# PROPOSITION 84 IRWM REGIONAL PLANNING GRANT APPLICATION

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

Big Sur Land Trust							
California Coastal Commission							
California State University Monterey Bay							
California Water Service Company							
Castroville Community Services District							
City of Salinas							
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							
San Jerardo Cooperative, Inc.							

September 28, 2010

# I. APPLICANT INFORMATION TAB

## **1. APPLICANT INFORMATION**

Organization Name: Monterey Bay Sanctuary Foundation

Tax ID: 94-3225675

**Proposal Name:** Regional Planning Grant to Complete an IRWM Plan for the new Greater Monterey County Region

**Proposal Objective:** The objective for this Planning Grant request is to bring an existing IRWM Functionally Equivalent Plan (FEP) to a completed and approved IRWM Plan that meets current IRWM Program standards, and to significantly strengthen the IRWM planning process for the new Greater Monterey County IRWM region. The Greater Monterey County region represents an expansion of a former IRWM region, the Salinas Valley region, which was created under Proposition 50. The new region was created to address significant IRWM Plan coverage voids in the Central Coast Funding Area. A Regional Water Management Group (RWMG) for the new Greater Monterey County region was formed in January 2009, expanding the former Salinas Valley RWMG from just three organizations to 18 organizations and introducing several important geographic areas within Monterey County into the IRWM planning process that had not been represented previously. Significant progress has been made toward development of a new IRWM Plan for the region (in accordance with the Proposition 50 standards), but the Plan is still far from complete. In addition, the Proposition 84 IRWM Guidelines have added new, more stringent requirements for the IRWM Plan, necessitating additional work to be done for the Plan. Planning Grant funds are therefore being requested to complete a final IRWM Plan for the Greater Monterey County that will meet the current IRWM standards. In addition, Planning Grant funds will provide much-needed support for the IRWM planning process, including specifically: increased outreach to disadvantaged communities and Native American tribes; an evaluation of climate change impacts on water supplies and natural resources in the region, including a tool to analyze greenhouse gas emissions on both the project level and the regional level over time; the development of a comprehensive data management system with potential for expansion and use for the entire Central Coast region; the development and testing of a new conflict resolution approach for the planning region ("Water Project Reconciliation"); support for increased stakeholder outreach and participation (including public workshops and website development); a tool to assist project proponents with economic feasibility analysis; and support for interregional coordination on joint projects.

# 2. BUDGET

Other Contribution: 0 Funding Match (Local Contribution): \$ 149,000.00 Federal Contribution: \$ 22,000.00 In-kind Contribution: \$ 223,900.00 Grant Funds Requested: \$ 755,264.00 Total Project Cost: \$ 1,150,164.00

# **3. GEOGRAPHIC INFORMATION**

Latitude: 36.239

Longitude: -121.196

**Location:** The Greater Monterey County IRWM region is part of the IRWM Central Coast Funding Area. The region lies entirely within the Central Coast Regional Water Quality Control Board (RWQCB) district, and includes the entirety of Monterey County exclusive of the Pajaro River Watershed IRWM region and the Monterey Peninsula, Carmel Bay, and South Monterey Bay IRWM region established under Proposition 50. The Greater Monterey County IRWM region sits adjacent to the Pajaro River Watershed IRWM region; the Monterey Peninsula, Carmel Bay, and South Monterey Bay IRWM region; and the San Luis Obispo County IRWM region.

**County:** The Greater Monterey County IRWM Region is located almost entirely within Monterey County. A very small portion of the planning region is located in San Benito County, where the Salinas River watershed extends into that county.

**Groundwater Basin(s):** The largest groundwater basin in the planning region is the Salinas Valley groundwater basin. The basin is located entirely within Monterey County and consists of one large hydrologic unit comprised of five subareas: Upper Valley, Arroyo Seco, Forebay, Pressure, and East Side. Other, considerably smaller groundwater basins in the planning region include Lockwood Valley, Cholame Valley, and Peach Tree Valley basins at the southern end of the county and a portion of the Pajaro Valley groundwater basin at the northern end of the county.

**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):

Hydrologic Units in the Region					
Hydrologic Unit #	Hydrologic Unit/Area/Subarea				
306.00	Bolsa Nueva				
308.00	Santa Lucia				
309.00	Salinas				
309.10	Lower Salinas Valley				
309.20	Chualar				
309.30	Soledad				
309.40	Upper Salinas Valley				
309.60	Arroyo Seco				
309.70	Gabilan Range				
309.80	Paso Robles				
309.82	Nacimiento Reservoir				
309.83	San Antonio Reservoir				

#### Hydrologic Units in the Region

**Watershed(s):** The Greater Monterey County IRWM region includes six major watersheds (or portions thereof). The Salinas River watershed is by far the largest watershed in the region, encompassing an area of approximately 3,950 square miles within Monterey and San Luis Obispo Counties. Other major watersheds in the Greater Monterey County region include the Santa Lucia watershed, comprised of the numerous coastal watersheds along the Big Sur coast, the Estrella River watershed which is located in the southern part of the county (most of this watershed is actually located in San Luis Obispo County), and the Bolsa Nueva and the Gabilan Creek watersheds at the northern end of the county. The region also

includes a small portion of the Estero Bay watershed at the southern end of the county along the Big Sur coast.

# 4. LEGISLATIVE INFORMATION

State Assembly District: Districts 27 and 28State Senate District: Districts 15 and 12U.S. Congressional District: District 17

# **II. APPLICANT INFORMATION AND QUESTION'S TAB**

**Q1. Proposal Description:** The objective for this Planning Grant request is to bring an existing IRWM Functionally Equivalent Plan (FEP) to a completed and approved IRWM Plan that meets current IRWM Program standards, and to strengthen and enhance the IRWM planning process for the new Greater Monterey County IRWM region. The Greater Monterey County region represents an expansion of a former IRWM region, the Salinas Valley region, which was created under Proposition 50. The new region was created in order to address significant geographic coverage voids in the Central Coast Funding Area for the purposes of IRWM planning. Since the formation of the new regional boundaries and new Regional Water Management Group (RWMG) in January 2009, significant progress has been made toward developing a whole new IRWM Plan for the Greater Monterey County region, though the Plan is still far from complete. The Planning Grant funds requested in this proposal will enable the RWMG to complete the Plan, as well as bring the existing work up to Proposition 84 standards.

In addition, Planning Grant funds will provide much-needed programmatic support for the IRWM planning process. This includes specifically:

- Support for a part-time IRWM Plan Coordinator to coordinate all IRWM Plan tasks, as well as to write the IRWM Plan and see it through the final approval process
- Increased outreach and participation of disadvantaged communities and Native American tribes in the IRWM planning process
- An evaluation of climate change impacts on water supplies and natural resources in the region, including a tool to analyze greenhouse gas emissions on both the project level and the regional level over time
- Development of a process (called "Water Project Reconciliation") to resolve water-related conflicts in the region and to reconcile conflicting projects submitted for inclusion in the Plan
- Establishment of a comprehensive data management system with potential for expansion and use for the entire Central Coast region
- Support for increased stakeholder outreach and participation, including public workshops and website development
- Development of an economic feasibility analysis tool for project proponents
- Support for interregional coordination on joint projects

#### **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 Management:

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: The applicable DWR region is the South Central Coast.

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

**Q7. Eligibility:** The application represents a single application from an IRWM Planning region approved in the RAP. The name of that planning region is the Greater Monterey County IRWM region.

**Q8. Eligibility:** The Monterey Bay Sanctuary Foundation is a non-profit organization as described in Appendix B of the Guidelines.

**Q9. Eligibility:** No urban water suppliers will be receiving funding from the proposed grant.

Q10. Eligibility: N/A

Q11. Adoption Date: The anticipated adoption date of the IRWM Plan is December 15, 2011

Q12. Completeness Check: All of the fields in the application have been completed.

# ATT1\_PG1\_AuthDoc1of1 Authorizing Documentation

## Excerpt from: <u>Monterey Bay Sanctuary Foundation</u> <u>Board of Directors Meeting Minutes</u> <u>May 19, 2010</u> <u>Heritage Harbor, Monterey</u> <u>National Marine Protected Areas Center, Conference Room</u>

Directors present:	Scott Hennessy (SH), Jeff Paduan (JP), Kay Archer Bowden (KAB),
	Dave Rossum (DR), Robert Mazurek (RM) and Jenny Carless (JC)
Directors absent:	Rachel Saunders (RS) and Maris Sidenstecker (MS)
Mgt. Staff present:	Dennis Long (DL)

- 1) The meeting was called to order at 4:10 P.M.
- 2) Board of Directors Approval of Minutes
  - a) Review and approve the minutes of the March 3, 2010 Board meeting (distributed via email)

## **Board Resolution**

After discussion and on a motion duly made (SH) and seconded (RM), the following resolution was adopted:

RESOLVED that the minutes of the March 3, 2010 Board Meeting be adopted, JC abstains.

- b) <u>Water Quality</u>
  - The California Department of Water Resources is accepting applications for planning grants to facilitate a Regional Water Management Plan. The MBSF is proposed to serve as the project sponsor with eighteen partners, including the MBNMS. Susan Robinson is leading the proposal preparation and development phase. The total value of the project is estimated to be up to \$1,000,000.

## Board Resolution

After discussion and on a motion duly made (JP) and seconded (KAB), the following resolution was unanimously adopted:

RESOLVED that the Board approves of the project proposal as described and accepting the grant if awarded.

# ATT2\_PG1\_EligDoc1of2 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\_PG1\_EligDoc2of2

**ARTICLES OF INCORPORATION** 

# ATT3\_PG1\_WorkPlan\_1of3 Work Plan

# I. BACKGROUND

## 1.1 Regional Water Management Group Composition

Eighteen organizations in the Monterey County area have come together to form a Regional Water Management Group (RWMG) for the purposes of integrated regional water management planning and project implementation within the Greater Monterey County Integrated Regional Water Management (IRWM) region. These entities include government agencies, nonprofit organizations, educational organizations, water service districts, private water companies, and organizations representing agricultural, environmental, and community interests, as follows:

Big Sur Land Trust							
California Coastal Commission							
California State University Monterey Bay							
California Water Service Company							
Castroville Community Services District							
City of Salinas							
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							
San Jerardo Cooperative, Inc.							

The Greater Monterey County RWMG comprises adequate and balanced representation of water resource management issues and geographic areas in the planning region and includes all of the agencies and organizations necessary to address the objectives involved in the development of the IRWM Plan. Seven of the 18 RWMG organizations have statutory authority over water supply and/or water management within the Greater Monterey County region: the California Coastal Commission, Castroville Community Services District, City of Salinas, Marina Coast Water District, Monterey Bay National Marine Sanctuary, Monterey County Water Resources Agency, and the Monterey Regional Water Pollution Control Agency.

The table below summarizes the water resource and geographic areas represented by members of the RWMG:

<b>TABLE 1. RWMG Members: Water Resource Management and Geographic Areas Served</b>	

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RWMG Member	Water Supply	Water Quality	Wastewater Treatment	Flood Management	Environmental Resource Protection	Agricultural Interests	Land Use Planning	DACs and Environmental Justice	Geographic Areas Represented
Big Sur Land Trust					Х				All of Monterey County
California Coastal Commission		Х			Х		х		Coastal zone
CSUMB Watershed Institute		х			Х			х	Entire region
California Water Service	Х	Х							Salinas Valley
Castroville Community Services District	X	X							Castroville area (upper Salinas Valley/northern coast)
City of Salinas		х	x	x			х		City of Salinas (upper Salinas Valley)
Coastlands Water Company	х	X							Big Sur Coast
Elkhorn Slough National									Elkhorn Slough (northern
Estuarine Research Reserve		х			х				coast)
Environmental Justice Coalition									
for Water		х						х	Entire region
Garrapata Creek Watershed Council		х			х				Garrapata Creek watershed (Big Sur)
Coulen		Λ			Λ				Marina and Ord
Marina Coast Water District									Community (upper Salinas
Marina Coast water District	Х	Х							Valley/northern coast) Mean high water, with
Monterey Bay National Marine									education & outreach in
Sanctuary		Х			X				the watersheds
Monterey County Agricultural Commissioner's Office						х			All of Monterey County
Monterey Regional Water Pollution Control Agency	x	х	x						Several cities and unincorporated areas in Monterey County
Resource Conservation District of Monterey County		х				x			All of Monterey County
Monterey County Water									
Resources Agency	х	х		х		х	х		All of Monterey County
Moss Landing Marine									
Laboratories		х			х				Entire region
San Jerardo Cooperative, Inc.		х						х	San Jerardo (Salinas Valley)

Members of the RWMG have entered into a Memorandum of Understanding (MOU) to acknowledge cooperative efforts in the planning region and to form an institutional structure to develop and implement an IRWM Plan. The MOU and bylaws formalize the collaborative planning effort, describe the level of participation expected of RWMG members, and outline a process for completing the IRWM Plan and for making amendments in the future. RWMG members share joint responsibilities for ensuring effective and comprehensive IRWM planning and implementation for the region.

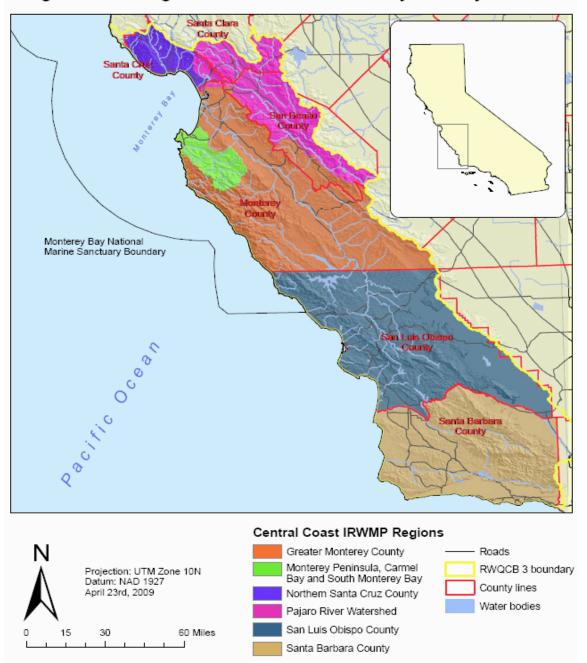
# **1.2 Region Description**

The Greater Monterey County IRWM region is based on watersheds, groundwater basins, jurisdictional boundaries, existing partnerships, and historical planning efforts. The region lies entirely within the Central Coast Regional Water Quality Control Board (RWQCB) district, and is part of the IRWM Central Coast Funding Area. The Greater Monterey County region includes the entirety of Monterey County exclusive of the Pajaro River Watershed IRWM region and the Monterey Peninsula, Carmel Bay, and

South Monterey Bay IRWM region established under Proposition 50. The region also includes a small portion of San Benito County where the Salinas River watershed extends outside of Monterey County. Generally, the region includes the entire Salinas River watershed north of the San Luis Obispo County line, all of the Gabilan and Bolsa Nueva watersheds in the northern part of the county, and all of the coastal watersheds of the Big Sur coastal region within Monterey County. Adjacent IRWM regions include: Pajaro River Watershed IRWM region; Monterey Peninsula, Carmel Bay, and South Monterey Bay IRWM region; and San Luis Obispo County IRWM region. The maps on the following pages illustrate the Greater Monterey County regional boundaries and the region in context with other Central Coast IRWM regions (Figures 1 and 2).







Regional Setting of the Greater Monterey County IRWMP

#### 1.3 The Partially Completed IRWM Plan

The IRWM Plan for the Greater Monterey County region represents an expansion and modification of a former plan, the Salinas Valley Integrated Regional Water Management Functionally Equivalent Plan (FEP), which was developed by the Monterey County Water Resources Agency in May 2006. The tasks proposed for this Planning Grant will bring the existing FEP to a completed IRWM Plan that will meet current IRWM standards.

The decision to expand the Salinas Valley IRWM region and to write an entirely new IRWM Plan for the region 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 underrepresented for the purposes of IRWM planning and associated funding opportunities. 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 18 organizations listed above. The Greater Monterey County IRWM region was approved by the California Department of Water Resources (DWR) in the Regional Acceptance Process (RAP) in November 2009.

Expanding the Salinas Valley 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 portions of western San Benito County. Expanding the boundary has also served to make the region more inclusive, inviting more partners and stakeholders to the table and opening up new opportunities for cooperation and integration of efforts.

In January 2009, a consultant was hired on a part-time basis through private grant funds to coordinate the IRWM planning process for the new Greater Monterey County region and to write the IRWM Plan. Organizations were invited to participate on the RWMG, boundaries were determined, an MOU was signed, a basic website was created, an extensive stakeholder list was developed, the region was approved through the RAP, and several significant "milestones" for the IRWM Plan were achieved. Those milestones include:

- Development of a governance structure, and signing of an MOU
- Identification of "issues and conflicts" in the region
- Determination of regional goals and objectives
- Development of a process for ranking projects
- Solicitation of projects from stakeholders
- Project review
- Project integration
- Project ranking (currently underway)

The respective IRWM Plan sections have been drafted as each of these milestones have been achieved, though the Greater Monterey County IRWM Plan is still quite far from complete. While it was anticipated that the private grant funds obtained to develop the IRWM Plan would result in a final approved Plan by the summer of 2010, unanticipated delays in the process plus the release of the final Proposition 84 and Proposition 1E IRWM Program Guidelines in August 2010—adding more stringent requirements—have prolonged completion of the Plan. Planning Grant funds will enable the Greater Monterey County

RWMG to complete the IRWM Plan in accordance with current IRWM standards. The completed IRWM Plan will fully replace the former FEP for the Salinas Valley—resulting in a significantly improved IRWM Plan, a vastly expanded IRWM region, a larger and more diversified RWMG, a more inclusive stakeholder base, and a much stronger IRWM planning process overall.

#### **1.4 Stakeholder Process**

Stakeholders have played and continue to play an important role in the decision-making process throughout the development of the IRWM Plan. Together, stakeholders and the RWMG represent all of the major water resource management authorities in the region boundary—as well as water resource management authorities and stakeholders from neighboring IRWM regions—and provide broad and fair representation of water supply, water quality, wastewater, stormwater, flood control, watershed, municipal, environmental, agricultural, and regulatory interests throughout all geographic areas of the Greater Monterey County IRWM planning region.

Stakeholder outreach has targeted specific audiences and constituencies as well as the general public. An extensive stakeholder email list was initially developed through brainstorming every known organization that might be affected by and/or interested in the IRWM Plan process. That list continues to be expanded through word of mouth, newspaper announcements and sign-up sheets at public workshops, and personal outreach to disadvantaged communities. The stakeholder list currently includes about 150 agencies, organizations, districts, municipalities, businesses, academic institutions, and citizen groups that have expressed an interest in participating in the IRWM planning process.

A basic website has been developed to facilitate communication with stakeholders about the IRWM Plan process (http://ccwg.mlml.calstate.edu/irwmp/). Stakeholders are informed of IRWM Plan developments through email notices, website postings and where email capability is lacking, personal communication. Stakeholders can participate directly in the IRWM planning process through attendance at regularly scheduled RWMG meetings, which are open to the public and announced on the website, through participation in public workshops, and by providing input via written comment both generally and during specific public comment periods. A formal 30-day public comment period or alternative means of public input (e.g., discussion at public workshops) has been made available for each major IRWM Plan "milestone" (including, for example, regional issues and conflicts, goals and objectives, project ranking system, the project list, and draft IRWM Plan sections). Stakeholder participation has also been encouraged by requesting the assistance of local experts throughout the planning region at various points in the planning process, for example, in information gathering for "issues and conflicts" and through participation on Project Committees during project solicitation and project review.

Two public workshops have been held thus far to encourage broad public participation in the IRWM planning process. The first workshop introduced stakeholders to the Greater Monterey County IRWM planning process and solicited their input on water-related issues and conflicts in the region. The second workshop focused on project submission, including information about the project solicitation and project review process. The workshops were announced through newspaper ads, email notifications sent to the stakeholder mailing list, website postings, and word of mouth. For each of the two workshops, separate meetings were held in two or three different locations in different areas of the planning region on different days and at different times of day in order to reach as many stakeholders as possible. Spanish translation services (along with Spanish hand-outs) were available for at least one of the meetings during each of the two workshops. Three more workshops are planned for this next phase of Plan development, as described in the Work Plan below.

#### 1.5 Process Used to Identify and Engage Disadvantaged Communities in IRWM Planning

Special effort has been made to encourage participation of disadvantaged communities (DACs) in the Greater Monterey County IRWM planning process and to ensure that their water resource needs are considered and addressed. Disadvantaged communities are defined for the Greater Monterey County IRWM region as communities with annual median household incomes (MHI) that are less than 80% of the statewide MHI (which was \$47,493, according to the 2000 US Census), and/or communities with American Indian or Alaskan Native, Asian or Pacific Islander, Black, and/or Hispanic/Latino populations exceeding 50% of the total population.

Eleven disadvantaged communities have been identified in the Greater Monterey County IRWM region: Greenfield, King City, San Ardo, San Lucas, Gonzales, Salinas, Soledad, Boronda, Castroville, Chualar, and Las Lomas. A tract-level search using 2000 US Census data identified other sub-areas outside of these communities as being "disadvantaged" as well. Four of the DACs listed above had MHIs that were less than 80% of the statewide MHI (i.e., less than \$37,994): Greenfield, King City, San Ardo, and San Lucas. San Ardo qualifies as a "severely disadvantaged community" since its MHI (\$25,208) was less than 60% of the statewide MHI. All 11 of the communities listed above have Hispanic/Latino populations that well exceed 50% of their total populations (according to the 2000 US Census). Table 2 shows the MHI and Hispanic/Latino populations for DACs in the Greater Monterey County region.

	Median Household	Hispanic/Latino
Community	Income	Populations
California	\$47,493	36%
San Ardo	\$25,208	66%
San Lucas	\$31,538	86%
King City	\$34,398	80%
Greenfield	\$37,602	88%
Castroville	\$38,594	86%
Gonzales	\$41,582	86%
Soledad	\$42,602	87%
Chualar	\$43,125	94%
Salinas	\$43,702	64%
Boronda	\$46,797	73%
Las Lomas	\$48,802	84%

<b>TABLE 2. Disadvantaged Communities MHI</b>	and Ethnicity
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Source: 2000 US Census

Two entities—the Environmental Justice Coalition for Water (EJCW) and the San Jerardo Cooperative, Inc.—have been invited to participate on the RWMG to represent the interests of DACs. EJCW works with DACs throughout the State, advocating for clean and reliable water supplies and partnering with nonprofits such as California Rural Legal Assistance Foundation to address water quality concerns in those communities. The San Jerardo Cooperative, a housing complex for low-income farm working families in the Salinas Valley, are experts on drinking water contamination in the Salinas Valley, having themselves suffered from a lack of clean drinking water for over a decade. The San Jerardo Cooperative has agreed to participate on the RWMG to ensure that their water resource needs as well as those of other disadvantaged farm labor communities in the Salinas Valley are met, and to ensure the IRWM Plan process is sensitive to the limited capacities and different needs of DAC communities.

In addition to ensuring that critical water needs of DACs are met through the IRWM Plan process, the RWMG also remains vigilant to environmental justice concerns. Environmental justice communities are often low-income or non-English-speaking communities. In the Salinas Valley, many of these environmental justice communities are farm worker communities. The RWMG endeavors to take into

account the impact of water management decisions on vulnerable communities such as these, and is committed to achieving a fair and equitable distribution of benefits to all communities in the Greater Monterey County IRWM region. All projects that have been submitted for inclusion in the IRWM Plan have been screened for environmental justice concerns.

#### 1.6 Process Used to Identify Regional Issues and Conflicts, Objectives, and Priorities

A subcommittee comprised of RWMG members was formed in May 2009 to investigate water-related issues and conflicts in the region. The subcommittee interviewed 43 local experts in the areas of water quality, water supply, flood control, natural resources, and public health and safety. Based on those interviews, the subcommittee developed a summary list of water-related issues and conflicts in the Greater Monterey County IRWM region. The list was expanded at a RWMG brainstorming session, and then presented to stakeholders for comment and input at public workshops held in Big Sur and Soledad in the Salinas Valley in September 2009. After incorporating stakeholder input, a final list of issues and conflicts was approved by the RWMG in October 2009. This list is attached as ATT3 PG1 WorkPlan 2of3.

With a clearer understanding of the significant water resource issues in the region, the RWMG then formed a committee comprised of RWMG members to draft goals and objectives for the region to guide regional efforts toward solving water resource problems. The first step in determining goals and objectives was to develop a set of "guiding principles" that would outline an overall approach to IRWM planning in the Greater Monterey County region. The Goals and Objectives Committee then spent several months developing and refining the goals and objectives for the region, based not only on the regional issues and conflicts but also taking into consideration Basin Plan objectives, the State's 20x2020 goals, the IRWM Plan minimum objectives as outlined in CWC §10540(c), and local land use and water resource management plans. A preliminary version was presented to stakeholders for 30-day public comment, and several iterations of goals and objectives for the IRWM Plan were approved by vote of the RWMG in March 2010, and are attached as ATT3\_PG1\_WorkPlan\_3of3.

Note that the RWMG made a decision not to prioritize objectives during the initial phase of IRWM Plan development. Recognizing that almost all of the objectives might be considered high priority depending on the perspective of the water resource manager or of the stakeholder, the RWMG decided to give all objectives equal weight. However, the new Proposition 84 IRWM Program Guidelines encourage RWMGs to develop regional priorities, and the Greater Monterey County RWMG has come to realize the utility of having regional priorities for the purpose of long-term regional planning. The RWMG intends to identify regional priorities during the next phase of Plan development, for which Planning Grant funds are being requested.

The RWMG also intends to re-visit regional objectives during the next phase of Plan development. The initial process of developing goals and objectives was based on the Proposition 50 IRWM Guidelines, which did not require objectives to be measurable. The Proposition 84 IRWM Guidelines do require objectives to be measurable, and the RWMG recognizes the utility of that requirement. With measurable objectives, the RWMG will be able to make stronger use of the IRWM Plan as a long-term planning tool and will be in a better position to chart progress toward regional goals.

## **1.7 Data and Technical Analysis**

The background information and technical data in the Greater Monterey County IRWM Plan—including land use information, population studies and demographic information, economic data, water supply and

water use data, environmental resources, and projected water demand—have been derived from existing plans and reports. These include, among others:

- Urban water management plans and water master plans
- Stormwater management plans and master plans
- Wastewater management plans
- LAFCO municipal services review reports
- Department of Water Resources land use surveys
- Watershed assessment and management plans
- Monterey County Water Resource Agency water reports and groundwater extraction data summaries
- Monterey County Floodplain Management Plan
- RWQCB plans, including 303(d) list
- Monterey County General Plan and Specific Area Plans
- Monterey Bay National Marine Sanctuary (MBNMS) Management Plan
- MBNMS Condition Report
- US Census data
- Association of Monterey Bay Area Government (AMBAG) economic reports
- Monterey County Agricultural Commissioner crop reports
- Research and technical studies conducted by local academic institutions and environmental consultants

Regional objectives were also informed by these and other planning documents in the region, including watershed management plans, MBNMS Water Quality Protection Program Action Plans, Basin Plan objectives, and the RWQCB Watershed Management Initiative. All of the information and data contained in the IRWM Plan will be reviewed and updated every five years, at a minimum, along with the formal update of the Plan.

Since the Greater Monterey County region is a new IRWM region with its IRWM Plan still under development, there has been no opportunity as of yet to collect data obtained from projects contained within the Plan. Water resource data—resulting from ongoing monitoring and research—is currently collected for a number of purposes by a myriad of agencies and organizations in the region. One of the requests in this Planning Grant application is to develop a comprehensive data management system that will not only manage the data collected through IRWM Plan project implementation, but will allow for the assimilation of other regional water resource data so as to be a useful tool for project managers and data users throughout the region.

#### **1.8 Resource Management Strategies**

The RWMG has chosen to include 37 resource management strategies in the Greater Monterey County IRWM Plan, including 28 resource management strategies from the California Water Plan Update 2009 plus nine additional strategies. The RWMG based selection of the resource management strategies primarily on the region's goals and objectives, i.e., the strategies needed to achieve the objectives of the Plan. The resource management strategies included in the Plan are as follows:

Strategies from the California Water Plan Update 2009

- Agricultural water use efficiency
- Urban water use efficiency
- Conveyance regional/local
- System reoperation
- Water transfers

- Conjunctive management & groundwater storage
- Desalination
- Precipitation enhancement
- Recycled municipal water
- Surface storage regional/local
- Drinking water treatment and distribution
- 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)
- Ecosystem restoration
- Forest management
- Land use planning and management
- Recharge area protection
- Water-dependent recreation
- Watershed management
- Flood risk management
- Dewvaporation or atmospheric pressure desalination
- Fog collection
- Rainfed agriculture

Other Resource Management Strategies

- Environmental and habitat protection and improvement
- Recreation and public access
- Storm water capture and management
- Wetlands enhancement and creation
- Water and wastewater treatment
- Infrastructure reliability
- Regional cooperation
- Education and outreach
- Monitoring and research

The projects chosen for inclusion in the IRWM Plan represent a broad mix of the resource management strategies listed above. Most of the strategies are already being widely implemented throughout the region and are included in water management plans, stormwater management plans, watershed management plans, land use plans, and other local water resource plans. Some of the strategies listed above—including desalination and recharge area protection—are currently implemented on only a very limited basis or not at all, and will be employed by proposed projects in the IRWM Plan. Other strategies—including stormwater capture and management, precipitation enhancement, and recharge area protection—are not currently employed in the region (though precipitation enhancement has been used in the past) nor are they currently proposed for use by projects in the IRWM Plan, but they are considered attractive options that the RWMG wishes to explore. A few of the resource management strategies—namely, dewvaporation, fog collection, and rainfed agriculture—are not relevant for use under current conditions; however, the RWMG considers these potentially viable resource management tools and remains open to their potential use as technologies evolve and as water resource needs and conditions change in the region. In future IRWM Plan project solicitations, projects will be proactively sought to ensure a diverse mix of resource management strategies for the region's water management portfolio.

## 1.9 IRWM Plan Implementation and Anticipated Impacts and Benefits

The objective of this Planning Grant request, in essence, is to support the Greater Monterey County RWMG in transforming an IRWM FEP into a completed IRWM Plan. The Greater Monterey County RWMG is currently in the middle of conducting the project review process to develop a final project list for the Plan. Under consideration are 58 projects, including 32 implementation projects and 26 concept proposals submitted by about 25 different organizations and agencies. The types of projects submitted include:

- Water supply and water system rehabilitation projects, including improvements to infrastructure and water treatment systems, construction of new recycled water delivery systems, a major new desalination facility, and more efficient power generation for water supply systems
- Wastewater system improvements, including infrastructure improvements and constructed wetlands
- Flood control projects
- Natural resource restoration, including: general watershed restoration (e.g., in-stream, riparian, wetlands, and upland habitat); wetlands, lagoon, and estuary restoration; coastal dune restoration; and steelhead enhancement (including habitat restoration, population monitoring, monitoring of river flows, and installation of fish screens)
- Land acquisition for parkland, with benefits that include restored wetland and riparian habitat, increased groundwater recharge, flood control benefits, stormwater detention, water quality improvements, open space, and public recreation
- Erosion control projects for roads and farmlands
- Invasive species control and eradication projects (targeting *Arundo donax*, and invasive mussel species)
- Watershed assessment and management planning
- Community-based water research and education projects
- Multi-stakeholder facilitation to support water resource management decision-making
- Vocational watershed and ocean literacy education, with benefits targeted to DACs
- Beach and river clean-ups
- Implementation of agricultural best management practices, including irrigation and nutrient management
- Sustainable agriculture and sustainable development demonstration projects
- Abandoned mine survey and remediation
- Improved data management system for monitoring coordination and data synthesis on the Central Coast

The overall benefits of IRWM Plan implementation for the region promise to be immense, with benefits accruing to all parts of the planning area. However, besides the countless benefits that will be achieved through project implementation, the benefits that have already been achieved by creating this new IRWM planning region in itself are already quite evident. The new Greater Monterey County IRWM region represents a significant expansion from the former Salinas Valley region, bringing important geographic areas into the IRWM planning process such as the entire Big Sur coast and much of the Salinas River watershed within Monterey County. The new region has also significantly expanded the RWMG, from three organizations to 18 organizations, and has developed a much more diverse and inclusive stakeholder base. The Greater Monterey County IRWM planning process has developed a reputation for being one of

the most positive, cooperative, and collaborative planning efforts to occur in the Monterey Bay area in recent years. Supporting this burgeoning planning effort will result in immeasurable benefits, not just for water resource management but as a platform for general planning and communication in the region.

In addition, the specific requests in this Planning Grant proposal for programmatic support will enhance the overall IRWM planning effort and enable the RWMG to make great strides in implementing a strong IRWM Plan. Of particular significance is the proposed "Water Project Reconciliation" process, a new approach to addressing and resolving water-related conflicts in the region, which, if successful, will enable the Greater Monterey County RWMG and stakeholders to move past certain (sometimes contentious) water-related issues that have kept the region "stuck" for decades. The significance of this cannot be overestimated, and if successful, the program can be readily transported to other IRWM regions.

Another important component in this Planning Grant application that promises huge benefits both to this region and beyond is the development of a comprehensive data management system. The need for a region-wide data management system has been echoed by many resource agencies, academic institutions, and organizations throughout the Monterey Bay region for many years. The proposed data management system would not only benefit the Greater Monterey County IRWM region, but could potentially be expanded for use by all six IRWM regions on the Central Coast. Finally, the new IRWM Plan, with Planning Grant support, will enable the increased participation of DACs and Native American tribes in the planning process, which would satisfy an important objective for the Greater Monterey County RWMG.

## 1.10 How the Existing Plan Meets Current IRWM Plan Standards

Section 1.3 above, The Partially Completed IRWM Plan, generally describes the work that has been completed thus far on the Greater Monterey County IRWM Plan. A great deal of progress has been made, led by a part-time IRWM Plan Coordinator and a very enthusiastic RWMG. However, as noted above, the Plan is still quite far from complete. The new Proposition 84/1E IRWM standards have not only added new Plan requirements, but have made apparent certain deficiencies in the existing draft Plan and/or potential areas of improvement that need to be addressed. The following table provides a brief summary of progress made on the IRWM Plan to date, what deficiencies exist, and what needs to be done to address those deficiencies:

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	Status (anticipated as of January 2011)	Deficiencies (including New Prop 84 IRWM Plan Requirements)	What Needs to be Done
Governance	Completed		
Region Description	Mostly completed	<ul> <li>This section is mostly drafted; however, some data gaps exist (mainly re: water demand) and information will still need to be verified.</li> <li>Additional information required by new IRWM Plan standards includes:</li> <li>Somewhat more detailed description of characteristics of watersheds</li> <li>Need to incorporate effects of climate change on watersheds, water supply, water demand</li> </ul>	<ul> <li>Fill data gaps</li> <li>Update water supply/demand information</li> <li>Obtain information needed to write more detailed "watershed description"</li> <li>After climate change analysis is completed, incorporate impacts of climate change on watersheds, water supply, water demand, and other IRWM Plan sections as appropriate</li> </ul>
Objectives	Mostly completed	Objectives were determined and approved by the RWMG. The new IRWM Plan standards require objectives to be measurable and encourage RWMGs to identify regional priorities.	<ul> <li>Work with RWMG to make objectives measurable</li> <li>Work with RWMG to identify regional priorities</li> <li>Revise this section accordingly</li> </ul>
Resource Management Strategies	Mostly completed	RMSs were determined and approved by the RWMG. The new IRWM Plan standards require major elements of the IRWM Plan to be evaluated in terms of climate change; the RMSs will need to be re-visited.	<ul> <li>After climate change analysis is completed, review RMSs once again in light of anticipated climate change impacts</li> </ul>
Integration	Mostly completed		Note: Currently, "integration" is incorporated in various elements throughout the IRWM Plan; however, a separate section on Integration may be written as the process nears completion.
Project Review Process	Completed		
Impacts and Benefits	Completed		
Plan Performance and Monitoring	Still to do	The new IRWM Plan standards include more stringent requirements for plan performance and monitoring. This section can only be written after objectives are made measurable and priorities are identified.	Determine a system to measure plan performance, and write this section
Data Management	Still to do	The new IRWM Plan standards include more stringent requirements for data management.	• Establish a data management system (as described in Task 7), and write this section
Finance	Still to do		Work with RWMG to determine a plan for financing the IRWM Plan, and potential funding sources for project/program implementation and project O&M

# Table 3. IRWM PLAN SECTIONS: Proposed Work to Bring Existing Plan up to Current IRWM Plan Standards

Write this section

Technical	Partially	Most of this information has been	Obtain any updated information/
Analysis	completed	collected, reviewed, and incorporated into the Plan, but an update will be required.	documents, and write the section
Relation to Local Water Planning	Partially completed	Most of this information has been collected, reviewed, and incorporated into the Plan, but the section still needs to be written.	<ul> <li>Obtain any updated information/ documents, and write the section</li> </ul>
Relation to Local Land Use Planning	Still to do	The new IRWM Plan standards strongly encourage efforts to create a more proactive, collaborate planning process between water and land use planners.	<ul> <li>Examine how local water planning agencies and land use planning agencies currently communicate</li> <li>Explore avenues for improving planning efforts between the RWMG and land use planning agencies</li> <li>Write the section</li> </ul>
Stakeholder Involvement	Mostly completed		<ul> <li>Update this section to include description of final workshops, new website features, etc.</li> </ul>
Coordination	Still to do	New projects submitted for inclusion in the IRWM Plan have generated new considerations for coordination between IRWM regions.	<ul> <li>Describe boundary issues, joint projects, and process for coordination with all three neighboring regions</li> <li>Work with Monterey Peninsula region on joint subchapter outlining issues surrounding the Monterey Bay Regional Water Project</li> <li>Describe coordination with agencies</li> </ul>
Climate Change	Still to do	The new IRWM Plan standards require analysis of climate change impacts on the region's water management systems and water-related resources.	<ul> <li>Conduct climate change analysis</li> <li>Incorporate impacts of climate change into appropriate sections throughout the IRWM Plan</li> <li>Write a Climate Change section</li> </ul>

The Planning Grant funds requested in this application will not only enable the RWMG to complete an IRWM Plan for the Greater Monterey County region according to current IRWM standards, but will provide much-needed support for certain programmatic elements that will significantly strengthen the overall planning process. This includes:

- Increased outreach to DACs
- Public workshops to support increased participation of stakeholders
- Greenhouse gas (GHG) emissions analysis and tracking for IRWM Plan projects
- Water Project Reconciliation (the testing of a facilitation process for conflict resolution)
- Development of a comprehensive data management system
- Development of a tool to assist project proponents with economic feasibility analysis
- Website development

## 1.11 How the Completed IRWM Plan will address IRWM Program Preferences

The tasks proposed in this Planning Grant application address the following IRWM program preferences as specified in PRC §75026(b) and CWC §10544:

- Include regional projects or programs.
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the RWQCB region or subdivision; or other region or sub-region specifically identified by DWR.
- Effectively resolve significant water-related conflicts within or between regions.

- Address critical water supply or water quality needs of disadvantaged communities within the region.
- Effectively integrate water management with land use planning.
- Address Statewide priorities, specifically:
  - Climate Change Response Actions
  - Improve Tribal Water and Natural Resources
  - Ensure Equitable Distribution of Benefits

The specific program preferences addressed by each proposed task is noted in the Work Plan below. Please note that the projects currently included in the draft Greater Monterey County IRWM Plan also address several IRWM program preferences, as follows (with some project examples provided):

- Include regional projects or programs (project example: Monterey County RCD's "Monterey County Integrated Watershed Restoration Program")
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the RWQCB region or subdivision; or other region or sub-region specifically identified by DWR (this is being achieved currently through the project integration process, which is combining several individual projects into regional programs)
- Address critical water supply or water quality needs of disadvantaged communities within the region (project examples: San Jerardo Cooperative "Wastewater Project" and Castroville Community Services District's "Well 2B Treatment Project")
- Address Statewide priorities, specifically:
  - Drought Preparedness (project example: Marina Coast Water District's "Regional Desalination Project")
  - Use and Reuse Water More Efficiently (project examples: City of Soledad's "Recycled Water Project" and Marina Coast Water District's "Regional Urban Water Augmentation Project")
  - Climate Change Response Actions (project example: Central Coast Wetlands Group's "Coastal Dune Restoration and Wetland Erosion Control")
  - Expand Environmental Stewardship (project examples: California State Parks "Big Sur River Steelhead Enhancement Project," Monterey County Water Resources Agency's "Salinas River Lagoon Fisheries Enhancement Project," and the Central Coast Wetlands Group's "Implementation of the Moro Cojo Slough Management and Enhancement Plan")
  - Practice Integrated Flood Management (project examples: Big Sur Land Trust, the City of Salinas, and CSUMB Watershed Institute's "Carr Lake Property Acquisition" and the City of Salinas's "Re-purposing of Reclamation Ditch 1665 to a Multi-Purpose Integrated Regional Facility")
  - Protect Surface Water and Groundwater Quality (project examples: Ventana Wilderness Alliance's "Los Burros Abandoned Mine Survey and Remediation" and Elkhorn Slough National Estuarine Research Reserve's "Water Resource Conservation in Elkhorn Slough")
  - Ensure Equitable Distribution of Benefits (project examples: San Jerardo Cooperative "Wastewater Project" and Castroville Community Services District's "Well 2B Treatment Project")

# **II. WORK PLAN TASKS**

The Work Plan below describes the tasks necessary to complete the Greater Monterey County IRWM Plan in accordance with current IRWM standards, and to provide much-needed support for certain programmatic elements that have been found to be deficient in the planning process. 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.

**Timeframe for this Task:** Throughout the duration of the project period. A Final Report will be submitted at end of project period.

#### **TASK 2: IRWM Plan Coordination and Development**

Funds are being requested to support general coordination of the Greater Monterey County IRWM planning effort and development of the IRWM Plan. In January 2009, a consultant was hired on a parttime basis through private grant funds to coordinate the Greater Monterey County IRWM planning process and to write the IRWM Plan. The private grant funds that have been supporting this effort are expected to expire in October 2010. Several members of the RWMG have committed funds to continue support of the IRWM Plan Coordinator on a limited basis through January 2011 in order to avoid losing momentum on Plan development. The RWMG is requesting IRWM grant funds to fund the part-time IRWM Plan Coordinator position beginning in January 2011 for one year. Support for the IRWM Plan Coordinator position beginning in January 2011 for one year.

The IRWM Plan Coordination and Development task includes overseeing and directing all aspects of the IRWM planning process as well as writing drafts of the Plan. General responsibilities include coordinating Tasks 3 – 10 listed below, incorporating the information generated from those tasks into the IRWM Plan and the IRWM planning process, guiding the RWMG through the decision-making processes that will lead to IRWM Plan "milestones" (according to current IRWM Plan Guidelines), ensuring open communication with the public, promoting the participation of stakeholders, disadvantaged communities and Native American tribal representatives, updating previously written sections and drafting new sections of the Plan to ensure consistency with the Proposition 84/1E IRWM standards, and seeing the Plan through the final approval process. Specific tasks are described below.

Program Preferences: This task satisfies the following IRWM program preferences:

• Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the RWQCB region or subdivision; or other region or sub-region specifically identified by DWR.

- Effectively integrate water management with land use planning.
- Address Statewide priorities, specifically:
  - Climate Change Response Actions

**Subtask 2a: General Coordination of the IRWM 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:

- Guide the RWMG through all of the information gathering and decision-making processes necessary to complete a final IRWM Plan. This includes, among other things, working with RWMG subcommittees to re-visit and revise prior work in order to bring those sections up to Proposition 84/1E standards, obtaining new information and data needed to assist the RWMG in decision-making, and guiding the RWMG through the final IRWM Plan approval process.
- Act as a clearinghouse for IRWM-related news and opportunities. This includes, for example, interpreting the final Proposition 84/1E IRWM Guidelines and PSPs for RWMG members and stakeholders, 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.
- Work with neighboring IRWM regions—the Monterey Peninsula region, Pajaro River Watershed region, and San Luis Obispo region—to coordinate on joint projects (see Task 10 below).
- Keep the public and stakeholders informed of IRWM Plan progress and events, and work to promote their participation (including email updates, website materials, personal communications, public workshops, the facilitation of public review and comment on the IRWM Plan).
- 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 Regions and Roundtable of Regions representatives.
- Work with RWMG members and consultants hired to develop new IRWM Plan elements and planning tools (described in the tasks listed below), assisting in the development of those elements and tools as needed. Incorporate the results of their work into the IRWM planning process and the IRWM Plan. Oversee activities to ensure consistency with Proposition 84/1E IRWM standards and the IRWM Plan Guidelines.

**Subtask 2b: Plan Development:** The Greater Monterey County IRWM Plan represents a revision and expansion of a former Plan, the Salinas Valley Functionally Equivalent Plan (FEP). *The work described in this subtask will bring the Salinas Valley FEP to a final, approved IRWM Plan for the new Greater Monterey County IRWM region.* Note that the revision of the former FEP is so extensive—involving significant geographic regions that were not included in the former Plan, significantly more stakeholders and project proponents, and a significantly expanded RWMG (from three to 18 organizations)—that the new IRWM Plan is essentially being written from scratch.

The process of re-writing the Plan began in January 2009, with the hiring of a part-time IRWM Plan Coordinator/Writer (hired through private grant funds) and the volunteered resources of a hard-working RWMG. Significant progress has been made toward development of the Plan, based on Proposition 50 IRWM standards, but the Plan is far from complete and additional work is needed in light of the new, more stringent Proposition 84/1E IRWM Guidelines. Additional work necessitated by the new standards includes, among other things, an evaluation of climate change impacts on the region's water resources, analysis of greenhouse gas (GHG) emissions, more stringent economic feasibility analysis, and a more comprehensive data management system.

Elements of the IRWM Plan that will be re-visited, revised, and/or newly developed as part of this Planning Grant request include, but are not limited to, the following:

- 1. **Region Description:** The "Region Description" chapter of the IRWM Plan is a massive section that includes not only a description of the region's watersheds and water resources, but projections for the region's water needs over a 20-year planning period. Much of this section has already been written but some of the information will need to be updated, and several data gaps still need to be filled. In addition, the Proposition 84/1E IRWM Program Guidelines have added certain new requirements, including consideration of climate change impacts for water supply and natural resources, which will require additional work to be done for this chapter.
- 2. Regional Objectives: The Proposition 84/1E Guidelines require regional objectives to be measurable. The regional objectives that were approved by the Greater Monterey County RWMG in March 2010 were developed according to the Proposition 50 IRWM Program Guidelines, which had no requirement for measurability. As a result, the current regional objectives are not presented in quantitative terms and are not readily measurable. Making the objectives measurable will enable the RWMG to more accurately chart the Plan's progress over time. The IRWM Plan Coordinator will assist the RWMG in re-visiting and re-framing the regional objectives so as to make them measurable.
- 3. **Regional Priorities:** As noted earlier, the RWMG chose not to prioritize objectives during the initial phase of IRWM Plan development, nor to develop other regional priorities. Recognizing that almost all of the objectives might be considered "high priority" depending on perspective, the RWMG decided to give all objectives equal weight. However, RWMG members have come to realize that identifying regional priorities will enable the Greater Monterey County IRWM Plan to serve as a much stronger planning tool. The IRWM Plan Coordinator will guide the RWMG through this process of developing regional priorities.
- 4. Plan Performance: The "Plan Performance and Monitoring" section of the IRWM Plan will hinge not only on the outcome of the two tasks described directly above (i.e., making objectives measurable and identifying regional priorities), but on the new data management system that will be developed for the region, as described in Task 7 below. Plan performance also includes reviewing projects included in the IRWM Plan and monitoring project implementation to determine how well regional objectives are being met. The RWMG is currently in the process of reviewing and prioritizing projects for inclusion in the IRWM Plan. Once the project list is finalized, it will be important to review the projects to gauge their actual potential to implement the Plan. This task will involve analyzing anticipated project outcomes against regional objectives, identifying any gaps, and determining what more must be done to meet regional goals (e.g., proactively seeking or initiating new projects). The process is expected to lead to the development of stronger projects, to new ideas, and to new partnerships.
- 5. Finance: One of the subcommittees that has been planned as a fundamental part of the RWMG's governance structure—but that has not yet been created—is the Funding Committee. The role of the Funding Committee is, in part, to assist the RWMG in identifying funding sources beyond state IRWM funds, including federal, other state, and private funding sources, to help implement the region's projects. The Funding Committee might also assist in identifying resources for funding project O&M and other aspects of Plan implementation that cannot be funded through the IRWM Grant Program. Also yet to be determined in terms of financing is how to support ongoing development of the IRWM Plan itself. The IRWM Plan Coordinator will work with the RWMG and the Funding Committee (once formed) to determine how to fund the Plan, how to fund the projects, and how to fund ongoing project O&M.

- 6. **Technical Analysis:** The technical information and data used to develop the IRWM Plan thus far has been derived from numerous planning documents, assessments, regulatory documents, academic research and monitoring, studies, reports, books, and personal communications. These documents are continually being updated, and new studies, research, and monitoring data are continually being generated. Planning Grant funds will enable the IRWM Plan Coordinator to review existing documents, obtain updated documents as needed, collect new data, and use this information to update the "Technical Analysis" section. This task will also inform the update of the "Relation to Local Water Planning" section of the IRWM Plan.
- 7. Relation to Local Land Use Planning: The "Relation to Local Land Use Planning" section in the IRWM Plan poses a particular challenge, as the connection between local water planning and land use planning in the Greater Monterey County region is considered to be somewhat lacking. Planning Grant funds will enable the IRWM Plan Coordinator to more fully examine how the local water planning agencies and land use planning agencies currently communicate and to explore avenues for improving planning efforts between the Greater Monterey County RWMG and land use planning agencies. Strengthening this connection will promote more informed, collaborative water resource management decisions within the region, and will hopefully encourage greater participation of land use planners in the region's IRWM planning process.
- Interregional Coordination: There are several major projects being proposed for 8. implementation through the IRWM Plan that span two or more IRWM regions. The Greater Monterey County IRWM Plan contains joint projects with each of its neighboring regions, including the Monterey Peninsula, Carmel Bay, and South Monterey Bay region (Monterey Peninsula region), the San Luis Obispo region, and the Pajaro River Watershed region. One notable example is the Monterey Bay Regional Water Project, which includes two major projects—a desalination facility and a recycled water distribution system—with potential benefits for both the Greater Monterey County and the Monterey Peninsula IRWM regions. Task 10 below outlines the work needed to clarify certain jurisdictional and water supply issues related to this project, which is being requested in cooperation with the Monterey Peninsula RWMG as part of this Planning Grant application. The IRWM Plan Coordinator will work with representatives from the Monterey Peninsula region to accomplish those tasks, and will continue to work with the other adjacent IRWM regions to coordinate joint projects, clarify any boundary issues, and develop common language for describing projects and project impacts/benefits in each of the respective IRWM Plans.
- 9. Climate Change: Planning Grant funds will be utilized to accomplish IRWM program standards for climate change as outlined in the Program Guidelines, including three broad focuses: (1) analysis and assessment of regional vulnerabilities to climate change; (2) identification of adaptation strategies for the projected effects of climate change in the region; and (3) identification of mitigation strategies for greenhouse gas emissions at regional and project-specific scales as available.

The Greater Monterey County region is located in an area of California where the impacts of climate change are anticipated to include, among other things, sea level rise in the coastal areas of the planning region, effects on local and regional water supply sources due to change in timing and amount of precipitation, frequency and severity of storm and flood damages, and ecological system disruptions and shifts in species populations and habitats. The proposed climate change analysis will seek to provide, at minimum, a climate change discussion for the IRWM Plan which utilizes the most recent state, federal, and academic findings regarding the effects of climate change, and will identify "no regret" adaptation strategies as well as identify methods for reducing emissions in the planning region. Specific tasks include:

- a. *Review of pertinent state, federal, and academic climate change reports:* This task includes review of pertinent documents and reports with regards to identifying to the extent possible vulnerabilities projected for the Greater Monterey County planning region with regards to water supply, flood management, sea level rise, ecosystem and habitat changes, and preparedness activities. The analysis will rely on existing information and no new information will be created for this task. A subcommittee of the RWMG comprised of water supply agencies, local government, and ecological experts will review this analysis for accuracy with regards to vulnerability assessment conclusions. The product will be a chapter for the Plan establishing a Regional Description with regards to climate change, and discussions of the relation of climate change to local water planning, land use planning, and coordination.
- b. Identification of "no regret" adaptation strategies available to the region: Based on the results of the vulnerability assessment, the IRWM Plan Coordinator will work with the Climate Change Subcommittee of the RWMG and other regional experts, including NOAA's Monterey Bay National Marine Sanctuary and the Elkhorn Slough National Estuarine Research Reserve, to identify a set of "no regret" adaptation strategies for anticipated climate change impacts to local and regional water supplies, flood management, and ecological habitats and species. A regional multi-day workshop or series of workshops co-held with federal, state, and local agencies and facilitated by the Monterey Bay National Marine Sanctuary will help focus the identification of these "no regret" strategies for the region. The "no regret" strategies will be developed so that they provide the first tier of possible action for the region and can be built upon as more region-specific data and analysis becomes available by scientific and academic institutions over time.
- c. *Identification of policies and procedures to promote adaptive management for climate change impacts:* The IRWM Plan Coordinator will identify policies and procedures that promote adaptive management at the project level for the planning region, including a feedback loop for project sponsors on projects implemented and projects proposed with regards to required changes or adaptation actions needed, based on available climate change data and predictions. This subchapter will identify appropriate monitoring parameters to capture the effectiveness of initial "no regret" actions. It is assumed this policy directive will be updated as more direct information becomes available regarding climate impacts at the local level, but at least it will provide initial guidance on projects in the near term.

**Timeframe for this Task:** This work will be ongoing from the signing of the grant agreement through completion of the final IRWM Plan (with anticipated completion by December 15, 2011). The various IRWM Plan sections will be drafted as each "milestone" is achieved.

## TASK 3: Increase Outreach to Disadvantaged Communities and Native American Tribes

DWR's statewide priorities for the IRWM Plan include a provision to "ensure equitable distribution of benefits" by "increasing participation of small and disadvantaged communities in the IRWM process," and by "containing projects that address safe drinking water and wastewater treatment needs of DACs." 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. Two organizations, the Environmental Justice Coalition for Water (EJCW) and the San Jerardo Cooperative, were asked 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 disadvantaged communities, and aims to build the capacity of organizations and groups to engage in local, regional, and statewide water policy and planning (see <u>www.ejcw.org</u>). 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 been experiencing severe drinking water contamination and wastewater issues recently, and has been involved in the statewide movement for water justice.

EJCW and San Jerardo Cooperative 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. However, the low availability of time and funds has limited the actual DAC outreach that these organizations have been able to conduct thus far during the IRWM planning process. Planning Grant funds will enable EJCW and San Jerardo Cooperative to significantly expand their outreach efforts to DACs within the Greater Monterey County IRWM region and will enable DACs to participate in the planning process in a more significant and meaningful way. These tasks will be carried out over a time period of two years from the signing of the contract.

EJCW and the San Jerardo Cooperative will work to identify DACs in the Greater Monterey County region that have ongoing water issues, will provide basic water education and advocacy services, and will develop a clear sense of the community water concerns and potential solutions in these communities. Outreach will begin in areas that have already been identified as DACs, such as Camp 21, other farm labor camps, Greenfield, King City, San Lucas, Gonzales, Soledad, Boronda, Chualar, Las Lomas, and San Ardo. A special effort will be made to mobilize communities in the Salinas Valley to participate strategically in regional IRWM Plan meetings.

EJCW and the San Jerardo Cooperative will advocate for the development of 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). Drinking water is a major concern in the Salinas Valley, especially for small and low-income communities. The Central Coast Regional Water Quality Control Board in their Preliminary Staff Report recently stated: "In the Central Coast Region, thousands of people are drinking water contaminated with unsafe levels of nitrate or are drinking replacement water to avoid drinking contaminated water. The cost to society for treating polluted drinking water is estimated to be in the hundreds of millions of dollars."<sup>1</sup> There is also a need to investigate potential DAC issues in areas such as Granite Ridge, which is undergoing a severe water shortage. EJCW has already made contact with several of these communities, and has a bi-lingual Organizer located in the Central Coast who has begun outreach to various communities in the region.

The RWMG recognizes that even within DAC communities, there may be populations that are more severely disadvantaged and may require additional support. DACs may also be rendered invisible in other ways, for example, low-income communities that may live within wealthier ones, or communities that are not documented. Identifying these "hidden" disadvantaged communities will be part of the proposed DAC outreach effort.

A secondary part of this task will include outreach to Native American tribes in the Greater Monterey County region. While there are no dedicated tribal lands within the Greater Monterey County region, there are nonetheless many Native American tribal members still living in the Monterey County region and a number of historic, cultural, and sacred Native American sites throughout the region. The RWMG

<sup>&</sup>lt;sup>1</sup> Central Coast RWQCB, Preliminary Draft Staff Recommendations for an Agricultural Order.

has consulted with the California Native American Heritage Commission and is working to include tribal representatives in the project review process to ensure that projects implemented as part of the IRWM Plan do not impact Native American archeological or cultural resources. This task will further that effort, and will aim to increase the participation of Native American representatives in the IRWM planning process.

Specifically, this task will accomplish the following objectives:

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

Program Preferences: This task satisfies the following IRWM program preferences:

- Address critical water supply or water quality needs of disadvantaged communities within the region.
- Address Statewide priorities, including:
  - Ensure equitable distribution of benefits (specifically: increase the participation of small and disadvantaged communities in the IRWM process; develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations; and contain projects that address safe drinking water and wastewater treatment needs of DACs);
  - Improve Tribal Water and Natural Resources.

**Subtask 3a: Develop a DAC Map and Outreach Plan:** This sub-task includes: 1) developing a block-level map of DACs, and also identifying Native American tribal communities, in the Greater Monterey Cunty region; 2) understanding their project needs such as drinking water, wastewater, storm drain, flood control, watershed, access to open space and shoreline, etc.; and 3) creating a plan to conduct targeted, respectful and effective outreach to DACs and tribal communities.

Timeframe: Focused in the first 3 months, with updates as necessary.

Subtask 3b: Conduct Outreach Activities: Outreach activities will be conducted by the following methods:

- Establishing a relationship with DAC communities and tribes
- Conducting bilingual meetings as needed with community residents
- Conducting informational meetings with non-profit and community-based organizations in the area to create allies and partners for DAC water needs
- Cultivating relationships with local elected officials to represent DAC and tribal needs
- Creating linguistically and culturally appropriate outreach materials to inform communities of general water issues, the IRWM Plan, and possible funding opportunities
- Reaching out to small community water systems and domestic well owners, and providing them with information and possible solutions to water needs
- Hosting a Salinas Valley Water Strategy Meeting
- Towards the end of the sub-contract period, disseminating results to communities through various written reports and presentations at meetings

**Timeframe:** Focused from 3 - 22 months, with updates as necessary.

**Subtask 3c: Integrate DAC Members and Tribes into the Greater Monterey County IRWM Planning Process:** This task includes: 1) giving presentations at local events, community forums, fairs, etc. to educate members of DACs about the IRWM planning process and the Greater Monterey County IRWMP; 2) convening DAC and tribal leaders and helping them to participate in Greater Monterey County IRWM Plan stakeholder meetings; and 3) fostering participation of DAC and tribal leaders in meetings by providing assistance on inclusion in the IRWM region governance, developing responsive MOUs, supporting their understanding of goals and objectives, ensuring cultural sensitivity of the IRWM Plan, creating a fair ranking process for projects, etc.

**Timeframe:** Months 3 – 24

**Subtask 3d: Community Assistance for Project Preparation**: This task includes: 1) providing assistance to DAC and tribal leaders to identify specific projects that address critical water supply, water quality, wastewater and other water-related needs; 2) together with DAC and tribal leaders, selecting a subset of DAC and tribal entities for assistance with project development; and 3) promoting water and resource conservation projects and watershed projects among DACs and tribal communities.

**Timeframe:** Months 3 – 24

**Subtask 3e: Technical Assistance for Project Preparation:** This task includes: 1) leveraging DWR technical assistance funds for DACs and tribes to prepare projects for submission into the IRWM Plan; 2) hiring consultant engineers as needed to provide technical assistance to communities in order to develop their project applications for the IRWM Plan; 3) preparing technical assessments, including developing initial feasibility studies for projects; and 4) finalizing a subset of projects, assisting DAC members with project development, and preparing and submitting project proposals for inclusion in the IRWM Plan.

**Timeframe:** Months 3 – 18

## **TASK 4: Stakeholder Outreach: Public Workshops**

The RWMG is requesting Planning Grant funds to conduct public workshops to encourage stakeholder participation in the IRWM planning process, including the participation of disadvantaged communities. Two public workshops have already been conducted as part of the initial phase of Plan development: the first workshop was held September 2009 in two different locations (Big Sur and the City of Soledad in the Salinas Valley) to introduce the IRWM process to stakeholders and to obtain stakeholder input regarding water-related "issues and conflicts" in various parts of the region; the second workshop was held March 2010 in three different locations (Big Sur, King City, and Salinas) to solicit projects for inclusion in the IRWM Plan. Funds are still available (from the private grant source that has funded the planning effort thus far) to support one more public workshop. That workshop will focus on the IRWM Plan project list, and will include an explanation of the projects, the project integration process, project ranking, and the resulting prioritized project list.

The RWMG would like to conduct two additional public workshops as part of the ongoing IRWM Plan development process. The first workshop will occur after the first draft of the IRWM Plan is released and will focus on obtaining public comments, input, and general support for the IRWM planning process. The second workshop will follow the release of the final IRWM Plan. The purpose of that workshop will be to formally present the final Plan, respond to any questions, explain the IRWM Grant Program, announce upcoming grant cycles, and describe next steps. Like the previous public workshops, the proposed workshops will be held in at least two (preferably three) different locations in various parts of the

planning region, at different times of day and with at least one location providing Spanish translation services in order to make the workshops accessible to as many people as possible. EJCW and San Jerardo Cooperative will work to ensure the participation of DACs at both workshops.

Program Preferences: This task satisfies the following IRWM program preferences:

- Address Statewide priorities, specifically:
  - Ensure Equitable Distribution of Benefits

**Subtask 4a: Organize and Conduct Public Workshops:** Conduct two public workshops, in at least two different locations for each workshop (as described above). A consultant will be hired to organize, publicize, and conduct the workshops, and perform any necessary follow-up, including reporting to the RWMG on workshop outcomes. Publicizing the workshops will include, at minimum: email notices to all stakeholders on the stakeholder list, announcements on the website, posters posted in public meeting places, and notices in local newspapers.

**Timeframe:** The first workshop will take place around month 10; the second workshop will take place after release of the final IRWM Plan, around month 12.

## **TASK 5: Stakeholder Outreach: Website Development**

When project managers, State agencies, stakeholders and the general public need information on the Greater Monterey County IRWM Plan, the internet is the first place they will look. For this reason the IRWM Plan must have a website that is easy to find, easy to navigate, and can provide all the information that anyone interested in the IRWM Plan will need. The current IRWM Plan website is hosted by the Central Coast Wetlands Group, http://ccwg.mlml.calstate.edu/irwmp/. While the site does provide the basic information, it is difficult to find, confusing to navigate, and has minimal capacity for expansion. As development of the IRWM Plan continues, more information will need to be publicly available, including information on the funded projects and the data collected.

Continuing to add to the current site will make it increasingly convoluted, when the main priority of the website should be to make the information easily accessible and the IRWM Plan process transparent to the public. The best solution is to build a new website where people can find all the Plan information, funded projects, and data in one location. In addition, to the greatest extent possible, the deliverables of the greenhouse gas (GHG) emissions tracking system (Task 6) and the data management system for the Greater Monterey County region (Task 7) will be available through this site. Once completed, this site will be the primary outreach center for the Greater Monterey County IRWM Plan. This task will be conducted by the Central Coast Wetlands Group with assistance from a technical consultant.

**Subtask 5a: Website Development:** The first priority will be to register a domain and get the new website designed and populated with information from the existing website as soon as possible. The new website will be designed through careful planning to ensure it is easy to navigate and has the capacity to evolve and expand along with the IRWM Plan. This could include features such as user login, email signups, online form submittal, events calendar, and/or interactive maps.

Timeframe: First 6 months.

**Subtask 5b: Data Management Integration:** The website, in addition to being the first point of contact with the Greater Monterey County IRWM Plan, will also house the new data management system (as described in Task 7 below) for use by project proponents, resource managers, and the general public. To ensure project proponents can easily use the data management system, and that grant funders, resource managers, and the general public can easily access the results of IRWM Plan funded projects, the website

and data management system must work hand in hand. Integration with existing sites in the data management system through links on the website, and identifying the gaps that must be filled by the website, are part of this subtask.

**Timeframe:** Completed within months 6-9.

**Subtask 5c: Database Development:** This task develops the necessary online databases required by the data management system to fill gaps in data collection and tracking, and integration of the GHG emissions tracking system as described in Task 6 below. Through this, the IRWM Plan website will become an integrated data portal which will make data submittal and viewing results simple and ensure that all the projects have comparable data. *This portal will function as a prototype that can be integrated for use by all six IRWM regions on the Central Coast.* The database will be developed through the following steps:

- **Development of the Conceptual Approach to the Tracking System**. This will involve aligning our regional knowledge needs with data reporting specifics (fields, data structure, reporting frequency, etc.) and our regional reporting and data management capacity. We will borrow from and make sure that it coincides with the existing California Wetland project tracker and SWAMP/CEDEN data fields.
- Gather Stakeholder Input and Facilitate Coordination. The goal upon completion of the development of this website is for it to be a regional system. To achieve this, we need local experts and potential users to weigh in at the development stage to provide input in its design. This will involve several stakeholder meetings and a considerable amount of follow-up correspondence to ensure all input is received and addressed.
- Implementation of the Conceptual Approach in a Web-based Tracking System. Protocols will need to be established for administering these data. These protocols will be installed on the web server and then custom forms will be built and uploaded to the website for data input and database administration.
- **Design and Construction of Web-based Data Dissemination Tools.** This will require the construction of additional user forms and custom built queries which will allow for users to view data with various reporting options. Options may also include chart and map outputs.
- **System Testing**. To ensure the website works, extensive system testing will need to be conducted. Problem areas will be identified and adjusted (potential problem areas include, e.g., entering and retrieving information from the databases). These problems will need to be resolved before the system is released to the public.

**Timeframe:** Months 5-12

**Subtask 5d: Maximizing Usability and Accessibility:** Testing the website layout to confirm it is easy to use, easy to navigate, and easy to find before it is finalized will facilitate the website's becoming the primary outreach vehicle for the Greater Monterey County IRWM Plan. Testing will involve asking members of the RWMG and volunteers to spend time exploring the site to make sure the information is easy to access, and data is easy to upload and retrieve. In addition, funds will be used to translate several key parts of the website in Spanish to ensure usability by some non-English speakers, particularly in disadvantaged communities.

#### **Timeframe:** Months 9-16

#### **TASK 6: Greenhouse Gas Emissions Analysis**

As noted in Task 2 above, Planning Grant funds are being requested to accomplish IRWM program standards for climate change as outlined in the Program Guidelines, including three broad focuses: (1) analysis and assessment of regional vulnerabilities to climate change, (2) identification of adaptation strategies for the projected effects of climate change in the region, and (3) identifying mitigation strategies for GHG emissions at regional and project-specific scales as available.

One key part of IRWM Plan development, in relation to climate change, will be directing and assisting project sponsors in assessing their own project's effects on GHG emissions at the project level, and then tracking that information cumulatively at the planning region level. A technical consultant will be hired to implement this task. The consultant will 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.

<u>Program Preferences</u>: This task satisfies the following IRWM program preferences:

- Include regional projects or programs.
- Address Statewide priorities, specifically:
  - Climate Change Response Actions

**Subtask 6a: Develop GHG Emissions Analysis Tool:** A technical consultant will be hired to create a GHG emissions analysis tool to assist project proponents in conducting project-specific GHG emissions analysis and to produce GHG emissions data for their projects.

**Subtask 6b: Develop GHG Emissions Tracking System:** The technical consultant will develop the GHG emissions tracking system and assist the Central Coast Wetlands Group in making the database available on the IRWM Plan website. The technical consultant will also investigate and provide recommendations on effective GHG reduction strategies (e.g., use of 20% bio-diesel, carpool for crews to distant locations, high efficiency pumps, and solar powered equipment) that could be integrated into each project to achieve a 30% reduction in emissions below standard levels. As projects are implemented through the IRWM Plan over time, the tracking system will be used to analyze GHG emissions of IRWM Plan projects on a regional scale. It is intended that with every formal Plan update, a GHG emissions summary and evaluation report will be produced with recommendations for further GHG reductions at the project level.

Timeframe for this Task: Within the first 10 months of the project period.

#### **TASK 7: Data Management**

Currently there is not a system in place to characterize, track, and quantify watershed health and water quality improvement actions across the Greater Monterey County region in a consistent and useful way. Quantitative "cause and effect" relationships that indicate the effectiveness of best practice implementation and ecosystem health will be increasingly sought in the future. The task of linking improved ecosystem health to changes in best practice implementation has historically been difficult, partially due to the lack of well-designed monitoring schemes. In addition, detection of spatial or temporal trends in best practice implementation requires that practices be measured in a consistent manner over time and from one location to another.

This task will establish a data management system that will coordinate existing systems and fill data gaps and inconsistencies. The numerous monitoring programs that collect water quality and other environmental data on the Central Coast have substantial differences that include sampling designs, measurement types, analytical methods, objectives, funding stability levels, and technical capacities that have historically made coordination among programs and integration of data sets difficult. Important general differences between data sources include:

- Spatial extent
- Temporal extent and frequency
- Purpose
- Measurement types (analytes, media, species, habitat quality metrics)
- Experimental designs (targeted vs. probabilistic)
- Data formats
- Data documentation

There are also differences in the level of data gathered for different water-related projects such as groundwater, surface water, and habitat. These differences must be identified and addressed to create a consistent level of reporting for all project types.

Implementation of a comprehensive data management system will improve resource managers' knowledge of water resources health in the region, particularly the status and trends of water quality conditions and the effectiveness of water quality protection actions, by improving capacity to synthesize information collected by disparate entities for different purposes. Since projects implemented under the IRWM Plan will have different objectives and reporting requirements, the Plan cannot prescribe the type, extent, or design of project monitoring components. Instead, the Plan will specify a data management approach to ameliorate some of the technical and data access gaps identified above, as well as others not yet identified. IRWM Plan data management will be oriented towards providing more effective access to data sets that will be useful for answering questions prioritized by regional stakeholders including federal agencies, city and county staff, and research scientists.<sup>2</sup> These questions include:

- What is the quality of water on the Central Coast?
- Is water quality getting better or worse?
- How are spatial patterns of pollution related to land use and land use management improvements?
- Do pollutants pose risks to human health?
- What is the loading of pollutants to the ocean from coastal watersheds?

The exact look and function of the data management system will be developed once grant funds are secured to facilitate collaboration with other regions and to come up with the most comprehensive system. Primary data management for ongoing programs, including data validation and quality assurance, will remain distributed throughout the region with the individual data generating organizations but will follow the guidelines established in the Monterey Bay National Marine Sanctuary (MBNMS) Strategic Plan for Central Coast Water Quality Monitoring Coordination and Data Synthesis. Submission of all surface water quality data will be uploadable to regional and statewide databases such as the Central Coast Ambient Monitoring Program (CCAMP) and California Environmental Data Exchange Network (CEDEN). Data collected on private land will not be posted on the website without permission from the landowner.

<sup>&</sup>lt;sup>2</sup> http://www.ccamp.net/sam/index.php/SAM\_Strategic\_Plan

This task will be conducted by staff of the MBNMS and of the Central Coast Wetlands Group.

Program Preferences: This task satisfies the following IRWM program preferences:

- Include regional projects or programs
- Effectively integrate water management with land use planning

**Subtask 7a: Assessment of Monitoring Programs and Data Gaps:** Conduct an assessment of all monitoring programs within the Greater Monterey County IRWM planning region. Identify existing data sets, information gaps, and data needs related to assessing improvements to ecosystem health and effectiveness of IRWM Plan efforts.

Timeframe: Completed within the first 6 months of the project period.

**Subtask 7b: Develop a Tracking and Reporting System:** Develop a tracking system and reporting system to map and identify all water quality, water level, water supply and restoration efforts within the region. Priority will be given to projects included in the IRWM Plan, initially building to a more comprehensive list of projects. Development will include research into systems used by other IRWM planning regions on the Central Coast to establish inter-regional consistency. It is important to specify standardized reporting requirements for IRWM Plan projects so that the information collected can be used collectively to address regional questions about watershed health and water resources. This task will also include developing a format for annual review and analysis of IRWM Plan data.

Timeframe: Completed within the first 10 months of the project period.

**Subtask 7c: Design a Comprehensive Monitoring Program:** Building on the guidelines established in the MBNMS Strategic Plan for Central Coast Water Quality Monitoring Coordination and Data Synthesis, design a monitoring program for the planning region incorporating existing watershed monitoring with IRWM Plan project monitoring. Specific protocols will ensure that data is gathered in a consistent manner and will include processes for data and information sharing. The data gaps identified during Subtask 7a will help inform what needs to be included in the monitoring program.

Timeframe: Completed within the first 12 months of the project period.

**Subtask 7d: Coordinate Data Management System with Website:** Integrate the tracking and reporting system developed in Subtask 7c into the website (described in Task 5). To ensure project proponents can easily use the data management system, and that grant funders, resource managers, and the general public can easily access the results of IRWM Plan projects, the website and data management system must work hand in hand.

Timeframe: Completed within the first 12 months of the project period.

**Subtask 7e: Provide Training and Data Management Services:** Provide training and data management services to all potential IRWM grant recipients to ensure that all key metadata fields are managed and documented in a format that ensures appropriate QA/QC and that is compatible with regional and statewide databases such as CCAMP and CEDEN.

Timeframe: Completed within the first 22 months of the project period.

## **TASK 8: Water Project Reconciliation**

Historically, water issues and related solutions in the Greater Monterey County region have been developed without a great deal of interaction on the part of the various parties that would be affected by the solutions. Recently, the Salinas Valley has come together to implement the final piece of infrastructure to halt seawater intrusion, the Salinas Valley Water Project (SVWP). The SVWP required reaching out to the public to gain support for an assessment (Proposition 218 process) to cover costs related to its operations and maintenance, as well as other benefits provided. The valley voted with an 85% affirmative vote to build and operate the project.

Moving into the future, with the advent of the IRWM planning process, more groups of people who typically do not interact with each other will be working together to develop or champion other waterrelated projects. The IRWM planning process calls for issues and conflicts to be identified, as well as solutions brought forth by the region. Conflict resolution can be a lengthy, expensive process, usually leaving each participant feeling equally disappointed. The Greater Monterey County RWMG desires to proactively move from a conflict resolution paradigm to one of cooperation and reconciliation.

The RWMG is seeking funds to develop a process that we are calling "Water Project Reconciliation" (WPR). The WPR uses a basic joint fact-finding approach, whereby parties discuss what factual questions they believe to be relevant to a decision, exchange information, identify where they agree and where they disagree, and negotiate an approach to seeking additional information, either to fill gaps or to resolve areas of disagreement. The proposed project would bring stakeholders into the process from the start, beginning with the question, "What information do we need to make our decisions?" The key is that the stakeholders are at the table during the process of both defining the technical scope of work and for the selection of the technical investigators. The discovery process is also shared, so that learning is a shared activity.

The idea for WPR came out of the recent project review process. As RWMG members were reviewing projects for opportunities to integrate them into multi-benefit projects and programs, it became apparent that many projects within certain sub-watershed areas could and should be integrated, except that underlying conflicts between project objectives and/or project proponents put the projects at odds with one another. It became clear that a process was needed—beyond the normal integration process—to reconcile these projects for integration to occur and for project implementation to proceed. But while many attempts at traditional conflict resolution have been made in the past, most of these attempts have failed, resulting in even more mistrust on the part of stakeholders. The RWMG concluded that a new approach was needed—and what better platform for testing out this new approach than the IRWM planning process.

The goal of the WPR is to alleviate areas of mistrust so that mutual solutions can be achieved. The process is intended to work towards solutions that are reached by a sharing of data, experiences, stakeholder concerns, and viewpoints. Beginning from a solutions-based platform, all stakeholders interact and in the end develop, ideally, a result that all involved can get behind. The RWMG predicts that bringing the public together with scientists and local-elected leadership to work with each other and share their knowledge in an open consensus-seeking process will prove a better way to ensure the use of good science in water resource decision-making than through the more typical adversarial process. What follows is a proposed process and conceptual budget to refine, develop, and test the WPR process to determine its potential utility as part of the IRWM planning process.

Program Preferences: This task satisfies the following IRWM program preferences:

- Include regional projects or programs.
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the RWQCB region or subdivision; or other region or sub-region specifically identified by DWR.
- Effectively resolve significant water-related conflicts within or between regions.

**Subtask 8a: Groundwork:** A subcommittee of the RWMG will identify an appropriate location to conduct the "test run" of the WPR process, based on evidence of conflicts or incompatibilities between projects recently submitted for inclusion in the IRWM Plan. The subcommittee will work closely with a contractor that specializes in facilitation and mediation services to design the WPR process, including the best approach for building agreement. For example: Are the parties needing to reach full consensus, or is it sufficient to build broad support? Does agreement need to be made around a single alternative, or is it preferable to craft a range of options to be considered by high-level decision makers? What are the strategies for making agreements binding? The contractor will help the RWMG subcommittee outline the overall WPR process, which may include, for example, developing a conceptual model that describes the desired outcomes, the processes that will either be conducive to or will constrain their achievement, the relative strength of connections in the model, and the certainty/uncertainty associated with each model component.

Timeframe: Within the first two months of the project period.

**Subtask 8b: Identify and Invite Representative Stakeholders to Participate in WPR Process:** The subcommittee will identify potential participants with an aim of achieving complete representation of stakeholder interests. Stakeholders will be invited to participate in the WPR process. The subcommittee will also select an appropriate facilitator/mediator at this time. It is important that the facilitator/mediator is seen by all parties to be absolutely neutral.

Timeframe: Within the first three months of the project period.

**Subtask 8c: Conduct Meetings:** The facilitator, with assistance from the RWMG subcommittee, will set up and conduct several (anticipating five or six) stakeholder meetings over the course of several months, depending on the scope of the issue. The RWMG will publicize the meetings in newspapers, on the IRWMP website, through email notices, and word of mouth. Translation services will be provided at the meetings, if needed. The facilitator will establish ground rules and explain the WPR process to all participants. Through the joint fact-finding process, key questions will be compiled, information needs and uncertainties among participants will be identified, and a list of appropriate investigators to conduct technical studies will be agreed upon. This subtask includes all of the facilitated stakeholder meetings over the course of the project period, and includes meeting preparation, meeting facilitation, and follow-up (e.g., distributing meeting summaries, and "to do" items between meetings).

**Timeframe:** Estimated at months 4-20, depending on scope of issue and time needed to conduct technical studies, with the WPR "test run" concluding within two years.

**Subtask 8d: Information Gathering:** Work to obtain whatever data is needed to fill information gaps. This may include recruiting independent scientific experts to conduct new research or monitoring studies or to gather and review scientific information, or it may involve the stakeholders themselves pooling relevant information to narrow areas of disagreement and uncertainty. Information could be in the form of the following, though not limited to:

- Mapping drainage ways
- Inventory of biological resources, or other category of resources
- Watershed analyses

- Feasibility studies
- Economic impact assessments

The resulting information will be presented to all stakeholders as part of the ongoing facilitated meeting process.

**Timeframe:** Estimated at months 4-20, depending on information needs and time needed to gather sources or conduct studies.

**Subtask 8e: Evaluation:** Given that this task represents a "test run" of the WPR process, the final step will be to evaluate what worked, what didn't work, how the process might be improved, and how valuable the WPR process is as a tool for resolving conflicts and reconciling water-related projects in the ongoing IRWM planning process. The evaluation will take place in the group setting, led by the facilitator, with input from all willing stakeholders and RWMG members. The facilitator will document the process and the outcomes for future reference in a final evaluation report, including recommendations for adaptive management measures, as appropriate.

**Timeframe:** Prior to the end of the grant period.

**Subtask 8f: Identify Funding Opportunities:** A subcommittee of the RWMG, the Funding Committee, will work to identify funding opportunities beyond the IRWM Grant Program to assist in funding projects and programs that result from the WPR process. The purpose of this subtask is to "see the WPR process through" to its conclusion, helping to ensure that the process ultimately results in project implementation.

**Timeframe:** Following the stakeholder meetings.

# **TASK 9: Economic Feasibility Analysis**

The Greater Monterey County IRWM region includes numerous agencies and organizations involved with water resources planning and watershed management. A wide variety of projects have been identified to address specific improvements to water and wastewater systems, related watersheds and drainage systems, as well as the interface with marine environments. Each of these projects will require an economic feasibility analysis but many of the sponsoring organizations do not have the staff capabilities or resources to adequately address this need.

This task will create a model composed of informational databases and spreadsheet templates to assist organizations and local jurisdictions to complete standard economic feasibility studies, both for project planning purposes and also to comply with the Proposition 84 Implementation Grant application requirements. Broadly speaking, it is anticipated that implementation grant applications will address a variety of project types including:

- Habitat restoration
- Storm water detention/reduced flooding risk
- Water quality enhancement in natural areas
- Watershed restoration
- Domestic water supply systems
- Sustainable agricultural and land use practices
- Fisheries
- Wastewater systems
- Community involvement and vocational training in related fields

Recreation facilities and open space

The economic analysis requirements for the implementation grants focus primarily on the comparison of benefits and costs of the proposed projects. This will require estimation of benefit values for a wide range of activities, resources, and land uses. Some value estimations will require the use of socioeconomic data in addition to resource data. Within the Greater Monterey County IRWM region, there is a defined range of values related to the relevant resources and economic activities and conditions, which can be organized into databases to facilitate efficient preparation of the economic analyses of the proposed projects.

Program Preferences: This task satisfies the following IRWM program preference:

Include regional projects or programs.

**Subtask 9a: Develop Socioeconomic Databases:** Valuation of economic benefits frequently addresses changes in population or employment, improvements to wage levels or household incomes, increases in business activity, whether related to recreation and tourism or agriculture and other industry groups, and the related economic multiplier effects of changes in economic activity. This subtask would assemble and organize datasets such as the following:

- Employment and workforce trends
- Demographic and educational data
- Household incomes
- Regional dollar values of various economic activities, particularly tourism and recreation
- Economic multipliers (using IMPLAN Input-Output model)

These datasets would be customized to the Greater Monterey County region and identified by subarea to permit their use for project analysis at specific locations within the region.

**Subtask 9b: Assemble or Create Databases to Quantify Land and Resource Values:** The proposed projects will affect specific watershed and habitat resources, as well as agricultural areas and developed land areas, particularly in terms of flood protection. A number of these resources or land uses have quantifiable economic values, such as agricultural production values, fisheries market values, and recreation usage values.

Other resources and ecosystem components require non-market value estimations. We are aware that a number of databases have been developed to assist in accessing non-market values and estimation techniques for a number of habitats and resource environments (e.g., National Ocean Economics Program (NOEP), Environmental Valuation Reference Inventory (EVRI), Spatial Trends in Coastal Economics (STICS), etc.). This task is not intended to duplicate data available from sources such as these, but rather to collate relevant data to the specific habitats and resources areas potentially affected within the Greater Monterey County region.

The following data sets would be provided and organized to permit customized searches for the specific geography and resource or land use type relevant to each project application. The type of project most likely to use each dataset is indicated in parentheses.

- Typical property values by land use and agricultural crop type (flood protection)
- Crop values (sustainable ag practices)
- Tourism and visitor count data and trends (recreation facilities)
- Current regional water and sewer rates (domestic water and sewer systems)
- Fisheries values and trends (runoff water quality)
- Ecosystem values based on studies in comparable areas, adjusted to Monterey County conditions (watershed management and wetlands restoration)

**Subtask 9c: Create Report and Spreadsheet Templates:** This subtask will provide a format for local agencies to use in assembling the economic information for each project developed from the database resources in the previous subtasks. Spreadsheet templates will be designed to organize data and perform calculations in the format required for Attachments 7-10 in the Proposition 84 Implementation Grant Application Package. The report template will provide instructions for inserting data, preparing calculations and providing relevant text to present the economic evaluation of each project. Clearly, this kind of template can only function as a guide. Specific project characteristics may dictate deviation from the template or other judgments regarding necessary information to present a complete picture of the economic feasibility of any particular project. However, the template will add efficiency to the analysis and report preparation process, particularly for organizations and agencies with limited staff resources to perform these studies.

Timeframe for this Task: Completed within first 6 months

## TASK 10: Interregional Coordination

The purpose of the "Coordination" chapter of the IRWM Plan is, in part, to identify neighboring IRWM efforts and the way cooperation or coordination with these other efforts will be accomplished. The chapter includes discussion of any ongoing water management conflicts or overlapping jurisdictional issues with adjacent IRWM efforts. The Greater Monterey County region shares borders with three 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. This task focuses specifically on the coordination of projects between the Greater Monterey County region and the Monterey Peninsula region (while Task 2 includes more general coordination efforts between the Greater Monterey County region and all three neighboring IRWM regions). The outcome of this task will be information that can be included in both regions' IRWM Plans, describing the coordination of efforts between the two regions.

Note: Both regions are submitting this task in full (including the full budget) for Planning Grant funds, in order to avoid the possibility of one region not receiving a Planning Grant award and part or all of this task not getting accomplished. In the event that both regions should be awarded Planning Grant funds, the two regions have tentatively agreed to evenly split budget costs and match, and evenly divide the remaining award funds to be allocated in consultation with DWR to other Planning Grant tasks.

The primary area where water resource management is shared between the Greater Monterey County and the Monterey Peninsula regions is in the vicinity of the Seaside/Salinas River Groundwater Basin divide. The Seaside Groundwater Basin is a place of water supply storage and extraction for the Monterey Peninsula, and the Salinas River Groundwater Basin is a source of water supply for the Ord Community, portions of which are in each IRWM planning region (see Figure 3: Jurisdictional Boundaries in the Ft. Ord Area). The Seaside Groundwater Basin and other portions of the former Fort Ord area can provide a

significant opportunity for stakeholders in both IRWM planning regions to collaborate and coordinate on projects of interest to both regions. Of particular note, and prompting the preparation of this joint subchapter, is a major water supply and recycled water distribution project—the Monterey Bay Regional Water Project—being proposed for funding under the IRWM Grant Program, with potential long-term benefits for both regions.

Within the area shared by the two IRWM regions, responsibility for and management of groundwater, potable water, wastewater, recycled water, stormwater, desalinated water, and resources dependent on all of these is divided among dozens of stakeholders. These range from private water distribution systems to federal agencies involved in the reuse of the former Fort Ord. However, most management responsibilities lie with the Cities of Seaside and Marina, California American Water Company, Marina Coast Water District, Monterey Peninsula Water Management District, County of Monterey, Monterey County Water Resources Agency, Monterey Regional Water Pollution Control Agency, Fort Ord Reuse Authority, and the Department of the Defense.

It is important for both regions to have an understanding of the physical and jurisdictional interactions between the planning regions and for each region to understand each other's objectives and priorities. The following outline of work is intended to provide both regions with the basic information necessary to understand proposals within the regional and interregional context and to prioritize future management actions.

Program Preferences: This task satisfies the following IRWM program preferences:

- Include regional projects or programs.
- Address Statewide priorities, including:
  - Drought preparedness
  - Use and reuse water more efficiently

**Subtask 10a: Background Description:** This task involves describing the relationship between the Greater Monterey County and Monterey Peninsula IRWM regions, previous cooperation agreements, and the potential for interregional coordination on joint projects.

Timeframe: Within the first two months of the project period.

**Subtask 10b: The Boundary Region:** This task includes describing current and anticipated water supply needs in the boundary region (the former Fort Ord area) as they relate to the two IRWM planning regions and how the various jurisdictions propose to meet those needs. The former Fort Ord area is almost equally divided geographically between the Greater Monterey County and Monterey Peninsula IRWM regions. The former Fort Ord community is under the jurisdiction of several agencies. Water supply is managed by both the Monterey County Water Resources Agency and the Monterey Peninsula Water Management District, is extracted from both the Seaside Groundwater Basin and the Salinas Valley Groundwater Basin, and is delivered by the Marina Coast Water District, California American Water Company, and several dozen other water distribution systems. The outcome of this task will be a subsection describing the water supply and existing and anticipated water supply needs, and the various jurisdictions in this boundary region.

Timeframe: Within the first two months of the project period.

**Subtask 10c: The Regional Water Project and Anticipated Impacts/Benefits for Each Planning Region:** The Monterey Bay Regional Water Project consists of several individual projects, including a major new desalination plant and a recycled water distribution system, with construction planned in multiple phases. The program would link water resources in the Salinas Valley with supplies to the Seaside Groundwater Basin within the Fort Ord area. There are ongoing discussions among agencies with

responsibilities over these supplies, which include desalinated water, brackish groundwater near the coast, and recycled water. This task involves writing a detailed description of the Regional Water Project, including current status (i.e., outcome of a decision by the CPUC, status of project agreements, proposed schedule, etc.) and a summary of the project components. The goals and objectives of each component will be described, and the water supply benefits anticipated from each project component will be defined for each planning region. This task will involve much coordination and facilitation, and could include some amount of technical assistance.

Timeframe: Within the first ten months of the project period.

**Subtask 10d: Interregional Prioritization Process:** The Greater Monterey County and the Monterey Peninsula regions have each developed processes for selecting and prioritizing projects to meet regional objectives. Each region uses a slightly different approach. However, in order to reduce the potential for good projects to be stranded between the two regional IRWM Plans, it has been agreed that a separate process should be developed to coordinate on how to include joint projects, in this case the Regional Water Project, within each Plan. The following tasks will be carried out in connection with the development of this joint subchapter and in parallel with the development and update of each IRWM Plan:

- Identify the issues, objectives, priorities, and projects for the Ord Community, which lies astride the common regional boundary. Identify project components that would most appropriately fit one region or the other. Each region will then prioritize the project components according to its own project ranking and prioritization process.
- Present these results to each RWMG for their consideration.

Timeframe: Within the first ten months of the project period.

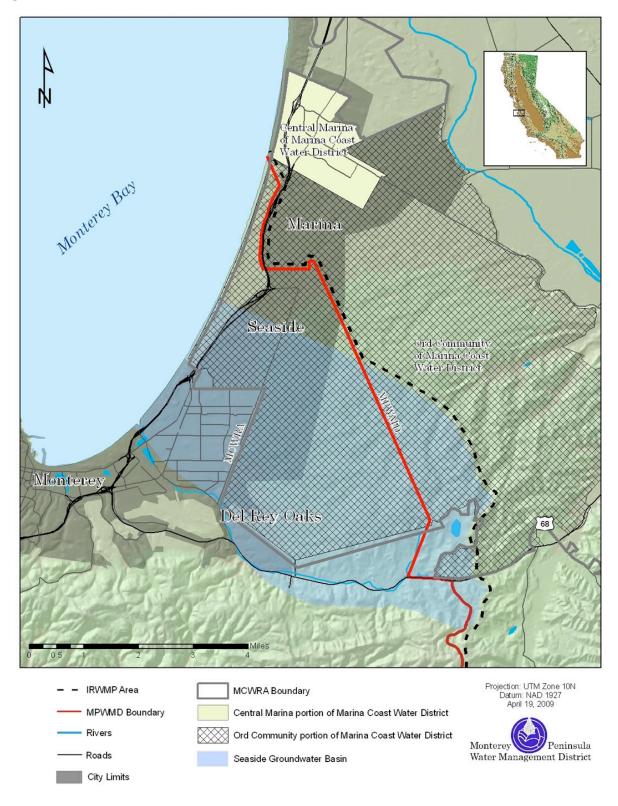


Figure 3: Jurisdictional Boundaries in the Ft. Ord Area

# ATT4\_PG1\_BUDGET\_1of1 Budget

Project Budget									
Budget Category	Funding Match \$	Requested Grant Funding \$	Total \$	% Funding Match					
Task 1. Direct Project Administration									
1a. Administration		20,000	20,000	0%					
1b. Reporting		17,000	17,000	0%					
Subtotal		37,000	37,000	0%					
Task 2. IRWM Plan Coordination and Development									
2a. General Coordination of the IRWM Plan Planning Process	57,000	52,100	109,100	52%					
2b. Plan Development	235,700	50,500	286,200	82%					
2b.9.b No Regret Regional Workshop	20,000	50,000	70,000	29%					
Subtotal	312,700	152,600	465,300	67%					
Task 3. Increase Outreach to DACs									
3a. Develop a DAC Map of the Greater Monterey County		15,000	15,000	0%					
Region and Outreach Plan	10 700	10.000		500/					
3b. Conduct Outreach Activities	43,700	40,000	83,700	52%					
3c. Integrate DAC Members and Tribes into the Greater Monterey County IRWM Planning Process		25,000	25,000	0%					
3d. Community Assistance for Project Preparation		35,000	35,000	0%					
3e. Technical Assistance for Project Preparation		45,000	45,000	0%					
Subtotal	43,700	160,000	203,700	21%					
Task 4. Stakeholder Outreach: Public Workshops		1 (0.000							
4a. Organize and Conduct Public Workshops	15,000	10,000	25,000	60%					
Subtotal	15,000	10,000	25,000	60%					
Task 5. Stakeholder Outreach: Website Development		00.000		0.01					
5a. Website Development		20,000	20,000	0%					
5b. Data Management Integration		25,000	25,000	0%					
5c. Database Development		30,000	30,000	0%					
5d. Maximizing Usability and Accessibility Subtotal		10,000 <b>85,000</b>	10,000 <b>85,000</b>	0% 0%					
		05,000	65,000	0%					
Task 6. Greenhouse Gas Emissions Analysis           6a. Develop GHG Emissions Analysis Tool		6,000	6,000	0%					
6b. Develop GHG Emissions Tracking System		4,000	4,000	0%					
Subtotal		10,000	10,000	0%					
Task 7. Data Management		10,000	10,000	U /6					
7a. Assessment of Monitoring Programs and Data Gaps		13,010	13,010	0%					
7b. Develop a Tracking and Reporting System	12,000	21,684	33,684	36%					
7c. Design a Comprehensive Monitoring Program	10,000	17,347	27,347	37%					
7d. Coordinate Data Management System with Website	10,000	21,684	21,684	0%					
7e. Provide Training and Data Management Services		6,939	6,939	0%					
Subtotal	22,000	80,664	102,664	21%					
Task 8. Water Project Reconciliation									
8a. Groundwork		15,000	15,000	0%					
8b. Identify and Invite Representative Stakeholders to	750	,	750	100%					
Participate in WPR Process									
8c. Conduct Meetings		30,000	30,000	0%					
8d. Information Gathering		100,000	100,000	0%					
8e. Evaluation		5,000	5,000	0%					
8f. Identify Funding Opportunities	750		750	100%					
Subtotal	1,500	150,000	151,500	1%					
Task 9. Economic Feasibility Analysis									
9a. Develop Socioeconomic Databases		15,000	15,000	0%					
9b. Assemble or Create Databases to Quantify Land and Resource Values		25,000	25,000	0%					
9c. Create Report and Spreadsheet Templates		10,000	10,000	0%					
Subtotal		50,000	50,000	0%					
Task 10. Interregional Coordination		2 500	2 500	00/					
10a. Background Description		2,500	2,500	0%					
10b. The Boundary Region		2,500	2,500	0%					

10c. The Regional Water Project and Anticipated		10,000	10,000	0%
Impacts/Benefits for Each Planning Region				
10d. Interregional prioritization process		5,000	5,000	0%
Subtotal		20,000	20,000	0%
GRAND TOTAL	394,900	755,264	1,150,164	34%

#### **BUDGET NARRATIVE**

Non-State matching funds represent **34%** of total project costs. Sources of the match are listed below in the narrative.

**Task 1.** As requested, we have limited the direct project administrative expenses to less than 5% of the total proposal costs.

**Task 2.** Requested funds include \$102,600 to hire a consultant part-time over 12 months to coordinate the overall IRWM planning process and to write the Plan (12 months x 90 hours/month x \$95/hour). Requested funds also include \$50,000 to conduct a multi-day workshop or series of workshops, co-held with federal, state, and local agencies and facilitated by the Monterey Bay National Marine Sanctuary, to focus the identification of "no regret" strategies for the region.

**Match:** Note that 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. The RWMG is an enthusiastic group of individuals who have contributed countless hours toward getting the new Greater Monterey County IRWM planning process off the ground and developing the Plan. Their extraordinary effort is reflected in the match for this task. Subtasks 2a and 2b include \$114,000 from private grant funds (Resources Legacy Fund) to support the IRWMP Coordinator to coordinate the overall IRWM planning process and begin writing the Plan, plus \$178,700 in non-State in-kind funds from RWMG members for time spent participating in RWMG meetings (not including travel) and in the various subcommittees (including Issues and Conflicts, Goals and Objectives, Project Ranking, five different Project Committees, Integration Committee, and the Planning Grant Committee). Subtask 2b also includes \$20,000 in private grant funds (Packard Foundation) that have already been committed to support a climate change "No Regret" regional workshop (or series of workshops).

**Task 3.** Requested funds for DAC outreach total \$160,000, as follows. Personnel includes \$58,240 to support the EJCW Northern California Program Director (8 hours/week for 2 years at \$70/hour), plus \$62,400 to support the Central Coast Organizer (20 hours/week for 2 years at \$30/hour). Other expenses include \$20,500 for travel (over two years, including \$0.50/mile for privately owned vehicles, plus reimbursement for car rentals if necessary, public transportation, parking and tolls, and food and lodging if necessary); \$1,500 for Spanish translation services; \$1,500 for copying and printing of outreach materials; \$4,200 for meeting expenses; \$1,500 for conference calls; and \$10,160 for technical assistance/consultant costs (for project preparation and well testing).

**Match:** The match for the DAC outreach 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 \$43,700 in non-State funds that supported two EJCW representatives and one San Jerardo Cooperative representative to attend RWMG meetings, participate on a special DAC Subcommittee, and to conduct outreach efforts (since March 2009).

**Task 4.** We are requesting \$10,000 to conduct two public workshops (at an estimated \$5,000 per workshop).

**Match:** The match totals \$15,000 from private grant funds (Resources Legacy Fund). This includes two public workshops (\$10,000) that have already been conducted as part of the IRWM planning effort, plus an additional \$5,000 that has been committed to hold one more public workshop.

**Task 5.** Requested funds for website development total \$85,000. This subtask will be performed by staff at the Central Coast Wetlands Group and a website consultant. It includes \$20,000 for website development; \$25,000 for data management integration; \$29,970 for database development; and \$10,000 for maximizing usability and accessibility.

Task 6. The Greenhouse Gas Emissions Analysis task has been estimated at \$10,000 for technical consultant fees.

**Task 7.** Requested funds for the Data Management Task total \$80,664 and include, by subtask: \$13,010 for assessment of monitoring programs and data gaps (150 hours at \$86.74/hour); \$21,684 to develop a tracking and reporting system (250 hours at \$86.74/hour); \$17,347 to design a comprehensive monitoring program (200 hours at \$86.74/hour); \$21,684 to coordinate the data management system with the website (250 hours at \$86.74/hour); and \$6,939 to provide training and data management services (80 hours at \$86.74/hour).

**Match:** Matching funds include \$12,000 in non-State funds from a federal earmark to USDA passed through to the Monterey Bay Sanctuary Foundation for developing a practice tracking system for local RCDs. In addition, \$10,000 from the National Oceanic and Atmospheric Administration (NOAA) has been committed for work on the data management system.

**Task 8.** Requested funds for the development and testing of the Water Project Reconciliation process are \$150,000. This includes \$15,000 for consulting fees to conduct the groundwork, which is based on quotations by several facilitation/mediation consulting companies; \$30,000 for the facilitation of meetings (assuming five meetings at \$6,000 per meeting, based on quotations, and including ongoing communications between meetings); \$100,000 for technical studies (we recognize that the cost for technical studies could potentially be much higher, but this amount would support initial studies, at a minimum); and \$5,000 for an evaluation report to be conducted by the facilitator.

**Match:** Matching funds include \$1,500 in non-State contributions on the part of RWMG members (assuming at a minimum 10 hours for each task, at an average rate of \$75/hour).

**Task 9.** Requested funds for the Economic Feasibility Analysis total \$50,000, based on a quotation for this work provided by an economic consultant.

**Task 10.** Requested funds for the Inter-regional Coordination task are \$20,000 for consulting fees that will include coordination, facilitation and technical review of water projects. *Note: This same task was also requested in the Monterey Peninsula, Carmel Bay and South Monterey Bay IRWM planning grant proposal to ensure that at least one region receives the funding.* 

# ATT5\_PG1\_SCHED1of1 Schedule

Project Period: Two Years from Signing of Grant Agreement

	Months											
	1 - 2	3 -	5 -	7 -	9 -	11 -	13 -	15 -	17 -	19 -	21 -	23 -
Work Plan Tasks		4	6	8	10	12	14	16	18	20	22	24
Task 1. Direct Project Adminis	stration					•						
1a. Administration												
1b. Reporting												
Task 2. IRWM Plan Coordinati	on and Dev	elopme	nt									
2a. General Coordination of												
the IRWM Plan Planning												
Process												
2b. Plan Development												
Task 3. Increase Outreach to I	DACs		•	•		•						
3a. Develop a DAC Map of the												
Greater Monterey County												
Region and Outreach Plan												
3b. Conduct Outreach												
Activities												
3c. Integrate DAC Members and Tribes into the Greater												
Monterey County IRWM												
Planning Process												
3d. Community Assistance for												
Project Preparation												
3e. Technical Assistance for												
Project Preparation												
Task 4. Stakeholder Outreach	: Public Wo	rkshops	3									
4a. Organize and Conduct												
Public Workshops Task 5. Stakeholder Outreach												
5a. Website Development	. website D	evelopi	nent						1			1
•												
5b. Data Management												
Integration 5c. Database Development	1				1				-			
•												
5d. Maximizing Usability and												
Accessibility Task 6. Greenhouse Gas Emis	aione Anel	voie										
6a. Develop GHG Emissions		y 515										1
Analysis Tool												
6b. Develop GHG Emissions												
Tracking System												
Task 7. Data Management	•		•	•								
7a. Assessment of Monitoring												
Programs and Data Gaps												
7b. Develop a Tracking and												
Reporting System							<u> </u>					<b> </b>
7c. Design a Comprehensive												
Monitoring Program 7d. Coordinate Data												
Management System with												
Website												
7e. Provide Training and Data												
Management Services												
Task 8. Water Project Reconci	iliation											
8a. Groundwork												
					1	1			1			1

Work Plan Tasks	Months											
	1 - 2	3 - 4	5 - 6	7 - 8	9 - 10	11 - 12	13 - 14	15 - 16	17 - 18	19 - 20	21 - 22	23 - 24
8b. Identify and Invite Representative Stakeholders to Participate in WPR Process												
8c. Conduct Meetings												
8d. Information Gathering												
8e. Evaluation												
8f. Identify Funding Opportunities												
Task 9. Economic Feasibility A	Analysis											
9a. Develop Socioeconomic Databases												
9b. Assemble or Create Databases to Quantify Land and Resource Values												
9c. Create Report and Spreadsheet Templates												
Task 10. Interregional Coordin	ation		-	-				-			-	
10a. Background Description												
10b. The Boundary Region												
10c. The Regional Water Project and Anticipated Impacts/Benefits for Each Planning Region												
10d. Interregional prioritization process												

# ATT3\_PG1\_WorkPlan2of3 Major Water-Related Issues and Conflicts in the Region

# Water Quality

- Drinking water quality impairments, particularly in small communities in North and South County (including both private and municipal wells)
- Groundwater quality impairments due to seawater intrusion
- Surface and groundwater quality impairments due to runoff (agricultural and urban sources, including municipal outflows/stormwater), including:
  - Nitrates and other nutrients from agriculture, livestock management, septic system failures, and urban sources
  - Sediment (due to land use practices, including construction, agricultural practices, and poorly constructed/maintained roads)
  - Pesticides
  - Metals (e.g., mercury, arsenic, chromium, copper, zinc)
  - Bacteria
  - Salts
  - Trash
  - Unknown impairments in surface waters and ocean from emerging pollutants such as pharmaceuticals, personal hygiene products, etc.
- Agricultural food safety issues impacting water quality
- Impacts to the marine environment
- Data gaps as outlined in the Strategic Plan for Central Coast Water Quality Monitoring Coordination and Data Synthesis (e.g., long-term data sets for trend analysis, improved dissemination of data results)
- Public recreation vs. water quality in reservoirs and rivers/creeks
- Challenges for small water system managers in complying with water quality regulations
- Need for increased public education about water quality issues
- Need for more enforcement of existing water quality regulations
- Lack of effective incentive structure (including economically feasible management practices) for protecting water quality from agricultural runoff

# Water Supply

- Water supply problems associated with water quality impairments, particularly:
  - Seawater intrusion
  - Nitrates
- Problems with water storage and conveyance infrastructure (inadequate, leaky, or otherwise defective water systems, particularly in regard to small water systems)
- Overconsumption/overdraft
  - Irrigation
  - Municipal supplies (including landscaping)
- Water supply unreliable in certain areas, particularly in small communities
- Need/opportunities for increased water conservation (including gray water re-use, rainwater catchment)
- Environmental water needs (fisheries, wildlife)
- Drought management
- Need for increased public education about water supply issues

# Watershed Management and Flood Management

- Data gaps (need for overall watershed resource assessments)
- Need for monitoring programs to assess effectiveness of projects and/or policies

- Regulatory and intergovernmental issues:
  - Interagency coordination
  - Conflicting mandates and regulations
  - Problems with regulatory compliance
  - Inconsistent enforcement of regulations
- Stormwater management/municipal drainage
- Impacts of wildfires (including water supply and water quality, debris flows)
- Need to protect and restore functioning watersheds
- Conflicts regarding flood control projects (particularly in regard to Salinas River Channel maintenance programs)
- Need to better educate rural landowners about land management/development practices that affect water resources)

## **Environmental Resources**

- Hydrologic modifications of wetlands, streams, estuaries and lagoons impact the preservation and quality of habitat by affecting circulation (water quality), habitat structure (geomorphology), and the exchange of energy and nutrients
- Food safety issues impacting wildlife and habitat protection
- Steelhead, specifically:
- Sustaining flows
- Fish passage
- Habitat (including problems caused by erosion and invasive species, e.g., sticky eupatorium weed)
- Other special status species
  - Protection
  - Habitat restoration
  - Data gaps (while noting stakeholder concern for potential "regulatory creep" with collection of new data), including especially:
    - Surface water quality
    - Sources of erosion (especially in Big Sur)
    - Environmental water needs
  - Invasive species (i.e., Arundo, Cape ivy, zebra mussels)
- Upland riparian habitat

## **Climate Change**

- Anticipated changes in rain patterns and intensity adding to the uncertainty of water supply and to creek instability
- Potential impacts from sea level rise and storm surges on coastal aquatic resources and water infrastructure
- Exacerbation in saltwater intrusion in groundwater basin from sea level rise
- Anticipated increase in number and severity of wildfire events, with subsequent erosion and water quality problems
- Potential increase in flooding due to climate change

## **Disadvantaged Communities**

- Water quality and water supply reliability problems in certain small communities
- Inadequate wastewater treatment in some disadvantaged communities
- Need for increased public education in disadvantaged communities
- Flood impacts from small and large watersheds

## Miscellaneous

• Need for increased academic training and job recruitment in local water resource management sectors

# ATT3\_PG1\_WorkPlan3of3

# Greater Monterey County Region Goals and Objectives

In the IRWM Plan process, development of objectives is a key step, as objectives provide a basis for decision-making, guide work efforts, and can be used to evaluate project benefits. As a result, the Regional Water Management Group developed a series of guiding principles and goals, which ultimately led to the creation of objectives. The planning objectives are targeted outcomes that benefit the region. When implementing regional projects, project partners will strive to meet as many objectives as possible while also recognizing that some objectives may not be fully achieved. During the development of the guiding principles, goals, and objectives, the Regional Water Management Group considered the issues and concerns identified during this process.

## **GUIDING PRINCIPLES**

- Continue to provide localized solutions to regional water supply issues
- Do not burden anyone unfairly or unnecessarily
- Need to measure results of projects through monitoring
- Encourage projects with multiple benefits
- Support collaboration of agencies, organizations, stakeholders, and willing landowners on the development of projects that provide water resource benefits
- Minimize negative impacts to the environment and the local economy from water resource management projects
- Recognize, respect, and consider water rights and those who hold them
- Projects should be science based

# **GOALS AND OBJECTIVES**

## WATER SUPPLY

## Goals:

- Improve water supply reliability.
- Improve the long-term hydrologic balance between recharge and withdrawal.

## **Objectives:**

- Protect and augment groundwater and surface water supplies for designated beneficial uses.
- Increase groundwater recharge and protect groundwater recharge areas.
- Provide sufficient water supply to meet all identified water needs through the year 2030.
- Optimize the use of groundwater storage with infrastructure enhancements and improved operational techniques.
- Address water storage and conveyance infrastructure needs.
- 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.

• Establish a plan to provide emergency drinking water to communities in the region in the event of a disaster.

# WATER QUALITY

# Goal:

• Protect and improve surface, groundwater, estuarine, and coastal water quality for all designated beneficial uses.

## **Objectives:**

- Meet or exceed all applicable water quality regulatory standards (for drinking water, surface and groundwater quality).
- Prevent seawater intrusion.
- 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.
- Support research and pilot projects for the co-management of food safety and water quality protection.
- Improve septic systems, sewer system infrastructure, wastewater treatment systems, and manure management programs to prevent water quality contamination.
- Support research and other efforts on salinity management.
- Support monitoring to better understand major sources of erosion, and implement a comprehensive erosion control program.
- 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.
- Promote regional monitoring and analysis to better understand water quality conditions.
- Support research of emerging technologies (enzymes, etc.) to develop effective water pollution prevention and mitigation measures.
- Promote public education about water quality issues and needs.
- Utilize emerging technologies to better track sources of pollution (i.e., PCR, GIS, etc.).

# FLOOD PROTECTION AND FLOODPLAIN MANAGEMENT

## Goal:

• Develop, fund, and implement integrated watershed approaches to flood management through collaborative and community supported processes.

# **Objectives:**

- Protect infrastructure and property from flood damage.
- Improve flood management infrastructure and operational techniques/strategies.
- Implement flood management projects that provide multiple benefits such as public safety, habitat protection, recreation, agriculture, and economic development.
- Protect, restore, and enhance the natural ecological and hydrological functions of rivers, creeks, streams, and their floodplains.
- Support research and monitoring efforts to understand the effects of flooding on surface and coastal waters particularly following wildfire events.
- Support research and monitoring efforts to understand the effects of flooding on transport and persistence of pathogens in food crop production areas.
- Support management of flood waters so that they do not contaminate fresh produce in the field.
- Promote public education about local flood management issues and needs.

# **ENVIRONMENT**

## Goal:

• Protect, enhance, and restore the region's ecological resources while respecting the rights of private property owners.

## **Objectives:**

- Support science-based projects to protect, improve, and restore the region's ecological resources.
- Develop and implement projects that protect, enhance, and/or restore the ecologic functions of rivers, streams, wetlands, estuaries and coastal lagoons, 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 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.
- Reduce the effects of 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.
- Support the development of cost-effective strategies to reduce adverse impacts on ecological resources.

# **REGIONAL COMMUNICATION AND COOPERATION**

## Goal:

• Promote regional communication, cooperation, and education regarding water resource management.

## **Objectives:**

- Facilitate dialogue and reduce inconsistencies in water management strategies/regulations between local, regional, state, and federal entities.
- Promote dialogue between federal and state regulators and small water system managers to facilitate water quality regulation compliance.
- Foster collaboration between regional entities to minimize and resolve potential conflicts and to obtain support for responsible water supply solutions and improved water quality.
- Build relationships with state and federal regulatory agencies and other water agencies to facilitate the permitting, planning, and implementation of water-related projects.
- Increase stakeholder input and public education about the need, complexity, and cost of strategies, programs, plans, and projects to improve water supply, water quality, flood management, coastal conservation, and environmental protection.

# DISADVANTAGED COMMUNITIES

## Goal:

• Ensure the provision of high-quality, potable, affordable water and healthy conditions for disadvantaged communities.

## **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.

# **CLIMATE CHANGE**

## Goal:

• Adapt the region's water management approach to deal with impacts of climate change using science-based approaches, and minimize the regional causal effects.

#### **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 producing energy use.
- Seek long-term solutions to maintain and protect existing pristine natural resources.
- Support research 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.