# PROPOSITION 84 IRWM REGIONAL PLANNING GRANT APPLICATION ROUND 2

# Submitted to the California Department of Water Resources

# By the Monterey Bay Sanctuary Foundation



# On Behalf of the Greater Monterey County Regional Water Management Group

# I. APPLICANT INFORMATION TAB

# 1. APPLICANT INFORMATION

**Organization Name:** Monterey Bay Sanctuary Foundation

**Tax ID:** 94-3225675

Proposal Name: Addressing Critical Gaps in the IRWM Plan for the Greater Monterey County Region

Proposal Objective: The RWMG is requesting funds to address critical information gaps in the GMC IRWMP in order to make it a more effective planning document for the region. Because this RWMG is made up of 20 different organizations, without one agency taking a leading role, funding for a Coordinator is integral to the success of the entire effort. This planning grant will provide that much-needed monetary support for the coordination of the IRWM planning process. The requested planning grant funds will also enable the RWMG to strengthen and improve certain elements of IRWM planning; including collecting and assessing data on environmental water needs to ensure future protection, restoration, and improvement of aquatic, riparian, and watershed resources within the region. Two other important regional issues that are included in this planning effort are wildfires and "food safety". They have significant bearing on water management in the Greater Monterey County IRWM region and these tasks present an excellent opportunity to leverage other related regional efforts with the IRWM planning process. In addition, increased funding for DAC technical assistance, interregional planning, and an analysis of the potential barriers to project implementation are included in this proposal to ensure successful implementation of the IRWM Plan.

## 2. BUDGET

Other Contribution: \$0

**Local Contribution (Funding Match): \$0** 

Federal Contribution: \$0

In-kind Contribution: \$107,246 Amount Requested: \$244,730

**Total Project Cost: \$351,976** 

# 3. GEOGRAPHIC INFORMATION

**Latitude:** 36 deg. 9 min. 10 sec. **Longitude:** 121 deg. 8 min. 15 sec.

Location: Greater Monterey County region lies within the CC Funding Area and includes most of the

County.

**County:** Monterey County

# **Groundwater Basin(s):**

3-2 Pajaro Valley

3-4 Salinas Valley

3-4.01 180/400 Foot Aquifer

3-4.02 East Side Aquifer

3-4.03

3-4.04 Forebay Aquifer

3-4.05 Upper Valley Aquifer

3-4.06 Paso Robles Area

3-4.09 Langley

3-4.10 Corral de Tierra Area

3-5 Cholame Valley

3-6 Lockwood Valley

3-32 Peach Tree Valley

**Hydrologic Region(s):** The Greater Monterey County region includes the following hydrologic unit areas (as outlined by the Regional Water Quality Control Board in the Central Coast Basin Plan):

Central Coast

**Watershed(s):** The Greater Monterey County IRWM region includes six major watersheds (or portions thereof):

Salinas River watershed Santa Lucia watershed, Estrella River watershed

Bolsa Nueva watershed

Estero Bay watershed

# 4. LEGISLATIVE INFORMATION

State Assembly District: Districts 27 and 28

**State Senate District:** Districts 15 and 12 **U.S. Congressional District:** District 17

# II. PROJECT INFORMATION TAB

# 1. PROJECT BENEFITS INFORMATION

**PROJECT BENEFIT TYPE:** Primary

**BENEFIT TYPE:** Other **MEASUREMENT:** N/A

**DESCRIPTION:** Develop an IRWM Plan for the region

# III. APPLICANT INFORMATION AND QUESTION'S TAB

**Q1. Proposal Description:** The Greater Monterey County RWMG is requesting \$244,730 to address critical information gaps in the IRWM Plan, and to provide much-needed support for the IRWM planning process. Round 1 Planning Grant funds will enable the RWMG to produce a standards compliant Plan by Fall 2012; however, critical gaps will still exist, including a lack of data on environmental water needs

and the lack of consideration of two important regional issues—wildfires and "food safety"—that have significant bearing on water management in the Greater Monterey County IRWM region. While the final approved IRWM Plan will be considered adequate to meet Proposition 84/1E standards, these information gaps may render the Plan less than adequate as an effective planning document for the region. The requested Planning Grant funds will also enable the RWMG to strengthen and improve certain elements of the IRWM planning process, including increased funding for DAC technical assistance, interregional planning and coordination, and an analysis of the potential barriers to project implementation to help ensure successful implementation of the IRWM Plan.

# **Q2. Project Director:**

Dennis Long, Executive Director Monterey Bay Sanctuary Foundation 299 Foam Street, Suite D Monterey, CA 93940 (831) 644-9600

Email: dennis@mbnmsf.org

# Q3. Project Manager:

Bridget Hoover, Water Quality Protection Program Director Monterey Bay National Marine Sanctuary 299 Foam Street Monterey, CA 93940 (831) 647-4217

Email: Bridget.Hoover@noaa.gov

# **Q4. Applicant Information:**

Monterey Bay Sanctuary Foundation 299 Foam Street, Suite D Monterey, CA 93940

Q5. Additional Information: South Central Coast.

**Q6. Additional Information:** The Greater Monterey County IRWM region is located entirely within the Central Coast RWQCB (Region 3).

**Q7. Additional Information:** No other contributions.

**Q8.** Eligibility: No urban water suppliers will receive funding from the proposed grant.

Q9. Eligibility: N/A

**Q10.** Completeness Check: All of the fields in the application have been completed.

# **Att1\_PG2\_MBSF\_AuthDoc\_1of1 Authorizing Documentation**

# Att2\_PG2\_MBSF\_EligDoc\_1of2 Eligible Applicant Documentation

1. Is the applicant a non-profit agency as defined in Appendix B of the Guidelines? Please explain.

Yes, the Monterey Bay Sanctuary Foundation was formed in April 1995 as a 501(c)(3) nonprofit corporation. Federal Identification number 94-3225675.

2. Does the applicant have legal authority to enter into a grant agreement with the State of California?

Yes. We have entered into many similar agreements and are familiar with the terms of such agreements.

3. Describe any legal agreements among partner agencies and/or organizations that ensure performance of the Proposal and tracking of funds.

When awarded work of this nature, we enter into formal contractual agreements with any partner agencies or organizations that will be receiving funds. Terms and Conditions of our agreement with the State are incorporated into those agreements as an addendum.

4. Include a copy of the certificate of incorporation for the organization.

Please see attached Articles of Incorporation.

# Att2\_PG2\_MBSF\_EligDoc\_2of2 ARTICLES OF INCORPORATION

# Att3\_PG2\_MBSF\_WrkPIn\_1of1 Work Plan

### I. CURRENT STATUS IN MEETING IRWM PLAN STANDARDS

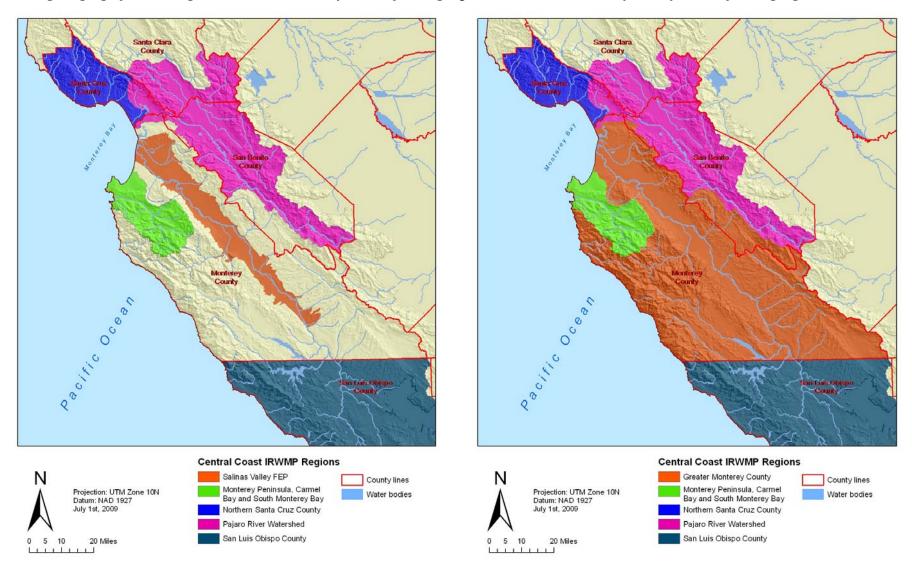
# Background

The Integrated Regional Water Management (IRWM) Plan for the Greater Monterey County region represents an expansion of a former plan, the Salinas Valley IRWM Functionally Equivalent Plan, which was developed by the Monterey County Water Resources Agency in May 2006. The decision to expand the Salinas Valley IRWM region and to write an entirely new IRWM Plan came about as a result of a meeting in February 2008 of the six Central Coast Funding Area IRWM groups (spanning from Santa Cruz County to Santa Barbara County). During that meeting it was noted that several important geographic areas within Monterey County were not included in any of the IRWM Plans. Representatives from all six regions agreed that a new IRWM region should be formed to address those IRWM Plan coverage voids. In early 2009 the Greater Monterey County RWMG was created, expanding the former Salinas Valley RWMG from just three organizations—the Monterey County Water Resources Agency, Marina Coast Water District, and Castroville Community Services District—to the 20 organizations listed below:

- Big Sur Land Trust
- California Coastal Commission
- California State University Monterey Bay Watershed Institute
- California Water Service Company
- Castroville Community Services District
- City of Salinas
- City of Soledad
- Coastlands Mutual Water Company
- Elkhorn Slough National Estuarine Research Reserve
- Environmental Justice Coalition for Water
- Garrapata Creek Watershed Council
- Marina Coast Water District
- Monterey Bay National Marine Sanctuary
- Monterey County Agricultural Commissioner's Office
- Monterey County Water Resources Agency
- Monterey Regional Water Pollution Control Agency
- Moss Landing Marine Laboratories
- Resource Conservation District of Monterey County
- Rural Community Assistance Corporation
- San Jerardo Cooperative, Inc.

The Greater Monterey County IRWM region was approved by the California Department of Water Resources (DWR) in the Regional Acceptance Process in November 2009. Expanding the Salinas Valley IRWM Region to the Greater Monterey County IRWM Region has brought several key geographic areas into the IRWM planning process, including: the Big Sur coastal watersheds and communities on the western side of the Santa Lucia Range, from Pt. Lobos south to the San Luis Obispo County line; the larger Salinas River watershed from the Salinas River National Wildlife Refuge at the Pacific Ocean south to the San Luis Obispo County line and including the east and west ranges of the valley; the Gabilan watershed; and a small portion of western San Benito County. The maps on the following page illustrate the change in geographic coverage from the Salinas Valley IRWM planning region to the Greater Monterey County IRWM planning region.

Change in geographic coverage from the Salinas Valley IRWM planning region to the Greater Monterey County IRWM planning region:



Expanding the former IRWM boundary has served to make the new Greater Monterey County IRWM planning region more inclusive, inviting more partners and stakeholders to the table and opening up new opportunities for cooperation and integration of efforts. Expanding the boundary has also meant developing an entirely new IRWM Plan. The Greater Monterey County RWMG received Round 1 IRWM Planning Grant funds to develop an IRWM Plan for the new Greater Monterey County IRWM region. The completed IRWM Plan will meet Proposition 84/1E IRWM Program Guideline standards, and will fully replace the former Salinas Valley IRWM Functionally Equivalent Plan.

# Status of the Greater Monterey County IRWM Plan

The tasks funded through Round 1 of the Planning Grant Program will result in a standards compliant IRWM Plan for the Greater Monterey County IRWM region. The Plan will address all 16 standards outlined in the Proposition 84/1E IRWM Guidelines. The RWMG expects to have a completed, approved, standards compliant IRWM Plan by Fall 2012 (anticipated completion is October 2012).

In the course of developing the IRWM Plan over the past several months, it has come to the attention of the RWMG that the Plan contains some critical information gaps, including a lack of data on environmental water needs and the lack of consideration of two important regional issues—wildfires and "food safety"—that have significant bearing on water management in the Greater Monterey County IRWM region. While the final approved IRWM Plan will be considered adequate to meet Proposition 84/1E standards, these information gaps are significant enough to render the Plan less than adequate as a meaningful planning document for the Greater Monterey County region. The RWMG is therefore requesting Round 2 Planning Grant funds to address these gaps. The RWMG is also requesting additional Planning Grant funds to strengthen and improve certain elements of the IRWM planning process, including increased funding for DAC technical assistance, interregional planning and coordination, and an analysis of the potential barriers to project implementation to help ensure successful long-term implementation of the IRWM Plan.

Funding support through Round 2 will result in a stronger planning process and a much stronger IRWM Plan that will more adequately and fully reflect the unique water resource planning needs of the Greater Monterey County region.

# Specific Need for Additional Work

While Round 1 Planning Grant funds will enable the RWMG to produce a standards compliant IRWM Plan, the funds being requested in Round 2 will provide important improvements to the Plan that will make it a more effective planning document for the Greater Monterey County IRWM region. Additional Planning Grant funds will also provide critical support needed to improve the long-term planning effort. The following provides an overview of the Work Plan objectives:

- **OBEJECTIVE 1: Address Critical Information Gaps:** In the course of developing the Greater Monterey County IRWM Plan thus far, three critical information gaps have been found to exist, and will continue to exist even after the Plan is completed and approved as "standards compliant." The Planning Grant funds requested in this proposal will enable the RWMG to address these information gaps. The resulting information will be incorporated into the IRWM Plan as new sections or chapters of the Plan. The three issues are as follows:
  - Co-management of Food Safety and Water Quality. With Monterey County's \$4 billion agricultural industry, this is an issue of critical importance for the region. Many large produce buyers have adopted stringent standards for the management of the fields where they source their produce, due to food safety concerns. In some cases these standards conflict with

agricultural management practices developed for water quality protection and erosion control, which include for example the retention of surface runoff or establishment of non-crop vegetation on field edges (such as filter strips or buffers). Growers report that they are increasingly caught in an untenable position, forced to choose between meeting mandates to improve water quality, or meeting food safety guidelines and contractual requirements. Food safety concerns may potentially block existing projects in the IRWM Plan from getting implemented. Food safety policies and regulations may also conflict with the Plan's goals and objectives over the long term. Many growers and regional experts believe that "comanagement" for food safety and environmental protection represents the optimal path forward. Co-management is defined as an approach to minimize microbiological hazards associated with food production while simultaneously conserving soil, water, air, wildlife, and other natural resources. Funds for this task will enable the RWMG to promote and fund projects to help resolve barriers that food safety concerns present to implementing water quality, ecological restoration, and flood management projects.

- Wildfire and Water Resource Management. Wildfire management is another issue of critical importance to water and natural resource managers in the region, particularly given the region's dependence on surface water and reservoir storage, the predominance of high quality ecological habitats in the region, and the prediction of increased fires as a result of climate change. In 2008, over 240,000 acres of land burned in the IRWM planning area (the fifth largest fire in California history), affecting watershed function, public and private water systems, ecological systems, and temporal water quality conditions. This land perturbation needs to be acknowledged and analyzed for input into the IRWM Plan in order to support project development that responds to the occurrence of major wildfires in the region. An existing planning effort called FireScape Monterey will be the primary source of information to tie this resource management issue into the IRWM Plan. This task presents an excellent opportunity to link other resource management efforts (including land use planning) into the IRWM planning effort.
- Assessment of Environmental Water Needs. Very little information exists for environmental water needs in the Greater Monterey County region. As a result, the IRWM Plan does not take environmental water needs into consideration when calculating and planning for future water demand. This is a serious deficiency in the current IRWM Plan that must be addressed if adequate water supplies for environmental aquatic needs are to be ensured and protected. This task will represent a critical "first step" in assessing environmental water needs in the Greater Monterey County region. The task consists of gathering existing information and data, performing a data gap analysis, and charting a course forward.
- **OBJECTIVE 2: Improve the IRWM Planning Process:** Funds are being requested for three specific tasks that will strengthen the overall planning process. The tasks are as follows:
  - Provide Additional Technical Assistance for DACs. The Greater Monterey County RWMG is strongly committed to involving DACs in the IRWM planning process and providing support for DAC water resource projects. The RWMG received \$160,000 in Round 1 Planning Grant funds for DAC support. Specific tasks include: identify DACs in the region and provide outreach; integrate DAC members and Native American Tribal members into the IRWM planning process; provide assistance in identifying potential water resource projects; and provide technical assistance for project preparation. As part of the ongoing outreach effort, the RWMG is requesting \$50,000 in Round 2 to provide additional technical assistance for project development (e.g., feasibility studies, permitting), operator training for water systems, and fiscal training. These funds are critical to help DAC members develop their project proposals and to help them attain self-reliance in managing their projects and water

systems.

- Assessing Barriers to IRWM Plan Implementation. The IRWM Plan is only as strong as it is implementable. Plan objectives will be achieved as projects are implemented; therefore, it is important that any potential barriers to project implementation be identified and addressed. There are many types of potential barriers to project implementation, including regulatory barriers, communication barriers, and funding barriers. The purpose of this task is to investigate potential barriers to IRWM Plan implementation and to identify possible solutions to those barriers. The result of this work will be included as a new section in the IRWM Plan.
- Interregional Planning and Coordination. Planning Grant funds in the amount of \$20,000 were awarded to the Monterey Peninsula, Carmel Bay, and South Monterey Bay IRWM region in Round 1 to develop a "joint chapter" for the Monterey Peninsula and the Greater Monterey County IRWM Plans. The chapter will describe overlapping interests specifically in the former Fort Ord military base area, and will develop a process for prioritizing joint projects within the two IRWM Plans. The Greater Monterey County IRWM Plan Coordinator and RWMG will be assisting the Monterey Peninsula RMWG with this effort, as needed. However, while significant attention has been placed on the border with the Monterey Peninsula region, enormous potential exists for interregional projects and programs with our other neighboring IRWM regions on the Central Coast. What is needed is a concerted effort on the part of the respective RWMGs to focus in on the common issues, to encourage the development of project proposals, to determine how those projects should get prioritized in the respective IRWM Plans, and to collaborate on getting the projects implemented. The RWMG is therefore requesting Planning Grant funds in Round 2 to launch this effort and to ensure that interregional coordination and planning receives the proper level of attention.
- OBJECTIVE 3: Support Continued Coordination of the IRWM Planning Process. None of the above tasks can get accomplished without the assistance of the IRWM Plan Coordinator. The RWMG is requesting Planning Grant funds to support the IRWM Plan Coordinator position on a part-time basis for the duration of the project period. Additional funding support for the IRWM Plan Coordinator position is considered absolutely necessary in order to enable the Coordinator to carry out the level of work needed to effect these important Plan improvements and to continue facilitating the IRWM planning process.

The proposed work, and justification for this work, is described in detail in the Grant Work Plan Content section below. These items were identified by the RWMG as agreed-upon priorities for the Planning Grant. They capture some very important issues and planning efforts currently ongoing in the region and provide a synergy for the IRWM Plan as a long-term planning document.

# **II. GRANT WORK PLAN CONTENT**

As noted previously, support from the Round 1 Planning Grant will enable the RWMG to complete a standards compliant IRWM Plan for the Greater Monterey County IRWM region. Additional support is being requested through Round 2 to bring that IRWM Plan to the next level, providing critical planning funds for items such as increased DAC technical support and the incorporation of important regional planning efforts—including fire management and the co-management of food safety and water quality—that have bearing on the long-term effectiveness of the Plan for assisting our region. This section outlines the proposed Scope of Work, and further describes the need and justification for each task. Note that none of the tasks included in this Planning Grant request will require compliance with CEQA or other environmental documentation.

# **TASK 1: Direct Project Administration**

Direct project administration includes invoicing, tracking progress, ensuring that tasks are completed on time and within budget, reporting, and any other tasks necessary for administering the grant. This task will be performed by the Monterey Bay Sanctuary Foundation, the applicant for this proposal.

**Subtask 1a: Administration:** This includes contracting, invoicing and all general grant administration tasks.

**Subtask 1b: Reporting:** The applicant will write and submit quarterly reports to DWR, as well as a final report at the conclusion of the project period.

#### **Deliverables:**

- Contracts, invoices, and quarterly reports to DWR.
- A Final Report will be submitted at end of project period.

**Timeframe:** Throughout the duration of the project period.

# **TASK 2: IRWM Plan Coordination**

Since the founding of the RWMG and the Greater Monterey County IRWM region, the IRWM Plan Coordinator has been funded through a combination of private grant funds, State Planning Grant funds, and RWMG financial contributions. Long-term funding for the IRWM Plan Coordinator position will consist mainly of RWMG financial contributions; however, the level of work that is needed in the short-term to bring the IRWM Plan up to the desired standard—as described in this proposal—will require more funds than the RWMG entities can contribute. The RWMG is therefore requesting Planning Grant funds to help support the IRWM Plan Coordinator position in order to complete the tasks outlined in this proposal and to make the IRWM Plan a stronger, more effective planning document for the Greater Monterey County region. Funds are being requested to support the IRWM Plan Coordinator position on a part-time basis for up to two years. Support for the IRWM Plan Coordinator position is considered critical to enable continued development of the IRWM Plan.

Funding support is also being requested for technical assistance to maintain the Greater Monterey County IRWM region website and to update maps, as needed. The proposed tasks are as follows:

**Subtask 2a: Coordination of the IRWM Plan planning process.** This task includes all activities necessary to facilitate the IRWM planning process and to promote a positive, cooperative, collaborative,

constructive, and effective planning environment. Specific tasks include, but are not limited, to the following:

- 1. Schedule and conduct regular monthly RWMG meetings and act as representative for the Greater Monterey County region to DWR and other RWMGs, including Central Coast IRWM Funding Area regions and Roundtable of Regions representatives.
- 2. Guide the RWMG through the decision-making processes necessary for continued IRWM planning and Plan development. This includes, among other things, convening and coordinating subcommittees as needed, leading the RWMG through the Plan amendment process, and overseeing the 2013 IRWM Plan project solicitation, which will likely entail a revision of the Project Review and Project Ranking processes.
- 3. Work with the consultants hired to develop the new IRWM Plan elements and planning tools described in Tasks 3 8 below. Assist in the development of those tasks as needed, and act as a liaison between the consultants and the RWMG to ensure linkages with the IRWM Plan and ongoing IRWM planning process.
- 4. Incorporate Round 1 Planning Grant tasks into the ongoing IRWM planning process. The IRWM Plan is expected to be completed and approved by Fall 2012, yet most of the tasks that are currently being implemented through the Round 1 Planning Grant will be ongoing beyond that completion date. The IRWM Plan Coordinator will work to incorporate the results of those tasks into the ongoing IRWM planning process, as well as into the Plan as new or updated sections (through a Plan amendment process). Specific tasks from Round 1 include:
  - a. Water Resource Project Coordination (WRPC) process outcomes. The IRWM Plan Coordinator will work with project proponents to include any new projects that result from the WRPC process into the IRWM Plan, will work with the RWMG to identify other sub-watershed areas that might benefit from the WRPC process, and will share the results of this pilot project with other interested RWMGs.
  - b. *Data management outcomes*. As the RWMG continues to learn more about the data management needs in the region and develops additional data management tools, the IRWM Plan Coordinator will work with the RWMG and with project proponents to incorporate that information into the ongoing IRWM planning process.
  - c. Greenhouse gas emissions tool. The IRWM Plan Coordinator will assist project proponents in using the new GHG emissions analysis tool, and will share the outcomes and success of the GHG emissions tool with other interested RWMGs.
  - d. *Economic feasibility analysis*. The IRWM Plan Coordinator will make the economic feasibility analysis tool available to project proponents and will assist them with its use. The IRWM Plan Coordinator will also share the outcomes and success of the economic feasibility analysis tool with local jurisdictions and other interested RWMGs.
- 5. Keep the public and stakeholders informed of IRWM Plan progress and events, and work to promote their participation (including email updates, updating website content, personal communications, the facilitation of public review and comment on any major IRWM Plan decisions, and continued updating of the stakeholder list). In addition, the IRWM Plan Coordinator will work with project proponents to keep them updated on the IRWM Grant Program and other grant programs, to update their projects in the IRWM Plan before the Round 2 Implementation Grant solicitation, and to continue to identify opportunities for increased project integration.

- 6. Conduct ongoing "Plan Performance and Monitoring," which includes analyzing IRWM Plan projects against objectives, tracking progress of projects, and determining future directions for the IRWM Plan. (Note: The IRWM Plan Coordinator is expected to produce a Plan Performance Review on a bi-annual basis, as funds are available; however, this report will most likely be completed after the Round 2 Planning Grant project period ends.)
- 7. Act as a clearinghouse for IRWM-related news and opportunities. This includes, for example, interpreting the Proposition 84/1E IRWM Guidelines and PSPs for RWMG members and stakeholders as they are released, tracking the latest climate change guidance and related requirements, keeping up with the progress of other IRWM regions and learning from their successes, and notifying RWMG members of applicable non-IRWM grant opportunities.

#### **Deliverables:**

- Quarterly summary of activities related to this task, including as appropriate:
  - Monthly RWMG meeting minutes
  - Updated Project Review and Project Ranking processes (and any other updated or new IRWM Plan "milestones"), upon completion
  - Updated (2013) IRWM Plan Ranked Project List
  - Summary of communication with stakeholders
  - Updated sections of the IRWM Plan to reflect results of Round 1 Planning Grant tasks
  - Updated sections of the IRWM Plan to reflect results of Round 2 Planning Grant tasks
  - Website content (available for viewing on website: http://www.greatermonterevirwmp.org)

**Timeframe:** Throughout the duration of the project period (as funding remains available).

**Subtask 2b: Website maintenance and map updates.** This subtask refers to the technical aspect of website maintenance, including regular updates and changes to content in HTML, uploading new documents and removing old ones, and general web upkeep performed by the webmaster. The development of website content is not included. Additionally, the RWMG has expressed interest in making the website a portal to events and small-scale resources in the region that may be difficult to find elsewhere. These will need to be researched, described on the website, and regularly updated. Finally, the Greater Monterey County IRWM website will be linked to an online project submittal form that will be designed to help track IRWM Plan effectiveness in terms of the extent to which IRWM Plan projects are helping the region to achieve IRWM Plan goals. This information will be updated regularly as projects progress, and will be displayed on the website.

This subtask also includes updating of IRWM maps, as needed, which will consist primarily of DAC maps but could also include surface water, impaired waterbody, groundwater, land use maps or others. Updating maps often includes background data acquisition and synthesis and the creation and manipulation of polygons. The task also includes the cartography needed to turn the GIS information into a static map that can be understood by the stakeholders who will need it.

This subtask will be conducted by the Central Coast Wetlands Group at Moss Landing Marine Laboratories.

#### **Deliverables:**

- Website: http://www.greatermontereyirwmp.org
- Updated maps

**Timeframe:** Throughout the duration of the project period, as needed.

# **TASK 3: Increased Technical Assistance to Disadvantaged Communities**

The Greater Monterey County RWMG has made a concerted effort to ensure that the water resource management needs and interests of DACs are fully considered and addressed in the IRWM Plan. Three organizations—the Environmental Justice Coalition for Water (EJCW), the San Jerardo Cooperative, and the Rural Community Assistance Corporation (RCAC)—have been invited to participate on the RWMG specifically to represent DAC interests:

- 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 DACs, and aims to build the capacity of organizations and groups to engage in local, regional, and statewide water policy and planning (see <a href="https://www.ejcw.org">www.ejcw.org</a>).
- RCAC is a nonprofit organization that provides technical assistance, training, and financing to rural DACs to help them achieve their goals and visions. RCAC's work encompasses a wide range of services including environmental infrastructure; affordable housing development; economic and leadership development; and community development finance. RCAC's services are generally available to DACs with populations of 10,000 or fewer, as well as tribal communities (see <a href="http://www.rcac.org/">http://www.rcac.org/</a>).
- The San Jerardo Cooperative is a unique rural housing complex for low-income farmworker families in rural Monterey County. The Cooperative is the first such development in California, where there are 60 units that are owned by Coop members themselves, and also includes four rental units, a community room, child-care center and soccer fields. The Coop has experienced severe drinking water contamination and wastewater treatment issues, and has been involved in the statewide movement for water justice.

EJCW, San Jerardo Cooperative, and RCAC have worked diligently on the RWMG to ensure that DAC needs have been considered thus far in the IRWM Plan development process, including the RWMG's consideration of regional issues and conflicts, goals and objectives, and the project review process. In addition, Planning Grant funds from Round 1 have been received to enable the RWMG to significantly expand its outreach efforts to DACs within the Greater Monterey County IRWM region and to promote the participation of DACs in the planning process. Work funded through Round 1 includes, specifically, identifying DACs in the Greater Monterey County region that have ongoing water issues, providing basic water education and advocacy services, and working with those communities to develop a clear sense of the community water concerns and potential solutions. EJCW and RCAC will then help the members of these communities develop water projects that can be included in the IRWM Plan (particularly water and wastewater projects, but also including other projects based on the identified needs in the area).

As the RWMG is in the beginning stages of the DAC outreach effort supported through Round 1 Planning Grant funds, it is already apparent that additional funds will be needed for technical assistance. Most DACs have extremely limited resources to provide the needed technical, managerial, and financial capacity to fully develop and properly manage their water resource projects. In order to promote project development and to position DACs to independently manage the provision of safe drinking water and reliable wastewater treatment and disposal systems in their communities, the RWMG is requesting additional technical assistance funding for DACs. Note that the RWMG's request for DAC assistance both in the Round 1 grant proposal (awarded) and in this Round 2 grant proposal constitutes more than 20% of the respective total funding requests, which reflects the RWMG's full support for DAC participation in the Greater Monterey County IRWM planning process.

The proposed tasks are as follows:

**Subtask 3a. Provide technical assistance in fiscal management and operator training for water/wastewater systems.** As part of the ongoing outreach effort to encourage the participation of DACs in the IRWM planning process, the RWMG will offer assistance in fiscal management and operator training for water and wastewater systems where need is evident. Fiscal management training will be offered to enable the communities to have the capability of conducting proper accounting practices. In addition, the RWMG will provide technical assistance and resources to educate DACs on how to independently operate and maintain their water/wastewater systems, including rate setting analysis for operation and maintenance and CIP planning. Classroom trainings that prepare DACs on Operator Exam preparation may also be offered. This task will be conducted by RCAC.

### **Deliverables:**

• Documentation of training sessions, including list of individuals/communities trained.

**Timeframe:** Months 1 - 24 [August 2012 - July 2014], as needed.

**Subtask 3b. Prepare technical assessments.** Hire consultant engineers as needed to help DACs prepare technical assessments, including diagnostic studies (e.g., design, engineering, and permitting).

### **Deliverables:**

• Documentation of progress toward design, permits, assessments for DAC proposals.

**Timeframe:** Months 1 - 24 [August 2012 - July 2014], as needed

**Subtask 3c. Assist DACs with project development.** Assist DAC members with developing their project ideas into project proposals. Assist them in preparing and submitting project proposals for inclusion in the IRWM Plan. This task will be conducted by RCAC and/or EJCW, as appropriate.

### **Deliverables:**

• DAC project proposals submitted (or ready for submission) for the IRWM Plan.

**Timeframe:** Months 12 – 24 [August 2013 – July 2014]

**Subtask 3d. Update DAC section of the IRWM Plan, and incorporate DAC projects into the Plan.** The IRWM Plan Coordinator will update DAC information in the Stakeholder Involvement section of the IRWM Plan and other sections that describe DACs in the region, and will work with project proponents as needed to facilitate the incorporation of DAC projects into the Plan during the IRWM Plan project solicitation.

#### **Deliverables:**

• Updated DAC information in the IRWM Plan, incorporated as Plan amendments.

**Timeframe:** Sometime within months 12 – 24 [August 2013 – July 2014]

# TASK 4: Co-Management of Food Safety and Water Quality

The fresh produce of Monterey County is among the healthiest food in the world. Rare outbreaks of illness have been linked to the contamination of leafy greens by pathogens where wildlife was the likely vector. In response, many large buyers have adopted stringent standards for the management of the fields where they source their produce. Some interpretations of these standards conflict with agricultural management practices developed for water quality protection and erosion control, which often include the

retention of surface runoff or establishment of non-crop vegetation on field edges (such as filter strips or buffers). Growers report that they are increasingly caught in an untenable position, forced to choose between meeting mandates to improve water quality, or meeting food safety guidelines and contractual requirements. For example, 32% of leafy greens growers who responded to a local survey reported removing non-crop vegetation in response to pressure from buyers or auditors. Addressing these conflicts is critical to the success and advancement of the Greater Monterey County IRWM Plan.

Many growers and regional experts believe that "co-management" for food safety and environmental protection represents the optimal path forward, albeit one that faces several key obstacles. Co-management is defined as an approach to minimize microbiological hazards associated with food production while simultaneously conserving soil, water, air, wildlife, and other natural resources.<sup>2</sup> It is based on the premise that farmers want to produce safe food, desire to be good land stewards, and can do both while still remaining economically viable.

The science of food safety and water quality co-management is rapidly advancing. The field management standards and contractual requirements of produce buyers may adapt to that knowledge base as it is built, enabling more flexibility to growers. There remains the important work of developing new approaches to water quality management that are consistent with the requirements of buyers. Many approaches can be advanced such as enzymatic removal of pesticides from the water column, woodchip bioreactors to remove nitrate, and regional wetlands with adequate buffers from cropland. However, many of these approaches are early in the development phase, and investment and coordination will be required to define reliable approaches and scale them up for broader application.

To resolve this vexing issue requires progress on several parallel tracks. The Greater Monterey County IRWM Planning process can facilitate the gathering and summarizing of existing information, and bring new and existing ideas forward as implementation projects in the IRWM Plan.

**Subtask 4a. Develop web-based tool to synthesize information and improve communication related to Co-Management.** Develop a "Farm, Food Safety, & Conservation Network" webpage that will serve as a portal for information related to the co-management of food safety and water quality. Populate the webpage with links to relevant research, materials, and events. Provide web-based networking and communication tools through the site. Link to the Greater Monterey County IRWM Plan. Literature compiled for this task will inform development of a Co-Management section for the IRWM Plan (subtask 4c).

## **Deliverables:**

• Farm, Food Safety & Conservation Network webpage

**Timeframe:** Months 1 – 6 [August 2012 – January 2013], with ongoing maintenance

Subtask 4b. Coordinate and host a Co-Management Forum to identify priority actions to advance as IRWM Plan implementation projects. Engage approximately 40 diverse stakeholders (including growers, resource conservationists, food safety professionals, researchers, buyers, etc.) in a daylong collaborative forum. The goals of the forum are to:

Synthesize the latest in co-management research, policy and practice

<sup>&</sup>lt;sup>1</sup> Resource Conservation District. 2007. A Grower Survey: Reconciling Food Safety and Environmental Protection. Salinas, CA: Resource Conservation District of Monterey County.

<sup>&</sup>lt;sup>2</sup> Lowell, K., J. Langholz, and D. Stuart. 2010. Safe and Sustainable: Co-Managing for Food Safety and Ecological Health in California's Central Coast Region. San Francisco, CA. and Washington, D.C: The Nature Conservancy of California and the Georgetown University Produce Safety Project.

• Identify priority needs and implementation projects that address those needs for inclusion in the Greater Monterey County IRWM Plan (subtask 4c).

### **Deliverables:**

- Forum agenda
- Summary report of forum participant evaluations
- Outreach materials: synthesis of co-management research, policy, and practice
- Priority list of IRWM Plan implementation projects to address co-management, developed through collaborative learning process

**Timeframe:** Months 8 – 13 [Spring/Summer 2013]

**Subtask 4c. Develop the Co-Management Chapter for the Greater Monterey County IRWM Plan.** Summarize the issue of co-management and its importance to the Greater Monterey County IRWM Plan. Summarize existing research and implementation projects. Include descriptions of established and nascent partnerships advancing the issue and their identified needs and priorities.

#### **Deliverables:**

• Co-Management Chapter for inclusion in the Greater Monterey County IRWM Plan. Content for this chapter will be generated in part by the webpage and Forum (subtasks 4a and 4b).

**Timeframe:** Months 10 - 15 [May – October 2013]

# **TASK 5: Wildfire and Water Resource Management**

In August 1977, a wildfire called the Marble-Cone Fire burned for three weeks in the high country of Big Sur. By the time it was extinguished, it had burned about 178,000 acres<sup>3</sup> of the Ventana Wilderness, making it the largest wildfire in recorded California history at that time. The fire burned 90% of the vegetation cover in the upper Big Sur River watershed, posing the threat of serious flooding in the Big Sur River Valley, where a much smaller August 1972 fire had led to disastrous flooding later that year. Fortunately, moderate rains resulted in no major flooding problems.<sup>4</sup> However, the Marble-Cone Fire stimulated implementing the California early warning ALERT system for flooding in Monterey County, which is still in use today.

In 2008, Monterey County experienced the fifth largest wildfire in California history. The result was over 240,000 acres burned in public and private lands mostly in the western area of the county on the west and east sides of the Big Sur Coastal Range.<sup>5</sup> Two separate fires burned into one massive event after two weeks. One of the fires (Indians Fire) was traced to a campfire and one of the fires (the Basin Fire) was started by a lightning strike. The immediate effects include damaged and burned water delivery and storage systems, damaged access roads to storage and treatment facilities, and moderate to severely burned watershed mostly on south facing slopes of the range. A full review of the fire's immediate effects and predicted future effects to water storage reservoirs from sedimentation, water delivery systems repair,

<sup>&</sup>lt;sup>3</sup> "Sequential Changes in Bed Habitat Conditions in the Upper Carmel River Following the Marble-Cone Fire of August, 1977", California Digital Library:

http://publishing.cdlib.org/ucpressebooks/view?docId=ft1c6003wp&doc.view=content&chunk.id=d0e21806&toc.depth=1&anchor.id=0&brand=eschol

<sup>&</sup>lt;sup>4</sup> Lussier, Tommie Kay, Big Sur: A Complete History and Guide, ISBN 0-935766-27-8

<sup>&</sup>lt;sup>5</sup> State Emergency Assessment Team (SEAT) Report: "Basin-Indians Fire: Affecting Watersheds in Monterey California," September 2008.

and security and watershed recovery for habitat and species was documented in a number of reports conducted by the US Forest Service and California Department of Forestry.

In 2010, Monterey County adopted a Community Wildfire Protection Plan laying the groundwork for local community planning for wildfire in Monterey County. In 2011, the US Forest Service initiated a process called FireScape Monterey (http://firescape.ning.com/) in the Big Sur Coastal Range for public and private lands that share a border in the area. The effort has identified Core Values and a Conceptual Model for desired conditions regarding wildfire management in the region. These conditions include watersheds and community facilities in the watershed including water supply.

The management of wildfire is of critical concern to water and natural resource managers in the Greater Monterey County region, particularly to those in the Big Sur coastal region where the water supply system is particularly susceptible to wildfire impacts. The FireScape Monterey process has important implications for water management in the region, yet as a relatively new effort, few RWMG members know anything about it. This task represents an opportunity to facilitate an information exchange and goals process between the two planning efforts and incorporate the FireScape Monterey effort into the IRWM planning effort.

The task will involve coordinating with the FireScape Monterey Core Team in an exchange of information—soliciting input from the FireScape Core Team on IRWM Plan goals and objectives, and determining how the IRWM planning effort can inform and assist the FireScape Monterey effort. A new section on Wildfire and Water Resource Management will be developed for the IRWM Plan. This task will include: gathering existing information and summarizing the potential impacts of wildfires on ecological and water resources; documenting the relationship between water resource planning and land use planning as it pertains to wildfires (forestry management, water supply issues, water quality issues, ecological issues, watershed restoration, fire management policies, etc.); and incorporating the latest FireScape Monterey efforts into the IRWM Plan. Additionally the recommendations of the FireScape Monterey effort will be incorporated as proposed projects to the extent appropriate, based on IRWM Plan goals and objectives.

**Subtask 5a: Facilitate an exchange of information between the RWMG and FireScape Monterey Core Team.** A consultant will be hired to facilitate an exchange of information between the RWMG and the FireScape Monterey Core Team. The RWMG will seek recommendations from the FireScape Monterey Core Team related to IRWM Plan goals and objectives. Additionally, the RWMG will explore with the FireScape Monterey Core Team ways in which the IRWM planning effort can assist the FireScape effort.

#### **Deliverables:**

• Meeting notes with RWMG and members of the FireScape Monterey Core Team

**Timeframe:** Months 4-5 [November – December 2012]

Subtask 5b: Conduct one-day workshop to identify common goals and objectives for possible future projects in coordination between the IRWM planning and FireScape efforts. The RWMG and FireScape Core Team will participate in a one-day workshop to identify common goals and objectives for possible future projects in coordination between the two efforts. A consultant will be hired to facilitate the workshop. The RWMG will encourage the development of projects appropriate for inclusion in the IRWM Plan.

### **Deliverables:**

- The workshop
- Summary of outcomes

• List of new projects or concept proposals for inclusion in the IRWM Plan, if appropriate

**Timeframe:** Month 6 [January 2013]

**Subtask 5c: RWMG reviews mechanisms to promote desired outcomes**. The consultant will lead the RWMG in reviewing mechanisms to promote outcomes including items such as local permitting strategies for standardized treatments and standardized monitoring and assessment related to fire suppression.

#### **Deliverables:**

- RWMG meeting notes
- Summary of possible local mechanisms for partnerships and collaborative projects

**Timeframe:** Months 6 – 7 [January – February 2013]

Subtask 5d: Develop Wildfire and Water Resource Management Section for the Greater Monterey County IRWM Plan. The IRWM Plan Coordinator will develop a section for Greater Monterey County IRWM Plan incorporating the outcomes of subtasks 5a – 5c. The section will include a description of the impact of wildfires on ecological and water resources in the Greater Monterey County region, the significance of wildfires for water management, the purpose and desired outcomes of Firescape Monterey, a summary of the latest Firescape Monterey efforts, and local mechanisms for partnerships and collaborative projects. The resulting product may constitute a stand-alone chapter in the IRWM Plan, or alternatively, a section within the Region Description chapter.

#### **Deliverables:**

 Wildfire and Water Resource Management Section for inclusion in the Greater Monterey County IRWM Plan

**Timeframe:** Months 7 – 12 [February – July 2013]

# **TASK 6: Assessing Environmental Water Needs**

The California Water Code §10540(c) requires IRWM Plans to address, among other things, the protection, restoration, and improvement of aquatic, riparian, and watershed resources within the region. Several objectives of the Greater Monterey County IRWM Plan address this requirement, including:

- Support science-based projects to protect, improve, enhance, and/or restore the region's ecological resources, while providing opportunities for public access and recreation where appropriate.
- Protect and enhance state and federally listed species and their habitats.
- Implement fish-friendly stream and river corridor restoration projects.
- Support applied research and monitoring to better understand environmental conditions, environmental water needs, and the impacts of water-related projects on environmental resources.

The last objective recognizes a need for increased research and monitoring to better understand environmental water needs. Aquatic resources cannot be adequately protected unless these needs are understood and accounted for.

As a long-term planning document, the IRWM Plan considers historic and current water demand and then estimates projected water demand over a 20-year planning horizon in order to be able to manage future water supply sources to meet those needs. Water use data for agricultural and urban water demand in the region—historic, current, and projected—is readily available, and has been used to estimate future water

demand projections in the IRWM Plan. However, very little data has been found regarding environmental water needs in the region. As a result, the Greater Monterey County RWMG has determined that the current IRWM Plan lacks the data needed to adequately evaluate the future water supply needs of aquatic environments.

Establishing environmental water needs is somewhat more challenging than establishing agricultural and urban water needs. Each aquatic ecosystem has a specific threshold of water flow, magnitude, timing, duration, and volume required to maintain healthy function. Establishing these amounts scientifically is challenging, but crucial for incorporation into regional water planning. The RWMG is concerned that allocations for future environmental water needs in the Greater Monterey County region may be getting overlooked by water managers, and—since so little data appears to exist at present—that these needs may be getting overlooked now. The ability to balance human water needs with the needs of aquatic ecosystems when planning water allocation and future development will become increasingly important, particularly given the anticipated impacts of climate change.

The proposed task will represent an important "first step" in assessing environmental water needs in the region. It will involve gathering and summarizing existing information and data, analyzing the gaps, and making recommendations for next steps.

Subtask 6a: Determine availability of existing data on environmental water needs in the Greater Monterey County region. A graduate student from California State University Monterey Bay's (CSUMB) Coastal and Watershed Science and Policy (CWSP) Professional Science Master's Program will be hired to conduct this task. An internship opportunity advertisement will be sent to all students in the program. Interested students will be interviewed and chosen based on appropriate background, training, and experience. The student will conduct research to determine the availability of information and data regarding the amount of water required by the environment within the six watersheds in the Greater Monterey County region. A professor in the Division of Science and Environmental Policy at CSUMB will provide oversight of the graduate student's work and guidance with every aspect of subtasks 6a and 6b, as needed.

#### **Deliverables:**

• Annotated list of all pertinent information/data found to exist on environmental water needs in the region.

**Timeframe:** Months 1 - 4 [August – November 2012]

**Subtask 6b: Summarize data, analyze information gaps, and produce report with recommendations for further research.** Once the student has found all existing data available in the region, he or she will summarize this information and will then conduct an analysis to explore the deficiencies of the data. These data gaps will be highlighted and recommendations for future research will be provided. The student will present his/her findings and recommendations to the Greater Monterey County RWMG in the form of a final report.

# **Deliverables:**

A formal report presented to the Greater Monterey County RWMG. The report will
contain the annotated list of all pertinent information/data found to exist on
environmental water needs in the region, a narrative summary of that information, an
analysis of perceived information/data gaps, and recommendations for future research
needed in this area.

**Timeframe:** Months 4 - 10 [November 2012 - May 2013]

**Subtask 6c:** Incorporate resulting information into the IRWM Plan and determine next steps. The IRWM Plan Coordinator will incorporate the pertinent information from the final report into the Greater Monterey County IRWM Plan, and will work with the RWMG to figure out next steps. This will include a plan for financing future research and/or other work needed to obtain sufficient information and data on environmental water needs in the Greater Monterey County region.

#### **Deliverables:**

- Updated section on environmental water needs in the IRWM Plan (in the Water Supply/Water Demand section).
- Documentation of decision-making, including RWMG meeting notes and decisions regarding next steps.

**Timeframe:** Within months 11 – 13 [June – August 2013]

# TASK 7: Analysis of Potential Barriers to IRWM Plan Implementation

In order to successfully implement the Greater Monterey County IRWM Plan, it will be important to assess the potential "barriers" that may exist to IRWM Plan implementation. Barriers to IRWM Plan implementation may come in the form of barriers to project implementation or more generally in the form of barriers to Plan objectives. The barriers may be real or perceived, but even perceived barriers can cause a real impediment to IRWM Plan implementation. Many types of potential barriers exist, among them:

- Policy/Regulatory: This includes policy and regulations that may directly hinder project implementation, conflicting policy and regulations, and/or changing policy or regulations. Policy and regulations from one regulatory entity may not align with those from another regulatory entity (federal, state, regional/county, cities). There may be conflicts between State policies and local (or regional) regulations, for example between State policies and County or City General Plans. Internal conflicts within agencies may also exist, for example, if a city's development fees are not sufficient to support maintenance work on storm water facilities; or there may be misalignments of priorities, for example, between State and Regional Board Planning Issues and Priorities. Oftentimes projects must meet requirements of ever changing regulations. One major area of concern for the agriculture industry in Monterey County, as described in Task 4, is the conflict between certain regulations intended to improve or protect water quality and the demands of produce buyers, which prohibit the very practices required by the regulators. Most of the barriers that exist for IRWM Plan implementation will most likely fall within this "regulatory/policy" category.
- Information Exchange: This refers to circumstances that may limit information exchange among partners, including: unavailability or limited availability of technical reports from various fields of expertise; confidentiality of data that may limit information exchange; unstable partner forums that may discourage long-term participation; or lack of effective channels for information exchange.
- Collaboration and Communication: There may be "territorial boundaries" that get in the way of communication, cooperation, and collaboration between regulatory agencies, bureaucratic agencies (e.g., counties and cities), and other partners. Another potential problem is the loss of institutional knowledge associated with changes in staff within agencies and organizations, causing the need to re-establish working partnerships.
- Feasibility and Cost Issues: Barriers to project implementation may be presented by such things as unforeseen costs. For example, a proposed infrastructure project consisting of a new well and

distribution system may promise substantial water supply benefits to a DAC, but the monthly costs to operate and maintain that system may simply be unaffordable to the residents. Unexpected permit costs can also present a hindrance to some project proponents, and the regulatory review process may take longer than anticipated, delaying project implementation. A different type of cost issue may be a lack of in-kind funds on the part of RWMG entities or stakeholders to support staff time to participate fully in the RWMG or in the IRWM planning process.

The RWMG seeks to identify the potential barriers to IRWM Plan implementation in order to be able to identify solutions to overcome those barriers. Reducing or removing barriers, real or perceived, will help ensure a more successful implementation of the Greater Monterey County IRWM Plan. This task consists of investigating and identifying potential barriers to IRWM Plan implementation, analyzing that information to produce recommended solutions, incorporating the resulting information into the IRWM Plan, and determining with the RWMG a possible course of action.

**Subtask 7a: Investigate potential barriers to IRWM Plan implementation.** Potential barriers to IRWM Plan implementation, including but not limited to those outlined above, will be investigated and summarized. The barriers will be related directly to the IRWM Plan in terms of either the Plan objectives and/or project implementation.

#### **Deliverables:**

• Summary of potential barriers to IRWM Plan and project implementation, upon completion

**Timeframe:** Months 3 – 5 [October – December 2012]

**Subtask 7b: Analyze information and identify possible solutions to implementation barriers.** This subtask will consist of analyzing the information that results from subtask 7a and identifying potential solutions for reducing or eliminating the implementation barriers. The analysis and recommendations will be presented to the RWMG for discussion, and to determine a possible course of action.

### **Deliverables:**

- Summary of analysis and recommendations
- RWMG meeting minutes

**Timeframe:** Months 5 – 9 [December 2012 – April 2013]

**Subtask 7c: Develop section to incorporate into IRWM Plan.** The IRWM Plan Coordinator will develop a section for the IRWM Plan that describes the potential barriers to IRWM Plan implementation and identifies possible solutions. If it seems useful, the section may also contain a matrix table that shows how the different types of barriers variously affect different types of projects, for example, water supply, water quality, flood management, and watershed restoration projects. The section will most likely be incorporated into the Projects chapter of the IRWM Plan, which includes the ranked Project List along with summary descriptions of all of the implementation projects.

## **Deliverables:**

• Section for the IRWM Plan, upon completion

Timeframe: Month 10 [May 2013]

# **TASK 8: Interregional Planning**

The Greater Monterey County IRWM region shares borders and common interests with three other IRWM regions—the Monterey Peninsula, Carmel Bay, and South Monterey Bay IRWM region (the Monterey Peninsula region), the Pajaro River Watershed region, and the San Luis Obispo region—and shares additional common interests with two other IRWM regions in the Central Coast Funding Area, the Northern Santa Cruz County region and the Santa Barbara County region. Funds were requested through the Round 1 Planning Grant program, collaboratively from the Greater Monterey County region and the Monterey Peninsula region, to explore and describe the overlapping interests and jurisdictional boundaries between those two IRWM regions, focusing specifically on the former Fort Ord military base area. The requested funds were granted and awarded to the Monterey Peninsula RWMG, which is now responsible for conducting the task and producing a section that will be incorporated into both regions' IRWM Plans. The IRWM Plan Coordinator and RWMG for the Greater Monterey County region will be assisting the Monterey Peninsula RWMG with this effort, as appropriate.

While efforts have been focused predominantly on the border with the Monterey Peninsula region, enormous potential exists for interregional projects and programs with the other IRWM regions on the Central Coast. Interregional coordination and collaboration will be based on shared issues, which include, for example, flooding and floodplain management, secure water supplies, climate change, and environmental and bio-diversity issues. What is needed is a concerted effort on the part of the respective RWMGs to focus in on the common issues, to encourage the development of project proposals, to determine how those projects should get prioritized in each of the IRWM Plans, and to collaborate on getting the projects implemented, either through IRWM grant funds and/or through non-IRWM funding sources.

Several potential interregional projects/programs and common issues that warrant further exploration have already been flagged. It is uncertain at this time which of these issues are appropriate or "ready" for interregional planning; but potential issues include (and are not limited to):

- Invasive Aquatic Species Control and Monitoring: Monterey and San Luis Obispo counties have worked closely over the past several years to monitor for invasive mussels. The goal is to create a sustainable program to inspect all vessels launching at reservoirs in the region to prevent quagga/zebra mussels from becoming established in these critical water supplies. This project has been included in the Greater Monterey County IRWM Plan, but as of yet no further coordination has occurred between the Greater Monterey County and the San Luis Obispo RWMGs regarding the project. The RWMGs need to determine how the project will be prioritized relative to other projects in the respective IRWM Plans, and to identify a cooperative plan for getting the project implemented.
- Interlake Tunnel between Lake Nacimiento and Lake San Antonio: Lake Nacimiento and Lake San Antonio are manmade reservoirs within the Salinas River Basin. Lake Nacimiento is located in northern San Luis Obispo County and Lake San Antonio is located in Monterey County, but both reservoirs are owned and operated by the Monterey County Water Resources Agency. The watershed feeding Lake Nacimiento is more responsive to rain events, with nearly three times more inflow than Lake San Antonio. At times water releases are made from Lake Nacimiento during the winter months because the lake is at capacity while Lake San Antonio has excess storage available. A project has been proposed to provide a pathway between the lakes in order to redirect water and use it to fill the excess capacity typically available in Lake San Antonio. This would provide additional water storage as well as increased recreational opportunities. Like the project described previously, this project has been included in the Greater Monterey County

IRWM Plan but no effort has yet been made to coordinate the prioritization of the project with the San Luis Obispo RWMG or to develop a plan for getting the project implemented.

- South-Central California Coast Steelhead: Several small coastal streams in San Luis Obispo County share the same steelhead Distinct Population Segment (DPS) as the Greater Monterey County IRWM region. Issues in the area south of Carmel extending across the county line would be better addressed by having the two IRWM regions working closely together.
- Paso Robles Groundwater Basin: More than 33% of the Paso Robles Groundwater Basin lies within Monterey County, with the remaining portion located within San Luis Obispo County. The Monterey County Water Resources Agency, a Greater Monterey County RWMG member, participates on the Paso Robles Groundwater Management Plan Steering Committee. There are numerous issues that face and will face the Paso Robles Groundwater Basin, including increasing agricultural demands, water quality issues, water supply issues (overdrafted basin), and urbanization pressure. The committee is currently discussing possible options for the basin. Opportunities to share experiences, resources, and strategies would provide a win-win situation for both regions.
- Stormwater Management: Stormwater passes across the boundaries of the Greater Monterey County and the Monterey Peninsula IRWM regions. While the Monterey Peninsula RWMG is working with the support of Round 1 Planning Grant funds to describe overlapping interests between the two regions, that effort is limited specifically to the geographic area of the former Fort Ord military base. Other common issues and shared interests between the two regions, such as stormwater management, need to be examined and discussed.
- Region-wide Climate Change Impacts: Some preliminary attempts have been made to initiate a Central Coast region-wide climate change impact analysis; at this point in time, however, each of the IRWM regions in the Central Coast area is proceeding on its own. Sharing information and resources, coordinating efforts, and potentially creating a region-wide database would increase efficiencies, save money and staff time, and most likely result in increased coordination, collaboration, and communication between the regions regarding climate change projects, actions, and overall planning. It is unclear whether the RWMGs will opt for the coordinated approach, but the issue at least warrants further discussion.
- Biodiversity Issues: Numerous biodiversity issues shared by the Central Coast IRWM regions
  could be greatly assisted by creating an interregional approach. This type of approach would
  allow regions the ability to work together to identify common issues and develop strategies and
  solutions collaboratively, better utilizing State resources.

Planning Grant funds will enable the IRWM Plan Coordinator and the RWMG to focus more attention on interregional coordination and planning efforts between the Greater Monterey County IRWM region and the other regions in the Central Coast Funding Area, while continuing to coordinate with the Monterey Peninsula region on common issues and joint projects in the former Fort Ord area. The proposed tasks are as follows.

Subtask 8a: Coordinate with the neighboring IRWM regions to investigate common issues and potential interregional projects/programs. The IRWM Plan Coordinator will work with the Greater Monterey County RWMG and with RWMG members from adjacent regions—primarily the San Luis Obispo County and Pajaro River Watershed regions, as well as with the Monterey Peninsula region—to investigate potential interregional projects across the shared borders. The IRWM Plan Coordinator will also work with RWMG members from the other Central Coast regions—including Northern Santa Cruz County and Santa Barbara County—to explore shared interests and potential region-wide projects or programs, as described above.

#### **Deliverables:**

• List of projects/programs developed for inclusion in the IRWM Plans

**Timeframe:** Months 1 - 10 [August 2012 - May 2013]

Subtask 8b: Determine process for prioritizing projects in the respective IRWM Plans and submitting them for IRWM grant funds. The IRWM Plan Coordinator will work with RWMG members from the adjacent and neighboring regions to define a process for prioritizing projects/programs within the IRWM Plans, and a plan for getting the projects/programs implemented. The latter will include not only IRWM grant funds but other non-IRWM funding sources as well.

### **Deliverables:**

• Summary of prioritization plans

**Timeframe:** Months 6 - 10 [January – May 2013], as appropriate

**Subtask 8c: Update Coordination Section in IRWM Plan to reflect outcomes.** The IRWM Plan Coordinator will incorporate outcomes of the Interregional Planning task into the Coordination Section of the IRWM Plan. The update will be included as a Plan amendment.

#### **Deliverables:**

• Updated section of the IRWM Plan, upon completion

**Timeframe:** Months 10 - 12 [May – July 2013]

### III. ADDITIONAL IRWM PLAN WORK

No additional work will be needed to develop a standards compliant IRWM Plan.

# Att4\_PG2\_MBSF\_BUDGET\_1of1 Budget

Project Budget								
Budget Category	Funding Match \$	Requested Grant Funding \$	Total \$					
Task 1. Direct Project Administration								
1a. Administration		12,235	12,235					
1b. Reporting		12,235	12,235					
Subtotal		24,470	24,470					
Task 2. IRWM Plan Coordination		Т						
2a. Coordination of the IRWM Plan planning process	57,437	83,000	140,437					
2b. Website maintenance and map updates	F7 407	7,000	7,000					
Subtotal Pack 3 Increased Technical Assistance to DACs	57,437	90,000	147,437					
Task 3. Increased Technical Assistance to DACs		T						
3a. Provide technical assistance in fiscal management and operator		10,000	10.000					
training for water systems  3b. Prepare technical assessments		10,000 30,000	10,000 30,000					
3c. Assist DACs with project development	5,464	10,000	15,464					
3d. Update DAC section of the IRWM Plan, and incorporate DAC	J, <del>4</del> U4	10,000	13,404					
projects into the Plan		1,500	1,500					
Subtotal	5.464	51,500	56,964					
Task 4. Co-Management of Food Safety and Water Quality	0,404	01,000	00,004					
4a. Develop web-based tool to synthesize information and improve								
communication related to Co-Management		6.000	6,000					
4b. Coordinate and host a Co-Management Forum to identify priority		5,555	-,,,,,,					
actions to advance as IRWM Plan implementation projects		15,000	15,000					
4c. Develop the Co-Management Chapter for the Greater Monterey			·					
County IRWM Plan	38,720	10,000	48,720					
Subtotal	38,720	31,000	69,720					
Task 5. Wildfire and Water Resource Management								
5a. Facilitate an exchange of information between the RWMG and								
FireScape Monterey Core Team	5,625	3,500	9,125					
5b. Conduct one-day workshop to identify common goals and								
objectives for possible future projects in coordination between the		4.000	4.000					
IRWM planning and FireScape efforts		1,000	1,000					
5c. RWMG reviews mechanisms to promote desired outcomes 5d. Develop Wildfire and Water Resource Management section for		2,000	2,000					
IRWM Plan		10,000	10,000					
Subtotal	5.625	16,500	22,125					
Task 6. Assessing Environmental Water Needs	J,023	10,500	££,1£5					
6a. Determine availability of existing data on environmental water		T I						
needs in the Greater Monterey County region		3,470	3,470					
6b. Summarize data, analyze information gaps, and produce report		5,	0, 0					
with recommendations for further research		6,470	6,470					
6c. Incorporate resulting information into the IRWM Plan and		,	- , -					
determine next steps		1,500	1,500					
Subtotal		11,440	11,440					
Task 7. Analysis of Potential Barriers to IRWM Plan Implementatio	n							
7a. Investigate potential barriers to IRWM Plan implementation		3,500	3,500					
7b. Analyze information and identify possible solutions to								
implementation barriers		5,000	5,000					
7c. Develop section to incorporate into IRWM Plan		1,500	1,500					
Subtotal		10,000	10,000					
Task 8. Interregional Planning		T						
8a. Coordinate with the neighboring IRWM regions to investigate		4.000	4.000					
common issues and potential interregional projects/programs		4,320	4,320					
8b. Determine process for prioritizing projects in the respective		0.500	0.500					
IRWM Plans and submitting them for IRWM grant funds		2,500	2,500					
8c. Update Coordination Section in IRWM Plan to reflect outcomes		3,000	3,000					
Subtotal CRAND TOTAL	107 246	9,820	9,820					
GRAND TOTAL	107,246	244,730	351,976					

#### **BUDGET NARRATIVE**

Non-State matching funds represent over 30% of total project costs. Sources of the match are listed below in the narrative.

**Task 1.** The RWMG is requesting \$24,470 for direct project administrative expenses, which is 10% of the total requested funds. The RWMG recognizes that the State requests direct project administrative funds to be limited to 5% of total requested funds; however, 5% of the requested budget—\$12,230, or \$6,115/year over the two-year grant period—does not seem to the RWMG to be sufficient for project administration, particularly given the number of tasks in this grant (and the number of separate entities that will need to be hired, invoiced, and tracked). The RWMG wants to be certain that the Monterey Bay Sanctuary Foundation is adequately and fairly compensated for its work as lead fiscal agent on behalf of the Greater Monterey County region.

**Task 2. IRWM Plan Coordination.** Requested funds total \$83,000 to support the IRWM Plan Coordinator position part-time over the duration of the project period (up to two years, depending on completion of other tasks in this proposal and continued availability of grant funds). This work will be conducted by the current IRWM Plan Coordinator and includes 1,107 hours at \$75/hour (or an average of 46 hours/month over two years). Requested funds in Task 2 include an additional \$7,000 for technical work needed to maintain the Greater Monterey County IRWM region website and to update maps. This work will be conducted by the Central Coast Wetlands Group at Moss Landing Marine Laboratories, and includes 200 hours at \$35/hour.

Match: The Greater Monterey County RWMG has been set up to be a "working group." The MOU signed by all RWMG members commits them to attending regular RWMG meetings and to proactively participating in subcommittees to help develop the IRWM Plan and carry out the IRWM planning process. The RWMG is an enthusiastic group of individuals who have contributed countless hours toward IRWM Plan development and the IRWM planning process. Their extraordinary effort is reflected in the match for this task. Subtask 2a includes \$57,437 in non-State in-kind funds from RWMG members for time spent participating in RWMG meetings (not including travel) and in the various subcommittees, specifically: Goals and Objectives, Project Review, IRWM Plan Draft Review, Funding, Water Resource Project Coordination, Plan Performance & Data Management, and Integration Committees.

The match has been calculated for each RWMG member based on the number of RWMG meetings attended from October 2010 through February 2012 (supported through meeting minutes), the estimated hours of participation in each subcommittee, multiplied by each RWMG member's regular hourly rate (or by a standard "adult volunteer" rate of \$45/hour, if the RWMG member was not reimbursed by his or her organization for RWMG-related work). The calculations for this match, along with supporting letters and documentation, will be submitted to DWR upon request. Note that the hours included in match for this task reflect only a portion of RWMG members, and therefore only a small portion of the actual time that the RWMG has spent on IRWM Plan development and IRWM planning.

Task 3. Increased Technical Assistance to DACs. The RWMG is committed to providing support to enable the full participation of DACs in the Greater Monterey County IRWM process and to assist in meeting their water resource needs. The RWMG is requesting \$50,000 in Planning Grant funds for DAC technical assistance, which is a little more than 20% of the total grant request (note that the RWMG's funding request in Round 1 for DAC support was also about 20% of the total grant request). Subtask 3a includes \$10,000 to provide technical assistance in fiscal management and operator training for water systems as part of the ongoing outreach effort to encourage participation of DACs in the IRWM planning process. This will be conducted by RCAC, and includes 104 hours based on the GSA approved commercial rate of \$95.91 for a Senior Environmental Specialist. Subtask 3b includes \$30,000 to conduct

technical assessments; this is a lump sum amount that will be used to hire consulting engineers to conduct the technical assessments, as needed. Subtask 3c includes \$10,000 to assist DACs with project development. This task will be conducted by either RCAC and/or EJCW as appropriate; the cost is included as a lump sum amount payable to RCAC or EJCW staff at their standard rates. Subtask 3d includes \$1,500 for 20 hours of the IRWM Plan Coordinator's time (at \$75/hour) to coordinate with RCAC and EJCW on DAC issues and to update the DAC section of the IRWM Plan to reflect the latest efforts (including maps).

**Match:** The match for the DAC effort comes from the work that has been done to date to ensure the participation of DACs in the Greater Monterey County IRWM planning effort. This includes \$5,464 in non-State funds as in-kind match from RCAC and the San Jerardo Cooperative, Inc. in attending RWMG meetings and participating on subcommittees to represent DAC interests. (EJCW also participated in RWMG meetings and on subcommittees, but the match does not include their time.)

**Task 4. Co-Management of Food Safety and Water Quality**. This task totals \$31,000 and will be conducted by the Monterey Bay National Marine Sanctuary (MBNMS). Subtask 4a includes \$6,000 to develop a web-based tool, including \$2,500 for MBNMS staff (38.5 hours at \$65/hour) and \$3,500 lump sum for a technical consultant to assist in this effort. Subtask 4b includes \$15,000 to coordinate and host the 2013 Co-Management Forum, including \$6,500 for MBNMS staff (100 hours at \$65/hour), \$7,000 for a consultant to assist in this effort, and \$1,500 for expenses (facility rental and materials). Subtask 4c includes \$10,000 for MBNMS staff to develop the Co-Management Chapter of the Greater Monterey County IRWM Plan (154 hours at \$65/hour).

**Match:** The match for this task totals \$38,720 and consists of the following:

- \$14,637 Work conducted on the Co-Management effort thus far by Resource Conservation District (RCD) of Monterey County staff (about 179 hours at \$82/hour). Source of funds: Federal NRCS grant
- \$5,980 Monthly meeting facilitation of the Co-Management effort in Monterey County conducted by MBNMS staff (92 hours at \$65/hour), from October 2008 July 2012 (two hours/month). Source of funds: Federal USDA (AWQA) grant
- \$11,603 Coordination and hosting of 2010 Co-Management Forum. Includes meeting supplies, RCD Food Safety/Water Quality Manuals, and funds for videography/webinar. Source: Federal ARRA grant.
- \$6,500 Coordination and hosting of 2012 Co-Management Forum (this will occur in April or May 2012). Match reflects a conservative estimate of MBNMS staff time: 100 hours at \$65/hour.

Task 5. Wildfire and Water Resource Management. Requested funds for this task total \$16,500. Subtask 5a, facilitating an exchange of information between the RWMG and FireScape Monterey Core Team, will cost \$3,500 and consists of hiring a consultant to coordinate this effort (47 hours at \$75/hour). Subtask 5b, coordination and hosting of a one-day workshop, totals \$1,000 and consists of \$700 for the consultant to coordinate and lead the workshop (9.3 hours at \$75/hour), plus \$300 for facilities rental and miscellaneous supplies. Subtask 5c, identifying mechanisms to promote desired outcomes, will cost \$2,000 and consists of 27 hours of the consultant's time (at \$75/hour) to facilitate this effort with the RWMG. Subtask 5d, developing the Wildfire and Water Resource Management section for IRWM Plan, will cost \$10,000 and consists of 133.3 hours of the IRWM Plan Coordinator's time to research and write this section (at \$75/hour).

**Match:** The match for this task totals \$5,625 and reflects participation of the president of the Coastlands Mutual Water Company (a RWMG member) on the FireScape Monterey team, to date. This is an in-kind match, based on a conservative estimate of 125 hours at an adult volunteer rate of \$45/hour.

**Task 6. Assessing Environmental Water Needs.** Requested funds for this task total \$11,440 and consist of the following: Subtasks 6a and 6b will cost \$6,000 for a graduate student internship (400 hours at \$15/hour), plus \$3,940 for CSUMB Graduate Faculty buy-out, based on an annual salary of \$80,000. Subtask 6a assumes 100 hours of student work; subtask 6b assumes 300 hours of student work; and the cost of faculty oversight has been split evenly between the two tasks. Subtask 6c, updating the IRWM Plan to incorporate the outcomes of this task, will cost \$1,500 and consists of 20 hours of the IRWM Plan Coordinator's time to complete this task (at \$75/hour).

**Task 7. Analysis of Potential Barriers to IRWM Plan Implementation.** Requested funds total \$10,000 and consist of 133.3 hours at \$75/hour for the IRWM Plan Coordinator to research and analyze potential barriers, develop recommendations for possible solutions, work with the RWMG to determine a plan of action, and to develop a new section or chapter for the IRWM Plan.

**Task 8. Interregional Planning.** Requested funds for this task total \$9,820. Subtasks 8a and 8b total \$6,820 and consist of 91 hours (at \$75/hour) for the IRWM Plan Coordinator to work with the Greater Monterey County RWMG and the neighboring RWMGs in order to investigate potential interregional projects, and to determine processes for prioritizing projects in the respective IRWM Plans. Subtask 8c will cost \$3,000 and consists of 40 hours (at \$75/hour) for the IRWM Plan Coordinator to update the Coordination Section of the IRWM Plan to reflect outcomes of this work.

# Att5\_PG2\_MBSF\_SCHED\_1of1 Schedule

Project Period: August 6, 2012 – August 5, 2014 (Approximately Two Years from Signing of the Grant Agreement)

(Approximately Lw	Two Years from Signing of the Grant Agreement)											
	Months											
Work Plan Tasks	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24
Task 1. Direct Project Administration												
1a. Administration												
1b. Reporting												
Task 2. IRWM Plan Coordination			•			•			•	•		
2a. Coordination of the IRWM Plan Planning Process												
2b. Website maintenance and map updates												
Task 3. Increased Technical Assistance to DACs												
3a. Provide technical assistance in fiscal management and operator training for												
water systems												
3b. Prepare technical assessments												
3c. Assist DACs with project development												
3d. Update DAC section of the IRWM Plan, and incorporate DAC projects into the												
Plan												
Task 4. Co-Management of Food Safety and Water Quality												
4a. Develop web-based tool to synthesize information and improve communication												
related to Co-Management												
4b. Coordinate and host a Co-Management Forum to identify priority actions to												
advance as IRWM Plan implementation projects												
4c. Develop the Co-Management Chapter for the Greater Monterey County IRWM												
Plan												
Task 5. Wildfires and Water Resource Management				1		ľ	1		ľ	ľ		
5a. Facilitate an exchange of information between the RWMG and FireScape												
Monterey Core Team												
5b. Conduct one-day workshop to identify common goals and objectives for possible												
future projects in coordination between the IRWM planning and FireScape efforts												
5c. RWMG reviews mechanisms to promote desired outcomes												
5d. Develop Wildfire and Water Resource Management section for IRWM Plan												
Task 6. Assessing Environmental Water Needs				1	1		1	1		1		
6a. Determine availability of existing data on environmental water needs in the												
Greater Monterey County region												
6b. Summarize data, analyze information gaps, and produce report with												
recommendations for further research												
6c. Incorporate resulting information into the IRWM Plan and determine next steps												
Task 7. Analysis of Potential Barriers to IRWM Plan Implementation					1	1	1	1	1	1	1	
7a. Investigate potential barriers to IRWM Plan implementation												
7b. Analyze information and identify possible solutions to implementation barriers												
7c. Develop section to incorporate into IRWM Plan												
Task 8. Interregional Planning							1	Т	1	1		
8a. Coordinate with the neighboring IRWM regions to investigate common issues												
and potential interregional projects/programs												
8b. Determine process for prioritizing projects in the respective IRWM Plans and												
submitting them for IRWM grant funds												
8c. Update Coordination Section in IRWM Plan to reflect outcomes									1			

# Att6\_PG2\_MBSF\_Pref\_1of1 Program Preferences

This section describes how the Greater Monterey County IRWM Plan and planning process will address IRWM program preferences. The IRWM program preferences, as specified in PRC §75026(b) and CWC §10544, consist of the following:

- Include regional projects or programs
- 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
- Effectively resolve significant water-related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the IRWM region
- Effectively integrate water management with land use planning
- Include actions designed to integrate the stormwater resource plan requirements specified in CWC Section 10562 into an IRWM Plan.
- Address statewide priorities, including:
  - 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

The following section will describe how the tasks specifically proposed in this Round 2 Planning Grant application will address IRWM program preferences. The subsequent section will describe how the final standards compliant IRWM Plan for the Greater Monterey County IRWM region (anticipated for completion in Fall 2012), with the support of Round 1 Planning Grant funds, will address each of the IRWM program preferences. Together, *all* of the IRWM program preferences, with the exception of those that do not apply in the Greater Monterey County IRWM region, will be addressed through the completed standards compliant IRWM Plan and the tasks proposed in this Planning Grant application.

# How the Tasks Proposed in this Application will Address IRWM Program Preferences

### Task 2. IRWM Plan Coordination

The IRWM Plan Coordination addresses all of the IRWM program preferences (except for those that do not apply in this region) by providing critical leadership and support for the ongoing IRWM planning process—keeping stakeholders engaged and interested in submitting projects for the IRWM Plan, promoting coordination with neighboring IRWM regions, and most importantly, motivating the RWMG's continued enthusiasm for proactive, collaborative, positive, and integrated water resource planning for the Greater Monterey County region. While it can be said that the IRWM Plan Coordination task touches on

all of the IRWM program preferences, the program preferences that are most directly addressed by the IRWM Plan Coordinator are those that refer to the "big picture" of IRWM planning in the Greater Monterey County region. Those include:

- Include regional projects or programs
- Effectively integrate water management programs and projects within a hydrologic region
- Effectively resolve significant water-related conflicts within or between regions
- Address critical water supply or water quality needs of disadvantaged communities within the IRWM region
- Effectively integrate water management with land use planning
- Statewide Preference: Practice Integrated Flood Management
- Statewide Preference: Ensure Equitable Distribution of Benefits

#### Task 3. Increased Assistance and Outreach to DACs

By providing increased technical assistance to DACs and promoting the development of DAC projects, this task addresses the following specific IRWM program preferences:

- Address critical water supply or water quality needs of disadvantaged communities within the IRWM region
- Statewide Preference: Drought Preparedness
- Statewide Preference: Protect Surface Water and Groundwater Quality
- Statewide Preference: Ensure Equitable Distribution of Benefits

# Task 4. Co-Management of Food Safety and Water Quality

The Co-Management of Food Safety and Water Quality task will support continuing efforts in the Greater Monterey County region to promote and enable the implementation of agricultural best management practices that will protect both water quality and ecological resources, while also protecting food safety. Supporting the Co-Management forum and promoting projects through the IRWM Plan may help to resolve critical conflicts that exist within the region in terms of agricultural practices and water quality regulations. The Co-Management task will bring land use management practices into the forefront of RWMG's ongoing discussion of integrated water resource management, and will effectively incorporate the existing region-wide Co-Management effort into the IRWM planning process. This task therefore has the potential to address all of the following IRWM program preferences:

- Include regional projects or programs
- Effectively integrate water management programs and projects within a hydrologic region
- Effectively resolve significant water-related conflicts within or between regions
- Effectively integrate water management with land use planning
- Statewide Preference: Expand Environmental Stewardship
- Statewide Preference: Practice Integrated Flood Management
- Statewide Preference: Protect Surface Water and Groundwater Quality

## Task 5. Wildfire and Water Resource Management

This task will address an issue of critical importance in the Greater Monterey County region. The problem of wildfire and its effects on water resources, ecological resources, and water supply systems is anticipated to worsen as climate change increases over time, and therefore this is very much a climate change issue. Since the issue of wildfire is a regional issue, potential solutions will also likely be regional and multi-faceted in nature. This task will effectively integrate land use planning with water resource

management, and will effectively incorporate the FireScape Monterey planning effort into the Greater Monterey County IRWM planning effort. The task will therefore directly address the following IRWM program preferences:

- Include regional projects or programs
- Effectively integrate water management programs and projects within a hydrologic region
- Effectively integrate water management with land use planning
- Statewide Preference: Drought Preparedness
- Statewide Preference: Climate Change Response Actions
- Statewide Preference: Expand Environmental Stewardship
- Statewide Preference: Protect Surface Water and Groundwater Quality

# Task 6. Assessing Environmental Water Needs

As described earlier in this proposal, there is a critical lack of data regarding environmental water needs in the Greater Monterey County IRWM region. By analyzing these data gaps and charting a course forward, this task will eventually enable the RWMG to more effectively plan for future water needs and to offer greater protections for environmental resources. Since environmental water needs are expected to increase with increasing climate change, this is also a climate change issue. The following IRWM program preferences are addressed specifically by this task:

- Statewide Preference: Climate Change Response Actions
- Statewide Preference: Expand Environmental Stewardship
- Statewide Preference: Protect Surface Water and Groundwater Quality

# Task 7. Analysis of Potential Barriers to IRWM Plan Implementation

Rather than addressing specific IRWM program preferences, this task addresses all of the program preferences in a global sense. Since the goal of the "Barriers" task is to remove and/or reduce regulatory and other types of barriers to IRWM Plan and IRWM project implementation, the result of this task will be a more effective and successful IRWM Plan for the Greater Monterey County region. A more effective and successful IRWM Plan for the Greater Monterey County region will in turn enable the IRWM Plan to address all of the IRWM program preferences more effectively.

#### Task 8. Interregional Planning

The Interregional Planning task will by nature promote more regional projects and program and will increase the integration of projects and programs. By increasing communication, the task may also help resolve any water-related conflicts between regions. In addition, of the many issues shared between IRWM planning regions, several exhibit particularly good potential for interregional coordination, including drought preparedness, climate change response, and environmental stewardship. This task therefore has the potential to address the following IRWM program preferences:

- Include regional projects or programs
- Effectively integrate water management programs and projects within a hydrologic region
- Effectively resolve significant water-related conflicts within or between regions
- Effectively integrate water management with land use planning
- Statewide Preference: Drought Preparedness
- Statewide Preference: Climate Change Response Actions
- Statewide Preference: Expand Environmental Stewardship

# How the Completed IRWM Plan will Address IRWM Program Preferences

The work that will be completed through the Round 1 Planning Grant will result in an IRWM Plan that will address *all* of the IRWM program preferences, with the exception of preferences that are not applicable to the Greater Monterey County IRWM region. Each of the IRWM program preferences is listed below, followed by a description of how the IRWM Plan and planning process will address that preference, and taking into consideration the following elements, as applicable:

- IRWM Plan
- IRWM Plan projects
- IRWM planning elements supported through the Round 1 Planning Grant

# Include regional projects or programs

One of the overarching goals of the Greater Monterey County IRWM planning process is to promote the development and implementation of regional projects and programs. The following aspects of the IRWM Plan and planning process address this program preference:

• IRWM Plan: One of the IRWM Plan goals, with five supporting objectives, is to "Promote regional communication, cooperation, and education regarding water resource management." In addition, one of the "Guiding Principles" for the goals and objectives is to "Support collaboration of agencies, organizations, stakeholders, and willing landowners on the development of projects that provide water resource benefits." This goal and guiding principle reflect the RWMG's intention to encourage collaboration, partnerships, and ultimately, the development of regional projects and programs through the IRWM planning process.

An Integration chapter will be developed for the final IRWM Plan that describes how the IRWM planning process encourages regional projects and programs through RWMG and stakeholder partnerships, through collaboration on projects, and through other means. The purpose of integrating projects is not only to provide multiple benefits but to encourage broader geographic "reach" and to combine individual projects into regional programs where appropriate.

- <u>IRWM Plan Projects</u>: Most of the 27 implementation projects currently included in the IRWM Plan can be considered regional in nature. These include:
  - Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project
  - Central Coast Wetlands Group: Water Quality Enhancement of the Tembladero Slough
  - Elkhorn Slough Foundation: Ridgeline to Tideline: Water Resource Conservation in Elkhorn Slough
  - Nacimiento Regional Water Management Advisory Committee: Interlake Tunnel between Lake Nacimiento and Lake San Antonio
  - Resource Conservation District of Monterey County: Monterey County Farm Water Quality Assistance Program
  - Central Coast Wetlands Group: Implementation of the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough
  - Marina Coast Water District: Recycled Water Element of the Regional Urban Water Augmentation Project (RUWAP)
  - RCD of Monterey County: Livestock and Land: Rangeland and Livestock Facility Water Quality, Vegetation Management and Wildlife Enhancement Program

- RCD of Monterey County: Salinas River Watershed Invasive Non-native Plant Control and Restoration Program
- Monterey County Water Resources Agency: Salinas River Flood Risk Reduction Project
- Ecology Action: Monterey Bay Green Gardener Training & Certification Program
- Monterey County Water Resources Agency: Aquatic Invasive Species Inspection Project
- Central Coast Wetlands Group: Coastal Wetland Erosion Control and Dune Restoration
- Monterey County Water Resources Agency: Coastal Dedicated Monitoring Well Drilling
- Monterey County Water Resources Agency: Test Well for Regional Desalination Project Slant Well
- Central Coast Wetlands Group: Ecosystem Condition Profile for the Lower Salinas River Watershed
- Monterey Bay Sanctuary Foundation: Making Monitoring Count
- Monterey County Water Resources Agency: Salinas River Fisheries Enhancement Project
- Save Our Shores: Watershed Protection Program Annual Coastal Cleanup Day in Monterey County
- Rural Community Assistance Corporation: Greater Monterey Bay Disadvantaged Community Wastewater Management Pilot Program

In addition, note that "regionalism" is a factor in the project ranking process: A project can receive extra points if it demonstrates regional vs. local benefits, based on the size of the HUC area. Also, a project can receive extra points if it demonstrates multiple partnerships, based on diversity and number of partners.

• <u>IRWM Planning Process</u>: The IRWM planning process as a whole can be said to promote regional projects and programs, since the primary goals of the planning process include promoting regional partnerships, increased collaboration, and projects with multiple benefits.

# Effectively integrate water management programs and projects within a hydrologic region

- IRWM Plan: As noted above, the IRWM Plan contains a Regional Communication and Cooperation goal. The goal is intended to pave the way for effective integration of water management programs and projects within the Greater Monterey County IRWM region. Also, an Integration chapter will be developed for the IRWM Plan that describes how the IRWM planning process encourages integration through RWMG and stakeholder partnerships, through collaboration on projects, through the RWMG's choice of diverse and multiple resource management strategies for the IRWM Plan, and other means.
- IRWM Plan Projects: The project ranking process includes four criteria related to integration: partnerships, regionalism, multiple benefits, and use of a diverse mix of resource management strategies. An example of projects in the current IRWM Plan that can be considered "well integrated" include:
  - California State Parks: Big Sur River Steelhead Enhancement Project
  - Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project
  - Central Coast Wetlands Group: Water Quality Enhancement of the Tembladero Slough
  - Elkhorn Slough Foundation: Ridgeline to Tideline: Water Resource Conservation in Elkhorn Slough
  - Central Coast Wetlands Group: Implementation of the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough

- RCD of Monterey County: Livestock and Land: Rangeland and Livestock Facility Water Quality, Vegetation Management and Wildlife Enhancement Program
- IRWM Planning Process: Much of the Greater Monterey County IRWM planning effort is geared toward achieving "integration." The very constitution of the RWMG—including 20 agencies and organizations that include federal, state, and local governments, public water districts and private water purveyors, non-profit organizations, agricultural interest groups, university research groups, and DAC interest groups—reflects the RWMG's paramount interest in "integration." A concerted effort is also made to integrate IRWM Plan projects. An "Integration Committee" was convened during the 2010 Project Review Process specifically for that purpose. In addition, the RWMG has recently initiated an innovative "joint fact-finding" process with the support of Round 1 Planning Grant funds to resolve project-related conflicts in one of the sub-watersheds in the region. One intended outcome of the "Water Resource Project Coordination" process is enhanced integration of projects within that sub-watershed area.

### Effectively resolve significant water-related conflicts within or between regions

- IRWM Plan: As noted above, the IRWM Plan contains a Regional Communication and Cooperation goal, which seeks to facilitate partnerships, dialogue, collaboration, and cooperation between entities within the region. One of the objectives in particular seeks to minimize water-related conflicts through the IRWM planning process: "Foster collaboration between regional entities to minimize and resolve potential conflicts and to obtain support for responsible water supply solutions and improved water quality."
- IRWM Plan Projects: While none of the projects in the IRWM Plan have been developed with the specific goal of resolving water-related conflicts within or between regions, several of the projects include community-based engagement processes that are intended to directly address any conflicts or differences of opinion that may arise with project implementation. These projects include:
  - Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project
  - Central Coast Wetlands Group: Water Quality Enhancement of the Tembladero Slough
  - Central Coast Wetlands Group: Implementation of the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough

In addition, one concept proposal included in the IRWM Plan focuses on "Community-Based Participatory Research" (CPBR). CBPR activities include public meetings, trainings of peer leaders to conduct community surveys, learning from and with university and professional researchers, and sharing data and information in all directions. As technical experts participate in the numerous interactions to learn from and with the public, they can also take the opportunity to educate the public on water-related issues. The CPBR approach engages diverse individuals and groups in future discussions of water supply, water quality, and other environmental issues, and potentially lends greater legitimacy to future plans and actions by ensuring community involvement.

IRWM Planning Process: The RWMG requested and received \$150,000 through the Round 1 Planning Grant to initiate an innovative conflict resolution process for one of the sub-watershed areas of the region, where 35 out of the 65 projects included in the IRWM Plan (in 2010) were located. The Water Resource Project Coordination (WRPC) process, referenced above, is intended to create a forum for project coordination and reconciliation in an environment that is respectful, positive, and collaborative. The process, which is currently underway, is based on a joint fact-finding approach where the project proponents and stakeholders come together to discuss their projects, identify potential conflicts and potential areas for collaboration and expansion, identify where they agree and disagree, and negotiate an approach to seeking

additional information to fill gaps or to resolve areas of disagreement. The end product will be a revised and possibly expanded list of projects to include in the IRWM Plan—eliminating project conflicts while increasing integration. The WRPC process represents a pilot project that may serve as a model for other sub-watershed areas within the region and potentially for other IRWM regions in the State.

Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program: This program preference is not applicable in the Greater Monterey County IRWM region.

### Address critical water supply or water quality needs of DACs within the IRWM region

- IRWM Plan: The IRWM Plan includes a goal focused entirely on DACs: "Ensure the provision of high-quality, potable, affordable water and healthy conditions for disadvantaged communities." Under this goal are five separate objectives:
  - Seek funding opportunities to ensure all communities have a water system with adequate, safe, high-quality drinking water.
  - Seek funding opportunities to ensure all communities have adequate wastewater treatment.
  - Ensure that disadvantaged communities are adequately protected from flooding and the impacts of poor surface and groundwater quality.
  - Provide support for the participation of disadvantaged communities in the development, implementation, monitoring, and long-term maintenance of water resource management projects.
  - Promote public education in disadvantaged communities about water resource protection, pollution prevention, conservation, water quality, and watershed health.

The Stakeholder Involvement chapter of the IRWM Plan includes a section that describes the process that the RWMG uses for actively engaging and involving DAC members in the IRWM planning effort. The section identifies DACs in the region (with maps) and provides a general discussion of environmental justice and DAC needs.

- IRWM Plan Projects: The current IRWM Plan includes several projects that address critical water management needs of DACs in the region. Two of these projects (the first two listed below) have received funding through the Round 1 IRWM Implementation Grant program and will soon begin implementation. DAC projects in the IRWM Plan include:
  - Castroville Community Services District: Castroville CSD Well 2B Treatment Project
  - San Jerardo Cooperative, Inc.: San Jerardo Wastewater Project
  - Monterey County Redevelopment & Housing Office: Well Replacement and Pipeline San Lucas Water District
  - Rural Community Assistance Corporation: Greater Monterey Bay Disadvantaged Community Wastewater Management Pilot Program

Note that the project ranking process gives preference to DAC projects by including several opportunities for those projects to earn extra points: they can earn extra points through the "IRWM Plan objectives" criteria (there are five objectives for DACs, with points earned for every objective addressed), by addressing IRWM program preferences (specifically, this program preference), and by demonstrating "special or urgent need" (this can account for a full 10% of possible points). In addition, all DAC projects are "flagged" in the IRWM Plan Project List to ensure that they receive special recognition.

• IRWM Planning Process: The RWMG applied for and received \$160,000 in Round 1 Planning Grant funds to provide support specifically for DAC participation in the IRWM planning process

and for the development of DAC projects. Specific tasks from the Round 1 Planning Grant (currently underway) include: identify DACs in the region and provide outreach; integrate DAC members and Native American Tribal members into the IRWM planning process; provide assistance in identifying potential water resource projects; and provide technical assistance for project preparation. The RWMG is requesting \$50,000 in funding support in this Planning Grant round to provide additional technical assistance to DACs for project development (e.g., feasibility studies, permitting) and training in operations and fiscal management. These funds will be critical to help DAC members develop their project proposals and to help them attain self-reliance in managing their projects and water systems.

## Effectively integrate water management with land use planning

- IRWM Plan: The final IRWM Plan will include a chapter entitled, "Relation to Local Land Use Planning," which describes the relationship between water resource managers and land use planners in the Greater Monterey County IRWM region. The chapter provides specific recommendations for ways in which communication and coordination between water managers and land use jurisdictions can be improved.
- <u>IRWM Plan Projects</u>: Several projects included in the IRWM Plan naturally integrate water resource management with land use planning and management. These include:
  - Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project
  - Central Coast Wetlands Group: Water Quality Enhancement of the Tembladero Slough
  - Central Coast Wetlands Group: Implementation of the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough
  - Elkhorn Slough Foundation: Ridgeline to Tideline: Water Resource Conservation in Elkhorn Slough
  - Monterey Bay National Marine Sanctuary, Central Coast Wetlands Group, and the Resource Conservation District of Monterey County: Watershed Approach to Water Quality Solutions (funded through Round 1 IRWM Implementation Grant)
  - Resource Conservation District of Monterey County: Monterey County Farm Water Quality Assistance Program
  - Resource Conservation District of Monterey County: Livestock and Land: Rangeland and Livestock Facility Water Quality, Vegetation Management and Wildlife Enhancement Program
  - University of California, Davis (Granite Canyon Marine Pollution Studies Laboratory):
     Evaluation of Potential for Storm water Toxicity Reduction by Low Impact Development
     (LID) Treatment Systems (funded through Round 1 IRWM Implementation Grant)
- IRWM Planning Process: As noted above, the Relation to Local Land Use Planning chapter of the IRWM Plan includes recommendations for how to improve communication and coordination between water managers and land use planners. Recommendations include: possible monthly or quarterly joint planning meetings; an annual Land Use Planning/Water Resource Planning Forum; a one-time Collaboration Workshop; and the production of a "User's Guide to the Water and Land Management Organizational Landscape." Also included as one of the recommendations in the chapter is an analysis of potential barriers to IRWM Plan implementation, which explores the areas where water management meets land use regulation. The analysis of potential barriers to IRWM Plan implementation is included as Task 7 in this Planning Grant application. Over time, the RWMG will seek to implement several (or all) of these recommendations through the ongoing IRWM planning process.

Inclusion of actions designed to integrate the stormwater resource plan requirements specified in CWC Section 10562 into an IRWM Plan.

- <u>IRWM Plan</u>: Three goal categories in the IRWM Plan address this priority: Water Supply, Water Quality, and Environment, with specific objectives including:
  - Increase groundwater recharge and protect groundwater recharge areas.
  - Capture and manage storm water runoff.
  - Promote practices necessary to meet, or where practicable, exceed all applicable water quality regulatory standards (for drinking water, surface and groundwater quality).
  - Incorporate or promote principles of low impact development where feasible, appropriate, and cost effective.
  - Protect surface waters and groundwater basins from contamination and the threat of contamination.
  - Promote programs and projects to reduce the quantity and improve the quality of urban and agricultural runoff and/or mitigate their effects in surface waters, groundwater, and the marine environment.
  - Support research and utilization of emerging technologies (enzymes, etc.) to develop effective water pollution prevention and mitigation measures, and source tracking.

Federal and State stormwater programs and local stormwater efforts are described in the Region Description chapter of the IRWM Plan, in a sub-section of the Water Quality section entitled, "Efforts to Improve Water Quality in the Greater Monterey County Region."

- IRWM Plan Projects: The Greater Monterey County IRWM Plan does not include any projects whose stated purpose is to develop a stormwater resource plan. However, several projects contain project elements that support or are consistent with the stormwater resource plan requirements specified in CWC Section 10562, though they are not actually part of stormwater resource plans. Project elements include: groundwater recharge or storage for beneficial reuse of stormwater; opportunities for source control for both pollution and stormwater runoff volume, onsite and local infiltration, and reuse of stormwater; projects to reestablish natural water drainage treatment and infiltration systems, or mimic natural system functions to the maximum extent feasible; opportunities to develop or enhance habitat and open space through stormwater management, including wetlands, riverside habitats, parkways, and parks; and design criteria and best management practices to prevent stormwater pollution. These projects include:
  - Central Coast Wetlands Group: Implementation of the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough
  - Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project
  - Central Coast Wetlands Group: Water Quality Enhancement of the Tembladero Slough (Phase I has been funding through the Round 1 IRWM Implementation Grant)
  - City of Salinas: Integrated Industrial Wastewater Conveyance and Treatment Facility Improvements
  - Ecology Action: Monterey Bay Green Gardener Training & Certification Program
  - Monterey Bay National Marine Sanctuary, Central Coast Wetlands Group, and the Resource Conservation District of Monterey County: Watershed Approach to Water Quality Solutions (funded through Round 1 IRWM Implementation Grant)
  - University of California, Davis Granite Canyon Marine Pollution Studies Laboratory:
     Evaluation of Potential for Storm water Toxicity Reduction by Low Impact Development
     (LID) Treatment Systems (funded through Round 1 IRWM Implementation Grant)

IRWM Planning Process: As noted previously, Task 8 in this Planning Grant application includes a proposal for Interregional Planning and Coordination with the Monterey Peninsula IRWM region that centers on stormwater management. The work would provide a good opportunity to collaboratively develop more effective stormwater management practices while integrating the stormwater resource plan requirements specified in CWC Section 10562 into the respective IRWM Plans.

## Address statewide priorities, including:

#### **Statewide Priority: Drought Preparedness**

- IRWM Plan: The Greater Monterey County IRWM Plan includes the following Water Supply goal: "Improve water supply reliability and protect groundwater and surface water supplies." Implicitly included within that statement is the goal of "drought preparedness." The Water Supply goal category includes 11 objectives, all of which can be said to either directly or indirectly support drought preparedness (with the last objective most directly addressing this priority). The objectives are as follows:
  - Increase groundwater recharge and protect groundwater recharge areas.
  - Optimize the use of groundwater storage with infrastructure enhancements and improved operational techniques.
  - Increase and optimize water storage and conveyance capacity through construction, repair, replacement, and augmentation of infrastructure.
  - Diversify water supply sources, including but not limited to the use of recycled water.
  - Maximize water conservation programs.
  - Capture and manage storm water runoff.
  - Optimize conjunctive use where appropriate.
  - Support research and monitoring to better understand identified water supply needs.
  - Support the creation of water supply certainties for local production of agricultural products.
  - Promote public education about water supply issues and needs.
  - Promote planning efforts to provide emergency drinking water to communities in the region in the event of a disaster.

RWMG has chosen a mix of resource management strategies for the IRWM Plan to help achieve hydrologic balance in the Salinas Valley Groundwater Basin and thereby help address the goal of drought preparedness. Most of the resource management strategies chosen by the RWMG either directly or indirectly address drought preparedness, and include specifically:

- Agricultural Water Use Efficiency
- Urban Water Use Efficiency
- Conveyance Regional/Local
- System Re-operation
- Water Transfers
- Conjunctive Management and Groundwater Storage
- Desalination
- Precipitation Enhancement
- Recycled Municipal Water

- Surface Storage Regional/Local
- Groundwater Remediation/Aquifer Remediation
- Matching Water Quality to Use
- Pollution Prevention
- Salt and Salinity Management
- Urban Runoff Management
- Agricultural Lands Stewardship
- Economic Incentives (Loans, Grants, and Water Pricing)
- Forest Management
- Land Use Planning and Management
- Recharge Area Protection
- Storm Water Capture and Management
- Water and Wastewater Treatment (including recycling)
- Infrastructure Reliability
- Regional Cooperation
- Education and Outreach
- Watershed Management/Planning
- Dewvaporation or Atmospheric Pressure Desalination
- Fog Collection
- Rainfed Agriculture

In addition, the Region Description chapter of the IRWM Plan contains a section entitled "Achieving Hydrologic Balance in the Salinas Valley Groundwater Basin." The section describes a portfolio of water supply projects, called the Monterey Regional Water Supply Program, which has been formulated as part of a regional collaborative process to address pending regional water supply shortages and to develop a regionally supported solution. This portfolio contains ten water supply projects—spanning the Greater Monterey County and Monterey Peninsula IRWM regions—that have potential to enhance the region's water supplies.

- IRWM Plan Projects: The IRWM Plan contains numerous projects that effectively address long-term drought preparedness by contributing to sustainable water supply and reliability during water shortages. These projects are intended to increase and improve water supply through such means as recycled water, desalination, new water supply infrastructure, establishing system interties, providing critically needed water supply treatment, promoting water conservation, improving landscape and agricultural irrigation efficiencies, and providing efficient groundwater basin management. The projects include:
  - Castroville Community Services District: Castroville CSD Well 2B Treatment Project (funded through Round 1 IRWM Implementation Grant)
  - City of Soledad: Soledad Water Recycling/ Reclamation Project (funded through Round 1 IRWM Implementation Grant)
  - Delicato Vineyards: San Bernabe Lining Project
  - Ecology Action: Monterey Bay Green Gardener Training & Certification Program
  - Marina Coast Water District: Recycled Water Element of the Regional Urban Water Augmentation Project (RUWAP)

- Marina Coast Water District: Regional Desalination Project
- Monterey County Redevelopment & Housing Office: Well Replacement and Pipeline San Lucas Water District
- Monterey County Water Resources Agency: Granite Ridge Regional Water Supply Project
- Monterey County Water Resources Agency: Coastal Dedicated Monitoring Well Drilling
- Monterey County Water Resources Agency: Test Well for Regional Desalination Project Slant Well
- Nacimiento Regional Water Management Advisory Committee: Interlake Tunnel between Lake Nacimiento and Lake San Antonio
- Resource Conservation District of Monterey County: Monterey County Farm Water Quality Assistance Program

# **Statewide Priority: Use and Reuse Water More Efficiently**

- <u>IRWM Plan</u>: As noted previously, the IRWM Plan Water Supply goal is to "Improve water supply reliability and protect groundwater and surface water supplies." The objectives within this goal category that specifically address the priority to "use and reuse water more efficiently" are:
  - Optimize the use of groundwater storage with infrastructure enhancements and improved operational techniques.
  - Increase and optimize water storage and conveyance capacity through construction, repair, replacement, and augmentation of infrastructure.
  - Diversify water supply sources, including but not limited to the use of recycled water.
  - Maximize water conservation programs.
  - Capture and manage storm water runoff.
  - Optimize conjunctive use where appropriate.

The Water Supplier section of the Region Description chapter of the IRWM Plan describes how water managers in the Greater Monterey County region are "using and reusing water more efficiently," including current water recycling and proposed desalination. In addition, the Resource Management Strategies chapter of the IRWM Plan includes several strategies that address this priority, including

- Agricultural Water Use Efficiency
- Urban Water Use Efficiency
- System Re-operation
- Desalination
- Precipitation Enhancement
- Recycled Municipal Water
- Matching Water Quality to Use
- Agricultural Lands Stewardship
- Storm Water Capture and Management
- Water and Wastewater Treatment (including recycling)
- Dewvaporation or Atmospheric Pressure Desalination
- Fog Collection
- Rainfed Agriculture

- <u>IRWM Plan Projects</u>: The Greater Monterey County IRWM Plan includes many projects that implement water use efficiency, water conservation, recycling and reuse to help meet future water demands, increase water supply reliability, and adapt to climate change. These include:
  - City of Soledad: Soledad Water Recycling/Reclamation Project (funded through Round 1 IRWM Implementation Grant)
  - Ecology Action: Monterey Bay Green Gardener Training & Certification Program
  - Marina Coast Water District: Recycled Water Element of the Regional Urban Water Augmentation Project (RUWAP)
  - Nacimiento Regional Water Management Advisory Committee: Interlake Tunnel between Lake Nacimiento and Lake San Antonio
  - Resource Conservation District of Monterey County: Monterey County Farm Water Quality Assistance Program
  - University of California, Davis Granite Canyon Marine Pollution Studies Laboratory:
     Evaluation of Potential for Storm water Toxicity Reduction by Low Impact Development
     (LID) Treatment Systems (funded through Round 1 IRWM Implementation Grant)

## **Statewide Priority: Climate Change Response Actions**

- IRWM Plan: The Greater Monterey County IRWM Plan includes a goal category dedicated specifically to Climate Change. The Climate Change goal is to: "Adapt the region's water management approach to deal with impacts of climate change using science-based approaches, and minimize the regional causal effects." The goal category includes seven supporting objectives:
  - Plan for potential impacts of future climate change.
  - Support increased monitoring and research to obtain greater understanding of long-term impacts of climate change in the Greater Monterey County region.
  - Support efforts to research alternative energy and to diversify energy sources appropriate for the region.
  - Seek long-term solutions to reduce greenhouse gas (GHG) producing energy use.
  - Seek long-term solutions to maintain and protect existing pristine natural resources from the impacts of climate change.
  - Support research and/or implementation of land-based efforts such as carbon-sequestration on working lands and wildlands in the Greater Monterey County region.
  - Promote public education about impacts of climate change, particularly as it relates to water resource management in the Greater Monterey County region.

A Climate Change chapter has been developed for inclusion in the IRWM Plan according to the Proposition 84/1E IRWM Program standards. The chapter includes an analysis and assessment of regional vulnerabilities to climate change, identification of adaptation strategies for the projected effects of climate change in the region, and identification of mitigation strategies for GHG emissions at regional and project-specific scales as available. A discussion of anticipated climate change impacts and response actions is included in several other chapters and sections of the IRWM Plan as well, including: IRWM Plan Goals and Objectives, Resource Management Strategies, Relation to Local Water Planning, Relation to Local Land Use Planning, Plan Performance and Monitoring, and Coordination.

• IRWM Plan Projects: The Greater Monterey County IRWM Plan contains numerous projects that will address adaptation to climate change effects in the region. These include projects that, for

example, advance and expand conjunctive management of multiple water supply sources, that use and reuse water more efficiently, and that provide ecological benefits which will help mitigate the impacts of climate change. Projects include:

- California State Parks: Big Sur River Steelhead Enhancement Project
- Central Coast Wetlands Group: Coastal Wetland Erosion Control and Dune Restoration
- Central Coast Wetlands Group: Implementation of the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough
- Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project
- Central Coast Wetlands Group: Water Quality Enhancement of the Tembladero Slough (Phase I has been funding through the Round 1 IRWM Implementation Grant)
- City of Soledad: Soledad Water Recycling/Reclamation Project (funded through Round 1 IRWM Implementation Grant)
- Ecology Action: Monterey Bay Green Gardener Training & Certification Program
- Elkhorn Slough Foundation: Ridgeline to Tideline: Water Resource Conservation in Elkhorn Slough
- Elkhorn Slough Foundation: Integrated Ecosystem Restoration in Elkhorn Slough (funded through Round 1 IRWM Implementation Grant)
- Marina Coast Water District: Recycled Water Element of the Regional Urban Water Augmentation Project (RUWAP)
- Monterey County Water Resources Agency: Salinas River Fisheries Enhancement Project
- Nacimiento Regional Water Management Advisory Committee: Interlake Tunnel between Lake Nacimiento and Lake San Antonio
- Resource Conservation District of Monterey County: Monterey County Farm Water Quality Assistance Program
- Resource Conservation District of Monterey County: Livestock and Land: Rangeland and Livestock Facility Water Quality, Vegetation Management and Wildlife Enhancement Program
- Resource Conservation District of Monterey County: Salinas River Watershed Invasive Nonnative Plant Control and Restoration Program

Note that the project ranking process gives preference for projects that help mitigate or adapt to climate change impacts by enabling extra points for addressing two different criteria: IRWM Plan Climate Change objectives, and Statewide priorities.

• IRWM Planning Process: The RWMG requested and received funds through the Round 1 Planning Grant to assist project proponents in assessing their own project's effects on GHG emissions at the project level, and to track that information cumulatively at the planning region level. A consultant will be hired to create a database of available information for project sponsors to conduct project-specific GHG emissions analysis and to produce GHG emissions data for their projects. The resulting information will be tracked and input into a simple database system for the IRWM Plan as a whole, thereby "tracking" both emissions outputs and emissions offsets created by IRWM Plan projects over the long term during the life of the Plan.

The IRWM planning process for the Greater Monterey County IRWM region will continue to incorporate new information and data about climate change as it becomes available, and the RWMG's response to climate change impacts will evolve to reflect that knowledge. One of the tasks in this Planning Grant proposal is to coordinate with other IRWM regions in the Central Coast area to better understand and monitor climate change impacts along the Central Coast, and

to consider the merits of developing a region-wide plan.

#### Statewide Priority: Expand Environmental Stewardship

- IRWM Plan: The Greater Monterey County IRWM Plan contains a goal category dedicated to environmental stewardship: "Protect, enhance, and restore the region's ecological resources while respecting the rights of private property owners." Associated with this goal are ten supporting objectives, nine of which address the priority to "expand environmental stewardship":
  - Support science-based projects to protect, improve, enhance, and/or restore the region's ecological resources, while providing opportunities for public access and recreation where appropriate.
  - Protect and enhance state and federally listed species and their habitats.
  - Minimize adverse environmental impacts of water resource management projects.
  - Support applied research and monitoring to better understand environmental conditions, environmental water needs, and the impacts of water-related projects on environmental resources.
  - Implement fish-friendly stream and river corridor restoration projects.
  - Reduce adverse impacts of sedimentation into streams, particularly from roads and non-point sources.
  - Promote efforts to prevent, control, reduce, and/or eradicate high priority invasive species.
  - Promote native drought-tolerant plantings in municipal and residential landscaping.
  - Consider opportunities to purchase fee title or conservation easements on lands from willing sellers that provide integrated water resource management benefits. Ensure adequate funding and infrastructure to manage properties and/or monitor easements.

The Region Description chapter of the Greater Monterey County IRWM Plan describes the natural resources of the region and the current efforts to protect them. The RWMG's support for environmental stewardship is reflected in the resource management strategies chosen for inclusion in the IRWM Plan, which include:

- Agricultural Lands Stewardship
- Ecosystem Restoration
- Forest Management
- Watershed Management/Planning
- Environmental and Habitat Protection and Improvement
- Wetlands Enhancement and Creation
- <u>IRWM Plan Projects</u>: The Greater Monterey County IRWM Plan contains numerous projects that practice, promote, improve, and expand environmental stewardship. These include:
  - California State Parks: Big Sur River Steelhead Enhancement Project
  - Central Coast Wetlands Group: Coastal Wetland Erosion Control and Dune Restoration
  - Central Coast Wetlands Group: Ecosystem Condition Profile for the Lower Salinas River Watershed using the Level 1-2-3 Framework
  - Central Coast Wetlands Group: Implementation of the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough
  - Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project

- Central Coast Wetlands Group: Water Quality Enhancement of the Tembladero Slough (Phase I has been funding through the Round 1 IRWM Implementation Grant)
- Elkhorn Slough Foundation: Integrated Ecosystem Restoration in Elkhorn Slough (funded through Round 1 IRWM Implementation Grant)
- Elkhorn Slough Foundation: Ridgeline to Tideline: Water Resource Conservation in Elkhorn Slough
- Monterey Bay National Marine Sanctuary, Central Coast Wetlands Group, and the Resource Conservation District of Monterey County: Watershed Approach to Water Quality Solutions (funded through Round 1 IRWM Implementation Grant)
- Monterey County Water Resources Agency: Aquatic Invasive Species Inspection Project
- Monterey County Water Resources Agency: Salinas River Fisheries Enhancement Project
- Resource Conservation District of Monterey County: Livestock and Land: Rangeland and Livestock Facility Water Quality, Vegetation Management and Wildlife Enhancement Program
- Resource Conservation District of Monterey County: Salinas River Watershed Invasive Nonnative Plant Control and Restoration Program
- Save Our Shores: Watershed Protection Program Annual Coastal Cleanup Day in Monterey County
- IRWM Planning Process: Seven out of the 20 RWMG entities—the Big Sur Land Trust, California Coastal Commission, Elkhorn Slough National Estuarine Research Reserve, Garrapata Creek Watershed Council, Monterey Bay National Marine Sanctuary, Moss Landing Marine Laboratories, and the Resource Conservation District of Monterey County—have missions to protect, conserve, restore, or otherwise enhance environmental resources. The ongoing IRWM planning process reflects this dedication on the part of the RWMG to protecting natural resources as a vital part of managing the region's water system, and as an important end in itself.

#### **Statewide Priority: Practice Integrated Flood Management**

- IRWM Plan: The Greater Monterey County IRWM Plan contains a Flood Protection and Floodplain Management goal that directly addresses this statewide priority: "Develop, fund, and implement integrated watershed approaches to flood management through collaborative and community supported processes." Associated with this goal are seven objectives, two of which in particular encourage integrated flood management:
  - Implement flood management projects that provide multiple benefits such as public safety, habitat protection, recreation, agriculture, and economic development.
  - Develop and implement projects to protect, restore, and enhance the natural ecological and hydrological functions of rivers, creeks, streams, and their floodplains.

Flood management is considered to be an integral part of the collective water system in the Greater Monterey County IRWM region. It is discussed in the Region Description chapter as one element of the water system, and is discussed separately in a stand-alone chapter to allow for a more in-depth review. The Flood Management chapter describes the current framework for flood management in the Greater Monterey County IRWM region and identifies the potential for integrated flood management. The chapter encourages the development of projects that provide multiple benefits including water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge.

• <u>IRWM Plan Projects</u>: The Greater Monterey County IRWM Plan contains several projects that will provide multiple flood management benefits, including improved flood protection,

stormwater capture and management, more sustainable flood and water management systems, enhanced floodplain ecosystems, and that promote LID techniques. These projects include:

- Central Coast Wetlands Group: Implementation of the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough
- Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project
- Central Coast Wetlands Group: Water Quality Enhancement of the Tembladero Slough (Phase I has been funding through the Round 1 IRWM Implementation Grant)
- Ecology Action: Monterey Bay Green Gardener Training & Certification Program
- Monterey Bay National Marine Sanctuary, Central Coast Wetlands Group, and the Resource Conservation District of Monterey County: Watershed Approach to Water Quality Solutions (funded through Round 1 IRWM Implementation Grant)
- Monterey County Public Works: Las Lomas Drive Storm Drain Improvements Project
- Monterey County Water Resources Agency: Salinas River Flood Risk Reduction Project
- Resource Conservation District of Monterey County: Salinas River Watershed Invasive Nonnative Plant Control and Restoration Program
- IRWM Planning Process: One of the aims of the Greater Monterey County RWMG is to promote increased *integrated* flood management over time in the IRWM planning region. The RWMG has initiated an important effort, funded through the Round 1 Planning Grant and described earlier, called the "Water Resource Project Coordination" process. The WRPC process is a stakeholder outreach program that aims to bring together IRWM Plan project proponents and other stakeholders in one sub-watershed area of the region (the lower Gabilan/Reclamation Ditch watershed). The conflicts in this particular sub-watershed area center around several issues, prominent of which is flooding and flood management efforts. The RWMG hopes to encourage collaboration among the stakeholders in this sub-watershed area and to promote projects that will implement integrated flood management. If successful, the WRPC process will be applied to other watershed areas of the region.

#### Statewide Priority: Protect Surface Water and Groundwater Quality

• <u>IRWM Plan</u>: The Water Supply goal in the Greater Monterey County IRWM Plan directly addresses this statewide priority. The goal is: "Improve water supply reliability and protect groundwater and surface water supplies." One of the Water Supply objectives also speaks to this priority directly: "Increase groundwater recharge and protect groundwater recharge areas."

The Water Quality section of the Region Description chapter in the IRWM Plan describes current efforts by water managers in the Greater Monterey County region to protect surface water and groundwater quality. In addition, the Resource Management Strategies chapter of the IRWM Plan includes several strategies that directly or indirectly address this statewide priority, including:

- Pollution Prevention
- Urban Runoff Management
- Agricultural Lands Stewardship
- Forest Management
- Land Use Planning and Management
- Recharge Area Protection
- Watershed Management/Planning
- Environmental and Habitat Protection and Improvement

- Wetlands Enhancement and Creation
- IRWM Plan Projects: The Greater Monterey County IRWM Plan contains numerous projects that will help protect surface water and groundwater quality in order to safeguard public and environmental health and secure water supplies for beneficial uses. These include:
  - California State Parks: Big Sur River Steelhead Enhancement Project
  - Central Coast Wetlands Group: Implementation of the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough
  - Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project
  - Central Coast Wetlands Group: Water Quality Enhancement of the Tembladero Slough (Phase I has been funding through the Round 1 IRWM Implementation Grant)
  - Central Coast Wetlands Group: Study of Environmental Services from Nutrient Reducing BMPs
  - City of Salinas: Integrated Industrial Wastewater Conveyance and Treatment Facility Improvements
  - Elkhorn Slough Foundation: Integrated Ecosystem Restoration in Elkhorn Slough (funded through Round 1 IRWM Implementation Grant)
  - Elkhorn Slough Foundation: Ridgeline to Tideline: Water Resource Conservation in Elkhorn Slough
  - Monterey Bay National Marine Sanctuary, Central Coast Wetlands Group, and the Resource Conservation District of Monterey County: Watershed Approach to Water Quality Solutions (funded through Round 1 IRWM Implementation Grant)
  - Monterey Bay Sanctuary Foundation: Making Monitoring Count
  - Monterey County Water Resources Agency: Aquatic Invasive Species Inspection Project
  - Monterey County Water Resources Agency: Coastal Dedicated Monitoring Well Drilling
  - Resource Conservation District of Monterey County: Monterey County Farm Water Quality Assistance Program
  - Resource Conservation District of Monterey County: Livestock and Land: Rangeland and Livestock Facility Water Quality, Vegetation Management and Wildlife Enhancement Program
  - Rural Community Assistance Corporation: Greater Monterey Bay Disadvantaged Community Wastewater Management Pilot Program
  - San Jerardo Cooperative, Inc.: San Jerardo Wastewater Project (funded through Round 1 IRWM Implementation Grant)
  - Save Our Shores: Watershed Protection Program Annual Coastal Cleanup Day in Monterey County
- <u>IRWM Planning Process</u>: The RWMG's dedication to protecting surface water and groundwater quality as part of managing the region's water system is reflected in all aspects of the overall IRWM planning process.

### Statewide Priority: Improve Tribal Water and Natural Resources

(Note: This program preference is not applicable in the Greater Monterey County IRWM region. While Native American tribes inhabit the area, there are no designated tribal lands or "communities" within the region.)

## Statewide Priority: Ensure Equitable Distribution of Benefits

- IRWM Plan: This statewide priority is addressed in the Greater Monterey County IRWM Plan Goals and Objectives through the Disadvantaged Communities goal category. The DAC goal is to: "Ensure the provision of high-quality, potable, affordable water and healthy conditions for disadvantaged communities." Five objectives support that goal:
  - Seek funding opportunities to ensure all communities have a water system with adequate, safe, high-quality drinking water.
  - Seek funding opportunities to ensure all communities have adequate wastewater treatment.
  - Ensure that disadvantaged communities are adequately protected from flooding and the impacts of poor surface and groundwater quality.
  - Provide support for the participation of disadvantaged communities in the development, implementation, monitoring, and long-term maintenance of water resource management projects.
  - Promote public education in disadvantaged communities about water resource protection, pollution prevention, conservation, water quality, and watershed health.

As noted previously, the Stakeholder Involvement chapter of the IRWM Plan includes a section that describes the process that the RWMG uses for actively engaging and involving DAC members in the IRWM planning effort. The section identifies DACs in the region (with maps) and provides a general discussion of environmental justice and DAC needs.

- IRWM Plan Projects: Projects that will ensure equitable distribution of benefits consist of projects that increase the participation of small and disadvantaged communities in the IRWM process, that provide multiple benefits with consideration of affected DACs and vulnerable populations, and that address safe drinking water and wastewater treatment needs of DACs. The Greater Monterey County IRWM Plan includes four projects that directly address critical water resource needs in DACs, including:
  - San Jerardo Cooperative: San Jerardo Wastewater Project (currently being implemented through Round 1 of the IRWM Implementation Grant Program)
  - Castroville Community Services District: Well 2B Treatment Project (currently being implemented through Round 1 of the IRWM Implementation Grant Program)
  - Monterey County Redevelopment & Housing Office: Well Replacement and Pipeline San Lucas Water District
  - Rural Community Assistance Corporation: Greater Monterey Bay Disadvantaged Community Wastewater Management Pilot Program

In addition, the IRWM Plan includes numerous projects that provide water resource management assistance (such as farm water quality assistance, rangeland and livestock facility water quality assistance, or Green Gardener training) to a broader geographic area that includes DACs, or alternatively, provides important water resource improvements or environmental enhancements to broader geographic regions that will also benefit DACs (for example, watershed restoration, wetlands restoration, or elimination of invasive non-native species in waterways). These include:

- Monterey Bay Sanctuary Foundation: Watershed Approach to Water Quality Solutions (currently being implemented through Round 1 of the IRWM Implementation Grant Program)
- Elkhorn Slough Foundation: Integrated Ecosystem Restoration in Elkhorn Slough (currently being implemented through Round 1 of the IRWM Implementation Grant Program)

- Central Coast Wetlands Group: Tembladero Restoration and Castroville Community Public Access – Phase I (currently being implemented through Round 1 of the IRWM Implementation Grant Program)
- Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project
- Central Coast Wetlands Group: Implementation of the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough
- Central Coast Wetlands Group: Study of Environmental Services from Nutrient Reducing BMPs
- Central Coast Wetlands Group: Water Quality Enhancement of the Tembladero Slough Phase
   II
- RCD of Monterey County: Monterey County Farm Water Quality Assistance Program
- Central Coast Wetlands Group: Coastal Wetland Erosion Control and Dune Restoration
- Monterey County Water Resources Agency: Salinas River Flood Risk Reduction Project
- Ecology Action: Monterey Bay Green Gardener Training & Certification Program
- RCD of Monterey County: Livestock and Land: Rangeland and Livestock Facility Water Quality, Vegetation Management and Wildlife Enhancement Program
- RCD of Monterey County: Salinas River Watershed Invasive Non-native Plant Control and Restoration Program
- Elkhorn Slough Foundation: Ridgeline to Tideline: Water Resource Conservation in Elkhorn Slough
- Save Our Shores: Watershed Protection Program Annual Coastal Cleanup Day in Monterey County
- IRWM Planning Process: As noted previously, the RWMG applied for and received \$160,000 in Round 1 Planning Grant funds to provide support specifically for DAC participation in the IRWM planning process and for the development of DAC projects. Specific tasks from the Round 1 Planning Grant (currently underway) include: identify DACs in the region and provide outreach; integrate DAC members and Native American Tribal members into the IRWM planning process; provide assistance in identifying potential water resource projects; and provide technical assistance for project preparation. The RWMG is requesting \$50,000 in funding support in this Planning Grant round to provide additional technical assistance to DACs for project development (e.g., feasibility studies, permitting) and training in operations and fiscal management. These funds will be critical to help DAC members develop their project proposals and to help them attain self-reliance in managing their projects and water systems.