

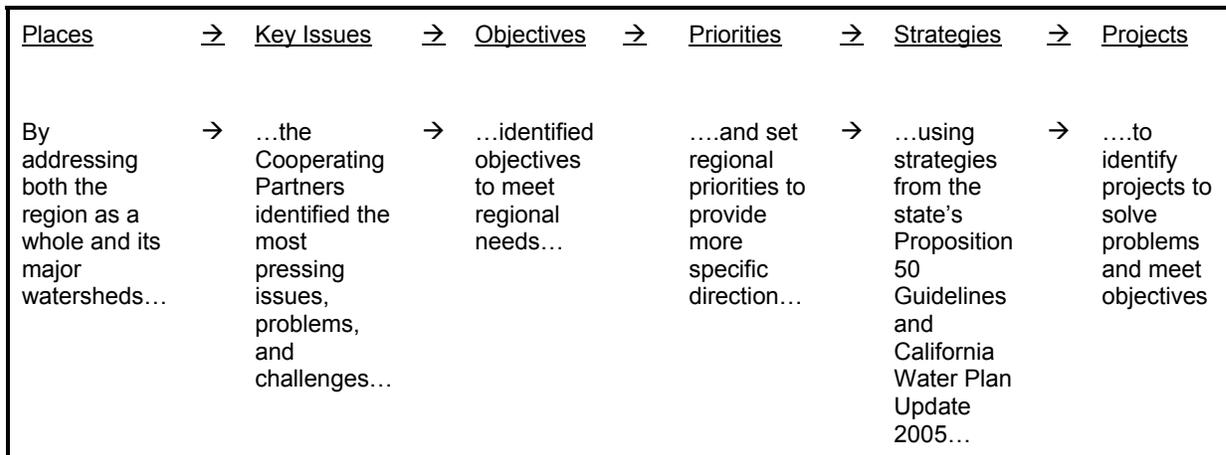
## 8 Strategic Approach for Plan Implementation

This section describes how the IRWMP is to be utilized, outlining the strategic approach that is used to link regionwide and watershed-specific issues with the need for specific projects. The methods used to identify and prioritize projects are also described, along with detailed information regarding those projects that are currently thought to be the highest priority.

For the purpose of seeking integrated regional water management funding from the state, the Cooperating Partners determined that Proposition 50 grant requests should focus on two overarching needs: (1) more efficient water use in the northern and central portions of the county through improved water and wastewater treatment to meet standards; and to allow effluent reuse and improved quality of surface discharges and returns to groundwater; and (2) increased reliability and efficiency through conjunctive use and system flexibility in the southern portion of the county.

### 8.1 Strategic Approach

A straightforward, linear path is followed to relate place-specific issues to regional objectives, priorities, and strategies in order to identify projects needed to resolve these issues. The following schematic presents this strategic approach.



The logic sequence shown above was developed to ensure that specific projects that met countywide needs were included in the IRWMP. In this way, the list of substantial issues that challenge agencies and special districts in one or more parts of the region was narrowed to specific projects to address key problems. Projects have not yet been identified to address all of the countywide problems, and as discussed in Section 10, the IRWMP will be used as a mechanism to develop solutions to existing problems, as well as to identify new issues and methods for their resolution.

The linkages between regionwide issues, objectives, priorities, strategies, and the Tier I projects are shown in Table 8-1. Some regionwide issues, such as addressing the developing TMDLs, the need for more conservation, and the need for continued integrated regional water management planning, will require cooperative efforts by regionwide entities. Other regionwide issues will be addressed by individual agencies developing projects that collectively will work together to resolve issues that are important to the county as a whole. The linkages between watershed-specific issues, objectives, priorities, strategies, and Tier I projects are shown in Table 8-2. In some cases (such as San Antonio Creek and Santa Ynez River watersheds), projects have not yet been developed to address specific local concerns, but the IRWMP may be used as the mechanism to do so.

## 8.2 Project Solicitation and Prioritization

Projects required to address countywide issues were solicited from the Cooperating Partners, as well as other interested stakeholders within Santa Barbara County through the outreach efforts outlined in Section 6. All projects received were evaluated and prioritized according to the following criteria:

1. Readiness to proceed
  - a. California Environmental Quality Act (CEQA) process has been initiated or completed
  - b. Costs have been adequately estimated
  - c. Schedule, including project timeframe and milestones, has been prepared
2. One or more regional objectives are addressed
3. One or more water management strategies are utilized
4. One or more regional priorities are addressed
5. One or more statewide priorities are addressed
6. The project is likely consistent with applicable general plan
7. The project will not cause long-term significant adverse impacts, including long-term adverse impacts to agriculture
8. The project serves a disadvantaged community (DAC)

Each criterion was assigned one point, including readiness to proceed; a single point was awarded in a category if any one of the three subcriteria were met. The highest scoring projects, with scores of 7 or above, were considered to be the highest priority projects for the near-term (Tier I projects) and are shown in Table 8-3 and Figure 8-1; the corresponding project descriptions are shown in Appendix C-1. Further prioritization of these projects will be conducted by the Cooperating Partners as they consider which projects are appropriate candidates for grant funding.

Descriptions of the projects with scores below 7 (Tier II projects) are included in Appendix C-2, and tables showing the consistency of all projects with the regional objectives, regional priorities, water management strategies, and statewide priorities are included in Appendix D-6.

**TABLE 8-1**  
Linkages between Regionwide Issues and Projects

Watershed	Key Issues	Objectives	Regional Priorities <sup>a</sup>	Strategies <sup>b</sup>	Project Examples <sup>c</sup>
All	<b>Emergency Response:</b> Inadequate backup supplies for severe emergencies (earthquake, large wildfire, extreme drought), with potential adverse health and safety impacts	Water supply	Ensure the adequacy of water supplies during drought and emergencies	<i>Water supply reliability</i>	Interconnect: Goleta and City of Santa Barbara  Modifications to the South Coast Conduit  Other projects still to be developed
All	<b>Improve Regionwide Water Management System:</b> Challenges inherent in managing a complex, integrated, regional water supply system; increased water supply reliability needed	Water supply  Groundwater management  Water quality	Expand voluntary water conservation programs  Encourage expanded cooperation in conjunctive use	<i>Water conservation</i>  <i>Water transfers</i>  <i>Conjunctive use</i>	Water efficiency rebates and incentives  Goleta Water District and Carpinteria Valley Water District injection well projects to improve conjunctive use
All	<b>Water Quality Standards:</b> Comply with state and federal requirements for impaired water bodies, while also respecting property rights	Water quality	Improve surface and ocean water quality	<i>Water quality protection and improvement</i>	Wastewater treatment plant upgrades for City of Guadalupe, City of Santa Maria, Laguna County Sanitation District and Vandenberg Village Community Services District.  Watershed working groups for South Coast beaches
All	<b>Implement IRWMP:</b> Current Integrated Regional Water Management commitment is only short-term	All	Continue interagency coordination	<i>All strategies in state's IRWMP Guidelines</i>	Develop a Memorandum of Understanding for IRWMP governance

**Notes:**

<sup>a</sup>The text is verbatim from language approved as regional priorities by the Cooperating Partners, as presented in Section 7.

<sup>b</sup>The italicized words are verbatim from the state's Proposition 50 Guidelines; many strategies are already being implemented, but in some cases specific projects are needed to enhance current efforts.

<sup>c</sup>The projects listed in the "Projects" column are examples of those that scored highest in the Cooperating Partners' project evaluation process. They are not necessarily the projects that would be included in an application for a project implementation grant; specific criteria for project selection will be developed for the grant application. More information on these projects can be found in appendices to this IRWMP.

DAC: Disadvantaged community

TABLE 8-2  
Linkage between Watershed-specific Issues and Projects

Watershed	Key Issues	Objectives	Regional Priorities <sup>a</sup>	Strategies <sup>b</sup>	Project Examples <sup>c</sup>
<b>Santa Maria River and Cuyama River</b>	<b>Public Health:</b> Risk of illness, especially in DACs, from inadequate drinking water and pollution from wastewater; impaired water bodies; elevated levels of nitrates in groundwater in some areas	Water supply Water quality Infrastructure efficiency and reliability	Ensure the adequacy of water and wastewater treatment facilities, especially in DACs	<i>Water and wastewater treatment through improved drinking water treatment and distribution systems; upgrades to wastewater treatment systems</i>	Casmalia water system improvements Guadalupe wastewater treatment plant improvements Cuyama wastewater treatment plant effluent disposal Cuyama water tower repair Expansion of Santa Maria wastewater treatment plant
	<b>Public Safety:</b> Potential harm to people and property from flooding	Emergency preparedness Flood control	Protect public safety by reducing the potential for flooding	<i>Flood management through levee reconstruction</i>	Santa Maria River levee reinforcement
	<b>Groundwater Overdraft:</b> Overdraft in the Cuyama Groundwater Basin, causing increased pumping lift for agricultural users	Water supply	Develop programs to increase groundwater recharge or decrease groundwater use	Groundwater management	To be developed
<b>San Antonio Creek</b>	<b>Public Health and Environmental Protection:</b> Sedimentation of creeks	Water quality	Improve surface water quality	<i>Water quality protection and improvement</i>	Specific projects developed through implementation of Consolidated Resource Management Plan for the area
	<b>Groundwater Overdraft:</b> Overdraft in the San Antonio Groundwater Basin, causing increased pumping lift for agricultural users	Water supply	Develop programs to increase groundwater recharge or decrease groundwater use	Groundwater management	To be developed
<b>Jalama Creek</b>	<b>Public Health and Environmental Protection:</b> Saturation of the leach fields at Jalama Beach, potentially affecting surface water quality in Jalama Creek and the ocean	Water quality	Improve surface and ocean water quality	<i>Water and wastewater treatment, and Water quality protection and improvement</i>	Replace undersized septic tanks at county park

TABLE 8-2  
Linkage between Watershed-specific Issues and Projects

Watershed	Key Issues	Objectives	Regional Priorities <sup>a</sup>	Strategies <sup>b</sup>	Project Examples <sup>c</sup>
<b>Santa Ynez River</b>	<p><b>Integrated Water Management:</b> A State Water Resources Control Board (SWRCB) decision is needed on the Cachuma Project water rights permits that supports those elements of the Cachuma Project Settlement Agreement under its jurisdiction to facilitate integration of water supply, downstream water rights, and public trust resources</p> <p><b>Water Supply Reliability:</b> Reliance on a single water source (Lompoc Uplands Groundwater Basin) in the face of increasing growth; lack of diversity in viable water sources in City of Solvang; and water supply source management and interconnection between the Santa Ynez River Water Conservation District, Improvement District No. 1 and Solvang</p>	<p>Water supply</p> <p>Ecosystem restoration</p> <p>Groundwater management</p>	<p>Protect, restore and enhance ecological processes in aquatic areas</p> <p>Increase water supply reliability</p> <p>Protect public safety by reducing the potential for flooding</p> <p>Increase water supply reliability</p> <p>Provide adequate water to meet projected growth</p>	<p><i>Environmental and habitat protection and improvement</i></p> <p><i>Water supply reliability</i></p> <p><i>Storm flow management</i></p> <p><i>Surface water management</i></p> <p><i>Groundwater management</i></p> <p><i>Water quality improvement</i></p> <p><i>Conjunctive use</i></p> <p><i>Water supply reliability</i></p> <p><i>Water quality improvement</i></p> <p><i>Conjunctive use</i></p>	<p>No infrastructure needed; an SWRCB decision supporting the flows for fisheries and downstream water rights as provided in the Cachuma Project Biological Opinion and Settlement Agreement would facilitate integration of water supply, downstream water rights, and public trust resources</p> <p>Specific projects still in planning stage</p>
	<p><b>Public Health and Environmental Protection:</b> Compliance with emerging wastewater discharge standards; water quality problems in shallow groundwater in Santa Ynez Uplands; control of noxious weeds along the Santa Ynez River</p> <p><b>Groundwater Overdraft:</b> Need for further study of the hydrology of the Lompoc groundwater basins, especially as it relates to potential overdraft in the Santa Rita subbasin</p>	<p>Groundwater management</p> <p>Ecosystem restoration</p> <p>Water quality</p> <p>Infrastructure efficiency and reliability</p> <p>Groundwater management</p>	<p>Strategically restore and replace wastewater infrastructure</p> <p>Protect, restore and enhance ecological processes</p> <p>Develop programs to increase groundwater recharge or decrease groundwater use</p>	<p><i>Water and wastewater treatment;</i></p> <p><i>Water quality protection and improvement</i></p> <p><i>Conjunctive use</i></p> <p><i>Environmental and habitat protection and improvement</i></p> <p>To be determined</p>	<p>Lompoc Regional Wastewater Reclamation Plant</p> <p>Santa Ynez Uplands projects in planning stage</p> <p>Arundo eradication</p> <p>To be developed; conduct a study of the hydrology of the Lompoc Groundwater Basin, especially for the Santa Rita subbasin</p>

TABLE 8-2  
Linkage between Watershed-specific Issues and Projects

Watershed	Key Issues	Objectives	Regional Priorities <sup>a</sup>	Strategies <sup>b</sup>	Project Examples <sup>c</sup>
<b>South Coast (multiple small creek watersheds)</b>	<b>Water Supply Reliability:</b> Difficulty meeting peak demands; aging infrastructure constrains system operability; insufficient integration of adjacent systems	Water supply Infrastructure efficiency and reliability	Increase water supply reliability	Water supply reliability through expanding capacity of distribution system	South Coast Conduit 2 <sup>nd</sup> pipeline Carpinteria Valley Water District Central Zone transmission main Goleta plant sedimentation upgrades Blended irrigation at La Cumbre Mutual Water Company
	<b>Public Safety:</b> Potential harm to people and property from creek flooding	Emergency preparedness Flood flow management	Protect public safety by reducing the potential for flooding	Flood management by improving flow channel capacity for large storms	Storm water management and flood control for Mission, Las Positas, San Jose, Las Vegas, and San Pedro creeks
	<b>Public Health and Environmental Protection:</b> Pollution of creeks and coastal waters from nonpoint sources and point source runoff during rain events	Groundwater management Ecosystem restoration Water quality Infrastructure efficiency and reliability	Improve surface and ocean water quality Develop programs and policies to increase groundwater recharge	<i>Water and wastewater treatment through sewers in certain septic areas; and sewer repairs</i> <i>Water recycling</i> <i>Water quality protection and improvement</i> <i>Storm water capture and management</i>	Sewer line extension, replacements and relocation in Goleta, Carpinteria, and City of Santa Barbara El Estero Swale restoration Goleta water reclamation facility refurbishment Goleta backwash tanks replacement

Notes:

<sup>a</sup>The text is verbatim from language approved as Regional Priorities by the Cooperating Partners, as presented in Section 7.

<sup>b</sup>The italicized words are verbatim from the state's Proposition 50 Guidelines.

<sup>c</sup>The projects listed in the "Projects" column are examples of those which scored highest in the Cooperating Partners' project evaluation process; they are not necessarily those which would be included in an application for a project implementation grant; specific criteria for project selection will be developed for the grant application. More information on these projects can be found in appendices to this IRWMP.

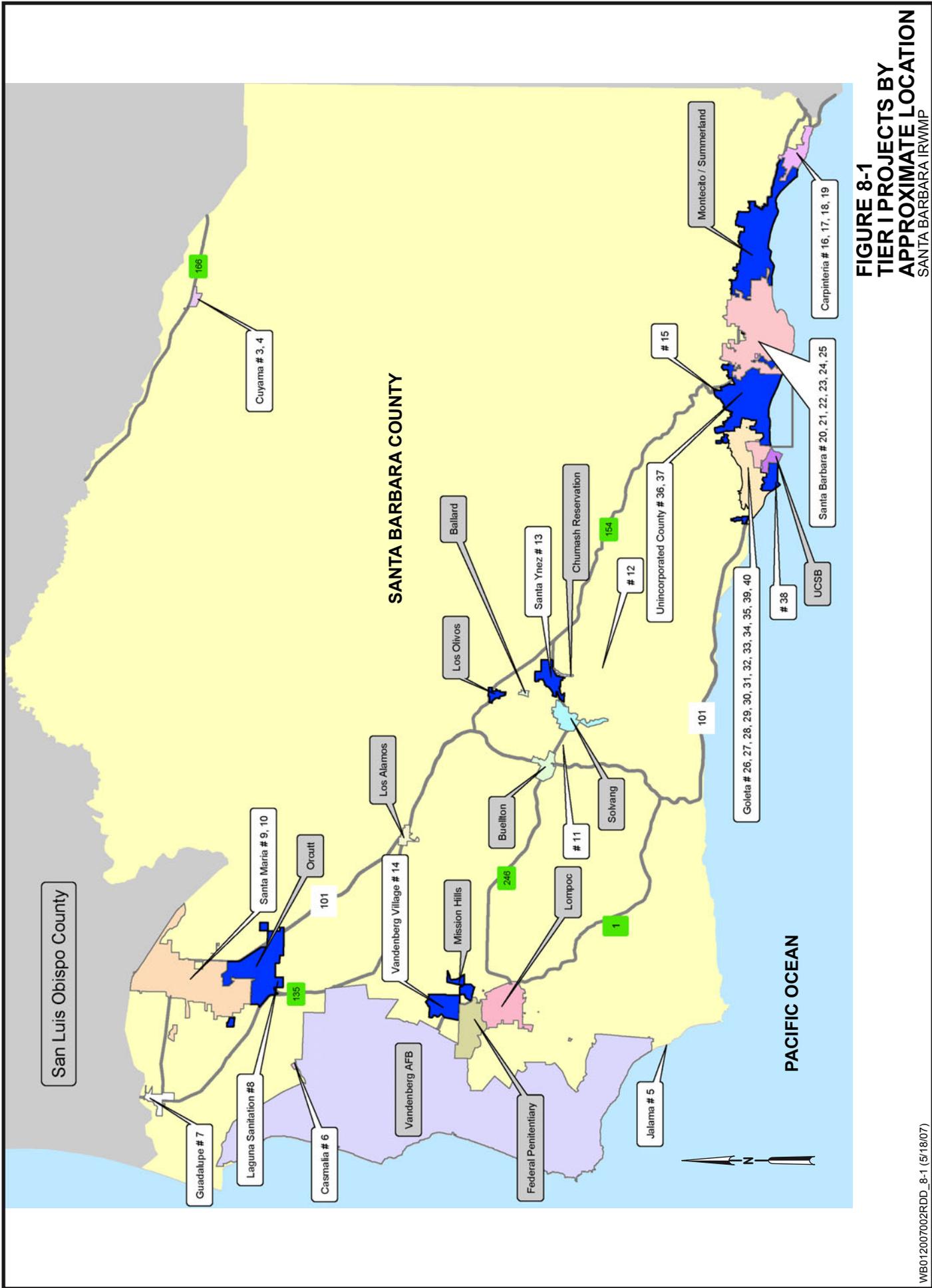
DAC: disadvantaged community

TABLE 8-3  
Santa Barbara County IRWMP Projects Scoring 7 or Above (Sorted by Watershed)

No.	Watershed	Sponsor	Project
1	All	Southern SLO and Santa Barbara Counties Ag Watershed Coalition	Santa Maria River/Oso Flaco, Santa Ynez River, and South Coast Beaches TMDLs Watershed Working Groups
2	All	Water Purveyors and the County Water Agency	Regional Water Conservation Rebates, Incentives, and Promotion
3	Cuyama	Cuyama Community Services District	Wastewater Treatment Plant Effluent Disposal
4	Cuyama	Cuyama Community Services District	Water Tower Repair
5	Jalama	Santa Barbara County Parks	Jalama Beach County Park Septic System Improvements
6	Santa Maria	Casmalia Community Services District	Casmalia Water System Improvements
7	Santa Maria	City of Guadalupe	Guadalupe WWTP Reuse Improvements
8	Santa Maria	City of Santa Maria	Wastewater Treatment Plant Expansion
9	Santa Maria	Laguna County Sanitation District	Wastewater Reclamation Plant Upgrade
10	Santa Maria	Santa Barbara County Flood Control District	Santa Maria River Levee Reinforcement
11	Santa Ynez	Agricultural Commissioner's Office <i>Doing Business As</i> Santa Barbara County Weed Management Area	Santa Ynez River Arundo Eradication
12	Santa Ynez	Cachuma Conservation Release Board/Santa Ynez River Water Conservation District Improvement District No.1	Quiota Creek, Fish Passage Enhancements
13	Santa Ynez	Santa Ynez River Water Conservation District Improvement District No. 1	Gallery Well Filtration Facility
14	Santa Ynez	Vandenberg Village Community Services District	Lompoc Regional Wastewater Reclamation Plant
15	South Coast	Cachuma Operation and Maintenance Board	South Coast Conduit 2nd Pipeline - Upper Reach
16	South Coast	Carpinteria Sanitary District	Bluffs Sewer Relocation
17	South Coast	Carpinteria Sanitary District	Carpinteria Creek Overhead Crossing Replacement
18	South Coast	Carpinteria Valley Water District	Central Zone Transmission Main/ASR Demonstration Well
19	South Coast	Carpinteria Valley Water District	Recycled Water Feasibility Study
20	South Coast	City of Santa Barbara	Braemer Area Sewer Extension
21	South Coast	City of Santa Barbara	El Estero Swale Restoration
22	South Coast	City of Santa Barbara	Elings Park Solid Waste Assessment Test/Corrective Action Plan

TABLE 8-3  
 Santa Barbara County IRWMP Projects Scoring 7 or Above (Sorted by Watershed)

No.	Watershed	Sponsor	Project
23	South Coast	City of Santa Barbara	Las Positas Storm Water Management
24	South Coast	City of Santa Barbara and Santa Barbara County Flood Control District	Lower Mission Creek Flood Control and Rehabilitation
25	South Coast	City of Santa Barbara	Old Mission Creek Storm Water Management and Restoration
26	South Coast	Goleta Sanitary District	Fairview Avenue Sewer Line Installation
27	South Coast	Goleta Sanitary District	Mattorral Way Creek Arial Crossing Sewer Replacement
28	South Coast	Goleta Sanitary District	Modoc Road New Sewer Line Installation
29	South Coast	Goleta Sanitary District	Water Reclamation Facility 2007 Refurbishment
30	South Coast	Goleta Water District	ASR Well Rehabilitation and Construction
31	South Coast	Goleta Water District	Backwash Tank Replacement at 4 Wells
32	South Coast	Goleta Water District	Cathedral Oaks Pipeline Replacement
33	South Coast	Goleta Water District	Corona Del Mar Water Treatment Plant - Sedimentation Basin Effluent Upgrades
34	South Coast	Goleta Water District	Downstream Reservoir Meters
35	South Coast	Goleta Water District	Interconnect with City of Santa Barbara
36	South Coast	La Cumbre Mutual Water Company	Blended Irrigation
37	South Coast	La Cumbre Mutual Water Company	Iron and Manganese Removal Plant
38	South Coast	Santa Barbara County - Project Clean Water	Diversion of Non-storm Flows from Storm Drain System to Sanitary System
39	South Coast	Santa Barbara County Flood Control District	Las Vegas and San Pedro Creeks, Goleta
40	South Coast	Santa Barbara County Flood Control District	San Jose Creek Improvements (Goleta)





Figures 8-2 and 8-3 illustrate the process that was used to identify projects and ensure that they were integrated, using a mix of plan objectives and water management strategies. The projects also were reviewed to ensure that they addressed the needs of individual geographic areas and the region as a whole; and would result in an array of integrated, multiple benefits. Additionally, projects were evaluated in terms of their potential to assist in meeting the following statewide priorities established by the California Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB):

- Reduce conflict between water users or resolve water rights disputes, including interregional water rights issues
- Implementation of total maximum daily loads (TMDLs) that are established or under development
- Implementation of Regional Water Quality Control Board (RWQCB) Watershed Management Initiative Chapters, plans, and policies
- Implementation of the SWRCB's Nonpoint Source Pollution Plan
- Assist in meeting Delta Water Quality Objectives
- Implementation of recommendations of the Floodplain Management Task Force
- Implementation of recommendations of the Desalination Task Force
- Implementation of recommendations of the Recycling Task Force
- Implementation of recommendations of the State Species Recovery Plan
- Address environmental justice concerns
- Assist in achieving one or more goals of the CALFED Bay-Delta Program.

As shown in Table 8-4 and Appendix D-3, both the highest ranking projects and the entire suite of projects use a broad range of water management strategies to meet plan objectives, regional priorities, and statewide priorities. This plan is a living document, intended to provide a planning framework over the next 20 years, and as the longer-term projects included in Appendix C-2 become better defined, or as regional priorities change, they may be reclassified as higher priority projects through the adaptive management process outlined in Section 10. Additionally, the IRWMP will serve as a mechanism for identifying new projects designed in accordance with the regional objectives, priorities, and management strategies using the logic sequence outlined above.

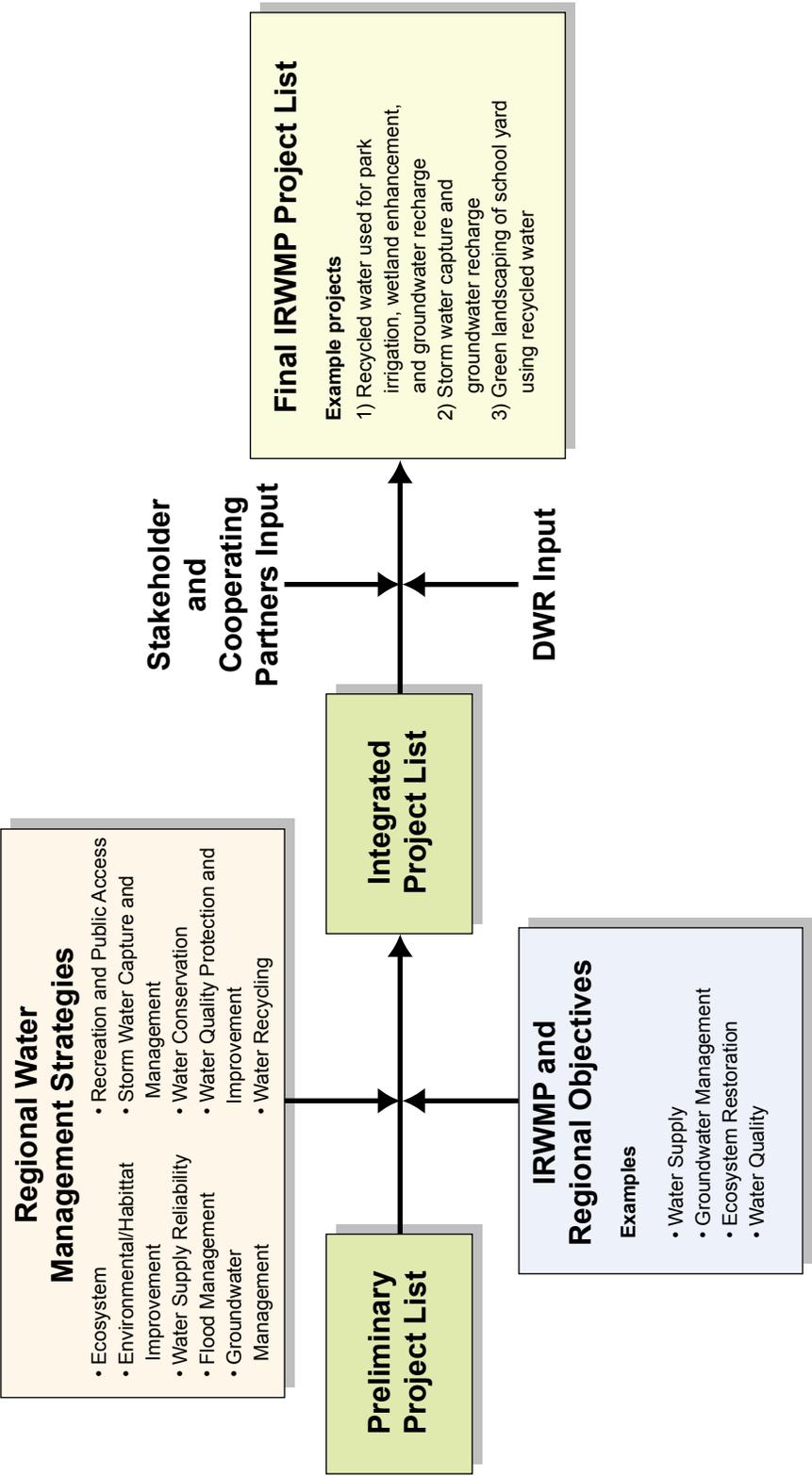
**TABLE 8-4**  
 Summary of Overall Evaluation Matrix

Criteria		Total Number of Projects That Met Criteria	Total Number of Top Tier Projects That Met Criteria
Readiness to Proceed	CEQA Process Initiated or Completed	39	27
	Costs Adequately Estimated	44	30
	Schedule Prepared	36	22
	Overall Readiness to Proceed	55	37
One or More Regional Objectives Are Addressed		97	40
One or More Water Management Strategies Are Utilized		97	40
One or More State Priorities Are Addressed		76	40
One or More Regional Priorities Are Addressed		95	40
Lack of Significant Long-term Adverse Impacts, Including Impacts to Agriculture		65	40
Consistency with General Plans		82	40
Disadvantaged Community		4	4

Watershed	Readiness	Objectives	Strategies	State Priorities	Regional Priorities	No Adverse Impact	Consistency w/Gen Plans	Disadv. Community	↑	Total Criteria Met
Project 1	●	●	●	●	●	●		●	↑	7
Project 4	●	●	●	●	●	●	●		↑	7
Project 2	●		●				●		↑	3
Project 3	●		●	●	●	●	●		↑	6
Project 5	●	●		●	●	●			↑	5

**FIGURE 8-2**  
**PROJECT EVALUATION PROCESS**  
 SANTA BARBARA IRWMP





**FIGURE 8-3**  
**PROJECT INTEGRATION**  
 SANTA BARBARA IRWMP



### 8.3 Descriptions of Current High Priority Projects

The projects described in detail on the following pages are currently considered to be the highest priority projects based on the evaluation process outlined above. Their locations are shown on Figure 8-1. These projects were identified by the Cooperating Partners based on their specific needs identified through technical studies, water quality monitoring, Capital Improvement Plans, Urban Water Management Plans, and other planning mechanisms; a number of projects also are required to meet regulatory standards. As such, they are considered technically feasible. Due to the number of projects included in the plan, costs for implementing each project have not been included at this time. Costs estimates for implementing specific projects will be provided as part of specific grant applications. Estimated start and end dates for each project are included in Table 8-5; the precise start dates will be dependent upon receipt of funding, with corresponding changes to the end dates.

**TABLE 8-5**

**Timeline for the Implementation of High Priority Projects**

No.	PROJECT NAME	2008	2009	2010	2011	2012	2013	2014	2015
1	Santa Maria River/Oso Flaco, Santa Ynez River, and South Coast Beaches TMDLs Watershed Working Groups	2008 through undetermined end date							
2	Regional Water Conservation Rebates, Incentives, and Promotion	In progress and continuing							
3	Cuyama Wastewater Treatment Plant Effluent Disposal Project	2008 through 2009							
4	Cuyama Water Tower Repair Project	2008 through 2009							
5	Jalama Beach County Park Septic System Improvements	2008 through 2009							
6	Casmalia Water System Improvements Project	2008 through 2009							
7	Guadalupe Wastewater Treatment Plant Reuse Improvements Project	2008 through 2010							
8	Santa Maria Wastewater Treatment Plant Expansion	2008 through 2010							
9	Laguna County Sanitation District Wastewater Reclamation Plant Upgrade	2008 through 2010							
10	Santa Maria River Levee Reinforcement	2008 through 2012							
11	Santa Ynez River Arundo Eradication Project	2008 through 2014							
12	Quiota Creek, Fish Passage Enhancements Project	2008 through 2009							
13	Gallery Well Filtration Facility	2008 through 2009							
14	Lompoc Regional Wastewater Reclamation Plant	2008 through 2010							
15	South Coast Conduit 2nd Pipeline - Upper Reach	2008 through 2009							
16	Bluffs Sewer Relocation Project	2008 through 2010							
17	Carpinteria Creek Overhead Crossing Replacement Project	2008 through 2009							
18	Central Zone Transmission Main/ASR Demonstration Well	2008 through 2011							
19	Recycled Water Feasibility Study	2008 through 2009							
20	Braemer Area Sewer Extension Project	2008 through 2009							
21	El Estero Swale Restoration Project	2008 through 2009 <sup>1</sup>							
22	Elings Park Solid Waste Assessment Test-Corrective Action Plan	2008 through 2009							
23	Las Positas Storm Water Management Project	2008 through 2011							
24	Lower Mission Creek Flood Control and Rehabilitation Project		2009 through 2014						
25	Old Mission Creek Storm Water Management and Restoration Project	2008 through 2009							
26	Fairview Avenue Sewer Line Installation Project				2011 through 2015				
27	Mattorral Way Creek Aerial Crossing Sewer Replacement Project	2008 through 2009							
28	Modoc Road New Sewer Line Installation Project				2011 through 2015				
29	Water Reclamation Facility 2007 Refurbishment Project	2008 through 2009							
30	ASR Well Rehabilitation and Construction Project		2009 through 2010						
31	Backwash Tank Replacement at 4 Wells Project	2008 through 2009							
32	Cathedral Oaks Pipeline Replacement Project			2010					
33	Corona Del Mar Water Treatment Plant – Sedimentation Basin Effluent Upgrades Project	2008 through 2009							
34	Downstream Reservoir Meters Project	2008 through 2009							
35	Interconnect with City of Santa Barbara Project	2008 through 2009							
36	Blended Irrigation Project	2008 through 2009							
37	Iron and Manganese Removal Plant Project	2008 through 2009							
38	Non-Storm Water Diversion, Isla Vista		2009 through 2010						
39	Las Vegas and San Pedro Creeks Flood Control Improvements	2008 through 2012							
40	San Jose Creek Flood Control Improvements	2008 through 2011							

**LEGEND**

In Progress and Continuing 

Timeline 

<sup>1</sup>The project can be implemented as soon as there is concurrence among various agencies regarding the resolution of issues associated with hazardous materials onsite.

***Project Number and Name***

No. 1 Santa Maria River/Oso Flaco, Santa Ynez River, and South Coast Beaches TMDLs Watershed Working Groups

***Project Sponsor***

Southern San Luis Obispo and Santa Barbara Counties Agricultural Watershed Coalition

***Watershed***

All

***Project Description***

This project will fund seed money to form watershed working groups for the lower Santa Maria River/Oso Flaco Waterbodies, Santa Ynez River and the South Coast Beaches for the express purpose of managing the TMDL process in these watersheds. Fecal coliform, nitrate, and ammonia TMDLs for Santa Maria River Oso Flaco are in progress. Also, the following TMDLs are being investigated: Santa Barbara County Beaches Bacteria, Santa Maria River Pesticides and Santa Ynez River Nutrients. All of the above named TMDLs are scheduled to occur in the next 3 to 8 years. All TMDLs will require a substantial investment of resources from a variety of agencies, special districts, irrigated agriculture, ranchers and the general public. TMDLs have the potential to become controversial. Generally, the more controversial and contentious, the more expensive the process. Watershed working groups have the potential to create a collaborative approach to solve a specific set of problems as well enable disparate interests to formally chart a strategic course.

***Need for the Project***

At present, there are no organized watershed working groups organized on these specific waterbodies. There are watershed working groups on subwatersheds such as the Oso Flaco, Gaviota, San Jose, Carpinteria Creek, and Rincon Creek Watershed Working Groups. Consequently, there are no overarching vehicles to approach the larger TMDL process in a strategic and cost effective manner. Additionally, without formal, watershed working groups, it will very difficult to pursue outside funding sources to pay for professional fees or special projects.

***Estimated Start and End Date***

2008 through 2015

***Potential Funding Sources***

Grant funding will be used to form initial watershed working groups. The working groups will then pursue specific funding to pay for watershed specific projects.

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

Aquatic life, wildlife, and birds will benefit from improved water quality as a result of the TMDL process. Drinking water supplies from nearby wells will be safeguarded by reducing surface water sources of contamination. Pathogen exposure of surfers and other people taking part in water recreation activities will be reduced along the South Coast of Santa Barbara County. Water quality will be improved at several state and county parks. Other projects may be an indirect result of the formation of watershed working groups.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Implement TMDLs

Implement RWQCB Watershed Management Initiative

Implement SWRCB's Nonpoint Source Pollution Plan

***Project Number and Name***

No. 2 Regional Water Conservation Rebates, Incentives, and Promotion

***Project Sponsor***

Water Purveyors and the County Water Agency

***Watershed***

All watersheds

***Project Description***

The program aims to generate water savings and achieve actual reduction in overall demand as well. Program elements include rebates for plumbing fixtures, irrigation devices, and new technology to promote conservation. The program rebates, incentives and promotions can apply in multiple sectors: residential, commercial, municipal, and industrial, depending on the specific rebate or incentive. Current demand is below 14,000 AFY, compared to demand of 16,300 AFY in 1988 when the current program began to be developed.

***Need for the Project***

Although water conservation programs have been in place and effective within Santa Barbara County, there remains considerable opportunity for new and expanded programs in all parts of the region, especially using rebates, incentives, and other promotions. The most promising sectors for such programs are in the commercial, industrial, and municipal sectors.

***Estimated Start and End Date***

In progress and continuing

***Potential Funding Sources***

Water rate revenue from participating purveyors with potential augmentation from grants, especially from Reclamation

***Percent of Matching Funding that Will Be Provided***

50 percent

***Regional and Local Benefits***

Conservation not only offsets the need for additional water supplies, but also reduces costs associated with ordering water deliveries or reactivating water supply projects, and reduces the amount of additional transfers required from other parts of the state. Conserved water also means more water available for other purposes, such as environmental needs.

***Statewide Priorities Addressed***

Help achieve CALFED Bay Delta program goals

***Project Number and Name***

No. 3 Wastewater Treatment Plant Effluent Disposal Project

***Project Sponsor***

Cuyama Community Services District

***Disadvantaged Community***

Yes

***Watershed***

Cuyama

***Project Description***

The project involves installation of two percolating ponds for effluent disposal.

***Need for the Project***

NPDES Permit requires that Cuyama Community Services District complies with Effluent Limitation No. D.1. by May 31, 2007. If the District continues to dispose of effluent by discharging into Salisbury Creek, the result will be mandatory penalties, and the permit will not be renewed.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

Grant funds, a waiver from matching funds is also being sought

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

Installation of appropriate effluent disposal mechanisms will guarantee protection of the environment downstream and ensure that the rate-paying customers, who are members of a DAC, are receiving service.

***Statewide Priorities Addressed***

Implement TMDLs

Implement SWRCB's Nonpoint Source Pollution Plan

Address environmental justice concerns

***Project Number and Name***

No. 4 Water Tower Repair Project

***Project Sponsor***

Cuyama Community Services District

***Disadvantaged Community***

Yes

***Watershed***

Cuyama

***Project Description***

The elevated water tower, which stands 100 feet tall, requires complete repair to the interior and additional repair to the exterior for its operation to continue. Cleaning and coating will be done, and new electric pump controls will be installed.

***Need for the Project***

The water tower is over 50 years old, and it has never been serviced. It provides the pressure for the water to the New Cuyama Townsite. If it is not repaired, it will reach the point where it will not function.

***Estimated Start and End Date***

2008; will be completed within one year

***Potential Funding Sources***

Grant funds, a waiver from matching funds is also being sought

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

The water tower is an essential element of the Cuyama water supply, and its repair will allow water service to continue to this DAC.

***Statewide Priorities Addressed***

Address environmental justice concerns

***Project Number and Name***

No. 5 Jalama Beach County Park Septic System Improvements

***Project Sponsor***

Santa Barbara County Parks Department

***Watershed***

Santa Ynez

***Project Description***

Replace undersized septic tanks at eight locations within Jalama Beach County Park

***Need for the Project***

Installation will increase wastewater retention time in tanks, thus reducing the amount of solids entering the leach field system, particularly during peak use season. Existing leach fields risk becoming saturated under current conditions, causing park restrooms to close to preclude leach field overuse and contamination from surfacing wastewater.

***Estimated Start and End Date***

2008; will be completed within one year

***Potential Funding Sources***

Proposition 50 Clean Beach Initiative Program

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

The project will continue to ensure that water quality in nearby Jalama Creek and the ocean is protected, and it will enhance recreational opportunities by keeping the park restrooms functional.

***Statewide Priorities Addressed***

Implement SWRCB's Nonpoint Source Pollution Plan

***Project Number and Name***

No. 6 Casmalia Water System Improvements Project

***Project Sponsor***

Casmalia Community Services District

***Disadvantaged Community***

Yes

***Watershed***

Santa Maria

***Project Description***

The town of Casmalia uses a well located approximately 4.5 miles north of the town off Black Road just north of Highway 1. The project involves the design and construction for replacement of water pipelines and tank facilities to replace deficient infrastructure, upgrading electrical building and facilities to comply with code requirements, and improvements to the existing well facility. The service connections will also be upgraded or replaced.

***Need for the Project***

Casmalia's water supply system is in serious need of upgrades in order to meet regulatory requirements and protect public health. Water samples collected in November 2006 indicated the presence of both total coliform and E. coli bacteria, and all residents were directed to boil their water before drinking it. The community of Casmalia was started as a company town with the water well and distribution system owned by the Casmite Corporation. The Casmite Corporation no longer operates these facilities, and therefore would like to transfer them to the Casmalia Community Services District, which to date only operates the service connections. In order to transfer the facilities, upgrades to comply with design and code requirements are necessary as well as a new distribution system located in legal rights-of-way. Once the complete system is updated and functional, the Casmalia Services District can take over full water service operation.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

Grant funds

***Percent of Matching Funding that Will Be Provided***

Casmalia is a DAC, and a waiver from the matching funds requirement is being sought.

***Regional and Local Benefits***

The project is essential to providing Casmalia, a DAC, with a safe, secure water supply that is managed in an efficient manner. This project will also provide a public health improvement with respect to management and regulation.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Address environmental justice concerns.

***Project Number and Name***

No. 7 Guadalupe Wastewater Treatment Plant Reuse Improvements Project

***Project Sponsor***

City of Guadalupe

***Disadvantaged Community***

Yes

***Watershed***

Santa Maria

***Project Description***

The project will consist of (1) treatment improvements, (2) new effluent transfer capabilities, and (3) potential improvements at a 20-acre wetland site located within city limits. Treatment improvements will consist of alterations to the lagoon treatment process to limit effluent total suspended solids caused by algae growth. These improvements are currently under study, but may include headworks improvements, increased lagoon mixing, a chemically enhanced settling process, or lagoon covers. New effluent disinfection capability will be accomplished using either sodium hypochlorite chlorination, or ultraviolet disinfection. Effluent transfer capabilities will include piping and valve improvements to the existing effluent discharge location, and a new transfer pump station and approximately 3 miles of new pipeline routed to the wetland site. Improvements at the wetland site are being studied, but may include flow control structures and enhancements for public use.

***Need for the Project***

The project is intended to accomplish the following: (1) Allow compliance with effluent requirements for total suspended solids during periods when algae growth challenges compliance capability; (2) provide effluent disinfection to improve the health and safety of people and animals potentially coming in to contact with areas where effluent has been applied; and (3) increase opportunities for effluent reuse beyond the single application area currently employed. A planned use is for wetland enhancement within the city limits.

***Estimated Start and End Date***

Phase I: 2008 through 2009

Phase II: Completion - 2010

***Potential Funding Sources***

Local match from development impact fees

***Percent of Matching Funding that Will Be Provided***

30 percent

***Regional and Local Benefits***

The project will improve effluent quality in the City of Guadalupe, a DAC, and will improve health and safety at the sites where effluent is applied, through enhanced suspended solids removal and effluent disinfection. In addition, the introduction of additional water to the 20-acre wetland will improve this unique habitat site and provide a beneficial and attractive enhancement to the downtown Guadalupe area, potentially increasing tourism and development.

***Statewide Priorities Addressed***

Address environmental justice concerns.

Reduce water user conflicts/resolve water rights disputes

Implement floodplain management task force recommendations

Implement recycling task force recommendations

***Project Number and Name***

No. 8 Wastewater Treatment Plant Expansion

***Project Sponsor***

City of Santa Maria

***Watershed***

Santa Maria

***Project Description***

Revision to the current permit to allow for greater permitted flow, environmental review and completion of the expanded preliminary and final facility design, in order to begin construction in 2008. The project also includes a new wastewater supervisory control and data acquisition system. The actual construction will be budgeted in the next 2-year budget cycle, commencing in 2008 and projected for completion in 2010, at which point in time we expect the expanded facilities to be able to accommodate a 12.5 mgd flow capacity. Facilities envisioned for construction include, but are not limited to: new ponds for sludge drying and percolation, augmented pretreatment facilities, a new primary clarifier and trickling filter, standby power equipment, an updated telemetry system, and rehabilitation/reconstruction of infrastructure using outdated technology.

***Need for the Project***

The current daily flow at the wastewater treatment plant ranges from 8.5 to 9.0 million gallons per day (mgd) approaching the permitted capacity of 9.5 mgd. Phase I of the plant expansion, completed in 1997, increased the capacity by 3 million gallons and incorporated a new SCADA system, construction of head works, a sludge thickener, and additional drying beds. In order to maintain service levels, sustain current growth, and protect public health, the capacity of the facility must be elevated to 10.5 mgd by 2007 and to 12.5 mgd by 2010. The wastewater treatment plant expansion continues a long-term Utilities Master Plan project that meets the City's wastewater needs through 2016. Completion of this project maintains service levels, sustains projected growth, and protects public health.

***Estimated Start and End Date***

Construction will be completed in two phases. The first phase will begin in 2008, and the second will begin as soon thereafter as necessary to stay ahead of projected growth in the City. Both phases should be completed before the end of 2010.

***Potential Funding Sources***

The City matching funds will be paid from revenues procured from the collection of growth mitigation fees. The fees that will be used are those collected as conditions to the permits issued in the orderly development of Santa Maria.

***Percentage of Matching Funds that Will Be Provided***

50 percent

***Regional and Local Benefits***

Improvement of groundwater quality within the basin underlying the wastewater treatment plant.

The wastewater treatment plant is the central facility for treatment of sewage collected from rural development throughout Santa Barbara and San Luis Obispo counties. The City uses micro turbines to convert methane (a byproduct of sludge digestion in wastewater treatment) into electricity to reduce demand for energy from the grid. The project will initially include at least eight new percolation ponds. These ponds will be used to recharge the Santa Maria Groundwater Basin with resource of quality superior to the background with respect to total dissolved solids (TDS). The City has augmented the permanent open space in the valley by purchasing 260 acres of land for development as an open network of ponds and lagoons.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Implement TMDLs

Implement RWQCB Watershed Management Initiative

Implement recycling task force recommendations

***Project Number and Name***

No. 9 Laguna County Sanitation District Wastewater Reclamation Plant Upgrade

***Project Sponsor***

Laguna County Sanitation District

***Watershed***

Santa Maria

***Project Description***

The project involves plant capacity improvements and upgrades to facilitate treatment of wastewater and discharge of recycled water. The District provides wastewater, treatment, and disposal services to the Orcutt and southern unincorporated Santa Maria areas. The District's method of discharge has always been through the reuse of treated wastewater. Recently, the District completed an upgrade to reduce salt in the discharge and increase treatment to tertiary levels in order to comply with regulatory requirements and reuse water for enhanced beneficial uses. The proposed improvements will expand capacity by adding additional tertiary treatment and disinfection processes as well as new discharge distribution facilities.

***Need for the Project***

The District is anticipating significant growth in the very near future pursuant to the County's Orcutt Community Plan. An expansion from 3.7 million gallons per day (mgd) to 5.5 mgd is anticipated in 2010.

***Estimated Start and End Date***

Detailed planning and permit review is expected to begin in 2008. Construction is anticipated from 2009 to 2010.

***Potential Funding Sources***

Grant funds and Connection Fees (developer impact fees).

***Percent of Matching Funding that Will Be Provided***

50 percent

***Regional and Local Benefits***

The plant has a capacity of 3.7 mgd (4,145 AFY). The project will increase the capacity to 5.5 mgd (6,161 AFY). Current flow is 2.4 mgd (2,689 AFY) and the projected flow is 4.8 mgd (5,377 AFY) by 2019. 100 percent of the water is recycled.

The project will benefit water supply, water reuse, salt removal, water quality, drought protection, and potentially groundwater recharge.

***Statewide Priorities Addressed***

Implement recycling task force recommendations

***Project Number and Name***

No. 10 Santa Maria River Levee Reinforcement

***Project Sponsor***

Santa Barbara County Flood Control District

***Watershed***

Santa Maria

***Project Description***

The project includes modifications to the Santa Maria River Levee. The first phase would place a sheetpile wall, or other alternative, along the length of the Santa Maria River Levee between Suey Crossing and U.S. Highway 101, a distance of approximately 3,300 feet.

***Need for the Project***

The 24-mile-long Santa Maria River Levee, constructed of sand with a rock rip rap facing, has degraded over the 40 years since its completion in 1963. Degradation has reached the point of reducing the effectiveness of the levee in withstanding the forces of the river and increasing the risk of levee failure, which could flood adjacent neighborhoods as well as the City of Santa Maria.

***Estimated Start and End Date***

2008 through 2012

***Potential Funding Sources***

Grant funding

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

This project will provide protection for people, property, and the environment from flooding.

***Statewide Priorities Addressed***

Implement floodplain task force recommendations

**Project Number and Name**

No. 11 Santa Ynez River Arundo Eradication Project

**Project Sponsor**

Agricultural Commissioner's Office, doing business as Santa Barbara County Weed Management Area

**Watershed**

Santa Ynez

**Project Description**

This project aims to define the extent of *Arundo donax* and *Tamarix spp.* on the Santa Ynez River and eradicate both species from the riparian corridor.

**Need for the Project**

*Arundo donax* and *Tamarix spp.* are noxious and invasive weeds. Both species are regulated by the California Department of Agriculture and the County of Santa Barbara Agricultural Commissioner as a noxious weed and are considered invasive by the California Invasive Plant Council. Both currently are limited in distribution on the Santa Ynez River, especially in comparison to other riparian systems in Santa Barbara County and California.

The Santa Ynez River is a major river within Santa Barbara County running along the entire width of the county. It is a primary source of water and recreation. Funding to control arundo, tamarisk, and other invasive weeds is needed to protect, restore, and conserve riparian habitat in the county before the problem gets out of hand. The County of Santa Barbara has an opportunity to control an incipient infestation, which is less expensive to control than a widespread infestation. The Santa Clara River in Ventura and Los Angeles counties serves as an example of the need for this project. The Santa Clara River is suffering from a major infestation of arundo; a multimillion dollar project is being proposed for an arundo eradication project there.

*Arundo donax* displaces native plants and associated wildlife species because of the massive stands it forms (Bell 1994, Gaffney and Cushman 1998). Competition with native species has been shown to result from monopolization of soil moisture and by shading (Dudley unpublished data). It clearly becomes a dominant component of the flora and was estimated to comprise 68 percent of the riparian vegetation in the Santa Ana River (Douthit, 1994). As *Arundo donax* replaces riparian vegetation in semiarid zones, it reduces habitat and food supply, particularly insect populations, for several special status species such as least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo (Frandsen and Jackson, 1994; Dudley and Collins, 1995). Unlike native riparian plants, *Arundo donax* provides little shading to the in-stream habitat, leading to increased water temperatures and reduced habitat quality for aquatic wildlife. At risk are protected species such as arroyo toad, red-legged frog, western pond turtle, Santa Ana sucker, arroyo chub, unarmored three-spined stickleback, tidewater goby, and southern steelhead trout, among others (Franklin, 1996). In the Sacramento-San Joaquin Delta region *Arundo donax* interferes with levee maintenance and wildlife habitat management (Perrine, personal communication).

*Arundo donax* is also suspected of altering hydrological regimes and reducing groundwater availability by transpiring large amounts of water from semiarid aquifers. It alters channel morphology by retaining sediments and constricting flows, and in some cases may reduce stream navigability (Lake, personal communication, TNC 1996).

Dense growth presents fire hazards, often near urbanized areas, more than doubling the available fuel for wildfires and promoting postfire regeneration of even greater quantities of *Arundo donax* (Scott, 1994; Gaffney and Cushman, 1998). Uprooted plants also pose clean-up problems when deposited on banks or in downstream estuaries (Douthit, 1994) and during floods create hazards when trapped behind bridges and other structures. Although often planted for erosion control, *Arundo donax* can promote bank erosion because its shallow root system is easily undercut and bank collapse may follow.

*Continued on next page*

**No. 11 Santa Ynez River Arundo Eradication Project, continued**

There is debate as to whether *Tamarix spp.* is a consequence (Anderson, 1996) or a cause (Lovich and de Gouvenain, 1998) of environmental changes associated with its presence and proliferation. Regardless, the presence of *Tamarix spp.* is associated with dramatic changes in geomorphology, groundwater availability, soil chemistry, fire frequency, plant community composition, and native wildlife diversity. Geomorphological impacts include trapping and stabilizing alluvial sediments, which results in narrowing of stream channels and more frequent flooding (Graf, 1978). *Tamarix spp.* has been blamed for lowering water tables because of its high evapotranspiration rate, and, on a regional scale, dense *Tamarix spp.* groves use far more water than native riparian plant associations (Sala et al., 1996).

Soil salinities increase as a result of inputs of salt from glands on *Tamarix spp.* leaves. The dome-shaped glands consist of at least two cells embedded in the epidermal pits (Decker, 1961). Increased salinity inhibits growth and germination of native riparian species (Anderson 1996). Leaf litter from drought-deciduous *Tamarix spp.* increases the frequency of fire. *Tamarix spp.* is capable of resprouting vigorously following fire and, coupled with changes in soil salinity, ultimately dominates riparian plant communities (Busch, 1995).

Although *Tamarix spp.* provides habitat and nest sites for some wildlife (for example, white-winged dove, *Zenaidura macroura*), most authors have concluded that it has little value to most native amphibians, reptiles, birds, and mammals (Lovich and de Gouvenain, 1998).

**Estimated Start and End Date**

2008 through 2014

**Potential Funding Sources**

County of Santa Barbara, California Department of Fish and Game, U.S. Fish and Wildlife Service, National Fish and Wildlife Foundation, DWR

**Percent of Matching Funding that Will Be Provided**

30 percent

**Regional and Local Benefits**

The increasing spread of invasive weeds is a pressing concern throughout Santa Barbara County, and this is one of a number of efforts to eradicate such species in sensitive riparian habitats. The weeds are detrimental to habitat and water conservation and increase the risk of flooding and erosion in riparian systems. They displace native plants thus degrading habitat and reducing biodiversity. They use more water than native plants and increase the risk of fire, flooding, and erosion along riparian areas. Additionally, the Santa Ynez River has regional significance as one of the major rivers in the county, serving as a source of water, recreation, and habitat for a number of listed fish and bird species. Control of both arundo and tamarisk will benefit water quality, water use/groundwater, flood control, farming, recreation, and resource management. The Santa Ynez River is designated as a Critical Coastal Area (CCA).

**Statewide Priorities Addressed**

Implement floodplain task force recommendations

***Project Number and Name***

No. 12 Quiota Creek, Fish Passage Enhancements Project

***Project Sponsor***

Cachuma Conservation Release Board/Santa Ynez River Water Conservation District Improvement District No. 1

***Watershed***

Santa Ynez

***Project Description***

The project involves improvement of endangered steelhead passage on Quiota Creek by replacing two temporary bridges on Refugio Road that have damaged low flow (Arizona) crossings below, with prefabricated bridges that span the entire creek and re-grade the stream channel to restore natural conditions. This project is part of a broader watershed-scale planning effort that encompasses a comprehensive analysis of nine low flow passage impediments on Quiota Creek and proposed alternatives for each crossing considering passage flows, migration barriers, design criteria, and cost.

***Need for the Project***

There are two significant reasons to implement this project. First, the current Santa Ynez River steelhead run is estimated at 100 to 200 fish – perhaps the largest remaining population of southern steelhead, which was federally listed as endangered in 1997. These fish depend on the tributaries downstream of Bradbury Dam for spawning and rearing habitat. The quality of the lower watershed habitat is limited, however, by factors such as low surface flows, high water temperatures, passage impediments, sedimentation and lack of streamside canopy. Quiota Creek contains some of the best habitat in the Lower Santa Ynez River watershed, but fish have limited access due to passage impediments from low flow crossings along Refugio Road. Modifications of these impediments will open up approximately 3 miles of excellent stream habitat for steelhead. Removal of all nine Quiota Creek passage impediments was recommended in the Lower Santa Ynez River Fish Management Plan published in October 2000.

The second reason is that Refugio Road is an important access road for landowners along Quiota Creek, as well as for those residing at the top of the coastal mountains and on the coastal side of the watershed. The road is essential for fire fighting efforts and serves as a critical escape route for local landowners during emergencies such as fire, flood, or landslide. Providing local residents with a safe and reliable road is an important objective of the project and for the County of Santa Barbara.

***Estimated Start and End Date***

2008; will be completed within one year

***Potential Funding Sources***

California Department of Fish and Game, Fisheries Restoration Grant Program, California Coastal Conservancy, National Marine Fisheries Service, and Cachuma Member Agencies

***Percent of Matching Funding that Will Be Provided***

20 percent

***Regional and Local Benefits***

The project will improve riparian and riverine environments along 1.3 miles of stream channel and improved access to approximately 3 miles of habitat for migrating steelhead/rainbow trout. The project also will offer reduced erosion potential and improved riparian corridor connectivity. The Lower Santa Ynez River Fish Management Plan identified improvements throughout the region that would improve steelhead habitat, including the removal of fish barriers along Quiota Creek. This project is part of a broader watershed-scale planning effort and, thus, will contribute to the improvement of steelhead habitat throughout Santa Barbara County. Improved riparian corridor is also a regional benefit. The proposed permanent bridges will help keep Refugio Road open during storm events. Refugio Road links the South Coast with the Santa Ynez Valley and is an important County access road for landowners and a critical access road for emergency vehicles, as well as an egress for residents during any type of emergency.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Implement RWQCB Watershed Management Initiative

Implement State Species Recovery Plan

***Project Number and Name***

No. 13 Gallery Well Filtration Facility

***Project Sponsor***

Santa Ynez River Water Conservation District Improvement District No. 1

***Watershed***

Santa Ynez

***Project Description***

The proposed Gallery Well Filtration Facility Project involves the construction of a packaged filtration facility inclusive of infrastructure designed to produce a capacity of 1 MGD (700 gpm) approximately matching the production of an existing Gallery Well. In addition to complying with the Department of Health Service (DHS) requirements to filter water under the Surface Water Treatment Rule, the Gallery Well Filtration Facility will control the Trihalomethamne (THM's) and meet the appropriate stage 2 disinfectant/disinfection by-product standard which will allow the District to provide potable water to its customers from a well that has been inactive.

***Need for the Project***

The Department of Health Services (DHS) requires filtration of all surface water sources and groundwater under the influence of surface water. The existing Gallery Well noted in this project is located within the Santa Ynez River alluvium basin and has been classified by DHS as a source requiring filtration. Since there are no filtration facilities within the District, the Gallery Well's production has been curtailed due to its lack of compliance with the EPA/DHS Surface Water Treatment Rule. Lack of production at this site has resulted in the indefinite suspension of 515 acre-feet per year of water production. Additionally, the District may not utilize the Gallery Well or Lake Cachuma source at any time without any additional filtration and disinfection treatment facilities being constructed in full compliance with the Surface Water Treatment Rule.

In 2004, the Santa Ynez Band of the Chumash Indians brought on-line its wastewater treatment plant, which treats .15 mgd. Effluent is discharged into Zanja de Cota Creek, which is a live stream tributary to the Santa Ynez River. The Gallery Well is located downstream of the confluence of the Zanja de Cota Creek and Santa Ynez River. Because of its Federal sovereign status, the Santa Ynez Band of the Chumash Indians only complies with Federal EPA standards with no State or local control. Filtration is needed to protect all District alluvium wells in the Santa Ynez River downstream of this new facility.

***Estimated Start and End Date***

2008 though 2009

***Potential Funding Sources***

Funding for this project will come from Prop 50 grant funding and the District's Construction Reserves.

***Percentage of Matching Funds that Will be Provided***

10 percent

***Regional and Local Benefits***

Reduction of THM's and UV disinfection will provide safeguards against water quality upstream.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Help meet Delta Water Quality Objectives/

Implement RWQCB Watershed Management Initiative

Implement recycling task force recommendations

***Project Number and Name***

No. 14 Lompoc Regional Wastewater Reclamation Plant

***Project Sponsor***

Vandenberg Village Community Services District

***Watershed***

Santa Ynez

***Project Description***

Upgrade the Lompoc Regional Wastewater Reclamation Plant to improve reliability and meet new, more stringent discharge requirements. Upgrade treatment level from secondary to tertiary (including nutrient removal). Construct two new oxidation ditches and three new secondary clarifiers. Replace influent pumping station and sludge thickening equipment. Replace the current chemical disinfection system with an ultraviolet disinfection system. Install a new supervisory control and data acquisition system.

***Need for the Project***

The plant was constructed in 1974 as a regional facility to treat wastewater from the City of Lompoc, Vandenberg Village, and Vandenberg Air Force Base. It has performed well but it is old and needs to be rehabilitated and upgraded. Vandenberg Village Community Services District depends on the regional plant to treat all the wastewater from Vandenberg Village, a civilian residential community of 6,000 people (only 2,400 ratepayers). A long-term agreement with the City of Lompoc conveys 17.8 percent of the plant capacity rights to the Vandenberg Village Community Services District. The District is required to fund 17.8 percent of capital improvements to the plant. The estimated construction cost of this project is \$87.4 million making the District's 17.8 percent share \$15.6 million. This places considerable financial strain on a relatively small number of ratepayers.

***Estimated Start and End Date***

2008 through 2010

***Potential Funding Sources***

User fees will pay for the 10 percent matching funding for this project, and all subsequent operations and maintenance expenses for the plant.

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

This project will improve the quality of the wastewater which is treated at the plant and then discharged into the San Miguelito Creek (a tributary to the Santa Ynez River). It will benefit the habitat of the river, downstream recreational users, and the Lompoc Groundwater Basin. About 90 percent of the treated wastewater percolates into this basin, which serves as the primary source of water supply for City of Lompoc, Vandenberg Village, and Mission Hills.

***Statewide Priorities Addressed***

Implement TMDLs

***Project Number and Name***

No. 15 South Coast Conduit 2nd Pipeline - Upper Reach

***Project Sponsor***

Cachuma Operation and Maintenance Board

***Watershed***

South Coast

***Project Description***

The 2nd Pipeline Project will improve the reliability, integrity, and capacity of the South Coast Conduit. This project consists of installing 7,800 feet of 48-inch pipe in the vicinity of the existing 48-inch South Coast Conduit and connecting the three control structures in this reach. This second pipeline will facilitate maintenance of the original pipeline, create redundancy, and increase the South Coast Conduit capacity to original design levels to better meet the water supply needs of the South Coast communities.

***Need for the Project***

The 2nd Pipeline Project will improve the reliability, integrity, and capacity of the South Coast Conduit. The South Coast Conduit is the primary source of water for the 200,000 residents of the South Coast communities of Santa Barbara County. This system delivers water from Lake Cachuma through the Tecolote Tunnel to the South Coast Member Units (the City of Santa Barbara, Goleta Water District, Montecito Water District, and Carpinteria Valley Water District) through 26 miles of pipeline from Goleta to Carpinteria. The South Coast Conduit was installed in the 1950s and is constructed of reinforced concrete pipe. Over the years of service, the South Coast Conduit has been mostly trouble-free, but recently significant maintenance needs have been identified. One section of the South Coast Conduit is of primary concern; this section consists of 7,800 feet of 48-inch pipe and connects the South Portal of the Tecolote Tunnel to the Corona Del Mar Water Treatment Plant. The current plan is to add a second section of pipeline in the vicinity of the existing South Coast Conduit. This will allow continued water deliveries to be made through the existing pipeline with minimal interruptions during construction of the new pipeline. The new pipeline will improve system reliability by constructing a new modern pipeline with greatly improved integrity. It will improve long-term reliability by allowing either pipeline to be removed from service for maintenance without interruption of water deliveries through the other pipeline. This will facilitate improved maintenance and will reduce the number of unscheduled shutdowns due to emergency repairs. The increased capacity will help with delivery issues that have occurred over the last 30 years and as other infrastructure ages this added capability will greatly increase the reliability of the water supply to these communities. The improved South Coast Conduit reliability, redundancy, and capacity will ensure the ability of the South Coast Conduit to meet the current and future water demand requirements of the South Coast communities.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

Local Member Unit Assessments, Long-term Capital Improvements Loan, and grant funding

***Percent of Matching Funding that Will Be Provided***

15 percent

***Regional and Local Benefits***

As noted above, the South Coast Conduit is the primary source of water for the 200,000 residents of Santa Barbara County South Coast communities. The 2<sup>nd</sup> Pipeline Project will improve the South Coast Conduit reliability, redundancy, and capacity will ensure the ability of the South Coast Conduit to meet the current and future water demand requirements of the South Coast communities.

***Statewide Priorities Addressed***

Reduce water user conflicts/reduce water rights disputes

***Project Number and Name***

No. 16 Bluffs Sewer Relocation Project

***Project Sponsor***

Carpinteria Sanitary District

***Watershed***

South Coast

***Project Description***

The project includes (1) relocation of approximately 6,000 linear feet of existing gravity sewer pipeline from the current location along edge of Carpinteria Bluffs to within Carpinteria Avenue, and (2) reconstruction of the inverted siphon crossing under Carpinteria Creek at Carpinteria Avenue. This pipeline is exposed within the creek bed, and flow has been temporarily diverted to another pipeline to prevent the discharge of sewage in the event the siphon is physically damaged.

***Need for the Project***

The existing sewer pipeline is located along the top edge of the Carpinteria Bluffs. A significant portion of the pipeline corridor is located within Environmentally Sensitive Habitat (coastal sage scrub). The pipeline is subject to surface erosion and has failed on at least one occasion, causing discharge of raw sewage to the Pacific Ocean. This failure required emergency realignment and construction within the banks of Garrapata Creek. The existing pipeline is difficult to access for maintenance and emergency response. Relocation to Carpinteria Avenue would significantly reduce the failure threat and would remove the sewer infrastructure from the Carpinteria Bluffs. The new pipeline would be easily accessible for maintenance purposes. Replacement of the inverted siphon crossing of Carpinteria Creek would remove the existing exposed pipe, which may be a barrier to the passage of southern steelhead trout. The new siphon would be more reliable and would have a lower potential for blockages and resultant sewer overflows into Carpinteria Creek.

***Estimated Start and End Date***

2008 through 2010

***Potential Funding Sources***

Development Impact Fees from future users (for example resort development), grant funding, and limited capital improvement funds.

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

The Carpinteria Bluffs Preserve is important to the Santa Barbara region; local citizens joined with the Land Trust for Santa Barbara County and raised the money to purchase the land, which contains walking trails, a bikeway, and a 6-acre area for soccer and baseball fields. The Carpinteria Bluffs also contain undisturbed grasslands and coastal sage that serve as foraging grounds for birds. This project will eliminate the potential for pipe failure and sewage discharge to the Carpinteria Bluffs, Garrapata Creek, and the Pacific Ocean, benefiting ocean and creek water quality and biological resources. The removal of infrastructure will enhance the natural setting enjoyed by those who frequent the bluffs. The project also will eliminate the need to remove or impact Environmentally Sensitive Habitat for pipeline maintenance, emergency response or repair. Relocation of the pipeline will facilitate pipeline maintenance and reduce potential for sewer overflow and associated impacts to public health and the environment.

***Statewide Priorities Addressed***

Implement SWRCB's Nonpoint Source Pollution Plan

Help meet Delta Water Quality Objectives

***Project Number and Name***

No. 17 Carpinteria Creek Overhead Crossing Replacement Project

***Project Sponsor***

Carpinteria Sanitary District

***Watershed***

South Coast

***Project Description***

The project includes removal of an existing 14-inch diameter cast iron sewer pipe suspended over Carpinteria Creek, where it crosses a public bicycle path immediately north of U.S. Highway 101. Failure of pipe or pier supports would result in direct discharge of untreated sewage to Carpinteria Creek. Replacement of the suspended line would enhance the natural setting within the creek corridor.

***Need for the Project***

The existing sewer pipeline is a cast iron segmented pipe suspended over Carpinteria Creek. In addition to the visual impacts of this infrastructure on the natural setting, the suspended pipeline has a relatively high failure potential, and the resultant impacts to the Carpinteria Creek habitat are significant. The pipe has failed previously when the cable suspension system was damaged due to extreme temperatures during a brushfire. Replacement would provide for a much less vulnerable conveyance system.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

Grant funding and limited capital improvement funds.

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

As discussed in Section 2, Santa Barbara County creeks are at risk from a variety of factors, including sewage discharge. The project will eliminate the potential for pipe failure and sewage discharge to Carpinteria Creek. Removal of infrastructure will enhance the natural setting of the Carpinteria Creek corridor and surrounding environment. Replacement will minimize the potential for sewer overflows within this sensitive watershed. This project will have direct local benefits, but also contribute to the improvement of regional water quality and biological resources.

***Statewide Priorities Addressed***

Implement SWRCB's Nonpoint Source Pollution Plan

Help meet Delta Water Quality Objectives

***Project Number and Name***

No. 18 Central Zone Transmission Main and Aquifer Storage Recovery (ASR) Demonstration Well Project

***Project Sponsor***

Carpinteria Valley Water District

***Watershed***

South Coast

***Project Description***

Construct a large diameter water transmission main (18 to 22 inches in diameter) approximately 1.25 miles long connecting existing wells, Carpinteria Valley Water District distributions systems, the South Coast Conduit and a 3-million-gallon tank. Construct an ASR demonstration well and groundwater production facility with associated transmission piping.

***Need for the Project***

Carpinteria Valley Water District blends local groundwater with imported surface waters in order to meet state and federal health-related water quality regulations. These regulations require that water systems reduce total Trihalomethanes and Haloacetic acids to 80 parts per billion and 60 parts per billion on all of the worst sample sites in the system by 2012. In order to blend efficiently and leverage the limited groundwater supply, ultimately ensuring that that surface water entering the system will be blended with groundwater to reduce formation of TTHms and Haa5s, the District has constructed a tank for groundwater storage, a new well, and a blending system. The missing piece to the current system is a transmission main that would allow the District to hook up one existing well to the new tank, a new ASR capable well, and filtration plant with some associated piping to connect to the proposed transmission main. This would provide redundancy to the system and ensure there will always be groundwater available for blending, as well as allow the District operations staff the flexibility to manage the water supply more efficiently. In addition to water quality benefits, the new system will allow the District to offset demands placed on the South Coast Conduit and Cater Treatment Plant by using local groundwater supply in high peak times rather than burdening the South Coast transmission system. Further in an emergency or natural disaster setting the District will be able to offset or provide water supply back towards the communities of Santa Barbara and Montecito as well as Carpinteria from its groundwater supply. Finally, the project is a first step in developing a potential groundwater banking project.

***Estimated Start and End Date***

2008 through 2011

***Potential Funding Sources***

Grant funds and revenues

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

This project will complete the Carpinteria Valley Water District water system, provide redundancy, ensure groundwater availability for blending, and increase water management efficiency. The project therefore will benefit the District service area, but also will allow the District to offset demands placed on the South Coast Conduit and Cater Treatment Plant, thus providing a more regional benefit, as well. Additionally, during an emergency or natural disaster, the District will be able to offset or provide water supply to the communities of Santa Barbara and Montecito, as well as Carpinteria, from its groundwater supply. Finally, the project is a first step in developing a potential groundwater banking project. Other benefits to drinking water quality include lowered disinfectant byproducts and improved taste and odor.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

***Project Number and Name***

No. 19 Recycled Water Feasibility Study

***Project Sponsor***

Carpinteria Valley Water District

***Watershed***

South Coast

***Project Description***

The project is the study of the feasibility of developing a recycled water system in the Carpinteria Valley. The study will include an analysis of cost related to implementing a recycle project, the potential users of such a water supply, the economics of a recycled water supply verses the current and potential new water supplies, and the environmental benefits of a recycled water supply project.

***Need for the Project***

Carpinteria Valley is situated at the southerly end of Santa Barbara County's South Coast and receives water through the Cachuma Project, local groundwater, and the State Water Project. Reliance on local water sources can reduce continued dependence on imported water that has questionable reliability as California's water supply becomes more and more stressed. By critically looking at the feasibility of using some of the wastewater for irrigation uses, the Carpinteria Valley policy makers can better make decisions on how much to invest into this potential new water supply.

***Estimated Start and End Date***

2008; will be completed within one year

***Potential Funding Sources***

Revenue from Carpinteria Valley Water District and grant monies.

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

The project will reduce discharge of secondary wastewater into the ocean and increase water supply reliability through the creation of a new water supply. This also will reduce dependence on State Water Project water.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Implement TMDLs

Implement RWQCB Watershed Management Initiative

Help meet Delta Water Quality Objectives

***Project Number and Name***

No. 20 Braemer Area Sewer Extension Project

***Project Sponsor***

City of Santa Barbara

***Watershed***

South Coast

***Project Description***

The project involves extension of the City sewer system to serve approximately 100 properties not currently served by municipal sewer. A preliminary feasibility design study has been completed. The extension would include up to approximately 10,000 feet of 8-inch gravity sewer mains and up to 3,000 feet of 3-inch force mains. The area to be served is on the coastal plain adjacent to the ocean.

***Need for the Project***

The project would provide sewer connections for approximately 100 properties, most of which are currently occupied by single family residences served by septic systems. Some septic systems appear to be functioning adequately, while some have failed or are about to fail.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

Property owner assessment, plus potential grant funding

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

Creek and ocean water contamination is a regional problem. Eliminating septic tanks through this project will remove existing sources of contamination, potentially improving creek and ocean water quality. The project will provide the infrastructure to allow approximately 100 residences to abandon septic tanks and connect to City sewer.

***Statewide Priorities Addressed***

Implement SWRCB's Nonpoint Source Pollution Plan

***Project Number and Name***

No. 21 El Estero Swale Restoration Project

***Project Sponsor***

City of Santa Barbara

***Watershed***

South Coast

***Project Description***

The project involves restoration and enhancement of a degraded wetlands and adjacent area next to El Estero Wastewater Treatment Plant. The area is classified as habitat for the southwestern pond turtle, a California Species of Concern.

***Need for the Project***

This project will achieve compliance with requirements under state and local wetlands protection regulations.

***Estimated Start and End Date***

The project will be implemented as soon as there is concurrence among various agencies regarding the resolution of issues associated with hazardous materials onsite.

***Potential Funding Sources***

Wastewater rate revenues and potential grant funding.

***Percent of Matching Funding that Will Be Provided***

50 percent

***Regional and Local Benefits***

The loss of wetlands and habitat for special status species is a regional concern. This project will help achieve improvement in Laguna Channel water quality with wetlands restoration. Approximately 0.75 acres of habitat for southwestern pond turtle will be restored.

***Statewide Priorities Addressed***

Implement RWQCB Watershed Management Initiative

Implement State Species Recovery Plan

***Project Number and Name***

No. 22 Elings Park Solid Waste Assessment Test-Corrective Action Plan

***Project Sponsor***

City of Santa Barbara

***Watershed***

South Coast

***Project Description***

Elings Park is the site of one of the City's old open air dumps. Gas monitoring at the site shows methane gas above lower explosive levels. This dump was abandoned prior to the promulgation of landfill requirements. California Code of Regulations (CCR) Title 27 Section 20080(e) establishes that dumps abandoned/inactive on or before November 27, 1984, are not immediately subject to the Closure and Post-Closure Maintenance requirements of CCR Title 27. Additionally, Title 27, Section 20080(g) gives the Regional Board discretion in deciding if the persons/entity responsible for discharges of waste at the dump will be required to develop and implement a detection-monitoring program. Thus, if groundwater monitoring shows water quality is impaired, such persons/entity may be required to develop and implement an acceptable corrective action program. Depending on the level (extent and degree) of groundwater quality impairment, an acceptable corrective action program may include a proposal for the installation of a final cover system, a gas extraction system and/or the implementation of an acceptable groundwater treatment alternative.

***Need for the Project***

In 2005 and 2006, Solid Waste Assessment Testing Activities were performed in compliance with the above regulations and under direction from the County of Santa Barbara and the RWCQB. Groundwater monitoring reports from this project indicate that concentrations of volatile organic compound constituents were detected in groundwater samples collected from groundwater monitoring at the site. Volatile organic compound constituents detected in groundwater samples collected at the site include: benzene detected at a concentration of 1.2 micrograms per liter ( $\mu\text{g/L}$ ); Chlorobenzene detected at concentrations of 5.3  $\mu\text{g/L}$  and 3.1  $\mu\text{g/L}$ ; 1,4-Dichlorobenzene detected at concentrations of 5.7  $\mu\text{g/L}$  (MW-3A) and 3.5  $\mu\text{g/L}$  (PII1); cis-1,2-Dichloroethene detected at a concentration of 14.1  $\mu\text{g/L}$ ; PCE detected at a concentration of 14.8  $\mu\text{g/L}$ ; and TCE detected at a concentration of 4.3  $\mu\text{g/L}$ . The benzene concentration detected is in excess of the drinking water MCL for benzene (1.0  $\mu\text{g/L}$ ). The cis-1,2-Dichloroethene and PCE concentrations detected are in excess of the drinking water MCL for cis-1,2-Dichloroethene (6.0  $\mu\text{g/L}$ ) and PCE (5.0  $\mu\text{g/L}$ ). Concentrations of other volatile organic compound constituents detected in groundwater samples collected at the site during the 4Q05 groundwater monitoring event do not exceed the applicable state drinking water MCLs for the respective volatile organic compound constituents.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

City of Santa Barbara and potential grant funding

***Percent of Matching Funding that Will Be Provided***

20 percent

***Regional and Local Benefits***

This project will lessen the impact of leachate from the dump to groundwater as well as potentially treat the groundwater, improving groundwater quality. This project will also benefit public health and safety, because this site is now a park used by numerous residents for varied purposes, including soccer, BMX, offleash dog walking, hiking, hang gliding, weddings, picnics, and summer camps. Due to the high levels of methane present, it is necessary to monthly monitor the gas levels. The project will eliminate the high methane levels.

***Statewide Priorities Addressed***

Implement SWRCB's Nonpoint Source Pollution Plan

***Project Number and Name***

No. 23 Las Positas Storm Water Management Project

***Project Sponsor***

City of Santa Barbara

***Watershed***

South Coast

***Project Description***

This is a low-impact development project that retrofits the existing Santa Barbara Golf Club with best management practices for water quality treatment and peak flow reduction. The primary purpose is to detain and treat urban storm runoff, which enters the golf course from surrounding neighborhoods, in order to improve water quality downstream in Las Positas Creek, the Arroyo Burro Estuary, and Arroyo Burro Beach.

***Need for the Project***

Extensive monitoring of Las Positas and Arroyo Burro creeks indicates concentrations of fecal indicator bacteria that exceed the recreational contact standards. Arroyo Burro County Beach Park, a popular beach located at the mouth of Arroyo Burro Creek, is posted frequently during low flow and storm conditions with warnings of bacterial pollution. Monitoring of storm water runoff entering and exiting the golf course shows that both sources contain high levels of indicator bacteria. Efforts to locate hotspots, such as a neighboring playground, have not helped to rule in or rule out specific sources of pollution. Elevated peak flows during storms, due to urbanization of the watershed, have led to increased erosion and sedimentation rates in Lower Arroyo Burro Creek. In addition to degrading the stream channel, high peak flows discourage the implementation of restoration or water quality improvement projects in the watershed.

***Estimated Start and End Date***

2008 through 2011

***Potential Funding Sources***

Grant funds will be pursued for construction. The City Creeks Division will fund final design and match funding for any grants that are received to construct the project. The City will identify the operating and maintenance costs during project design and set aside funds to operate and maintain the project beginning with the Fiscal Year 2008 budget.

***Percent of Matching Funding that Will Be Provided***

25 percent

***Regional and Local Benefits***

The project will treat 140 cubic feet per second, which is equal to 100 percent of a 10-year storm runoff over the 106-acre drainage area. By reducing sediments, pollutants, and peak flow rates, this project will improve water quality and beneficial uses such a recreation and wildlife habitat. Hydrology studies show that the project will reduce peak runoff volumes during 100-year storm events by over 50 percent. During smaller events; that is, up to 10-year events, the project will detain and treat nearly 100 percent of the runoff. Depending on how long storm water is detained, up to 90 percent of sediment and associated pollutants could be removed during detention. Runoff from smaller storms (approximately two per year) and nuisance flows will be treated primarily by filtration through a series of bioswales, which are predicted to remove 20 to 80 percent of suspended pollutants. Therefore, a substantial reduction in indicator bacteria concentrations is expected in flow exiting the golf course. Furthermore, reduced peak flows will decrease erosion and sedimentation downstream. Lower on Las Positas Creek, flow will be reduced by 10 percent during a 100-year event.

The project will establish native landscapes that can support bird populations and enhance the 100-acre open space of the golf course. The project will be implemented in conjunction with maintaining playability and aesthetic standards for the public golf course. The project will also serve as a demonstration on natural treatment systems for the Santa Barbara residents that use the golf course as well as school groups and other educational institutions.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Implement RWQCB Watershed Management Initiative

Implement SWRCB's Nonpoint Source Pollution Plan

***Project Number and Name***

No. 24 Lower Mission Creek Flood Control and Rehabilitation Project

***Project Sponsor***

City of Santa Barbara and Santa Barbara County Flood Control District

***Watershed***

South Coast

***Project Description***

This 1.3-mile-long project includes the removal of concrete channel walls, banks, and bed to be replaced with natural stream bed features and vegetated, stabilized banks, using the “joint planting” strategy, where live riparian cuttings are used to stabilize and reinforce the soil upon which large boulders and other natural elements are stacked. The project includes replacement of several bridges that span over Mission Creek, including Mason Street, Haley Street, Cota Street, and Ortega Street bridges.

***Need for the Project***

Lower Mission Creek is one of the deteriorated urban creeks in the region with the potential to provide habitat and passage for endangered species, migratory birds, and aquatic life. The project will improve and ultimately protect habitat and passage for the endangered steelhead trout and tidewater goby. Both of these endangered species have been documented and tracked in lower Mission Creek, and the opportunity to provide fish passage up the watershed has been a County and City goal for numerous years. The project will also significantly reduce flood risks for the lower urban area of Santa Barbara, improve water quality, and improve ground water percolation.

***Estimated Start and End Date***

2009 through 2014

***Potential Funding Sources***

Santa Barbara County Flood Control South Coast Zone Assessment, City Streets Program, U.S. Army Corps of Engineers, Continuing Authority Program (\$7 million, maximum), and City Creeks Division (Measure B).

***Percent of Matching Funding that Will Be Provided***

50 to 80 percent

***Regional and Local Benefits***

In addition to restoring the creek channel, improving habitat, and providing fish passage up the watershed, the project also includes removal of invasive and non-native plants and trees and installation of native plants and trees. The restored stream channel will also reduce stream velocities and increase the wetland area. This not only improves water quality and habitat for aquatic life and birds, but also improves urban runoff filtration and natural treatment of pollutants.

***Statewide Priorities Addressed***

Implement RWQCB Watershed Management Initiative

Implement SWRCB's Nonpoint Source Pollution Plan

Implement State Species Recovery Plan

***Project Number and Name***

No. 25 Old Mission Creek Storm Water Management and Restoration Project

***Project Sponsor***

City of Santa Barbara

***Watershed***

South Coast

***Project Description***

The project includes construction of wetland detention ponds to filter storm water runoff from a 700-acre subwatershed and restoration of approximately two acres of riparian habitat along Old Mission Creek, including stabilization of 700 linear feet of creek channel, construction of 0.3 acres of new wetland habitat, and removal and replacement of non-native plants with native plants.

***Need for the Project***

The Old Mission Creek Storm Water Detention and Creek Restoration Project is a priority project because water quality in Old Mission Creek is high in bacteria and provides significant flow to the main Mission Creek Channel. The high bacteria levels contribute to water quality problems in Mission Creek and ultimately the city beaches, which frequently exceed the water contact standards. The project site is also located immediately downstream of an existing creek restoration project at Bohnett Park, as well as a newly constructed low flow ultraviolet water quality treatment project, providing the opportunity to link these two important habitat areas and treat all the low flow and storm water runoff within this subwatershed. In addition, the site is one of the largest floodplains available in the city to implement storm water treatment and has been identified as an ideal location for water quality treatment and restoration by a number of technical studies.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

City of Santa Barbara and IRWMP

***Percent of Matching Funding that Will Be Provided***

25 percent

***Regional and Local Benefits***

The project will result in treatment of 700 acres of urban storm water runoff with high bacteria levels. An additional benefit will result in the primary water supply to Lower Mission Creek and estuary during the low flow dry season (May through October).

The project will result in restoration of over 700 liner feet of creek channel and channel banks and will include removal of invasive non-native plants and trees and installation of native plants and trees. It will also result in construction of approximately 3 acres of new wetland habitat.

***Statewide Priorities Addressed***

Implement RWQCB Watershed Management Initiative

Implement SWRCB's Nonpoint Source Pollution Plan

Implement State Species Recovery Plan

***Project Number and Name***

No. 26 Fairview Avenue Sewer Line Installation Project

***Project Sponsor***

Goleta Sanitary District

***Watershed***

South Coast

***Project Description***

Install approximately 6,340 feet of new sewer line along Fairview Avenue in Goleta, Santa Barbara County. The current sewer line in this area ranging from 8 to 15 inches in diameter will be abandoned in place. The location of the new sewer pipeline will be moved to the east and placed in a less environmentally sensitive area.

***Need for the Project***

The length of sewer line proposing to be replaced along Fairview Avenue has a relatively high volume of inflow and infiltration of storm water into the sewer system, which will be eliminated by replacing this sewer line. The new location will be located away from a tributary to Goleta Slough which is an environmentally sensitive area and a Critical Coastal Area.

***Estimated Start and End Date***

2011 through 2015

***Potential Funding Sources***

Goleta Sanitary District Capital Project Fund and Grant Funding

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

The replacement of this sewer line will reduce inflow and infiltration of storm water that results in increased capacity for conveyance and treatment of sewage downstream, which may reduce sewer line surcharges and needs for increased capacity. It will reduce and/or eliminate the sanitary sewer overflows that have the potential to directly impact waters of the state. This project will help protect the environmentally sensitive Goleta Slough, a Critical Coastal Area, and enhance recreational activities at the Goleta Beach County Park, whose recreational activities include swimming, fishing, boating, and scuba diving.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Implement SWRCB's Nonpoint Source Pollution Plan

Implement recycling task force recommendations

***Project Number and Name***

No. 27 Mattorral Way Creek Arial Crossing Sewer Replacement Project

***Project Sponsor***

Goleta Sanitary District

***Watershed***

South Coast

***Project Description***

Replace the sewer pipe and bridge which crosses San Antonio Creek north of U.S. Highway 101. The existing bridge and abutments are no longer structurally sound due to earth movement, erosion, and deterioration of the concrete and steel materials.

***Need for the Project***

The existing bridge crossing and pipe have structural deficiencies jeopardizing the structural integrity of the sewer creek crossing. Structural failure would cause serious environmental damage to the San Antonio Creek ecosystem.

***Estimated Start and End Date***

2008; will be completed within one year

***Potential Funding Sources***

Goleta Sanitary District Capital Project Fund and Grant Funding

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

This project will protect the local environment from interruption raw wastewater conveyance and protect the San Antonio Creek waterway from spills resulting from structural failure affecting the sewer line.

***Statewide Priorities Addressed***

Implement recycling task force recommendations

***Project Number and Name***

No. 28 Modoc Road New Sewer Line Installation Project

***Project Sponsor***

Goleta Sanitary District

***Watershed***

South Coast

***Project Description***

Install approximately 5,918 feet of new sewer line along Modoc Road near Cieneguitas Creek in Goleta, Santa Barbara County. The new sewer line in this area will range in size from 6 to 8 inches in diameter.

***Need for the Project***

The new sewer line proposed for this area will serve a future housing project that may be developed in the area bound by Modoc Road, Vista Clara Road and Encore Drive.

***Estimated Start and End Date***

2011 through 2015

***Potential Funding Sources***

Goleta Sanitary District Capital Project Fund and Grant Funding

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

Installation of appropriate wastewater conveyance will avoid the use of septic tanks for planned developments, helping protect local environment from potential nonpoint source pollution. ‘

***Statewide Priorities Addressed***

Implement SWRCB's Nonpoint Source Pollution Plan

***Project Number and Name***

No. 29 Water Reclamation Facility 2007 Refurbishment Project

***Project Sponsor***

Goleta Sanitary District

***Watershed***

South Coast

***Project Description***

Refurbish the filter valves and automated valve operators located in the reclaimed water filter process. The scope of the work will include the purchase and installation of 16 valves, valve shafts and electric valve operators.

***Need for the Project***

The water reclamation facility provides recycled wastewater to the Goleta Valley for primarily irrigation uses. The use of reclaimed water has reduced the demand on the potable water supplies. This project is necessary to refurbish the primary mechanical components of the reclamation filters ensuring a reliable and dependable recycled water supply.

***Estimated Start and End Date***

2008; will be completed within one year

***Potential Funding Sources***

Goleta Water District

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

This project will ensure reliable recycled water supply reducing the demand on potable supplies. It will also provide irrigation water for parks and recreation areas throughout Goleta.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Implement SWRCB's Nonpoint Source Pollution Plan

Implement recycling task force recommendations

***Project Number and Name***

No. 30 ASR Well Rehabilitation and Construction Project

***Project Sponsor***

Goleta Water District

***Watershed***

South Coast

***Project Description***

Rehabilitate one existing well and construct one new well, to more efficiently manage the Goleta Groundwater Basin and the Goleta Water District conjunctive use program.

***Need for the Project***

In order to efficiently manage the Goleta Groundwater Basin and the Goleta Water District conjunctive use program, one existing well needs to be rehabilitated and another well needs to be constructed.

***Estimated Start and End Date***

2009 through 2010

***Potential Funding Sources***

Goleta Water District general fund and grant funding

***Percent of Matching Funding that Will Be Provided***

40 percent

***Regional and Local Benefits***

This project will improve conjunctive use capability through improved efficiency of groundwater supply management.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Help meet Delta Water Quality Objectives

Implement recycling task force recommendations

Help achieve CALFED Bay-Delta Program Goals

***Project Number and Name***

No. 31 Backwash Tank Replacement at 4 Wells Project

***Project Sponsor***

Goleta Water District

***Watershed***

South Coast

***Project Description***

The project includes replacement of undersized backwash tanks used in treatment of groundwater for four wells. When replaced, larger tanks will reduce and potentially eliminate waste of water to drain. Water used for backwash can be retreated and injected to groundwater basin and/or supplied for potable use instead of wasting.

***Need for the Project***

The backwash tanks are currently undersized. When replaced, larger tanks will reduce and potentially eliminate waste of water to drain. Water used for backwash can be retreated and injected to groundwater basin and/or supplied for potable use instead of wasting.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

Goleta Water District general fund and grant funding

***Percent of Matching Funding that Will Be Provided***

50 percent

***Regional and Local Benefits***

The project will provide conservation of water supply, offsetting potable water use and will reduce the production of wastewater.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Help achieve CALFED Bay-Delta Program Goals

***Project Number and Name***

32 Cathedral Oaks Pipeline Replacement Project

***Project Sponsor***

Goleta Water District

***Watershed***

South Coast

***Project Description***

Replace 1,800 feet of 12-inch-diameter pipe with 20-inch-diameter pipe. This project will reduce pressure losses and thereby increase volume flow to meet peak demands and emergency fire flows.

***Need for the Project***

Reduce pressure losses and thereby increase volume flow to meet peak demands and emergency fire flows.

***Estimated Start and End Date***

2010; will be completed within one year

***Potential Funding Sources***

Goleta Water District general fund and grant funding

***Percent of Matching Funding that Will Be Provided***

50 percent

***Regional and Local Benefits***

Benefits for this project include increased emergency water supply and fire fighting capability.

***Statewide Priorities Addressed***

Help achieve CALFED Bay-Delta Program Goals

***Project Number and Name***

No. 33 Corona Del Mar Water Treatment Plant – Sedimentation Basin Effluent Upgrades Project

***Project Sponsor***

Goleta Water District

***Watershed***

South Coast

***Project Description***

The proposed project will include modifications and upgrades to the District's existing Corona Del Mar Water Treatment Plant. Modifications will include:

- Replacement of deteriorated and inefficient effluent launders
- Installation of new plate settlers within the sedimentation basin
- Modification and upgrade of the combined effluent channels for improved efficiency
- Replacement of the deteriorated filter backwash troughs

***Need for the Project***

The District's Corona Del Mar Water Treatment Plant has been in service for over 30 years. Although upgrades to the plant have occurred over the last several years, many components of the plant are deteriorated and still in need of replacement and upgrade. The upgrades described above will significantly improve the plant efficiency and quality of water produced by the plant.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

Goleta Water District Capital Improvement Project Fund and Grant Funding

***Percent of Matching Funding that Will Be Provided***

25 percent

***Regional and Local Benefits***

The proposed improvements will reduce the amount of flocculent that reaches the filters and reduce the amount of filter aid required during the filtration process. This in turn will reduce the amount of sludge produced during filter backwash.

The modifications and upgrades will result in significant improvement to the plant's overall treatment efficiency. Maintenance tasks will be simplified saving time and money. Less filter aid (chemical) will be used also reducing operating costs by approximately \$5,000 annually. The project will replace several plant components that have outlived their design life, such as the launders and filter backwash troughs. This will improve reliability by replacing aging unreliable components of the plant.

***Statewide Priorities Addressed***

Help achieve CALFED Bay-Delta Program Goals

***Project Number and Name***

No. 34 Downstream Reservoir Meters Project

***Project Sponsor***

Goleta Water District

***Watershed***

South Coast

***Project Description***

Install meters downstream of Goleta Water District storage reservoirs to measure area demands, determine areas of unaccounted water, minimize losses and optimize efficiency.

***Need for the Project***

Measure area demands, determine areas of unaccounted water, minimize losses and optimize efficiency.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

Goleta Water District general fund and grant funding

***Percent of Matching Funding that Will Be Provided***

50 percent

***Regional and Local Benefits***

The project will reduce loss of water in the distribution system, and optimize the efficiency of serving water which will offset needs for other sources of potable water.

***Statewide Priorities Addressed***

Help achieve CALFED Bay-Delta Program Goals

***Project Number and Name***

No. 35 Interconnect with City of Santa Barbara Project

***Project Sponsor***

Goleta Water District

***Watershed***

South Coast

***Project Description***

The project includes a pipeline and pump station connection between the water systems of Goleta Water District and City of Santa Barbara. This will provide the ability to supply water from one agency to the other during big peak demands and emergencies. This will also increase the amount of water that can be delivered to other agencies downstream from the City of Santa Barbara.

***Need for the Project***

This project provides the ability to supply water from one agency to the other during big peak demands and emergencies. It will also increase the amount of water that can be delivered to other agencies downstream from the City of Santa Barbara.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

Goleta Water District, City general fund, and grant funding

***Percent of Matching Funding that Will Be Provided***

50 percent

***Regional and Local Benefits***

Increased water supply reliability to several water districts and cities: Goleta Water District, City of Santa Barbara, Montecito Water District, and City of Carpinteria.

***Statewide Priorities Addressed***

Reduce water user conflicts/resolve water rights disputes

Help achieve CALFED Bay-Delta Program Goals

***Project Number and Name***

No. 36 Blended Irrigation Project

***Project Sponsor***

La Cumbre Mutual Water Company

***Watershed***

South Coast

***Project Description***

Use of nonpotable groundwater from a well exceeding iron and manganese levels by blending with water from a 31-acre lake located on a golf course, to offset the state water usage. The proposal is to install a wet well, intake structure, and variable frequency drive pump station to pump lake water into the irrigation system.

***Need for the Project***

The proposed lake pump house would make available a source of groundwater currently unusable for domestic use. This would further diversify the La Cumbre Water supply and free higher quality water for more appropriate uses. Currently during peak demand periods, La Cumbre Water is at full capacity. The Blended Irrigation Project would allow La Cumbre Water to meet peak demand at 62 percent capacity and provide 38 percent reserve capacity for reliability.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

La Cumbre Mutual Water Company funding and grant funding

***Percent of Matching Funding that Will Be Provided***

100 percent

***Regional and Local Benefits***

This project will provide a greater percentage of State Project Water and increased water quality water for domestic customers. It will also provide more appropriate use of lower quality water for recreational uses.

***Statewide Priorities Addressed***

Implement recycling task force recommendations

***Project Number and Name***

No. 37 Iron and Manganese Removal Plant Project

***Project Sponsor***

La Cumbre Mutual Water Company

***Watershed***

South Coast

***Project Description***

This project includes construction of a 2,150-gallons per minute iron and manganese removal treatment plant, treating groundwater for domestic potable water service. The source water is approximately four times limit for these parameters. Treated water would offset state water usage and provide approximately 38 percent reserve capacity for reliability to domestic users.

***Need for the Project***

Currently the plant is at maximum capacity in the summer time. Adding a treatment plant would create a needed margin of safety to keep up with demand if one of our wells were to fail during high peak demand periods. Currently during peak demand periods, La Cumbre Water Company is at full capacity. The Iron and Manganese Removal Plant would allow La Cumbre Water Company to meet peak demand at 62 percent capacity.

***Estimated Start and End Date***

2008 through 2009

***Potential Funding Sources***

La Cumbre Mutual Water Company funding and grant funding

***Percent of Matching Funding that Will Be Provided***

100 percent

***Regional and Local Benefits***

This project makes groundwater available for potable domestic service, offsetting imported water needs.

***Statewide Priorities Addressed***

Help meet Delta Water Quality Objectives

***Project Number and Name***

No. 38 Non-Storm Water Diversion, Isla Vista

***Project Sponsor***

County of Santa Barbara

***Watershed***

South Coast

***Project Description***

The project is located in Isla Vista, one of the most densely populated communities in California and home of the UCSB campus. Most runoff in Isla Vista is treated with a trash/gross solids separator. There are four such solid separators. Pollutants that are smaller than 0.185 inch are passed through the separators. These pollutants are then discharged, untreated, onto the beach. Due to commercial and residential water use (i.e., landscape overwatering, car washing, hosing paved surfaces, etc.) low flows are discharged from the storm drain system and onto the beach on a daily basis year-round. This project will divert flows from the storm drain system into the sanitary collection system during dry periods, eliminating all non-storm water discharges and its associated pollutants. Educational signage and student-oriented information will be provided to communicate benefits of project.

***Need for the Project***

An unhealthy assemblage of pollutants is generated from runoff on urban surfaces. Discharges off gutters, driveways, and commercial areas occur year-round. Pollutants that are carried by these non-storm water flows range from vehicle emissions (oil drips, cleaners, copper, zinc, etc.) to food wastes and bird droppings hosed off outside areas of restaurants and bars. Regular testing of bacteria from non-storm water runoff shows elevated levels of indicator bacteria, which means beachgoers in Isla Vista are exposed to a higher risk of illness. This project will protect ocean water quality and human health at the beaches in Isla Vista during non-rainy periods.

***Estimated Start and End Date***

2009 through 2010

***Potential Funding Sources***

County of Santa Barbara's Project Clean Water program, Shoreline Preservation Fund (a UCSB student grant source)

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

Santa Barbara County is responsible for water quality in storm drain discharges in the area of Isla Vista. This project will achieve the objectives of the municipal operations section of the County's Storm Water Management Program by treating and removing pollution conveyed by the storm drain system. The project will protect human health and improve ocean water quality by preventing pollutants from being discharged onto the beach. The project will improve water quality of urban runoff into the Santa Barbara Channel, an area used for fishing and water contact sports. This project addresses D-7 Water Quality Priorities related to beach closure issues and implementation of Phase II of the NPDES Storm Water Program. It also addresses Urban Management 3.6A by improving controls for existing surface water runoff through pollution prevention. The results will be quantifiable through ongoing monitoring of diverted flows.

***Statewide Priorities Addressed***

Implement TMDLs

Implement RWQCB Watershed Management Initiative

Implement SWRCB's Nonpoint Source Pollution Plan

***Project Number and Name***

No. 39 Las Vegas and San Pedro Creeks Flood Control Improvements

***Project Sponsor***

Santa Barbara County Flood Control District

***Watershed***

South Coast

***Project Description***

This project consists of the construction of two improved reinforced concrete box culverts along San Pedro Creek and Las Vegas Creek in Goleta.

***Need for the Project***

During storm events, parts of Calle Real and U.S. Highway 101 are sometimes closed, and numerous homes and businesses are subject to flooding. The cleanup costs associated with the flooding in past storm events is significant. Construction of these culverts will greatly improve the capacity of the drainage system and reduce the flood hazard to adjacent properties.

***Estimated Start and End Date***

2008 through 2012

***Potential Funding Sources***

Caltrans, South Coast Flood Zone

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

This project will provide protection for people, property and the environment from flooding.

***Statewide Priorities Addressed***

Implement recycling task force recommendations

***Project Number and Name***

No. 40 San Jose Creek Flood Control Improvements

***Project Sponsor***

Santa Barbara County Flood Control District

***Watershed***

South Coast

***Project Description***

The project includes modifications to the San Jose Creek, primarily affecting the tops of the existing banks, in order to increase channel capacity.

***Need for the Project***

Large portions of Old Town Goleta need to be protected from risk of flooding because they are within the San Jose Creek's 100-year flood zone, an area mapped by the Federal Emergency Management Agency as a special flood hazard area.

***Estimated Start and End Date***

2008 through 2011

***Potential Funding Sources***

The City of Goleta is likely to submit this project to the Federal Emergency Management Agency for a Pre-Disaster Mitigation Grant.

***Percent of Matching Funding that Will Be Provided***

10 percent

***Regional and Local Benefits***

This project will provide protection for people, property and the environment from flooding.

***Statewide Priorities Addressed***

Implement floodplain management task force recommendations

