

9 Compliance with Statewide Priorities, Benefits, and Impacts from IRWMP Implementation

This section summarizes the overall compliance of Santa Barbara County’s ongoing and future water management actions with the statewide priorities, describes the overall benefits that will result from the implementation of the IRWMP, as well as the beneficial and adverse impacts that could result from implementing the IRWMP, focusing on the impacts to individual environmental resources from the implementation of specific projects. This section also addresses obstacles to IRWMP implementation.

9.1 Compliance with Statewide Priorities

As described in preceding sections, the issues facing the Santa Barbara countywide region are consistent with those identified as being important to the state; and the project prioritization process considered whether individual projects included in the IRWMP complied with the statewide priorities identified in the state’s Proposition 50 Guidelines. Each statewide priority identified in the Guidelines is shown below in italics, followed by a description of how the IRMWP complies with the priority. In some cases, compliance is occurring through established programs or agreements described in this IRWMP; in others, compliance will occur through the implementation of specific projects.

Reduce conflict between water users or resolve water rights disputes, including interregional water rights issues

After decades of contentious disagreements and litigation, conflicts between water users and water rights disputes are being addressed through a series of agreements, including the Cachuma Project Settlement Agreement, Upper Santa Ynez River Operations Agreement, Wright Suit Settlement, and the Santa Maria Adjudication (Section 3). Development and implementation of projects through the IRWMP will demonstrate the ability of multiple entities to work together effectively in ways that honor the water rights covered by these various agreements.

Implementation of TMDLs that are established or under development

No Total Maximum Daily Loads (TMDLs) are currently in place in Santa Barbara County; however, several are under development, including TMDLs in Santa Maria and Oso Flaco for both nitrates and fecal coliform, Santa Barbara County beaches for bacteria, Santa Maria River for pesticides, and Santa Ynez River for nutrients. Table 2-3 identifies impaired water bodies within the county, and Appendix A identifies scheduled dates for the implementation of specific TMDLs. The Santa Maria River/Oso Flaco, Santa Ynez River, and South Coast Beaches TMDLs Watershed Working Groups Project, described in Section 8, 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 providing input to the TMDL process in these watersheds. Projects that will help address specific water quality impairments are shown in Table 9-1. Additionally, the IRWMP provides a mechanism for developing additional projects to address issues such as water quality concerns in the impaired water bodies.

TABLE 9-1
Projects with Linkages to TMDLs or 303(d) Listed Water Bodies

Project Name	Sponsor	Location	Water Body	Impairment Addressed
Bluffs Sewer Relocation Project	Carpinteria Sanitary District	Eastern portion, City of Carpinteria	Carpinteria Creek, Pacific Ocean	Pathogens (creek) Fecal coliform (ocean) Total coliform (ocean)
Guadalupe Wastewater Treatment Plant Reuse Improvements Project	City of Guadalupe	Western Santa Maria basin	Santa Maria River, Estuary	Proposed TMDLs: Bacteria Nitrate
Braemar Area Sewer Extension	City of Santa Barbara	Calle Real/Hope Avenue area	Arroyo Burro Creek, Pacific Ocean	Pathogens (creek) Total coliform (ocean)
Las Positas Stormwater Management	City of Santa Barbara	Calle Real/Las Positas Road area (golf course)	Arroyo Burro Creek, Pacific Ocean	Pathogens (creek) Total coliform (ocean)
Cuyama Effluent Disposal	Cuyama Community Services District	Cuyama Valley	Tributary to Cuyama River/ Santa Maria River	Proposed TMDLs: Bacteria Nitrate
Jalama Beach Park Septic System Improvements	County Parks Department	Mouth of Jalama Creek	Pacific Ocean at Jalama Creek	Fecal coliform (ocean) Total coliform (ocean)
Watershed working groups (countywide)	Agricultural Watershed Coalition	Countywide	Countywide	Proposed TMDLs: All 303(d) listings
Lompoc Regional Wastewater Reclamation Plant	Vandenberg Village Community Services District	North side, Lompoc basin	Lower Santa Ynez River	Nutrients

Implementation of Regional Water Quality Control Board (RWQCB) Watershed Management Initiative chapters, plans, and policies

The Central Coast Watershed Management Initiative chapter is in the process of being revised, although the Water Quality Priorities have been updated and include the following:

Agriculture - Addressing water quality impacts from irrigated agriculture, a major land use in the region that has been identified as a potential source of impairment for many of the

waterbodies on the 303(d) list (constituents of concern include nutrients, pesticides and sediment) by implementing the conditional waiver for irrigated lands.

In Santa Barbara County, runoff from commercial, irrigated lands is being addressed through the Central Coast RWQCB's Conditional Waiver for Irrigated Lands program, and will be addressed through TMDLs, which are in development (Sections 2 and 5). Groundwater quality impacts from agricultural activities are being addressed through the mobile lab program (Section 5) and the Conditional Waiver program through the implementation of management measures.

TMDLs - Developing and implementing TMDLs throughout the region

See the discussion under TMDLs above.

Urban Runoff - Addressing beach closure issues, implementing Phase II of the National Pollution Discharge Elimination System (NPDES) Storm Water Program.

Urban runoff and beach closure issues are being addressed through Project Clean Water and Storm Water Management Plans developed by Santa Barbara County and individual cities, as well as through programs and educational efforts by local agencies (Section 5). The IRWMP also includes projects to address this issue, including the Las Positas Storm Water Management Project, which will detain and treat urban storm runoff from surrounding urban areas that enters a golf course to improve water quality downstream in Las Positas Creek, the Arroyo Burro Estuary, and Arroyo Burro Beach. Additionally, the Lower Mission Creek Flood Control and Rehabilitation Project will improve urban runoff filtration and the natural treatment of pollutants, and the Old Mission Creek Storm Water Management and Restoration Project will result in the treatment of 700 acres of urban storm water runoff. These projects could help reduce beach closures.

***Implementation of the State Water Resources Control Board (SWRCB)
Nonpoint Source Pollution Plan***

The Nonpoint Source Pollution Plan adopts a number of management measures as goals for six Nonpoint Source Pollution categories (agriculture, forestry, urban areas, marinas and recreational boating, hydromodification, and wetlands/riparian areas/vegetated treatment systems).

In agricultural areas, runoff is being addressed through the Central Coast RWQCB's Conditional Waiver for Irrigated Lands program (Section 5).

Urban runoff and beach closure issues are being addressed through Project Clean Water and Storm Water Management Plans developed by the County and individual cities, as well as through educational efforts by local agencies (Section 5).

Nonpoint Source Pollution in the Los Padres National Forest is addressed by the U.S. Forest Service through its management plan.

Nonpoint Source Pollution in the Santa Barbara marina is addressed through the Clean Marina Program (Section 3).

A number of projects involving the restoration of wetlands and riparian areas are underway in Santa Barbara County, some examples of which are included in Section 2. Additionally, a

number of projects that will improve water quality through wetland restoration are included in this IRWMP, including the El Estero Swale Restoration Project, Lower Mission Creek Flood Control and Rehabilitation Project, and the Old Mission Creek Storm Water Management and Restoration Project.

Assist in meeting Delta Water Quality Objectives

Decision 1641 is an action by the SWRCB to establish water quality objectives for water uses in the Delta. The Bay/Delta Water Quality Control Plan was developed as a means to attain these water quality objectives and includes the following components: implementation of flow objectives for specific water quality criteria in the Bay-Delta Estuary; a petition to change the point of diversion for the Central Valley Project and State Water Project in the southern Delta; and a petition for change in place of use and purpose of use of the Central Valley Project. The potential for actions within Santa Barbara County to assist in achieving these goals is through the increase in the reliability of local water supplies, as will result from a number of projects included in the IRWMP, thereby reducing the potential need for additional imported water supplies from the Bay-Delta region. Projects that will increase water supply reliability include: Santa Ynez River Arundo Eradication; South Coast Conduit 2nd Pipeline; Central Zone Transmission Main; Santa Ynez River Arundo Eradication; South Coast Conduit 2nd Pipeline - Upper Reach; Central Zone Transmission Main; Carpinteria Valley Water District's Recycled Water Feasibility Study; Casmalia Water System Improvements; Regional Water Conservation Rebates, Incentives, and Promotion; Cuyama Water Tower Repair, Goleta Sanitary District's Water Reclamation Facility 2007 Refurbishment Project; Goleta Water District's Aquifer Storage and Recovery (ASR) Well Rehabilitation and Construction, Backwash Tank Replacement at Four Wells, Cathedral Oaks Pipeline Replacement, Corona Del Mar Water Treatment Plant-Sedimentation Basin Effluent Upgrades, Downstream Reservoir Meters, and Interconnect with City of Santa Barbara; La Cumbre Mutual Water Company's Blended Irrigation Project and Iron and Manganese Removal Plant; Santa Maria River/Oso Flaco, Santa Ynez River, and South Coast Beaches TMDLs Watershed Working Groups; and Vandenberg Village's Lompoc Regional Wastewater Reclamation Plant.

Implementation of recommendations of the floodplain management task force

Recommendations include, but are not limited to, floodplain mapping, land use planning in areas affected by flooding, alluvial floodplain management, repetitive loss reduction, and flood warning and local community flood response programs.

Such programs are already in place in Santa Barbara County, and the IRWMP includes additional projects that will enhance flood protection, including the Santa Ynez River Arundo Eradication Project, Lower Mission Creek Flood Control and Rehabilitation Project, Las Vegas and San Pedro Creeks Flood Control Improvements, and Santa Maria Levee Project.

Implementation of recommendations of the desalination task force

Recommendations include use of desalination, where economically and environmentally appropriate, as an element of a balanced water supply portfolio, which also includes conservation and water recycling to the maximum extent practicable.

As discussed in Section 4, the City of Santa Barbara owns a desalination plant, which could be reactivated as needed to supplement ongoing conservation and recycling programs.

Implementation of recommendations of the recycling task force

Recommendations include:

- Local agencies should engage the public in an active dialogue and participation using a community value-based decision-making model in planning water recycling projects. Public participation activities should go beyond the minimum requirements of state and federal environmental laws, perhaps being reinforced by state funding agencies requiring a comprehensive public participation process as a condition for receiving state funds.
- Local agencies should create well-defined recycled water ordinances. Local regulatory agencies should effectively enforce these ordinances.
- Local agencies should maintain strong source control programs and increase public awareness of their importance in reducing pollution and ensuring a safe recycled water supply.
- Local agencies are encouraged to perform economic analyses in addition to financial analyses for water recycling projects to provide transparency regarding the true costs and benefits of projects.

Santa Barbara County has several sources of recycled water (Section 4), and the IRWMP contains several more projects that will enhance use of recycled water, including the Guadalupe Wastewater Treatment Plant Reuse Improvements Project, which will use treated wastewater to provide water to a 20-acre wetland site, and the Water Reclamation Facility 2007 Refurbishment Project, which will provide the infrastructure upgrades needed to ensure a reliable supply of recycled water. Additionally, the IRWMP has resulted in new dialogues between water and wastewater providers within the county (refer to Section 6), and resulting suggestions included performing a market study to determine the potential for using more recycled water.

Implementation of recommendations of the state species recovery plan

Santa Barbara County contains a number of listed species (Section 2), and a number of habitat enhancement projects are ongoing (e.g., those in Carpinteria Marsh, Goleta Slough, Devereux Slough, and Arroyo Burro). The IRWMP contains a number of projects that will enhance habitat in areas containing listed species, including the Santa Ynez River Arundo Eradication Project, Quiota Creek Fish Passage Enhancements Project, Bluffs Sewer Location Project, El Estero Swale Restoration Project, Las Positas Storm Water Management Project, and the Lower Mission Creek Flood Control and Rehabilitation Project.

Address environmental justice concerns

The IRWMP includes four high priority projects that will improve much-needed water and wastewater treatment services in the three disadvantaged communities (DACs) present in Santa Barbara County, thereby addressing environmental justice concerns. The City of Guadalupe has inferior water and wastewater systems that are in need of upgrading. The City of Guadalupe Wastewater Treatment Plant Reuse Improvements Project will improve the quality of wastewater discharge, benefiting the health and safety of community

members, and allowing the treated water to be used for a wetland enhancement project. The community of Casmalia has a critical need for water system improvements that will ensure it has a safe, secure water supply. In December 2006, bacterial contamination of its drinking water resulted in a “boil water” order. The Casmalia Water System Improvements Project will replace deficient infrastructure such as water pipelines and tank facilities, update buildings and facilities to comply with design and code requirements, and make improvements to the existing well facility. Two essential projects also will improve water quality and drinking water in Cuyama. The Wastewater Treatment Plant Effluent Disposal Project will allow Cuyama to avoid mandatory penalties and have its NPDES permit renewed. Additionally, if Cuyama’s 50-year-old water tower is not repaired, it will soon reach the point where it will not function.

Assist in achieving one or more goals of the CALFED Bay-Delta Program

The CALFED Bay-Delta Program objectives focus on water quality, ecosystem quality, water supply reliability, and levee system integrity in the Bay-Delta area. The potential for actions within Santa Barbara County to assist in achieving these goals is through the increase in the reliability of local water supplies, as will result from a number of projects included in the IRWMP, thereby reducing the potential need for additional imported water supplies from the Bay-Delta region. Projects that will increase water supply reliability are described under “Assist in meeting Delta Water Quality Objectives.”

9.2 Overall Benefits of the IRWMP

9.2.1 Projects that Address Specific Regional Issues and Challenges

The key issues and challenges facing Santa Barbara County were identified by the Cooperating Partners through the IRWMP process, and they are reflected in the objectives, regional priorities, and water management strategies identified in this plan. Projects that met these objectives and regional priorities were then developed using a variety of water management strategies. Example projects are shown in Tables 8-1 and 8-2, and the complete list of highest priority projects is shown in Table 8-3. The plan also includes an adaptive management element, described in Section 10, which outlines a process for modifying and developing new projects to reflect changing regional needs.

9.2.2 Projects that Are Consistent with State of California Program Preferences

The benefits of the IRWMP also are demonstrated by the following discussion, which shows the consistency of the plan with the program preferences established by the state.

Include Integrated Projects with Multiple Benefits

Integration can occur through multiple means, as discussed below.

Integration through Use of Multiple Water Management Strategies

The integration between the IRWMP’s water management strategies, regional objectives, and regional priorities, and the multiple benefits that result from such an approach are discussed in Section 7. As shown in Table 8-4 and Tables D-1 through D-5 in Appendix D, the highest priority projects and the entire suite of projects included in the IRWMP use a

wide range of water management strategies to achieve the plan objectives and meet regional priorities, thus, resulting in an inherently integrated plan.

Integration through Use of the Same Water Management Strategies

Other ways of achieving integration are through the implementation of multiple projects using the same water management strategy. For example, several IRWMP projects will enhance recycled water supplies, and thereby countywide water supply reliability (Guadalupe Wastewater Treatment Reuse Improvements; Regional Water Conservation Rebates, Incentives, and Promotion; Water Reclamation Facility 2007 Refurbishment). Additionally, a number will remove invasive weeds, remove barriers to fish passage, and restore riparian areas (Santa Ynez River *Arundo* Eradication, Lower Mission Creek Flood Control and Rehabilitation, Old Mission Creek Storm Water Management and Restoration, Quiota Creek, Fish Passage Enhancements). Together they contribute to a greater benefit to the affected resources than if they were implemented in isolation.

Integration Resulting from Projects with Multiple Benefits

Additionally, most projects included in the IRWMP have multiple regional and local benefits (Section 8), and each project is therefore integrated through the linkage of resources that will benefit from its implementation. For example, eradicating *Arundo donax* and *Tamarix spp.* along the Santa Ynez River will reduce the risk of flooding, erosion, and fire, and increase biodiversity, improve water quality, minimize water consumption, and increase groundwater availability, improve soil chemistry, and improve river access for recreational users. The Quiota Creek Fish Passage project, for example, will improve riparian and riverine environments along 1.3 miles of stream channel and improve 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, and 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.

Integration with Other Projects Not in the IRWMP

Integration also occurs through linkage with other projects, including those that are not part of the Plan. For example, several IRMWP projects will benefit Arroyo Burro and Goleta Slough and will complement other restoration projects in those areas. Mission Creek, which runs through downtown Santa Barbara, also represents a prime opportunity to integrate the goals of flood control, habitat enhancement, and recreational opportunities, as well as complement other ongoing creek improvements, both upstream and downstream. After years of debate, planning, and design, the Lower Mission Creek Flood Control and Restoration Project is ready to move ahead, and will address a 1.3-mile length of Lower Mission Creek. It will be a multiphase project designed to increase the carrying capacity of the creek from an 8-year event to a 20-year event, remove concrete channels, create a wider channel and natural streambed features for bank stabilization, replace several bridges, improve creek water quality, and remove invasive and non-native vegetation. Habitat and fish passage for several endangered species (southern steelhead trout and tidewater goby) will be enhanced as a result of the project, while also reducing the potential for severe flooding, which occurred in the downtown area in 1995 and 2005. The project has integrated

a variety of funding sources, including federal highway grants, County Flood Control assessments, City street repair funds, and potential Army Corps of Engineer funding.

Integration with Other Management Plans and Programs

The IRWMP is also integrated through linkage with other Santa Barbara County water management plans and programs described in Section 3, including General Plans, Urban Water Management Plans, Storm Water Management Plans, Water Shortage Contingency Plans, Capital Improvement Plans, and Operations Agreements, as well as weed management programs. The IRWMP contains projects and strategies that are either specifically included in these plans or that help meet the Plan goals and objectives. As an example, the projects that will remove fish barriers from local creeks (the Quiota Creek Fish Passage Project, Bluffs Sewer Relocation Project) are part of a watershed-scale planning effort to improve steelhead habitat throughout Santa Barbara County.

Geographic Integration

Integration also can occur geographically; for example, multiple projects have been included in the IRWMP that will increase tidal circulation and reduce storm water discharges into Goleta Slough, which is a 303(d) impaired water body. Other projects will benefit riparian areas within Carpinteria or the City of Santa Barbara.

System Integration

IRWMP projects sponsored by individual agencies also are integrated through their role in the overall system of which they are a part. For example, the Central Zone Transmission Main Project will complete the Carpinteria Valley Water District water treatment and distribution system, allowing it to comply with state and federal health standards, while providing redundancy to the system. The South Coast Conduit 2nd Pipeline Project also is an essential element of the Cachuma Operation and Maintenance Board system and is needed to improve the South Coast Conduit reliability, redundancy, and capacity to ensure the ability of the conduit to meet the current and future water demand requirements of the South Coast communities. The improvements to water systems in the DACs (Casmalia, Cuyama, and the City of Guadalupe) are critical elements needed to ensure that these communities have safe and reliable water and wastewater systems.

Integration through Interagency Cooperation

Integration also can occur through cooperative efforts between agencies, as exemplified by the Goleta Water District and City of Santa Barbara Interconnect Project, which will provide the ability to supply water from one agency to the other during big peak demands and emergencies. Additionally, the Central Zone Transmission Main and ASR Demonstration Well Project will provide a means to supply water to the southern (downstream) communities of the South Coast Conduit reach in the event its capacity is reached or interrupted. This project will further increase the water supply reliability of the South Coast Conduit system.

Support and Improve Local and Regional Water Supply Reliability

The IRWMP includes a number of projects that will improve water supply reliability. For example, the South Coast Conduit 2nd Pipeline Project will improve the reliability, integrity, and capacity of the Conduit, which is essential to the delivery of water supplies to the current and future population of the South Coast. As noted immediately above, the Central Zone Transmission Main and ASR Demonstration Well Project will further increase the

water supply reliability of the South Coast Conduit system. Other projects will improve treatment and distribution systems, allowing them to comply with state and federal health standards, while increasing reliability. Operation of the Santa Barbara County Regional Water Conservation Program, which increases reliability of water supplies through a reduction in water consumption, also is included as a project. Specific projects that will improve water supply reliability are listed above under “Assist in meeting Delta Water Quality Objectives.”

Contribute Expeditiously and Measurably to the Long-term Attainment and Maintenance of Water Quality Standards

Several projects meet this program preference. One IRWMP 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. Other projects will provide infrastructure improvements that allow water and wastewater purveyors to meet regulatory standards (Central Zone Transmission Main and ASR Demonstration Well, Casmalia Water System Improvements, Corona Del Mar Water Treatment Plant – Sedimentation Basin Effluent Upgrades, Vandenberg Village Lompoc Regional Wastewater Reclamation Plant). Another project involves groundwater assessment testing and development of a Corrective Action Plan (Elings Park Solid Waste Assessment Test-Corrective Action Plan).

Eliminate or Significantly Reduce Pollution in Impaired Waters and Sensitive Habitat Areas, Including Areas of Special Biological Significance

The IRWMP includes a number of infrastructure projects that will reduce pollution in sensitive habitat areas by relocating infrastructure that has previously discharged sewage into those areas; other projects will improve discharges to Goleta Slough, a 303(d) listed water body. The plan also includes a number of habitat restoration projects and creek rehabilitation projects that will improve water quality.

Include Safe Drinking Water and Water Quality Projects that Serve Disadvantaged Communities

The IRWMP includes four high priority projects that will serve DACs. The community of Casmalia has a critical need for the water system improvements that will ensure that it has a safe, secure water supply. The City of Guadalupe Wastewater Treatment Plant Reuse Improvements Project will improve the quality of wastewater discharge, benefiting the health and safety of community members, and allowing the treated water to be used for a wetland enhancement project. Two essential projects also will improve water quality and drinking water in Cuyama. The Wastewater Treatment Plant Effluent Disposal Project will allow Cuyama to avoid mandatory penalties and have its NPDES permit renewed. Additionally, if Cuyama’s 50-year-old water tower is not repaired, it will soon reach the point where it will not function.

Include Groundwater Management and Recharge Projects

Several long-term projects are included in the plan, including the Vandenberg Village Community Services District Lompoc Groundwater Basin Recharge Study, and the Central Coast Water Authority Groundwater Banking Opportunities Study, which will identify agencies that may benefit from a groundwater banking program both within the Water Authority service area and in the central valley of California. The study also will identify and prioritize benefits, risks, and costs associated with several scenarios. The Water Authority also submitted a project for the design and construction of a groundwater bank

near the Polonio Pass Water Treatment Plant in San Luis Obispo County. This plan will be dependent on the results of the recently initiated Paso Robles Groundwater Basin Water Banking feasibility study and additional studies yet to be determined. In most years, several thousand acre-feet of State Water Project water are lost because they cannot be taken into storage. This study will identify mechanisms to better utilize State Water Project water supplies and maintain reserves for use during droughts. Another project submitted, the Central Zone Transmission Main and ASR Demonstration Well Project will be a first step in evaluating and demonstrating the viability of artificial recharge in a local groundwater basin using treated surface water, which may lead to a regional groundwater banking program within the South Coast area.

9.2.3 Beneficiaries of IRWMP Implementation

The projects included in this IRWMP will benefit the residents of Santa Barbara County as a whole, as well as those residing in specific watersheds. The disadvantaged communities of Casmalia, Cuyama, and Guadalupe will benefit from the implementation of four water and wastewater projects that will ensure that service is provided in a manner that meets regulatory requirements and protects public health. As shown in Tables 8-3 and 8-4, the highest priority projects will directly address those issues of the most pressing concern in Santa Barbara County, and residents will benefit from the improved ability to manage water resources, including specific improvements in water supply reliability, ecosystem restoration, water quality, emergency preparedness, and the strategic rehabilitation and replacement of aging infrastructure. Additionally, the IRMWP provides a mechanism for ongoing coordination between those entities that manage water resources, as well as for the identification of additional projects in the future to address water resources concerns. These factors will result in more efficient water management planning, benefiting all county residents.

9.3 Resource-specific Impacts

Each project included in the IRWMP is required to undergo the appropriate level of review under the California Environmental Quality Act (CEQA) and where there is federal involvement, the National Environmental Policy Act (NEPA). Mitigation measures for significant environmental impacts will be developed at that time, as needed, and projects also will be required to obtain permits including conditions that will minimize impacts. Opportunities for public comment on project impacts will be provided as part of the CEQA/NEPA process.

The following is a preliminary overview of the types of impacts that could occur from the implementation of the projects included in this IRWMP. The project evaluation criteria include “lack of significant long-term adverse impacts, including impacts to agriculture,” and based on the preliminary evaluation performed, most projects are not expected to result in long-term adverse impacts. Adverse impacts generally would be short-term, resulting from construction activities, while long-term impacts generally are expected to be beneficial, because sensitive habitats, including habitats for sensitive species, would be enhanced; surface and groundwater quality would be improved; water supply reliability would be increased; flood protection would be increased; and the ability to provide water during emergencies would be enhanced.

9.3.1 Aesthetic/Visual Resources

Overall, impacts from plan implementation will be beneficial, because a number of projects will restore degraded areas. Most infrastructure improvements will be located in already developed areas and will not contribute to an adverse impact to visual resources. Areas disturbed by pipeline construction will be required to be revegetated; thus, no long-term visual impacts will occur.

9.3.2 Agricultural Resources

The IRWMP will not result in adverse impacts to agricultural resources; projects will not result in the loss of agricultural lands, nor will agricultural water supplies be adversely affected.

9.3.3 Air Quality

Short-term air quality impacts will result from construction, but contractors will have to comply with the County Air Pollution Control District's requirements, which will minimize impacts. No long-term air quality impacts are expected.

9.3.4 Biological Resources

Short-term impacts to some biological resources could occur during construction activities, but it is anticipated that they could be mitigated through measures such as scheduling construction to avoid breeding seasons, use of best management practices and other standard measures. Overall, the IRWMP will result in beneficial impacts to biological resources because it includes a number of habitat restoration projects, including the removal of barriers to steelhead passage and weed eradication projects. It also includes a number of infrastructure projects that will result in reduced risks from sewage spills and maintenance activities in environmentally sensitive areas.

9.3.5 Cultural Resources

Impacts to cultural resources could occur during construction, but it is anticipated that they could be mitigated through standard measures, such as conducting site record searches and surveys prior to construction, monitoring sensitive areas, avoiding known sites, and data recovery.

9.3.6 Environmental Justice/Disadvantaged Communities

The IRWMP includes four high priority projects that will improve much-needed water and wastewater treatment services in the three disadvantaged communities (DACs) present in Santa Barbara County, thereby addressing environmental justice concerns. The City of Guadalupe has inferior water and wastewater systems that are in need of upgrading. The City of Guadalupe Wastewater Treatment Plant Reuse Improvements Project will improve the quality of wastewater discharge, benefiting the health and safety of community members, and allowing the treated water to be used for a wetland enhancement project. The community of Casmalia has a critical need for the water system improvements that will ensure that it has a safe, secure water supply. In December 2006, bacterial contamination of its drinking water resulted in a "boil water" order. The Casmalia Water System Improvements Project will replace deficient infrastructure such as water pipelines and tank

facilities, update buildings and facilities to comply with design and code requirements, and make improvements to the existing well facility. Two essential projects also will improve water quality and drinking water in Cuyama. The Wastewater Treatment Plant Effluent Disposal Project will allow Cuyama to avoid mandatory penalties and have its NPDES permit renewed. Additionally, if Cuyama's 50-year-old water tower is not repaired, it will soon reach the point where it will not function.

9.3.7 Geology and Soils

All construction will be required to comply with the appropriate engineering standards given the soils and seismic hazards present at each construction site, which will mitigate impacts to geology and soils.

9.3.8 Hazards and Hazardous Materials

Construction could potentially result in spills of hazardous materials (for example, fuels, oils, and lubricants), but these impacts could be mitigated through the use of best management practices. Facilities, such as water and wastewater treatment facilities, use hazardous materials, but they will be used in accordance with all regulatory requirements, which will mitigate any potential impacts.

9.3.9 Hydrology and Water Quality

Overall, impacts to hydrology and water quality will be beneficial, because a number of IRMWP projects will improve groundwater, surface water, or drinking water quality. Additionally, the IRMWP contains a number of projects that will improve flood control and enhance the production and use of recycled water. Some include habitat restoration elements, which will have beneficial impacts to biological resources; others will enhance flood protection by adding improvements to areas that have already been modified.

9.3.10 Land Use and Planning

No significant land use changes or inconsistencies with policies are anticipated.

9.3.11 Noise

Noise will be limited to short-term construction activities, and impacts will be reduced through adherence to local restrictions on hours of construction.

9.3.12 Population and Housing

No impacts to housing will occur. The IRWMP will increase the reliability of supplies needed to serve the projected population growth.

9.3.13 Public Services

Public services (for example, fire and police protection) will not be adversely affected by the IRWMP. Beneficial impacts to fire protection will occur to the extent that the reliability of water supplies is enhanced, redundant systems are developed, and water supplies are available at the appropriate pressure.

9.3.14 Recreation

The IRWMP will have an overall beneficial impact to recreation by improving water quality at local beaches (for example, Arroyo Burro, Goleta Beach) and by providing irrigation water for parks; TMDLs will also improve water quality at recreational areas.

9.3.15 Transportation and Circulation

Transportation impacts will be limited to short-term impacts from construction activities.

9.3.16 Utilities/Service Systems

Beneficial impacts to water and wastewater treatment, water supplies, and storm water management will result from the implementation of IRWMP projects. Conversion of septic systems to sewer systems and other projects will benefit water quality, as will the enhancement of water and wastewater treatment processes. Storm water management will be enhanced through the projects that will improve the region's ability to manage urban runoff.

9.4 Possible Obstacles to IRWMP Implementation

Implementation of the IRWMP could face several potential obstacles. The lack of grant funding from Proposition 50 would be a significant obstacle. Those agencies included in the Santa Barbara countywide team believe that with the completion of the IRWMP in late May 2007, the region will be in a good position to compete for Proposition 50 Round 2 funding. The region is optimistic that most of the Cooperating Partners and other organizations will support the adoption of the IRWMP and that this will not become an obstacle to state agency support of the region's Proposition 50, Round 2, Step 1 application.

Lack of agreement among the Cooperating Partners on a number of issues could become an obstacle. However, to date, the Cooperating Partners have been able to resolve all challenges, including differing priorities and objectives, with full consensus. The Cooperating Partners are meeting regularly to develop a future governance structure; prepare for the administrative and consulting support needed to prepare the Proposition 50 application; keep up regular outreach; and to develop the necessary supporting information for a successful grant application.

Public stakeholders have participated throughout the IRWMP development process. All Cooperating Partner meetings have been open to the public; a series of eight public stakeholder meetings were expressly organized to reach out to the public; the public review period for the draft IRWMP exceeded that mandated by the state; and information has been made available to the public through the IRWMP Web site. The Cooperating Partners hope to further increase public participation as the IRWMP process grows and matures. Lack of participation by key public organizations could be an obstacle to truly integrated solutions to regional challenges.

Once the final list of projects is selected for the Proposition 50 Round 2 process, there could be disagreement over the inclusion of certain types of projects. For example, a project supported by one agency may not find the same level of support from some members of the environmental community or permitting agencies. If not resolved, this could present a

potential obstacle to implementation of the IRWMP. In order to avoid this potential problem, public input will be obtained prior to selecting projects to be included in grant applications. The public and agencies will have an opportunity to comment on individual projects during their environmental review and permitting processes, and opportunities will be available during this time to modify the projects to avoid or minimize impacts to the environment.

9.5 Ongoing Support and Financing

Potential sources of financing for each Tier I project are described in Chapter 8. Each implementing agency will be responsible for obtaining funding for its own projects, including funding for operation and maintenance of those projects requiring construction. Projects that do not require construction, such as studies and working groups, will not require ongoing operation or maintenance. However, recommendations and related work flowing from these studies will be the responsibility of the agencies identified throughout the studies.

9.6 The IRWMP's Role in Future Planning Efforts

As an added benefit, development of the IRWMP has served as a catalyst for discussions between the Cooperating Partners and other stakeholders regarding ways to increase integrated water resource management planning within Santa Barbara County. Some of these discussions led to some of the projects included in this plan; others resulted in the identification of issues and needs to be further explored in the future through the cooperative structure established by the IRWMP. The IRWMP will also serve as a mechanism for further evaluation of regional issues and the means to resolve those issues through the adaptive management process outlined in Section 8. Issues currently under consideration include:

- The need to conduct a market analysis to determine if there is sufficient additional demand for recycled water, requiring the capacity of existing facilities to be more fully utilized or expanded along with expansion of distribution systems.
- The need to rethink ways of co-managing improvements in water quality, environmental protection, and food safety during crop production. Food safety issues associated with food-borne E. coli outbreaks from the consumption of leafy greens has created an apparent conflict between water quality management practices and food safety/good agricultural practices.
- Consideration of the use of the City of Santa Barbara's desalination facility; in the event of a drought, it could be further utilized under an inter-regional partnership where areas with significant groundwater resources fund operation of desalination facility and exchange for State Water Project water during wet years (allowing recharge of basins), with desalination capacity reserved for South Coast use during droughts.
- The need to develop additional water resources and better integrate adjacent water system infrastructure in the Santa Ynez watershed, including infrastructure serving the

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- Ways of improving the effectiveness of water conservation programs:
 - How to evaluate the effectiveness of existing water conservation programs
 - How to improve educational outreach programs, especially for high schools
 - How to develop more effective water conservation programs for the commercial/industrial sector
 - How to coordinate with the state's emphasis on water conservation through landscape-related programs
 - How to incorporate water conservation measures into new residential and commercial development
- The need to review groundwater data in the County archives to determine groundwater quality trends in several watersheds (e.g., Santa Maria, Santa Ynez, and Carpinteria).

