



**Proposition 84 Integrated Regional Water
Management Planning Grant (Round 1)**

San Francisco Bay Area IRWM Region

Planning Grant Application
Attachment 3. Work Plan (2 of 2)



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Management Planning Grant (Round 1)**

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Planning Grant Application
Work Plan

San Francisco Bay Area Integrated Regional Water Management Plan
Coordinating Committee
September 28, 2010

WORK PLAN

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Work Plan Content

This Work Plan provides a narrative description of the tasks that will be conducted to update the San Francisco Bay Area Integrated Regional Water Management Plan (Plan). The work will be carried out under the direction of the **Regional Water Management Group (RWMG)** for the Bay Area known as the **Coordinating Committee (CC)**. Please see the budget and schedule attachment for funding and scheduling information. The table below summarizes the **Program Preferences addressed in this Work Plan** and the existing IRWM Plan.

Program Preference	Addressed in Work Plan Section
Include regional projects or programs (CWC §10544)	<ul style="list-style-type: none"> • Task 3 identifies and develops regional Plan objectives which will be used for the identification or development of regional projects or programs in the Plan.
Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision, or other region or sub-region specifically identified by DWR	<ul style="list-style-type: none"> • Task 2 provides clarification and justification for the IRWM regional boundary which is coterminous with the San Francisco Bay Hydrologic Region and San Francisco Bay RWQCB boundary, which are the State boundaries for water management in the Bay Area. • Task 6 identifies integrated, regional and sub-regional projects for the IRWM Plan. • Salt/nutrient management planning in Task 5 will integrate efforts to address a variety of salt and nutrient sources.
Effectively resolve significant water-related conflicts within or between regions	<ul style="list-style-type: none"> • Regional objectives developed in Task 3 will be based on the results of the evaluation of conflicts and challenges identified in Task 3.1, therefore the objectives determined will address the resolution of significant water-related conflicts. These objectives will then be used to identify implementation projects that will effectively resolve conflicts. • The project prioritization process in Task 6 will include regional assessment criteria for projects to address significant water-related conflicts.
Contribute to the attainment of one or more of the objectives of the CALFED Bay-Delta Program: <ul style="list-style-type: none"> • Water Quality • Water Supply Reliability • Levee Protection • Ecosystem Restoration 	<ul style="list-style-type: none"> • The existing IRWM Plan includes CALFED Bay-Delta Program objectives. Regional objectives developed in Task 3 will include one or more objectives of the CALFED Bay-Delta Program. Bay Area agencies (e.g. Solano County Water Agency, Napa County Flood Control and Water Conservation District, Alameda County Water District, and Santa Clara Valley Water District) receive imported water from the Bay-Delta.

	<ul style="list-style-type: none"> The salt/nutrient management plan proposed in Task 5 meets the water quality objective of the Program and is also designed to facilitate the expansion of recycled water use, which will improve supply reliability.
<p>Address critical water supply or water quality needs of disadvantaged communities within the region</p>	<ul style="list-style-type: none"> The project review process developed in Task 6 includes DAC-related review criteria, which will help to identify projects that will address critical water supply or water quality needs of DACs in the region. In Task 14, SFEP/ABAG will conduct quarterly workshops and coordinate with DACs to identify potential project opportunities. The CC will also coordinate with local non-profit organization(s) to identify DACs and develop customized informational materials and hold workshops/community town hall meetings to conduct focused outreach, and provide assistance in project development for the DACs.
<p>Effectively integrate water management with land use planning</p>	<ul style="list-style-type: none"> In Task 13, SFEP/ABAG will conduct outreach to cities in the Bay Area to improve water management planning efforts between the Bay Area IRWM Coordinating Committee and land use planning efforts by land use agencies. Building on the work in Task 13.1, SFEP will form a Low Impact Design (LID) Leadership Group to develop green infrastructure strategies for implementation (Task 14.5).
<p>Address Statewide Priorities</p> <ul style="list-style-type: none"> Drought Preparedness Use and Reuse Water More Efficiently Climate Change Response Actions Expand Environmental Stewardship Practice Integrated Flood Management Protect Surface Water and Groundwater Quality Improve Tribal Water and Natural Resources Ensure Equitable Distribution of Benefits 	<ul style="list-style-type: none"> Task 6 project review criteria includes project prioritization criteria for projects to provide for long-term drought preparedness, promote water use efficiency and water reuse, incorporate climate change response strategies, and address critical water supply or water quality needs of DACs in the region. <p>Climate Change Response Actions</p> <ul style="list-style-type: none"> Task 2 reviews and consolidates regional climate change impact analyses Task 3 incorporates Climate Change Standards into Plan Objectives Task 4 describes how effects of climate change on the region are factored into the RMS considered Task 12 reviews local water plans to identify the climate change adaptation strategies

	<p>identified by local water agencies, and consolidates these strategies for incorporation into the Plan.</p> <ul style="list-style-type: none">• Task 14 will form an LID Leadership Group which will spearhead the planning and implementation of green infrastructure projects, which are an adaptive form of climate change response strategies endorsed by the EPA.• Task 16 describes actions that the Bay Area IRWM region will take to analyze the region’s vulnerability to climate change, and to develop adaptation/mitigation strategies for the region. <p>Expand Environmental Stewardship/Practice Integrated Flood Management</p> <ul style="list-style-type: none">• The workshops and outreach efforts conducted under Task 14 will expand environmental stewardship through educating stakeholders on the sustainable elements of green infrastructure, which benefits watershed health. The identification and development of potential LID projects from these workshops are part of the practice of integrated flood management. <p>Protect Surface Water and Groundwater Quality</p> <ul style="list-style-type: none">• Task 5 Perform Salt and Nutrient Management Planning involves development of a salt/nutrient management plan for Sonoma Valley groundwater sub-basin to identify salt and nutrient sources within the sub-basin to attain water quality objectives and beneficial uses.
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1. Governance

Guidelines Requirement(s)

- *Describe RWMG, list all entities responsible for Plan development, and identify members of the RWMG with statutory authority for water management.*
- *Describe governance structure.*
- *Describe how governance addresses and ensures various activities, such as public involvement processes.*
- *Describe decision-making process and how a decision is vetted with stakeholders and the RWMG.*
- *Describe the manner in which the governance structure ensures balanced access and opportunity for participation.*
- *Describe how governance would foster communication with the different functional groups within the RWMG, with project proponents, with general stakeholders, with neighboring RWMGs, government agencies, and the general public.*
- *Describe how governance helps ensure implementation of the Plan in the long-term.*
- *Explain how governance will help ensure coordination with neighboring IRWM efforts, State agencies and Federal agencies.*
- *Explain whether the governance structure shows that a collaborative process was used to establish Plan objectives.*
- *Explain how the governance structure facilitates interim changes and formal changes to the Plan.*
- *Describe process involved in updating or amending the IRWM Plan.*

This task involves developing a new *Governance* section in the Plan update, which will be built upon the Regional Water Management Group section in the existing Plan. In general, this section will describe the governance of the Bay Area IRWM region established for implementation of the Plan, and highlight how it is effective in meeting the above Guidelines requirements. As detailed in *Section A.1 Composition of the RWMG* in the Background Section, the Bay Area RWMG was started as a Technical Coordinating Committee in 2004 largely for the preparation of the Bay Area Integrated Regional Water Management Plan. Since the adoption of the Plan, the RWMG has been reconstituted as the Coordinating Committee (CC).

Specific actions that will be taken to develop the Governance section in the Plan include:

1.1 Develop governance section

As part of the Plan update, the description of the governance structure of the RWMG in the existing Plan will be updated to reflect the governance structure presented in the Bay Area's Region Acceptance Process (RAP) document (refer to **Figure 1** in the Background Section). The list of entities responsible for Plan development and members of the RWMG with statutory authority for water management will be reviewed for consistency with the RAP. The update will discuss how the current governance structure as documented in the RAP ensures balanced access and opportunity for participation, and how it fosters

communication with the different Functional Areas (Water Supply-Water Quality; Wastewater-Recycled Water; Flood Protection-Stormwater Management; and Watershed Management-Habitat Protection & Restoration) within the RWMG, project proponents, general stakeholders, neighboring RWMGs and government agencies. The Plan update will also include a detailed description of the decision-making process of the CC which is based on consensus-building (refer to **Figure 15** in the Background Section).

1.2 Document adaptive approach for future revisions to the Plan

The Bay Area IRWM Plan is envisioned to be a living document that will be updated to meet the changing needs, objectives and priorities of the San Francisco Bay Area region, and will serve as a region-wide tool for integrated and adaptive regional water resources management. The CC recognizes the need for an adaptive framework that will facilitate the process of making future updates to the Plan. The CC currently uses an adaptive approach for implementing the Plan – this process will be documented in the updated Plan, including the process established for future Plan updates.

Key Outcome(s)

- Comprehensive description of the Bay Area IRWMP RWMG's governance, roles and responsibilities and decision-making process.

Deliverable(s)

- Draft Governance section for review and comment by the Coordinating Committee and other interested parties
- Final Governance section for the Plan update

Schedule

The update of the Governance section will occur between February and April 2011, in conjunction with the update of the Region Description.

2. Region Description

Guidelines Requirement(s)

- *Describe watersheds/water system.*
- *Describe internal boundaries.*
- *Describe water supply and demand projections for at least a 20-year planning horizon.*
- *Describe the current and future (or proposed) water quality conditions. Describe any protection and improvement of water quality within the area of the IRWM Plan. Describe any Basin Plans, Watershed Management Initiatives, and water quality goals and objectives for watersheds in the region. Describe any projects or examples within the region matching water quality to water use.*
- *Explain regional IRWM boundary.*
- *Identify neighboring or overlapping IRWM regions.*
- *Describe likely climate change impacts on the region.*

As an approved RAP region, the San Francisco Bay Area IRWM Region boundary is coincident with the San Francisco Bay hydrologic region boundary, a watershed-based boundary used by both DWR and SWRCB/RWQCB for planning purposes. The delineation of the IRWM region based on watershed boundaries encourages development of integrated water management programs or projects within the hydrologic region.

This task involves updating the Region Description section and maps in the existing IRWM Plan for all the above items (refer to *Section B Region Description* in the Background Section).

Specific actions that will be taken to update the Region Description section in the Plan include:

2.1 Clarify Regional Boundary and Governance

Update the definition and explanation of the IRWM region boundary to be consistent with the approved RAP region and describe the process involved in determining and justifying the boundary. Update description on coordination with neighboring and IRWM regions to resolve overlapping areas or gaps between regions.

2.2 Update Region Description

The update of the Region Description includes:

- Update descriptions of watersheds and water systems.
- Update description of internal boundaries.
- Update the water supply and demand projections for at least a 20-year planning horizon, in the context of climate change. The projections will be primarily based on the Urban Water Management Plan Updates prepared by various urban water suppliers in the Bay Area, estimated to be completed in mid-2011.

- Update of socio-economic descriptions, including listing and describing disadvantaged communities and Native American tribal communities in the Bay Area, and their critical water supply or water quality needs.
- Review inventory of Basin Plans and water management planning studies in the Bay Area completed since Plan adoption, to gather information to update water supply projections and water quality descriptions in the existing Plan. Update the list of impaired water bodies and TMDLs under development. Identify any Watershed Management Initiatives.
- Identify data deficiencies and explain how these data gaps may be minimized.
- Update description of major water related objectives and conflicts within the Bay Area.

2.3 Update and develop maps in Region Description section

Update relevant maps in the existing IRWM Plan (e.g. maps showing internal boundaries) and develop new maps to serve as communication tools for the sub-regions, DWR, and stakeholders (including maps showing census block-level locations of DACs, and Native American tribal lands), and to illustrate plan performance assessment.

2.4 Describe sub-regions and the sub-regional process

Describe and illustrate with maps, the sub-regions, and document the process involved in delineating the sub-regions, and how the sub-regions function and contribute to the IRWM outreach process.

2.5 Review and consolidate regional climate change impact analyses

Review relevant studies from DWR's IRWM Climate Change Document Clearinghouse, as well as Bay Area regional and local climate change studies to consolidate and synthesize information on predicted climate change impacts on water resources in the Bay Area. Describe what the prevailing climate change impact means to future water supply within the region. These descriptions will be updated and become more region-specific as vulnerability analysis tools become available.

2.6 Consolidate regional data and format data to State standards

Establish data management protocols to ensure that formatting protocols for GIS spatial data are consistent with State standards, document sources of information and technical analysis methods used to develop information for the Plan update, and develop procedures for maintaining and distributing updated water management information.

Key Outcome(s)

- Comprehensive description of the Bay Area IRWM region including its jurisdictional and physiographic boundaries, water supply/demand and quality information, water infrastructure, land use information, environmental resources, demographic characteristics, and areas susceptible to sea level rise as a result of climate change.

Deliverable(s)

- Draft Region Description and regional maps for review and comment by Coordinating Committee and other interested parties.
- Final Region Description and regional maps for the Plan update
- GIS data package

Schedule

The majority of updates for the Region Description will occur between February 2011 and December 2011, including the consolidation of climate change analysis. Formatting GIS data according to state standards will follow after all data has been compiled.

3. Objectives

Guidelines Requirement(s)

- *Determine IRWM Plan objectives.*
- *Describe the collaborative process and tools used to establish objectives.*
- *Describe metric the IRWM region can use to measure if objectives are being met as the IRWM Plan is implemented.*
- *Explain prioritization of Plan objectives.*

The overall vision of the Bay Area IRWM Plan is “Working together to enhance sustainable water resources management to support a high quality of life in the Bay Area”. Common interests, regional goals and objectives to meet this vision have been identified by the Coordinating Committee and are described in *Table 7 Common Interests, Regional Goals and Objectives in the Bay Area IRWM Region* in the Background Section. Through the IRWM planning process, these 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 IRWM Plan development. In addition, regional goals and objectives in the existing Plan were designed to address both Proposition 50 program preferences and Statewide Priorities. As part of the Plan update, the Coordinating Committee will review the status of water resources management conflicts and challenges for the region to ensure that they are up to date with the latest State and regional plans, review and update goals and objectives for the region, describe the process for updating the objectives, develop measurable indicators for objectives, and establish a framework for prioritizing objectives.

Specific actions that will be taken to update the Objectives section in the Plan include:

Determining Objectives

3.1 Review and update Bay Area water resources management conflicts and challenges

Regional water resources management conflicts and challenges described in the existing Plan will be reviewed and updated based on input from the Coordinating Committee (CC) and the four functional areas (Water Supply-Water Quality, Wastewater-Recycled Water, Flood Protection-Stormwater Management and Watershed Management-Habitat Protection and Restoration). The update will consider issues and priorities from the California Water Plan Update 2009, which include:

Water Quality Issues & Priorities

- Decline in the quantity and quality of the biological resources of the Bay.
- Continual degradation of water quality in many water bodies due to nonpoint source pollution and cumulative impacts of multiple point sources such as urban runoff.

- Impacts on aquatic and riparian habitats, sediment transfer and hydrology in channelized, culverted, or geomorphically altered creeks.
- Variable quality of Delta water affects quality of drinking water supply.
- Groundwater supplies still face threats due to contamination from spills, leaks and discharges.
- Water quality impacts in rural areas of the region from grazing and agriculture, confined animal facilities, onsite sewage systems, and land conversions.
- Impaired coastal watersheds due to impacts from sedimentation and habitat degradation.

Surface Water Pollution Issues & Priorities

- Toxic pollutants (e.g. mercury, PCBs, chlorinated pesticides) in surface water from past human activities such as mining, manufacturing, distribution, and use of agricultural pesticides and industrial products.
- Invasive species in the San Francisco Bay.
- San Francisco Bay Estuary, Water Diversions and Delta Issues – achieving water quality objectives and protecting the beneficial uses of the San Francisco Bay Estuary system depend on freshwater outflow from the Delta.
- Runoff pollution and hydromodification in urban watersheds.
- Wetland Restoration.

Groundwater Pollution Issues & Priorities

- Portions of groundwater basins that could serve as sources of drinking water have been impacted by drought and decades of groundwater pollution, over-pumping.
- Increased aquifer protection and groundwater management if the reliance on groundwater storage of potable water becomes greater.

Future Water Quality Priorities and Actions

- Total Maximum Daily Load (TMDL) – Development and implementation of TMDLs for pollutants causing water quality impairments, which would contribute to meeting goals of the California Water Plan through improved watershed and habitat management actions.
- Using the IRWM plan process to link land use planning with water system and water quality planning to develop low impact development strategies for managing urban runoff.
- Integrated Regional Water Management Planning
- Expanded Groundwater Storage – greater reliance on groundwater basins for offline storage of potable water in response to drought cycles and the anticipated effects of climate change.

- Flood management – prevention of flooding in urban areas can help to reduce the amount of contaminants that are picked up by flood waters and discharged into creeks and the Bay.

3.2 Develop measurable Plan Objectives

Based on review of the conflicts and changes, overarching regional Plan objectives will be developed. The functional areas (Water Supply-Water Quality; Wastewater-Recycled Water; Flood Protection-Stormwater Management; Watershed Management-Habitat Protection and Restoration) will provide input to the Coordinating Committee (CC) to identify measurable regional Plan objectives that reflect current and future identified priorities of the Bay Area region (e.g. increasing climate change resiliency through the region, sustainability, etc.). A public stakeholder meeting will be conducted to present the updated regional Plan objectives to stakeholders for review and adoption into the Plan update. Recent efforts by the Bay Institute, San Francisco Estuary Institute, San Francisco Estuary Partnership, and the North Bay Watershed Association on performance measures and indicators will contribute toward developing measurable objectives.

3.3 Incorporate Climate Change Standard Requirements into Plan Objectives

The following climate change standard requirements will be considered and incorporated into the Plan update as part of the review and update of the Plan objectives. They include:

- Adapting to climate change: address ways to adapt to changes in the amount, intensity, timing, quality and variability of runoff and recharge; the effects of sea level rise on water supply conditions and identification of suitable adaptation measures.
- Reducing emissions: reducing energy consumption, GHG emissions, strategies adopted by CARB in the AB 32 Scoping Plan, options for carbon sequestration.

3.4 Review objectives for consistency with other plans

Review and update objectives to ensure that they are consistent with overarching planning goals outlined in following planning documents: the Basin Plan, 20x20x20 water efficiency goals, and requirements of CWC §10540(c). Review Plan objectives against Statewide Priorities and Proposition 84 program preferences and explain how the objectives are in line with the priorities and program preferences.

Measuring Objectives

3.5 Develop metric to measure objectives

Working through the Coordinating Committee (CC) and its subcommittees, develop metrics for objectives that can be used by the CC to determine the degree to which the objective is being met with Plan implementation. In the existing Plan, objectives and performance monitoring are set at the functional area level and project level. As part of the Plan update, the CC will evaluate the need to develop higher level overall

effectiveness indicators that could serve as a baseline benchmark to assess how effective the Plan has been.

Prioritizing Plan Objectives

3.6 Develop prioritization for objectives

Currently, objectives in the IRWM Plan are not prioritized. The Coordinating Committee (CC), together with support from the relevant subcommittee(s), will develop a framework for prioritizing objectives.

Describing the Process

3.7 Illustrate the collaborative process and tools used to establish objectives

This task includes describing the process of reviewing and establishing objectives, the types of information considered in the development of objectives, people involved in the process, and how the final decision was made and accepted by the region. A review of the objectives will be led by the CC and the functional areas. A public stakeholder meeting will be conducted under Task 3.2 in order to present the technical analyses and guidance documents used in the formulation of updated objectives to stakeholders, and will also gather public input and comments on the objectives. The final decision establishing the objectives will be made in accordance with the Bay Area IRWM region's decision-making framework noted in Section D.2.2 IRWM Plan Decision-making Process in the Background Section.

Key Outcome(s)

- Updated regional planning objectives for the Bay Area IRWM region that has support of the Coordinating Committee, Functional Areas, project proponents and stakeholders.

Deliverable(s)

- Draft list of updated Plan objectives for review and comment by the Coordinating Committee and other interested stakeholders
- Public workshop for stakeholders to review and ratify draft updated Plan objectives
- Draft Objectives section for review and comment by the Coordinating Committee and other interested parties
- Final Objectives section for the Plan update

Schedule

The development of regional Plan objectives and update of Objectives section will occur between February 2011 and December 2011, so that the updated Plan objectives may be applied to the Project Review Process for the second round of Implementation grant applications.

4. Resource Management Strategies

Guidelines Requirement(s)

- *Document the process used to consider RMS in the IRWM Plan.*
- *Describe which RMS were considered (include all RMS listed in Table 3 of the Guidelines).*
- *Describe which RMS of those considered would be implemented to achieve the objectives of the IRWM Plan.*
- *Demonstrate how the effects of climate change on the region are factored into its resource management strategies.*

The IRWM Plan currently considers the following Water Management Strategies (refer to Section I *Employment of Integrated Resource Management Strategies* in the Background Section):

Water Management Strategies Considered	
<ul style="list-style-type: none"> ▪ Ecosystem Restoration ▪ Environmental 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 ▪ Conjunctive Use ▪ Desalination 	<ul style="list-style-type: none"> ▪ Imported Water ▪ Land Use Planning ▪ Non-point source (NPS) Pollution Control ▪ Surface Storage ▪ Watershed Planning ▪ Water and Wastewater Treatment ▪ Water Transfers ▪ Interties ▪ Infrastructure Reliability ▪ Regional Cooperation ▪ Education and Outreach ▪ Monitoring and Modeling ▪ Groundwater Banking

These strategies will be revised and refined as part of the Plan update, to ensure that all RMS required by Proposition 84 are incorporated in the updated Plan.

This task involves updating the *Water Management Strategies* section in the existing Plan to a *Resources Management Strategies* section. Specific actions that will be taken to update the Resource Management Strategies section in the Plan include:

4.1 Document process used to consider RMS in Plan Update

This task involves documenting the process (i.e. technical analysis, stakeholder input, etc.) for deciding how applicable each Resource Management Strategy is in meeting IRWM Plan objectives, employing the Coordinating Committee's decision-making framework. Working through the Coordinating Committee (CC) and its subcommittees, the list of

Water Management Strategies (WMS) in the existing IRWM Plan will be evaluated against all relevant Resource Management Strategies (RMS) required by Proposition 84 (Table 3 in the Guidelines). The Plan update will list the RMS considered, and for each strategy considered, explain the reasoning behind the decision.

4.2 Describe how the effects of climate change on the region are factored into the RMS considered

The Plan update will explain how the RMS identified can address the anticipated climate change impacts for the region, based on consolidated findings from climate change impact studies/analyses prepared for the Bay Area region. Key RMS identified in San Francisco Bay regional workshops (California Water Plan Update 2009, Volume 3, Page SF-40) to address climate change impacts on the region will also be reviewed and considered in the updated Plan. The CC will identify and consider “No Regrets” adaptation strategies (listed in Task 16.4) for near-term implementation, and consider longer-term adaptation strategies for implementation once vulnerability assessments and tools become available to aid with region-specific analysis.

4.3 Review other plan sections for consistency with considered RMS

This task involves reviewing the *Governance*, *Region Description*, and *Objectives* sections in the Plan update to ensure that they support and are consistent with the decisions outlined in the *RMS* section.

Key Outcome(s)

- Identification of Resource Management Strategies that will help achieve the Objectives of the Bay Area IRWM Plan.

Deliverable(s)

- Draft Resource Management Strategies section for review and comment by the Coordinating Committee and other interested parties
- Final Resource Management Strategies section for the Plan update

Schedule

The update of the Resource Management Strategies section will occur between July and September 2011, based on input from Task 3 – the development of Plan objectives. This schedule will enable for the projects to be submitted for Round 2 Implementation grant applications to include consideration of the updated RMS.

5. Integration or Supporting Activities

Guidelines Requirement(s)

- *Demonstrate stakeholder/institutional integration; resource integration and project implementation integration.*

The existing Plan contains an *Integration* section (refer to Section I *Employment of Integrated Resource Management Strategies* in the Background Section) which was developed to document the integration of the Functional Area Documents into the IRWM Plan. The Integration section in the existing IRWM Plan describes how water management strategies identified by each of the four functional areas were integrated into regional strategies, and also outlines ways in which these water management strategies can be augmented through integration of projects.

In the Plan update, this section of the Plan will be updated to describe additional planning efforts for the region that would contribute to the overall improvement of the Plan.

5.1 Perform Salt and Nutrient Management Planning

Water recycling is a key water management strategy in the San Francisco Bay Area, and has been adopted by many agencies as a means of increasing water supply reliability through creation of a drought-proof supply that can offset use of potable supplies for non-potable demands, and also reducing dependence on imported water supplies. However, as noted in the existing IRWM Plan, recycled water projects can include potential water quality impacts from nutrient and salinity loading and emerging contaminants.

The State Water Resources Control Board (SWRCB) issued their Recycled Water Policy on February 3, 2009 encouraging every region in California to develop a salt/nutrient management plan by 2014. The intent of the policy is for every groundwater basin/sub-basin in California to have a consistent salt/nutrient management plan. The Plans are also intended to help streamline permitting of new recycled water projects while ensuring compliance with water quality objectives and protection of beneficial uses.

Salt and nutrient management planning addresses several DWR Program Preferences. The development of regional or sub-regional salt and nutrient management plans rather than imposing requirements solely on individual recycled water projects, effectively integrates water management programs within the region. Salt/Nutrient management plans also contribute to the attainment of the Water Quality objective of the CALFED Bay-Delta Program and Statewide Priority of Protecting Surface Water and Groundwater Quality, through the development of implementation procedures for achieving or ensuring attainment of water quality objectives and beneficial uses. Expanded recycled water use, which will be facilitated by salt and nutrient management planning, will

contribute to the attainment of CALFED Bay-Delta program objective of Water Supply Reliability for Bay Area agencies that receive imported water from the Bay-Delta. Expanded recycled water use also contributes drought preparedness, water reuse, and climate change response Statewide Priorities.

The Sonoma Valley County Sanitation District (SVCS D) has begun the process to prepare a salt/nutrient management plan for the Sonoma Valley Groundwater Sub-basin. The Coordinating Committee (CC) recognizes that the Sonoma Valley Salt/Nutrient Management Plan will help facilitate stakeholder/institutional integration through the cooperative and collaborative development process, which will involve water and wastewater agencies, and other salt and nutrient stakeholders. In addition, development of the Salt/Nutrient Management Plan will also contribute to the integration of resources, through the sharing of information such as project scoping, project outcomes and lessons learned with other agencies in the Bay Area.

The Salt/Nutrient Management Plan will be developed in coordination and collaboration with the existing stakeholder groups assembled for the Sonoma Valley Groundwater Management Program (GMP). These stakeholder groups include a Basin Advisory Panel (BAP) and Technical Advisory Committee (TAC), which are comprised of a wide array of local interests, including representatives from water purveyors, agriculture, dairies, local government, private business enterprises, environmental groups, and rural well owners, and have lead the development and ongoing implementation of the Sonoma Valley GMP. As one of the key strategies identified by the BAP and TAC to sustain groundwater resources in Sonoma Valley is the increased use of recycled water to offset groundwater pumping, these stakeholder groups are well-suited to providing input on the Plan's development. Other integral components of the Sonoma Valley GMP which are relevant to requirements of the Recycled Water Policy include a robust groundwater monitoring program and the protection of groundwater quality.

In developing the Plan, the District will incorporate a technical analysis to identify salt and nutrient sources within the sub-basin, analyze salt and nitrogen loading, summarize relevant groundwater quality and monitoring data, and conduct an anti-degradation analysis.

Results and outcomes from the Sonoma Valley Salt/Nutrient Management Plan will be incorporated into the Bay Area IRWM Plan update.

Specific activities in this task include:

5.1.1 Identify and Collaborate with Stakeholders

- a. As required by the Recycled Water Policy, the SVCS D will develop the Plan through a collaborative process which engages relevant stakeholders in the groundwater basin. The BAP and TAC for the Sonoma Valley GMP have been identified as the primary stakeholder group and will also be used to help identify other local stakeholders that

may have interest in the Salt and Nutrient planning process. (Project coordination with stakeholders will be an important element throughout the processes, to ensure consistency throughout the project).

- b. Facilitate workshops with stakeholders and other project sponsors to establish criteria and constraints and define project goals and objectives.
- c. Much of the data considered necessary for developing the Plan has already been compiled as part of a recent U.S. Geological Survey study of the Sonoma Valley Groundwater Basin and ongoing efforts associated with the Sonoma Valley GMP. However, additional outreach will be performed through the stakeholder group to identify additional data sources which may be needed to fill data gaps.

Deliverable(s)

- Coordinate meeting attendance with the Sonoma Valley community and other stakeholders including state and local agencies, business, industry, and related organizations
- Prepare agendas and coordinate meetings
- Prepare and disseminate meeting notes to participants and other interested parties
- Prepare required status reports for the Bay Area IRWM Plan update reporting

5.1.2 Develop Groundwater Monitoring Plan

- a. Develop a basin wide monitoring plan that includes an appropriate network of monitoring locations.
- b. Existing available groundwater quality data will be evaluated to determine whether the concentrations of salt, nutrients and other potential constituents of concern are consistent with applicable water quality objectives.
- c. Consistent with Recycled Water Policy requirements, the monitoring plan will include provisions for conducting annual monitoring of Emerging Constituents/ Constituents of Emerging Concern (e.g., endocrine disrupters, personal care products or pharmaceuticals) (CECs) consistent with recommendations by CDPH and consistent with any actions by the State Water Board.

Deliverable(s):

- Develop monitoring plan, summarize existing groundwater data and determine if data is consistent with water quality objectives and summarize findings

5.1.3 Conduct Potential Source Identification

- a. The potential source(s) of any salt and nutrients identified based on the evaluation of groundwater quality data will be assessed.

Deliverable(s):

- Identify sources of salt and nutrient sources within Sonoma Valley and summarize findings source control measures identified as necessary to protect groundwater quality during the Plan development process

5.1.4 Assess assimilative capacity, loading and fate and transport of salt and nutrients

- a. The assimilative capacity of the basin and loading estimates of salts and nutrients will be assessed by evaluating groundwater quality data in conjunction with water budget estimates for the basin developed using the existing groundwater flow model of the basin.
- b. The groundwater flow model will also be utilized to determine the fate and transport mechanisms for how salt and nutrients move through the basin.

Deliverable(s):

- Analyze salt and nutrients loadings in Sonoma Valley and summarize results

5.1.5 Identify recycled water and stormwater recharge goals and objectives

- a. Identify goals and objectives for water recycling and storm water recharge. Goals and objectives developed as part of the Sonoma Valley GMP for increasing the use of recycled water and enhancing groundwater recharge using storm water will be updated and incorporated into the Plan to address any specific findings or issues identified in Tasks 2 through 4, above.

Deliverable(s):

- Produce goals and objective that will assist the District and other agencies in Sonoma Valley aid in the implementation of recycled water and storm water recharge projects in Sonoma Valley

5.1.6 Perform Anti-Degradation Analysis

- a. Perform anti-degradation analysis indicating the projects included within the plan will, collectively, satisfy the requirements of Resolution No. 68-16.

Deliverable(s):

- Summarize findings of the anti-degradation analysis and determine if the projects planned will satisfy the requirements of Resolution 68-16

5.1.7 Identify implementation measures

- a. Identify implementation measures to manage salt and nutrient loading in the basin on a sustainable basis. The implementation plan will list the phases, activities and timeframes involved for implementation.

Deliverable(s):

- Prepare a report on sustainable practices that will reduce or minimize the impacts of salt and nutrients on groundwater in Sonoma Valley

5.1.8 Integrate findings into Bay Area IRWM Plan update

- a. Identify key steps in the processes to prepare a salt and nutrient management plan. Summarize key steps in a template format that other Bay Area communities could use to prepare a Salt and Nutrient Management Plan. Meet with Bay Area IRWM Coordinating Committee and incorporate findings into the Bay Area IRWM Plan update.

Deliverable(s):

- Produce a report documenting the processes needed to begin and complete a Salt and Nutrient Management Plan that can be used by other Bay Area agencies
- Integrate results and outcomes into the Bay Area IRWM Plan update
- Present results and outcomes at the Coordinating Committee meeting

Key Outcome(s)

- Salt/Nutrient Management Plan for the Sonoma Valley Groundwater Subbasin and documentation of the processes in preparing salt/nutrient management plans, which can be used by other Bay Area agencies.

Schedule

The development of the Sonoma Valley Groundwater Subbasin Salt/Nutrient Management Plan will occur between January 2011 and mid-October 2012, and results from the planning study will be incorporated into the draft Plan update.

6. Project Review Process

Guidelines Requirement(s)

- *Describe project review process. Description must include procedures for submitting a project to the IRWM Plan, procedures for review of projects to implement the IRWM Plan; and procedure for communicating the list(s) of selected projects*

This task involves development of the *Project Review Process* section of the IRWM Plan. As described in Section G *Process used to Determine Criteria for Developing Regional Priorities* in the Background Section the Coordinating Committee (CC) developed a project review process which emphasizes integrated, multi-benefit, regional projects. The project review process was applied to identify projects for Proposition 50 Round 2 funding and Supplemental Funding. The key components of the process are to establish a consistent priority ranking system for all Bay Area region projects, and to identify projects that meet regional priorities and objectives. In response to the Proposition 84 guidelines, the CC recently added new criteria to its project review process to encourage development of projects that would provide the following benefits:

- Address critical water supply or water quality needs of DACs within the region
- Provide long-term drought preparedness
- Promote water use efficiency and water reuse
- Incorporate climate change response strategies

Sub-regional Approach and Local Project Selection Process

In addition, because there are a limited number of projects that can be integrated through the nine-county Bay Area, the CC has approved organizing the Bay Area into four sub-regions to facilitate local project prioritization, stakeholder involvement and improved project integration. Sub-regional planning also enables smaller agencies, non-governmental organizations and other groups to more effectively participate in the IRWM process. In parallel, the CC has approved a *Local Project Selection Process* for identifying projects at the sub-region level and adding projects to the Plan. The goal is to develop the most competitive set of projects that is consistent with the IRWM Plan, and will create an incentive for more integrated projects at the sub-regional level.

The sub-regions were first configured using DWR's detailed analysis units (essentially watersheds). The final sub-region boundaries are coterminous with watershed boundaries with one exception – Alameda Creek. In this case, the County boundary was used between Alameda and Santa Clara. The CC will strive to assure that the Alameda watershed projects will be addressed holistically. The four sub-regions are as follows:

- North Bay – Marin, Napa, Solano and Sonoma counties
- East Bay – Alameda and Contra Costa counties
- South Bay – Santa Clara county
- West Bay – San Francisco and San Mateo counties

The CC has identified a lead representative for each sub-region, whose responsibilities are to convene the various interested parties in each county – water supply, wastewater, floodplain, stormwater, watershed and habitat parties (and EJ representatives if applicable) and other project proponents and identify the best project or set of projects to propose for grant funding. Each sub-region is in the process of developing procedures for this process.

The development of the *Project Review Process* section will include the following:

Process Components: (1) Procedures for submitting a project for inclusion in the IRWM Plan

6.1 Document process for submitting a project for inclusion in the IRWM Plan

Regional project solicitations during the interim period between IRWM Plan updates have been conducted via the Functional Areas and regional organizations (e.g. BAFPAA, BAWAC, BACWA and SFEP), and also through updates and announcements during Coordinating Committee meetings and through the Bay Area IRWM Plan website. Currently, projects may be submitted by completing a project template that is available on the website. Projects submitted for inclusion in the Plan are reviewed based on the assessment criteria in the Plan, and are then added as an appendix to the Plan. As part of the Plan update, this process will be expanded further and will provide clear documentation on the steps needed to submit a project for inclusion in the IRWM Plan and the tools available to assist project proponents with their project submittal.

Process Components: (2) Procedures for review of projects considered for inclusion in the IRWM Plan

6.2 Develop and implement review process for projects considered for inclusion into the IRWM Plan

An updated project review process will be developed and established, based on the regional priorities and objectives developed for the Plan update, with the purpose of identifying projects to meet Plan objectives and help implement the Plan. It is envisioned that the set of regional objectives will serve as the baseline screening for projects to be included in the IRWM Plan.

The updated project review process will incorporate review factors as described in the Plan Standards and listed below to review all projects selected for inclusion in the Plan update:

- A. How the project contributes to the IRWM objectives
- B. How the project is related to resource management strategies
- C. Technical feasibility of the project
- D. Specific benefits to critical DAC water issues
- E. Specific benefits to critical water issues for Native American tribal communities
- F. Environmental Justice Considerations
- G. Project Costs and Financing
- H. Economic Feasibility

- I. Project Status
- J. Strategic considerations for IRWM Plan Implementation
- K. Purposefully implementing projects with multi-benefits
- L. Contribution of the project in adapting to the effects of climate change
- M. Contribution of the project in reducing GHG emissions as compared to project alternatives

6.3 Support sub-regional project review process

This task includes providing support and working collaboratively with each sub-region to strengthen the process for identification of local projects and to support local project integration opportunities.

6.4 Add new regional projects into the Plan

The project list for regional projects will be updated. The CC and subcommittees will work with project proponents to develop necessary documentation for regional projects to be added into the Plan.

6.5 Add new sub-regional projects into the Plan

As part of the Plan update, sub-regional project lists will be updated and projects added to the Plan. This task includes adding projects from the Tomales Bay Integrated Coastal Water Management Plan (ICWP) and other previously separate IRWM planning efforts, as appropriate, and includes coordinating with local project proponents in all sub-regions to develop necessary documentation for each project.

6.6 Update prioritization of implementation projects

This task involves considering a prioritization of projects selected for inclusion in the Plan update, based on the regional assessment criteria (which would consist of updated regional priorities, Statewide priorities and other overarching goals from other Planning documents as stated in the Guidelines).

Process Components: (3) Procedures for communicating the list(s) of selected projects

6.7 Develop and implement procedure for communicating the list of selected projects

This task involves developing a procedure for communicating the updated prioritized list of projects to stakeholders, which will include the following components:

- The updated project list will be included in the updated Plan, and made available on the Bay Area IRWM website, and via email distribution to the Bay Area IRWM email list-serv subscribers.
- The updated project list will be discussed and ratified at the Coordinating Committee (CC) meetings as new projects are added to the list and/or project information in the list is changed.

Key Outcome(s)

- Comprehensive description of the Bay Area IRWM Plan project review processes, and updated project review criteria.
- Review and revision of IRWM Plan implementation projects in accordance with revised project review criteria and process.

Deliverable(s)

- Draft Project Review Process section for review and comment by the Coordinating Committee and other interested parties
- Final Project Review Process section for the Plan update
- Actively Maintained Project Lists

Schedule

The development of the Project Review Process section will occur between January and December 2011, and will include reviewing projects for the Prop 1E Stormwater Flood Management Grant application between February and April 2011, and reviewing projects for Prop 84 Round 2 Implementation Grant application between September and December 2011.

7. Impacts and Benefits

Guidelines Requirement(s)

- *Include a screening level discussion of the potential impacts and benefits of plan implementation*
- *Clearly state when more detailed project-specific impact and benefit analyses will occur*

This task involves updating the *Impacts and Benefits* section of the IRWM Plan. The existing Plan contains a screening-level discussion of the potential impacts and benefits of implementation of the Bay Area IRWM Plan, first at the water management strategy level and then at project-specific level (refer to Table 13 *Typical Benefits and Impacts by Water Management Strategy* in the Background Section). The impacts and benefits that are described in the existing IRWM Plan are based on implementation of the water management strategies considered in the Plan. The updated discussion of potential impacts and benefits of Plan implementation will include both impacts and benefits within the IRWM region; between regions; and those directly affecting DAC, EJ related concerns, and Native American tribal communities. In addition, as part of the development of *Resource Management Strategies* section, the *Impacts and Benefits* section in the existing Plan will be updated to ensure that all impacts and benefits associated with the RMS considered in the Plan update are included.

The update of the *Impacts and Benefits* section will include the following:

7.1 Review existing monitoring programs as an indicator of impacts and benefits

Work under this task will identify and review relevant monitoring programs in the Bay Area to determine the long-term and high level impacts and benefits associated with project implementation. Specific impacts and benefits from individual projects will be measured and tracked on a project-by-project basis, consistent with each project's monitoring and reporting plan. Each project sponsor is responsible for project-specific impact analyses as required by CEQA and/or NEPA. Information from project-specific CEQA/NEPA analyses will be incorporated into the IRWM Plan if available.

7.2 Review and update screening-level discussion of impacts and benefits

Based on information derived from Task 7.1, and a general understanding of the potential benefits and impacts to be gained by implementing the projects in the Plan based on project information submitted by project proponents, the Coordinating Committee with support from the relevant subcommittee(s) will develop a screening level discussion of the potential impacts and benefits of plan implementation to stakeholders. This task will also involve reviewing the presentation of impacts and benefits in the existing Plan and creating a tabular format to manage information and organize the impacts and benefits in such a way that will reflect the emphases of the Bay Area IRWM region (e.g. by regional/local benefits, RMS, or objectives).

7.3 Identify and analyze direct impacts and benefits affecting DAC, EJ concerns, and Native American tribal communities

Local stakeholders and environmental justice organizations that are actively involved in working with DACs in the Bay Area watershed will be consulted to identify and analyze potential direct impacts or benefits to DAC/EJ communities from Plan implementation. This task will leverage on the location analysis of DACs conducted in Task 2.3 *Update and develop new maps for Region Description section* to analyze impacts and benefits of projects located in or within the vicinity of disadvantaged communities and will also incorporate the outcomes of Task 14.6 *Increase Outreach to DACs*, to include additional impacts and benefits into the IRWM Plan update. Project-specific DAC/EJ impacts analysis from CEQA/NEPA documents will be incorporated if available.

7.4 Develop benchmark for assessing impacts and benefits for Plan performance evaluation

This task includes working with project proponents to clearly describe in the Plan update when a more detailed project-specific impact and benefit analyses will occur, and that the more detailed analysis will be conducted prior to any implementation activity.

Key Outcome(s)

- Identification of potential high level impacts and benefits associated with Plan implementation and the timeline for project-specific impact and benefit analysis with project implementation.

Deliverable(s)

- Draft table conveying the potential impacts and benefits for review and comment by the Coordinating Committee and other interested parties
- Draft Impacts and Benefits section, including table conveying the potential impacts and benefits for review and comment by the Coordinating Committee and other interested parties
- Final Impacts and Benefits section for the Plan update

Schedule

The update of the impacts and Benefits section will occur between January and June 2012, after the project review process and update of the project list is completed.

8. Plan Performance and Monitoring

Guidelines Requirement(s)

- *Explain whom or what group within the RWMG will be responsible for IRWM implementation evaluation.*
- *List the frequency of evaluating the RWMG's performance at implementing projects in the IRWM Plan.*
- *Explain how IRWM implementation will be tracked with a Data Management System (DMS) and who will be responsible for maintaining the DMS.*
- *Discuss how findings or "lessons learned" from project-specific monitoring efforts will be used to improve the RWMG's ability to implement future projects in the IRWM Plan.*
- *Identify who has the primary responsibility for development of the project-specific monitoring plans and who is responsible for project-specific monitoring activities.*
- *Specify the stage of project development that a project-specific monitoring plan will be prepared.*
- *Provide an explanation of typically required contents of a project-specific monitoring plan including:*
 - *Clearly and concisely (in a table format) describe what is being monitored for each project. Examples include monitoring for water quality, water depth, flood frequency, and effects the project may have on habitat or particular species (before and after construction).*
 - *Measures to remedy or react to problems encountered during monitoring. An example would be to coordinate with the Department of Fish and Game if a species or its habitat is adversely impacted during construction or after implementation of a project.*
 - *Location of monitoring*
 - *Monitoring frequency*
 - *Monitoring protocols/methodologies, including who will perform the monitoring*
 - *DMS or procedures to keep track of what is monitored. Each project's monitoring plan will also need to address how the data collected will be or can be incorporated into Statewide databases. Note that standards and guidance related to the integration of data into Statewide databases is included in Data Management Standard.*
 - *Procedures to ensure the monitoring schedule is maintained and that adequate resources (funding) are available to maintain monitoring of the project throughout the scheduled monitoring timeframe*

This task involves updating the *Plan Performance* section of the IRWM Plan to a *Plan Performance and Monitoring* section. As described in Section H.2 *Plan Performance Assessment* in the Background Section, Bay Area IRWM Plan performance is assessed at three levels: the project level, the Functional Area level, and the Plan level. IRWM Plan assessment activities at the project and Functional Area levels are conducted annually, and periodically by the Coordinating Committee (CC).

The update of the *Plan Performance and Monitoring* section will include the following:

8.1 Review and update institutional structure for IRWM implementation evaluation

This task involves reviewing the effectiveness of the institutional structure in the existing IRWM Plan in terms of conducting IRWM Plan assessment, including designation of responsibilities and responsible parties, the frequency of assessment at various levels (Plan, functional area and project), and the frequency of evaluating the CC's performance at implementing projects in the IRWM Plan.

8.2 Develop policies and procedures that promote adaptive management

This task includes outlining a process and tools for implementing an adaptive management approach for the Bay Area IRWM Plan, which will include the ongoing incorporation of statewide and local data at a variety of spatial and temporal scales, and an opportunity to continually refine Plan content, objectives and strategies as more effects of climate change manifest, new vulnerability assessments or tools become available. One of the tools could include developing a template or guidance document for an adaptive management approach to integrated regional water management planning that can be utilized by all stakeholders.

8.3 Explain how IRWM implementation will be tracked with a Data Management System (DMS) and who will be responsible for maintaining the DMS

As part of this process, the CC will request information from project proponents to assess IRWM Plan performance in contributing to regional priorities and objectives in the IRWM Plan. The CC will work with a website and database management consultant to develop and maintain a Project Database on the Bay Area IRWM Plan website, which is envisioned to contain project information and progress updates, as well as project achievements and lessons learned with the completion of the project.

8.4 Identify scope of ongoing monitoring programs

The CC recognizes that the status of IRWM Plan project implementation will evolve with Plan implementation and the type of monitoring best suited for Plan performance will change accordingly. With the understanding that monitoring programs themselves tend to change with time, the CC will identify the scope of ongoing monitoring programs currently in place in the Bay Area during the time of the Plan update that the CC may leverage to support the Plan assessment. This task will be coordinated with Task 7.1. Examples of ongoing monitoring programs include watershed monitoring programs conducted by the San Francisco Estuary Partnership (SFEP) and San Francisco Estuary Institute (SFEI), and groundwater basin monitoring programs.

8.5 Develop adaptive framework for a project-specific monitoring plan

The CC will draw on the experiences of SFEP, SFEI and other RWMG members that have administered projects with monitoring plans to develop an adaptive framework for a project-specific monitoring plan for the Bay Area IRWM Plan. As noted in the Guidelines, the adaptive framework will include an explanation of typically required contents of a project-specific monitoring and identify in general, the party who has the primary responsibility for development of the project-specific monitoring plan and the party responsible for project-specific monitoring activities.

Key Outcome(s)

- Description of procedure for evaluating plan implementation progress, including measures of performance, monitoring systems, and methods to adapt the IRWM Plan and its projects based on the findings of the evaluation.

Deliverable(s)

- Draft Plan Performance and Monitoring section for review and comment by the Coordinating Committee and other interested parties
- Final Plan Performance and Monitoring section for the Plan update

Schedule

The update of the Plan Performance and Monitoring section will occur between December 2011 and July 2012, and will be coordinated to incorporate the outcomes of Task 9 Data Management.

9. Data Management

Guidelines Requirement(s)

- *Provide a brief overview of data needs within the IRWM region*
- *Describe typical data collection techniques*
- *Describe how stakeholder contribute data to a DMS*
- *Identify the entity responsible for maintaining data in the DMS*
- *Describe the validation or quality assurance/quality control measures that will be implemented by the RWMG for data generated and submitted for inclusion into the DMS.*
- *Explain how data collected for IRWM project implementation will be transferred or shared between members of the RWMG and other interested parties throughout the IRWM region, including local, State and federal agencies.*
- *Explain how the DMS supports the RWMG's efforts to share collected data*
- *Outline how the data saved in the DMS will be distributed and remain compatible with State databases.*

This task involves updating the *Data Management* section (described in H.5.4 Data Management in the Background Section) of the IRWM Plan as part of Plan implementation. As part of the IRWM implementation, data would be collected to support assessment of projects and Plan performance at three levels: the project level, the functional area level, and the IRWM Plan level. At each of these levels, effective data management and dissemination is critical to successful IRWM Plan implementation.

The update of the *Data Management* section will include the following:

9.1 Update procedures to manage and disseminate data

This task consists of several activities:

- Conduct a review of the effectiveness of the existing institutional structure described in the IRWM Plan for data management responsibilities, and define the type, level and frequency of data management and dissemination activities, and the parties responsible for implementing those activities in the Plan update.
- Coordinate with the functional areas and project proponents to update the description of how stakeholders may contribute data to a DMS through the CC and its subcommittees.
- Work with the website and database management consultant to develop validation or QA/QC measures that will be implemented by the CC for data generated and submitted for inclusion in the DMS.
- Develop data format protocols in the Plan update to ensure that Bay Area data saved in the DMS will be distributed and remain compatible with the following State databases: Water Data Library (WDL), Surface Water Ambient Monitoring Program (SWAMP), Groundwater Ambient Monitoring and Assessment Program

(GAMA), California Environmental Information Catalog (CEIC), Integrated Water Resources Information (IWRIS), California Environmental Resources Evaluation System (CERES).

9.2 Modify and update Bay Area IRWM Plan website to facilitate data management

The existing IRWM Plan is associated with a web-based project database on the Bay Area IRWM Plan website (<http://www.bairwmp.org/>). The database was created to facilitate regional IRWM planning across all functional areas. The purpose of the web-based database is to provide a common platform for all project proponents to view, review, upload and share information regarding specific projects. As part of the Plan update, the CC will work with a website and database management consultant to update the Bay Area IRWM Plan website, and create a dynamic project information database that can be accessed by project proponents to input or edit project information, project reviewers to review project summary information, and Bay Area IRWM region stakeholders to browse projects and identify opportunities for project integration.

Key Outcome(s)

- Comprehensive description of the Bay Area IRWM Plan DMS structure, roles and responsibilities, data sharing procedures, and steps taken to ensure that data is compatible with State databases, and an updated IRWM website and dynamic project database.

Deliverable(s)

- Draft Data Management section for review and comment by the Coordinating Committee and other interested parties
- Final Data Management for the Plan update
- Bay Area IRWM website updates and project database

Schedule

The update of the Data Management section and Bay Area IRWM website will occur between February 2011 and December 2011.

10. Financing

Guidelines Requirement(s)

- *Provide program-level description of the sources of funding, which will be utilized for the development and ongoing funding of the IRWM Plan.*
- *Describe the potential funding sources for projects and programs that implement the IRWM Plan.*
- *Discuss the potential sources of funding for project O&M.*
- *Indicate the certainty and longevity of the funding sources.*
- *Include explanatory text that would help a stakeholder understand how the IRWM Plan would be financed.*

This task involves updating the *Financing* section in the IRWM Plan. The existing Plan identifies beneficiaries of Plan implementation, the financial arrangements for implementation, operation and maintenance of the projects in the Plan, and regional financing of Plan administration. Successful IRWM Plan implementation will require ongoing financing to support operations and maintenance of projects upon implementation. The IRWM planning effort has been administered by the CC and is supported through in-kind services provided by CC members and funding provided by the functional areas for Consultant assistance. The CC expects that implementation of the IRWM Plan will continue to rely upon this combination of support services; however the success of the IRWM Plan will also be partially contingent upon continued state and federal funding for implementation efforts.

The update of the *Financing* section would include the following:

10.1 Identify potential sources of funding

The CC, with assistance from the functional areas, will identify at program-level the sources of funding which will be utilized for the ongoing funding of the IRWM Plan and the next Plan update. As part of this task, the CC will also review the financial resources available for regional financing of Plan administration.

10.2 Link funding to implementation projects and programs

The CC, with assistance from project proponents, will update the list of potential funding sources for projects and programs that implement the IRWM plan and discuss potential sources of funding for O&M. Most of the funding for implementing projects and programs come from a combination of funding sources such as capital improvement programs, rate/revenue user charges, and service connection fees. O&M funding sources include water/wastewater/stormwater utility customer charges. The certainty and longevity of these funds will be described, as for State and federal funding sources. In addition, if the CC is targeting a State grant program to fund an implementation project, this section will include discussion of whether the funding has been secured via a grant award with the State and the status of associated grant agreement, and whether an application for funding has or will be submitted at a future date.

This information will be presented in tabular format (based on Table 5 in the Guidelines) and will list the sources of funding that the CC has obtained or may pursue to finance the IRWM Plan, the associated implementation projects, the O&M costs and the certainty and longevity of the identified funding sources, including O&M funding, for each implementation project.

10.3 Develop description of how the IRWM Plan would be financed

The CC, with assistance from the functional areas, will provide a clear description in the Plan update how the IRWM Plan would be financed.

Key Outcome(s)

- Description of the sources of funding identified for IRWM planning and implementation, the certainty and longevity of these funding sources, and how the IRWM Plan would be financed.
- Updated financing information for projects in the Plan.

Deliverable(s)

- Draft table presenting IRWM Plan financing for review and comments by the Coordinating Committee and other interested parties
- Draft Financing section, including table presenting IRWM Plan financing, for review and comment by the Coordinating Committee and other interested parties
- Final Financing section for the Plan update

Schedule

The update of the Financing section will occur between February 2011 and June 2012.

11. Technical Analysis

Guidelines Requirement(s)

- *Describe the technical information sources and/or data sets used to develop the water management needs in the IRWM Plan. Explain why this technical information is representative or adequate for developing the IRWM Plan.*
- *Identify data gaps where additional monitoring or studies are needed, and describe how the Plan will help bridge these data gaps.*
- *Describe studies, models, or other technical methodologies used to analyze the technical information and data sets. Explain how this information aids the RWMG's and stakeholders' understanding of the water management picture for the period of the planning horizon.*

This task involves updating the *Technical Analysis* section in the IRWM Plan. As described in Section H.1 Technical Analysis in the Background Section, technical analysis for the IRWM Plan is based upon the analysis of data provided in the Functional Area Documents (Water Supply-Water Quality, Wastewater-Recycled Water, Flood Protection-Stormwater Management, and Watershed Management and Habitat Protection & Restoration). These documents were developed using information provided at local and sub-regional levels, which include: land use and development information, water supply and demand projections, wastewater flows and recycled water production, stormwater quality, flooding data, and watershed management issues and opportunities. Several technical studies have been prepared since the adoption of the IRWM Plan in the Bay Area region, and the CC and functional areas will leverage upon these studies to update the Technical Analysis for the IRWM Plan update.

The update of the *Technical Analysis* section will include the following:

11.1 Identify data gaps where additional technical analysis is required

This task consists of several activities:

- The functional areas will review and update technical information sources and/or data sets in the existing IRWM Plan to ensure that the information represents current conditions, and the planning horizon.
- The CC will work with the functional areas to update the description of the technical information sources and/or data sets used to develop the water management needs of the IRWM Plan, and explain why this technical information is representative or adequate for developing the IRWM Plan.
- The CC will work with the functional areas and other stakeholders to identify data gaps where additional monitoring or studies are needed, and describe how the updated Plan would help bridge these data gaps.

11.2 Document technical analyses methods and sources

The CC, with assistance from the functional areas, will develop a summary matrix (based on Table 6 in the Guidelines) to show the types of technical analysis conducted, the outcomes of the analysis, use in the IRWM Plan, reference or source of the information, and in addition, where applicable, the certainty/uncertainty involved in the analysis, or how the outcomes are applied to the planning horizon.

Key Outcome(s)

- Description of the technical analysis conducted and outcomes of the analysis and identification of data gaps that are addressed by the analysis in the Plan update.

Deliverable(s)

- Draft technical analyses summary matrix for review and comment by the Coordinating Committee and other interested parties
- Draft Technical Analysis section, including summary matrix, for review and comment by the Coordinating Committee and other interested parties
- Final Technical Analysis for the Plan update

Schedule

The update of the Technical Analysis will occur between January 2012 and April 2012, based on the outcomes of updating the Region Description in Task 2, development of Plan Objectives in Task 3 and Identification of Resource Management Strategies in Task 4.

12. Relation to Local Water Planning

Guidelines Requirement(s)

- *Describe how the RWMG has or will coordinate its water management planning activities to address or incorporate member actions related to local water planning.*

This task involves updating the *Relation to Local Planning* section in the IRWM Plan. The updated section in the IRWM Plan will be based on the numerous water plans and studies that have been developed in recent years and are currently being collated and evaluated. As part of the Plan update, the Coordinating Committee (CC) and Functional Areas will initiate the collation of these plans and studies. Members of the CC are comprised of local agency stakeholders in various areas of local water management, including water supply/quality, wastewater/recycled water, flood protection/stormwater management and habitat protection/restoration, and their comments and review will be crucial to ensuring that recent plans and studies are adequately considered in the Plan update. Members of the CC are also members of regional associations such as the Bay Area Water Agencies Coalition (BAWAC), Bay Area Clean Water Agencies (BACWA), and Bay Area Flood Protection Agencies Association (BAFPAA) which hold monthly meetings and provide regular updates on the IRWM planning process at these meetings.

The update of the *Relation to Local Water Planning* section will include the following:

12.1 Review and update technical information sources and/or data sets

The CC, with assistance from the functional areas, will consolidate latest water management planning activities in the region and identify coordination activities between the CC and local members through regional association meetings and sub-region meetings (described above) to ensure that local water planning elements (e.g. groundwater management plans, urban water management plans, water supply assessments, agricultural water management, stormwater management plans, etc.) are adequately incorporated into the IRWM Plan.

12.2 Review and incorporate information from local water plans

For the relevant local plans, the CC will work with the sub-regions and local planning stakeholders to describe in the Plan update how local water planning relates to the IRWM Plan in terms of jurisdiction of local plans, identify inconsistencies between local and regional plans and how those might be resolved, and the procedure for coordinating information flow/updates between local plans and the IRWM Plan.

12.3 Consider local water management issues and climate change adaptation/mitigation strategies

The CC and sub-regions will also review the local plans to incorporate water management issues and climate change adaptation and mitigation strategies into the IRWM plan, as well as any applicable water management tools.

Key Outcome(s)

- Updated description of *Relation to Local Planning* section on how the IRWM plan is congruent with local water plans, and that the Plan includes current, relevant elements of local water planning and water management issues common to multiple local entities in the Region.

Deliverable(s)

- Draft Relation to Local Water Planning section for review and comment by the Coordinating Committee and other interested parties
- Final Relation to Local Water Planning section for the Plan update

Schedule

The update of the Relation to Local Water Planning will occur between July 2011 and May 2012, to incorporate outcomes from the region's Urban Water Management Plans (UWMPs) which will be completed in June 2011.

13. Relation to Local Land Use Planning

Guidelines Requirement(s)

- *Describe the current relationship between local land use planning entities and water management entities. Describe how water management input is considered in land use decisions and vice-versa.*
- *Describe future efforts in the process of establishing a proactive relationship between land use planning and water management*

This task involves updating the *Relation to Local Planning* section in the IRWM Plan. Land use agency involvement in the IRWM Plan is currently coordinated through participation of local land use agency representatives at the Coordinating Committee (CC) meetings and through the Association of Bay Area Governments (ABAG) updates. As part of the Plan update, the CC will send out announcements to all 110 cities and counties in the Bay Area via ABAG to provide information on the Plan update and to ensure that all relevant local land use plans, programs and policies are considered in the Plan update.

Improve linkage between water and land use planning to address climate change impacts

The CC and multiple partners in the Bay Area recognize the need to link water system and water quality planning with land use planning within cities and counties to develop integrated strategies to address the impacts of climate change, e.g. increased flooding and variability of flooding. These may include encouraging adoption of the Ahwahnee Water Principles for Resource Efficient land use into local zoning codes, planning codes, specific plans or general plan elements; use of Low Impact Development (LID) as a planning tool and development of watershed management plans integrating land use policies and water management policies. The update of the *Relation to Local Land Use Planning* section will include the following:

13.1 Conduct outreach to cities to improve planning efforts

San Francisco Estuary Partnership (SFEP)/Association of Bay Area Governments (ABAG) will conduct outreach to cities in the Bay Area on the IRWM Plan update. The outreach effort will include conducting workshops or meetings with city/county planning agencies to discuss ways to improve planning efforts between the CC and land use planning agencies, as well as water-related supply and treatment issues in General Plans or Specific Plans that would need to be coordinated with the IRWM Plan update.

The Bay Area IRWM Coordinating Committee (CC) will also leverage on cross-agency efforts developed by StopWaste.Org for Alameda County through its Bay-Friendly Landscaping Program to foster communication between land use agencies and the water management agencies, with the intent of effectively integrating water management and land use planning. The cross-agency approach will align water agencies in the county with programs in sustainable landscaping and green building to better leverage resources, branding and impact for water conservation.

13.2 Address climate change impacts with land use-water management linkages

SFEP/ABAG will leverage on the work conducted under Task 13.1 to facilitate the sharing of information between water agencies and land use based agencies to promote collaboration between water management and regional land use planning projects.

13.3 Relate outcomes of SB 375 to Local Land Use Planning and how it is linked to water management

The CC will coordinate with the Joint Policy Committee to identify and incorporate relevant policies for the Bay Area's Implementation of Senate Bill 375 into the IRWM Plan update.

Key Outcome(s)

- Updated description of *Relation to Local Planning* section on how the CC would improve planning efforts between local land use agencies and the CC in IRWM planning efforts.

Deliverable(s)

- Draft Relation to Local Land Use Planning section for review and comment by the Coordinating Committee and other interested parties
- Final Relation to Local Land Use Planning section for the Plan update

Schedule

The update of the Relation to Local Land Use Planning will occur between January 2011 through June 2012, and will be coordinated with SFEP/ABAG's outreach efforts in Task 14.

14. Stakeholder Involvement

Guidelines Requirement(s)

- *List the stakeholders participating in the IRWM planning effort.*
- *Describe the processes that provide outreach and an opportunity to participate in plan development and implementation.*
- *Discuss how DACs in the region have been identified and what efforts have been/will be taken to include them in the RWMG.*
- *Account for technology and information barriers to stakeholder participation.*
- *Describe decision making process, the committees and groups, and how stakeholders can provide input to the process.*
- *Describe how the stakeholders necessary to meet Plan objectives are involved in Plan activities or are being invited to participate in Plan activities.*
- *Discuss what mechanisms the Plan includes that describe how stakeholders not currently involved in the Plan will be invited to participate.*

This task involves updating the *Stakeholder Involvement* section in the IRWM Plan. During development of the existing IRWM Plan, targeted stakeholder outreach activities involved a diverse group of water supply, water quality, wastewater, stormwater, flood control, watershed, municipal, environmental, and regulatory groups. Targeted outreach was conducted via stakeholder workshops, individual County/Agency outreach to stakeholders in their particular area, and an updated website (refer to Section D *Stakeholder Involvement and Public Outreach Process* in the Background Section for details). Stakeholders were identified through the development of Functional Area Documents and local planning documents, which involved conducting workshops, meetings and forums with participants from agencies, non-profit organizations and local communities.

As part of the Plan update, the Coordinating Committee (CC) will continue its commitment to reach out to a variety of potential stakeholders who express an interest in the process, including those who normally do not have much of a voice in planning efforts. From all of the various interactions initiated during the planning process of the IRWM Plan, a comprehensive list of potential stakeholders was developed from the outset of Plan development and has been continually updated with the identification of new stakeholders.

Focused Outreach to Sub-regions

The CC has developed a sub-regional approach to expand its outreach and coordination efforts. In addition to efforts led by the CC, there will be outreach and coordination efforts in four sub-regions – North Bay, East Bay, South Bay and Peninsula. The sub-regions cover the entire San Francisco Bay Area region. Each of these sub-regions is essentially several detailed analysis units (DAUs), or small watersheds. Although the mechanics and specific implementation processes are still in development, it is anticipated that this sub-regional approach will enhance participation by stakeholders who have not previously been actively involved in the IRWM Plan

because issues and outreach will be more localized. These stakeholders may include a myriad of non-governmental organizations, representatives of disadvantaged communities, community organizations, environmental justice groups, industry and agricultural organizations, park districts, educational institutions, and local general governments where many land-use decisions are made. Another significant reason for a sub-regional approach is that it will foster more focused communications and planning by water resources management agencies at a scale that allows clear delineation of benefits and costs associated. As part of the Plan update work, some targeted capacity building will be provided to sub-regions as needed in order to help all sub-regions to become equally functional in contributing to the overall Plan outreach mechanism.

Outreach to DACs and Native American Tribes

Disadvantaged Communities (DACs) were provided opportunities to participate in the IRWM planning process through IRWM Plan workshops held at various locations throughout the Bay Area. During the planning process several maps showing the locations of DACs throughout the region were developed to provide a better understanding of the location of disadvantaged communities, and of the potential impacts and benefits that may be provided through implementation of the IRWM process. A map showing the location of DACs in the Bay Area is shown in Figure 10 *DACs in the San Francisco Bay Area* in the Background Section. DACs in the Bay Area are mainly located in the cities of Oakland, Berkeley, Albany, Richmond, San Pablo, San Francisco, Vallejo, Martinez and Concord. An initial limitation that DACs faced in participating in the IRWM planning process was the lack of staff resources and funding to travel to meeting venues, to conduct review of documents, and preparation of materials and project submittal information for input to the IRWM Plan. However, these limitations were addressed by the following actions, which are continued through Plan implementation:

- The monthly Coordinating Committee (CC) meetings for the IRWM Plan are held at regular times in downtown Oakland (at the State Building), which is close to major transportation networks, to facilitate attendance of DAC representatives.
- Meeting agendas and materials are made available in hard copy at the CC meetings and electronically (through the Bay Area IRWM Plan website) to facilitate the transfer of information to a variety of interested participants at a reasonable cost.
- During the IRWM Plan development process, the State Coastal Conservancy, through one of its consultants, contracted with the Environmental Justice Coalition for Water (EJCW) to directly engage DACs in the Bay Area. The goal was to identify specific projects that could be included in the IRWM Plan and would qualify for grant and other funding. Several of the projects identified made the top tier of projects in the Plan.
- The CC has worked closely with organizations like the Bay Area Watershed Network (BAWN) and San Francisco Estuary Partnership (SFEP) to identify potential watershed management projects that would benefit DACs and to provide assistance in developing project submittals if needed.

The CC has not yet conducted targeted outreach to Native American Tribes within the region. As part of the Plan update process, the Native American Heritage Commission will be contacted

in order to learn about Native American tribes and lands located within the region, and to obtain relevant contact information. An approach to conducting outreach to Native American tribes will be developed and the outreach will be conducted as part of the Plan update process.

As described in Background section, the CC has conducted outreach to DAC and environmental justice groups, and has incorporated criteria that evaluate whether a project benefits a DAC into the project review process. The CC will continue to work with DACs and environmental justice groups to further improve implementation of the IRWM Plan through continued communication and collaboration, focusing on the following areas:

- Determining the types of demographic analysis needed to identify disadvantaged and environmental justice (DA/EJ) communities.
- Defining DACs in a manner that captures the issue of the higher cost of living in the Bay Area while maintaining the focus on communities that need the most assistance.
- Refining project assessment criteria or project prioritization methods to better capture benefits to DA/EJ communities.
- Developing a better understanding of the specific project-level impacts and benefits that are of most concern to DA/EJ.
- Identifying additional opportunities to better integrate DA/EJ communities into water resource planning and projects.
- Identify communities located near impaired water bodies, and invite local watershed groups or representatives to join the CC meetings.

To substantively involve all stakeholders in the update of the IRWM Plan, the CC will carry out the following tasks:

14.1 Conduct monthly Coordinating Committee and stakeholder meetings

The CC will continue to conduct regular monthly meetings in a centralized location to discuss and review Plan update tasks and activities with stakeholders, and disseminate information to IRWM stakeholders via the meeting and Bay Area IRWM Plan website.

14.2 Conduct regular sub-region meetings

Regular sub-region meetings will be conducted, depending on specific needs in each region to expand outreach and coordination efforts to smaller agencies, non-governmental organizations and other local groups, so that they can participate in the IRWM planning process more effectively.

14.3 Conduct quarterly workshops with cities/counties for input to the Plan update and coordination with DACs

The San Francisco Estuary Partnership (SFEP) has Low Impact Development (LID) workshops scheduled in October 2010 and February 2011 to provide as a non-state cost share for this task, and will conduct outreach to DACs as part of the workshops. Assuming that planning funds are available, SFEP will host four other workshops over 18 months.

The content will be refined following the February 2011 workshop based upon feedback as well as input from the CC and subcommittees.

Deliverable(s)

- Stakeholder workshops

14.4 Develop findings from workshops

SFEP has developed outreach material for local governments on Green Infrastructure/LID, which will be used to facilitate discussion of this subject. The material will be distributed at the workshops/meetings. Following the workshops, SFEP will summarize lessons learned from the workshops as well as any additional guidance that may assist local governments to develop multi-benefit water projects.

Deliverable(s)

- Summary of findings and outcomes from workshops and LID Leadership Group Meetings

14.5 Form LID Leadership Group to develop green infrastructure strategies for implementation

SFEP will develop an LID Leadership Group following the October 2010 workshop, and will convene this group six times over 18 months. Meetings may take place around the region, including tours of green infrastructure projects. SFEP will develop and report findings from the leadership group under Task 14.4.

Deliverable(s)

- LID Leadership Group Meetings

14.6 Increase Outreach to Disadvantaged Communities (DACs)

The Coordinating Committee (CC) continues to value the inclusion and participation of disadvantaged communities (DACs) and Native American Tribal communities into the IRWMP planning process. Targeted outreach and consistent effort is required for these goals to be met and this task will result in enhanced outreach to DACs and tribes. The Environmental Justice Coalition for Water (EJCW)¹ performed similar services during preparation of the 2006 Bay Area IRWM Plan.

Enhanced effort will be devoted to addressing the water-related needs and priorities of DACs in the IRWM Plan. The availability of time and funds has limited the actual DAC

¹ EJCW is a statewide coalition comprised of over 70 community-based and non-profit member organizations working on water justice issues that impact low-income communities and communities of color. EJCW has identified a chronic lack of access to water resources as a critical health disparity facing many of California's such communities, and aims to build the capacity of organizations and groups to engage in local, regional and statewide water policy and planning (see www.ejcw.org).

outreach thus far during the IRWM planning process. Planning Grant funds will enable the CC to significantly expand its outreach to DACs in the Bay Area region and to enable them to participate in the planning process in a more significant and meaningful way. One or more community based organizations and/or non-governmental organizations will be engaged to assist in carrying out this task.

In the San Francisco Bay Area region, efforts will be undertaken to improve identification of DACs in the area with ongoing water issues, provide basic water education, and develop a clear sense of the community water concerns and potential solutions in these communities. A special effort will be made to mobilize communities in the region to participate strategically in CC or subcommittee meetings to enable them to advocate for the development of water projects that can be included in the IRWM Plan, based on the identified needs in that area. Several of these communities were identified in the 2006 IRWM Plan, and will be encouraged to participate in the ongoing IRWM process.

This task satisfies two IRWM program preferences as specified in PRC §75026(b):

- Address critical water supply or water quality needs of disadvantaged communities within the region.
- Address Statewide priorities, including “Ensure equitable distribution of benefits,” which includes specifically:
 - Increase the participation of small and disadvantaged communities in the IRWM process.
 - Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations.
 - Contain projects that address safe drinking water and wastewater treatment needs of DACs.

Specifically, the DAC outreach in the Bay Area IRWM region will strive to accomplish the following objectives:

1. Develop an inventory of disadvantaged communities and Native American tribes in the region and conduct an assessment of water needs.
2. Engage and integrate DACs effectively into the Bay Area IRWM Plan by developing mechanisms to address priority DAC needs and support integrated solutions to DAC needs within the Bay Area IRWM Plan.
3. Develop conceptual project descriptions and cost estimates to include in the Bay Area IRWM Plan and strive towards ensuring that DAC projects receive funding.

This task includes several components:

Identifying the needs of DACs and creating an Outreach Plan

- Based on the maps showing the locations and characteristics of DACs and Native American tribal communities developed in Task 2.3 *Update and develop maps in Region Description section*, a needs assessment will be conducted to identify and

understand project needs in these communities related to drinking water, wastewater, stormwater pollution, flood control, watershed pollution, vulnerability to sea-level rise, and access to open space and shoreline, etc.

- An Outreach Plan will be created, to conduct targeted, respectful and effective outreach.

Conducting Outreach Activities

- Establish a relationship with DAC communities and tribes.
- Conduct bilingual meetings as needed with community residents.
- Conduct informational meetings with non-profit and community-based organizations in the area to create allies and partners for DAC water needs.
- Cultivate relationships with local elected officials to represent DAC and tribal needs.
- Create linguistically and culturally appropriate outreach materials to inform communities of general water issues, the IRWM Planning process, and possible funding opportunities.
- Conduct presentations at local events, community forums, fairs, etc. to educate members of disadvantaged communities about the IRWM planning process.
- Reach out to small community water systems and provide them information and possible solutions to water needs
- Host a San Francisco Bay Area Water Strategy Meeting
- Towards the end of the sub-contract period, disseminate results to communities through written reports and presentations at meetings.

Integrating DAC members and tribes into the Bay Area IRWM Planning process

- Convene DAC and tribal leaders and enable them to participate in Bay Area IRWMP Stakeholder meetings
- Foster participation of DAC and tribal leaders in meetings by providing assistance on inclusion in the process, understanding goals and objectives, encouraging cultural sensitivity of IRWM Plan, creating a fair ranking process for projects, etc.
- Provide interpretation for DAC members at key IRWM Plan meetings as needed.

Community Assistance for Project Preparation

- Provide assistance to DAC and tribal leaders to identify specific projects that address critical water supply, water quality, wastewater and other water-related needs.
- Together with DAC and tribal leaders, select subset DAC and tribal entities for assistance with project development.
- Promote water and resource conservation projects and watershed projects among DACs and tribal communities

Deliverable(s)

- Results of needs assessment and detailed Outreach Plan

- Community presentations and meetings
- Fliers, brochures, and other outreach materials produced on the IRWM planning process, water contamination and other issues, translated to Spanish, and distributed to communities and allies
- Catalog of identified DAC and tribal needs
- San Francisco Bay Area Water Strategy Meeting
- Subset of projects selected for project development assistance

14.7 Provide technical assistance for project preparation

DACs are in need of state funds to improve their access to clean and safe water and wastewater services, including funding from Prop 84 set aside exclusively for disadvantaged communities. This task will help ensure that projects are ready for the DWR set aside of “not less than 10% of funds” for implementation projects that address critical water supply or water quality needs for DACs, and planning funds to facilitate and support the participation of DACs in IRWM planning.

This will be conducted by the following methods:

- Leverage DWR technical assistance funds for DACs and tribes to prepare projects for submission into the IRWMP plan to apply for funds for DAC and tribal projects.
- Hire consultant engineers as needed to provide technical assistance to communities in order to develop their project applications for the IRWMP.
- Prepare technical assessment, develop initial feasibility studies for projects.
- Develop project descriptions that include the following components:
 - A. How the project contributes to the IRWM objectives*
 - B. How the project is related to resource management strategies*
 - C. Technical feasibility of the project*
 - D. Specific benefits to critical DAC water issues*
 - E. Specific benefits to critical water issues for Native American tribal communities*
 - F. Environmental Justice Considerations*
 - G. Project Costs and Financing*
 - H. Economic Feasibility*
 - I. Project Status*
 - J. Strategic considerations for IRWM Plan Implementation*
 - K. Purposefully implementing projects with multi-benefits*
 - L. Contribution of the project in adapting to the effects of climate change*
 - M. Contribution of the project in reducing GHG emissions as compared to project alternatives*
- Finalize a subset of projects, conduct project development, preparation and submission to IRWMP

Deliverable(s)

- Three to five community projects developed for inclusion in the Bay Area IRWM Plan

14.8 Review and update processes that provide outreach and an opportunity to participate in Plan development and implementation

The CC will work with its subcommittees and sub-regions to review and update the processes to identify potential stakeholders, share information, and invite and involve stakeholders in the IRWM process.

Key Outcome(s)

- Updated description and documentation of the stakeholder outreach process implemented in the IRWM Plan, and identification of deficiencies in existing outreach efforts and mechanisms to address these deficiencies, DAC outreach and project development.

Deliverable(s)

- Draft Stakeholder Involvement section for review and comment by the Coordinating Committee and other interested parties
- Final Stakeholder Involvement section for the Plan update
- Stakeholder workshops

Schedule

The update of the Stakeholder Involvement section will occur between January 2011 through January 2012.

15. Coordination

Guidelines Requirement(s)

- *Identify the process for coordination of projects and activities with local participants and stakeholders.*
- *Discuss the various agencies and adjacent IRWM efforts identified for coordination.*

As mentioned in the Governance and Stakeholder Involvement sections, there is already extensive coordination and cooperation among local agencies in the Bay Area IRWM region. The RWMG is the Coordinating Committee (CC), and it consists of representatives from the Bay Area's water supply agencies, wastewater agencies, flood control agencies, ecosystem management and restoration agencies, regulatory agencies and non-governmental organizations.

Agencies and other stakeholders participating in the San Francisco Bay Area IRWM Plan enjoy a working relationship at several levels. At the CC level, several Bay Area-wide regulatory agencies, non-governmental organizations and environmental groups collaborate on decisions regarding regional planning efforts, grant applications, public outreach, etc. A list of some of the Bay Area-wide organizations that the CC coordinates IRWM efforts with is shown below:

- Bay Area/North Coast/Central Coast Water Quality and Sustainability Work Group
- Bay Area Water Supply and Conservation Agency (BAWSCA)
- Bay Area Water Forum
- ABAG
- Bay Area Water Agencies Coalition (BAWAC)
- Bay Area Clean Water Agencies (BACWA)
- Bay Area Flood Protection Agencies Association (BAFPAA)
- Bay Area Watershed Network (BAWN)

Working relationships are often especially productive in CC subcommittees where policy and other recommendations are developed through a collaborative process and then forwarded to the full CC for discussion and final decision-making. Other effective working relationships are manifested when agencies' staff and other stakeholders work at the functional area level. This is particularly the case with two of the functional areas – Flood Protection and Stormwater Management and Watershed Management and Habitat Protection and Restoration. Here, for example, stakeholders with specific interests in environmental issues contribute greatly to the development of multipurpose projects.

Coordination of Activities within the Bay Area IRWM region

Specific tasks will include:

15.1 Coordinate with the Functional Areas and local water/wastewater/flood protection agencies

The CC will continue to coordinate information sharing and decision-making activities with the functional areas and local water and wastewater management agencies, flood protection agencies and watershed management associations and organizations.

15.2 Coordinate information dissemination to stakeholders in the region

The CC will work with a consultant to develop Plan update outreach informational materials and to post the materials to the Bay Area IRWM Plan website for dissemination to all interested stakeholders.

15.3 Coordinate with regional associations

Members of the CC will continue to coordinate and share information on the Plan update process and IRWM planning activities with the following regional organizations at organization meetings: Bay Area Water Forum (BAWF), Bay Area Watershed Network (BAWN), Bay Area Flood Protection Agencies Association (BAFPAA), Bay Area Clean Water Association (BACWA), Bay Area Water Agencies Coalition (BAWAC), and the Bay Area Stormwater Agencies Association (BASMAA).

15.4 Coordinate project development and selection with the relevant subcommittees of the CC (e.g. Project Screening Subcommittee)

The Project Screening subcommittee was created by the CC to help facilitate the process of incorporating new project ideas and processing/updating existing projects for the Plan update and future funding applications. The subcommittee is made up of members from various agencies, with representation from all four functional areas.

15.5 Coordinate with local stakeholders for sub-regional process

The sub-regions will coordinate with local stakeholders to further develop and implement the sub-regional outreach and project solicitation process.

Identification and Coordination with Neighboring IRWM Regions

The CC identified and coordinated with neighboring IRWM regions on defining region boundaries during the Region Acceptance Process (refer to Table 4 *Bay Area IRWM Region's Relationships and Coordination with Neighboring IRWM Regions* in the Background Section for description of the coordination efforts). This would effectively reduce significant water-related conflicts between regions.

Specific tasks will include:

15.6 Update identification and characterization of neighboring IRWM regions

The CC will work with a consultant to update the list of neighboring IRWM efforts identified in the existing Plan and submit a map showing the IRWM region and adjacent regions based on the latest approved IRWM regions from the RAP. The CC will also describe similarities and differences in water management issues between the Bay Area IRWM region and neighboring regions.

15.7 Coordinate with neighboring IRWM regions

The CC will work with functional areas and sub-regions to coordinate with the East Contra Costa County IRWM region in the San Joaquin Funding Area, Solano County and Napa County in the Sacramento River Funding Area, Northern Santa Cruz IRWM region and Pajaro River Watershed IRWM region in the Central Coast Funding Area, and the North Coast IRWM region in the North Coast Funding Area. A list of the status of the relationship between the Bay Area IRWM region and adjacent IRWM regions is provided in Table 4 in the Background Section.

Coordination with Agencies

As part of the Plan update, efforts will be made to coordinate and exchange information with other jurisdictions such as State, federal and local agencies important to the development of the IRWM Plan update and the implementation projects.

15.8 Coordinate with Agencies

The CC will coordinate with relevant agencies which may include the following:

State - CalEPA, DWR, Department of Fish and Game, SWRCB, RWQCB Region 2, California Coastal Commission, Coastal Conservancy, and the Department of Public Health.

Federal - U.S. Army Corp of Engineers, U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, and the U.S. Environmental Protection Agency.

Local - County flood districts, public works departments, environmental health departments, parks and recreation, resource conservation districts.

Other – California Climate Action Registry

Key Outcome(s)

- Updated documentation of State, Federal, and local stakeholders' coordination process.

Deliverable(s)

- Draft Coordination section for review and comment by the Coordinating Committee and other interested parties
- Final Coordination section for the Plan update

Schedule

The update of the Coordination section will occur between January 2011 through January 2012.

16. Climate Change

Guidelines Requirement(s)

- *Describe, consider, and address the effects of climate change on the region and disclose, consider, and reduce when possible GHG emissions when developing and implementing projects.*
- *Identify climate change impacts and address adapting to changes in the amount, intensity, timing, quality and variability of runoff and recharge.*
- *Consider the effects of sea level rise on water supply conditions and identify suitable adaptation measures.*
- *Describe policies and procedures that promote adaptive management.*

As noted in the California Water Plan Update 2009, climate change is projected to present water resource management challenges to the Bay Area region. Many climate models predict warming and increased precipitation variability over the entire Sierra Nevada, which would result in reduced snow accumulation, earlier and quicker snowmelt, and potentially affect water supplies for the San Francisco region.

Sea level rise is also anticipated with climate change. California's coastal observations and global model projections indicate that California's open coast and estuaries will experience increasing sea levels during the next century. Historical records show that sea level in the San Francisco Bay has risen about 7 inches over the past 100 years. The 2006 California Climate Action Team Report projects that global sea level will rise between 4 and 33 inches by the year 2100. As the mean sea level increases, historical coastal structure design criteria may be exceeded causing the need for newer or higher levees and jeopardizing structures. Additionally, ecosystems, salinity levels and water resources could be adversely affected.

This task will involve development of a new section *Climate Change* to assess regional vulnerabilities to climate change, identify and measure impacts of climate change, evaluate strategies (including adaptation and mitigation) and disclose, consider and reduce when possible GHG emissions when developing and implementing projects.

Assess Vulnerabilities/Describe Impacts

16.1 Assess regional vulnerabilities

The Coordinating Committee (CC) and its subcommittees and/or consultant will leverage on the large number of vulnerability assessments that have been conducted for the Bay Area region and California, and include in the Plan update an assessment of the region's vulnerability to the long-term increased risk and uncertainty associated with climate change. The assessment would include an integrated flood management component and a drought component that assumes (until more accurate information is available), a 20 percent increase in the frequency and duration of future dry conditions. Once publicly accessible vulnerability assessment tools are made available, the CC will use them to refine the preliminary vulnerability assessment.

16.2 Identify mapping tools to help evaluate vulnerabilities

The CC and its subcommittees and/or consultant will use mapping tools developed by State or federal agencies or other regional organizations to conduct a preliminary evaluation of impacts by specific location (e.g. the CalAdapt mapping tool). This would help to locate focus areas with higher vulnerability (e.g. low-lying areas around the Bay with disadvantaged communities), and prioritization of these focus areas (e.g. areas where flooding is a safety risk vs. biological/ecological risk). Maps developed from this assessment will be included in the Plan update.

16.3 Identify water/wastewater/flood infrastructure in the region that may be affected by climate change

The CC will coordinate with local water/wastewater agencies via the functional areas to identify vulnerable infrastructure based on agency assessments, and provide a summary list of infrastructure that may be affected by climate change and project opportunities in the Plan update.

Evaluate Adaptation Strategies

16.4 Identify and develop regional adaptation strategies

The CC will coordinate with local organizations such as the Joint Policy Subcommittee, the North Bay Climate Adaptation Initiative, and leverage on findings developed by the Bay Area/North Coast/Central Coast Water Quality and Sustainability Work Group, and San Francisco Bay regional workshops to identify climate adaptation strategies for the region which would include (not an exhaustive list):

Near-term “No regret strategies”

- Conserve water, reuse stormwater and gray water
- Develop future conservation best management practices
- Protect watersheds and natural resources and habitats; link habitat/riparian water issues with water quality and supply
- Identify integrated flood and stormwater management programs

Longer-term Adaptation Strategies

- Address infrastructure needs for replacing aging systems and for new development.
- Diversify regional water portfolios: desalination, recycled water
- Integrate land use and water planning, develop land use strategies to cluster development to economically serve water/wastewater needs
- Address environmental justice groups and DACs
- Reduce water imports and exports, while facilitating transfers which optimize water supply to the highest and best use
- Protect groundwater quality
- Expand reuse and storage (above and below ground)
- Expand monitoring and data collection capabilities

Climate Change Mitigation/GHG Reduction

16.5 Prepare GHG emissions analysis

The CC will work with project proponents to develop preliminary GHG emissions analysis for implementation projects to help the CC to evaluate the sustainability aspect of the project for the purposes of IRWM project selection. If a project is selected to be included in a grant application, the project proponent shall prepare a full project CEQA GHG emissions analysis which will include quantifiable estimates of emissions for each project.

The CC will continue to coordinate with other IRWM regions on inter-regional projects, and on a larger-scale, on climate change adaptation strategies through the Bay Area/North Coast/Central Coast Water Quality and Sustainability Work Group. The Work Group was formed to identify and describe the connections between water quality and climate change on the coast from central California to the Oregon border as well as actions in the water quality arena that can help reduce greenhouse gases (GHGs) and reduce the impacts of climate change.

Key Outcome(s)

- Comprehensive description of climate change impacts and water management adaptation strategies for the Bay Area IRWM Region, including policies and procedures for adaptive management.

Deliverable(s)

- Draft Climate Change section for review and comment by the Coordinating Committee and other interested parties
- Final Climate Change section for the Plan update

Schedule

The update of the Climate Change section will occur between June 2011 through May 2012. Project proponents with projects selected for submission for Round 2 Implementation grant application will prepare a greenhouse gas emissions analysis for their project(s) within the grant application schedule, and incorporate results of the analysis into the Plan update.

17. Preparation of Updated Plan

17.1 Prepare Draft Plan Update

The Coordinating Committee (CC) will work with a consultant to compile all the information developed from Tasks 1 through 16 into a single draft updated IRWM Plan. The draft updated IRWM Plan will be distributed to stakeholders for review and comments via the Bay Area IRWM website and email list-serv. Stakeholder comments on the draft updated IRWM Plan will be discussed and addressed at Coordinating Committee meetings. Responses to comments will be provided prior to presenting the Plan update for adoption to the Board of Directors of the agencies in the Coordinating Committee (CC).

17.2 Prepare Final Plan Update

The final updated IRWM Plan will be prepared. The CC member agencies will present the Plan to their Boards with a recommendation for adoption.

Deliverable(s)

- Draft updated IRWM Plan for review and comment by the Coordinating Committee and other interested parties
- Final updated IRWM Plan

Schedule

The preparation of the draft Updated Plan will occur between September and December 2012. **The final Updated Plan will be completed by January 2013.**

18. Project Management and Controls

Marin Municipal Water District (MMWD) will act as Grant Administrator for the Bay Area IRWM RWMG. MMWD will follow Appendix E: Guidelines for Grantees and Borrowers in the August 2010 Guidelines to ensure that records are maintained for each funded project. The tasks associated with Grant Management are listed below.

18.1 Direct Administration – Grant Management

MMWD will perform ongoing grant management, including calls and meetings with the State, during the two year Plan update process, record keeping as required, and consultant procurement and management. MMWD will also conform with State requirements noted in the August 2010 Guidelines.

Deliverable(s):

- Calls and meetings with the State
- Record Keeping
- Consultant Contract(s)

18.2 Establish Agreements with DWR and Contributing Participants

MMWD will draft and finalize grant agreement with the State, as well as agreements with contributing participants, and compile appropriate tracking information.

Deliverable(s):

- Final agreement with the State
- Final agreements or appropriate documentation with participants that are contributing to help implement this Work Plan
- Quarterly tracking information

18.3 Prepare quarterly and final reports

MMWD will prepare quarterly and final reports and regular grant invoices to the State.

Deliverable(s):

- Quarterly reports
- Final report
- Grant invoices

Schedule

Project controls and management will be conducted throughout the time of the contract agreement.

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