.	●	.	●	●	◐	.	○	◐	.	○	●	◐	◐	.	.	●	
41 Jamieson Treatment Plant Improvements (City of Napa)	.	◐	.	●	●	.	◐	●	○	◐	.	.	◐	●	○	
42 Kirker Creek Watershed Greenway Park Plan (Contra Costa RCD)	●	.	○	.	.	◐	○	.	○	●	●	◐	.	.	○	○	.	.	◐	.	○	○	◐	
43 Kirker Creek Watershed Nursery (Contra Costa RCD)	●	◐	.	●	.	●	.	○	.	.	○	.	.	○	.	.	.	○	○	

	Projects	Bay Area IRWMP Regional Goals						Bay Area Regional Assessment Criteria					Prop 50 Program Preferences					Prop 50 Statewide Priorities							
		Sustain-ability	Supply Reliability	Hydrologic Function	Water Quality - Drinking Water	Water Quality - Receiving Water	Env. Resources	Public Health, Safety, Property	Funding Match	Regionalism	Partnerships	Meets Objectives of Multiple FADS	Integration	Supply Reliability	Water Quality	Pollution to Habitat	DAC Benefits	Reduce Conflict	TMDL	WMI	NPS Pollution Control	Bay/Delta Water Quality	Task Forces	Env. Justice	CALFED Goals
44	Lake Merritt and Lake Merritt Channel Improvements (City of Oakland)	•	•	●	•	◐	◐	○	▪	○	•	●	○	•	●	◐	●	•	•	●	○	◐	•	●	●
45	LEAD at Crockett (EBMUD)	•	●	•	•	•	•	○	●	◐	◐	•	●	•	•	○	•	•	•	•	•	●	•	●	
46	Ledson Marsh Restoration: Annadel State Park (California State Parks)	•	•	●	•	○	◐	○	•	○	◐	●	○	•	•	○	•	•	•	◐	•	○	•	◐	
47	Livermore-Amador Valley Mocho Groundwater Demineralization Project (Zone 7)	○	◐	•	●	●	•	◐	●	○	○	●	●	•	•	○	•	•	•	•	•	●	•	○	
48	Lomita Canal / Cupid Row Canal Upgrades (San Francisco International Airport)	◐	•	◐	•	◐	●	○	•	○	◐	●	•	○	●	•	•	•	•	●	●	●	•	•	○
49	Lower Silver Creek, Reaches 4-6 (SCVWD)	○	•	○	•	•	◐	●	●	•	●	●	◐	•	•	•	●	•	•	○	•	•	●	●	○
50	Marin County Benthic Macroinvertebrate Sampling Program (Marin County STOPPP)	○	•	○	•	●	○	•	●	○	◐	●	○	•	○	•	•	•	•	●	•	•	•	•	
51	Martinez Adult Education Campus Creek Project Enhancement (Muir Heritage Land Trust)	○	•	◐	•	◐	◐	●	●	•	●	●	●	•	○	○	•	•	•	◐	◐	◐	•	○	◐
52	Milpitas Transit Area Recycled Water Project (City of San Jose)	◐	●	•	•	◐	◐	○	●	○	◐	●	●	◐	◐	○	●	○	○	•	○	●	•	●	
53	Mirant Cooling Recycled Water Project (DDSD)	◐	◐	○	•	○	●	○	●	○	◐	●	◐	○	○	•	●	○	○	•	○	●	•	●	
54	Monitoring Well Construction and Water Quality Monitoring Program (ACWD)	○	◐	•	●	●	•	○	●	•	◐	●	◐	●	•	•	•	•	•	●	•	•	•	•	○
55	Mountain View / Moffett Area Water Recycling Project (City of Palo Alto/City of Mountain View)	◐	●	•	•	◐	○	○	●	○	○	●	○	●	○	○	○	○	○	•	○	●	•	●	
56	Mt. Diablo Creek Watershed Coordinated Steelhead Passage Project (Natural Heritage Institute)	◐	•	•	•	•	●	•	●	•	●	●	○	•	•	•	•	•	○	•	•	•	•	•	●
57	Mt. Diablo State Park: Comprehensive Stock Pond Evaluation and Sedimentation Remediation (California State Parks)	◐	•	●	•	•	◐	•	●	•	●	●	◐	•	•	•	•	•	•	●	●	●	•	•	●
58	Mt. Diablo State Park: Mitchell Creek Riparian Restoration (California State Parks)	◐	•	●	•	•	◐	•	●	•	●	●	○	•	•	•	•	•	•	●	○	○	•	•	●
59	Napa Plant Site Restoration Project (CDFG)	○	•	○	•	○	●	○	•	○	●	●	○	•	○	•	•	•	•	◐	•	•	•	•	◐
60	Napa Salt Marsh Restoration Project (State Coastal Conservancy)	◐	○	◐	•	○	●	•	●	●	●	●	○	◐	◐	•	•	•	•	●	○	○	○	•	●
61	Nathanson Creek Preserve Restoration Project (Sonoma Ecology Center)	○	•	◐	•	◐	●	◐	•	•	●	●	○	•	○	•	•	•	●	●	○	◐	•	•	●
62	North Solano Groundwater Monitoring (Solano CWA)	◐	●	•	•	•	•	•	●	•	●	•	◐	•	•	•	○	•	•	•	•	•	•	•	○
63	Pacifica Recycled Water Project (North Coast County Water District)	◐	●	•	•	○	•	○	●	◐	◐	●	◐	●	○	•	○	•	•	•	•	•	●	•	•
64	Palo Alto Recycling Project (City of Palo Alto)	◐	●	•	•	◐	○	○	●	○	○	●	○	●	○	•	●	○	○	•	○	●	•	●	

	Projects	Bay Area IRWMP Regional Goals						Bay Area Regional Assessment Criteria					Prop 50 Program Preferences					Prop 50 Statewide Priorities						
		Sustain-ability	Supply Reliability	Hydrologic Function	Water Quality - Drinking Water	Water Quality - Receiving Water	Env. Resources	Public Health, Safety, Property	Funding Match	Regionalism	Partnerships	Meets Objectives of Multiple FADS	Integration	Supply Reliability	Water Quality	Pollution to Habitat	DAC Benefits	Reduce Conflict	TMDL	WMI	NPS Pollution Control	Bay/Delta Water Quality	Task Forces	Env. Justice
65	Palo Alto Regional Water Quality Control Plant Water Recycling Program - Phase 3 Expansion (City of Palo Alto)	●	●	●	●	○	○	●	●	●	●	●	●	●	●	●	●	○	○	●	○	●	●	●
66	PCBs Investigation at the Pulgas Creek Pump Station Watershed, San Carlos, California (San Mateo C/CAG)	○	●	●	●	●	●	●	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	○
67	Peacock Gap Recycled Water Extension (MMWD)	●	●	●	●	○	○	●	○	○	●	○	●	○	○	●	○	○	○	●	○	●	●	●
68	Peralta Tyson Groundwater Treatment Facility (ACWD)	○	●	●	●	●	●	●	●	●	●	○	●	●	●	●	○	●	●	●	●	●	●	●
69	Permanente Creek Flood Protection (SCVWD)	○	●	●	○	○	●	●	●	●	●	●	●	○	●	●	●	●	●	○	○	●	●	●
70	PG&E Contra Costa Power Plant #8 Recycled Cooling Water (DDSD)	●	●	●	●	●	○	●	○	●	●	●	●	○	○	○	●	○	○	●	○	●	●	●
71	Phase 2 – Niles Cone Groundwater Recharge and Fish Passage Program (ACWD)	●	●	●	○	○	●	●	●	●	●	●	●	○	●	●	●	○	○	●	●	●	●	●
72	Pilarcitos Creek Integrated Watershed Management Plan Development and Implementation (SFPUC)	●	●	○	○	○	○	●	●	●	●	●	○	○	○	●	●	●	○	○	○	○	●	●
73	Pinole Creek Restoration and Greenway Park (CCC FC&WCD)	●	○	●	○	○	○	●	○	●	●	●	○	○	○	●	●	●	○	○	○	●	●	●
74	Pittsburg Recycled Water Implementation (DDSD)	●	●	●	●	○	○	●	○	●	●	○	●	○	○	○	●	○	○	●	○	●	●	●
75	Protection from Tidal Flooding (City of Burlingame)	●	●	○	○	○	●	●	●	●	●	●	○	○	○	●	●	●	○	○	○	●	●	●
76	R10-2 Arroyo de la Laguna (ADLL) Improvement Project 2 (Zone 7)	●	●	●	●	●	●	●	●	●	●	●	●	○	○	●	●	○	○	○	○	●	●	●
77	R10-5 Arroyo de la Laguna Improvement Project 5 (Zone 7)	●	●	●	●	●	●	●	○	○	●	●	●	○	○	●	●	○	○	○	○	●	●	●
78	Recycled Water Conveyance Pipeline (Novato Sanitary District)	●	●	●	●	○	○	●	○	●	●	○	●	○	○	●	○	○	○	○	○	●	●	●
79	Recycled Water Program for North Marin WD & Novato Sanitary District – Phase 1 (North Marin Water District)	●	●	●	●	○	○	●	○	○	●	○	●	○	○	●	○	○	○	○	○	●	●	●
80	Reducing Women and Children's Exposure to Mercury in the Bay and Delta Region (Ma'at Youth Academy)	●	●	●	●	○	○	●	○	●	●	●	○	○	○	●	○	○	○	○	○	●	●	●
81	Redwood City Recycled Water Project (City of Redwood City)	●	●	●	●	○	○	●	○	●	●	○	●	○	○	●	○	○	○	○	○	●	●	●
82	Regional Biosolids Project (Regional Biosolids JPA)	●	●	●	○	○	○	●	●	●	●	○	●	○	○	●	○	○	○	○	○	●	●	●
83	Regional BMPs, Field Manual and Training for Stream Maintenance Activities (Marin County STOPPP)	○	●	●	○	○	○	●	○	●	●	○	●	○	○	●	○	○	○	○	○	●	●	●
84	Regional Desalination Feasibility Study (EBMUD)	●	●	●	●	○	○	●	○	●	●	○	●	○	○	●	○	○	○	○	○	●	●	●
85	Regional Flood Agencies Forum (SCVWD)	●	●	○	○	○	○	●	○	●	●	○	●	○	○	○	○	○	○	○	○	●	●	●
86	Removal of NDMA, EDCs, and PPCPs in South Delta Water (CCWD)	●	○	○	●	●	○	●	○	●	●	○	○	○	○	○	○	○	○	○	○	●	●	●

	Projects	Bay Area IRWMP Regional Goals						Bay Area Regional Assessment Criteria					Prop 50 Program Preferences					Prop 50 Statewide Priorities							
		Sustain-ability	Supply Reliability	Hydrologic Function	Water Quality - Drinking Water	Water Quality - Receiving Water	Env. Resources	Public Health, Safety, Property	Funding Match	Regionalism	Partnerships	Meets Objectives of Multiple FADS	Integration	Supply Reliability	Water Quality	Pollution to Habitat	DAC Benefits	Reduce Conflict	TMDL	WMI	NPS Pollution Control	Bay/Delta Water Quality	Task Forces	Env. Justice	CALFED Goals
87	Rheem Creek Restoration and Watershed Council Project (Natural Heritage Institute)	●	·	○	·	●	●	●	·	·	●	●	○	·	○	○	●	·	·	○	·	○	·	●	●
88	Richmond Advanced Recycled Expansion (RARE) Water Project (EBMUD)	●	●	·	·	●	○	●	○	○	●	○	●	○	○	·	●	○	○	·	○	●	·	●	●
89	Richmond Bayshore Stewards (The Watershed Project)	●	·	○	·	○	·	·	·	●	●	○	·	·	●	●	·	·	○	○	○	·	●	●	●
90	Robert Louis Stevenson State Park Erosion Control: Table Rock Trail Re-route (California State Parks)	·	·	●	·	●	●	·	●	●	●	○	·	○	●	·	·	●	●	○	○	·	·	●	●
91	Rollingwood Neighborhood Creek Restoration Project (Urban Creeks Council)	○	·	●	·	●	○	●	·	●	●	○	·	○	○	●	·	·	●	·	·	●	●	●	●
92	San Francisco Creek Flood Damage Reduction and Ecosystem Restoration (San Francisco Creek JPA)	○	·	●	·	●	●	●	○	●	●	●	·	○	○	●	·	●	●	○	●	●	●	●	●
93	San Leandro Tributaries at South Hills (City of Oakland)	○	·	·	·	○	●	○	·	·	·	●	○	·	○	○	·	·	·	●	·	·	·	·	●
94	San Leandro Water Reclamation Facility Expansion Project (EBMUD)	●	●	·	·	●	○	○	●	○	●	○	●	○	○	○	●	○	○	·	○	●	·	●	●
95	San Ramon Valley Recycled Water Program - Phase 2 and Future Phases (DSRSD-EBMUD Recycled Water Authority)	●	●	·	·	●	○	○	●	○	●	○	●	○	○	○	●	○	○	·	○	●	·	●	●
96	Santa Clara Valley Water District Aquifer Storage and Recovery Project (SCVWD)	●	●	●	·	·	●	○	●	●	○	○	●	·	·	○	○	·	·	·	·	·	·	·	○
97	Satellite Recycled Water Treatment Plant Project (EBMUD)	●	●	·	●	●	○	○	●	·	○	○	●	○	○	·	●	○	○	·	○	●	·	●	●
98	SBWR Recycled Water Phase 2 Extensions--Santa Clara (City of San Jose)	●	●	·	·	●	○	○	●	○	●	●	●	●	○	○	●	○	○	·	○	●	·	●	●
99	Sears Point Restoration Project (Sonoma Land Trust)	●	·	●	·	●	●	○	·	○	●	○	·	○	○	·	·	·	●	·	○	●	·	●	●
100	SFPUC Groundwater Projects (SFPUC)	○	●	·	·	·	●	·	●	●	●	●	●	·	·	○	●	·	·	·	·	·	·	·	·
101	Sky Valley-Sulpher Springs Watershed Management Plan (City of Benicia)	●	·	·	·	○	●	○	·	·	·	·	○	·	○	·	·	·	●	·	·	·	·	·	●
102	Solano CWA Groundwater Banking/Conjunctive Use Program (Solano CWA)	●	●	·	·	·	·	·	●	·	●	●	○	●	·	·	○	·	·	·	·	·	·	·	●
103	Sonoma Valley Invasive Weed Control (Sonoma Land Trust)	○	·	○	·	·	●	○	●	·	·	●	○	·	·	·	·	·	·	·	·	·	·	●	●
104	South Bay Advanced Recycled Water Treatment Facility Project (SCVWD)	●	●	·	·	●	●	○	●	●	●	●	●	●	●	○	●	○	○	·	○	●	·	●	●
105	South Bay Salt Pond Restoration Project & South San Francisco Bay Shoreline Study: Early Implementation Activities (SCC)	●	·	○	·	●	●	○	●	●	●	●	●	○	●	·	·	·	●	●	●	●	·	●	●
106	Stanford Central Energy Facility Cooling Tower Recycled Water System (Stanford University)	●	●	·	·	●	○	○	●	●	·	●	○	○	○	○	●	○	○	·	○	●	·	●	●
107	Stevens Creek Restoration at Blackberry Farm, Cupertino	·	·	●	·	·	●	·	●	·	○	●	○	·	·	·	·	·	·	●	·	·	●	·	●

Projects	Bay Area IRWMP Regional Goals						Bay Area Regional Assessment Criteria						Prop 50 Program Preferences					Prop 50 Statewide Priorities						
	Sustain-ability	Supply Reliability	Hydrologic Function	Water Quality - Drinking Water	Water Quality - Receiving Water	Env. Resources	Public Health, Safety, Property	Funding Match	Regionalism	Partnerships	Meets Objectives of Multiple FADS	Integration	Supply Reliability	Water Quality	Pollution to Habitat	DAC Benefits	Reduce Conflict	TMDL	WMI	NPS Pollution Control	Bay/Delta Water Quality	Task Forces	Env. Justice	CALFED Goals
(SCVWD)																								
108 Sugarloaf Ridge State Park Erosion Control: Goodspeed Trail Rehabilitation (California State Parks)	●	·	·	·	○	◐	·	●	·	●	●	○	·	◐	●	·	·	●	●	●	●	·	·	◐
109 Sustainable Streets for Improved Stormwater Quality and Water Reuse (San Mateo C/CAG)	●	·	○	·	·	○	○	●	●	◐	●	○	·	○	○	○	·	○	◐	◐	○	·	○	○
110 Thompson Creek Stream Stabilization (SCVWD)	·	·	○	·	·	◐	○	●	·	○	●	○	·	○	·	·	·	·	◐	·	·	○	·	◐
111 Upper Guadalupe River Project (Reaches 6 and 12) (SCVWD)	◐	○	◐	·	○	◐	●	●	·	◐	●	○	○	○	·	·	·	◐	●	·	○	●	·	◐
112 Urban Creek Trash Reduction Program (SCVWD)	○	·	·	·	●	◐	·	●	◐	○	●	○	·	◐	◐	○	·	·	◐	◐	◐	·	○	◐
113 Watershed Habitat and Project Mapping Program (San Francisco Estuary Institute)	◐	·	·	·	·	●	·	·	●	●	●	○	·	·	·	·	·	·	●	·	·	·	·	○
114 Westside Baseline and Harding Park/Lake Merced Projects (SFPUC)	◐	●	·	·	·	○	○	●	●	○	●	○	●	·	·	○	○	·	·	·	·	●	·	·
115 Wetland and Creek Restoration at Big Lagoon, Muir Beach (National Parks Service-GGNRA)	○	·	◐	·	·	●	◐	●	●	◐	●	○	·	○	◐	·	·	·	●	○	○	◐	·	●
116 Wildcat Creek Restoration (CCC FC&WCD)	◐	·	◐	·	○	●	◐	·	·	●	●	●	·	○	◐	·	·	·	◐	·	·	◐	◐	●
COHORT 2 PROJECTS																								
117 Accelerate Eradication of Invasive Plant Species (TBD)	◐	·	○	·	·	●	○	·	·	·	●	○	·	·	·	·	·	·	○	·	·	◐	·	◐
118 Emergency Preparedness for Widespread and Tidal Flooding (TBD)	◐	·	·	·	·	·	●	·	·	·	·	·	·	·	·	·	·	·	·	·	·	●	·	·
119 Lower Walnut Creek Restoration (CCC FC&WCD)	○	·	◐	·	○	◐	●	·	·	○	●	◐	·	○	·	·	·	·	◐	·	·	●	·	●
120 Mid-Coyote (SCVWD)	○	·	○	·	○	◐	●	●	○	◐	●	○	·	○	·	●	·	·	◐	·	·	●	●	●
121 North San José Intensification Extension (South Bay Water Recycling)	○	●	·	·	○	○	○	●	○	○	●	○	●	○	○	○	○	○	○	·	○	●	·	●
122 Phase II Recycled Water Program - City of Petaluma (City of Petaluma)	○	●	·	·	◐	○	○	●	○	○	●	○	●	○	○	○	○	○	·	○	●	·	●	●
123 Pleasant Hill, Zone 1 Recycled Water Project (CCCSD)	○	●	·	·	◐	○	○	●	○	◐	●	◐	●	○	○	○	●	○	○	·	○	●	·	●
124 R3-2 Robertson Park Enhancement Project and Levee Construction (Zone 7)	◐	·	◐	·	○	◐	●	·	·	·	●	●	·	·	◐	·	·	·	●	○	○	●	·	○
125 R3-3 Parks Floodplain Dedication and Levee Construction (Zone 7)	◐	·	◐	·	·	·	●	·	·	·	●	●	·	·	·	·	·	·	●	·	·	●	·	●
126 R3-4 Holmes Street Sedimentation Basin and Granada/Murrieta Protection and Enhancement Project (Zone 7)	◐	·	◐	·	◐	◐	●	·	·	·	●	●	·	·	◐	·	·	·	●	◐	◐	●	·	●
127 Sonoma Valley Recycled Water Project (Sonoma CWA)	◐	●	·	·	○	○	○	●	○	○	●	◐	●	○	○	·	○	○	○	·	○	●	·	●



G Implementation

During implementation of the Bay Area IRWMP, the successor to the Technical Coordinating Committee is envisioned as using an adaptive management process to ensure that the Plan is responsive to the needs of the region.

The Bay Area IRWMP will be implemented through continued coordination and contribution towards regional goals through (1) implementation of agencies' programs and projects implementation, (2) implementation of the 116 high priority projects identified in this Plan to the extent that resources are available; and (3) on-going review by the successor to the Bay Area Technical Coordinating Committee (TCC).

The LOMU signatories are planning to adopt the Bay Area IRWMP by January 1, 2007. Following adoption, the Bay Area IRWMP will be implemented through execution of priority projects identified in this Plan by respective project proponents. Progress toward attaining the regional goals and objectives will be reviewed periodically. As a living document, information in the IRWMP will be updated as needed through an adaptive management framework. The steps for IRWMP implementation are described in further detail below. The level of effort in each area will depend on the amount of funding and resources available.

In developing this IRWMP, the Bay Area TCC (shown in Figure ES-1) demonstrated the ability to:

- work together and reach consensus on key decision points, despite the large geographic scope of the region, the diverse water resource management interests represented, and the short timeframe for plan development;
- foster coordination, collaboration and communication across a diverse array of water resources management entities throughout the region;
- provide a forum for involvement by resource agencies, environmental justice groups and other interested parties through targeted outreach efforts and public workshops throughout development of the Plan;
- develop and promote a unifying vision that reflects the water resources needs for the Bay Area region, and guide the development of goals and objectives, integrated water management strategies, and priorities for the Bay Area region;
- manage the entirety of the Plan development process including: contract compliance for the planning grant; management and oversight of a consultant team; development of a web-portal project collaboration tool; and the writing, editing, and production of the IRWMP.

Based on these accomplishments, the TCC will continue to serve as the decision making body until an improved institutional structure is developed and agreed to. The approach to implementing the IRWMP after the January 1, 2007 adoption includes the following:

1. Continue to follow the LOMU for coordination and collaboration on implementation issues for the Bay Area IRWMP – with the routine inclusion of resource and regulatory agencies and non-governmental organizations (NGOs) in deliberations – in addition to completion of future work.
2. Reconstitute the TCC as the San Francisco Bay Area Integrated Regional Water Management Plan Coordinating Committee (CC) as early as January 2007 after the IRWMP is adopted.
3. The CC will be comprised of two or three representatives appointed by each of the service function technical coordinating committees shown in Figure ES-1.
4. Non-public agency participants in the IRWMP will serve in an advisory role to the CC.



5. CC members will actively solicit input from interested stakeholders and the public. Resource and regulatory agencies, NGOs and other interested stakeholders will be invited to participate in monthly meetings with the CC.
6. The CC will define the process of implementation where coordination and collaboration are needed, including IRWMP performance tracking, monitoring and updating, and other mutually agreeable implementation activities. The CC will not be responsible for carrying out individual projects or programs in the IRWMP.
7. Each service function technical coordinating committee will update goals, objectives, and/or information on projects within its functional area as described in the IRWMP, as needed and subject to available funding.
8. The CC will, in consultation with resource and regulatory agencies and NGOs, compile the implementation priorities submitted by each functional area, develop and update overall regional implementation criteria and prioritized project lists that will be most eligible and competitive for federal and state grant funding.
9. The CC will, in consultation with resource and regulatory agencies and non-governmental organizations, periodically review the ongoing institutional structure and discuss whether improvements are needed and propose options for improvements to best serve IRWMP implementation needs effectively and meet the needs of the participating organizations. The first review will be conducted not later than March 31, 2007.

Potential near- and long-term institutional structure functions that will be undertaken by the existing IRWMP TCC and the formal CC entity during implementation of this Plan are described in Table ES-6.

Table ES-6: Potential Institutional Structure Functions During IRWMP Implementation ^a

Structure		Potential Functions
NEAR-TERM PERIOD	Bay Area IRWMP CC ^b	<ul style="list-style-type: none"> ▪ Provide decision-making authority for further development and/or implementation of the Plan. ▪ Foster partnerships and facilitate participation by a broad range of water resource management stakeholders, including environmental justice groups, resource agencies, public agencies, environmental groups, and the general public. ▪ Provide a regional forum for cross-jurisdictional coordination. ▪ Oversee continued outreach and data dissemination to stakeholders. ▪ Oversee plan implementation and evaluate cumulative Plan contributions toward achievement of regional goals. ▪ Periodically review and propose adjustments to regional goals and priorities. ▪ Propose alterations to project sequencing and Plan implementation based on performance data collected. ▪ Seek funding to support activities. ▪ Periodically review effectiveness of on-going organization
	Functional Area TCC	<ul style="list-style-type: none"> ▪ Collect and compile project status and performance information on an annual basis ▪ Assess functional area performance in meeting goals and objectives ▪ Prepare annual reports on progress and submit to Bay Area TCC ▪ Adjust functional area priorities as needed
	Project Proponents	<ul style="list-style-type: none"> ▪ Ensure implementation of projects and compliance with regulatory and statutory requirements ▪ Prepare quarterly reports on project performance and submit to Functional Area TCC.

Structure		Potential Functions
LONG TERM	Formal Entity ^c	<ul style="list-style-type: none"> ▪ Address decision-making authority for further development and/or implementation of the Plan. ▪ Foster partnerships and facilitate participation by a broad range of water resource management stakeholders, including environmental justice groups, resource agencies, public agencies, environmental groups, and the general public. ▪ Provide a regional forum for cross-jurisdictional coordination. ▪ Oversee continued outreach and data dissemination to stakeholders. ▪ Oversee plan implementation and evaluate cumulative Plan contributions toward achievement of regional goals. ▪ Periodically review and propose adjustments to regional goals and priorities. ▪ Propose alterations to project sequencing and Plan implementation based on performance data collected. ▪ Act on and/or adopt any proposed IRWMP changes or adjustments. ▪ Act on and/or adopt proposed adjustments to project sequencing and Plan implementation based on performance data collected. ▪ Manage preparation of the Bay Area Proposition 50 Chapter 8 implementation grant applications. ▪ Administer distribution of State funding to regional projects.
	Project Proponents	<ul style="list-style-type: none"> ▪ Ensure implementation of projects and compliance with regulatory and statutory requirements ▪ Prepare quarterly reports on project performance and submit to Functional Area TCC.

- a. Functions assume adequate funding and resources are available.
- b. In consultation with stakeholders including resource and regulatory agencies and NGOs.
- c. Same as above.

To the extent allowable under State IRWM guidelines and criteria, a new project submitted after adoption of the Plan will be considered by the appropriate functional area(s) to evaluate whether that project should be forwarded to the IRWMP CC as a high priority project to consider when the next available funding proposal is developed. The schedule and process for each functional area may vary.

Recognizing that goals, objectives, and regional priorities evolve over time, the TCC will review this IRWMP periodically, depending on changing conditions and availability of funds to update information presented in the Plan, and will make adjustments as necessary to respond to changes throughout the region. This process of continual review and update, as illustrated in Figure ES-8, will optimize the effectiveness of IRWMP implementation.

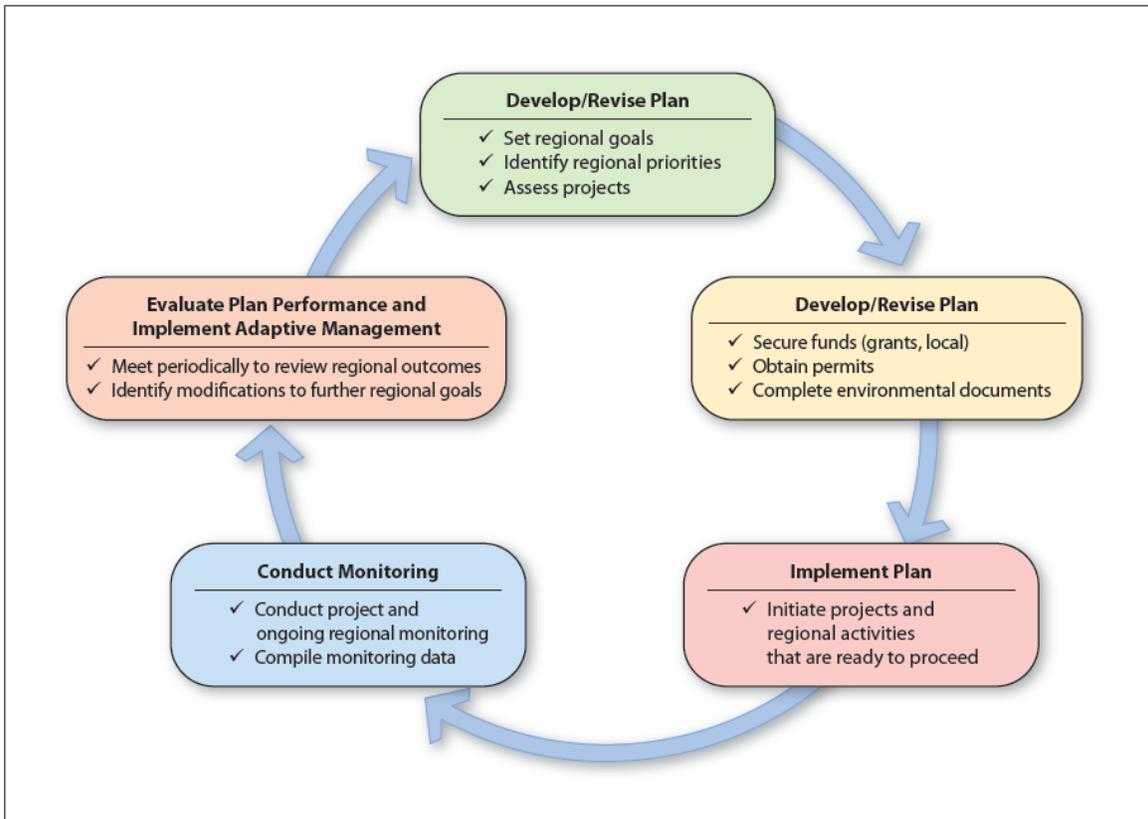


Figure ES-8: Bay Area IRWMP Implementation and Performance Assessment

H Impacts and Benefits

The projects included within the Bay Area IRWMP provide multiple benefits.

This IRWMP consists of a planning study and basic data compilation that would not result in the disturbance of any environmental resource. These activities are exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines §15262 and §15306. As such, programmatic environmental analysis under CEQA is not required. Furthermore, implementation of each short term priority project included in the IRWMP will be the responsibility of the project proponent and any applicable project partners. If implementing a project, project proponents bear responsibility for ensuring all regulatory requirements for the project are met.

Table ES-7 presents a screening level assessment of benefits and impacts that are typically associated with the various water management strategies included in this IRWMP.

**Table ES-7: Typical Benefits and Impacts by Water Management Strategy**

Water Management Strategy	Typical Benefits	Typical Impacts
Ecosystem Restoration	<ul style="list-style-type: none"> - Protection and enhancement of physical and biological processes - Increased critical habitat - Reduced flooding - Improved Water Quality 	<ul style="list-style-type: none"> - Temporary construction impacts - Changes in local species composition and diversity
Env. and Habitat Protection and Improvement	<ul style="list-style-type: none"> - Restoration of hydrologic and geomorphic function - Addition of cover, nesting and forage areas - Improved access to steelhead spawning and rearing habitats and improved mobility. - Improved Water Quality 	<ul style="list-style-type: none"> - Temporary construction impacts - Changes in or loss of sensitive habitat areas - Changes to the hydrologic makeup of site - Effects on land use planning and land values
Water Supply Reliability	<ul style="list-style-type: none"> - Reliable municipal and domestic water supplies - Reliable industrial supplies - Protection of watershed headlands 	<ul style="list-style-type: none"> - Temporary construction impacts - Changes to visual quality adjacent to above-ground infrastructure - Loss or disturbance of biological resources - Potential growth-inducing effects
Flood Management	<ul style="list-style-type: none"> - Protection of public safety and property - Habitat and groundwater recharge benefits 	<ul style="list-style-type: none"> - Temporary construction impacts - Changes in the frequency, duration and magnitude of storm flows and flooding - Water quality and hydrology impacts
Groundwater Management	<ul style="list-style-type: none"> - Supply reliability - Protection against overdraft - Potential for new habitat areas 	<ul style="list-style-type: none"> - Temporary construction impacts - Inundation of potential habitat areas
Recreation and Public Access	<ul style="list-style-type: none"> - Recreation opportunities - Education opportunities 	<ul style="list-style-type: none"> - Temporary construction impacts - Potential impacts to water quality and natural resources
Storm Water Capture and Management	<ul style="list-style-type: none"> - Reduction of downstream flooding impacts - Water supply, water quality, ecosystem restoration, recreation and public health benefits 	<ul style="list-style-type: none"> - Temporary construction impacts - Groundwater contamination
Water Conservation	<ul style="list-style-type: none"> - Supply reliability without construction-related impacts - Reduced demands on imported water supplies 	<ul style="list-style-type: none"> - Growth-inducing effects
Water Quality Protection and Improvement	<ul style="list-style-type: none"> - Reduced pollutant loading - Improved drinking water quality - Improved well-being of terrestrial and aquatic species - Reduced public health hazard 	<ul style="list-style-type: none"> - Temporary construction impacts - Brine disposal impacts from treatment processes - Disturbance of sensitive species during restoration
Water Recycling	<ul style="list-style-type: none"> - Improved water supply reliability - Drought-proof supply - Preservation of potable supplies for drinking water - Reduced dependence on imported supplies 	<ul style="list-style-type: none"> - Temporary construction impacts - Water quality impacts from nutrient and salinity loading and emerging contaminants - Increased energy usage and costs from treatment, - Potential growth-inducing impacts



Water Management Strategy	Typical Benefits	Typical Impacts
Wetlands Enhancement and Creation	<ul style="list-style-type: none"> - Improved nesting, foraging and breeding grounds for waterfowl, fisheries and small mammals - Preservation of rare and endangered species and environmental habitat 	<ul style="list-style-type: none"> - Temporary construction impacts - Changes in species distribution
Conjunctive Use	<ul style="list-style-type: none"> - Improved water supply reliability - Increased flexibility - Protection against overdraft and seawater intrusion - Reduced dependence on imported supplies during dry periods 	<ul style="list-style-type: none"> - Temporary construction impacts - Increased energy usage and costs from pumping - Potential growth-inducing impacts
Desalination	<ul style="list-style-type: none"> - New potable water supply - High quality, drought proof supply - Reduced dependence on imported supplies. 	<ul style="list-style-type: none"> - Temporary construction impacts - Water quality impacts from brine disposal - Increased energy usage and costs from treatment, - Potential growth-inducing impacts
Imported Water	<ul style="list-style-type: none"> - Improved water supply reliability - Improved water quality - Reduced treatment costs and public health risks from disinfection byproducts - 	<ul style="list-style-type: none"> - Temporary construction impacts - Potential impacts to natural stream flows and habitat associated with construction of conveyance facilities
Land Use Planning	<ul style="list-style-type: none"> - Improved coordination and collaboration - Protection of sensitive habitats 	<ul style="list-style-type: none"> - Temporary construction impacts
NPS Pollution Control	<ul style="list-style-type: none"> - Improved health of water bodies and wildlife dependant upon those water bodies - Improved coordination and collaboration 	<ul style="list-style-type: none"> - Temporary construction impacts - Reduction in developable land
Surface Storage	<ul style="list-style-type: none"> - Improved water supply reliability - Hydro-electric benefits - Flood plain management benefits - Protection against global warming impacts 	<ul style="list-style-type: none"> - Temporary construction impacts - Impacts to local habitat around the storage structure - Impacts to water quality from sedimentation and temperature stratification - Potential growth-inducing impacts
Watershed Planning	<ul style="list-style-type: none"> - Recreation and education opportunities - Improved coordination and collaboration - Protection of sensitive habitats - Reduced pollutant loading - Improved fish passage 	<ul style="list-style-type: none"> - Temporary construction impacts
Water and Wastewater Treatment	<ul style="list-style-type: none"> - Protection of human health - Protection of the quality of receiving water bodies - Protection of the health of aquatic and riparian species - Improved supply reliability 	<ul style="list-style-type: none"> - Temporary construction impacts - Visual impacts from above-ground facilities - Water quality impacts from process waste streams - Noise, vibration and air quality impacts from operation of power generators
Water Transfers	<ul style="list-style-type: none"> - Improved water supply reliability - Operational flexibility - Beneficial use of surplus irrigation supplies 	<ul style="list-style-type: none"> - Potential growth-inducing impacts - Third Party Impacts
Interties	<ul style="list-style-type: none"> - Improved water supply reliability during emergencies (earthquakes, electrical outages, sabotage). 	<ul style="list-style-type: none"> - Temporary construction impacts - Impacts to land use and habitat in areas of facility construction



Water Management Strategy	Typical Benefits	Typical Impacts
Infrastructure Reliability	<ul style="list-style-type: none"> - Improved water supply reliability - Reduced worker and public safety risk - Improved operation and efficiency - Reduced risk of damage and/or outage during catastrophic events 	<ul style="list-style-type: none"> - Temporary construction impacts - Impacts to land use and habitat in areas of facility construction
Regional Cooperation	<ul style="list-style-type: none"> - Improved likelihood of realizing benefits of other water management strategies - Lessons learned and efficiencies from integrated planning process 	None
Education and Outreach	<ul style="list-style-type: none"> - Increased volunteerism - Increased stakeholder support 	None
Monitoring and Modeling	<ul style="list-style-type: none"> - Better understanding of watershed and water quality conditions, hydrograph and flow patterns, water supply reliability and wildlife populations and movement. 	None
Groundwater Banking	<ul style="list-style-type: none"> - Improved water supply reliability - Operational flexibility 	- Potential growth-inducing impacts

I Technical Analysis and Plan Performance

The Bay Area IRWMP builds upon the data and technical analysis completed as part of other planning efforts, and serves as a planning baseline to measure progress towards achieving the goals and objectives outlined in this Plan.

Development of the Bay Area IRWMP is founded upon the analysis of data provided in the four Functional Area Documents, which in turn were founded upon the analysis of data and information provided in local planning documents, including but not limited to: General Plans, Urban Water Management Plans, Water, Wastewater, and Recycled Water Master Plans, Flood Protection and Stormwater Plans; and Watershed Management and Restoration Plans.

Based on the technical analysis completed during development of the Bay Area IRWMP, regional goals and objectives have been established and 116 near-term priority projects have been identified. As part of the Plan implementation process, additional analysis is needed to monitor progress towards achieving the stated goals and objectives of this Plan. As such, performance metrics and monitoring strategies have been identified for each of the priority projects, and functional area assessment and Plan-level assessment responsibilities have been identified (see Table ES-8). This table identifies the types of activities that will be undertaken as part of IRWMP implementation. The level of effort for each activity may vary depending on its need and upon the amount of funding and resources available.

**Table ES-8: IRWMP Assessment Responsibilities^a**

Responsible Party	Assessment Task	Frequency
Project Proponents	<ul style="list-style-type: none"> ▪ <i>If funded</i>, project proponents will be required to monitor and report on project status and progress towards achieving stated goals ▪ <i>If not funded</i>, project proponents would be encouraged to monitor and report on project progress 	<ul style="list-style-type: none"> ▪ Quarterly Basis
WS-WQ Functional Area TCC	<ul style="list-style-type: none"> ▪ Collect project performance information collected by proponents of WS-WQ projects ▪ Collect regional water use and population information ▪ Assess functional area performance in meeting goals and objectives ▪ Adjust functional area priorities as needed 	<ul style="list-style-type: none"> ▪ Annual Basis
WW-RW Functional Area TCC	<ul style="list-style-type: none"> ▪ Collect project performance information collected by proponents of WW-RW projects ▪ Collect information on recycled water use throughout the region ▪ Assess functional area performance in meeting goals and objectives ▪ Adjust functional area priorities as needed 	<ul style="list-style-type: none"> ▪ Annual Basis
FP-SM Functional Area TCC	<ul style="list-style-type: none"> ▪ Collect project performance information collected by proponents of FP-SM projects ▪ Collect information on number of acres within FEMA flood zone and number of floods and reported damages throughout region ▪ Assess functional area performance in meeting goals and objectives ▪ Adjust functional area priorities as needed 	<ul style="list-style-type: none"> ▪ Annual Basis
HP-WM&R Functional Area TCC	<ul style="list-style-type: none"> ▪ Collect and compile project performance information collected by proponents of HP-WM&R projects ▪ Assess functional area performance in meeting goals and objectives ▪ Adjust functional area priorities as needed 	<ul style="list-style-type: none"> ▪ Annual Basis
IRWMP CC	<ul style="list-style-type: none"> ▪ Collect information gathered by Functional Areas ▪ Assess IRWMP performance in contributing to regional goals, objectives, and IRWMP vision ▪ Adjust IRWMP as needed 	<ul style="list-style-type: none"> ▪ Periodically, pending availability of funding

a. Tasks, frequency, and responsible parties assume adequate funding and resources are available.

It is important to note that this assessment is not intended to supersede project assessment and tracking efforts being conducted at the individual agency level. Several LOMU signatories have already established individual goals for various aspects of water resources management within their organization.

By collecting and assessing this information at a regional scale, the IRWMP seeks to determine the contribution of IRWMP project implementation toward achievement of the overall goals of the IRWMP, as well as the regional vision of working together to enhance sustainable water resources management to support a high quality of life in the Bay Area.

It is envisioned that this IRWMP will establish a planning baseline for assessing the Bay Area's regional water resource management efforts, and that overall performance towards meeting the goals and objectives outlined in this IRWMP will be evaluated against this baseline as future work is completed, pending availability of funding and resources. Quantifiable information on project and plan performance, to the extent it exists, will be used in the evaluation.



J Data Management

Data generated through project implementation and data collected as part of region-wide monitoring programs will be compiled to support IRWMP assessment.

As part of Bay Area IRWMP implementation, data will be collected and compiled at three levels: the project level, the functional area level, and the Plan level. At each of these levels, effective data management and dissemination is critical to successful IRWMP.

- **Project Level Data Management.** At the Project level, project proponents will be responsible for collecting information on project implementation status, as well as evaluating project performance with respect to the specific performance measures established for their project. This information will be disseminated to the Functional Area TCC and other appropriate agencies on a quarterly basis.
- **Functional Area Data Management.** At the Functional Area level, information from the project proponents will be compiled, along with information from other monitoring programs, to assess progress toward achieving functional area objectives. This information will be disseminated to the Bay area IRWMP CC on an annual basis to support the Plan assessment and periodic updates to information in the Plan as needed.
- **Plan Level Data Management.** The Bay Area IRWMP CC will collect the information gathered by the Functional Area TCCs to assess IRWMP performance in contributing to regional goals, objectives, and IRWMP vision. The IRWMP CC will compile and manage this information, and will ultimately disseminate the data to the public.

The data collected will be maintained in a data library that will be publicly accessible from the IRWMP web portal. While every effort will be made to ensure open, public access to data used in the Plan performance assessment, confidentiality agreements may be required to obtain a portion of the data used to support Plan assessment. In these cases, data availability will be managed in a manner consistent with the terms of the individual confidentiality agreements.

The data collected during the implementation of the Bay Area IRWMP can also support several Statewide data needs. For example, DWR may use information developed through the IRWMP information updates to support updates to the California Water Plan, and the San Francisco Bay RWQCB may use the data as part of the new data standardization and data provision requirements that are being considered for 401-certification permits

Data collected as part of IRWMP project implementation will be required to be comparable with applicable statewide data collection programs such as the Surface Water Ambient Monitoring Program (SWAMP) and the Groundwater Ambient Monitoring and Assessment (GAMA) programs. Upon completion of the IRWMP performance assessment, the project-specific data collected, along with its associated quality assurance/quality control information, would be provided to the state in a format which could be easily integrated into statewide data collection and tracking programs. As appropriate, the TCC will also encourage project proponents to contribute data to the following statewide data programs:

- California Environmental Resources Evaluation System (CERES), an information system developed by the California Resources Agency to facilitate access to natural resource data
- California Environmental Data Exchange Network (CEDEN), a website developed by the State for coordinated data sharing



K Financing

Successful implementation of this \$2.1 Billion IRWMP requires ongoing financing to support operations and maintenance of projects upon implementation.

By contributing to water supply reliability, improved water quality, restoration of ecosystems and other water resources management objectives, implementation of the Bay Area IRWMP will benefit a wide variety of stakeholders within the Bay Area and throughout California

The 116 near-term priority projects identified in this Plan have a total capital cost of approximately \$2.1 Billion. Successful IRWMP implementation will require ongoing financing to support operations and maintenance of projects upon implementation. In addition to local funds, project proponents have identified several outside funding needs from State and Federal agencies to make these projects a reality.

L Statewide Priorities

All of the Bay Area IRWMP near-term priorities address one or more of the Statewide Priorities.

The Proposition 50 Guidelines⁴ identify the following Statewide Priorities:

- Reduce conflict between water rights users or resolve water rights disputes, including inter-regional water rights issues
- Implementation of TMDLs that are established or under development
- Implementation of RWQCB Watershed Management Initiatives, chapters and policies
- Implementation of SWRCB's Nonpoint Source (NPS) Pollution Plan
- Assist in meeting Delta Water Quality Objectives
- Implementation of recommendations of the floodplain management task force, desalination task force, recycling task force, or state species recovery plan
- Address environmental justice concerns
- Assist in achieving one or more goals of the CALFED Bay-Delta Program

All of the Bay Area IRWMP near-term priorities address one or more of Statewide priorities – and all of the Statewide Priorities are addressed by the Plan. The breadth and magnitude to which each project meets each Statewide Priority varies based on the nature of the project.

⁴ State Water Resources Control Board (SWRCB) and Department of Water Resources (DWR). 2004. Integrated Regional Water Management Grant Program Guidelines—Proposition 50. Chapter 8. November.

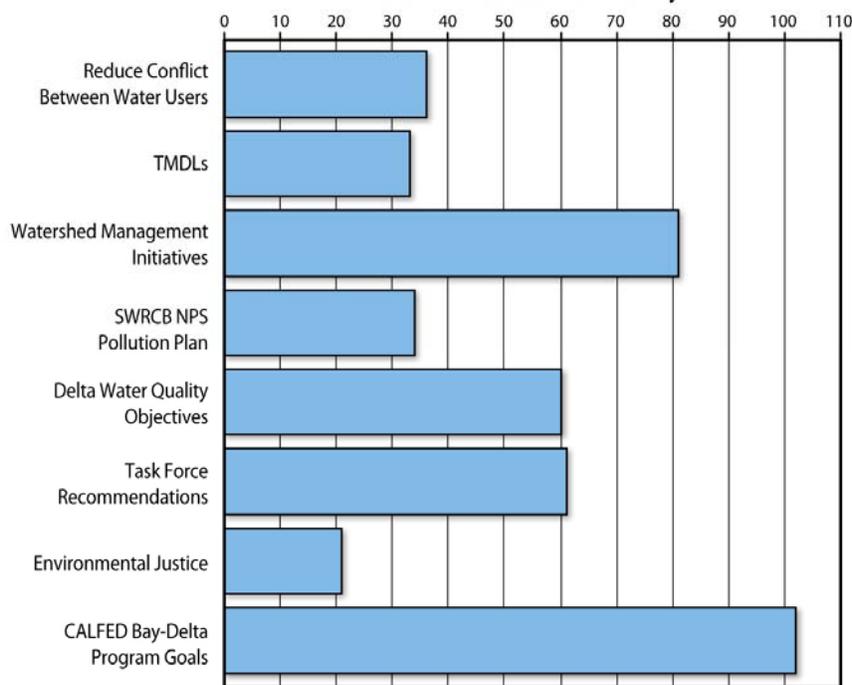


Figure ES-9: Number of Bay Area IRWMP near-term priority projects addressing Statewide Priorities

M Relation to Local Planning

The Bay Area IRWMP builds upon a wide variety of local plans and studies to establish a baseline for water resources management throughout the region.

As shown in Figure ES-10, development of the Bay Area IRWMP is founded upon the four Functional Area Documents, which in turn were founded upon several local planning documents and information available throughout the region.

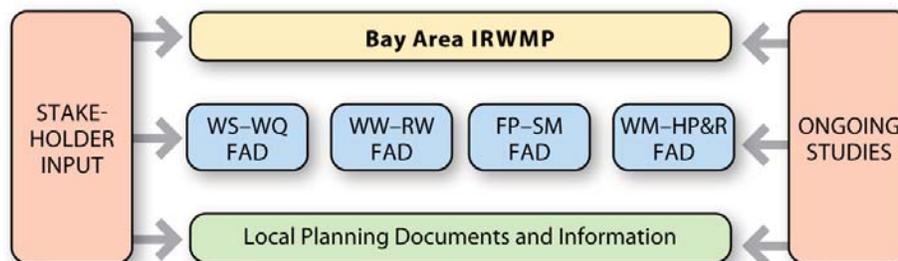


Figure ES-10: Relationship between IRWMP and Local Planning Documents

Local Planning documents used in the development of this plan include the following:



- General Plans
- Specific Plans
- Water Supply Assessments
- Conditional Use Permits
- Municipal Service Reviews
- Urban Water Management Plans
- Water, Wastewater, and Recycled Water Master Plans
- Flood Protection and Stormwater Plans
- Watershed Management and Restoration Plans

During development of this IRWMP, a series of targeted outreach meetings to local governments were conducted to engage local land-use decision makers in the regional planning process. The outreach series consisted of seven local government briefings, which were specifically geared toward municipal planning and public works departments. At each meeting, a presentation was delivered which detailed the IRWMP development process, provided background on Proposition 50, and described the planning grant and implementation grant funding mechanisms. Meeting attendees received “fact sheets” summarizing completed draft IRWMP sections, and encouraging them to get involved. The presentations were followed by question and answer sessions during which attendees were encouraged to ask questions pertaining to IRWMP development, project development and submission, and ways to become more engaged and involved in the process.

N Stakeholder Involvement

The stakeholder involvement and outreach activities conducted during the development of the Bay Area IRWMP sought to inform, educate and engage stakeholders throughout the region.

Development of the Bay Area IRWMP involved a diverse group of water supply, water quality, wastewater, stormwater, flood control, watershed, municipal, environmental, and regulatory groups whose input played a key role in defining sustainable water resources management goals and objectives and the selection of priority projects to help meet those goals and objectives.

The Bay Area IRWMP stakeholders—identified through local planning efforts, development of the FADs and development of the Plan itself—include elected officials, regulatory agencies, water agencies, wastewater agencies, flood control agencies, counties, cities, land use entities, environmental groups, watershed groups, community-based groups and many more.

To ensure that the Bay Area IRWMP reflects the needs and priorities of the diverse array of water management interests within the region, targeted stakeholder outreach activities were conducted throughout the Plan’s development. These outreach activities sought to inform, educate, and engage constituents, stakeholders, and interested parties throughout the nine-county Bay Area.



Stakeholder Workshops

Four stakeholder workshops were held to solicit input on the Bay Area IRWMP process:

- **Workshop #1** was held on February 27, 2006 in San Francisco to discuss the proposed approach to development of the Bay Area IRWMP, as well as to define the region and regional planning objectives.
- **Workshop #2** was held on April 24, 2006 in Millbrae to discuss the proposed water management strategies considered in the Bay Area IRWMP, and how various management strategies are being integrated within proposed projects and programs.
- **Workshop #3** was held on June 26, 2006 in Oakland, and was webcast to facilitate the involvement of those who could not attend in person. The third workshop included an Open House presentation of proposed Bay Area IRWMP projects. A proposed prioritization process was demonstrated through analysis of two projects after which meeting participants were invited to review and recommend refinements to the prioritization process.
- **Workshop #4** was held October 23, 2006 in Oakland. The topic of this last workshop was a review and discussion of the entire Public Draft Bay Area IRWMP, including the Plan implementation approach.



An Open House at Workshop #3 allowed participants to review IRWMP projects and assessment results.

Targeted Local Government Outreach

In addition to the four stakeholder workshops, a series of seven local government outreach briefings were held. These local government briefings were intended to inform local governments about the Bay Area IRWMP, ensure local needs are addressed in the Bay Area IRWMP, and provide an opportunity for local governments to give feedback on the Bay Area IRWMP development.

Bay Area Water Forum Presentations

Additional updates regarding the progress of the Plan development were provided at the Bay Area Water Forum meetings, which typically occurred every 4th Monday of the month.

Web Portal—www.BayAreaIRWMP.net

A comprehensive website established specifically for the Bay Area IRWMP provided another forum for stakeholder identification and participation, as well as draft document review and internal communications for the project team and TCC. Draft documents, public announcements, meeting handouts, and other deliverables were posted to the web site for public review. The web site included an e-mail address (info@bayairewmp.net) to facilitate the public's submission of comments, questions, requests for information, etc.

Regional Planning Committee (RPC) Updates

Bay Area IRWMP information was presented at the April 5, 2006 and October 4, 2006 ABAG RPC meetings. The RPC hears a broad suite of regional issues covering all planning areas, and makes recommendations on programs and activities to be undertaken by the ABAG executive board.



General Public Outreach

Various means were employed to extend the scope of outreach to stakeholders, including

- a comprehensive project e-mail database was developed for notification of available documents, workshops, and other announcements. A distribution list of a wide range of media outlets, including print, radio, and television, was maintained as part of this database;
- five non-technical fact sheets were developed to communicate about the IRWMP process and approach. Fact sheets were posted to the IRWMP web site and distributed at public meetings;
- TCC members made presentations and distributed informational materials via established newsletters and web sites;
- interested agencies and organizations were encouraged to sponsor forums to discuss the Bay Area IRWMP, distribute information, provide input, and to help build support for the Plan.

Other Targeted Outreach

The State Coastal Conservancy also led targeted outreach to encourage participation by resource and regulatory agencies, as well as watershed management interests and environmental and non-governmental organizations to ensure meaningful participation.

During the Plan implementation phase, the IRWMP CC will continue to actively solicit input from interested stakeholders and the public. Resource and regulatory agencies, NGOs and other interested stakeholders will be invited to participate in monthly meetings with the CC.

O Coordination

State and Federal agencies played an important role in the development of this Plan, and will continue to play a critical role as the priority projects are implemented.

Several State and Federal agencies were involved in the development of this Plan, including:

- | | |
|---|--|
| ▪ Bay Area Air Quality Management District | ▪ Caltrans |
| ▪ CALFED | ▪ Corps of Engineers |
| ▪ California Dept of Fish and Game | ▪ California Dept of Water Resources |
| ▪ California Dept of Forestry and Fire Protection | ▪ Metropolitan Transportation Commission |
| ▪ California Dept of Health Services | ▪ National Park Service |
| ▪ California Farm Bureau | ▪ NOAA National Marine Fisheries Service |
| ▪ California Resources Agency | ▪ Regional Water Quality Control Board |
| ▪ California State Lands Commission | ▪ State Water Resources Control Board |
| ▪ California State Parks | ▪ US Fish and Wildlife Service |
| ▪ California State Coastal Conservancy | ▪ US EPA |

State and Federal agencies are intimately involved with implementation of the region's priority projects. Many proposed IRWMP projects require permits from resource and regulatory agencies. Table ES-9 describes the discretionary actions that each resource and regulatory agency might have over various Bay Area IRWMP priority projects. These discretionary actions will directly impact the region's ability to effectively manage local water resources during the Plan implementation phase.

**Table ES-9: Summary of Local, State and Federal Discretionary Actions**

Agency	Permit/Review Required
Coastal Commission	Coastal Development Permits
SWRCB	Petition for Water Rights Transfer
San Francisco Bay RWQCB	General construction stormwater discharge permit Permit under Section 401 of the Clean Water Act
Bay Conservation and Development Commission (BCDC)	San Francisco Bay permit Suisun Marsh development permit
California Department of Fish and Game	Streambed Alteration Agreement under Fish and Game Code Section 1602
California Department of Health Services	Treatment plant operating permit
Caltrans	Encroachment Permit, if required
Army Corps of Engineers (Corps)	Permit under Section 404 of the Clean Water Act, if jurisdictional waters or wetlands affected Permit under Section 10 of the Rivers and Harbors Act, if jurisdictional waters affected
United States Fish and Wildlife Service (USFWS)	Approval of incidental take permit under Section 10 of the federal Endangered Species Act (ESA), if potential for effect on listed wildlife species Consultation under Section 7 of the federal ESA, if Corps permit required and potential for effect on listed species
National Marine Fisheries Service (NMFS)	Approval of incidental take permit under Section 10 (a)(1)(B) of the ESA, if potential for effect on listed marine life species
State Historic Preservation Office (SHPO)	Possible compliance with Section 106 of the National Historic Preservation Act, if Corps permit required and potential for effect on cultural resources