Section L. Statewide Priorities

IRWM Plan Standard:
"Identify statewide or State agency priorities that will be met or contributed to by implementation of the Plan, proposal, or specific projects. Describe how the Plan, proposal, or specific projects were developed pursuant to Statewide Priorities."

This San Luis Region Integrated Regional Water Management (IRWM) Plan promotes coordination with state wide water planning efforts (i.e. California Water Plan) by seeking to align the regional roadmap for achieving sustainable water resource management with the State's Roadmap to 2030. Consideration of all statewide priorities, along with regional issues and priorities was integral to the development of the IRWMP mission, goals, objectives, and project strategies. This section demonstrates how the IRWMP programs support statewide priorities.

This section also identifies the disadvantaged communities in the region, discusses the specific critical water-related needs of disadvantaged communities, discusses the mechanisms used in development of the Plan to ensure participation of disadvantaged communities, identifies the water-related Environmental Justice concerns for the Region, and discusses the mechanisms used in development of the Plan to ensure that implementation of the Plan addresses Environmental Justice concerns.

Statewide priorities address recognized water supply, water quality, and environmental issues for California. As defined in the Integrated Regional Water Management Grant Program Guidelines, the statewide priorities are as follows:

1. Reduce conflict between water users or resolve water rights disputes, including interregional water rights issues.
2. Implementation of TMDLs that are established or under development.
3. Implementation of RWQCB Watershed Management Initiative (WMI) Chapters, plans, and policies.
4. Implementation of the SWRCB's NPS Plan.
5. Assist in meeting Delta Water Quality Objectives.
6. Implementation of the recommendations of the floodplain management task force, desalination task force, recycling task force, or state species recovery plan.
7. Address environmental justice concerns.
8. Assist in achieving one or more goals of the CALFED Bay-Delta Program (combined with priority 5).

Each of the statewide priorities, how the San Luis Obispo IRWMP and projects meet or contribute to the priorities, and how the IRWMP and projects were developed pursuant to the statewide priorities is described below.

L1. Reduce conflict between water users or resolve water rights disputes, including interregional water rights issues

Water management conflicts arise where inconsistencies between proposed water management strategies and watershed objectives exist. Recognizing these inconsistencies is a step toward cooperative planning that will aid in the prioritization of integrated water management strategies for the region and will allow the stakeholders to minimize and resolve potential conflicts. Major water related conflicts in the San Luis Obispo region are associated with groundwater supply and use, groundwater quality, and beneficial uses of water resources.

Over 80% of the water use in the San Luis Obispo region is from groundwater. This significant pumping of the basin has led to overdraft conditions, impaired groundwater quality, and conflicts amongst water users. The IRWMP Groundwater Monitoring and Management Program goals and objectives were developed in recognition of this conflict:

- Develop monitoring and reporting programs for groundwater basins in the region.
- Evaluate and consider Groundwater Banking Programs.
- Protect and improve groundwater quality from point and non-point source pollution, including nitrate contamination; MTBE and other industrial, agricultural, and commercial sources of contamination; naturally occurring mineralization, boron, radionuclide, geothermal contamination; and seawater intrusion and salts.
- Conduct public education and outreach about ground water protection.
- Identify areas of known or expected conflicts and target stakeholders on specific actions that they should take to help protect groundwater basin quality and supply.
- Recharge ground water with high quality water.

Over the past several years, the region has completed studies and projects that will help alleviate these conflicts, including:

- Prepared the Paso Robles Groundwater Basin Analysis
- Party to litigation of the Santa Maria Groundwater Basin
- Initiated the implementation of the Nacimiento Water Project
- Embarked on several other water and wastewater quality projects
- Prepared the Arroyo Grande Habitat Conservation Plan
- Updated local policies on the State Water Project
- Embarking on feasibility analysis for groundwater banking
- Supported the independent efforts of autonomous agencies, such as the Nipomo Community Services District's Nipomo Supplemental Water Project.

Several high ranking IRWMP projects help alleviate this groundwater conflict to some degree, as listed in Table L1.1. The projects with the greatest degree of benefit are highlighted and discussed further.

Table L1.1: High-Ranking Projects with Groundwater Conflict Reduction Benefits

Project	Conflict Reduction Benefit
Los Osos Wastewater Project	Provides high quality effluent to mitigate existing water quality impacts and creates disposal/recharge capabilities and mitigates existing adjudication/litigation.
Master Water Plan	Develops strategy to share water resources regionally and implement inter-agency projects that could help reduce groundwater use conflicts.
Desalination Study	Evaluates desalination opportunities in the region, potentially reducing the demand from the groundwater basin.
Paso Robles Reclamation and Recharge Program	Increases recycled water use opportunities, potentially reducing the demand from the groundwater basin.
San Luis Obispo Reclamation Facility Upgrade	Increases recycled water use opportunities, potentially reducing the demand from the groundwater basin.
Morro Bay Desalination Facility Upgrade	Enhances desalination facility, potentially increasing the supply and reducing the demand from the groundwater basin.
Nipomo CSD Supplemental Water Project	Transfers supplemental water from one basin and transfers to an overdrafted groundwater basin, directly reducing groundwater conflicts.
Nacimiento Water Project	Optimizes the use of existing supplies and expands the region of project benefit, reducing the demand from the groundwater basin.
Morro Bay Wastewater Treatment Facility Upgrade	Increases recycled water use opportunities, potentially reducing the demand from the groundwater basin.
Southland Wastewater Treatment Facility Upgrade	Increases recycled water use opportunities, potentially reducing the demand from the groundwater basin.
South San Luis Obispo County Sanitation District Facility Upgrade	Increases recycled water use opportunities, potentially reducing the demand from the groundwater basin.
Nipomo CSD Salt Management Program	Implements salt management projects that will protect the groundwater quality and maintain beneficial uses.
San Simeon Wastewater Treatment Facility Upgrade	Increases recycled water use opportunities, potentially reducing the demand from the groundwater basin.
Chorro and Morro Groundwater Basin Management Plans	Evaluates groundwater conjunctive use opportunities, safely utilizing the basin yield and reducing conflicts
Groundwater Recharge Optimization Program	Evaluates groundwater recharge opportunities that can enhance the sustainable yield of the groundwater basin and reduce conflicts.
Groundwater Management Ordinance Study	Implements ordinance to protect groundwater quality and maintain beneficial uses.
Edna Valley Groundwater Basin Study	Evaluates safe basin yield and potential groundwater recharge and conjunctive use opportunities, safely utilizing the basin and reducing conflicts.

From a regional perspective, the status of overall water supplies within the San Luis Region and their ability to meet projected demand over the next 20 years has improved dramatically with the 2004 decisions to implement the Nacimiento Water Project and with initiation of the Nipomo Supplemental Water Project.

The implementation of the Nacimiento Water Project for the region's long-term resource sustainability cannot be understated. The project will provide the capability to convey 15,750 acre feet of water per year from the existing reservoir to North County communities and south of the Cuesta Grade on State Highway 101 to the City of San Luis Obispo. The pipeline will intersect with two of the region's other major surface water supplies (State Water and Santa Margarita Lake Water); thereby opening the door to future groundwater banking and conjunctive use programs.

The NWP benefits go further. Since only about 60% of the supply is committed to contracting parties, its capacity will meet additional supply reliability needs far into the future. In the meanwhile, groundwater banking and recharge opportunities and other conjunctive use possibilities can be researched and reviewed.

The Nipomo CSD will be constructing treatment facilities and a pipeline to transfer 3,000 to 6,200 acre feet of supplemental water per year from the Santa Maria Basin to resolve overdraft of groundwater in the Nipomo Mesa Groundwater Management Area. This project integrates water supply reliability and groundwater management strategies through inter-agency cooperation and will significantly reduce groundwater conflicts.

The Los Osos Wastewater Project will help resolve existing groundwater litigation and sea water intrusion. The current litigation is between the community's three water purveyors and the County, but not the agricultural and other rural pumpers. It is hoped that resolution of the wastewater project and related water supply enhancements will provide the opportunity to avoid further litigation and/or the need to engage more parties into the existing litigation.

Implementation of the IRWMP will result in a reduction in current and future conflicts over groundwater rights. Through the IRWMP collaborative efforts, it is envisioned that the stakeholder process will bring together conflicting parties, foster conflict understanding and discussion, provide a forum for conflict resolution, build consensus, and identify mutually beneficial strategies. Ultimately, the hope is to mitigate conflict to the extent practicable while optimizing the potential for integrated strategies with multiple benefits. Resolution of conflicts will be a critical task in the implementation of the IRWMP.

L2. Implementation of TMDLs that are established or under development

The following IRWMP Water Quality Program objectives were developed partly in response to TMDLs established for the San Luis Obispo region.

- Protect and improve source water quality.

- Meet all federal and state drinking water standards.
- Support the development and implementation of TMDLs.
- Comply with new waste discharge requirements.

Pollutants of concern in the San Luis Obispo region, as listed on the 2002 California Water Act Section 303(d) List of Water Quality Limited Segments, are shown in Table L2.1.

Table L2.1: 303(d) Listed Waterbodies and TMDL Priority

Waterbody	Pollutant	TMDL Priority	Potential Sources
Atascadero Creek	Fecal Coliform	Low	• Unknown
	Low Dissolved Oxygen	Low	• Unknown
Cholame Creek	Boron	Low	• Unknown
Chorro Creek	Fecal Coliform	Low	• Unknown
	Nutrients	High	• Municipal Point Sources • Agriculture • Irrigated Crop Production • Agricultural storm runoff
	Sedimentation/Siltation	High	• Agriculture • Irrigated Crop Production • Range grazing – riparian and/or upland • Agricultural storm runoff • Construction/Land Development • Road Construction • Resource extraction • Hydromodification • Channelization • Streambank modification/destabilization • Channel erosion • Erosion/siltation • Natural sources • Golf course activities • Nonpoint source
Chumash Creek	Fecal Coliform	Low	• Source unknown
	Low Dissolved Oxygen	Low	• Natural Sources
Dairy Creek	Fecal Coliform	Low	• Unknown
	Low Dissolved Oxygen	Low	• Unknown
Las Tablas Creek	Metals	High	• Surface Mining
Los Osos Creek	Fecal Coliform	Low	• Source Unknown
	Low Dissolved Oxygen	Low	• Agriculture • Pasture grazing – riparian and/or upland • Urban runoff/storm sewers • Natural Sources
	Nutrients	High	• Agriculture • Irrigated crop production • Agricultural storm runoff • Agricultural return flows
	Sedimentation/Siltation	High	• Agriculture • Irrigated Crop Production • Range Grazing – riparian and/or upland • Agricultural storm runoff • Hydromodification • Channelization • Dredging

Waterbody	Pollutant	TMDL Priority	Potential Sources
			• Habitat modification • Removal of riparian vegetation • Streambank modification/destabilization • Channel erosion • Erosion/Siltation • Natural Sources • Nonpoint Source
Morro Bay	Metals	Medium	• Surface mining • Nonpoint Source • Boat Discharges/Vessel Wastes
	Pathogens	High	• Range Grazing – upland • Urban Runoff/Storm sewers • Septage disposal • Natural Sources • Nonpoint Source
	Sedimentation/Siltation	High	• Agriculture • Irrigated Crop Production • Construction/Land Development • Resource Extraction • Channelization • Channel Erosion
Nacimiento Reservoir	Metals	High	• Surface Mining • Natural Sources
Nipomo Creek	Fecal Coliform	Low	• Agriculture • Urban Runoff/Storm Sewers • Natural Sources
Oso Flaco Creek	Fecal Coliform	Low	• Source Unknown
	Nitrate	Low	• Source Unknown
	Nitrate	Low	• Agriculture • Nonpoint Source
Pennington Creek	Fecal Coliform	Low	• Source Unknown
Salinas River - upper	Chloride	Low	• Agriculture • Pasture Grazing – riparian and/or upland • Urban Runoff/Storm Sewers
	Sodium	Low	• Agriculture • Pasture Grazing – riparian and/or upland • Urban Runoff/Storm Sewers
San Bernardo Creek	Fecal Coliform	Low	• Source Unknown
San Luis Obispo Creek	Nutrients	High	• Municipal Point Sources • Agriculture • Irrigated Crop Production • Agricultural storm runoff
	Pathogens	High	• Source Unknown
	Priority Organics	High	• Source Unknown
San Luisito Creek	Fecal Coliform	Low	• Source Unknown
Santa Maria River	Fecal Coliform	Low	• Agriculture • Pasture Grazing – riparian and/or upland • Urban Runoff/Storm Sewers • Natural Sources
	Nitrate	Low	• Agriculture • Pasture Grazing – riparian and/or upland • Urban Runoff/Storm Sewers

Waterbody	Pollutant	TMDL Priority	Potential Sources
Walters Creek	Fecal Coliform	Low	• Source Unknown
Warden Creek	Fecal Coliform	Low	• Source Unknown
	Low Dissolved Oxygen	Low	• Source Unknown

The IRWMP Water Quality Program will directly assist in implementing TMDLs through the implementation of a number of projects, as listed in Table L2.2

Table L2.2: High-Ranking Projects with TMDL Benefits

Project	TMDL Benefit
Nacimiento Water Project	The Salinas River is CWA 303(d) listed for sodium and chloride and a TMDL will be developed. This project improves Paso Robles WWTP discharge by lowering TDS, sodium and chloride in the influent waters.
San Luis Obispo Reclamation Facility Upgrade	Aids in meeting all TMDLs for San Luis Creek.
Los Osos Community Wastewater Project	Assists in the implementation of the Morro Bay TMDL for Pathogens, a high priority TMDL.
Morro Bay Wastewater Treatment Facility Upgrade	Aids in meeting nutrient and pathogen TMDLs for Morro Bay.
Southland Wastewater Treatment Facility Upgrade	Aids in meeting nutrient TMDL for Nipomo Creek.
South San Luis Obispo County Sanitation District Facility Upgrade	Aids in meeting nutrient TMDL for the Pacific Ocean.
San Simeon Wastewater Treatment Facility Upgrade	Aids in meeting nutrient and pathogen TMDLs for the Pacific Ocean.
Morro Bay NPDES Illicit Discharge Detection and Elimination Ordinance	Aids in meeting metals TMDL for Morro Bay.
Morro Bay Estuary Comprehensive Conservation and Management Plan	Aids in meeting all TMDLs for Morro Bay.
Flood Control Zone 1/1A Waterway Management Plan	Aids in meeting sediment TMDL for Morro Bay.
Flood Control Zone 9 Waterway Management Program	Aids in meeting sediment TMDL for Morro Bay.

L3. Implementation of RWQCB WMI Chapter, plans and policies

The RWQCB's Water Management Initiative Chapter (WMI) establishes funding priorities for each of the region's targeted watersheds and the region as a whole. The 2004 update of the WMI lists seven categories of activities and associated priorities for the RWQCB:

1) Agriculture: Addressing water quality impacts of irrigated agriculture;
2) TMDLs: Developing and implementing TMDLs throughout the region;
3) Urban Runoff: Addressing urban runoff that causes beach closures and implementing Phase II of the NPDES Stormwater Program;

4) Point Source Regulation: Streamlining point-source permit writing, renewals, and several existing Waste Discharge Requirements and performing inspections;
5) Basin Planning: Developing riparian corridor policies and reviewing and developing water quality objectives;
6) Monitoring: Maintaining the Central Coast Ambient Monitoring Program and integrating data from the agricultural cooperative monitoring program; and
7) Clean Up: Overseeing clean-up of perchlorate, MTBE, military bases, hazardous waste, and underground storage tanks

Two of the ten targeted Region 3 watersheds are in the San Luis Obispo region, Morro Bay and San Luis Obispo. The priority watersheds were selected because of significant water quality problems. The WMI provides a list of specific targeted projects and activities that support some of these priorities for Region 3 and for the San Luis Obispo region as shown in Table L3.1. Several IRWMP water quality objectives and high ranking projects support the WMI targets, as described in Table L3.2.

Table L3.1: RWQCB WMI Targeted Projects and Activities

Watershed	Targeted Projects and Activities
Region-wide	1. Projects that support implementation of the Conditional Waiver for Irrigated Lands ("agricultural waiver"), including a. Projects that support implementation of the Cooperative Monitoring Program b. Projects that support development and implementation of farm water quality management plans for irrigated operations to address irrigation management, nutrient management, pesticide management and erosion control c. Projects that implement and test the effectiveness of management practices 2. Projects that implement approved or developed TMDLs 3. Projects that support development of scheduled TMDLs
Morro Bay	1. Projects that support agricultural waiver implementation (monitoring, education, BMP implementation). 2. Projects that support sediment TMDL implementation (sediment reduction from urban runoff, roads, agriculture and grazing) 3. Projects that support pathogen TMDL implementation (pathogen reduction from boats, pets, urban runoff, agriculture and grazing). 4. Projects that support land acquisition for watershed/water quality riparian and wetland protection and restoration.
San Luis Obispo	1. Projects that support agricultural waiver implementation (monitoring, education, BMP implementation). 2. Projects that support riparian and wetland protection and restoration. 3. Projects that mitigate groundwater overdraft/increase infiltration. 4. Projects that support pathogen TMDL implementation (pathogen reduction from urban runoff and grazing).

Table L3.2: Objectives and High-Ranking Projects Supporting WMI Targets

Project	WMI Targets
Support the development and implementation of TMDLs.	• Projects that implement approved or developed TMDLs
Implement NPDES Phase II Storm Water Management Programs.	• Projects that support sediment TMDL implementation (sediment reduction from urban runoff, roads, agriculture and grazing)
Implement the California NPS Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture.	• Projects that support agricultural waiver implementation (monitoring, education, BMP implementation)
Paso Robles Reclamation and Recharge Program	• New recycled water supplies help mitigate groundwater overdraft/increase infiltration
San Luis Obispo Reclamation Facility Upgrade	• New recycled water supplies help mitigate groundwater overdraft/increase infiltration • Aids in meeting nutrient TMDL for San Luis Obispo Creek
Nipomo CSD Supplemental Water Project	• Helps mitigate groundwater overdraft/increase infiltration
Nacimiento Water Project	• Helps mitigate groundwater overdraft/increase infiltration • The Salinas River is CWA 303(d) listed for sodium and chloride and a TMDL will be developed. This project improves Paso Robles WWTP discharge by lowering TDS, sodium and chloride in the influent waters.
Los Osos Community Wastewater Project	• Assists in the implementation of the Morro Bay TMDL for Pathogens, a high priority TMDL
Morro Bay Wastewater Treatment Facility Upgrade	• New recycled water supplies help mitigate groundwater overdraft/increase infiltration
Southland Wastewater Treatment Facility Upgrade	• New recycled water supplies help mitigate groundwater overdraft/increase infiltration
South San Luis Obispo County Sanitation District Facility Upgrade	• New recycled water supplies help mitigate groundwater overdraft/increase infiltration
San Simeon Wastewater Treatment Facility Upgrade	• New recycled water supplies help mitigate groundwater overdraft/increase infiltration
Morro Bay NPDES Illicit Discharge Detection and Elimination Ordinance	• Support Morro Bay pathogen TMDL implementation (pathogen reduction from boats, pets, urban runoff, agriculture and grazing)
Morro Bay Estuary Comprehensive Conservation and Management Plan	• Supports sediment TMDL implementation (sediment reduction from urban runoff, roads, agriculture and grazing) • Supports pathogen TMDL implementation (pathogen reduction from boats, pets, urban runoff, agriculture and grazing) • Supports land acquisition for watershed/water quality riparian and wetland protection and restoration
Agriculture and Open Space Element	• Supports sediment TMDL implementation (sediment reduction from urban runoff, roads, agriculture and grazing) • Supports pathogen TMDL implementation (pathogen reduction from boats, pets, urban

Project	WMI Targets
	runoff, agriculture and grazing) • Supports land acquisition for watershed/water quality riparian and wetland protection and restoration
Conservation Element	• Supports land acquisition for watershed/water quality riparian and wetland protection and restoration • Supports riparian and wetland protection and restoration
Low Impact Development Program	• Supports land acquisition for watershed/water quality riparian and wetland protection and restoration
Wetland and Vernal Pool Mapping	• Supports land acquisition for watershed/water quality riparian and wetland protection and restoration • Supports riparian and wetland protection and restoration
Morro Bay Harborwalk	• Supports riparian and wetland protection and restoration
Chorro and Morro Groundwater Basin Management Plans	• Helps mitigate groundwater overdraft/increase infiltration
Groundwater Recharge Optimization Program	• Helps mitigate groundwater overdraft/increase infiltration
Edna Valley Groundwater Basin Study	• Helps mitigate groundwater overdraft/increase infiltration

L4. Implementation of the SWRCB NPS Pollution Plan

The vision of the SWRCB NPS Program Plan, which addresses both surface water and groundwater quality, is "to reduce and prevent NPS pollution so that the waters of California support a diversity of biological, educational, recreational, and other beneficial uses." The NPS Program Plan identifies a number of management measures (MMs). These MMs provide goals for the management of NPS pollution to which various management practices are applied. Table L4.1 presents regionally significant MMs and the IRWMP objectives and high ranking projects that will assist in meeting the SWRCB NPS Pollution Plan.

Table L4.1: Objectives and High-Ranking Projects Supporting NPS Measures

Management Measure	IRWMP Objectives & Projects
Agriculture MM 1A, Erosion and Sediment Control - MM 1A addresses NPS problems associated with soil erosion and sedimentation. Where erosion and sedimentation from agricultural lands affects coastal waters, landowners shall design and install a combination of practices to remove solids and associated pollutants in runoff during all but the larger storms. Alternatively, landowners may apply the erosion component of a Conservation Management System (CMS) as defined in the USDA Field Office Technical Guide.	Morro Bay is a high priority 303(d) listing for sediment and siltation from agriculture, irrigated crop production, construction/land development, resource extraction, channelization, and channel erosion. **Objectives** • Implement the California NPS Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture. • Support the development and implementation of TMDLs. **Projects** • Morro Bay Estuary Comprehensive Conservation and Management Plan: Protects and restores the Morro Bay estuary and its watershed through implementation of its watershed based plan. • Agriculture and Open Space Element: Identifies those areas of the region with productive farms, ranches and soils, and establishes goals, policies and implementation measures that will enable their long-term stability and productivity. • Conservation Element: Provides policies and best management practices consistent with applicable IRWP goals and objectives. • Low Impact Development Program: Establishes policies and guidelines for the retention of stormwater on-site for percolation, and utilization of smart growth principles to ensure that proposed development conforms to good design and flood management standards.
Agriculture MM 1C, Nutrient Management - MM 1C addresses the development and implementation of comprehensive nutrient management plans for areas where nutrient runoff is a problem affecting coastal waters. Such plans would include a crop nutrient budget; identification of the types, amounts and timing of nutrients necessary to produce a crop based on realistic crop yield expectations; identification of hazards to the site and adjacent environment; soil sampling and tests to determine crop nutrient needs; and proper calibration of nutrient equipment. When manure from confined animal facilities is to be used as a soil amendment and/or is disposed of on land, the plan shall discuss steps to assure that subsequent irrigation of that land does not leach excess nutrients to surface or ground water.	San Luis Obispo Creek is a high priority 303(d) listing for nutrient contamination from municipal point sources, agriculture, irrigated crop production, and agricultural storm runoff. **Objectives** • Implement the California NPS Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture. • Support the development and implementation of TMDLs. **Projects** • Morro Bay Estuary Comprehensive Conservation and Management Plan: Protects and restores the Morro Bay estuary and its watershed through implementation of its watershed based plan. • Agriculture and Open Space Element: Identifies those areas of the region with productive farms, ranches and soils, and establishes goals, policies and implementation measures that will enable their long-term stability and productivity.

Management Measure	IRWMP Objectives & Projects
Agriculture MM 1E, Grazing Management - MM 1E is intended to protect sensitive areas (including streambanks, lakes, wetlands, estuaries, and riparian zones) by reducing direct loadings of animal wastes and sediment. Upland erosion can be reduced by, among other methods: (1) maintaining the land consistent with the California Rangeland Water Quality Management Plan or Bureau of Land Management and Forest Service activity plans or (2) applying the range and pasture components of a Conservation Management System. This may include restricting livestock from sensitive areas by providing livestock stream crossings and by locating salt, shade, and alternative drinking sources away from sensitive areas.	The 303 (d) program lists grazing as the potential source of sediment (Chorro Creek), low dissolved oxygen (Los Osos Creek), pathogens (Morro Bay), chloride and sodium (Salinas River), and fecal coliform and nitrates (Santa Maria River). **Objectives** • Implement the California NPS Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture. • Support the development and implementation of TMDLs. **Projects** • Agriculture and Open Space Element: Identifies those areas of the region with productive farms, ranches and soils, and establishes goals, policies and implementation measures that will enable their long-term stability and productivity. • Conservation Element: Provides policies and best management practices consistent with applicable IRWP goals and objectives.
Agriculture MM 1F, Irrigation Water Management – MM 1F promotes effective irrigation while reducing pollutant delivery to surface and ground waters. Pursuant to this measure, irrigation water would be applied uniformly based on an accurate measurement of crop water needs and the volume of irrigation water applied, considering limitations raised by such issues as water rights, pollutant concentrations, water delivery restrictions, salt control, wetland, water supply and frost/freeze temperature management. Additional precautions would apply when chemicals are applied through irrigation.	**Objectives** • Implement the California NPS Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture. • Maximize water conservation for both M&I and agricultural uses. **Projects** • Nipomo CSD Salt Management Program: Encourages the reduction of salts. • Agriculture and Open Space Element: Identifies those areas of the region with productive farms, ranches and soils, and establishes goals, policies and implementation measures that will enable their long-term stability and productivity.

Management Measure	IRWMP Objectives & Projects
Agriculture MM 1G, Education/Outreach - MM 1G aims to implement pollution prevention and education programs to reduce NPS pollutants generated from the following activities where applicable: • Activities that cause erosion and loss of sediment on agricultural land and land that is converted from other land uses to agricultural land; • Activities that cause discharge from confined animal facilities to surface waters; • Activities that cause excess delivery of nutrients and/or leaching of nutrients; • Activities that cause contamination of surface water and ground water from pesticides; • Grazing activities that cause physical disturbance to sensitive areas and the discharge of sediment, animal waste, nutrients, • and chemicals to surface waters; • Irrigation activities that cause NPS pollution of surface waters.	**Objective** • Implement the California NPS Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture. **Projects** • Nipomo CSD Salt Management Program: Educates the public regarding agricultural activities that will reduce salt loading of the groundwater. • Morro Bay NPDES Illicit Discharge Detection and Elimination Ordinance: Educates the public regarding illegal activities that contribute to contamination of Morro Bay. • Agriculture and Open Space Element: Identifies those areas of the region with productive farms, ranches and soils, and educates the public regarding goals, policies and implementation measures that will enable their long-term stability and productivity.
Urban Areas MM 3.3A, Runoff from Existing Development – MM 3.3A is designed to develop and implement watershed management programs to reduce runoff pollutant concentrations and volumes from existing development. These programs include: 1) identification of priority local and/or regional watershed pollutant reduction opportunities (e.g., improve existing urban runoff control structures); 2) schedule for implementing appropriate controls; 3) means to limit destruction of natural conveyance systems; and 4) preservation, enhancement, or establishment of buffers along surface water bodies and their tributaries.	**Objectives** • Support the development and implementation of TMDLs. • Implement NPDES Phase II Storm Water Management Programs. • Implement the California NPS Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture. **Projects** • Low Impact Development Program: Establishes policies and guidelines for the retention of stormwater on-site for percolation, and utilization of smart growth principles to ensure that proposed development conforms to good design and flood management standards.
Forestry MM 2G, Fire Management - Prescribed fire practices for site preparation and methods to suppress wildfires should as feasible be conducted in a manner that limits loss of soil organic matter and litter and that reduces the potential for runoff and erosion. Prescribed fires on steep slopes or adjacent to streams and that remove forest litter down to mineral soil are most likely to impact water quality.	**Objective** • Implement tree protection and preservation programs, urban forest management, and wild lands fire management. **Project** • Conservation Element: Establishes policies and best management practices for protection of natural resources including forests.

Management Measure	IRWMP Objectives & Projects
Marinas and Recreational Boating MM 4.2E, Operation and Maintenance - During the course of normal marina operations, various activities and locations in the marina can generate polluting substances. Such activities include waste disposal, boat fueling, and boat maintenance and cleaning; such locations include storage areas for materials required for these activities and hull maintenance areas. Of special concern are substances that can be toxic to aquatic biota, pose a threat to human health, or degrade water quality. Paint sandings and chippings, oil and grease, fuel, detergents, and sewage are examples. It is important that marina operators and patrons take steps to control or minimize the entry of these substances into marina waters. For the most part, this can be accomplished with simple preventive measures such as performing these activities on protected sites, locating servicing equipment where the risk of spillage is reduced, providing adequate and well-marked disposal facilities, and educating the boating public about the importance of pollution prevention.	Boat discharges and vessel wastes are identified as a potential source for the medium priority 303(d) listing of metals in Morro Bay. **Objectives** • Support the development and implementation of TMDLs. • Implement the California NPS Plan and the RWQCB Conditional Agricultural Waiver Program for irrigated agriculture. • Manage public access to encourage public involvement and stewardship. **Projects** • Morro Bay NPDES Illicit Discharge Detection and Elimination Ordinance: Educates the public regarding illegal activities that contribute to contamination of Morro Bay and provides regulatory mechanism.
Hydromodification MM 5.1, Channelization / Channel Modification - California's management measures for channelization and channel modification promote the evaluation of channelization and channel modification projects. Channels should be evaluated as a part of the watershed planning and design processes, including watershed changes from new development in urban areas, agricultural drainage, or forest clearing. The purpose of the evaluation is to determine whether resulting NPS changes to surface water quality or instream and riparian habitat can be expected and whether these changes will be good or bad. Existing channelization and channel modification projects can be evaluated to determine the NPS impacts and benefits associated with the projects. Modifications to existing projects, including operation and maintenance or management, can also be evaluated to determine the possibility of improving some or all of the impacts without changing the existing benefits or creating additional problems. In both new and existing channelization and channel modification projects, evaluation of benefits and/or problems will be site-specific.	**Objectives** • Manage stream flows to fish bearing streams, support a region-wide fish passage barrier prevention and removal program, and implement fish friendly stream and river corridor restoration projects. • Distinguish the root cause of flooding problems stemming from new development, existing development, and mandatory regulation. • Integrate ecosystem enhancement, drainage control, and natural recharge into development projects. **Projects** • Flood Management Plan: Develops a regional model on how to approach flood management issues, including steps on how to integrate solutions for multiple benefits and community acceptance. • Flood Control Zone 1/1A Waterway Management Plan: comprehensive set of actions designed to increase the capacity of the leveed lower three miles of Arroyo Grande Creek while simultaneously enhancing water quality and sensitive species habitat within the managed channel. • Flood Control Zone 9 Waterway Management Program: comprehensive set of actions designed to provide flood protection while simultaneously enhancing water quality and sensitive species habitat, including steelhead passage improvements.

Management Measure	IRWMP Objectives & Projects
Hydromodification MM 5.2, Dams - Addresses NPS pollution associated with dams. MMs 5.2A and 5.2B address two problems associated with dam construction: (1) increases in sediment delivery downstream resulting from construction and operation activities and (2) spillage of chemicals and other pollutants to the waterway during construction and operation. MM 5.2C addresses the impacts of reservoir releases on the quality of surface waters and instream and riparian habitat in downstream.	Nacimiento Reservoir is a high priority 303(d) listing for metals from surface mining and natural sources. **Objectives** • Manage stream flows to fish bearing streams, support a region-wide fish passage barrier prevention, circumvention and removal program, and implement fish friendly stream and river corridor restoration projects. • Evaluate and minimize the risk of dam and levee failures. **Project** • Nacimiento Water Project: Involves increased releases to the communities of Paso Robles, Templeton, Atascadero, San Luis Obispo and Cayucos
Hydromodification MM 5.3A, Eroding Streambanks and Shoreline – MM 5.3A addresses the stabilization of eroding streambank and shorelines in areas where streambank and shoreline erosion creates a polluted runoff problem. Bioengineering methods such as marsh creation and vegetative bank stabilization are preferred. Streambank and shoreline features that have the potential to reduce polluted runoff shall be protected from impacts, including erosion and sedimentation resulting from uses of uplands or adjacent surface waters. This MM does not imply that all shoreline and streambank erosion must be controlled; the measure applies to eroding shorelines and that constitutes an NPS problem in surface waters.	**Objectives** • Manage stream flows to fish bearing streams, support a region-wide fish passage barrier prevention, circumvention and removal program, and implement fish friendly stream and river corridor restoration projects. • Distinguish the root cause of flooding problems stemming from new development, existing development, and mandatory regulation. • Integrate ecosystem enhancement, drainage control, and natural recharge into development projects. **Projects** • Flood Management Plan: Develops a regional model on how to approach flood management issues, including steps on how to integrate solutions for multiple benefits and community acceptance. • Flood Control Zone 1/1A Waterway Management Plan: comprehensive set of actions designed to increase the capacity of the leveed lower three miles of Arroyo Grande Creek while simultaneously enhancing water quality and sensitive species habitat within the managed channel. • Flood Control Zone 9 Waterway Management Program: comprehensive set of actions designed to provide flood protection while simultaneously enhancing water quality and sensitive species habitat, including steelhead passage improvements.

Management Measure	IRWMP Objectives & Projects
Wetlands, Riparian Areas and Vegetated Treatment Systems MM 6A, Protection of Wetlands/Riparian Areas – MM 6A is intended to protect the existing water quality improvement functions of wetlands and riparian areas as a component of NPS programs.	**Objectives** • Purchase and conserve with easements, preserve, enhance, and restore land in ecologically sensitive ecosystems. • Manage stream flows to fish bearing streams, support a region-wide fish passage barrier prevention, circumvention and removal program, and implement fish friendly stream and river corridor restoration projects. • Conserve natural resources. **Projects** • Morro Bay Estuary Comprehensive Conservation and Management Plan: Protects and restores the Morro Bay estuary and its watershed through implementation of its watershed based plan. • Conservation Element: Establishes policies and best management practices for protection of natural resources including wetlands. • Wetland and Vernal Pool Mapping: Inventories the wetlands in the region for development of protection measures.
Wetlands, Riparian Areas and Vegetated Treatment Systems MM 6B, Restoration of Wetlands/Riparian Areas – MM 6B refers to the recovery of a range of functions that existed previously by reestablishing hydrology, vegetation, and structure characteristics. Damaged or destroyed wetland and riparian areas should be restored where restoration of such systems will significantly abate polluted runoff.	**Objectives** • Purchase and conserve with easements, preserve, enhance, and restore land in ecologically sensitive ecosystems. • Manage stream flows to fish bearing streams, support a region-wide fish passage barrier prevention, circumvention and removal program, and implement fish friendly stream and river corridor restoration projects. • Conserve natural resources. • Integrate ecosystem enhancement, drainage control, and natural recharge into development projects. **Projects** • Morro Bay Estuary Comprehensive Conservation and Management Plan: Protects and restores the Morro Bay estuary and its watershed through implementation of its watershed based plan. • Conservation Element: Establishes policies and best management practices for protection of natural resources including wetlands. • Wetland and Vernal Pool Mapping: Inventories the wetlands in the region for development of protection measures.

Management Measure	IRWMP Objectives & Projects
Wetlands, Riparian Areas and Vegetated Treatment Systems MM 6C, Vegetated Treatment Systems – MM 6C promotes the installation of vegetated treatment systems (e.g., artificial or constructed wetlands) in areas where these systems will serve a polluted runoff-abatement function. Vegetated filter strips and engineered wetlands remove sediment and other pollutants from runoff and wastewater, and prevent pollutants from entering adjacent water bodies. Removal typically occurs through filtration, deposition, infiltration, absorption, adsorption, decomposition and volatilization.	**Objectives** • Purchase and conserve with easements, preserve, enhance, and restore land in ecologically sensitive ecosystems. • Integrate ecosystem enhancement, drainage control, and natural recharge into development projects. **Projects** • Morro Bay Estuary Comprehensive Conservation and Management Plan: Protects and restores the Morro Bay estuary and its watershed through implementation of its watershed based plan. • Low Impact Development Program: Establishes policies and guidelines for the retention of stormwater on-site for percolation, and utilization of smart growth principles to ensure that proposed development conforms to good design and flood management standards. • Flood Management Plan: Develops a regional model on how to approach flood management issues, including steps on how to integrate solutions for multiple benefits and community acceptance.
Wetlands, Riparian Areas and Vegetated Treatment Systems MM 6D, Education/Outreach – MM 6D promotes the establishment of programs to develop and disseminate scientific information on wetlands and riparian areas and to develop greater public and agency staff understanding of natural hydrologic systems—including their functions and values, how they are lost, and the choices associated with their protection and restoration.	**Objectives** • Manage public access to encourage public involvement and stewardship. • Develop and implement public education, outreach, and advocacy. **Project** • Morro Bay Estuary Comprehensive Conservation and Management Plan: Protects and restores the Morro Bay estuary and its watershed through implementation of its watershed based plan including public education and outreach.

L5. Assist in meeting Delta water quality objectives and CALFED priorities

The mission of the CALFED Bay-Delta Program is to develop and implement a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta System. To carry out this mission CALFED developed four primary objectives:

1. Restore the ecosystem,
2. Provide water supply reliability,
3. Improve water quality, and
4. Stabilize Delta levees.

The three relevant objectives of the CALFED Bay-Delta Program, ecosystem restoration, water supply reliability, and water quality, are consistent with the San Luis Obispo IRWMP objectives and addressed through the high ranking IRWMP projects, as shown in Table L5.1.

Reducing the overall demand of water conveyed through the Delta will benefit all four primary objectives. Since the State water is transported through the Delta, the most significant contribution of the San Luis Obispo region towards achieving CALFED priorities will be from reducing dependence on imported water.

The CALFED objectives are supported by 11 major program elements:

- Water Management
- Storage
- Conveyance
- Water use Efficiency
- Water Transfers
- Environmental Water Account
- Drinking Water Quality
- Watershed Management
- Levee System Integrity
- Ecosystem Restoration
- Science

The IRWMP will employ a number of these CALFED program elements within its programs and projects including water management, water use efficiency, water transfers, drinking water quality, watershed management, ecosystem restoration and science. CALFED program elements employed by the IRWMP are also shown in Table L5.1.

Table L5.1: High-Ranking Projects Supporting CALFED Bay-Delta Program Objectives

CALFED Primary Objectives	IRWMP Project	CALFED Elements
Water Quality		
• Develop and implement source control and drainage management programs. • Invest in treatment technology.	• Morro Bay Desalination Facility Upgrade: Installing an energy recovery system in the existing desalination facility to reduce electrical consumption from the current use of 27 +/- kWh per 1,000 gallons of potable water produced to 14 +/- kWh per 1,000 gallons produced, and increase production capacity via reclaiming facility effluent. • Desalination Study: Evaluating the potential for desalination applications in the region by reviewing how existing desalination facilities were established and existing study/project information in order to document opportunities for locations of new facilities and the typical process for implementation on a regional basis.	• Water Management • Water Use Efficiency • Drinking Water Quality
Ecosystem Restoration		
• Implement aggressive measures to improve Delta water quality and water quality science. • Restore habitat in the Delta and its tributary watersheds. • Improve fish passage though modification or removal of dams, improved bypasses and ladders.	• Flood Control Zone 9 Waterway Management Program: Includes Steelhead Passage Improvements; development of a plan for upper San Luis Obispo creek and constructing corrective improvements to the channel will allow for fish passage and use of the improvements constructed by the City approximately 5 years ago when an upstream dam was removed and step pools constructed.	• Water Management • Watershed Management • Ecosystem Restoration • Science
Water Supply Reliability		
• Assist local partners in developing 500,000 to 1 million acre-feet of groundwater storage. • Pursue planning and other actions at state and federal level to expand surface storage capacity by up to 3.5 million acre-feet. • Optimize water conveyance facilities in the Delta and in other locations to maximize flexibility, protect water quality and fish species, and increase water supply reliability. • Invest in local projects that boost water use efficiency through annual water conservation and recycling competitive grants/loan program. • Streamline water transfer approval process and develop an effective water transfer market that protects water rights, the environment and local economies.	• Nipomo CSD Supplemental Water Project: Transfers supplemental water to region with overdrafted groundwater basin • Nacimiento Water Project: Optimizes the delivery of State water from Nacimiento. • Groundwater Recharge Optimization Program: Evaluates opportunities to maximize groundwater storage	• Water Management • Water Use Efficiency • Drinking Water Quality • Watershed Management • Ecosystem Restoration • Science

L6. Implementation of recommendations of the floodplain management task force, desalination task force, recycling task force, or state species recovery plan

The DWR's mission is to manage the water resources of California in cooperation with other agencies, to benefit the State's people, and to protect, restore, and enhance the natural and human environments. To meet these objectives DWR has a number of task forces:

- Flood Management Task Force
- Desalination Task Force
- Water Recycling Task Force

The Task Forces focus on various aspects of water resource management and provide recommendations for adoption by the State and local agencies. The connection between the high ranking IRWMP projects and each of the task force's recommendations are discussed below.

L6.1 Floodplain Management Task Force

The Floodplain Management Task Force has recommended strategies that are designed to reduce flood losses and maximize the benefits of floodplains. The Task Force defined floodplain management as including "actions to the floodplain to reduce losses to human resources within the floodplain and/or protect benefits to natural resources associated with floodplains and flooding." Some sample actions as stated by the Task Force to support floodplain management include the following activities:

1. Minimizing impacts of flows;
2. Maintaining or restoring natural floodplain processes;
3. Removing obstacles within the floodplain voluntarily or with just compensation;
4. Keeping obstacles out of the floodplain;
5. Educating and planning for emergency preparedness; and,
6. Ensuring that operations of floodwater management systems are not compromised by activities that interfere with, or are damaged by, design floods of these systems.

Table L6.1 describes IRWMP objectives and high ranking projects that assist in meeting Floodplain Management Task Force recommendations.

Table L6.1: Objectives and High Ranking IRWMP Projects Consistent with Floodplain Management Task Force Recommendations

Floodplain Management Task Force Recommendations	**IRWMP Objectives and Projects**
Multi-Objective Management - Promote a MOM approach to flood management projects. State and local agencies should approach flood management as part of multi-objective watershed management. Where feasible, these projects should provide adequate protection for natural, recreational, residential, business, economic, agricultural, and cultural resources and protect water quality and supply.	**Objective** • Integrate ecosystem enhancement, drainage control, and natural recharge into development projects. **Projects** • Flood Control Zone 9 Waterway Management Program: Includes Steelhead Passage Improvements; development of a plan for upper San Luis Obispo creek and constructing corrective improvements to the channel will allow for fish passage and use of the improvements constructed by the City approximately 5 years ago when an upstream dam was removed and step pools constructed. • Flood Management Plan: Develops a regional model on how to approach flood management issues, including steps on how to integrate solutions for multiple benefits and community acceptance.
Flood Management Approach for Ecosystem Restoration and Agricultural Conservation – While providing for public safety and flood damage reduction, flood management programs and projects should maximize opportunities for agricultural conservation and ecosystem protection and restoration, where feasible. When land is being considered for use in a flood management project or program, the following should be addressed equitably: • Conserve productive agricultural land and natural habitat; • Promote the recovery and stability of agriculture; • Promote the recovery and stability of native species populations, and overall biotic community diversity; • Provide for natural, dynamic hydrologic, and geomorphic processes; • Increase and improve the quantity, diversity, and connectivity of native habitat; • Eliminate or mitigate negative redirected impacts to neighboring landowners; and • Evaluate and address economic impacts to local communities and regions.	**Objectives** • Integrate ecosystem enhancement, drainage control, and natural recharge into development projects. • Develop financial programs for drainage and flood control projects. • Reduce the effects of invasive plant species, manage public properties to re-establish rare and special status native plant populations, and promote native drought tolerant plantings in municipal and residential landscaping. **Projects** • Agriculture and Open Space Element: Identifies those areas of the region with productive farms, ranches and soils, and establishes goals, policies and implementation measures that will enable their long-term stability and productivity. • Conservation Element: Provides policies and best management practices to protect natural resources consistent with applicable IRWP goals and objectives. • Low Impact Development Program: Establishes policies and guidelines for the retention of stormwater on-site for percolation, and utilization of smart growth principles to ensure that proposed development conforms to good design and flood management standards.

Floodplain Management Task Force Recommendations	IRWMP Objectives and Projects
Nonstructural Approaches, Restoration and Conservation of Agriculture and Natural Lands – In planning new or upgraded floodwater management programs and projects, including structural projects, local and State agencies should, where appropriate, encourage nonstructural approaches and the conservation of the beneficial uses and functions of floodplains. It is recognized that some structural approaches provide needed flood protection and opportunities for agricultural conservation and ecosystem protection and restoration.	**Objectives** • Distinguish the root cause of flooding problems stemming from new development, existing development, and mandatory regulation. • Integrate ecosystem enhancement, drainage control, and natural recharge into development projects. **Projects** • Agriculture and Open Space Element: Identifies those areas of the region with productive farms, ranches and soils, and establishes goals, policies and implementation measures that will enable their long-term stability and productivity. • Low Impact Development Program: Establishes policies and guidelines for the retention of stormwater on-site for percolation, and utilization of smart growth principles to ensure that proposed development conforms to good design and flood management standards. • Flood Management Plan: Develops a regional model on how to approach flood management issues, including steps on how to integrate solutions for multiple benefits and community acceptance.
Protection of Floodplain Groundwater Recharge Areas – Permitting agencies should consider the impacts of land-use decisions on the capacity of the floodplain to recharge groundwater.	**Objectives** • Recharge ground water with high quality water. • Integrate ecosystem enhancement, drainage control, and natural recharge into development projects. **Project** • Low Impact Development Program: Establishes policies and guidelines for the retention of stormwater on-site for percolation, and utilization of smart growth principles to ensure that proposed development conforms to good design and flood management standards.
Tools for Protection of Flood-Compatible Land Uses – The State should identify, develop, and support a variety of tools for the protection of flood-compatible land uses. These tools should be developed in consultation with, and be made available to, private landowners, local governments, and non-governmental organizations. Examples of such tools can include: Easement/fee acquisition programs, management payments, land exchanges/bank, incentives for placing new development outside of the floodplain, safe harbor policy, adjacent landowner protections, stewardship incentive payments, voluntary agriculture wildlife habitats, habitat conservation plans, natural community conservation programs, and special area management plans.	**Objectives** • Distinguish the root cause of flooding problems stemming from new development, existing development, and mandatory regulation. • Integrate ecosystem enhancement, drainage control, and natural recharge into development projects. **Projects** • Agriculture and Open Space Element: Identifies those areas of the region with productive farms, ranches and soils, and establishes goals, policies and implementation measures that will enable their long-term stability and productivity. • Low Impact Development Program: Establishes policies and guidelines for the retention of stormwater on-site for percolation, and utilization of smart growth principles to ensure that proposed development conforms to good design and flood management standards.

Floodplain Management Task Force Recommendations	IRWMP Objectives and Projects
Multi-Jurisdictional Partnerships – The State should encourage multi-jurisdictional partnerships when floodplain management projects are planned and implemented. Jurisdiction-based projects provide localized solutions, when a greater benefit might be achieved if the project adopted a watershed-wide approach. Communities and jurisdictions should work together to develop, implement, and monitor watershed-wide floodplain management programs.	**Goal** • Develop, fund, and implement an integrated, watershed approach to flood management through a collaborative and community supported process without unfairly burdening communities, neighborhoods or individuals. **Project** • Flood Control Zone 1/1A Waterway Management Plan: comprehensive set of actions cooperatively developed by the community, the Coastal San Luis Resource Conservation District, and the San Luis Obispo County Flood Control and Water Conservation District
Proactive and Adaptive Management of Floodplains – State and local agencies should manage floodplains proactively and adaptively by periodically adjusting to current environmental, economic, hydraulic, and biological conditions and in response to new scientific information and knowledge. If new or additional flood management projects alter the size of a floodplain, cities and counties should evaluate all of their objectives for the area removed from or added to that floodplain.	**Objectives** • Distinguish the root cause of flooding problems stemming from new development, existing development, and mandatory regulation. • Integrate ecosystem enhancement, drainage control, and natural recharge into development projects. **Projects** • Low Impact Development Program: Establishes policies and guidelines for the retention of stormwater on-site for percolation, and utilization of smart growth principles to ensure that proposed development conforms to good design and flood management standards. • Conservation Element: Provides policies and best management practices to protect natural resources consistent with applicable IRWP goals and objectives.
New and Existing Funding Sources – State and local governments should increase and leverage federal programs, as appropriate, and encourage local, State, federal, public, nongovernmental, and other private cost sharing to achieve equitable and fair financing of multi-objective floodplain management actions and planning.	**Objective** • Develop, fund, and implement an integrated, watershed approach to flood management through a collaborative and community supported process without unfairly burdening communities, neighborhoods or individuals. • Develop financial programs for drainage and flood control projects.

L6.2 Desalination Task Force

The Desalination Task Force determined that significant value can be gained from desalination, and can provide the numerous benefits listed below.

- Providing a supplemental water supply to meet present year and projected demands;
- Replacing water lost from other sources and relieving drought conditions;
- Aiding in water supply reliability, and providing a high quality potable water supply;
- Reducing groundwater overdraft and restoring use of polluted groundwater; and,
- Replacing water that can otherwise be used for river and stream ecosystem restoration.

Table L6.2 describes the IRWMP objectives and high ranking projects that assist in meeting Desalination Task Force recommendations.

Table L6.2: Objectives and High Ranking IRWMP Projects Consistent with Desalination Task Force Recommendations

Desalination Task Force Recommendations	IRWMP Objectives and Projects
Include desalination, where economically and environmentally appropriate, as an element of a balanced water supply portfolio, which also includes conservation and water recycling to maximum extent practicable.	**Objectives** • Expand desalination water opportunities by 2010. **Projects** • Desalination Study: Facilitates inter-agency coordination on regional desalination projects; Compiles and shares information regionally to reduce feasibility study costs incurred by individual agencies considering desalination. • Morro Bay Desalination Facility Upgrade: Installing an energy recovery system in the existing desalination facility to reduce electrical consumption from the current use of 27 +/- kWh per 1,000 gallons of potable water produced to 14 +/- kWh per 1,000 gallons produced, and increase production capacity via reclaiming facility effluent.
Results from monitoring at desalination projects should be reported widely for the broadest public benefits. Encourage opportunities to share information on operational data. Create a database and repository for storing and disseminating information.	
Compare reasonable estimates of benefits, costs and environmental impacts for desalination with those for other water supply alternatives realistically available for that area.	
Where feasible and appropriate, utilize wastewater outfalls for blending/discharging desalination brine/concentrate.	
Evaluate all new water supply strategies including desalination based upon adopted community General Plans, Urban Water Management Plans, Local Coastal Plans, and other approved plans that integrated regional planning, growth and water supply/demand projections. Environmental reviews should ensure that growth related impacts of desalination projects are properly evaluated.	

L6.3 Recycled Water Task Force

The State of California Recycled Water Task Force focus is on the following recycled water components:

- Plumbing code and cross connection;
- Public information, education, and outreach;
- Funding and CALFED coordination;
- Regulations and permitting;
- Science and health, and indirect potable reuse; and,
- Economics.

Table L6.3 describes the IRWMP objectives and high ranking projects that assist in meeting Recycled Water Task Force recommendations.

Table L6.3: Objectives and High Ranking IRWMP Projects Consistent with Recycled Water Task Force Recommendations

Recycled Water Task Force Recommendations	IRWMP Objectives and Projects
Federal cost sharing legislation to support development of projects should be pursued	**Objective** • Expand reclaimed water use to make up 5% of total water use by 2010 and 10% of total water use by 2020. **Projects** The following IRWMP projects increase the recycled water use opportunities for the region: • Paso Robles Reclamation and Recharge Program • San Luis Obispo Reclamation Facility Upgrade • Morro Bay Wastewater Treatment Facility Upgrade • Southland Wastewater Treatment Facility Upgrade • South San Luis Obispo County Sanitation District Facility Upgrade • San Simeon Wastewater Treatment Facility Upgrade
Public participation should be incorporated in all phases of project planning in order to justify water recycling on fundamental needs or community desire.	
Local agencies should adopt well defined local recycled water ordinances.	
Within the current legal restrictions, local agencies should consider publicity campaigns to educate consumers regarding the impacts of self-regenerative water softeners and promote the use of off-site regeneration by service companies. They should also consider financial incentives to upgrade older inefficient appliances to the current standards.	

L7. Address Environmental Justice concerns

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. In the context of the IRWM Plan, Environmental Justice would include issues related to the placement of major infrastructure facilities, both from the perspective of how those facilities might detract from or negatively impact a community, as well as whether those facilities provide adequate services to disadvantaged communities at reasonable cost. Put another way, do the noise, odors and risk of upset related to a wastewater treatment plant have a disproportionate effect on a particular disadvantaged community? Or, do disadvantaged communities have equal access to new sources of higher quality water from an economic perspective?

An additional key component of Environmental Justice considerations is the degree to which all citizens have the opportunity to participate in the land use, community development, and water planning processes.

In San Luis Obispo County, important economically disadvantaged groups can be found in nearly all of the region's communities. In most instances, these populations do not occupy distinct, separate neighborhoods although census data does show blocks with less than 80% of the annual median household income in urban areas within the region (see Figures H5.1 – H5.3). As a result, they tend to share in both the benefits and impacts associated with community development and resource delivery issues. However, four distinct economically disadvantaged areas can be identified in different portions of the region, with two of those consisting of substantial portions of their communities.

In addition to addressing the needs of 'defined' disadvantaged communities, prompted by the Los Osos Community Wastewater Project, the County of San Luis Obispo is also addressing the needs of disadvantaged persons in communities that are not otherwise deemed as disadvantaged.

In particular, when the cost of compliance with regulatory mandates exceeds affordability standards established by the regulatory agency, the impacts to disadvantaged persons can be especially challenging when the community does not otherwise qualify for grants because the community is not a disadvantaged community. In particular, County officials have met with the US EPA officials responsible for the Federal State Revolving Fund (SRF) Program to identify the ability to obtain 30-year financing under the SRF program, which is currently not available in California. Specific discussions focused on mandates that exceed affordability standards. Guidance was provided, the County has subsequently discussed with State SRF officials, and the County is currently having legal counsel (Bond counsel) develop a legal opinion on how local agencies can meet federal requirements for 30-year extended financing. Consequently, the County's efforts directly support a State policy issue that could benefit disadvantaged persons throughout California. It is important to address the needs of both disadvantaged communities and disadvantaged persons within non-disadvantaged communities. Social diversity is clearly a growing strength of California, and the importance of sustaining economic diversity within the San Luis Region will directly benefit the health and cultures of communities throughout California.

In the south County, portions of Oceano and Nipomo, both unincorporated communities, are economically disadvantaged, with both communities consisting of predominately Hispanic residents. However, these neighborhoods are contained within larger communities that are clearly not economically disadvantaged. As result, both areas have the advantages of equal treatment because of their location within the larger community, but are both distinct enough to qualify for various forms of financial assistance to ensure that both basic community infrastructure improvements and community amenities are provided.

Major needs of the disadvantaged communities within Nipomo and Oceano can be met through implementation of the regional water management programs. The continuing IRWMP process will continue to take into account and be responsive to the needs of disadvantaged communities.

The benefits to disadvantage communities will involve three main categories of benefit:

- Improved Water Quality
- Increased Water Supply Reliability
- Flood Protection

These benefits are received indirectly from many of the recommended projects, however, the three recommended projects described below provide direct benefits to these disadvantaged communities.

The Nipomo CSD will be constructing treatment facilities and a pipeline to transfer 3,000 to 6,200 acre feet of supplemental water per year from the Santa Maria Basin to resolve overdraft of groundwater in the Nipomo Mesa Groundwater Management Area. This project integrates water supply reliability and groundwater management strategies through inter-agency cooperation.

The Nipomo CSD will be identifying strategies for managing water supplies to reduce salt input and identifying sources of salt in their wastewater collection system while implementing a pre-treatment program for non-residential dischargers, a retrofit rebate program to encourage voluntary replacement of residential regenerative water softeners with canister systems, a public education program to encourage voluntary mitigation measures and a program to monitor results. This project is intended to decrease the level of salt discharge from the Nipomo CSD's Southland Wastewater Treatment Facility into Nipomo Groundwater Basin and Nipomo Creek, thereby complying with waste discharge requirements, improving source water quality, supporting the implementation of TMDLs, improving the watershed ecosystem and managing the groundwater basin through monitoring efforts, pollution reduction, public outreach, recharge water quality improvement and conflict resolution efforts.

Flood Control Zone 1/1A is centered on Arroyo Grande Creek and includes communities from Arroyo Grande to Oceano. The Zone 1/1A Waterway Management Program is a comprehensive set of actions designed to increase the capacity of the leveed lower three miles of Arroyo Grande Creek while simultaneously enhancing water quality and sensitive species habitat within the managed channel. Actions include raising the height of the existing levees, managing in-channel vegetation to enhance habitat, reducing sediment deposition within the channel, implementing specific sediment removal projects, and raising the Union Pacific Railroad Bridge to accommodate higher water levels.

The Program was cooperatively developed by the community, the Coastal San Luis Resource Conservation District, and the San Luis Obispo County Flood Control and Water Conservation District and is described in detail in the Arroyo Grande Creek Erosion, Sedimentation and Flooding Alternatives Study completed in January 2006. Initial and on-going funding for the Program is provided by the landowners within Flood Control Districts 1 and 1A through additional property tax assessments approved July 18, 2006.

The County of San Luis Obispo Public Works Department has initiated the environmental review required to obtain the necessary federal and state permits necessary to implement the full Program. This process is anticipated to take approximately three years. However, the high flood risk of the current condition highlights the need to take immediate action on specific elements of the overall Program. The Alternatives Study estimated that the lower three miles of Arroyo Grande Creek would overtop during a 5-year storm, leaving residential neighborhoods to the north and farmlands to the south with only minimal flood protection. In order to sustain water quality and sensitive species habitat within the managed channel and increase the flood protection to the surrounding neighborhoods while the Program is being permitted, it is necessary to implement several capital improvements. The priority capital improvements are:

- Return north and south levees to design elevation to increase flood protection for residential neighborhoods and farmlands.
- Replace old, in-operable flap gates (check valves), where high flows cause backwater and flooding into the adjacent residential neighborhoods and farmlands.
- Install gates on levee tops to limit access to prevent erosion damage by unauthorized vehicles and reduce illegal dumping of landscaping waste and other debris that can cause

flow blockages in the channel which increase the risk of high flows overtopping the levees.

- Conduct bank stabilization at erosion damaged sites identified in the Alternatives Study or during the annual channel inspection.
- Install stream gages at key locations within lower Arroyo Grande Creek to obtain stream data that can be used to update/calibrate the hydrologic model for the watershed that was developed by Swanson Hydrology and Geomorphology Consultants for the Arroyo Grande Creek Erosion, Sedimentation and Flooding Alternatives Study. New steam gages will provide additional stream data to better evaluate flood impacts in lower Arroyo Grande Creek.

The north County has two rural communities, San Miguel and Shandon, that qualify as economically disadvantaged, even as both experience a comparatively high rate of residential development. Unlike the south county communities identified above, both San Miguel and Shandon are separate urbanized areas, separated from the nearest urban area (the City of Paso Robles) by approximately 10 and 20 miles of undeveloped lands. In addition, while both are located along major State Highways (101 and 46), neither is particularly well-positioned to take advantage of existing or planned water infrastructure. On the other hand, policies and programs contained in the IRWM Plan will serve to protect each community's existing ample groundwater supply, ensuring that the prospect of enduring higher than average water costs does not occur.

Two such projects in the IRWMP include the San Miguel Community Services District Wastewater Treatment Expansion and Water System Improvements projects. The San Miguel CSD will be expanding their existing wastewater treatment plant from 0.2 mgd to 0.4 mgd capacity. The existing facility consists of an influent lift station, flow metering, screening, four aeration ponds, and three effluent percolation ponds. The expansion will better meet the needs of this disadvantaged community while complying with waste discharge requirements and ensuring adequate capacity during storm events to protect source water quality. The San Miguel CSD Wastewater Treatment Expansion will help meet the following IRWMP objectives:

- Protect and Improve Source Water Quality
- Implement NPDES Phase 2 Stormwater Programs
- Comply with new Waste Discharge Requirements
- Protect Groundwater from Point and Non-Point Pollution
- Groundwater Recharge with High Quality Water

The San Miguel CSD will also be providing a new 650,000 gallon welded steel potable water storage tank and a new 16-inch diameter water transmission main, and upgrading various water distribution mains from 6-inch diameter to 8-inch diameter, to improve fire flow and service pressures while continuing to deliver drinking water and meeting water quality standards during an emergency. The storage component of the project will also allow greater flexibility in managing draws on the groundwater aquifer to sustain levels and source water quality and treatment.

A project in the IRWMP Flood Management Program that will benefit San Miguel is the San Miguel Flood Control Project. San Miguel lacks a formal drainage system which leads to

flooding problems throughout the community. The primary cause of flooding in San Miguel is due to the absence of a continuous positive slope and drainage conveyance path from the west side of town to the Salinas River. The railroad runs through town and serves as a barrier to storm runoff flowing from the west side of it to the Salinas River.

During the heavy rains in March 2001, several citizens experienced flood damage to their homes and businesses. In order to find solutions to the flooding problems the District funded a drainage and flood control study for San Miguel, along with other community drainage studies. The San Miguel Drainage and Flood Control Study was completed in December 2003.

The Study developed an overall plan to collect and convey runoff in an organized fashion to the Salinas River. The plan includes a system of curbs, gutters, drop-inlets, constructed ditches, and underground storm drainage pipes. The capital improvement plan is split into two phases of work, divided by category as downstream and upstream improvements. Downstream improvements must be constructed prior to upstream improvements. So, the first flood control project necessary will be to convey runoff across the railroad tracks to the Salinas River. There are four projects that are considered necessary downstream improvements and they are listed here in order of priority:

1. River Road Pipeline. This main drainage pipeline will accept runoff from the proposed redevelopment of the Mission Street Design Plan.
2. 16th Street Pipeline. This drainage line will provide conveyance of runoff for proposed development in the northern portion of the community and would intercept a portion of the runoff entering the Mission Street central district.
3. 11th Street Pipeline. This line drains the southern portion of the community and accepts a certain amount of runoff from Highway 101.
4. 12th Street Drainage Ditch. This ditch would drain a small watershed east of N Street between 11th and River Road.

The total cost to implement all four projects is estimated to be $5.3 million. Since San Miguel is a disadvantaged community, financial support is needed to implement these projects. The District will need to pursue several different mechanisms to fund the needed projects. Opportunities exist to enhance the design for improvement to stormwater quality discharge and groundwater recharge to support implementation of TMDL and stormwater programs, and the California NPS Plan to increase the benefits and funding potential.

The District has already sought and obtained a Community Development Block Grant (CDBG) of $650,000 that will be put toward the first of the four needed facilities. The CDBG fund will provide approximately 12% of the total project cost. Due to the CDBG funding, implementation of the River Road Pipeline is already underway with construction anticipated to begin in December of 2007.

Shandon is located in a water planning area that has a projected water supply surplus based on general plan build-out conditions. The only water quality issue for the area is the low TMDL priority listing of Boron in Cholame Creek, the source of which is unknown. There are no significant flooding or drainage issues in the region. Therefore, there are no water management

projects identified for the Shandon community at this time. However, Shandon is currently on septic systems and preliminary studies to explore the feasibility of developing a community wastewater system are currently being conducted.

All communities in the region, whether disadvantaged or not, currently enjoy good access to public policy decision-makers. Because incorporated Cities in the region have smaller populations, access to elected officials, agency staff and public forums is excellent. In the unincorporated area, containing roughly half the region's population, a system of Board of Supervisor's Advisory Councils, together with numerous self-governing Community Services Districts, provides the average citizen, regardless of their race, color, national origin, or income, broad access to public agency decision making.