Appendix I: Salinas Valley Integrated Regional Water Management Plan

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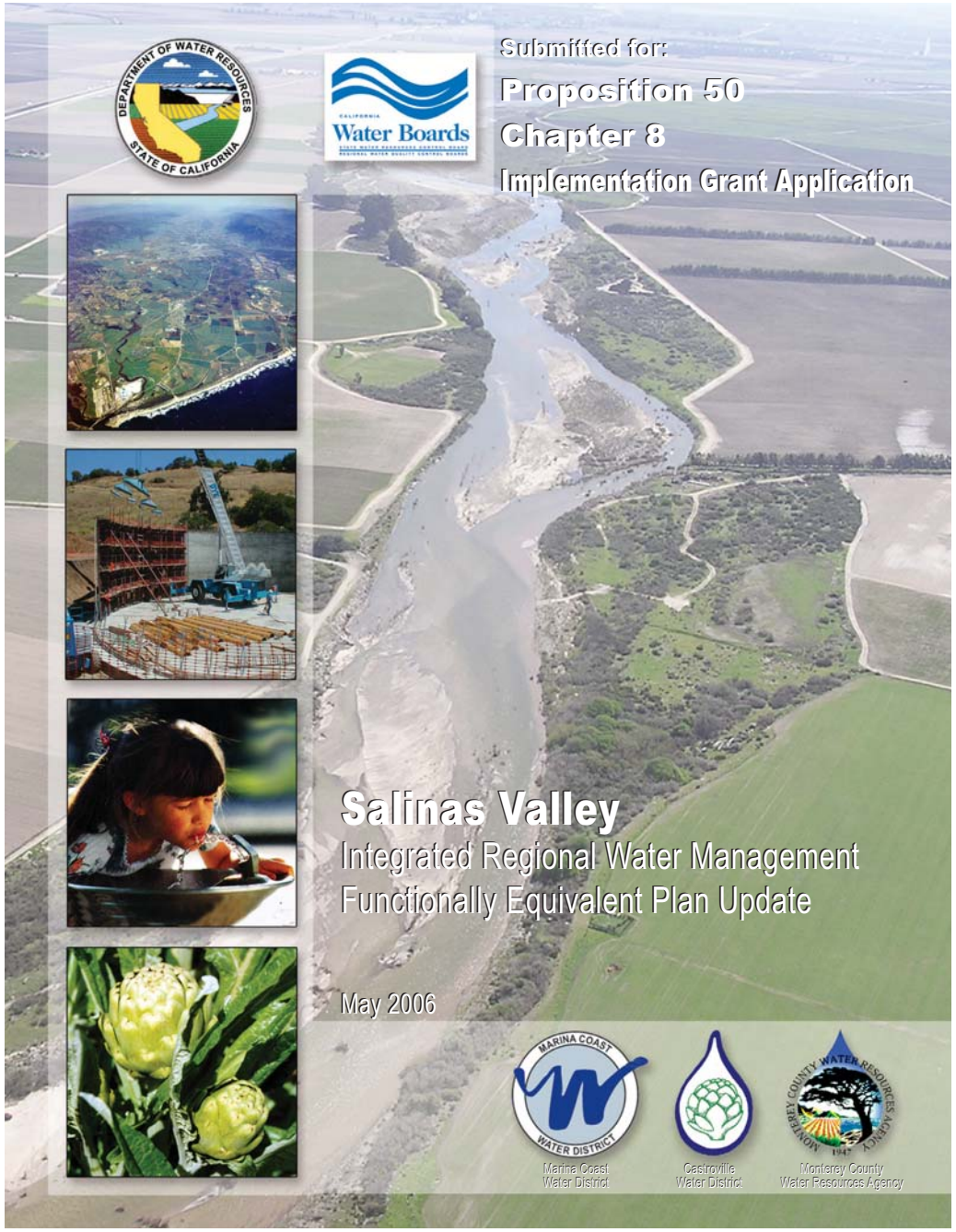


Salinas Valley Integrated Regional Water Management Functionally Equivalent Plan Summary Document UPDATE

Prepared by:

RMC

for

The Monterey County Water Resources Agency

May 2006

This document represents an update to the Salinas Valley IRWM Functionally Equivalent Plan (FEP) based on the review comments provided by the California Department of Water Resources and the State Water Resources Control Board. The updated sections of the FEP are written in italics to simplify the review of the updated document. The updates are summarized in the table below.

Scoring Criterion	Prev. Score	Actionable Comment	FEP Update Response to Comment	Location of Update
IRWM Plan and Proof of Formal Adoption	5	• none	The Updated FEP was readopted by member agencies in May, 2006	External to this report
Description of Region	3	• Does not explain why all of the Salinas River Watershed is not in the region. • Riparian and upland ecological processes are not described.	• More detailed description of region as well as explanation of why entire watershed is not included. • Expanded description of ecological processes	Page 3-1 Page 3-18
Objectives	4	• Objectives seem to relate to groundwater management, which does not help a fish habitat monitoring project.	• No update – several objectives address environment and ecosystem, including an objective that specifically mentions steelhead	Please see Page 4-9
Water Management Strategies and Integration	4	• Benefits from integrating strategies were listed, but evidence that these benefits are occurring is not provided.	• Specifics were added to the bulleted list of benefits of integrating strategies	Page 5-10
Priorities and Schedule	3	• No discussion of decision making process. • No discussion of how decision making will be responsive to regional changes or how project sequencing may be altered.	• New section to address decision making process • Section on modifying priorities was edited to reflect these concerns	Page 6-1 Page 6-4
Implementation	3	• Questionable that projects can be implemented in time period shown – SVWP financing and water rights concerns. • Not sufficient description of institutional structure to ensure implementation.	• Timelines have been updated to reflect current schedule. SVWP concerns updated in Stakeholder Outreach Section. • Section on institutional structure was added	Page 7-7 Page 14-5 Page 7-16
Technical Analysis and Plan Performance	4	• Not clear that monitoring program will do more than determine if seawater intrusion is reduced.	• Information added regarding plan performance	Page 9-2
Data Management	3	• Statements regarding data management come short of integration with SWRCB's programs. No discussion regarding how to support statewide data needs.	• Section edited to reflect the Water Management Group's dedication to sharing data with the State and supporting data needs.	Page 10-5
Financing	3	• Status of SVWP financing is in question due to litigation • No documentation of ongoing support of the projects.	• Section added to address results of recent litigation • Section added to address ongoing support	Page 11-1 Page 11-2
Relation to Local Planning and Sustainability	3	• Evidence is needed that shows that the FEP is being integrated into the General Plan.	• Section rewritten to show way in which FEP is integrated into General Plan.	Page 13-1
Stakeholder Involvement and Coordination	3	• Much stakeholder coordination goes back to the 1990's and it's unclear if it is ongoing. • A clear list of stakeholders was not included.	• Section rewritten to document ongoing coordination for FEP • Reference given for list of stakeholders	Page 14-1 Page 14-1

Table of Contents

Executive Summary **1**
ES-1 Background **1**
ES-2 On-Going Planning **1**
ES-3 Stakeholder Support **1**
ES-4 Region **2**
ES-5 Current and Future Water Resources of the Salinas Valley **4**
ES-6 Planning Objectives **8**
ES-7 Salinas Valley Water Resource Management Goals **9**
ES-8 Water Management Strategies and Integration **11**
ES-9 Short Term Regional Priorities **11**
ES-10 Long Term Regional Priorities **12**
ES-11 Selected Projects Based on Regional Priorities **13**
ES-12 Implementation **13**
ES-13 Impacts and Benefits **14**
ES-14 Technical Analysis and Plan Performance **15**
ES-15 Data Management **15**
ES-16 Project Financing **16**
ES-17 Statewide Priorities and Local Planning **16**
ES-18 Stakeholder Involvement **17**

1 Introduction **1-1**
2 Regional Water Management Group **2-1**
2.1 Salinas Valley Regional Management Group 2-1
2.2 Key Agency Stakeholders 2-2
2.3 Memorandum of Understanding 2-3
2.4 Letters of Support 2-3
3 Region Description **3-1**
3.1 General Description 3-1
3.2 Current and Future Water Resources of the Salinas Valley 3-10
3.3 The Salinas Valley is an Ideal Region for Integrated Water Management 3-10
3.4 Quality and Quantity of Water Resources within the Region 3-13
3.5 Water Supplies and Demand for a 25-Year Planning Horizon 3-16
3.6 Ecological Processes and Environmental Resources 3-17
3.7 Economic Conditions and Important Trends 3-25
3.8 Social and Cultural Make up of the Regional Community 3-26
3.9 Other Regional Plans in Monterey Bay 3-27
3.10 San Luis Integrated Regional Water Management Plan 3-29
4 Objectives **4-1**
4.1 Salinas Valley Water Resource Management Goals 4-1
4.2 Plan Objectives 4-2
4.3 Description of Objectives 4-7
5 Water Management Strategies and Integration **5-1**
5.1 Strategy Consideration 5-1
5.2 Strategy Integration 5-5
6 Regional Priorities **6-1**
6.1 Procedure for Developing Priorities 6-1
6.2 Short Term Regional Priorities 6-2
6.3 Long Term Regional Priorities 6-2

6.4 Selected Projects 6-3
6.5 Process for Modifying Priorities 6-4
7 Implementation **7-1**
7.1 Projects and Programs for FEP Implementation 7-3
7.2 Institutional Structures to Ensure Implementation 7-16
7.3 Future Priority Projects for Integrated Planning 7-16
8 Impacts and Benefits **8-1**
8.1 Impacts of Individual Projects 8-1
8.2 Benefits of Projects 8-2
8.3 Advantages of a Regional Plan 8-3
8.4 Impacts and Benefits to Disadvantaged Communities 8-5
8.5 Impacts to Energy and Air Quality 8-5
9 Technical Analysis and Plan Performance **9-1**
9.1 Technical Analysis 9-1
9.2 Project Evaluation and Performance 9-2
10 Data Management **10-1**
10.1 Current Data Collection and Dissemination 10-1
10.2 Future Data Collection and Dissemination 10-5
11 Financing **11-1**
11.1 Salinas Valley Water Project 11-1
11.2 Well No. 33, Booster Station and Reservoir 11-1
11.3 Water Quality and Fish Habitat Monitoring Program 11-2
11.4 Soledad Water Recycling/Reclamation Project 11-2
11.5 Ongoing Support for Projects 11-2
12 Statewide Priorities **12-1**
12.1 Previous State Involvement in Region 12-1
12.2 Statewide Priorities Considered 12-1
13 Relation to Local Planning **13-1**
13.1 Monterey County General Plan 13-1
13.2 Fort Ord Reuse Authority Planning 13-2
13.3 City of Soledad General Plan 13-2
14 Stakeholder Involvement and Coordination **14-1**
14.1 Outreach for Functionally Equivalent Plan 14-1
14.2 Ongoing Stakeholder Processes 14-2
14.3 Project Specific Outreach 14-2
14.4 Environmental Justice Concerns 14-3
14.5 Disadvantaged Communities 14-3
14.6 Coordination 14-4
14.7 Potential Obstacles to Implementation 14-5
14.8 Provisions for Changing IRWMP 14-6
15 References **15-1**

List of Tables

Table 2-1 Letters of Support **2-3**
Table 3-1: Water Districts in Salinas Valley **3-6**
Table 3-2: Urban Groundwater Pumping in 1999 ..... **3-14**
Table 3-3: Salinas Groundwater Basin Pumping in 1999 ..... **3-16**
Table 3-4: Estimated Water Demand Based on Basin Modeling **3-17**
Table 4-1 Goals for Salinas Valley Water Planning **4-2**

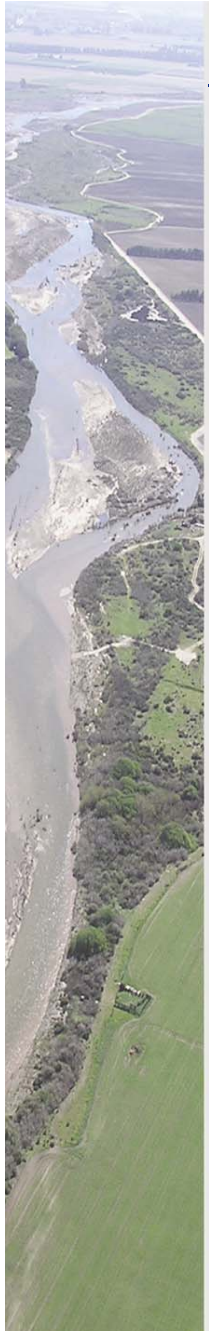
Table 4-2 List of Objectives 4-3
Table 5-1 Water Management Strategies 5-2
Table 5-2 Objectives and Strategies Comparison Matrix 5-6
Table 5-3 Integration of Strategies for FEP 5-10
Table 6-1 Projects Meet Short and Long Term Priorities 6-3
Table 7-1 Planning Objectives 7-2
Table 7-2 Salinas Valley Water Project Status 7-8
Table 7-3 Water Quality and Fish Habitat Monitoring Program Status 7-11
Table 7-4 Well 33, Booster Station and Reservoir Project Status 7-13
Table 7-5 City of Soledad Water Recycling/Reclamation Project Status 7-15
Table 8-1 List of Objectives that will be Met with the Salinas Valley Priority Projects 8-5
Table 10-1: Groundwater Data Collection and Schedule 10-2
Table 10-2 Elkhorn Slough Surface Water Quality Stations 10-3
Table 14-1: Cost Allocation Committee 14-3

List of Figures

Figure 3-1 Regional Map of Monterey County 3-3
Figure 3-2 Salinas Basin Hydrologic Subareas 3-4
Figure 3-3 Monterey County Water District Jurisdictions 3-7
Figure 3-4 Existing Land Uses within the Basin 3-9
Figure 3-5 Nitrate Concentrations for 65 Shallow Wells 3-15
Figure 3-6 Future Regional Planning in Monterey Bay 3-28
Figure 4-1 Goals and Objectives Process 4-1
Figure 4-2 Objectives Development Process 4-4
Figure 4-3 Salinas Valley Goals and Objectives 4-5
Figure 5-1 Strategy Integration Process 5-5
Figure 7-1 Salinas Valley Integrated Regional Planning Process 7-3
Figure 8-1 Regional Demographics 8-6

Appendices

Appendix A ....Memorandum of Understanding
Appendix B ....Letters of Support
Appendix C ....Planning Documents
Appendix D ....Project Prioritization
Appendix E ....Implementation Schedule
Appendix F ....Monterey Bay MOU



Executive Summary

ES-1 Background

The California Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB) are encouraging local and regional water management planners to establish integrated regional water management plans through the collaboration of planning efforts and project coordination. The intent is to encourage planners to implement projects focused on meeting multiple water resources needs on a regional basis. Jointly, both agencies are soliciting grant applications for Proposition 50 Chapter 8 grant funding, which was established to provide a fiscal tool to support integrated regional water management.

In order to take advantage of this funding opportunity, Monterey County Water Resources Agency (MCWRA), Marina Coast Water District (MCWD), and Castroville Water District (CWD) have formed the Salinas Valley Water Management Group to spearhead regional planning for the Salinas Valley Region of Monterey County.

One of the requirements of the Proposition 50 Chapter 8 guidelines is the preparation of an Integrated Regional Water Management Plan (IRWM Plan). However, both DWR and the SWRCB recognize that many communities in the state have already completed planning documents such as Basin Management Plans, Water Supply Master Plans and Urban Water Management Plans. There is a provision in the funding guidelines that allows for the submittal of a Functionally Equivalent Plan (FEP) that consists of a group of water management planning documents that meet all of the requirements of an IRWM Plan.

This report functions as an FEP for the Salinas Valley Region for the purposes of applying for Proposition 50 Chapter 8 funds. The FEP documents the manner in which the adopted plans in the region jointly meet all of the requirements of an IRWM Plan. A list of these adopted plans is included in Appendix C of this report.

MCWRA and the Salinas Valley Water Management Group are committed to IRWM Planning

MCWRA has obtained a series of EPA grants that provide the funding necessary to update the integrated regional planning work represented in the FEP, with a particular focus on integrated regional water management planning for future urban water needs. This funding provides an opportunity for the Salinas Valley to update this FEP and provide a sound basis for implementation of future water resource management projects in the Salinas Valley.

ES-2 On-Going Planning

In a parallel but related effort, MCWRA has obtained US EPA grant funding for integrated water management planning efforts in the Salinas Valley. Through the EPA grant funding process, MCWRA, through the Salinas Valley Water Management Group, is undertaking preparation of an updated Integrated Regional Water Management Plan for the Salinas Valley that is scheduled for completion in late 2006. MCWRA has been awarded a series of EPA grants that will extend the Integrated Regional Water Management Planning process to potentially include a broader regional area and/or greater analysis of water management issues and opportunities.

ES-3 Stakeholder Support

Three key stakeholders have been identified for the Salinas Valley Planning Region. The three key stakeholders are:

- Monterey Regional Water Pollution Control Agency

- The Elkhorn Slough Foundation, and
- The City of Soledad.

In addition, a number of additional stakeholders have expressed their support for the efforts of the Salinas Valley Water Management Group and its planning efforts. Presented in Table ES-1 is a list of stakeholders that have provided letters of support. *A detailed discussion of key agency stakeholders, including a list of stakeholders is included in Section 2.2.*

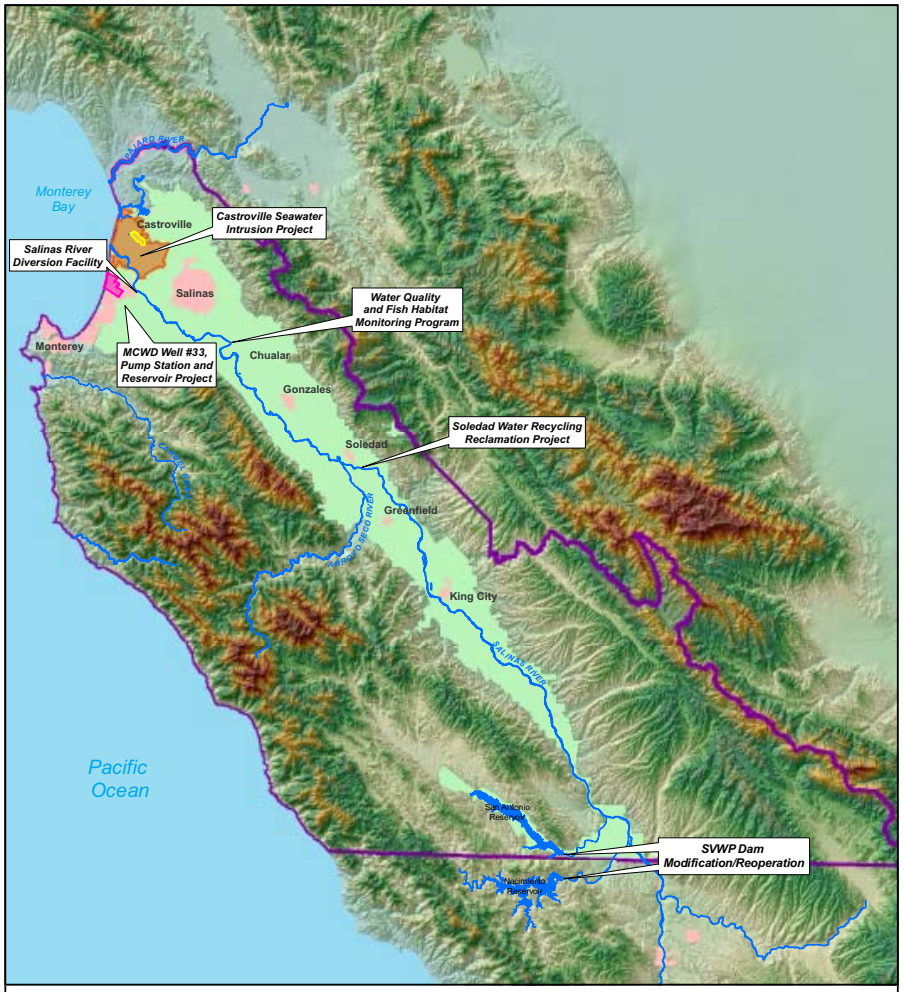
Table ES-1 Letters of Support

Stakeholder Group
California Water Service Company
State Senator Jeff Denham
Elkhorn Slough Foundation
Fort Ord Reuse Authority
City of Gonzales
City of Greenfield
Grower-Shipper Association of Central California
Nancy Isakson, Government Affairs Consultant
King City
State Assemblymember John Laird
City of Marina
Monterey County Board of Supervisors
Monterey County Farm Bureau
Monterey County Planning and Building Inspection Department
Monterey Peninsula Water Management District
Monterey Regional Water Pollution Control Agency
Pajaro Valley Water Management Agency
City of Salinas
State Assemblymember Simon Salinas
Salinas River Channel Coalition
Salinas Valley Water Coalition
City of Soledad
Watershed Institute

ES-4 Region

The region for the Salinas Valley Integrated Regional Water Management (SVIRWM) plan is defined by the boundaries of the Salinas Valley Groundwater Basin, as shown in Figure ES-1. The Salinas River generally runs in the northwestern direction from its headwaters in San Luis Obispo County, to the Monterey Bay. *The region includes parts of the Nacimiento, San Antonio and Arroyo Seco Rivers and their watersheds, all of which are tributary to the Salinas River.*

The Salinas Valley is a highly productive agricultural region in Monterey County. Along the Salinas River there are several urban and residential centers, including (from south to north): Bradley, San Ardo, King City, Greenfield, Soledad, Gonzales, Chualar, Salinas, Marina, and Castroville. Over 60% of the valley's population resides in the City of Salinas. The former military installation of Fort Ord is located in the northwestern portion of the county, and is being redeveloped into an education, technology and housing center.



Legend
- Cities
- Castroville Water District
- Marina Coast Water District
- Salinas Valley
- Monterey County Water Resources Agency (MCWRA)
- Rivers

Figure ES-1 Monterey County Water District Jurisdictions

0 10 20 Miles

Note: The scale and configuration of all information shown hereon are approximate and are not intended as a guide for survey or design work.

The water supply in the region is managed by several agencies, both public and private. The Monterey County Water Resources Agency (MCWRA) is responsible for managing, protecting, and enhancing the water supply and water quality as well as providing flood protection for specific areas within the County. The other major water suppliers in the Salinas Valley are the Marina Coast Water District (MCWD), the Castroville Water District (CWD), and the California Water Company. MCWD is responsible for providing water to the City of Marina and the former Fort Ord. CWD serves water to the Castroville area. California Water Company provides water to the Cities of Salinas and King City. Table ES-2 summarizes the water supply responsibilities in the Valley.

The Monterey Regional Water Pollution Control Agency (MRWPCA) provides wastewater treatment services for several communities of coastal Monterey County, including Marina, Salinas, and Castroville in the Salinas Valley. Additionally, MRWPCA provides recycled water for agricultural irrigation in the Castroville area in cooperation with MCWRA.

Table ES-2 Water Districts in Salinas Valley

Community	Water Supplier
Castroville	Castroville Water District
Chualar	California American Water
Fort Ord	Marina Coast Water District
Gonzales	City of Gonzales
Greenfield	City of Greenfield
King City	California Water Company
Marina	Marina Coast Water District
Salinas	California Water Company
San Ardo	San Ardo California Water District
San Lucas	San Lucas County Water District
Soledad	City of Soledad

ES-5 Current and Future Water Resources of the Salinas Valley

Surface Water

The primary surface water features overlying and influencing the Basin's hydrology are the Salinas River and its tributaries, Nacimiento and San Antonio reservoirs, and Monterey Bay.

Average annual flows to the ocean from the Salinas River are around 282,000 AFY, most of which occurs during the period of November through March. This period corresponds to the months of peak seasonal rainfall and coincides with a seasonal drop in irrigation in the valley. During the spring and summer months, the reservoirs on the Nacimiento and San Antonio Rivers regulate flow to minimize outflow to the ocean, maximizing groundwater recharge through the Salinas River channel.

Under current reservoir operations, water is released into the river during summer months to recharge the groundwater basin. Because a natural clay layer underlies the river in the northern portion of the valley, outflows from the dams are regulated to maintain river flow only as far

north as the Spreckels area. The river channel north of Davis Road has minimal flow during the summer season, except for agricultural run off.

Groundwater

Groundwater is the main source of water in the Salinas Valley for both agricultural and urban users. In the northern coastal areas of the Basin, groundwater extraction occurs primarily from two groundwater sources, the 180-Foot and the 400-Foot Aquifers. Groundwater extraction occurs from the unconfined aquifer in the central and southern portions of the Basin. Groundwater withdrawal has outpaced groundwater recharge and has resulted in overdraft conditions in the Basin, allowing for seawater to infiltrate both aquifers. In 1999, MCWRA estimated that seawater affected approximately 24,000 acres overlying the 180-Foot Aquifer and 10,500 acres overlying the 400-Foot Aquifer in the Northern Salinas Valley. As a result of this intrusion, urban and agricultural supply wells have been abandoned, destroyed and relocated. To prevent further seawater intrusion, groundwater pumping rates and recharge need to be brought into balance.

History of Regional Planning in the Salinas Valley

Seawater intrusion was first documented in 1946 when the State Department of Public Works (now known as Department of Water Resources) published Bulletin 52. Groundwater withdrawal in the Salinas Valley groundwater basin has outpaced groundwater recharge that has resulted in overdraft conditions in the Basin, allowing seawater to move steadily inland and infiltrate the 180-Foot and 400-Foot aquifers. As a result of publication of Bulletin 52 and other subsequent studies, Nacimiento and San Antonio Reservoirs were constructed in 1957 and 1967, respectively.

In 1977, the State Water Resources Control Board (SWRCB) listed the Salinas Valley groundwater basin as a candidate for adjudication. However, no further action was recommended at that time. In 1998, the SWRCB initiated adjudication proceedings for the Basin. The SWRCB considers the problems facing the Basin to be one of the "most critical" water resource issues facing California. Because of the seriousness of the issue, the SWRCB assembled a Salinas Valley Groundwater Basin Adjudication Team in order to protect the water resources in Salinas Valley. The SWRCB expressed an interest in working with local stakeholders and decision-makers to solve the seawater intrusion and nitrate contamination issues in the Valley, only bringing to bear adjudication as a last resort. The SWRCB then conducted a public workshop in Salinas, the result of which was a commitment by the SWRCB to provide approximately $600,000 in State funding to the MCWRA to assist in updating seawater intrusion lines, investigating continuity of clay layers, and preparing groundwater hydrostatic and monitoring reports. These efforts led to developing a local solution as opposed to adjudication.

The result of this undertaking was development and definition of the Salinas Valley Water Project, a project that was developed through public input and involvement of key stakeholders from throughout the Salinas Valley.

Numerous studies were conducted between 1977 and 1998 to determine the extent of the seawater intrusion and possible solutions. The results of these studies created a series of projects known as the Monterey County Water Recycling Projects (MCWRP), which were joint efforts between MCWRA and Monterey Regional Water Pollution Control Agency (MRWPCA). The projects addressed a portion of the seawater intrusion problem in the Salinas Valley coastal area near Castroville by providing recycled water for agricultural irrigation. The MCWRP began operation in April 1998. The use of recycled water for irrigation has decreased the amount of groundwater pumping required to meet water supply needs within the distribution area.

Quality and Quantity of Water Resources within the Region

The region faces two major water quality issues: seawater intrusion and nitrate contamination. Groundwater withdrawal has resulted in overdraft conditions in the Basin, allowing seawater to infiltrate both the 180-Foot and 400-Foot Aquifers. The MCWRA uses a 500 mg/l chloride concentration as an indicator of impaired water, based on the upper limit of the California Safe Drinking Water Act, Secondary Drinking Water Standard.

Nitrate contamination in the Salinas Valley was first documented in a report published by the Association of Monterey Bay Area Governments (AMBAG) in 1978. The SWRCB has twice documented that nitrate levels in the Salinas Valley groundwater have impaired its beneficial use as a drinking water supply. In response to the identification of nitrate contamination, the Nitrate Technical Advisory Committee (NTAC) was formed by the MCWRA to examine nitrate in the Salinas Valley groundwater basin and recommend a course of action, and as a result, MCWRA has prepared a nitrate management plan that is currently under implementation.

Water Use within the Region

The primary source of water in the Salinas Valley region is groundwater. Presented in Table ES-3 is a summary of groundwater pumping for the year 1999, the most recent year for which complete records are available.

Table ES-3 Salinas Groundwater Basin Pumping in 1999

Subarea	Agricultural Pumping (acre-feet)	Urban Pumping (acre-feet)	Total Pumping (acre-feet)
Pressure	97,910	20,963	118,873
East Side	79,562	8,955	88,517
Forebay	136,169	6,359	142,528
Upper Valley	150,367	4,282	154,649
Total	464,008	40,559	504,567

Source: MCWRA 1999 Groundwater Extraction Report published in October 2004.

Projected water needs within the region are presented in Table ES-4. Although urban water use is projected to increase, there is a projected decrease in total water use within the region due to a projected decrease in agricultural water use. However, since a majority of the increase in urban water use is projected to occur in the northern portion of the region, long-term water management planning is required to provide a balanced basin that stops seawater intrusion and provides a reliable long-term supply of water.

Table ES-4 Estimated Water Demand

Parameter	Baseline or Existing (1995) Conditions[1] (AFY)	Projected Future Baseline (2030) Conditions[1] (AFY)
Basin Groundwater Pumping		
Urban	45,000	85,000
Agricultural	418,000	358,000
Total Basin Pumping	**463,000**	**443,000**
Basin Overdraft (does not include seawater intrusion)[2]	17,000	14,000
Seawater Intrusion[3]	8,900	10,300
Salinas River Outflow to Ocean	238,000	249,000

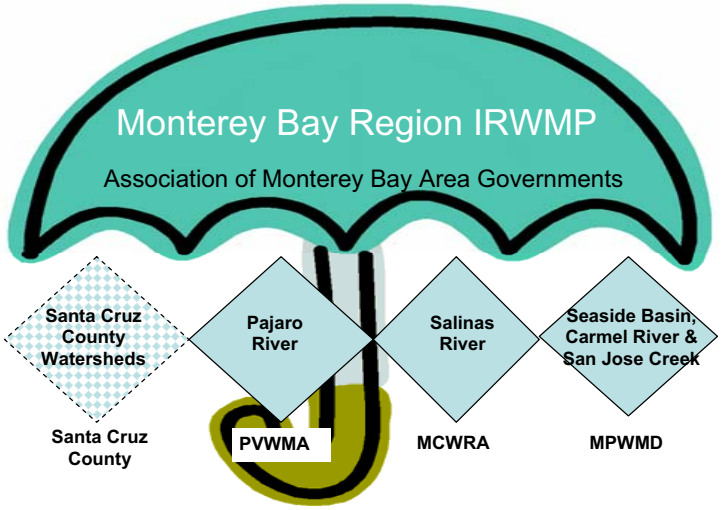
[1] Both conditions assume that deliveries from MCWRP are being made, with 13,300 AFY delivered for 1995 conditions and 15,900 AFY delivered under 2030 conditions.

Integrated Water Management Planning

The SVIRWM Plan is one of four detailed IRWM planning efforts in the greater Monterey Bay region. All IRWM Plan efforts originate within four Monterey Bay regions, which can generally be described as (1) Northern Santa Cruz County through and including Aptos Creek, San Andreas and the Watsonville Sloughs watershed, (2) the Pajaro River watershed in parts of Santa Clara, San Benito, Santa Cruz, and Monterey Counties, (3) the Salinas River watershed in Monterey County, and (4) the Carmel River watershed and Seaside groundwater basin in Monterey County. In addition, a Monterey Bay IRWM Plan is proposed as one of the future steps in regional water management planning for the greater Monterey Bay area.

The greater Monterey Bay IRWM Plan will be an effort undertaken by local water districts signatory to a MOU for Integrated Regional Water Management in the Monterey Bay Area. This MOU has been approved by MCWRA, the Pajaro Valley Water Management Agency, and the Monterey Peninsula Water Management Agency.

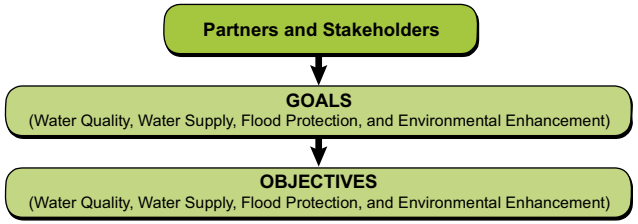
Figure ES-2 Future Regional Planning in Monterey Bay Area



ES-6 Planning Objectives

The objectives of the Functionally Equivalent Plan (FEP) were developed in order to identify and address the major water related issues of the region. The objectives were developed in a two-step fashion. An initial set of goals were established for water resource management within the Salinas Valley. After these goals were agreed upon by the partners and stakeholders in the region, the objectives of the FEP were developed based on received feedback. A diagram delineating the decision process by the Water Management Group and stakeholders is provided in Figure ES-3.

Figure ES-3 Goals and Objectives Process



ES-7 Salinas Valley Water Resource Management Goals

The first step in determining the objectives of the plan was to establish the water resource management goals for the region. While developing these goals, the Water Management Group considered the water related concerns of the Salinas Valley communities as well as the Salinas Groundwater Basin. The goals were organized into four general categories: water supply, water quality, flood protection, and environmental enhancement. The goals for each of these four categories are summarized in Table ES-5.

Table ES-5 Goals for Salinas Valley Water Planning

Water Supply	Water Quality
Improve Water Supply Reliability	Protect and Improve Groundwater Quality
Augment Existing Groundwater Availability	Protect and Improve Surface Water Quality
Improve Drought Reliability	Meet TMDL and Non-Point Source Objectives
Flood Protection	**Environmental Enhancement**
Maintain Present Flood Protection Levels	Opportunity to Enhance Streams/Fisheries
Minimize Flood Potential	Opportunity to Enhance Wetlands
Maintain Flood Channel Capacity	Opportunity to Enhance Monterey Bay Sanctuary
	Opportunity to Enhance Upland Habitat

The second step in the process was to establish a set of project specific objectives. Like the regional goals, the plan objectives were organized under the four categories of water supply, water quality, flood protection, and environmental enhancement. These objectives are specific to the Salinas Valley region, and are defined as the means by which the planning goals can be met.

Table ES-6 List of Objectives

Water Supply	Water Quality
• Stop Seawater Intrusion • Improve the long-term hydrologic balance between recharge and withdrawal • Provide sufficient water supply to meet all water needs through the year 2030 • Increase groundwater recharge through the Salinas River • Increase groundwater storage • Optimize the use of groundwater storage • Diversify Water Supply Sources • Continue and enhance water conservation programs for both municipal and agricultural uses • Optimize conjunctive use of the Salinas River, its tributaries, and the Groundwater Basin	• Meet or exceed all applicable water quality regulatory standards • Meet or exceed M&I water quality targets established by stakeholders • Deliver Agricultural water to meet quality guidelines established by stakeholders. • Meet or exceed Recycled water quality targets established by stakeholders • Aid in meeting TMDL's established for the Salinas River Watershed • Protect surface waters from contamination and threat of contamination • Protect groundwater basins from contamination and the threat of contamination • Prevent seawater intrusion • Manage groundwater levels to minimize water quality impacts to existing land uses while preserving environmental habitats
Flood Protection	**Environmental Enhancement**
• Protect existing infrastructure from flooding and erosion due to flood events • Work with Stakeholders to preserve existing channel maintenance program • Preserve flood protection associated with Dam Operations	• Identify opportunities to protect, enhance, and/or restore natural resources including streams, groundwater, watersheds, and other resources. • Minimize adverse environmental impacts of potential projects • Identify opportunities for open spaces and trails adjacent to streams, sloughs and lagoons • Identify opportunities to enhance ecological habitats, including migratory steelhead fish, through project implementation and operation.

The next step in this process was to make sure that each identified objective corresponds to one of the planning goals. Additionally, the Water Management Group verified that each goal had at least one objective associated with it. As a result of this analysis the Water Management Group concluded that the majority of the objectives that had been identified could be categorized under more than one of the planning goals, and many objectives can be categorized as reaching goals in more than one category (for example, the objective of stopping seawater intrusion corresponds to both water supply and water quality goals). Additionally, each planning goal had at least one

objective associated with it and many had more than one. Specific details about each objective are given in Section 4.3.

ES-8 Water Management Strategies and Integration

A number of water management strategies were considered in developing this plan. Several strategies are required in order to meet minimum Integrated Regional Water Management (IRWM) Plan Standards. The Water Management Group considered all of the required strategies along with others.

Table ES-7 Water Management Strategies

Water Management Strategy	Required to Meet Min. Plan Standards	Considered
Ecosystem Restoration	☑	☑
Environmental and habitat protection and improvement	☑	☑
Water Supply Reliability	☑	☑
Flood management	☑	☑
Groundwater management	☑	☑
Recreation and public access	☑	☑
Storm water capture and management	☑	☑
Water conservation	☑	☑
Water quality protection and improvement	☑	☑
Water recycling	☑	☑
Wetlands enhancement and creation	☑	☑
Conjunctive use		☑
Desalination		☑
Imported water		
Land use planning		☑
NPS pollution control		☑
Surface storage		☑
Watershed planning		☑
Water and wastewater treatment		☑
Water transfers		

A detailed discussion of the evaluation of water management strategies *and the benefits of integrating strategies* is presented in Section 5.1.2.

ES-9 Short Term Regional Priorities

Projects that Stop Seawater Intrusion and Balance Basin

The most pressing problem in the Salinas Valley region from a water supply and water quality standpoint is seawater intrusion. Balancing the quantity of water that recharges the basin with the amount of water that is pumped for agricultural, municipal and industrial uses will stop the spread

of seawater intrusion that has occurred since before 1946. Stopping seawater intrusion has been recognized as a regional priority by local and state agencies.

Projects that Help Meet Existing Water Demands

The combination of development in the coastal communities of the region (including the former Fort Ord Army base) and the extent of the existing seawater intrusion cause problems for the region's urban water suppliers. These two forces have jointly increased water demand and decreased water supply availability and quality in certain areas within the region. Projects that provide higher quality water to these areas while addressing seawater intrusion will receive priority.

Projects that Re-Establish Steelhead in Arroyo Seco

A priority in the region is to re-establish Steelhead Trout passage through the Salinas River system and into its tributaries, with particular short-term emphasis on reintroduction of this endangered species to the Arroyo Seco River. Biological studies have indicated that the Arroyo Seco River (a major tributary to the Salinas River) has potentially significant fish spawning habitat. The re-establishment of fish spawning at this location, which is 40 miles upstream of the mouth of the Salinas River, is a priority.

Projects that Protect and Improve Groundwater Quality

Groundwater quality in the Salinas Basin has been affected by both agricultural and urban influences. Several contaminants, including nitrates, have been detected through monitoring efforts done by MCWRA. Groundwater is an important water supply for the area. The protection and improvement of groundwater quality are important to the region to avoid loss of this resource.

ES-10 Long Term Regional Priorities

Meet Future Water Demands

Future water demands were projected for the region as part of the planning process for the Salinas Valley Water Project. These projections (as discussed in the Regional Description) show that water demands will increase as well as change location. As these demand patterns change, they will continue to challenge both urban and agricultural water managers. Meeting these demands in a manner that protects groundwater quality is a long term priority of the region.

Establish Steelhead Upstream of Arroyo Seco

There is potential spawning habitat in the Salinas River watershed upstream of the Salinas River confluence with the Arroyo Seco River. One such location is the Nacimiento River, which is approximately 90 miles upstream of the mouth of the Salinas River. After Steelhead Trout are re-established in the Arroyo Seco River, it is a long term priority for the region to re-establish spawning in the Nacimiento River and other upstream tributaries of the Salinas River.

Continue Efforts to Improve Groundwater Quality

As monitoring of groundwater provides more and more data and drinking water standards become more stringent, the need for continued groundwater quality improvement will be necessary.

Implement Watershed Management

Integrated watershed management in the Nacimiento and San Antonio watersheds will improve the water quality in the reservoirs as well as in the riparian and aquatic ecosystems of the Salinas River and Salinas River Groundwater Basin.

ES-11 Selected Projects Based on Regional Priorities

Based on their ability to address regional priorities, four projects have been selected and are included in the plan. *A discussion of the decision-making process in project selection and on how project components may be altered is given in Section 6. The selected* projects meet several of the plan objectives, and they are described in greater detail in Section 7. Presented in Table ES-8 is a summary of the selected projects and each project meets the short term priorities of the region and position the Water Management Group to meet its long term priorities.

Table ES-8 Projects That Meet Short and Long Term Priorities

Project	Short Term Priorities Addressed	Positioning for Long Term Priorities
Salinas Valley Water Project	Stop Seawater Intrusion/Balance Basin	Meet Future Water Demand
	Meet Existing Water Demands	
	Re-Establish Steelhead in Arroyo Seco River	Re-Establish Steelhead Upstream of Arroyo Seco
Water Quality and Fish Habitat Monitoring Program	Re-Establish Steelhead in Arroyo Seco River	Re-Establish Steelhead Upstream of Arroyo Seco
MCWD Well 33, Pump Station and Reservoir Project	Stop Seawater Intrusion/Balance Basin	Meet Future Water Demand
	Meet Existing Water Demands	
Soledad Water Recycling/Reclamation Project	Meet Existing Water Demands	Meet Future Water Demand
	Protect and Improve Groundwater Quality	Continue to Improve Groundwater Quality

Detailed descriptions of each project, including cost, status, project timeline, and other related information, is presented in Section 7.

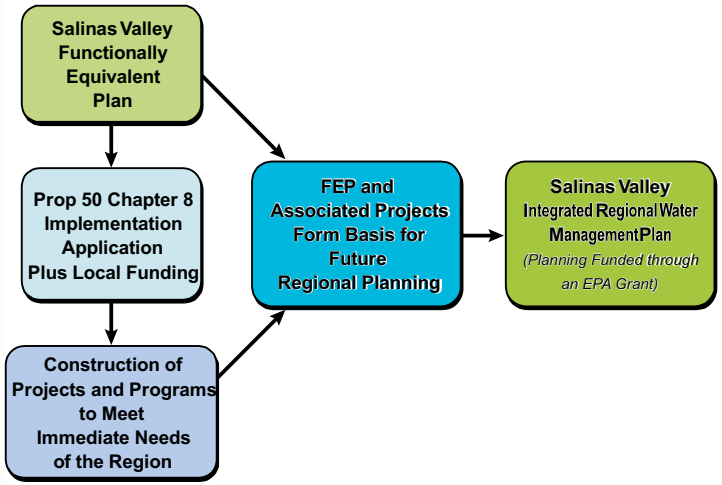
ES-12 Implementation

The Water Management Group has prioritized projects based on their compliance with the IRWM Plan priorities and which have a proposed construction start date by the end of 2006. The reason for this readiness-to-proceed criterion is the IRWM Plan implementation is critical to meeting the primary objectives of stopping seawater intrusion, hydrologically balancing the basin, increasing groundwater storage, and meeting water quality objectives.

The next phase of the ongoing regional planning is scheduled to be completed by December 31, 2006. This next phase will involve the next steps of integrated water management in the Salinas Valley, assuming that the projects highlighted in this FEP will already be under construction or fully implemented. Figure ES-4 illustrates this phased planning process. Some of the projects that have already been identified as part of future IRWM Planning efforts are discussed in Section 7.2.

Potential concerns regarding project implementation are discussed in Section 14.6. A discussion on the institutional structure in place to ensure project implementation is in Section 7.2

Figure ES-4 Salinas Valley Integrated Regional Planning Process



ES-13 Impacts and Benefits

Project Impacts

Each project identified for implementation within the Plan has either completed CEQA compliance or is in the process of completing this process. In each case, any impacts identified with each project for which mitigation is available will be mitigated. An EIR has been completed for the Salinas Valley Water Project, and CEQA compliance is currently being completed for the Well No. 33, Booster Station and Reservoir Project and the Soledad Water Recycling/Reclamation Project. In addition, an EIS for the Salinas Valley Water Project is awaiting final certification. Final certification will be issued once MCWRA completes the Section 7 consultation process with NOAA Fisheries and a Section 404 Permit is issued by the USACE.

Project Benefits

Each of the projects provides an individual, interlinked set of benefits. The identified benefits for all projects include:

- Balancing the Basin Hydrologically,
- Stopping Seawater Intrusion,
- Improving Groundwater Quality,
- Increasing Groundwater Storage,
- Improving Conjunctive Use,

- Improving Reliability and Quality of Domestic Water Supplies,
- Improving Fish Passage,
- Improving Salinas River Lagoon Habitat, and
- Creating Benefits to Disadvantaged Communities.

A full discussion of identified project benefits is presented in Section 8.2.

ES-14 Technical Analysis and Plan Performance

A detailed discussion of technical analysis and plan performance is given in Section 9.

Technical Analysis

The Salinas Valley Integrated Ground and Surface water Model (SVIGSM) was used to estimate and quantify the hydrologic benefits of the Salinas Valley Water Project (SVWP). SVIGSM is a comprehensive hydrologic model that simulates the various components of the water cycle, including the agricultural and urban land water uses, evapotranspiration and deep percolation through the soil and unsaturated zones, flows in the river systems, subsurface flows in the groundwater basin, and the dynamic interaction of these components over time. The SVIGSM was adapted for use in the Salinas Valley from the Integrated Ground and Surface Water Model developed by the California Department of Water Resources, the California State Water Resources Control Board, and the Bureau of Reclamation.

Project Evaluation and Performance

In order to accurately monitor and understand the relative effectiveness of the proposed projects, the members of the Salinas Valley Water Management, in coordination with the Key Stakeholders, is proposing to tailor, and supplement where necessary, existing monitoring efforts. To accomplish this, the Group is conducting a thorough review of the existing monitoring programs and making recommendations for possible modification and refinement for their use in measuring the success of the proposed projects. Once updated, the monitoring programs will become an important tool for use in the future refinement of project operations. Monitoring will occur over time. It will determine if the proposed projects are successful in halting seawater intrusion. *In addition, a Project Assessment & Evaluation Plan (PAEP) will be established for each project that establishes quantifiable and measurable metrics for determining project progress. These plans will be prepared with input, cooperation and approval from the SWRCb and DWR.*

ES-15 Data Management

MCWRA is the lead agency in the Salinas Valley that collects and disseminates data and other information to stakeholders, public, and State agencies, and is therefore the responsible party of the Salinas Valley Water Management Group for data management. MCWRA considers surface and groundwater data collection and management very important to managing and maintaining water supply and water quality. This section discusses current data management measures and future improvements that will allow broader dissemination of data to stakeholders, public, and State agencies.

Reports that are developed through the IRWMP process will be provided to the appropriate State and Federal Agencies for use in their programs. Data dissemination to stakeholders and the public will continue to occur after the implementation of the proposed projects. The Management Group will utilize the regularly scheduled MCWRA Board of Director's (Board) and Committee meetings as the primary vehicle for data dissemination to the public as well as through websites and Board approved reports.

ES-16 Project Financing

Salinas Valley Water Project

Apart from grant funding obtained from the Prop 50 Chapter 8 application, the Salinas Valley Water Project (SVWP) will be financed by the landowners of the Salinas Valley. In the late 1990's, MCWRA and key stakeholders in the Salinas Valley created the Cost Allocation Committee (CAC). The CAC was formed to provide a basis for evaluating the benefits of the SVWP and developing a methodology for assigning its benefits. The CAC consisted of 19 members of the public that were selected as representatives of the wide range of Salinas Valley water user interests.

The CAC formed the basis for the Proposition 218 land based assessment initiative, which allowed Salinas Valley landowners to vote on the cost allocation for the SVWP. A Proposition 218 Ballot was passed with 85% of the vote for the assessment of every irrigated acre in the affected region. The result is a total of $18.8 million available from the landowners for the implementation of the SVWP. The assessments on the landowners will be adjusted if grant money is obtained for this project. Annual Operations and Maintenance (O&M) costs were taken into account during the SVWP CAC process and were included in the Proposition 218 land based assessments. As a result, O&M will also be paid by the Salinas Valley landowners and beneficiaries of the project.

Water Quality and Fish Habitat Monitoring Program

Funding for this work is included in the annual operations and maintenance portion of the land based assessments associated with the SVWP.

Well 33, Booster Station and Reservoir Project

MCWD Well No. 33, Booster Station and Reservoir projects will be funded by borrowing money to fund the Ord community's Capital Improvement Projects (CIP). MCWD will acquire new debt for the implementation of its CIP and repay its debt by charging water users in capacity charges, consumer surcharges, and water rates. O&M cost will also be recovered with water consumer's charges. MCWD has a separate rate structure for the former Fort Ord facilities specifically to address these issues, and is committed to providing a 60 percent match to any grant funds provided through Proposition 50, Chapter 8 funding.

Soledad Water Recycling/Reclamation Project

The primary beneficiaries of this project will be the residents of Soledad. The city, through its bonding and borrowing capacity and capital improvement components of its enterprise funds has the ability to finance this project with the assistance of Proposition 50 grant opportunities. In addition to the capital costs of the project, the city's sewer enterprise fund is yearly funded to assure that the proper and ongoing operations and maintenance of its facilities, including those that are planned in this project are carried out.

ES-17 Statewide Priorities and Local Planning

Statewide Priorities

In March of 1998, the SWRCB cited that MCWRA had made significant progress on addressing some of the issues it needed to accomplish in order to address that Board's concerns. In the same letter, the SWRCB stated that it "considers the water quality problems in the Salinas Valley to be among the most critical water resources issue in the State." Further, the SWRCB remains committed to pursuing adjudication proceedings against Salinas Valley water users in the event the SVWP is not implemented.

TMDL's for the Salinas River are under development. The Regional Board has allocated funds to the California State University Monterey Bay (CSUMB) for the completion of technical studies for nutrient and sediment TMDL's. CSUMB finished and has delivered its studies to the Regional Board. The study is also published on CSUMB's website. This study will be used by the Regional Board for an assessment and future implementation of TMDL's in the Salinas River. Two projects that are part of this proposal that are responsive to the Regional Board's priorities are the Nitrate Management Plan and the Monterey Regional Storm Water Management Program.

MCWRA with other regional entities completed the Monterey Regional Storm Water Management Plan (MRSWMP) on December 8, 2004.The Central Coast Regional Water Quality Control Board held a public hearing on this plan on May 12, 2005. The MRSWMP is a critical component of overall water resource management in the Salinas Valley region.

Local Planning

The Salinas Valley Water Management Group has incorporated local planning into its planning of water resource management projects. *Integration of the FEP into the County General Plan/ General Plan Update is discussed in Section 13. Other* local planning efforts that have been considered and/or incorporated include the Fort Ord Reuse Authority Base Reuse and Capital Improvement Program planning, City General Plans, Urban Water Management Plans, and other similar local planning efforts. This FEP is fully consistent with those planning efforts.

ES-18 Stakeholder Involvement

The Salinas Valley water management process has fully integrated key stakeholders throughout its development. Each of the member agencies has participated in water management planning in the Salinas Valley region, and they have included significant stakeholder and public outreach efforts. Numerous projects that address the water supply needs of the Salinas Valley have been constructed and put into operation.

Of particular importance in this process is the Cost Allocation Committee (CAC) which was formed by the MCWRA as a key element in the stakeholder process for the SVWP. A list of the stakeholders directly involved in the CAC is presented in Table ES-9. *A detailed discussion of historic and ongoing stakeholder involvement is presented in Section 14. See Section 2.2 for a discussion of stakeholders and other supporters, including a list of stakeholders.*

Table ES-9 Cost Allocation Committee

Individual	Interest	Region
Dan Anderson	Agriculture	Forebay Area
Bob Antle	Agriculture	Pressure Area
Mike Armstrong	Urban	Marina Coast Water District
Chris Bunn	Agriculture	Pressure Area
Don Chapin	Urban	North Monterey County
Carl Chase	Urban	North Monterey County
Jan Collins	Urban	City of Salinas
Matt Gourley	Urban	City of Gonzales
Chris Indelicato	Agriculture	Upper Valley Area
Nancy Isakson	Agriculture	Arroyo Seco Area
Steve Jensen	Agriculture	East Side Area
Jim Manassero	Agriculture	East Side Area
Bob Martin	Agriculture	Forebay Area
Roger Moitoso	Agriculture	Upper Valley Area
Arvid Myhre	Agriculture	Upper Valley Area
Greg O'Neal	Agriculture	Pressure Area
Jim Perrine	Urban	Former Fort Ord
Rich Smith	Agriculture	Arroyo Seco Area
Jim Smith	Urban	Salinas and King City

Potential Obstacles to Implementation

The Management Group has worked diligently to obtain public, key stakeholder, and agency support for the proposed projects. Regional water projects in California commonly focus more energy on litigation than developing solutions to water resources management; the Management Group is very pleased that only three areas of potential obstacle currently remain to the implementation of the IRWM Plan. These three potential obstacles are:

Water Rights Petition Protest
MCWRA has petitioned the SWRCB for a change in the place of use and the addition of a new point of diversion for the water rights for Nacimiento and San Antonio Reservoirs. NOAA Fisheries is the sole protestor of this petition. However, NOAA Fisheries and MCWRA have been working closely to develop in-stream flow regimes that will protect and/or enhance Steelhead fish passage on the Salinas River. On this basis, MCWRA now believes the protest of the water rights petition by NOAA Fisheries is not a significant obstacle to implementation of the IWRM Plan.

Legal Challenge by Salinas Valley Property Owners for Lawful Assessments (SVPOLA)
A group called Salinas Valley Property Owners for Lawful Assessments (SVPOLA) filed a legal challenge to the basis of the SVWP assessments in Monterey County Superior Court. On March 16th, 2006, the judge in the case entered a stipulated judgment settling the case and establishing modified assessments for the plaintiffs. The judgment will not hurt MCWRA's ability to implement and fund the project. The modified assessments will result in approximately $130,000.00 less per year in funding for the SVWP. The total assessment is approximately $4

million annually. This loss can be recouped through reallocation of project resources, acquisition of increased outside funding, and/or increased water delivery charges.

Legal Challenge by Water World Resorts, Inc.
MCWRA prepared and certified an EIR for the SVWP that fully addresses the issues, impacts, and mitigation measures associated with the SVWP. Based on the information presented in the SVWP EIR, Water World Resorts, Inc., operators of the recreational facilities at San Antonio Reservoir and owner of similar facilities at Nacimiento Reservoir, has filed a suit contending impacts on reservoir levels that will result from implementation of the SVWP will negatively affect their business. Water World is not challenging the project, but is seeking monetary compensation for the affects caused by the IRWM Plan implementation to Water World's operations at the two reservoirs. Therefore, the legal challenge by Water World Resorts, Inc. is not an obstacle to the project, but is an attempt to resolve the financial impacts to the owner/operators of recreational facilities at the two reservoirs. This challenge is scheduled to be heard in Los Angeles County Superior Court in September of this year.

The Management Group feels that all potential obstacles will be effectively resolved in favor of project development.

1 Introduction

The California Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB) are encouraging local and regional water management planners to establish integrated regional water management plans through the collaboration of planning efforts and project coordination. The intent is to encourage planners to implement projects focused on meeting multiple water resources needs on a regional basis. Jointly, both agencies are soliciting grant applications for Proposition 50 Chapter 8 grant funding, which was established to provide a fiscal tool to support integrated regional water management.

In order to take advantage of this funding opportunity, Monterey County Water Resources Agency (MCWRA), Marina Coast Water District (MCWD), and Castroville Water District (CWD) have formed the Salinas Valley Water Management Group to spearhead regional planning for the Salinas Valley Region of Monterey County.

One of the requirements of the Proposition 50 Chapter 8 guidelines is the preparation of an Integrated Regional Water Management (IRWM) Plan. However, both DWR and the SWRCB recognize that many communities in the state have already completed planning documents such as Basin Management Plans, Water Supply Master Plans and Urban Water Management Plans. There is a provision in the funding guidelines that allows for the submittal of a Functionally Equivalent Plan (FEP) consisting of a group of water management planning documents that meet all of the requirements of an IRWM Plan.

This report functions as an FEP for the Salinas Valley Region for the purpose of applying for Proposition 50 Chapter 8 funds. The FEP documents the manner in which the adopted plans in the region jointly meet all of the requirements of an IRWMP. A list of these adopted plans is included in Appendix C of this report.

MCWRA and the Salinas Valley Water Management Group are committed to IRWM Planning

MCWRA has obtained a series of EPA grants that provides the funding necessary to update the integrated regional planning work represented in the FEP, with a particular focus on integrated regional water management planning for future urban water needs. This funding provides an opportunity for the Salinas Valley to update this FEP and provide a sound basis for implementation of future water resource management projects in the Salinas Valley.

In a parallel but related effort, MCWRA has obtained US EPA grant funding for integrated water management planning efforts in the Salinas Valley. Through the EPA grant funding process, MCWRA, through the Salinas Valley Water Management Group, is preparing an updated IRWM Plan for the Salinas Valley that is scheduled for completion in early 2006. MCWRA has been awarded a series of EPA grants that will extend the IRWM planning process to potentially include a broader regional area and/or greater analysis of water management issues and opportunities.

This FEP is a collection of planning studies which identifies possible future projects for the region. The Salinas Valley Water Management Group has not approved, adopted, or funded the projects included in this plan. Therefore, consistent with Section 21083 of the Public Resources Code, this IRWMP is statutorily exempt from the California Environmental Quality Act.

Any agency decision to implement any project or program identified herein would be subject to CEQA compliance at such time as such agency commits to fund or implement the project.

2 Regional Water Management Group

IRWM Standard A

This section describes the regional Water Management Group for development and implementation of the Plan. It includes the member agencies and organizations and their management responsibilities related to water. This section demonstrates that all agencies and organizations that were necessary to address the objectives and water management strategies of the Plan were involved in the planning process.

2.1 Salinas Valley Regional Management Group

Monterey County Water Resources Agency (MCWRA), Marina Coast Water District (MCWD), and Castroville Water District (CWD) form the Salinas Valley Water Management Group (Group) that has developed the Salinas Valley Integrated Regional Water Management (SVIRWM) Plan. The Group conducted extensive outreach in the region during project planning and identified key stakeholders that will contribute and benefit from the set of projects listed in this plan and in this application.

The Salinas Valley Water Management Group consists of Monterey County Water Resources Agency (MCWRA), Marina Coast Water District (MCWD), and Castroville Water District (CWD).

MCWRA

MCWRA is the lead agency in developing the SVIRWM Plan. MCWRA was formed under Chapter 699 of the Statutes of 1947 as the Monterey County Flood Control and Water Conservation District. In 1990 the District was renamed the Monterey County Water Resources Agency in Chapter 2 of the Water Code Appendix. MCWRA is responsible for managing, protecting, and enhancing the water supply and water quality, as well as providing flood protection in the County of Monterey.

MCWRA operates the Nacimiento and San Antonio Reservoirs for flood management and water supply (groundwater recharge) purposes. MCWRA operates a distribution system that delivers recycled water to approximately 12,000 acres of agricultural land in the northern Salinas Valley. The agency also performs groundwater elevation and ground and surface water quality monitoring, and manages numerous flood protection facilities that provide localized flood protection benefits.

MCWD

MCWD is located on the coast of Monterey Bay at the northwest limit of the Salinas Valley and occupies a service area of about 4.5 square miles (2,881 acres). MCWD is a county water district formed and authorized by Division 12 of the California Water Code. MCWD was formed in 1960 and provides potable water and wastewater treatment services to customers in its service area. MCWD currently delivers approximately 2,000 acre-feet per year (AFY) of potable water to approximately 18,000 customers in the City of Marina through a network of four supply wells, one desalination plant, two storage tanks and 42 miles of pipeline. Approximately 98% of MCWD's supply is groundwater, while less than 2% of the water is obtained from the MCWD desalination plant.

MCWD also provides water and wastewater services to the former Fort Ord. The Ord community uses drinking water from three supply wells that pump groundwater from the aquifers of the Salinas Valley groundwater basin. Drinking water is delivered to the Ord community customers

through a network of seven reservoir tanks, seven pressure zones and 170 miles of pipeline. Total existing water demand in the Ord community is estimated at approximately 3,000 AFY.

CWD

CWD is a special district formed in 1952 under the County Water District Act for the purpose of installing and operating water supply and distribution system facilities for the community of Castroville. The district serves more than 6,000 customers through 1,522 connections located in the Salinas Valley in northern Monterey County. CWD currently delivers approximately 1,000 AFY of water 100% of which is groundwater.

CWD operates three production wells. The estimated capacity of the wells is just under 5 million gallons per day. The CWD system encompasses approximately 13 miles of pipeline and includes two water storage tanks with a capacity of 1.1 million gallons. In addition, monitoring wells strategically placed along the coast monitor water quality and groundwater levels in the 400-Foot Aquifer. All monitoring wells are sampled to measure chlorides, nitrates, total dissolved solids, static water level and the threat of salt water intrusion.

2.2 Key Agency Stakeholders

Three key stakeholders have been identified for the Salinas Valley Planning Region. The three key stakeholders are:

- Monterey Regional Water Pollution Control Agency,
- The Elkhorn Slough Foundation, and
- The City of Soledad.

All necessary water management entities in the region were included in the planning process.

The Monterey Regional Water Pollution Control Agency (MRWPCA) owns and operates the regional wastewater treatment plant at the northern end of the City of Marina. Wastewater from the Monterey Peninsula, Salinas, Marina, Moss Landing and the former Fort Ord is conveyed to the MRWPCA treatment plant for processing. To retard the advancement of seawater intrusion, MRWPCA, in partnership with MCWRA, built two projects: a water recycling facility at the Regional Treatment Plant and a reclaimed water distribution system that delivers recycled water to approximately 12,000 acres of agricultural users near Castroville. These projects were completed in 1997 and are known collectively as the Monterey County Recycled Water Projects.

The Elkhorn Slough Foundation (ESF), located in Moss Landing, is a nonprofit, member-supported organization working to conserve and restore Elkhorn Slough and its watershed. The Foundation works with local, state, and national constituencies to protect the Elkhorn Slough's water quality and conservation of lands for improvement of habitat, research, and education. MCWRA and the ESF have been working together on the implementation of a water quality monitoring program and a habitat restoration project. MCWRA and ESF have developed cooperative water monitoring projects since 1998 when this partnership won the award for the "Best Poster for Collaborative Research" in the Monterey Bay National Marine Sanctuary Symposium.

The City of Soledad (City) owns and operates wastewater treatment plant facilities located one mile southwest of the City. The City also leases and plans to operate the former State Department of Corrections Wastewater Treatment Plant five miles northwest of the City. The City has been involved in the development of the plan. Its Water Recycling/Reclamation Project is included in

this Functionally Equivalent Plan as a project that will meet the plan's goals, objectives, and priorities.

Along with these key stakeholders, other entities responsible for water management in the region, as well as other interested parties, have been involved in the development of this plan. The Group is satisfied that all agencies and organizations that are necessary to address the objectives and water management strategies of the Plan were involved in the planning process.

2.3 Memorandum of Understanding

Stakeholder and agency participation for the implementation of projects in the Salinas Valley has occurred for many years. A memorandum of understanding (MOU) has been prepared and signed by all partnering agencies to acknowledge cooperative efforts in the Salinas Valley and agreements among agencies on project implementation. The MOU formalizes the collaborative planning effort that these agencies have been involved in for several years. A copy of this MOU is included in Appendix A.

2.4 Letters of Support

Several stakeholders have offered their support of the Salinas Valley Water Management Group's planning efforts. The following is a list of letters of support from stakeholders in the region. These letters are included in Appendix B.

Table 2-1 Letters of Support

Stakeholder Group
California Water Service Company
State Senator Jeff Denham
Elkhorn Slough Foundation
Fort Ord Reuse Authority
City of Gonzales
City of Greenfield
Grower-Shipper Association of Central California
Nancy Isakson, Government Affairs Consultant
King City
State Assemblymember John Laird
City of Marina
Monterey County Board of Supervisors
Monterey County Farm Bureau
Monterey County Planning and Building Inspection Department
Monterey Peninsula Water Management District
Monterey Regional Water Pollution Control Agency
Pajaro Valley Water Management Agency
City of Salinas
State Assemblymember Simon Salinas
Salinas River Channel Coalition
Salinas Valley Water Coalition
City of Soledad
Watershed Institute

3 Region Description

IRWM Standard B

This section explains why the region is an appropriate area for integrated regional water management. Included in this section are descriptions of:

- internal boundaries within the region,
- major water related infrastructure,
- major land-use divisions,
- a description of the quality and quantity of water resources within the region,
- water supplies and demand for a minimum 20-year planning horizon,
- important ecological processes and environmental resources within the regional boundaries, and the associated water demands to support environmental needs,
- the social and cultural makeup of the regional community; important cultural or social values, and
- economic conditions and important economic trends within the region.

Also included in this section is a discussion of the plans for a regional planning process throughout the Monterey Bay area.

3.1 General Description

The Salinas Valley region is located in Monterey County. Monterey County is situated along the central California coast, approximately 110 miles south of San Francisco and 320 miles north of Los Angeles. The county has approximately 105 miles of coastline and is bordered by Santa Cruz County to the north, San Luis Obispo County to the south, and San Benito, Kings and Fresno Counties to the east. Elevation within the county ranges from sea level to 5,862 feet at Junipero Serra Peak, which is located 12 miles inland in the Santa Lucia Range.

The region for the Salinas Valley Integrated Regional Water Management (SVIRWM) plan is defined by the boundaries of the Salinas Valley Groundwater Basin, as shown in Figure 3-2. The Salinas River generally runs in the northwestern direction from its headwaters in San Luis Obispo County to the Monterey Bay. The region includes parts of the Nacimiento, San Antonio and Arroyo Seco Rivers and their associated watersheds, all of which are tributary to the Salinas River.

The creation of the Salinas Valley Region signifies another affirmative step in regional planning in Monterey County. There is a history of successful inter-agency projects to address water issues in the County. The Salinas Valley Water Management Group has had discussions with neighboring regional groups regarding combining and/or changing regions in order to consolidate the planning process. Future integrated planning efforts with the regions that drain into the Monterey Bay are discussed in Section 3.9.

The Water Management Group has also discussed regional planning with San Luis Obispo County due to the planned shared use of the resources of the Nacimiento Reservoir and the fact that the Salinas River Watershed spans both counties. The decision was made, however, to contain the planning area to within Monterey County and to base it on the groundwater basin as opposed to the watershed. This decision was made for several reasons:

- *It is the historic planning region for identifying solutions for seawater intrusion, which was identified by the State Water Resources Control Board as "among the most critical water resources issues in the State."*
- *The reliance of Monterey County on groundwater resources for water supply has led to a focus on the Salinas River groundwater basin.*

- *The approach of the Central Coast towards IRWM Planning is to address smaller regions' specific water management planning needs before combining into larger regions. Using the groundwater basin as the Salinas Valley region avoided overlaps with neighboring planning areas.*

The Water Management Group continues to coordinate with San Luis Obispo County on watershed management and water supply issues, and has discussed joint regional planning efforts for the future.

3.1.1 Salinas River Watershed

The Salinas Valley Region is located within the Salinas River Watershed. The Salinas River Watershed encompasses an area of approximately 3,950 square miles and is the largest water system in Monterey County. The watershed includes the Salinas Valley, which extends from the Salinas River headwaters in the La Panza and Garcia Mountains in southern San Luis Obispo County to Monterey Bay, a length of approximately 170 miles.

3.1.2 Salinas Valley Groundwater Basin

The Salinas Valley Groundwater Basin (Basin) is located entirely within Monterey County. The Basin consists of one large hydrologic unit comprised of five subareas: Upper Valley, Arroyo Seco, Forebay, Pressure and East Side, as shown in Figure 3-2. These subareas have different hydrogeologic and recharge characteristics, though they are not separated by barriers to horizontal flow and water can move between them. The Upper Valley, Arroyo Seco and Forebay Subareas are unconfined and in direct hydraulic connection with the Salinas River.

Legend

- Monterey County
- Counties Surrounding Monterey
- Reservoirs
- Rivers
- Cities

Figure 3-1 Regional Map of Monterey County

0 10 20 Miles

Note: The scale and configuration of all information shown hereon are approximate and are not intended as a guide for survey or design work.

Legend

- Cities
- Rivers
- Reservoirs

Subareas

- Pressure
- Upper Valley
- Arroyo Seco
- East Side
- Forebay

Figure 3-2 Salinas Valley Hydrologic Subareas

0 10 20 Miles

Note: The scale and configuration of all information shown hereon are approximate and are not intended as a guide for survey or design work.

The Upper Valley Subarea includes approximately 99,000 acres near the south end of the Salinas Valley from Greenfield to Bradley. Groundwater recharge to the Upper Valley Subarea occurs primarily from percolation in the channel of the Salinas River.

The Forebay Subarea, from Gonzales to Greenfield, consists of approximately 60,000 acres of unconsolidated alluvium. Principal sources of recharge to the Forebay Subarea are percolation from the Salinas River, and groundwater outflow from the Upper Valley and Arroyo Seco.

The Arroyo Seco Subarea consists of approximately 22,000 acres of land located on the west side of the Salinas River between Soledad and approximately two miles south of Greenfield. The principal source of groundwater replenishment in the Arroyo Seco Subarea is percolation from the Arroyo Seco River and its tributary, Reliz Creek. Average annual flow in the Arroyo Seco River is approximately 40 percent of average annual flow in the Salinas River. This predominance of flow from the Arroyo Seco River precludes flow in the Salinas River from recharging the upper portion of the Arroyo Seco Cone even though the area is in hydraulic continuity with the alluvium of the Salinas Valley.

The Pressure Subarea includes approximately 114,000 acres between Gonzales and Monterey Bay. It is composed mostly of confined and semi-confined aquifers separated by clay layers (aquicludes) that limit the amount of vertical recharge. Three primary water-bearing strata have been identified in the Pressure Subarea: The 180-Foot Aquifer, the 400-Foot Aquifer, and the Deep Aquifer. These aquifers are separated by aquitards, although some vertical recharge occurs locally where the aquitards are thin or absent. The uppermost aquitards allow some limited recharge from the Salinas River directly to the 180-Foot Aquifer in the area near Spreckels. The areas of thin or absent aquitards also allow some interconnection between the shallow 180-Foot and deeper 400-Foot Aquifers.

The East Side Subarea consists of 87,000 acres and includes unconfined and semi-confined aquifers in the northern portion of the Basin that historically received some of their recharge from percolation from stream channels on the west slope of the Gabilan Range. As a result of extractions in excess of recharge, the declines in groundwater level in the East Side Subarea have increased subsurface recharge from the Pressure Subarea and the Forebay Subarea. This inflow is now a larger source of recharge than the stream channels coming from the Gabilan Range.

Groundwater recharge in the Salinas Valley is principally from infiltration from the Salinas River, Arroyo Seco - and to a much less extent - other tributaries to the Salinas River; and deep percolation of rainfall. Very minor amounts are derived from infiltration from small streams and inflow from bedrock areas adjoining the basin. Deep percolation of applied irrigation water is the second largest component of the groundwater budget, but because it represents recirculation of existing groundwater rather than an inflow of "new" water, it is not considered a source of recharge.

3.1.3 Internal Boundaries

The Salinas Valley is a highly productive agricultural region in Monterey County. Along the Salinas River there are several urban and residential centers, including (from south to north): Bradley, San Ardo, King City, Greenfield, Soledad, Gonzales, Chualar, Salinas, Marina, and Castroville. Over 60% of the valley's population resides in the City of Salinas. The former military installation of Fort Ord is located in the northwestern portion of the county, and is being redeveloped into an education, technology and housing center.

The water supply in the region is managed by several agencies, both public and private. The Monterey County Water Resources Agency (MCWRA) is responsible for managing, protecting, and enhancing the water supply and water quality, as well as providing flood protection for

specific areas within the County. The other major water suppliers in the Salinas Valley are the Marina Coast Water District (MCWD), the Castroville Water District (CWD), and the California Water Company. MCWD is responsible for providing water to the City of Marina and the former Fort Ord. CWD serves water to the Castroville area. California Water Company provides water to the Cities of Salinas and King City. Table 3-1 summarizes the water supply responsibilities in the Valley. The jurisdictions of the various water agencies are shown in Figure 3-3.

Table 3-1: Water Districts in Salinas Valley

Community	Water Supplier
Castroville	Castroville Water District
Chualar	California American Water
Fort Ord	Marina Coast Water District
Gonzales	City of Gonzales
Greenfield	City of Greenfield
King City	California Water Company
Marina	Marina Coast Water District
Salinas	California Water Company
San Ardo	San Ardo California Water District
San Lucas	San Lucas County Water District
Soledad	City of Soledad

The Monterey Regional Water Pollution Control Agency (MRWPCA) provides wastewater treatment services for several communities of coastal Monterey County, including Marina, Salinas, and Castroville in the Salinas Valley. Additionally, MRWPCA provides recycled water for agricultural irrigation in the Castroville area in cooperation with MCWRA.

3.1.4 Major Water Related Infrastructure

The two most prominent elements of the Salinas Valley's water infrastructure are the Nacimiento and San Antonio Reservoirs, built in 1957 and 1967, respectively. These reservoirs provide several benefits for the Salinas Valley including:

- Flood protection for the downstream communities and agricultural resources,
- Groundwater recharge through releases into the Salinas River,
- Recreational opportunities, and
- Power generation

The vast majority of water supply in the Salinas Valley comes from groundwater pumping and related distribution systems. In addition to the groundwater pumping systems, two other alternative water supply systems exist in the valley. MCWD has a desalination plant that provides 300 acre-feet of water to the City of Marina, and MRWPCA provides approximately 13,300 acre-feet of recycled water from its Regional Treatment Plant to approximately 12,000 acres of agricultural land located near Castroville through a distribution system operated by MCWRA.

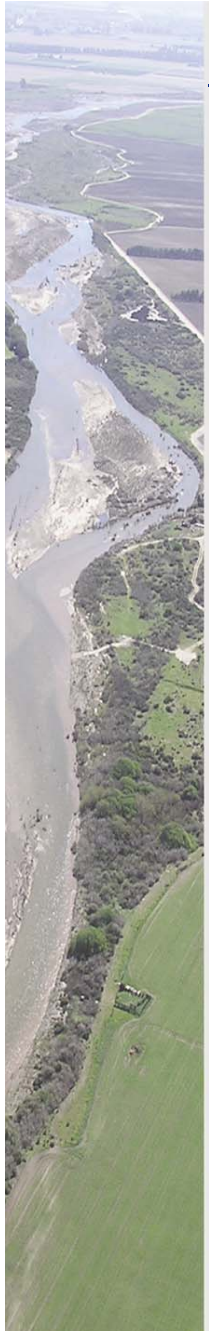
Legend

- Cities
- Castroville Water District
- Marina Coast Water District
- Salinas Valley
- Monterey County Water Resources Agency (MCWRA)
- Rivers

Figure 3-3 Monterey County Water District Jurisdictions

0 10 20 Miles

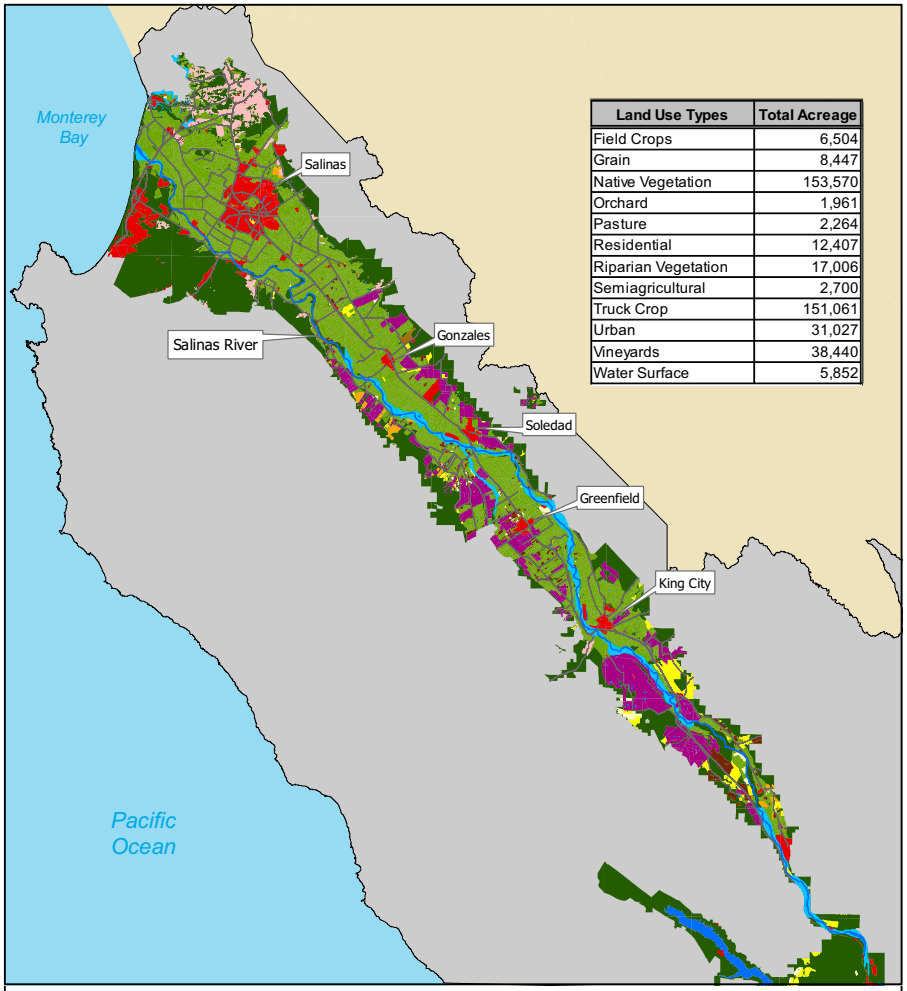
Note: The scale and configuration of all information shown hereon are approximate and are not intended as a guide for survey or design work.



3.1.5 Major Land Use Divisions

The Salinas River watershed is the largest individual watershed in the Central Coast area and provides water to some of the most fertile and productive agricultural areas on the west coast. The region holds national importance in that it provides a wide range of produce for the rest of the United States, as well as agricultural exports to a large number of countries. Agricultural production generated $3.4 billion in 2004 (Monterey County Agricultural Commissioner Crop Report, 2004).

The predominant land use in the Salinas Valley is agriculture and rangeland, with discrete areas of urban development occurring in cities and towns along the Salinas River. A map that illustrates the existing land uses within the region is shown in Figure 3-4. The highest density areas of urban development (which include residential, commercial and industrial uses) are clustered to the north in the vicinity of Monterey Bay. Agricultural practices vary throughout the Basin based on soil type and climatic conditions. In general, most of the high-value produce is grown in the northern two-thirds of the Salinas Valley, with hardier crops, vineyards, and rangeland in the southern third.



Land Use Types	Total Acreage
Field Crops	6,504
Grain	8,447
Native Vegetation	153,570
Orchard	1,961
Pasture	2,264
Residential	12,407
Riparian Vegetation	17,006
Semiagricultural	2,700
Truck Crop	151,061
Urban	31,027
Vineyards	38,440
Water Surface	5,852

Legend
Roads
Monterey County
Existing Land Use Classes
Truck Crop, Pasture, Vineyard, Urban, Orchard, Residential, Grain, Riparian Vegetation, Field Crop, Water Surface, Semiagricultural, Native Vegetation
Source: Dept. of Water Resources, 1997, Summer Landuse for Monterey County.

Figure 3-4 Existing Land Uses Within the Basin

0 5 10 Miles

Note: The scale and configuration of all information shown hereon are approximate and are not intended as a guide for survey or design work.

3.2 Current and Future Water Resources of the Salinas Valley

3.2.1 Surface Water

The primary surface water features overlying and influencing the Basin's hydrology are the Salinas River and its tributaries, Nacimiento and San Antonio reservoirs, and Monterey Bay.

In Monterey County, the Salinas River meanders through the Salinas Valley floor, an area of about 239,000 acres. Several tributaries enter the river along the length. These include Pancho Rico Creek, Santa Rita Creek, Estrella Creek, Chalone Creek, San Lorenzo Creek, El Toro Creek, Prunedale Creek, Arroyo Seco River, Nacimiento River and San Antonio River. The Nacimiento and San Antonio Rivers are by far the largest tributaries, with watersheds of about 330 and 328 square miles, respectively. Dams owned and operated by the MCWRA control both of these rivers. Nacimiento and San Antonio Rivers contribute approximately 200,000 AFY and 70,000 AFY, respectively, to the Salinas River. Another significant tributary is the Arroyo Seco River, the largest unregulated tributary to the Salinas River. In addition, there is flow from the upper Salinas River, which is most prominent during the wet winter months.

Average annual flows to the ocean from the Salinas River are around 282,000 AFY, most of which occurs during the period of November through March. This period corresponds to the months of peak seasonal rainfall and coincides with a seasonal drop in irrigation in the valley. During the spring and summer months, the reservoirs on the Nacimiento and San Antonio Rivers regulate flow to minimize outflow to the ocean, maximizing groundwater recharge through the Salinas River channel.

Under current reservoir operations, water is released into the river during summer months to recharge the groundwater basin. Because a natural clay layer underlies the river in the northern portion of the valley, outflows from the dams are regulated to maintain river flow only as far north as the Spreckels area. The river channel north of Davis Road has minimal flow during the summer season, except for agricultural run off.

3.2.2 Groundwater

Groundwater is the main source of water in the Salinas Valley for both agricultural and urban users. In the northern coastal areas of the Basin, groundwater extraction occurs primarily from two groundwater sources, the 180-Foot and the 400-Foot Aquifers. Groundwater extraction occurs from the unconfined aquifer in the central and southern portions of the Basin. Groundwater withdrawal has outpaced groundwater recharge and has resulted in overdraft conditions in the Basin, allowing for seawater to infiltrate both aquifers. In 1999, MCWRA estimated that seawater affected approximately 24,000 acres overlying the 180-Foot Aquifer and 10,500 acres overlying the 400-Foot Aquifer in the Northern Salinas Valley. As a result of this intrusion, urban and agricultural supply wells have been abandoned, destroyed and relocated. To prevent further seawater intrusion, groundwater pumping rates and recharge need to be brought into balance.

3.3 The Salinas Valley is an Ideal Region for Integrated Water Management

3.3.1 History of Regional Planning in the Salinas Valley

Seawater intrusion was first documented in 1946 when the State Department of Public Works (now known as Department of Water Resources) published Bulletin 52. Groundwater withdrawal in the Salinas Valley groundwater basin has outpaced groundwater recharge that has resulted in overdraft conditions in the Basin, allowing seawater to move steadily inland and infiltrate the

180-Foot and 400-Foot aquifers. In 1977, the State Water Resources Control Board (SWRCB) listed the Salinas Valley groundwater basin as a candidate for adjudication. However, no further action was recommended at that time. In 1983, MCWRA (then known as Monterey County Flood Control and Water Conservation District) received SWRCB funding to evaluate alternatives that would prevent further seawater intrusion. Numerous studies were conducted between 1983 and 1992 to determine the extent of the seawater intrusion and possible solutions. The results of these studies created a series of projects known as the Monterey County Water Recycling Projects (MCWRP), which were joint efforts between MCWRA and Monterey Regional Water Pollution Control Agency (MRWPCA). The projects addressed a portion of the seawater intrusion problem in the Salinas Valley coastal area near Castroville by providing recycled water for agricultural irrigation. The MCWRP began operation in April 1998. The use of recycled water for irrigation has decreased the amount of groundwater pumping required to meet water supply needs within the distribution area.

The MCWRA Board of Directors held a daylong workshop in 1992 to determine the long-term planning goals for the Basin, which ultimately led to development of the Salinas Valley Water Project (SVWP). The primary objective of the SVWP is to reduce the reliance on groundwater in the Salinas Valley in order to:

- Stop seawater intrusion,
- Improve the long-term hydrologic balance between recharge and withdrawal, and
- Provide a sufficient water supply to meet municipal and agricultural water needs through the year 2030.

The planning process was focused on developing the most cost-effective, environmentally sound approach to meeting these objectives of the project. When the MCWRA held another daylong workshop, 35 alternatives were presented and screened based on their ability to meet the required engineering and operational objectives. Other considerations included economic, legal and regulatory, socio-cultural, and biophysical characteristics and other effects of each alternative.

In addition to seawater intrusion, nitrate has contaminated the groundwater throughout the Salinas Valley. Fifty percent of wells sampled in the Salinas Valley exceed the maximum contaminant level for drinking water, which is 45 mg/l (NO_3).

In 1998, the SWRCB initiated adjudication proceedings for the Basin. The SWRCB considers the problems facing the Basin to be one of the "most critical" water resource issues facing California. Because of the seriousness of the issue, the SWRCB assembled a Salinas Valley Groundwater Basin Adjudication Team in order to protect the water resources in Salinas Valley. The SWRCB expressed an interest in working with local stakeholders and decision-makers to solve the seawater intrusion and nitrate contamination issues in the Valley, only bringing to bear adjudication as a last resort. If adjudication were to be initiated, it would mean loss of local control and oversight over the water resources of the Basin. The SWRCB initiated the first phase of the adjudication process, although it suspended the process and committed to terminate the proceedings if the following conditions are met:

- A viable solution to halt seawater intrusion is identified;
- There is agreement on a workable cost allocation;
- An implementation schedule is developed for the solution; and
- A nitrate management work plan is adopted that includes specific goals and timetables.

In addition, the SWRCB committed approximately $600,000 in funding support to MCWRA in an effort to further the development of a local solution that would obviate the need for adjudication of the groundwater basin. The funding was provided to MCWRA to assist in

updating seawater intrusion lines, investigating continuity of clay layers, and preparing groundwater hydrostatic and monitoring reports. These efforts led to developing a local solution as opposed to adjudication.

During the 1994 to 1996 time period, Notices of Preparation (NOPs) were released as the alternatives continued to be refined and reconsidered. However, none of the projects released in these NOPs advanced. In 1996, MCWRA held a series of workshops that redefined the Salinas Valley Integrated Ground and Surface water Model (SVIGSM) and prepared the Historic Benefits Analysis (HBA). These workshops led to the development of an alternative that met the objectives of the project. The MCWRA Board of Directors directed MCWRA to advance the engineering of that alternative in October 1997 and begin work on a project-level EIR. This led to the creation of the Salinas Valley Water Project, the 1997 NOP, and the 1998 Draft EIR. The project included elements such as:

- Modification of Lake Nacimiento Dam spillway;
- Altering operations of the Reservoir (re-operation of the Reservoir);
- Recharge of reoperation-created water into Salinas Valley groundwater aquifers;
- Diversion of a portion of Salinas River via a subsurface facility;
- Storage of diverted water and recycled water (from MRWPCA plant) into a new offstream surface impoundment;
- Alternative storage of recycled water within a defined area of the groundwater basin; and
- Treatment and distribution of water to agricultural and/or municipal users.

During review of the Draft EIR, the public raised concerns over project costs and the feasibility of some of the project elements. An alternative project was proposed by public interests, which addressed concerns over project costs and the feasibility of the subsurface diversion and the injection of recycled water project elements. After several public meetings and workshops, MCWRA decided to prepare a joint EIR/Environmental Impact Statement (EIS) that would incorporate a seasonal surface diversion facility that was based on the alternative project that was presented in public meetings. This revised project became what is now the proposed SVWP project. Changes to the original 1998 project are as follows:

- A surface diversion facility instead of a subsurface facility;
- No new surface impoundments;
- No injection and subsurface storage of recycled water;
- Use of existing distribution facilities;
- Expansion of these facilities in the long term if monitoring data suggests seawater intrusion has not been stopped; and
- Distribution to agricultural users only.

The surface diversion facility has triggered a need for federal approval (US Army Corp of Engineers) for the project, requiring a joint EIR/EIS environmental document to satisfy the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

3.3.2 Regional Problems Require Regional Solutions

Seawater intrusion in the Salinas Valley can only be solved with multiple water management strategies. The region encompasses multiple water agencies and water purveyors that are actively contributing to implementation of projects to ease the stress on groundwater pumping, restore

Salinas River flows, improve impacted habitat, and allow long-term development of agriculture and urban areas.

3.4 Quality and Quantity of Water Resources within the Region

As previously described, groundwater is the main source of water in the Salinas Valley for both agricultural and urban users. Recharge to the groundwater basin occurs primarily from precipitation, return flows from irrigated lands, and stream recharge from the Arroyo Seco and Salinas Rivers. It is estimated that stream recharge accounts for approximately half of the total basin recharge. Average precipitation in the Salinas Valley ranges from 15 to 60 inches in the mountain ranges on either side of the Valley, and from 10 to 15 inches within the Valley itself. Most of the precipitation occurs in winter, from November through March. To help increase the use of Salinas River flows for groundwater recharge and to provide flood control benefits, Nacimiento and San Antonio Reservoirs began operations in 1957 and 1967, respectively. In addition to flood protection, these reservoirs have been operated to optimize Salinas River recharge by storing winter runoff and making releases in a timely manner during the irrigation season when the potential for recharge is highest.

3.4.1 Water Quality

The MCWRA has an existing monitoring program focused on monitoring water supply levels and water quality changes over time. Conditions currently tracked by the MCWRA include: seawater intrusion; nitrate and other groundwater quality conditions; factors influencing Basin balance (i.e., data for rainfall, streamflows, reservoir operations, groundwater levels, etc.); and land use and water needs. Existing monitoring efforts by the MCWRA have been very successful in generating data necessary for the public, water managers, and relevant regulatory agencies to understand and evaluate the issues facing the Basin.

Seawater Intrusion

Groundwater withdrawal has resulted in overdraft conditions in the Basin, allowing seawater to infiltrate both the 180-Foot and 400-Foot Aquifers. The MCWRA uses a 500 mg/l chloride concentration as an indicator of impaired water, based on the upper limit of the California Safe Drinking Water Act, Secondary Drinking Water Standard. Native groundwater in the 180-Foot and 400-Foot aquifers has chloride concentrations of less than 50 mg/l. Values over the 500 mg/l chloride concentration limit serve as an indicator for seawater intrusion.

Several studies have been prepared since the original 1946 Bulletin 52 to evaluate the extent, causes, impacts, and possible mitigations of the seawater intrusion problem. The most significant of these studies were prepared by California Department of Water Resources in 1973; Leedshill-Henkenhoff, Inc. in 1985; and David Keith Todd Engineers in 1989. Currently, MCWRA monitors seawater intrusion through its groundwater well monitoring program.

Nitrate Contamination

Nitrate contamination in the Salinas Valley was first documented in a report published by the Association of Monterey Bay Area Governments (AMBAG) in 1978. The SWRCB has twice documented that nitrate levels in the Salinas Valley groundwater have impaired its beneficial use as a drinking water supply. This was first documented by the SWRCB in 1988 through the Nonpoint Source Assessment, and was again documented by the SWRCB in 1992 in the Water Quality Assessment.

In response to these reports, the Nitrate Technical Advisory Committee (NTAC) was formed by the MCWRA to examine nitrate in the Salinas Valley groundwater basin and recommend a course of action. Their report was published in 1990 and echoed the concerns and findings of the SWRCB. The SWRCB ranked the Salinas Valley as their number one water quality concern due

to the severity of nitrate contamination in a July 1995 staff report. As a result, development and implementation of a nitrate management program for the Salinas Valley became a priority for the SWRCB.

Nitrate may occur naturally in groundwater due to biologic activity or decomposition of geologic deposits, but rarely do natural concentrations exceed the Primary Drinking Water Standard of 45 mg/L NO_3. Groundwater degradation from nitrate pollution is usually indicative of contamination directly resulting from human influence and land use activities. The activities that have been most directly linked to high nitrate levels include agricultural fertilizer application, confined animal production facilities, and septic waste disposal systems. MCWRA has prepared a nitrate management plan that is currently under implementation. Figure 3-5 shows the extent of nitrate contamination in the basin.

3.4.2 Water Quantity

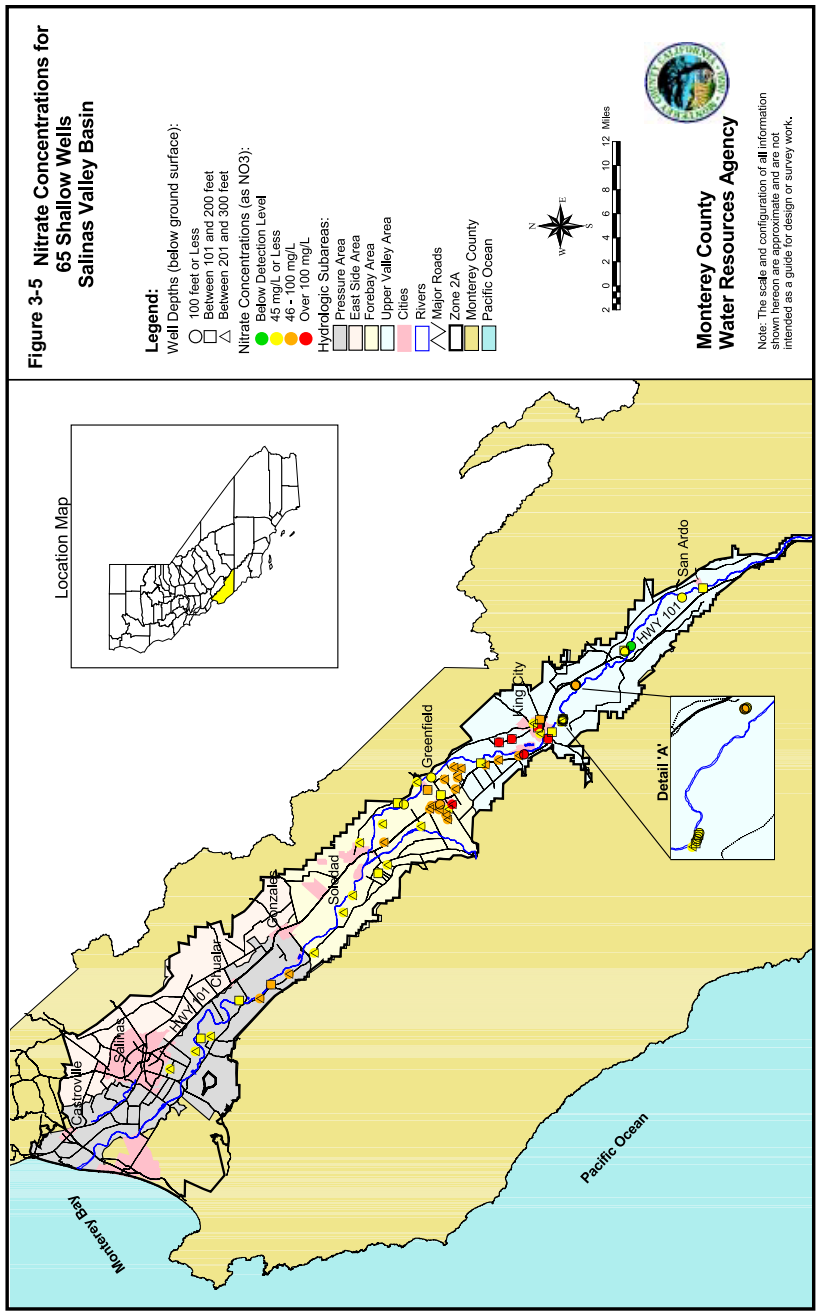
The Salinas Valley relies primarily upon its groundwater resources. According to the most recently published MCWRA groundwater extraction summary report, 504,000 AF of groundwater is reported to have been extracted in 1999; 464,000 AF of which is designated for agricultural purposes and 40,000 AF for urban use. The total groundwater extractions attributed to urban (residential, commercial/institutional, industrial, and governmental) pumping for the 1999 water reporting year are summarized by city or area in Table 3-2.

Table 3-2: Urban Groundwater Pumping in 1999

City or Area	Urban Pumping (acre-feet)	Percentage of Total
Castroville	1,226	3.0%
Chualar	142	0.3%
Fort Ord	2,826	6.1%
Gonzales	1,007	2.4%
Greenfield	1,984	4.8%
King City	3,847	9.3%
MCWD	1,898	4.6%
Salinas	18,705	45.3%
San Ardo	122	0.3%
San Lucas	N/A	0%
Soledad	1,578	3.8%
Soledad Prisons	2,086	5.0%
Other Areas	5,138	15%
Total	40,559	100%

Source: MCWRA 1999 Groundwater Extraction Report published in October 2004.

MCWRA has an agreement with agricultural landowners to provide agricultural water use information. MCWRA is responsible for measuring and documenting the amount of agricultural groundwater extracted in the Basin each year. Table 3-3 summarizes total urban and agricultural water use per Subarea in the Salinas Valley for the year of 1999. For purposes of groundwater extraction data collection, the Arroyo Seco and Forebay Subareas are combined.



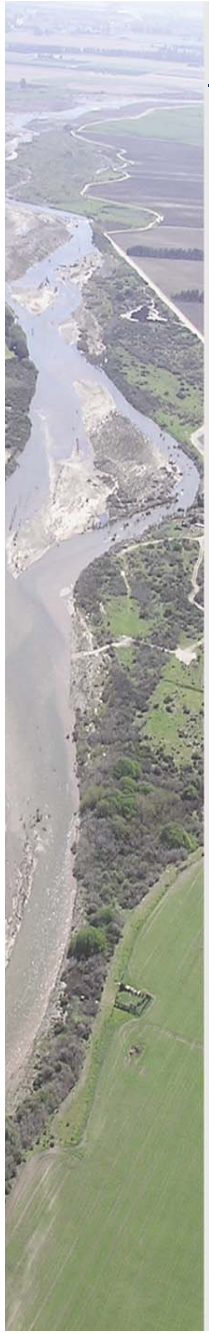


Table 3-3: Salinas Groundwater Basin Pumping in 1999

Subarea	Agricultural Pumping (acre-feet)	Urban Pumping (acre-feet)	Total Pumping (acre-feet)
Pressure	97,910	20,963	118,873
East Side	79,562	8,955	88,517
Forebay	136,169	6,359	142,528
Upper Valley	150,367	4,282	154,649
Total	464,008	40,559	504,567

Source: MCWRA 1999 Groundwater Extraction Report published in October 2004.

3.5 Water Supplies and Demand for a 25-Year Planning Horizon

The primary land use within the Salinas Valley is agricultural. Since the late 1940s, irrigated acreage within the Valley has increased substantially, with steady increases in the 1940s and 1950s, and more rapid increases in the 1960s and 1970s. Total irrigated acreage has remained relatively constant since the 1980s. Urban acreage has also experienced substantial growth, mostly in Castroville, Gonzales, Greenfield, King City, Marina, Salinas, and Soledad. As the agricultural and urban areas have expanded, so have the water needs of the Valley.

The Salinas Valley Integrated Ground and Surface Water Model (SVIGSM) was developed by MCWRA as a planning tool to assist in analyzing and managing the groundwater resources of the Salinas Valley. As part of this model development, the current and future water needs of the basin were estimated using land use, water demand estimates, and hydrogeologic data.

Basin water needs are anticipated to decline slightly between 1995 and 2030 as indicated in Table 3-4. Total urban needs are projected to increase from 45,000 AFY in 1995 to 85,000 AFY in 2030 (a 90% increase) based on projected population growth. A large amount of this growth is expected to occur in the northern end of the valley.

Agricultural needs, which make up a far greater share of water use, are projected to decrease by approximately 60,000 AFY (a 13% reduction) as a result of several factors, including increased irrigation efficiencies, changes in crops (e.g., increase in lower water-demand grape production), and some conversion of land from agriculture to urban uses. Although some agricultural land will be converted to urban uses, some of this acreage will be replaced by conversion of non-agricultural or non-irrigated land to irrigated uses. An overall slight net reduction in agricultural land use is expected. In total, reductions are projected to be substantial, with an overall reduction of 20,000 AFY in basin-wide water use by 2030.

The Monterey County Water Recycling Project (MCWRP) was put in operation in April 1998, and is now in full operation. The MCWRP provides tertiary treated recycled water for delivery to agricultural water users in the northern portion of the Basin. The MCWRP could generate approximately 21,600 AFY of recycled water, 13,300 AFY of which is presently delivered directly to the Castroville Seawater Intrusion Project (CSIP) area for irrigation during the irrigation season. The remaining 8,300 AFY of available capacity would be generated during the non-irrigation season, but cannot directly be delivered for irrigation purposes without seasonal storage facilities.

Table 3-4: Estimated Water Demand Based on Basin Modeling

Parameter	Baseline or Existing (1995) Conditions[1] (AFY)	Projected Future Baseline (2030) Conditions[1] (AFY)
Basin Groundwater Pumping		
Urban	45,000	85,000
Agricultural	418,000	358,000
Total Basin Pumping	**463,000**	**443,000**
Basin Overdraft (does not include seawater intrusion)[2]	17,000	14,000
Seawater Intrusion[3]	8,900	10,300
Salinas River Outflow to Ocean	238,000	249,000

[1] Both conditions assume that deliveries from MCWRP are being made, with 13,300 AFY delivered for 1995 conditions and 15,900 AFY delivered under 2030 conditions.
[2] Basin overdraft is defined as the average annual rate of groundwater extraction over and above the total recharge to the groundwater basin.
[3] Seawater intrusion is defined as the average annual rate of subsurface flow from the Monterey Bay into the groundwater aquifers.

All numbers shown assume that SVWP is not in place.
Source: Salinas Valley Water Project, Montgomery Watson and RMC, October 1998

Despite the overall reduction in total Basin water use, the current groundwater problems in the basin are projected to continue into the future. Therefore, a strategy is needed to offset groundwater pumping in order to meet the objective of achieving a hydrologic balance within the Basin.

3.6 Ecological Processes and Environmental Resources

3.6.1 Elkhorn Slough

Elkhorn Slough is the largest tidal estuary between San Francisco Bay and Morro Bay. The estuary provides some of the most important freshwater marsh and brackish marsh habitat for wildlife in California. Several sensitive plant and animal species are known to inhabit the Elkhorn Slough tidal estuary. The area is protected by a combination of private, federal, and state landowners including the Elkhorn Slough National Estuarine Research Reserve, the Moss Landing Wildlife Area, and the Nature Conservancy. In 1989, the Elkhorn Slough Wetland Management Plan was prepared for the California State Coastal Conservancy and the Monterey County Planning Department (ABA Consultants, 1989); to address the preservation and protection of wetlands and other sensitive resources.

Prior to the 1900s, the Salinas River flowed north, and before reaching Monterey Bay, joined with the mouth of Elkhorn Slough, and emptied into Monterey Bay north of Moss Landing. Following a series of storms in 1909-1910, the Salinas River changed course, creating a river mouth at its present location (MCWRA, 1997). Farmers seeking to use the old riverbed subsequently diked the River (ABA Consultants, 1989). With the new opening being maintained about five miles south of the natural river mouth, there was a dramatic decrease in the input of freshwater into Elkhorn Slough. Today, the majority of freshwater enters into the north end of the

Slough through Carneros Creek and Watsonville Creek, two intermittent creeks with substantial flows during the winter and virtually none during the summer. Direct runoff from surrounding hills in the winter and agricultural flows from irrigated fields contribute additional freshwater.

3.6.2 Monterey Bay National Marine Sanctuary

The Monterey Bay National Marine Sanctuary (MBNMS) encompasses over 5,000 square miles, stretching along 360 miles of coastline from Marin County in the north to San Luis Obispo County in the south. Because of its proximity to the coast, MBNMS is vulnerable to pollution from contaminated rainwater and agricultural runoff. Recognizing that water quality is a key to ensuring protection for all MBNMS resources, 26 groups consisting of federal, state, local agencies and public and private organizations are working together to develop a comprehensive Water Quality Protection Program to enhance and protect the MBNMS's physical, chemical and biological conditions (MBNMS, 1998).

3.6.3 Steelhead Trout Migration and Spawning

The Salinas River tributaries provide natural habitat for Steelhead Trout, a federally listed endangered species. MCWRA has engaged with the National Oceanographic and Atmospheric Administration, National Marine Fisheries Service (NMFS) relative to Steelhead Trout conditions along the Salinas River and its tributaries. MCWRA and NMFS, in coordination with the Corps of Engineers, have completed consultation under Section 7 of the Endangered Species Act for the River Channel Maintenance Program, and are now engaged in a similar consultation for the SVWP.

3.6.4 Biological Resources in the Region

Biological resources are discussed for the region in this section. The discussion for each area contains two summaries: one pertaining to the general biological resources and the second detailing sensitive biological resources that are known or have the potential of occurrence in the region.

Sensitive biological resources addressed in the following sections include those that are afforded specific protection under the federal Endangered Species Act (ESA); California Fish and Game Code, California Endangered Species Act (CESA); federal Clean Water Act; federal Rivers and Harbors Act, and CEQA. The list of potentially occurring special-status species in the project area was developed through a review of previously completed biological studies and consultation with USFWS and CDFG. The CDFG California Natural Diversity Database was also reviewed for specific information on documented observations of special-status species in the project area. Each of the special-status species is also described in more detail in each of the sections below, as applicable.

San Antonio and Nacimiento Reservoirs

This project area includes the San Antonio and Nacimiento Reservoirs, and the area surrounding the Nacimiento Reservoir spillway. Nacimiento Reservoir has a maximum storage capacity of 377,900 AF and San Antonio Reservoir stores approximately 335,000 AF of water at full capacity. Both reservoirs are relatively shallow and occupy long narrow ravines.

General Biological Resources

Habitats in the vicinity of the reservoirs include annual grassland, blue oak woodland and chaparral. Open areas on the hillsides surrounding the Nacimiento and San Antonio Reservoirs are dominated by annual grassland used for livestock grazing. Grasslands adjacent to the Nacimiento spillway are disturbed (i.e., ruderal) from previous dam construction activity. A large percentage of the plant species that occur in this habitat are non-native. Non-native grasses and other herbaceous annuals that are common in this habitat include wild oat (Avena fatua), soft

chess (Bromus hordeaceus), foxtail chess (Bromus madritensis), black mustard (Brassica nigra), sky lupine (Lupinus nanus), and Italian ryegrass (Lolium multiflorum). Immediately below the spillway, coyote brush (Baccharis pilularis) and Fremont cottonwoods (Populus fremontii) are scattered along the banks of the Nacimiento River; however, no mature riparian habitat is present directly below the spillway. The project area provides habitat for many of the animals that are common in the grasslands of southern Monterey and northern San Luis Obispo County. Wildlife species observed in this habitat during field surveys include California ground squirrel (Spermophilus beecheyi), mourning dove (Zenaida macroura), lark sparrow (Chondestes grammacus), and savannah sparrow (Passerculus sandwichensis).

Blue oak woodland, dominated by open stands of mature blue oaks (Quercus douglassii) and foothill pines (Pinus sabiana) is the predominant plant community in the vicinity of the reservoirs. Shrubs scattered in the understory include poison oak (Toxicodendron diversilobum), toyon (Heteromeles arbutifolia), and California buckeye (Aesculus californicus). Blue oak woodland provides important habitat for many of the wildlife species that occur in the foothills surrounding the Salinas Valley. Common species observed during field surveys include western scrub-jay (Aphelocoma californica), western bluebird (Sialia mexicana), and western fence lizard (Sceloporus occidentalis).

Dense patches of chaparral occur on some of the steeper south- or east-facing slopes in the project area. Chaparral is usually dominated by chamise (Adenostoma fasciculatum). Other plants found in this habitat include California sagebrush (Artemisia californica), coyote brush, and black sage (Salvia mellifera), sticky monkeyflower (Mimulus aurantiacus), poison oak (Toxicodendron diversilobum), and manzanita (Arctostaphylos sp.). Common wildlife species in the project area include California thrasher (Toxostoma redivivum), wrentit (Chamaea fasciata), Bewick's wren (Thryomanes bewickii), gopher snake (Pituophis melanoleucus), and southern alligator lizard (Gerrhonotus multicarinatus).

Shoreline and open water habitat on Nacimiento Reservoir and San Antonio Reservoir provides suitable habitat for a number of terrestrial and semi-aquatic wildlife species such as great blue heron (Ardea herodias) ruddy duck (Oxyura jamaicensis), western grebe (Aechmophorus occidentalis), and Clark's grebe (Aechmophorus clarkii).

Salinas River/Tributaries

The Salinas River study area includes the sections of river channel between the Salinas River Lagoon and the confluence of the Salinas River with the Nacimiento River.

General Biological Resources

Riparian habitat is the dominant plant community along the banks of the Salinas River. Riparian habitat is widely distributed in narrow strands along the banks of the Salinas River but rarely exists as extensive, mature stands. Riparian habitat within the project area has been severely reduced and fragmented by agricultural conversion, urban development, and flood control activities. Grazing and human alteration of the natural river flows have also adversely affected this habitat.

Most (approximately 75 percent) of the riparian habitat in the project area is dominated by woody shrubs and low-growing herbaceous vegetation. These areas are characterized by dense stands of narrow-leaved willow (Salix exigua), and mulefat (Baccharis salicifolius). Two invasive, non-native plants are also common: giant reed (Arundo donax) and tamarisk (Tamarix sp.). The herbaceous layer is typically dominated by low-growing species such as willow dock (Rumex salicifolius), willow herb (Epilobium sp.), rabbitfoot grass (Polypogon monspeliensis), and common monkeyflower (Mimulus guttatus). Wildlife species observed frequently in these areas include Audubon's cottontail (Sylvilagus audubonii), Pacific treefrog (Hyla regilla),

brown-headed cowbird (Molothrus ater), black phoebe (Sayornis nigricans), orange-crowned warbler (Vermivora celata), and song sparrow (Melospiza melodia).

A dense, multi-layered canopy of deciduous trees, shrubs, vines, and herbaceous species characterizes the remainder of the riparian habitat. Dominant tree species include black cottonwood (Populus balsamifera trichocarpa), Fremont's cottonwood, box-elder (Acer negundo), and arroyo willow (Salix lasiolepis). South of San Ardo, the canopy layer includes western sycamore (Platanus racemosa). Shrub species in this portion of the project area include blue elderberry (Sambucus mexicana), poison oak (Toxicodendron diversilobum), and California rose (Rosa californica). Vines and other herbaceous species that form the dense understory include Pacific blackberry (Rubus ursinus), giant nettle (Urtica dioica holosericea), and mugwort (Artemisia douglasiana). Multi-layered riparian vegetation supports a wide diversity of terrestrial fauna. Contiguous stands of riparian habitat and serve as breeding habitat and movement corridors for many species. Wildlife species observed during field surveys in these areas include a number of birds that are found predominantly, or exclusively, in multi-layered riparian vegetation such as Swainson's thrush (Catharus ustulatus), warbling vireo (Vireo gilvus), and Wilson's warbler (Wilsonia pusillus). Other wildlife observed or expected in this habitat include raccoon (Procyon lotor), striped skunk (Mephitis mephitis), gray fox (Urocyon cinereoargenteus), and dusky-footed woodrat (Neotoma fuscipes).

Riparian habitat in the central coastal region of California has evolved to flourish with the cool, wet winters and hot, dry summers that typify the region's climatic conditions. High winter flows that result from heavy winter rains provide the moisture needed for riparian vegetation to endure the summer months. Although riparian habitat thrives on high winter flows, this plant community has also evolved to persist during years of below normal flows (i.e., drought conditions).

Sensitive Biological Resources

The Salinas River Lagoon, located at the downstream terminus of the Salinas River, is a valuable natural resource. The value of this area is underscored by the great diversity of vertebrate species known to occur there. Habitats near the lagoon support over 280 species of fish and wildlife, including at least 38 rare, threatened, or endangered species. The Lagoon is valuable to wildlife because of its diversity of habitats and close proximity to the highly productive Elkhorn Slough system and Monterey Bay.

State and/or federally listed (i.e., Threatened or Endangered) wildlife species, which have the potential to occur within and along the Salinas River and its tributaries, include California red-legged frog, least Bell's vireo, and arroyo toad (Bufo microscaphus californicus). The western snowy plover (Charadrinus alexandrius nivosus) is known to occur at the mouth of the Salinas River. Other non-listed, special-status wildlife species that are known to occur in the area include three California Species of Special Concern: western pond turtle (Clemmys marmorata), yellow-breasted chat (Icteria virens), and yellow warbler (Denroica petechia).

A list of sensitive species potentially occurring in the Salinas Valley Region is provided in Table 3-5.

Table 3-5: Sensitive Species Potentially Occurring in the Region

Species	US-FWS	CDFG	CNPS	Habitat	Potential for Occurrence
Plants					
Robust spineflower Chorizanthe robusta robusta	E	--	1B	woodlands, coastal scrub, coastal dunes	Unlikely to occur; no appropriate habitat in the project area
Hickman's cinquefoil Potentilla hickmanii	E	E	1B	coniferous forest, freshwater marsh, meadows	Unlikely to occur; only marginal habitat in the project area
Seaside bird's-beak Cordylanthus rigidus littoralis	--	E	1B	coastal grasslands, chaparral, and woodlands	Unlikely to occur; only marginal habitat in the project area.
Yadon's piperia Piperia yadonii	--	--	1B	conifer forest, coastal bluff scrub, and sandy chaparral	Unlikely to occur; no appropriate habitat present
Amphibians					
California red-legged frog Rana aurora draytonii	T	CSC	--	streams and ponds with emergent or riparian vegetation	May occur; suitable habitat present.
Arroyo toad Bufo microscaphus californicus	E	CSC	--	rivers with shallow pool and sandy terraces	Known to occur in the San Antonio River. Not expected in lower Salinas River but could occur in upper Salinas River near confluence with San Antonio River.
Reptiles					
Western pond turtle Clemmys marmorata	--	--	CSC	freshwater ponds, streams, and rivers.	Known to occur
Birds					
Western snowy plover Charadrinus alexandrius nivosus	T	--	--	sand dune and beaches	Known to nest and winter on the sand dunes west of the project area, near the mouth of the Salinas River.
Bald eagle Haliaeetus leucocephalus	T	E	--	lakes and large rivers	Known to winter in the vicinity of Nacimiento and San Antonio Reservoirs
Least Bell's vireo Vireo bellii pusillus	E	E	--	riparian habitat	Unlikely to occur; presumed extirpated from Monterey County.

Yellow warbler Dendroica petechia	—	CSC	--	riparian habitat	Known to occur
Yellow-breasted chat Icteria virens	—	CSC	--	riparian habitat	Known to occur

U.S. Fish and Wildlife Service (USFWS) Federal Listing Categories:

E Federal Endangered
T Federal Threatened
PE Proposed Endangered
* Proposed for delisting

California Department of Fish and Game (CDFG) State Listing Categories:

E California Endangered
CSC California Species of Special Concern

California Native Plant Society (CNPS) Listing Categories:

1B considered rare or endangered in California and elsewhere
1B considered rare or endangered in California and elsewhere

Source: EDAW 2002

3.6.5 Existing Fish Resources in the Project Area

The reservoirs, rivers, and lagoons in the region contain several species of fish as described in this section.

San Antonio and Nacimiento Reservoirs

Fishery and Aquatic Resources

A listing of fish species occurring in San Antonio and Nacimiento Reservoirs based on CDFG electrofishing surveys is provided in Table 3-6.

Table 3-6: Fish Species Occurring in San Antonio and Nacimiento Reservoirs

Common Name	Scientific Name	San Antonio Reservoir	Nacimiento Reservoir	Native/ Introduced
Bluegill	Lepomis macrochirus	x	x	I
Striped bass	Morone saxatilis	x		I
Largemouth bass	Micropterus salmoides	x	x	I
Inland Silverside	Menidia beryllina	x		I
Threadfin shad	Dorosoma patenense	x	x	I
Smallmouth bass	Micropterus dolomieu	x	x	I
White bass	Morone chrysops		x	I
White catfish	Ictalurus catus	x	x	I
Channel catfish	Ictalurus punctatus	x	x	I
Common carp	Cyprinus carpio	x	x	I
Goldfish	Carassius auratus	x		I
Hitch	Lavinia exilicauda	x		N
Golden shiner	Notemigonus chrysoleucas	x		I
Redear sunfish	Lepomis microlophus	x	x	I
Green sunfish	Lepomis cyanellus	x	x	I
Black crappie	Pomoxis nigromaculatus	x	x	I

Brown bullhead	Ameiurus nebulosus	x	x	I
Sacramento pikeminnow	Ptychocheilus grandis	x	x	N
Western mosquitofish	Gambusia affinis		x	I
Sacramento sucker	Catostomus occidentalis	x	x	N
Rainbow trout	Oncorynchus mykiss	x	x	N

Source: CDFG file data

None of the fish found in San Antonio or Nacimiento reservoir are special status species.

Salinas River and its Tributaries

Most of the fish species of the Salinas River Basin are migratory to some degree. Steelhead and lamprey adults migrate to spawning habitat in the headwaters and tributaries and juveniles return to the ocean. A list of fish species found in the rivers of the region is provided in Table 3-7.

Table 3-7 Fish Species Reported from Rivers and Streams of the Salinas River Basin

Common Name	Scientific Name	Salinas River	Naci-miento River	San Antonio River	Arroyo Seco
Native Species					
Pacific lamprey	Lampetra tridentate	¢	¢ Þ Ë		Þ
California roach	Hesperoleucus symmetricus	¢	¢	¢	¢ Þ
Hitch	Lavinia exilicauda	¢ Ë	Ë	Ë	
Sacramento blackfish	Orthodon microlepidotus	¢			
Sacramento pikeminnow	Ptychocheilus grandis	Ë	Ë	Ë	Þ
Speckled dace	Rhinichthys osculus	¢ Ë	¢ Ë	¢ Ë	¢
Sacramento sucker	Catostomus occidentalis	¢ Ë	¢ Þ Ë	¢ Ë	Þ
Steelhead/rainbow trout	Oncorhynchus mykiss	¢	¢ Ë	¢	¢
Threespine stickleback	Gasterosteus aculeatus	¢ Ë	Ë	¢ Ë	¢ Þ
Prickly sculpin	Cottus asper	¢	Þ Ë		
Coastrange sculpin	Cottus aleuticus	¢			
Riffle sculpin	Cottus gulosus	¢			
Tule perch	Hysterocarpus traski	¢	¢		
Introduced Species					
Goldfish	Carassius auratus	Ë			
Carp	Cyprinus carpio		Þ Ë		
Black bullhead	Ameiurus melas	Ë			
Mosquitofish	Gambusia affinis	Ë	Ë	Ë	
White bass	Morone chrysops		Þ		

Green sunfish	Lepomis cyanellus	Ë	Ë	Ë	
Bluegill	Lepomis macrochirus	Ë	Ë		
Largemouth bass	Micropterus salmoides	Ë	Ë		
Black crappie	Pomoxis nigromaculatus		Ë		

¢ - reported by Snyder (1913)

Þ - incidental observations during visual surveys for spawning steelhead

Ë - collected by Page et al., 1995.

Source: EDAW 2002

Salinas River Lagoon

Fishery and Aquatic Resources

The Salinas River Lagoon (Lagoon) is a brackish to freshwater estuary extending from the mouth of the Salinas River at Monterey Bay upstream for several miles. The mouth of the Lagoon is typically closed by a sand bar, and historically the main River channel (Old Salinas River) flowed north behind the dunes to join the ocean at the mouth of Elkhorn Slough near Moss Landing Harbor). A gate at the head of this channel now restricts flows down the Old Salinas River channel. During low flow periods the gate is usually maintained in a partially opened position, allowing a small flow from the lagoon into the Old Salinas River channel. During high flows in the Salinas River, the outlet gate is closed to raise the lagoon level and the beach is artificially breached to convey flows directly to the ocean and prevent flooding in adjacent agricultural areas.

Table 3-8 Fish Species Recorded from the Salinas River Lagoon

Common Name	Scientific Name	Historical Records	1990-91	2000
Native Fresh And Brackish Water Species				
Green sturgeon	Acipenser medirostris	X		
Hitch	Lavinia exilicauda	X	X	X
Sacramento blackfish	Orthodon microlepidotus	X	X	X
Sacramento pikeminnow	Ptychocheilus grandis	X	X	
Speckled dace	Rhinichthys osculus	X		
Sacramento sucker	Catostomus occidentalis	X	X	X
Steelhead	Oncorhynchus mykiss	X	X	
Threespine stickleback	Gasterosteus aculeatus	X	X	X
Prickley sculpin	Cottus asper		X	X
Sacramento perch	Archoplites interruptus	X		
Tidewater goby	Eucyclogobius newberryi	X		
Introduced Freshwater Species				

Carp	*Cyprinus carpio*	X	X	X
Mosquitofish	*Gambusia affinis*	X	X	
White bass	*Morone chrysops*		X	
Marine/Estuarine Species				
Pacific herring	*Clupea harengus*	X	X	X
Northern anchovy	*Engraulis mordax*		X	
Surf smelt	*Hypomesus pretiosus*		X	
Topsmelt	*Atherinops affinis*	X	X	X
Jacksmelt	*Atherinopsis californiensis*		X	
Threespine stickleback	*Gasterosteus aculeatus*	X	X	X
Pacific staghorn sculpin	*Leptocottus armatus*	X	X	X
Striped bass	*Morone saxatilis*		X	
Shiner surfperch	*Cymatogaster aggregata*	X	X	
Silver surfperch	*Hyperprosopon ellipticum*		X	
Spotfin surfperch	*Hyperprosopon anale*		X	
Walleye surfperch	*Hyperprosopon argenteum*		X	
White seaperch (or surfperch)	*Phanerodon furcatus*		X	
Starry flounder	*Platichthys stellatus*	X	X	
English sole	*Pleuronectes vetulus*		X	

Source: EDAW 2002.

3.7 Economic Conditions and Important Trends

The Salinas Valley has such a strong agricultural economy that it is called the Salad Bowl of the World. The agricultural economy supplies lettuce, broccoli, strawberries, artichokes, wine grapes and numerous other crops all over the United States and the world. Agricultural production generated $3.4 billion in 2004 (Monterey County Agricultural Commissioner Crop Report, 2004). The economy of the region is highly dependent on agricultural production.

An emerging economic trend in the Salinas Valley is the growth of a tourism economy. The growing wine industry and the establishment of the National Steinbeck Center have brought tourist dollars into the valley. Several annual festivals and events attract thousands of visitors to the Salinas Valley including (Salinas Valley Chamber of Commerce, 2005):

- The California Rodeo,
- The California Airshow,
- The Castroville Artichoke Festival, and
- The Steinbeck Festival.

The latest (2004) California Department of Transportation socio-economic forecast for Monterey County states that farm jobs are not forecast to rise much over the next several years, as more service and government jobs dominate future employment growth. The service sector is the largest employment sector in the county with 24% of all the wage and salary jobs. This sector is expected to be the dominant job growth engine for the next 5-10 years as jobs, especially in education, personal services and health care, are added. The Monterey County Economic Forecast highlights the following:

- *Job growth is forecast to average 0.9 percent per year over the next 5 years*
- *The unemployed rate is expected to be in the 10 to 11 percent range for the next 5 years*
- *Population growth is expected to average 1.3 percent per year for the next 5 years*
- *Real per capita income is projected rise at an annual compound rate of 0.6 percent until 2008*

The entire report for Monterey County can be found at http://www.dot.ca.gov/hq/tpp/offices/ote/Monterey04.pdf.

3.8 Social and Cultural Make up of the Regional Community

Latinos make up nearly half (46.8 percent) of Monterey County's 401,762 residents, according to the 2000 Census. Almost nine out of 10 of the county's Latinos are of Mexican descent. But the County is becoming home to a growing and more diverse Latino population (Parsons, 2005):

- In 2000, people of Mexican origin accounted for 86.3 percent of county Latinos -- a slightly smaller segment than the 88.3 percent share in the 1990 census.
- In Salinas, people with Mexican roots made up 91 percent of the city's Latino population in 1990.
- In 2000, in large part because of an increase of 7,144 Latinos without ties to Mexico, Cuba or Puerto Rico, the Mexican segment of Salinas' Latino population dropped to 87.5 percent.

Disadvantaged Communities in the Planning Region

A disadvantaged community is one that has a Median Household Income (MHI) of less that 80% of the State MHI. For California, the MHI is $47,493.00 making a disadvantaged community one that has a MHI of $37,994.00 or less. The cities in the planning region (shown on the map in Figure 3-1) that meet the definition of disadvantaged are Greenfield, San Ardo and King City. Castroville, with a MHI of 38,594.00, is just above the cutoff of $37,944.00. All of the communities are below the MHI for both the State of California and Monterey County. The following Table 3-9 shows the MHI of all of the cities in the planning region. This information comes from the 2000 US Census at www.census.gov.

Table 3-9 Median Household Income

Community	Median Household Income
State of California	$47,493.00
Monterey County	$48,305.00
Castroville	$38,594.00
Chualar	$43,125.00
Gonzales	$41,582.00
Greenfield	$37,602.00
King City	$34,398.00
Marina	$43,000.00
Salinas	$43,720.00
San Ardo	$25,208.00
Soledad	$42,602.00

3.9 Other Regional Plans in Monterey Bay

The SVIRWM Plan is one of four detailed IRWM planning efforts in the greater Monterey Bay region. All IRWM planning efforts originate within four Monterey Bay regions, which can generally be described as (1) Northern Santa Cruz County through and including Aptos Creek, San Andreas and the Watsonville Sloughs watershed, (2) the Pajaro River watershed in parts of Santa Clara, San Benito, Santa Cruz, and Monterey Counties, (3) the Salinas River watershed in Monterey County, and (4) the Carmel River watershed and Seaside Groundwater Basin in Monterey County. This Functionally Equivalent Plan (FEP) is one of four Monterey Bay area IRWM plans that will steer the development of a greater Monterey Bay IRWM Plan.

Collaborative efforts have been undertaken with representatives from each of the other three IRWM planning regional groups to ensure overlapping areas and projects are understood and coordinated. All other Monterey Bay area IRWM planning efforts considered their delineations to be appropriate. The greater Monterey Bay IRWM Plan was not determined to be the most feasible initial step, as each regional planning group determined that its specific water management planning needs required an approach that initially focuses on each region's individual watersheds and groundwater basins.

The greater Monterey Bay IRWM Plan will be an effort undertaken by local water districts signatory to a MOU for Integrated Regional Water Management in the Monterey Bay Area. This MOU has been approved by MCWRA, Pajaro Valley Water Management Agency, and Monterey Peninsula Water Management Agency. A copy of the MOU is included in Appendix F.

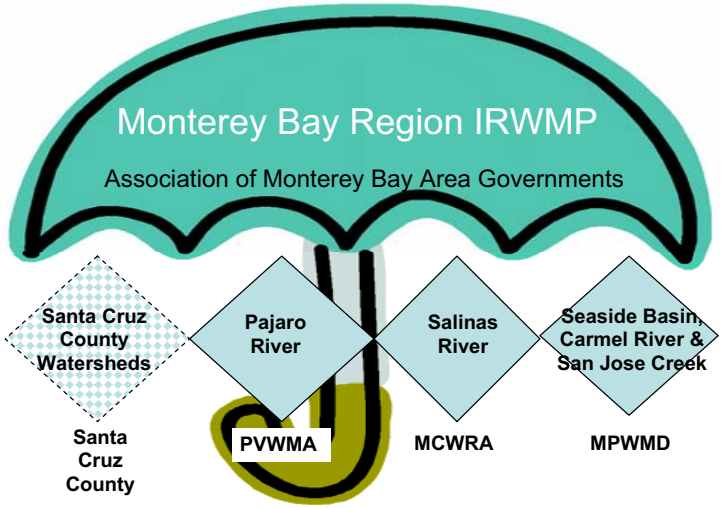
The Monterey Bay IRWM Plan, and the associated MOU, demonstrates a recognized need for increased coordination, collaboration and communication in the region among public agencies, contributing entities, and regulatory agencies. The desired result is more effectively managed resources, cost efficiencies and better service to the public. Participatory agencies plan to link and integrate the respective IRWM planning efforts and address, at a minimum; water supply, water quality, wastewater, recycled water, water conservation, storm water/flood control, watershed planning and aquatic habitat protection and restoration on a regional scale. The region, or geographic scope, for the Monterey Bay IRWM Plan will include the watersheds and associated

groundwater basins contributing to Monterey Bay. Figure 3-6 illustrates the relationship of the four ongoing planning efforts with the greater Monterey Bay effort.

The six goals of the Monterey Bay IRWM planning effort are:

1. To develop a comprehensive IRWM Plan for the Monterey Bay area that incorporates regional water supply, water quality, flood control, and environmental protection and enhancement objectives consistent with regional IRWM planning efforts currently underway,
2. To improve and maximize coordination of individual water district plans, programs and projects for mutual benefit and optimal regional gain,
3. To help identify, develop, and implement collaborative plans, programs, and projects that may be beyond the scope or capability of a single water district, but which would be of mutual benefit if implemented among multiple districts,
4. To facilitate regional water management efforts that include multiple water supply, water quality, flood control, and environmental protection and enhancement objectives,
5. To foster coordination, collaboration and communication between water districts and interested stakeholders, to achieve greater efficiencies, enhance public services, and build public support for vital projects, and
6. To realize regional water management objectives at the least cost possible through mutual cooperation, elimination of redundancy and enhanced competitiveness for State and Federal grant funding.

Figure 3-6 Future Regional Planning in Monterey Bay



3.10 San Luis Integrated Regional Water Management Plan

The San Luis Obispo County Flood Control and Water Conservation District (District) has prepared the San Luis Integrated Regional Water Management Plan. The region for the Plan is defined as the County of San Luis Obispo. One of the projects contained in the Plan, the Nacimiento Water Project (NWP), includes the construction of a pipeline and appurtenant facilities from the existing Nacimiento reservoir south to the communities of Paso Robles, Templeton, Atascadero and San Luis Obispo to convey the District's existing water entitlement from the reservoir to areas of use. While the Nacimiento Reservoir is located within San Luis Obispo County, it is owned and operated by Monterey County Water Resource Agency. It is located on the Nacimiento River, which is a tributary to the Salinas River.

The NWP of the District will complete the major conveyance facilities for San Luis Obispo County. The project, together with the Coastal Branch of the State Water Project, the Lopez Water Project, Salinas Dam and Reservoir and Whale Rock reservoir will place the San Luis region in a good position to meet water supply needs for upcoming decades. By completing the backbone conveyance facilities - three of which intersect at the Cuesta Grade on State Highway 101 - the San Luis region will also be well positioned to begin the planning on groundwater banking programs and other conjunctive use programs.

The MCWRA and the District have coordinated efforts for the implementation of the Salinas Valley Water Project (SVWP) and the NWP, which both include water from the Nacimiento Reservoir. The modeling that supported the development of the SVWP included the delivery of water (17,500 AF/yr) to which San Luis Obispo County is entitled for the NWP, so the NWP has already been and will continue to be an element of the planning process for the Nacimiento Reservoir and the Salinas Basin.

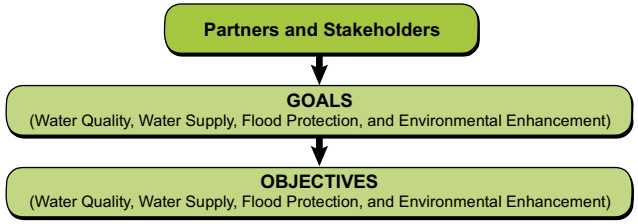
4 Objectives

IRWM Standard C

This section identifies IRWM Plan objectives and the manner in which they were determined.

The objectives of the Functionally Equivalent Plan (FEP) were developed in order to identify and address the major water related issues of the region. The objectives were developed in a two-step fashion. An initial set of goals were established for water resource management within the Salinas Valley. After these goals were agreed upon by the partners and stakeholders in the region, the objectives of the FEP were developed based on received feedback. A diagram delineating the decision process by the Water Management Group and stakeholders is provided in Figure 4-1.

Figure 4-1 Goals and Objectives Process



4.1 Salinas Valley Water Resource Management Goals

The first step in determining the objectives of the plan was to establish the water resource management goals for the region. While developing these goals, the Water Management Group considered the water related concerns of the Salinas Valley communities as well as the Salinas Groundwater Basin. The goals were organized into four general categories: water supply, water quality, flood protection, and environmental enhancement. The goals for each of these four categories are summarized in Table 4-1.

Table 4-1 Goals for Salinas Valley Water Planning

Water Supply	Water Quality
Improve Water Supply Reliability	Protect and Improve Groundwater Quality
Augment Existing Groundwater Availability	Protect and Improve Surface Water Quality
Improve Drought Reliability	Meet TMDL and Non-Point Source Objectives
Flood Protection	**Environmental Enhancement**
Maintain Present Flood Protection Levels	Opportunity to Enhance Streams/Fisheries
Minimize Flood Potential	Opportunity to Enhance Wetlands
Maintain Flood Channel Capacity	Opportunity to Enhance Monterey Bay Sanctuary
	Opportunity to Enhance Upland Habitat

4.2 Plan Objectives

The plan objectives were developed based on the goals for the region. Several objectives, both short term and long term, were developed in order to address the major water related issues and conflicts within the region. The Water Management Group agreed that these objectives best illustrated their shared vision of what they hoped to accomplish through this FEP as well as the ongoing Salinas Valley Integrated Regional Water Management (SVIRWM) Plan and other future planning efforts in the valley. The objectives are more specific than the goals in solving the region's problems.

4.2.1 Development of Objectives

The first step in the objective development process was to list specific objectives. Like the regional goals, the plan objectives were organized under the four categories of water supply, water quality, flood protection, and environmental enhancement.

The Plan's Objectives are organized under four categories:

- **Water Supply (including Groundwater Management),**
- **Water Quality (including Groundwater management),**
- **Flood Protection, and**
- **Environmental Enhancement.**

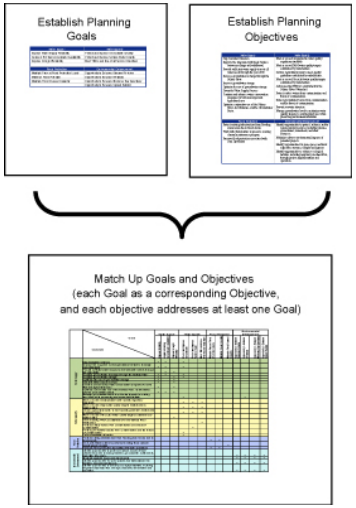
These objectives are specific to the Salinas Valley region, and are defined as the means by which the planning goals can be met. The result of this effort is shown in Table 4-2.

Table 4-2 List of Objectives

Water Supply	Water Quality
• Stop seawater intrusion • Improve the long-term hydrologic balance between recharge and withdrawal • Provide sufficient water supply to meet all water needs through the year 2030 • Increase groundwater recharge through the Salinas River • Increase groundwater storage • Optimize the use of groundwater storage • Diversify water supply Sources • Continue and enhance water conservation programs for both municipal and agricultural uses • Optimize conjunctive use of the Salinas River, its tributaries, and the Groundwater Basin	• Meet or exceed all applicable water quality regulatory standards • Meet or exceed M&I water quality targets established by stakeholders • Deliver agricultural water to meet quality guidelines established by stakeholders. • Meet or exceed recycled water quality targets established by stakeholders • Aid in meeting TMDL's established for the Salinas River Watershed • Protect surface waters from contamination and threat of contamination • Protect groundwater basins from contamination and the threat of contamination • Prevent seawater intrusion • Manage groundwater levels to minimize water quality impacts to existing land uses while preserving environmental habitats
Flood Protection	**Environmental Enhancement**
• Protect existing infrastructure from flooding and erosion due to flood events • Work with stakeholders to preserve existing channel maintenance program • Preserve flood protection associated with dam operations	• Identify opportunities to protect, enhance, and/or restore natural resources including streams, groundwater, watersheds, and other resources. • Minimize adverse environmental impacts of potential projects • Identify opportunities for open spaces and trails adjacent to streams, sloughs and lagoons • Identify opportunities to enhance ecological habitats, including migratory steelhead fish, through project implementation and operation.

The next step in this process was to make sure that each identified objective corresponded to one of the planning goals. Additionally the Water Management Group verified that each goal had at least one objective associated with it. This process is illustrated in Figure 4-2.

Figure 4-2 Objectives Development Process



As a result of this analysis the Water Management Group concluded that the majority of the objectives identified could be categorized under more than one of the planning goals, and many objectives can be categorized as reaching goals in more than one category. For example, the objective of stopping seawater intrusion corresponds to both water supply and water quality goals. Additionally, each planning goal had at least one objective associated with it and many had more than one. The relationship between the goals for the region and the plan objectives is shown in Figure 4-3.

Specific details about each objective are given in Section 4.3.

Figure 4-3 Salinas Valley Goals and Objectives

		Water Supply			Water Quality			Flood Protection			Environmental Enhancement			
		Improve Reliability	Augment Existing Groundwater Availability	Improve Drought Reliability	Protect and Improve Groundwater	Protect and Improve Surface Water	Meet TMDL and Non-Point Source Objectives	Maintain Present Flood Protection Levels	Minimize Flood Potential	Maintain Flood Channel Capacity	Opportunity to Enhance Streams/Fisheries	Opportunity to Enhance Wetlands	Opportunity to Enhance Monterey Bay Sanctuary	Opportunity to Enhance Upland Habitat
Water Supply	Stop Seawater Intrusion	✓	✓		✓									
	Improve the long-term hydrologic balance between recharge and withdrawal	✓	✓		✓									
	Provide sufficient water supply to meet all water needs through the year 2030		✓	✓										
	Increase groundwater recharge through the Salinas River	✓	✓		✓									
	Increase groundwater storage	✓		✓	✓									
	Optimize the use of groundwater storage	✓		✓										
	Diversify Water Supply Sources	✓		✓										
	Continue and enhance water conservation programs for both M&I and agricultural uses	✓		✓										
	Optimize conjunctive use of the Salinas River, its tributaries, and the Groundwater Basin	✓	✓											
Water Quality	Meet or exceed all applicable water quality regulatory standards				✓	✓	✓							
	Meet or exceed M&I water quality targets established by stakeholders.				✓	✓	✓							
	Deliver Agricultural water to meet quality guidelines established by stakeholders.				✓	✓	✓							
	Meet or exceed Recycled water quality targets established by stakeholders.			✓										
	Aid in meeting TMDL's established for the Salinas River Watershed						✓							
	Protect surface waters from contamination and threat of contamination					✓								
	Protect groundwater basins from contamination and the threat of contamination				✓									
	Prevent seawater intrusion				✓									
	Manage groundwater levels to minimize impacts to existing land uses while preserving environmental habitats.				✓							✓		

	Water Supply			Water Quality			Flood Protection			Environmental Enhancement			
	Improve Reliability	Augment Existing Groundwater Availability	Improve Drought Reliability	Protect and Improve Groundwater	Protect and Improve Surface Water	Meet TMDL and Non-Point Source Objectives	Maintain Present Flood Protection Levels	Minimize Flood Potential	Maintain Flood Channel Capacity	Opportunity to Enhance Streams/Fisheries	Opportunity to Enhance Wetlands	Opportunity to Enhance Monterey Bay Sanctuary	Opportunity to Enhance Upland Habitat
Flood Protection													
Protect existing infrastructure from flooding and erosion due to flood events							✓	✓					
Work with Stakeholders to preserve existing flood channel maintenance program									✓				
Optimize Dam Operations for flood protection							✓	✓					
Environmental Enhancement													
Identify opportunities to protect, enhance, and/or restore natural resources including streams, groundwater, watersheds, and other resources.										✓	✓	✓	✓
Minimize adverse environmental impacts										✓	✓	✓	✓
Identify opportunities for open spaces and trails adjacent to streams, sloughs and lagoons										✓	✓	✓	✓
Identify opportunities to enhance ecological habitats, including migratory steelhead fish, through project implementation and operation.										✓	✓	✓	✓

*The intent of this table is to show the objectives established to meet the regional goals.

As illustrated by their groupings, the objectives were developed to address specific goals; however the ability of some of the objectives to meet multiple goals is reflected in this table.

4.3 Description of Objectives

This section summarizes each objective developed by the Water Management Group.

4.3.1 Water Supply Objectives

Stop seawater intrusion

Seawater intrusion in the coastal area of the Salinas Basin was first documented in 1946 and several regional projects have been undertaken in order to stop the trend. These projects have slowed the advance of the intrusion, but seawater intrusion still impacts more than 24,000 acres of the Salinas Valley. It is a threat to the region's water supplies and water quality.

Improve the long-term hydrologic balance between recharge and withdrawal

The Salinas Valley groundwater basin is not in hydrologic balance. Groundwater extractions exceed groundwater recharge in portions of the basin. Groundwater is the primary water supply for both urban and agricultural users in the Salinas Valley. The basin's primary source of recharge is via the Salinas River. In order to maintain a reliable, high quality water supply, the extractions and recharge of the basin must be balanced.

Provide sufficient water supply to meet all water needs through the year 2030

As urban and agricultural land use trends change within the region, water demands will change accordingly. The water suppliers of the region must be able to meet all of these demands as they are projected into the future.

Increase groundwater recharge through the Salinas River

Nacimiento and San Antonio Reservoirs have been operated in a manner to enhance and increase groundwater recharge through the Salinas River while providing flood protection for the communities of the valley. The ability to increase groundwater recharge from the river would improve the health of the groundwater basin.

Increase groundwater storage

The current operation of Nacimiento and San Antonio Reservoirs has resulted in the addition of approximately 1,000,000 acre-feet to the Salinas Groundwater Basin. The ability to further increase groundwater storage in the basin would lead to a more reliable water supply for both urban and agricultural users.

Optimize the use of groundwater storage

Numerous studies of the groundwater basin indicate there are ways to use the storage in the basin more efficiently to increase groundwater pumping without negatively impacting basin storage or seawater intrusion. Ways to optimize the location of pumping and recharge should be addressed.

Diversify water supply sources

The water users of the Salinas Valley depend on groundwater pumping for the vast majority of water demands. Water supply diversification can result in a more reliable, higher quality water supply for all users.

Continue and enhance water conservation programs for both M&I and agricultural uses

Water conservation is an important aspect of all water supply efforts. Both urban and agricultural conservation programs have been very successful in the Salinas Valley. These efforts must be continued and enhanced.

Optimize conjunctive use of the Salinas River, its tributaries, and the groundwater basin

The Salinas River and its groundwater basin are inextricably linked. Effective conjunctive use of these water bodies would optimize the water supply to the basin and provide long-term reliable groundwater supply during droughts.

Manage groundwater levels to minimize impacts to existing land uses while preserving environmental habitats

Groundwater level management is necessary in portions of the Salinas Valley to preserve beneficial use of the lands for agricultural production. Groundwater level management can be accomplished in a manner that preserves habitat in the region's lagoons and wetlands while also minimizing the affect of high groundwater on the root zone of agriculture.

4.3.2 Water Quality Objectives

Meet or exceed all applicable water quality regulatory standards

Seawater intrusion as well as high levels of nitrates present throughout the basin threaten the quality of the groundwater in the region. Programs need to be in place to ensure that water quality regulations are either met or exceeded.

Meet or exceed M&I water quality targets established by stakeholders

Municipal and industrial water stakeholder involvement is important in determining water quality targets. The targets established by urban stakeholders that are beyond the regulatory requirements should be met or exceeded.

Deliver agricultural water to meet quality guidelines established by stakeholders

Agricultural water stakeholder involvement is important when determining water quality targets. The targets established by agricultural stakeholders should be met or exceeded.

Meet or exceed recycled water quality targets established by stakeholders

Stakeholder involvement is particularly important when determining recycled water quality. The targets established by the recycled water customers that are beyond the regulatory requirements should be met or exceeded.

Aid in meeting TMDL's established for the Salinas River watershed

Total maximum daily loads (TMDL) are currently being developed for the Salinas River Watershed. Meeting the TMDL's in the valley will be an important aspect of ensuring the water quality for all water users in the valley.

Protect surface waters from contamination and threat of contamination

The surface waters in the Salinas Valley include the Nacimiento Reservoir, San Antonio Reservoir, the Salinas River, and its tributaries. These surface waters should be protected from contamination to ensure the highest levels of water quality.

Protect groundwater basins from contamination and the threat of contamination

The Salinas Groundwater Basin is the primary source of drinking water for the Salinas Valley. It is important to protect the groundwater from contamination.

Prevent seawater intrusion

Seawater intrusion into the groundwater basin is a threat to both the water supply and the water quality of the region. Several regional projects have been undertaken in order to stop the trend.

These projects have yielded positive results; however,- seawater intrusion continues to be a threat to the region's water supplies and water quality.

4.3.3 Flood Protection Objectives

Protect existing infrastructure from flooding and erosion due to flood events

Flood protection is an important aspect of water resource management in the Salinas Valley. Nacimiento and San Antonio dams provide significant flood protection to the communities of the valley.

Work with Stakeholders to preserve existing flood channel maintenance program

The Monterey County Water Resources Agency (MCWRA), under a permit from the Army Corps of Engineers and in partnership with Salinas Valley landowners, provides the opportunity for a yearly effort by the private landowners to maintain the flood capacity of the Salinas River. This program is a critical flood protection activity.

Preserve flood protection associated with dam operations

Nacimiento Dam has a rule curve established by the California Division of Safety of Dams (DSOD) and the Federal Energy Regulatory Commission (FERC) for protection against the probable maximum flood. Changes to the spillway at Nacimiento and resulting changes in the operations of the dam can increase flood protection while providing increased storage.

4.3.4 Environmental Enhancement Objectives

Identify opportunities to protect, enhance, and/or restore natural resources including streams, groundwater, watersheds, and other resources

The Salinas Valley has several natural resources that have been affected by human activities in the region. Water related planning in the region should consider the effects of humans on these resources and identify opportunities to protect, enhance and restore them.

Minimize adverse environmental impacts

Most infrastructure projects have environmental impacts associated with them. It is important to minimize and, to the extent possible, mitigate these environmental impacts. This will be an important objective of any regional planning effort.

Identify opportunities for open spaces and trails adjacent to streams, sloughs and lagoons

Opportunities for recreation are often created with environmental enhancement. In the regional planning effort, the Water Management Group will seek to combine recreational activities with environmental enhancement projects.

Identify opportunities to enhance ecological habitats, including migratory steelhead fish, through project implementation and operation

Projects that involve operation of the reservoirs and optimizing flows in the Salinas River also have the opportunity of enhancing the ecological habitats for endangered species such as the steelhead trout. Identification and inclusion of these ecological habitats in planning efforts is an important part of the planning effort.

5 Water Management Strategies and Integration

IRWM Standards D and E

This section documents the range of water management strategies considered to meet the objectives. All of the required strategies are included in this section.

This section also presents the mix of water management strategies selected for inclusion in the Plan and discusses how these strategies work together to provide reliable water supply, protect or improve water quality, and achieve other objectives. Included in this section is a discussion of the added benefits of integration of multiple water management strategies.

The next step in the integrated planning process was to choose the appropriate water management strategies to meet the planning objectives. Eighteen strategies were considered for inclusion in the plan. Once the strategies were considered, they were evaluated based on how they could, in combination or individually, align with the planning objectives.

This section describes the strategies that were considered by the Water Management Group in its discussions in preparing this integrated plan for the region. Also included in this section is the process by which the strategies were integrated into a cohesive plan that meets the objectives of the planning process.

5.1 Strategy Consideration

5.1.1 Strategies Considered

A number of water management strategies were considered in developing this plan. Several strategies are required in order to meet minimum Integrated Regional Water Management (IRWM) Plan Standards. The Water Management Group considered all of the required strategies along with others, as shown in Table 5-1 and discussed in Section 5.1.2.

The Salinas Valley Water Management Group considered all of the required strategies to meet the minimum IRWM Plan Standards.

Table 5-1 Water Management Strategies

Water Management Strategy	Required to Meet Min. Plan Standards	Considered
Ecosystem Restoration	✓	✓
Environmental and habitat protection and improvement	✓	✓
Water Supply Reliability	✓	✓
Flood management	✓	✓
Groundwater management	✓	✓
Recreation and public access	✓	✓
Storm water capture and management	✓	✓
Water conservation	✓	✓
Water quality protection and improvement	✓	✓
Water recycling	✓	✓
Wetlands enhancement and creation	✓	✓
Conjunctive use		✓
Desalination		✓
Imported water		
Land use planning		✓
NPS pollution control		✓
Surface storage		✓
Watershed planning		✓
Water and wastewater treatment		✓
Water transfers		

5.1.2 Strategy Consideration Process

The strategies listed in Table 5-1 were each considered based on their applicability to the region and their ability to fulfill the planning objectives. Integrated planning includes several water management strategies for implementation and achieving the planning goals and objectives. The Water Management Group chose to consider all of the water management strategies that were applicable to the region and further the goals of the integrated planning effort. It was understood that not all of the strategies considered would necessarily be included in the plan. The following summarizes the consideration of each of the water management strategies for inclusion in the plan.

Ecosystem Restoration

There are many opportunities for ecosystem restoration in the Salinas Valley Region. Opportunities include fish habitat restoration on the Salinas River as well as ecosystem restoration at Elkhorn Slough and in the Salinas River National Wildlife Refuge.

Environmental and Habitat Protection and Improvement

Protecting and improving the habitat of endangered species of plants and animals in the region is an important aspect of water related planning. There are opportunities to improve environmental habitat along the Salinas River and in its lagoon, its tributaries, and Elkhorn Slough.

Water Supply Reliability

The reliability of the region's water supply is very important. Water supply reliability can be achieved through programs and projects that improve the region's groundwater quality, improve the hydrologic balance of the groundwater basin, stop seawater intrusion, and diversify the water supply sources.

Flood Management

The Monterey County Water Resources Agency is responsible for flood management throughout Monterey County. Flood protection is an important aspect of all surface water related planning in the region.

Groundwater Management

Since the region relies so heavily on groundwater for its water supplies, groundwater management is a critical strategy. There are already groundwater management programs throughout the basin for monitoring and evaluating water quality and water surface elevation as well as for establishing a hydrologic balance in the groundwater basin. Continuing and building upon these programs is an important water management strategy.

Recreation and Public Access

Recreation and public access are important aspects of water resource planning, particularly as related to the water supply reservoirs, the Salinas River, and the coast. Projects and programs should include consideration of recreation and public access as components of water resource planning.

Storm Water Capture and Management

Storm water management is important for surface water quality in the Salinas River and Monterey Bay as well as for flood protection in the region.

Water Conservation

The agricultural water users and urban water suppliers in the region have extensive water conservation programs that include education and incentives to increase conservation. Continuance and further development of these programs are very important for future water supply planning.

Water Quality Protection and Improvement

Surface water and groundwater quality protection and improvement are strategies that are very important for inclusion in integrated planning. Projects that include these aspects of water management are anticipated to be high priority for the region.

Water Recycling

Recycled water is an alternate water supply source for irrigation as well as other non-potable uses. Increasing the use of recycled water in the region, including extending it to urban users and providing storage for available wintertime recycled water, is an important water supply alternative.

Wetlands Enhancement and Creation

Opportunities for wetlands enhancement exist at Elkhorn Slough and the Salinas River Lagoon. Projects that address wetlands should be a part of water resource management planning.

Conjunctive Use

Optimizing conjunctive use of the Salinas River and its groundwater basin is important for the region's water supply as well as the quality of both the surface and groundwater in the region. Storage of water in the Salinas River groundwater basin is one of the most effective storage mechanisms within the region. Therefore, conjunctive use is an important aspect of water supply planning.

Desalination

Desalination has been shown to be successful in the Salinas Valley Region on a relatively small scale. It continues to be pursued as a water supply source in order to help protect the region from drought, and allow more water to go towards the groundwater imbalance that has lead to seawater intrusion.

Imported water

The agencies in charge of water supply in the region are not interested in imported water as a supply. The existing water supplies in the region can be managed in a way to provide a reliable, sustainable quantity of water without the need to import. Therefore, this strategy was not considered as part of the planning process.

Land use Planning

Water supply is and important aspect of land use planning throughout Monterey County. Those in charge of the County and the cities' water supplies have coordinated, and will continue to coordinate, with the land use planning process as it relates to water.

NPS Pollution Control

Non point source pollution control is important in this heavily agricultural region. This is mostly reflected in nitrate concentrations in the groundwater. Efforts to control non-point pollution are important for surface and groundwater quality.

Surface Storage

Surface storage of potable and recycled water may be considered as part of the overall water supply planning process.

Watershed Planning

The Salinas River Watershed can be managed for water supply, water quality, and environmental habitat considerations. All of these watershed planning strategies should be included in the planning process as it relates to surface and groundwater supply.

Water and Wastewater Treatment

As water supplies change in the region - including the potential for developing surface water supplies for urban use - water treatment plants may need to be built depending on the quality and source of new water supplies. Additionally, wastewater treatment facilities in some of the cities in the Salinas Valley may be required to address groundwater quality concerns.

Water Transfers

The existing water supplies in the region can be managed to provide a reliable, sustainable quantity of water without the need to for water transfers. Therefore, this strategy was not considered as part of the planning process.

5.2 Strategy Integration

The Water Management Group recognized that virtually all of the water management strategies are interrelated and difficult to evaluate separately from one another. In addition to this, the implementation of many of the strategies can meet more than one of the plan's objectives. This understanding guided the strategy integration process.

5.2.1 Matching Strategies with Projects

In order to better understand intersections and synergies of these strategies and to evaluate them in a meaningful way, the group used a matrix approach for matching planned or potential projects with each of the identified strategies. Many projects were listed under more than one strategy due to the fact that they incorporate several water management elements.

These projects will be further discussed in the Implementation Section of this report. This list includes projects to be included in this Functionally Equivalent Plan as well as for future regional integrated planning efforts already underway.

5.2.2 Matching Strategies with Objectives

After the strategies were matched up with potential projects, they were compared to the planning objectives that had been established by the Water Management Group. The matrix in Table 5-2 shows the relationship of the projects and strategies to the objectives. The proposed projects are listed under their associated strategies. A check mark indicates the project in the row meets the objective in the column. The process of matching strategies with objectives is shown in Figure 5-1.

Figure 5-1 Strategy Integration Process

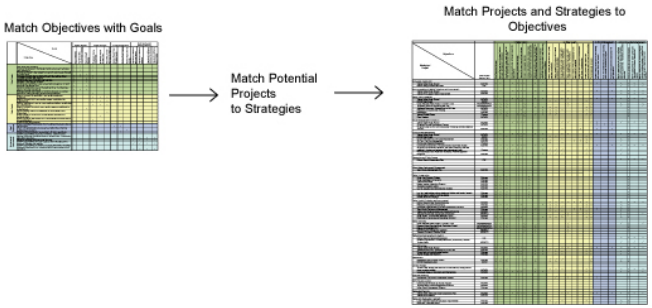


Table 5-2 Objectives and Strategies Comparison Matrix

Objectives / Strategies/ Project	Responsible Agency/ Party	1) Water Supply																2) Water Quality									3) Flood Management			4) Environmental Enhancement				
		Stop Seawater Intrusion	Improve the long-term hydrologic balance between recharge and withdrawal	Provide sufficient water supply to meet all water needs through the year 2030	Increase groundwater recharge through the Salinas River	Increase groundwater storage	Optimize the use of groundwater storage	Diversify Water Supply Sources	Continue and enhance water conservation programs for both M&I and agricultural uses	Optimize conjunctive use of the Salinas River, its tributaries, and the Groundwater Basin	Meet or exceed all applicable water quality regulatory standards	Meet or exceed M&I water quality targets established by stakeholders.	Deliver Agricultural water to meet quality guidelines established by stakeholders.	Meet or exceed Recycled water quality targets established by stakeholders.	Aid in meeting TMDL's established for the Salinas River Watershed	Protect surface waters from contamination and threat of contamination	Protect groundwater basins from contamination and the threat of contamination	Prevent seawater intrusion	Manage groundwater levels to minimize water quality impacts to existing land uses while preserving environmental habitats.	Protect existing infrastructure from flooding and erosion due to flood events	Work with Stakeholders to preserve existing flood channel maintenance program	Optimize Dam Operations for flood protection	Identify opportunities to protect, enhance, and/or restore natural resources including streams, groundwater basins, watersheds, and other resources.	Minimize adverse environmental impacts	Identify opportunities for open spaces and trails adjacent to streams, sloughs and lagoons	Identify opportunities to enhance ecological habitats, including migratory steelhead fish, through project implementation and operation.
Ecosystem Restoration																																		
Water Quality and Fish Habitat Monitoring Program	MCWRA	✓	✓		✓	✓	✓	✓		✓		✓	✓	✓				✓	✓	✓		✓					✓			✓	✓	✓	✓	✓
Elkhorn Slough Conservation Plan	ESF																																	
Environmental and Habitat Protection and Improvement																																		
Water Quality and Fish Habitat Monitoring Program	MCWRA	✓	✓		✓	✓	✓	✓		✓		✓	✓	✓				✓	✓	✓		✓					✓			✓	✓	✓	✓	✓
Salinas River Lagoon Habitat Improvement	MCWRA																																	
Water Supply Reliability																																		
Salinas Valley Water Project	MCWRA	✓	✓		✓	✓	✓	✓		✓		✓	✓	✓				✓	✓	✓		✓					✓			✓				
MCWD Well 33, Booster Station and Reservoir Project	MCWD			✓			✓				✓					✓																		
Seasalted Water Recycling/Reclamation Project	Seasalted																✓	✓	✓											✓	✓	✓	✓	✓
Urban Recycled Water Project - Former Ft. Ord	MCWD/MRWPCA			✓	✓			✓		✓		✓	✓	✓				✓	✓	✓										✓	✓	✓	✓	✓
Increased Urban/Ag Recycled Water Uses	MCWD/MRWPCA			✓	✓			✓		✓		✓	✓	✓				✓	✓	✓										✓	✓	✓	✓	✓
Additional Diversion of Salinas River for M&I Use	MCWRA											✓	✓	✓				✓	✓	✓														
Relocation of Groundwater Pumping	Partners						✓						✓	✓				✓	✓	✓														
Desalination	Partners			✓	✓		✓	✓										✓	✓	✓														
Indirect Potable Reuse	Partners			✓	✓		✓	✓								✓		✓	✓	✓														
Cloud Seeding	MCWRA			✓				✓																										
Flood Management (Protection)																																		
Salinas Valley Water Project	MCWRA	✓	✓		✓	✓	✓	✓		✓		✓	✓	✓				✓	✓	✓		✓					✓			✓				
On-going Channel Maintenance Program	MCWRA																				✓							✓						
On-going waterway flow and water quality monitoring and data collection w/USGS	MCWRA										✓											✓					✓							

Objectives / Strategies/ Project	Responsible Agency/ Party	1) Water Supply									2) Water Quality									3) Flood Management			4) Environmental Enhancement			
		Stop Seawater Intrusion	Improve the long-term hydrologic balance between recharge and withdrawal	Provide sufficient water supply to meet all water needs through the year 2030	Increase groundwater recharge through the Salinas River	Increase groundwater storage	Optimize the use of groundwater storage	Diversify Water Supply Sources	Continue and enhance water conservation programs for both M&I and agricultural uses	Optimize conjunctive use of the Salinas River, its tributaries, and the Groundwater Basin	Meet or exceed all applicable water quality regulatory standards	Meet or exceed M&I water quality targets established by stakeholders.	Deliver Agricultural water to meet quality guidelines established by stakeholders.	Meet or exceed Recycled water quality targets established by stakeholders.	Aid in meeting TMDL's established for the Salinas River Watershed	Protect surface waters from contamination and threat of contamination	Protect groundwater basins from contamination and the threat of contamination	Prevent seawater intrusion	Manage groundwater levels to minimize water quality impacts to existing land uses while preserving environmental habitats.	Protect existing infrastructure from flooding and erosion due to flood events	Work with Stakeholders to preserve existing flood channel maintenance program	Optimize Dam Operations for flood protection	Identify opportunities to protect, enhance, and/or restore natural resources including streams, groundwater basins, watersheds, and other resources.	Minimize adverse environmental impacts	Identify opportunities for open spaces and trails adjacent to streams, sloughs and lagoons	Identify opportunities to enhance ecological habitats, including migratory waterfowl habitat, through project implementation and operation.
Groundwater Management																										
Salinas Valley Water Project	MCWRA	✓	✓		✓	✓	✓	✓		✓			✓	✓				✓	✓	✓		✓	✓	✓	✓	✓
MCWD Well No. 33, Booster Station and Reservoir Project	MCWD			✓			✓				✓	✓					✓							✓		
Soledad Water Recycling/Reclamation Project	Soledad	✓	✓	✓				✓						✓			✓	✓					✓	✓		✓
Groundwater Pump for GW Level Management	Partners	✓	✓				✓						✓				✓	✓	✓				✓	✓		
On-Farm Tile Drain Management	MCWRA										✓				✓	✓	✓						✓	✓		
Wastewater Disposal Management	Partners										✓		✓				✓									
Continued Enhancement of Groundwater/Surface Water Models	MCWRA	✓	✓	✓	✓	✓	✓	✓		✓									✓	✓		✓	✓	✓	✓	✓
On-going GW extraction, elevation, and quality monitoring and data collection. Maintain and enhance data management tools.	Partners	✓	✓	✓	✓	✓	✓				✓	✓	✓				✓	✓	✓				✓	✓		
Well Construction and Abatement Ordinance, Well Management Programs	Partners	✓	✓	✓	✓	✓	✓				✓	✓	✓				✓	✓	✓				✓	✓		
Recreation and Public Access																										
Elkhorn Slough Conservation Plan	ESF																						✓	✓	✓	✓
Storm Water Capture and Management																										
Storm Water Management Plan	MCWRA																									
Water Conservation																										
Water Use Efficiency Studies	Partners	✓	✓	✓					✓															✓		
Water Use/Metering Programs	Partners	✓	✓	✓					✓															✓		
Tiered Water Rates	Partners	✓	✓	✓					✓															✓		
Mobile Irrigation Laboratory Program	MCWRA	✓	✓	✓					✓															✓		
Agricultural irrigation audits	MCWRA	✓	✓	✓					✓															✓		
Grower education and demonstration projects	MCWRA	✓	✓	✓					✓															✓		
Low flow toilet rebates, shower heads and kitchen and lavatory faucets	Partners	✓	✓	✓					✓															✓		
High-efficiency washing machine rebates	Partners	✓	✓	✓					✓															✓		
Conservation Ad Campaign	Partners	✓	✓	✓					✓															✓		

Objectives / Strategies/ Project	Responsible Agency/ Party	1) Water Supply									2) Water Quality									3) Flood Management			4) Environmental Enhancement			
		Stop Seawater Intrusion	Improve the long-term hydrologic balance between recharge and withdrawal	Provide sufficient water supply to meet all water needs through the year 2030	Increase groundwater recharge through the Salinas River	Increase groundwater storage	Optimize the use of groundwater storage	Diversify Water Supply Sources	Continue and enhance water conservation programs for both M&I and agricultural uses	Optimize conjunctive use of the Salinas River, its tributaries, and the Groundwater Basin	Meet or exceed all applicable water quality regulatory standards	Meet or exceed M&I water quality targets established by stakeholders.	Deliver Agricultural water to meet quality guidelines established by stakeholders.	Meet or exceed Recycled water quality targets established by stakeholders.	Aid in meeting TMDL's established for the Salinas River Watershed	Protect surface waters from contamination and threat of contamination	Protect groundwater basins from contamination and the threat of contamination	Prevent seawater intrusion	Manage groundwater levels to minimize water quality impacts to existing land uses while preserving environmental habitats.	Protect existing infrastructure from flooding and erosion due to flood events	Work with Stakeholders to preserve existing flood channel maintenance program	Optimize Dam Operations for flood protection	Identify opportunities to protect, enhance, and/or restore natural resources including streams, groundwater basins, watersheds, and other resources.	Minimize adverse environmental impacts	Identify opportunities for open spaces and trails adjacent to streams, sloughs and lagoons	Identify opportunities to enhance ecological habitats, including migratory waterfowl habitat, through project implementation and operation.
Water Quality Protection and Improvement																										
Water Quality and Fish Habitat Monitoring Program	MCWRA										✓	✓	✓	✓	✓	✓	✓						✓	✓	✓	✓
Soledad Water Recycling/Reclamation Project	Soledad	✓	✓	✓				✓						✓			✓	✓					✓	✓		✓
Relocation of groundwater pumping	Partners	✓	✓	✓			✓				✓	✓					✓	✓	✓				✓	✓		
Continued implementation of Nitrate management programs	MCWRA										✓	✓	✓				✓						✓	✓		
Storm Water Capture and Management	Partners			✓				✓		✓	✓				✓	✓				✓			✓	✓		
Salinity and Nitrate Education and Incentive Programs	MCWRA										✓	✓	✓				✓						✓	✓		
Industrial Wastewater Source Control Programs	MRWPCA													✓			✓						✓	✓		✓
Water Quality Improvement delivered to CSIP	MCWRA										✓		✓	✓									✓	✓		
Modification of pumping practices along the Coast	Partners	✓	✓			✓	✓				✓	✓	✓				✓	✓	✓				✓	✓		
Water Recycling																										
Soledad Water Recycling/Reclamation Project	Soledad	✓	✓	✓				✓						✓			✓	✓					✓	✓		✓
Regional Urban Water Augmentation Project	MCWD/MRWPCA	✓	✓	✓				✓						✓				✓					✓	✓		✓
Regional Urban Recycled Water Distribution Project	MCWD/MRWPCA	✓	✓	✓				✓		✓				✓										✓		
Delivery to Expanded CSIP	MCWRA/MRWPCA	✓	✓	✓				✓		✓				✓										✓		
MRWPCA Plant Membrane Treatment	MRWPCA	✓	✓	✓				✓		✓				✓										✓		
Seasonal Storage of Recycled Water	MRWPCA	✓	✓	✓				✓		✓				✓										✓		
Wetlands Enhancement and Creation																										
Elkhorn Slough Wetland Enhancement	ESF																						✓	✓	✓	✓
Wetland Augmentation with Recycled Water, Groundwater, diverted Surface Water	MRWPCA																						✓	✓	✓	✓
Conjunctive Use																										
Salinas Valley Water Project	MCWRA	✓	✓		✓	✓	✓	✓		✓			✓	✓				✓	✓	✓		✓	✓	✓	✓	✓
Additional Diversion of Salinas River for M&I Use	MCWRA	✓	✓	✓				✓		✓	✓	✓					✓	✓	✓					✓		
Groundwater extraction/transfer/banking	Partners	✓	✓	✓		✓	✓			✓		✓	✓				✓	✓	✓				✓	✓		

| Strategies/ Project \ Objectives | Responsible Agency/ Party | 1) Water Supply | | |

Through the stakeholder outreach process, the Water Management Group continues to illustrate the benefits of each project and bring together stakeholders. Since the FEP includes projects that benefit several different interests, the FEP projects have received widespread support, as evidenced by the number of letters of support obtained.

- **Opportunities to "add on" elements to projects that address different water management strategies.**

  The inclusion of the Blanco Drain element of the Salinas Valley Water Project added a surface water quality element to the SVWP, which is primarily a water supply/groundwater quality project.

6 Regional Priorities

IRWM Standard F

This section includes short-term and long-term priorities for implementation of the Plan. The process for modifying priorities in response to regional changes is also discussed.

This section outlines the short term and long term priorities for the Salinas Valley region as determined by the Water Management Group. These priorities were developed in order to refine the list of strategies and projects discussed in the strategies section. The projects that match up well with the short term priorities are included in this Functionally Equivalent Plan, while the projects and strategies that match up with long term priorities will be considered in further planning efforts. The Monterey County Water Resources Agency (MCWRA) currently has funding from the United States Environmental Protection Agency (EPA) in the next round of regional planning in the Salinas Valley.

6.1 Procedure for Developing Priorities

In developing priorities, the Water Management Group first established prioritization criteria in order to serve the best interests of the region. These criteria were as follows:

- *Develop priorities that address the needs of the region as a whole as opposed to each individual agency*
- *Concentrate on all aspects of water management (water supply, water quality, groundwater management, environmental issues, etc.)*
- *Consider statewide priorities and IRWM Grant Program preferences*

These criteria provided the guidance for the members of the Water Management Group to look beyond individual project needs and develop priorities that were consistent with the intent of Integrated Regional Water Management Planning.

The priorities were developed in a four step process that consisted of:

(1) ***Brainstorming*** *– a long list of water related issues was developed that encompassed all aspects of water management in the region.*

(2) ***Refining*** *– the list of issues was refined according to the prioritization criteria that had previously been developed by the group. This process condensed the list of issues into the most pressing priorities facing the region.*

(3) ***Categorizing*** *-- the remaining issues were grouped into short term and long term priorities.*

(4) ***Finalizing*** *– the list of short term and long term priorities was finalized for the region. The final decision on priorities was developed via a consensus process among the members of the water management group.*

The following sections describe the final list of regional priorities.

6.2 Short Term Regional Priorities

6.2.1 Projects that Stop Seawater Intrusion and Balance Basin

The most pressing problem in the Salinas Valley region from a water supply and water quality standpoint is seawater intrusion. Balancing the quantity of water that recharges the basin with the amount of water pumped for agricultural, municipal and industrial uses will stop the spread of seawater intrusion that has occurred since before 1946. Stopping seawater intrusion has been recognized as a regional priority by local and state agencies.

6.2.2 Projects that Help Meet Existing Water Demands

The combination of development in the coastal communities of the region (including the former Fort Ord Army base) and the extent of the existing seawater intrusion causes problems for the region's urban water suppliers. These two forces have jointly increased water demand and decreased water supply availability and quality in certain areas within the region. Projects that provide higher quality water to these areas while addressing seawater intrusion will receive priority.

6.2.3 Projects that Re-Establish Steelhead in Arroyo Seco

A priority in the region is to re-establish Steelhead Trout passage through the Salinas River system and into its tributaries, with particular short-term emphasis on reintroduction of this endangered species to the Arroyo Seco River. Biological studies have indicated that the Arroyo Seco River (a major tributary to the Salinas River) has potentially significant fish spawning habitat. The re-establishment of fish spawning at this location, which is 40 miles upstream of the mouth of the Salinas River, is a priority.

6.2.4 Projects that Protect and Improve Groundwater Quality

Groundwater quality in the Salinas Basin has been affected by both agricultural and urban influences. Several contaminants, including nitrates, have been detected through monitoring efforts done by MCWRA. Groundwater is an important water supply for the area. The protection and improvement of groundwater quality are important to the region to avoid loss of this resource.

6.3 Long Term Regional Priorities

6.3.1 Meet Future Water Demands

Future water demands were projected for the region as part of the planning process for the Salinas Valley Water Project. These projections (as discussed in the Regional Description) show that water demands will increase as well as change location. As these demand patterns change, they will continue to challenge both urban and agricultural water managers. Meeting these demands in a manner that protects groundwater quality is a long term priority of the region.

6.3.2 Establish Steelhead Upstream of Arroyo Seco

There is potential spawning habitat in the Salinas River watershed upstream of the Salinas River confluence with the Arroyo Seco River. One such location is the Nacimiento River, which is approximately 90 miles upstream of the mouth of the Salinas River. After Steelhead Trout are re-established in the Arroyo Seco River, it is a long term priority for the region to re-establish spawning in the Nacimiento River and other upstream tributaries of the Salinas River.

6.3.3 Continue Efforts to Improve Groundwater Quality

As monitoring of groundwater provides more and more data and drinking water standards become more stringent, the need for continued groundwater quality improvement will be necessary.

6.3.4 Implement Watershed Management

Integrated watershed management in the Nacimiento and San Antonio watersheds will improve the water quality in the reservoirs as well as in the riparian and aquatic ecosystems of the Salinas River and Salinas River Groundwater Basin.

6.4 Selected Projects

The following projects are included in the plan:

- Salinas Valley Water Project,
- Marina Coast Water District (MCWD) Well No. 33, Booster Station and Reservoir Project,
- Water Quality and Fish Habitat Monitoring Program, and
- City of Soledad Water Recycling/Reclamation Project.

These projects meet several of the objectives described in Section 4.3. They are described in more detail in Section 7. Table 6-1 summarizes how these projects meet the short term priorities of the region and position the Water Management Group to meet its long term priorities.

Table 6-1 Projects Meet Short and Long Term Priorities

Project	Short Term Priorities Addressed	Positioning for Long Term Priorities
Salinas Valley Water Project	Stop Seawater Intrusion/Balance Basin	Meet Future Water Demand
	Meet Existing Water Demands	
	Re-Establish Steelhead in Arroyo Seco River	Re-Establish Steelhead Upstream of Arroyo Seco
Water Quality and Fish Habitat Monitoring Program	Re-Establish Steelhead in Arroyo Seco River	Re-Establish Steelhead Upstream of Arroyo Seco
MCWD Well 33, Pump Station and Reservoir Project	Stop Seawater Intrusion/Balance Basin	Meet Future Water Demand
	Meet Existing Water Demands	
Soledad Water Recycling/Reclamation Project	Meet Existing Water Demands	Meet Future Water Demand
	Protect and Improve Groundwater Quality	Continue to Improve Groundwater Quality

6.5 Process for Modifying Priorities

The Water Management Group understands that conditions continually change in the region. These changes can be:

- *Physical (changes in water supply and quality)*
- *Political (changes in political leadership and priorities of stakeholders)*
- *Regulatory*

6.5.1 Changes to Short Term Priorities

It is not anticipated that the short term priorities for the region will be altered due to changes in the region. The short term priorities are widely regarded as the biggest and most immediate water-related issues facing the region. There is potential, however that changes to the region will affect the projects that have come out of the prioritization process. Throughout the remainder of the design, permitting, and implementation of these projects, their status in relation to regional issues will be continuously assessed through the stakeholder outreach process, the continuing monitoring of regional conditions and project performance, and discussions with regulators.

Potential Changes to Project Sequencing

The four projects identified are interrelated in the respect that the benefits that they provide to the region complement and build upon each other to the benefit of the whole region. However, they are, for the most part, independent projects that do not depend on each other for implementation. For example, if unforeseen regional changes affect the schedule for Marina Coast Water District to implement the Well 33, Pump Station and Reservoir Project, it will not affect the schedule of the Salinas Valley Water Project.

The one exception to the independence of the project schedules is the SVWP and the Water Quality and Fish Habitat Monitoring Program. The monitoring program is currently scheduled to be implemented after the construction of the SVWP. If there is an unforeseen delay in the SVWP, the monitoring program may be implemented in some form before the SVWP is complete.

6.5.2 Changes to Long Term Priorities

As stated previously, the Water Management Group is currently in the process of developing the Salinas Valley Integrated Regional Water Management Plan. During the development of this plan, the regional priorities will be re-evaluated through the decision making and stakeholder outreach processes. It is expected that the long term priorities may change due to physical, political, or regulatory changes in the region, especially as the projects outlined in this FEP document are implemented. The priorities will be evaluated using the same criteria used during the development of this FEP. The monitoring programs that have been established to assess the performance of the projects will be one tool used in the future development of priorities.

7 Implementation

IRWM Standard G

This section identifies specific actions, projects, and studies, by which the Plan will be implemented. Included in this section is identification of:

- the agency responsible for project implementation,
- linkages or interdependence between projects,
- economic and technical feasibility on a programmatic level,
- the current status of each element of the Plan,
- timelines for all active or planned projects, and
- the institutional structure that will ensure Plan implementation.

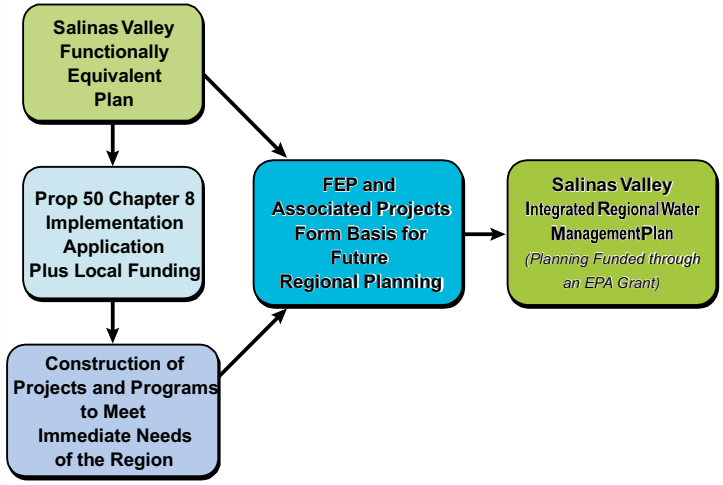
This section describes the projects and programs by which the goals and objectives of the IRWM Plan will be implemented. The IRWM Plan objectives were developed in Section 4, and shown in Table 7-1. A list of strategies was developed as a basis to meet the identified planning objectives, and is presented in Section 4. Potential local and regional projects were developed that correspond to the strategies and would achieve the goals and objectives of the planning process. This list of local and regional projects included a broad range of projects, ranging between projects that are already in the design process to projects that have not been fully evaluated and therefore may or may not be feasible. The projects included in the implementation of this Functionally Equivalent Plan (FEP) are discussed in Section 7.1.

Table 7-1 Planning Objectives

Water Supply	Water Quality
• Stop seawater intrusion • Improve the long-term hydrologic balance between recharge and withdrawal • Provide sufficient water supply to meet all water needs through the year 2030 • Increase groundwater recharge through the Salinas River • Increase groundwater storage • Optimize the use of groundwater storage • Diversify water supply sources • Continue and enhance water conservation programs for both M&I and agricultural uses • Optimize conjunctive use of the Salinas River, its tributaries, and the Groundwater Basin	• Meet or exceed all applicable water quality regulatory standards • Meet or exceed M&I water quality targets established by stakeholders. • Deliver agricultural water to meet quality guidelines established by stakeholders. • Meet or exceed recycled water quality targets established by stakeholders. • Aid in meeting TMDL's established for the Salinas River Watershed • Protect surface waters from contamination and threat of contamination • Protect groundwater basins from contamination and the threat of contamination • Prevent seawater intrusion • Manage groundwater levels to minimize water quality impacts to existing land uses while preserving environmental habitats.
Flood Protection	**Environmental Enhancement**
• Protect existing infrastructure from flooding and erosion due to flood events • Work with stakeholders to preserve existing channel maintenance program • Preserve flood protection associated with dam operations	• Identify opportunities to protect, enhance, and/or restore natural resources including streams, groundwater, watersheds, and other resources. • Minimize adverse environmental impacts of potential projects • Identify opportunities for open spaces and trails adjacent to streams, sloughs and lagoons • Identify opportunities to enhance ecological habitats, including migratory steelhead fish, through project implementation and operation.

The Water Management Group has prioritized projects based on their compliance with the IRWM Plan priorities and has a proposed construction start date by the end of 2006. The reason for this readiness-to-proceed criterion is the IRWM Plan implementation is critical to meeting the primary objectives of stopping seawater intrusion, hydrologically balancing the basin, increasing groundwater storage, and meeting water quality objectives. The next phase of the ongoing regional planning is scheduled to be completed by December 31, 2006. This next phase will involve the next steps of integrated water management in the Salinas Valley, assuming that the projects highlighted in this FEP will already be under construction or fully implemented. Figure 7-1 illustrates this phased planning process. Some of the projects that have already been identified as part of future IRWM Planning efforts are discussed in Section 7.2.

Figure 7-1 Salinas Valley Integrated Regional Planning Process



7.1 Projects and Programs for FEP Implementation

Four projects have been identified for implementation as a result of this FEP. These four projects meet all of the goals and priorities of the IWRM Plan process, and all four are scheduled for construction and implementation during 2006. The projects are presented in this section along with tables that show the following information for each project:

- Responsible Agency,
- Brief Project Description,
- Current Status of Project,
- Linkages/Interdependencies with other Projects,
- Economic Feasibility,
- Technical Feasibility,
- Project Timeline, and
- Institutional Structure that will Ensure Plan Implementation.

7.1.1 Salinas Valley Water Project

The Salinas Valley Water Project consists of three distinct components: (1) Modification of the Nacimiento Dam Spillway, (2) Construction of the Salinas River Surface Diversion Facility, and (3) Modified operation and maintenance of the existing reservoirs. The following sections provide a brief description of each project component.

Nacimiento Dam Spillway Modifications

A spillway modification is needed at Nacimiento Dam, to address lack of capacity to pass the Probable Maximum Flood (PMF) event. The SVWP takes advantage of the spillway modification, to provide greater flexibility and operational storage in the existing reservoir.

Nacimiento Dam's spillway structure was evaluated in the 1980's by MCWRA at the request of the California Department of Water Resources Division of Safety of Dams (DSOD) and the Federal Energy Regulatory Commission (FERC). The evaluation was required to determine the capacity of the dam structure to safely pass a PMF event. The PMF is a measure used to evaluate the dam spillway capacity to prevent catastrophic failure of the dam under extreme meteorological conditions. Recently, MCWRA retained GEI Consultants, Inc. (GEI) to conduct additional PMF capacity analyses, and to prepare recommendations for the physical modifications necessary to meet DSOD and FERC requirements. The GEI study was prepared under the guidance and review of MCWRA through its Reservoir Operations Committee, providing both technical oversight as well as stakeholder input to the process.

GEI found that spillway modifications were required at Nacimiento Dam in order to safely pass the revised PMF. The only alternative to modifying the reservoir spillway is to lower the operating rule curve to provide the level of additional storage required to attenuate a PMF event within the reservoir and prevent overtopping of the dam structure. The option of lowering the rule curve would reduce the effective water conservation storage capacity of Nacimiento Reservoir by approximately 124,000 acre-feet (out of a total of 377,900 AF), and was, therefore, not considered to be a viable alternative. Upon completion of the spillway modifications, MCWRA will comply with DSOD requirements, as well as gain additional flexibility in the operation of Nacimiento Reservoir. This flexibility allows for re-operation of the reservoir, one of the key components of the proposed project.

The proposed project calls for modifying Nacimiento Reservoir's existing spillway by lowering the spillway crest by eight feet and installing an inflatable rubber dam. Lowering the crest will require the excavation and removal of more than 1,000 cubic yards of concrete. The spillway crest will then be prepared and finished with concrete to accommodate the installation of an inflatable rubber dam. The sidewalls of the downstream spillway chute will be raised to accommodate the increased flows that could pass through the modified spillway. The structure will be installed such that the current maximum storage level of 800 feet elevation will be maintained.

The PMF will be passed by lowering (deflating) the rubber dam, resulting in an increase in the spillway capacity. Once the peak of the event hydrograph has passed, or late in the winter season, the rubber dam would be inflated to allow the reservoir water levels to return to the full storage capacity of Nacimiento Reservoir. Implementation of this component will not increase the existing maximum lake level (i.e., maximum inundation area surrounding the lake) of elevation 800 feet.

The inflatable rubber dam will be a custom-made structure anchored to the new spillway concrete foundation. Two rubber dam sections, each approximately 75 feet in length, will be installed across the 150-foot spillway crest. The inflatable dams will be raised by compressed air. An air pipe inflation system will be installed, consisting of an air supply and exhaust pipe, upstream water level sensor pipe, and inner pressure sensor pipe. It will take approximately 20-40 minutes to fully inflate the rubber dam. Deflation will be rapid. Inflation and deflation will be accomplished automatically and by remote or local control. Automatic safety devices will be installed to protect the dam from damage should any of the other control mechanisms fail. Final design of the facility is subject to the review and approval of DSOD and FERC.

Salinas River Surface Diversion Facility

The proposed project includes conveying water released from Nacimiento and San Antonio Reservoirs and diversion of that water at the proposed Salinas River Diversion Facility (SRDF). The proposed operations will involve: (1) conveyance of water from San Antonio and Nacimiento reservoirs via the Salinas River, (2) seasonal (April to October) confinement of water behind a proposed in-stream inflatable diversion structure, and (3) diversion of up to 12,800 AFY of water into the existing Castroville Seawater Intrusion Project (CSIP) distribution pipeline where it will be blended with recycled water produced at the Monterey County Water Recycling Project's facility and delivered to agricultural users for irrigation.

Delivery of water from the Salinas River to replace groundwater pumping in the area suffering from seawater intrusion has long been considered a potential component in solving the Basin's groundwater problems. With the listing in 1997 of steelhead fish as a federally threatened species under the Endangered Species Act; however, this component brings new environmental considerations for MCWRA. A remnant of steelhead runs the Salinas River mainstream for migration to spawning habitat in the Arroyo Seco and potentially in the Upper Salinas River. The proposed in-stream surface diversion facility will be designed to accommodate steelhead fish migration and to minimize potential impacts to steelhead.

The SRDF will be constructed within the Salinas River channel, approximately two miles upstream of Highway 1 near Moro Cojo at the approximate location of the Salinas River crossing of the CSIP distribution pipeline. The diversion facility will impound river water during the irrigation season (April through October). Up to 12,800 AFY of water will be diverted from the river by pumping directly into the existing CSIP pipeline. It then will be delivered to agricultural users within the CSIP service area.

The diversion of water from the Salinas River to the CSIP distribution pipeline will include the following features:

- Inflatable Impoundment Structure
- Fish Screen Diversion Facility
- Fish Ladder
- Salinas River Pump Station and CSIP Interconnection Pipeline

The diversion structure will incorporate an Obermeyer Spillway gate approximately 230 feet in length. The height of the spillway gate will be controlled with an inflatable air bladder. The diversion structure foundation will be constructed of reinforced concrete with vinyl sheet piles driven at the upstream and downstream ends. Vinyl sheet piles are proposed to avoid deterioration by corrosion, which will occur with steel. The upstream sheet piles will serve as a hydraulic cutoff to prevent piping under the structure and undermining of the foundation. The downstream sheet piles will serve as a structural cutoff to protect the foundation from being undercut by scouring.

The fish screen will be designed to comply with the criteria of the National Marine Fisheries Service (NMFS) and the California Department of Fish and Game (CDFG) for steelhead. The fish screen and fish ladder will be designed as a single hydraulic unit in that the bypass flows for fish passage through the ladder will provide sweeping velocities across the screen face. Final design parameters will be reviewed with the respective agencies for concurrence in advance of design.

The impoundment created by the diversion structure will be operated to provide flexibility in the water delivery, while minimizing spills at the diversion structure. The top one foot of the impoundment provides approximately 85 acre-feet of storage. This volume is equivalent to approximately 12 hours of the pump station operation at its design capacity of 85 cfs.

Operation and Maintenance of Nacimiento and San Antonio Reservoirs

The historic operation of the two reservoirs has been focused on two objectives: (1) providing flood protection and (2) providing conservation of winter flows for release during the summer months. As such, the reservoirs are operated based on "rule curves" that establish minimum flood pool requirements necessary to provide an adequate level of flood protection. Stored winter flows are released during the summer season, with the MCWRA's objective to increase stream recharge by maintaining flow to an approximate location of the Davis Road crossing of the Salinas River.

The spillway modifications at Nacimiento Dam will allow changes in the way both reservoirs are operated. This will result in additional water for surface diversion and/or groundwater recharge, ensure adequate flood control capacity, and maximize conservation releases. The increased flexibility provided by the proposed spillway modification would be especially evident during the late winter and early spring when Nacimiento Reservoir levels have historically been maintained at a maximum elevation of 777 feet (per the currently accepted rule curve) for flood control operation and to accommodate existing spillway capacity. During normal and heavier rainfall years, this has meant that Monterey County Water Resources Agency (MCWRA) is forced to release water from the reservoir that could otherwise have been stored for conservation (i.e., recharge) uses later in the year during the late-spring/summer months. By increasing the capacity of the spillway and redefining Nacimiento Reservoir's rule curve (or re-operating), more water can be stored during the winter/spring, while still passing the probable maximum flood (PMF), thus making more water available for release later in the year.

Re-operation would involve changes in the amount, frequency, and schedule for releases of water from the Nacimiento and San Antonio reservoirs into their respective rivers and would not involve physical improvements. Although no physical modifications are required at or proposed for San Antonio Reservoir, the operation and management of one reservoir impacts the other. Therefore, a change in operation at Nacimiento Dam translates into a change in operation at San Antonio Dam.

Based on the modeling conducted for the SVWP, it was determined that re-operation of both reservoirs (assuming implementation of the spillway modifications at Nacimiento) could increase the water available for surface diversion and/or groundwater recharge. Specifically, the re-operation will result in approximately 29,000 AFY (average over the 1949-1994 hydrologic record) of additional stored water that will be available for conservation releases (i.e., recharge of the groundwater aquifer) and downstream diversion.

Under the proposed project, releases from Nacimiento will be lower during the winter months. This is primarily the result of the increased spillway capacity, as well as no diversion requirement at the Salinas River Diversion Facility (SRDF) at Moro Cojo, during the winter months. Higher release requirements for diversion and recharge during the irrigation months will result in increased releases for the April through August period.

Releases from San Antonio Reservoir under the proposed project will generally be higher during the summer months than under existing conditions. Re-operation will also increase the releases from San Antonio Reservoir during the irrigation months to enhance groundwater recharge and meet diversion requirements. During the winter and early spring months, a reduction in releases will occur under the proposed project. The proposed project allows releases for recharge and diversion during the April through October period.

Blanco Drain Treatment System

The Blanco Drain serves approximately 8,000 acres of agricultural land located between Castroville and Salinas. The drain discharges up to 2,000 AFY of agricultural runoff to the Salinas River just upstream of the proposed location of the SRDF. The lower Salinas River and

the Salinas River Lagoon are listed as impaired water bodies under Section 303(d) of the Clean Water Act. According to work completed by the Watershed Institute, California State University, Monterey Bay, drainage discharge has been found to contain chlorpyrifos and diazinon at average concentration up to 62 and 91 mg/l, respectively. Both of these pesticides have been documented to be toxic to steelhead fish populations.

The SVWP includes a biological treatment system utilizing natural vegetation that will be installed in the Blanco Drain. The purpose of the system is to remove provide up to 75% removal of the two pesticides of concern, along with other contaminants of lesser concern. The system will be implemented and managed by the Resource Conservation District in coordination with MCWRA and the Monterey County Farm Bureau.

Project Progress

Table 7-2 summarizes the key information for the Salinas Valley Water Project. Information included in this table includes:

- the agency responsible for project implementation,
- linkages or interdependence between projects,
- economic and technical feasibility on a programmatic level,
- the current status of each element of the Plan,
- timelines for all active or planned projects, and
- the institutional structure that will ensure Plan implementation.

Table 7-2 Salinas Valley Water Project Status

Salinas Valley Water Project

Responsible Agency: Monterey County Water Resources Agency

Brief Project Description:

The Salinas Valley Water Project has three components – (1) enlarging the spillway at Nacimiento Dam to handle a maximum probable flood, (2) prolonging releases of water to the Salinas River so that the basin's groundwater can be recharged; and (3) installing a diversion structure on the Salinas River near Marina to temporarily store and divert water during dry periods. That water, about 10,000 acre-feet per year, will be pumped to the Castroville Seawater Intrusion Project area, thus further reducing groundwater pumping and recharging the area's aquifers to hold off seawater intrusion. During winter months, the diversion structure will be lowered so that water can flow to Monterey Bay and endangered steelhead trout can migrate up river to spawn in Arroyo Seco River and other upstream waters. Flowrates will be maintained in the river and fish screens installed to support steelhead migration.

Current Status of Project:

Planning	Permitting/Design	Construction	O&M

The project has undergone a lengthy planning and public outreach phase that has resulted in widespread support throughout the region. The project EIR was completed, and the agency is currently in Section 7 consultation with NOAA Fisheries as well as negotiating water rights with the State Water Resources Control Board. Both the diversion structure and spillway modifications are currently under design.

Linkages/Interdependencies with other Projects:

All future water management in the Salinas Valley Region is dependent upon the implementation of the Salinas Valley Water Project. The project will halt seawater intrusion and the continuing effect that seawater intrusion has had on water supply planning. Additionally, the SVWP is linked with the Water Quality and Fish Habitat Monitoring Program, which will track the efforts to improve steelhead trout habitat in the Salinas Valley Region.

Economic Feasibility:

A Proposition 218 Land Based Ballot Initiative was passed with 85% of the vote for the assessment developed lands in the affected region to pay for a total capital cost of $18.8 million, plus ongoing annual O&M of $2,390,000.

Technical Feasibility:

The Salinas Valley IGSM model has been developed and reviewed through a process that included members of the public as well as modeling experts. Model runs from the SVISGM indicate that the implementation of the SVWP will halt seawater intrusion.

Project Timeline:

Planning/EIR Preparation and Certification/Cost Allocation and Assessment Process							
1996	1997	1998	1999	2000	2001	2002	2003

	Permitting and Design			Construction		Operation and Maintenance		
2004	2005	2006	2007		2008	2009	2010	2011

Institutional Structure to Ensure Implementation:

The MCWRA is responsible for project implementation.

7.1.2 Water Quality and Fish Habitat Monitoring Program

Development of the Salinas Valley Water Project has involved detailed consideration of environmental effects, including potential effects to a remnant run of steelhead trout. Consultation with NOAA Fisheries has incorporated provisions in the project to protect steelhead and their habitat with the long term goal of enhancing the probability of their continued existence in the Salinas Basin. One result of the consultation was the recognition by all participants that there is substantial remaining uncertainty concerning aspects of steelhead biology in the Salinas Basin and the potential effects of certain elements of project operations. For that reason, participants are adopting an adaptive management approach to implementation of the project whereby sources of uncertainty are identified, appropriate hypotheses developed and tested and operations management adjusted to improve project performance with respect to safeguarding steelhead populations and maintaining or improving water quality.

An adaptive management approach involves monitoring of both project operations performance and steelhead response variables. In many cases, it is more feasible to monitor steelhead habitat parameters than to attempt direct measures of steelhead response to project operations.

The information needs and monitoring structure of an adaptive management program will change over time. A description of key monitoring program elements likely to be included at the initial stages (first three years) of an adaptive management program for the Salinas Valley Water Project is outlined below. Elements are identified as short-term if relatively firm conclusions are likely to be evident within 3 years, moderate-term if conclusions may be evident within 5 years, and long-term if firm conclusions are not expected until more than 5 years or if needed to demonstrate compliance with regulatory requirements.

Facilities Performance and Maintenance Monitoring (long-term)

The SVWP will require a new inflatable diversion dam and diversion intake structure on the lower Salinas River near the Salinas River Lagoon. The purpose of this monitoring element is to ensure that fish passage and protection structures at the diversion structure and other project facilities are performing according to design specifications and that migrating fish are not impeded. Monitoring will include:

- Fish screens remain operational and meet approach and sweep velocity criteria,
- Fish ladders are clean of sediment and debris and meet velocity and depth criteria,
- Diversion spillway is clear and fish passage is unimpeded,
- Sufficient depth of water in the spillway pool, and
- Diversion dam footing meets passage criteria when the dam not operational.

Impoundment Habitat Monitoring (short-term)

Steelhead will have to pass through the diversion impoundment when migrating between Monterey Bay and upstream spawning and rearing habitat. The impoundment may receive some level of agricultural return flows. Habitat conditions in the impoundment should be capable of supporting steelhead. Monitoring includes:

- Measurement of depth, temperature, and dissolved oxygen,
- Measurement of pesticides (chlorpyrifos and diazinon), and
- Measurement of flow velocity.

Lagoon Habitat Monitoring (short-term or moderate-term)

The project will result in some alteration in seasonal inflow to the Salinas River Lagoon. Project operations should not diminish habitat conditions for steelhead that may rear in the lagoon over the summer. Key monitoring variables include:

- Water quality parameters: temperature, salinity, dissolved oxygen, carbon dioxide, hydrogen sulfide,
- Depth and relationship to water surface elevation,
- Pesticides (chlorpyrifos and diazinon), and
- Periods of opening or closure of the mouth and relationship to river flow.

Passage Flow Monitoring

The SVWP will alter streamflow in the Salinas River and will be operated to provide flows during certain periods for migration of steelhead. There is some remaining uncertainty concerning the level of flow needed for passage by different life stages (adult upstream, smolt/juvenile downstream), and the length of time needed by different life-stages to migrate between points in the system. Part of the uncertainty is related to the interaction of river flows and the geomorphic processes of bar formation and low flow channel development. Monitoring includes:

- Stream discharge at key locations - accomplished by existing gages - (long-term), and
- Channel structure, flow depth, and velocity at critical passage locations in mainstem Salinas and Arroyo Seco (short-term or moderate-term).

Steelhead Response Monitoring (long-term)

Steelhead response to management actions is a key element of an adaptive management program. Response may be measured by behavioral parameters and/or by abundance parameters. Significant areas of unresolved uncertainty include timing of life history events (i.e. smolt migration and return of adults downstream after spawning), ability to migrate past key points (diversion impoundment, lower Arroyo Seco, mainstem critical riffles, etc.), and abundance of spawning or rearing populations in key locations (Arroyo Seco, Nacimiento River). Monitoring will include:

- Counts of fish passing the diversion facility,
- Relative abundance of lagoon rearing juveniles,
- Relative abundance of spawning populations- redd/spawning counts, and
- Relative abundance of rearing populations- juvenile abundance surveys.

Project Progress

Table 7-3 shows the vital information for the Water Quality and Fish Habitat Monitoring Program. Information displayed in this table includes:

- the agency responsible for project implementation,
- linkages or interdependence between projects,
- economic and technical feasibility on a programmatic level,
- the current status of each element of the Plan,
- timelines for all active or planned projects, and
- the institutional structure that will ensure Plan implementation.

Table 7-3 Water Quality and Fish Habitat Monitoring Program Status

Water Quality and Fish Habitat Monitoring Program

Responsible Agency: Monterey County Water Resources Agency

Brief Project Description:
The MCWRA has adopted an adaptive management approach to monitoring the Salinas Valley Water Project's effects on steelhead trout whereby sources of uncertainty are identified, appropriate hypotheses developed and tested and operations management adjusted to improve project performance with respect to safeguarding steelhead populations. There are five elements of this adaptive management program:

(1) Facilities Performance and Maintenance Monitoring - The purpose of this monitoring element is to ensure that fish passage and protection structures at the diversion structure and other project facilities are performing according to design specifications and that migrating fish are not impeded.
(2) Impoundment Habitat Monitoring - Steelhead will have to pass through the diversion impoundment when migrating between Monterey Bay and upstream spawning and rearing habitat. Habitat conditions in the impoundment should be capable of supporting steelhead.
(3) Lagoon Habitat Monitoring - Project operations should not diminish habitat conditions for steelhead that may rear in the lagoon over the summer.
(4) Passage Flow Monitoring - The project will alter streamflow in the Salinas River and will be operated to provide flows during certain periods for migration of steelhead. Streamflow will be monitored in various locations
(5) Steelhead Response Monitoring - Steelhead response to management actions is a key element of an adaptive management program. Response may be measured by behavioral parameters and/or by abundance parameters.

Current Status of Project:

NOAA Consultation and Plan Development | Program Implementation

The plan for this program has been developed in cooperation with NOAA Fisheries as part of the Salinas Valley Water Project Section 7 Consultation.

Linkages/Interdependencies with other Projects:
This program will be implemented in conjunction with the Salinas Valley Water Project (SVWP) and will monitor its affect on steelhead trout in the Salinas River. The results of the adaptive management plan will be used to adjust the operation of the SVWP, particularly the reservoir and diversion structure operation.

Economic Feasibility:
This program will be incorporated into the MCWRA annual budget after the completion of construction of the SVWP.

Technical Feasibility:
Adaptive management approaches have been applied to natural resources management efforts for more than 20 years, and have shown to be effective in optimizing ecosystem management.

Project Timeline:

Discuss w/ NOAA Fisheries		Further Planning		Implement Program			
2004	2005	2006		2007	2008	2009	2010

Institutional Structure to Ensure Implementation:

The MCWRA is responsible for project implementation.

7.1.3 Well 33, Booster Station and Reservoir Project

The 2004 Ord Community Water Distribution System Master Plan identified a near-term need for a proposed drinking water production well (well no. 33), associated booster pump station, and storage tank(s).

Locating Well No. 33 inland would remove the threat of seawater intrusion, as well as contamination from volatile organic compounds, e.g., trichloroethylene and carbon tetrachloride that remain from past Army practices. A site on federal property, within the Fort Ord footprint, near the intersection of Reservation Road and State Highway 68 has currently been identified as suitable for the well. Negotiations with the US Bureau of Land Management have started and are progressing well. The well will discharge into a two to three mile pipeline and will enter the former Fort Ord near East Garrison. A storage tank(s) will be located in this area. It is desirable to have two tanks located at the site to facilitate repair of one while maintaining system service; however, that decision will be reserved until the site is secured. Two sites have been identified as possible candidates primarily due to their elevation and proximity to existing pipelines and service areas. The storage tanks will be ideally located at an elevation that will correspond with existing Marina Coast Water District Service thereby providing gravity storage and pumped storage to service areas that are higher in elevation. A new booster pump station will also be part of the project, which will enable water to be transferred from the lower elevations to the higher elevations where it will be used by other Marina Coast Water District customers.

The proposed facilities are an integral part of Marina Coast Water District's system and will serve all of its customers. They will ensure a reliable, secure water system is available without concern of seawater intrusion or volatile organic compounds that remain from past Army practices.

Project Progress

Table 7-4 shows the vital information for the Well 33, Booster Station and Reservoir Project. Information displayed on this table includes:

- the agency responsible for project implementation,
- linkages or interdependence between projects,
- economic and technical feasibility on a programmatic level,
- the current status of each element of the Plan,
- timelines for all active or planned projects, and
- the institutional structure that will ensure Plan implementation.

Table 7-4 Well 33, Booster Station and Reservoir Project Status

Well 33, Booster Station and Reservoir Project

Responsible Agency: Marina Coast Water District

Brief Project Description:

The 2004 Ord Community Water Distribution System Master Plan identified a near-term need for a proposed drinking water production well (Well No. 33), associated booster pump station, and storage tank(s).

A site on federal property near the intersection of Reservation Road and State Highway 68 has currently been identified as suitable for the well. The well will discharge into a two to three mile pipeline and will enter the former Fort Ord near East Garrison. A storage tank(s) will be located in this area. Two sites have been identified as possible candidates primarily due to their elevation and proximity to existing pipelines and service areas. A new booster pump station will also be part of the project, which will enable water to be transferred from the lower elevations to the higher elevations where it will be used by other Marina Coast Water District customers.

Current Status of Project:

Planning	Permitting/Design	Construction	O&M

This project has gone through the planning process. Design and environmental permitting processes are planned to begin in July 2005. It is expected that the CEQA process will result in a Mitigated Negative Declaration.

Linkages/Interdependencies with other Projects:

This project work in conjunction with the Salinas Valley Water Project to help stop seawater intrusion in the basin. The new well will pump water from the deep aquifer, replacing other wells that pump from the aquifers that suffer from seawater intrusion, and reducing the pumping stress on these aquifers.

Economic Feasibility:

Cost was a factor in the planning process that led to the development of these projects. The projects will be included in the district's Capital Improvements Program.

Technical Feasibility:

These water system improvements were developed with the use of the WaterCAD hydraulic model that has been updated several times to reflect the conditions in the Fort Ord area. Design criteria have been developed to ensure a technically feasible project. The water supply aspect of the project has been modeled utilizing SVIGSM.

Project Timeline:

Planning				Design		Const.	O&M
2002	2003	2004	2005	2006	2007		2008

Institutional Structure to Ensure Implementation:

The MCWD is responsible for project implementation.

7.1.4 City of Soledad Water Recycling/Reclamation Project

The City of Soledad owns and operates a wastewater treatment facility located one mile southwest of the City. The City also leases and intends to operate the former State Department of Corrections Wastewater Treatment Plant five miles northwest of the City.

Both facilities use biological and physical treatment within aeration ponds and supplemental oxidation/disposal ponds. Additional biological and physical treatment occurs within the soil column after disposal. This additional treatment is severely limited during high groundwater conditions due to a lack of separation to groundwater. The City intends to upgrade to tertiary treatment levels, with disinfection, to mitigate groundwater quality concerns and to allow for disposal via water recycling.

Review of effluent nitrate and total Kjedahl nitrogen data indicate that no appreciable nitrogen removal (nitrification and denitrification) is occurring in the treatment ponds. Some nitrification may be occurring in the vadose zone beneath infiltration basins or other treatment/disposal ponds as wastewater percolates through the soil. The City's plans to recycle wastewater will address nutrient disposal issues, and nitrogen impacts for onsite wastewater disposal/storage.

The Soledad Water Recycling/Reclamation Project, in general, consists of upgrading its treatment capabilities from secondary to tertiary levels; transforming its disposal ponds to storage of Title 22 water quality treated effluent; and transporting the reclaimed water to two locations for use as irrigation water. From one point, the recycled water will be transported to a site just north of the city's plant and used for agricultural irrigation. Along the second route, the recycled water will be transported to a central stabilization/holding storage tank where it will distributed to various parks, landscape areas and a golf course for irrigation of green areas.

This project is consistent with: the underlying objective of the Salinas Valley Water Project, the city's Waste Discharge Requirements, Order No. R3-2005-0074, the city's Draft General Plan Update and Programmatic EIR and the city's Wastewater Treatment Plant and Disposal Master Plan (WWTPDMP).

The project is conceptualized and scoped to reach the 20 year planning horizon of the General Plan Update and the city's WTPDMP. It is therefore anticipated that the level of capacity, treatment and reclamation will be approximately 5.0 MGD within this planning period. More specifically, the intent of the project is to mitigate some of the existing plant deficiencies in light of the recently adopted WDR and provide for the upgrades necessary to meet the objectives and requirements consistent with the City's General Plan Update.

Project Progress

Table 7-5 shows the vital information for the City of Soledad Water Recycling/Reclamation Project. Information displayed on this table includes:

- the agency responsible for project implementation,
- linkages or interdependence between projects,
- economic and technical feasibility on a programmatic level,
- the current status of each element of the Plan,
- timelines for all active or planned projects, and
- the institutional structure that will ensure Plan implementation.

Table 7-5 City of Soledad Water Recycling/Reclamation Project Status

City of Soledad Water Recycling/Reclamation Project

Responsible Agency: City of Soledad

Brief Project Description:

The city's proposed project, in general, consists of upgrading its treatment capabilities from secondary to tertiary levels; transforming its disposal ponds to storage of Title 22 water quality treated effluent; transporting the reclaimed water to two distinct points for irrigation use. At one point, the recycled water will be transported to a site just north of the city's plant and used for agricultural irrigation. Along the second route, the recycled water will be transported to a central stabilization/holding storage tank where it will distributed to various parks, landscape areas and a golf course for irrigation of green areas.

Current Status of Project:

Planning	Permitting/Design	Construction	O&M

The project has gone through a lengthy planning and public outreach phase that has resulted in widespread support throughout the city and surrounding areas. A programmatic EIR is anticipated to be certified by September 2005. A Mitigated Negative Declaration will be completed (if required); otherwise, the Programmatic EIR for the General Plan Update, which reflects the Wastewater Treatment and Disposal Master Plan, will meet CEQA compliance for the proposed implementation project. Preliminary design for the majority of the project components has been completed.

Linkages/Interdependencies with other Projects:

This project is consistent with the goals and objectives of the Salinas Valley Region as well as the planning priorities for this FEP. This project, in conjunction with the other projects included in this plan will help achieve the plan's objectives.

Economic Feasibility:

Cost was a factor in the planning process that led to the development of this project. The project will be included in the City's General plan.

Technical Feasibility:

The City of Soledad has retained several consultants that are experts in their respective fields relevant to this project. These consultants have concluded that the elements of the proposed project are technically feasible and that the technology currently exists to implement the project.

Project Timeline:

Planning		Design/Permitting				Constr.		O&M
2002	2003	2004	2005	2006	2007	2008	2009	2010

Institutional Structure to Ensure Implementation:

The City of Soledad is responsible for project implementation.

7.2 Institutional Structures to Ensure Implementation

The Water Management Group entered into a Memorandum of Understanding on June 20, 2005 to undergo the planning and implementation of IRWM projects. The structure of this MOU allows for each agency to be responsible for the implementation of its own projects while supporting the integrated regional planning process.

The Salinas Valley Water Project and the Water Quality and Fish Habitat Monitoring Project will be implemented by the MCWRA. The MCWRA was created (as the Monterey County Flood Control and Water Conservation District) to manage the quantity and quality of the water supply of the Salinas Valley and provide flood control services. The MCWRA Board of Directors is appointed by the Monterey County Board of Supervisors as well as selection committees representing agricultural and urban water users in the County.

The Well 33, Booster Station and Reservoir Project will be implemented by the MCWD. The MCWD is responsible for water supply to the City of Marina and the communities on the former Ft. Ord. The MCWD is governed by a Board of Directors who are registered voters of the community. The District is governed by a five-member Board, each elected to serve four years.

The Water Recycling/Reclamation Project will be implemented by the City of Soledad. The City is responsible for the collection, treatment, and disposal of the wastewater generated in the City as well as in the Department of Correction prison facilities. The City Council is comprised of five elected members.

7.3 Future Priority Projects for Integrated Planning

There are several projects that have been identified as priority projects but do not meet the criterion of readiness to proceed. Further evaluation of their feasibility for inclusion in regional planning efforts will be included in future updates of the Salinas Valley Integrated Regional Water Management Plan (SVIRWM Plan). The next update for the SVIRWM Plan is currently underway. Funding for this planning effort has been obtained through a series of grants from the USEPA.

Two of the projects that will be considered in future IRWM Plan planning are the Regional Urban Water Augmentation Project and the Castroville Water District Well Relocation and Replacement Project. These projects are described in this section.

7.3.1 Regional Urban Water Augmentation Project

The Regional Urban Water Augmentation Project (RUWAP) will provide tertiary treated water produced by the Monterey Regional Water Pollution Control Agency at the Salinas Valley Reclamation Plant (SRVP) to customers in the Marina, Fort Ord, Seaside, Del Rey Oaks, and Monterey Areas. The project consists of a pipeline distribution system, pump stations, and storage tanks and reservoirs. The size of these facilities was determined by estimating recycled water demand while taking into account the efficiencies that can be achieved through conservation practices.

The project is projected to provide 3000 acre feet per year (AFY) of a combination of recycled and desalinated water, and it will be constructed in two phases. An EIR has been completed for the project, but design has not begun.

Another project associated with the RUWAP involves delivering recycled water for the Seaside Basin Groundwater Replenishment Project (GRP). The GRP is included in the Monterey Peninsula, Carmel Bay, and South Monterey Bay Implementation Grant application because it is located within their region.

7.3.2 Castroville Water District Well Relocation & Replacement Project

Groundwater serves as the sole water supply source for the Castroville Water District. Regionally, the Salinas Valley Groundwater Basin has experienced heavy use to meet agricultural demands. The District has operated groundwater wells in the Basin since 1952 to meet the urban water demands of the community of Castroville. While the Castroville Seawater Intrusion Project (CSIP) has positively affected the basin, the District has nevertheless experienced increasing concentrations of total dissolved solids (TDS) in its water supply wells. Implementation of the SVWP will provide further benefits to the groundwater basin, and is projected to provide significant benefits to the long-term water supply for the Castroville Water District.

Tracking of the 500 TDS concentration front in the basin by the MCWRA identifies Castroville to be in the direct line and immediate path of the seawater intrusion. Additionally, future development in the community is anticipated to more than double the potable water demand over the next three to five years. This project may necessary to protect the CWD water supply from further degradation and ensure the availability of water supplies for existing and approved future developed. Implementation of this project is pending evaluation of the effectiveness of the SVWP, and the long-term viability of the existing wells that serve the CWD.

The District has planned the construction of three new groundwater supply wells to meet the needs of the unincorporated community of Castroville. The project consists of the planning, engineering design, environmental compliance and construction of replacement wells approximately one-half mile inland from their current locations.

8 Impacts and Benefits

IRWM Standard H

This section discusses at a screening level the impact and benefits from Plan implementation, including an evaluation of potential impacts within the region and in adjacent areas from Plan implementation. This section identifies the advantages of the regional plan as well as which objectives necessitate a regional solution. Identify interregional benefits and impacts. The impacts and benefits to environmental justice or disadvantaged communities are described along with an evaluation of impacts/benefits to other resources, such as air quality or energy.

This section summarizes the impacts and benefits of the proposed projects of this Functionally Equivalent Plan (FEP). Future projects were identified and described in the Regional Priorities section of this FEP, but their impacts and benefits were not evaluated. The Salinas Valley Water Project is the only project with a complete and certified EIR; therefore, detailed impacts have already been established and are described below. MCWD Well No. 33, Booster Station and Reservoir and City of Soledad Recycling Reclamation Projects have not yet completed the environmental review process. As a result, these projects' impacts are discussed at a screening level.

8.1 Impacts of Individual Projects

8.1.1 Salinas Valley Water Project (SVWP)

The SVWP is described in the Implementation Section of this report. The SVWP EIR, certified in 2002, evaluated potential impacts of the SVWP. According to the EIR, the impacts of primary concern were related to: 1) impacts of project operations on fish passage, 2) changes in surface water elevations in Nacimiento and San Antonio Reservoirs, and 3) impacts during construction. The diversion structure will operate in April-October, generally after the up-stream steelhead migration season has passed. The impoundment will impact an estimated 32 acres of riparian and mixed riparian-woodland habitat, approximately half of which is mature and the other half of which is regenerating following annual channel maintenance activities. No sensitive terrestrial species are expected to be affected. Species of concern include California red-legged frog, and the area is considered unsuitable habitat for this species. Each of these potential impacts can be mitigated to a less-than-significant level. Sufficient flow will occur in the channel and past the diversion facility (when it is operational) such that steelhead migration will not be adversely affected and may be moderately benefited.

The modified schedule for releasing water from Nacimiento and San Antonio reservoirs that will occur under the SVWP will result in additional variation in surface elevations compared with existing operations. Air quality impacts associated with construction will be significant and unavoidable, although they will be relatively short-term and restricted to fugitive dust (PM_{10}) concerns.

8.1.2 Water Quality and Fish Habitat Monitoring Program

The Water Quality and Fish Habitat Monitoring Program is a monitoring project and will be tailored to evaluate and assure SVWP success. This project is will focus on: (1) Facilities Performance and Maintenance Monitoring (long-term), (2) Impoundment Habitat Monitoring (short-term), (3) Lagoon Habitat Monitoring (short-term or moderate-term), (4) Passage Flow Monitoring, and (5) Steelhead Response Monitoring (long-term). There are no identified negative potential impacts from this local monitoring program.

8.1.3 Well No. 33, Booster Station and Reservoir Project

The Well No.33, Pump Station and Reservoir Projects are elements of the Capital Improvement Projects (CIP) that MCWD has determined are required for the successful implementation of the development of the former Fort Ord. MCWD anticipates completing a mitigated negative declaration for this project during the project permitting phase which is schedule to be completed by December, 2005. It is anticipated that any identified impacts will be mitigated.

8.1.4 Soledad Water Recycling Reclamation Project

It is anticipated that the impacts of the project will be felt throughout the region as the city of Soledad will be one of the first municipalities in the Salinas Valley Region with pond disposal of treated wastewater that will implement tertiary treatment and reclamation/recycling. Further, the City of Soledad is planning to require all new developments to incorporate dual plumbing ("purple pipe") in its infrastructure plan in order to accommodate the distribution of the recycled water throughout new developments, especially to new parks that are part of these future projects. The city of Soledad also expects that a new planned golf course will be either entirely or mostly irrigated recycled water.

The project footprint will be within previously disturbed areas, including the Treatment Plant areas, actively farmed areas and within the City's limits (i.e., parks and landscape areas), such that there are no adverse impacts expected on endangered species and/or cultural resources. No appreciable impacts are also expected on air quality.

8.2 Benefits of Projects

8.2.1 Salinas Valley Water Project (SVWP)

In 1977, the State Water Resources Control Board (SWRCB) listed the Salinas Valley as a candidate for adjudication. Later, in 1996, the SWRCB adopted a budget and conducted a public meeting as a first step in an adjudication process. Following that public meeting, the SWRCB elected to provide funds to the MCWRA to aid in the development of a local solution, while awaiting the outcome of the local solution development before proceeding with a formal adjudication process. Through a series of workshops and public meetings, MCWRA developed the SVWP, and a Cost Allocation Committee (CAC) was formed to provide the basis for evaluating the benefits of the Salinas Valley Water Project and to develop a methodology for assigning its benefits. The CAC consisted of 19 members of the public that were selected as representatives of the wide range of Salinas Valley water user interests. The planning for the SVWP led to the EIR that was certified in 2002. SVWP benefits are:

- Balancing the Basin Hydrologically,
- Stopping Seawater Intrusion,
- Increasing Groundwater Storage,
- Improving Conjunctive Use,
- Improving Fish Passage,
- Improving Salinas River Lagoon Habitat, and
- Creating Benefits to Disadvantaged Communities.

8.2.2 Water Quality and Fish Habitat Monitoring Program

The Water Quality and Fish Habitat Monitoring Program is an extension of the SVWP. NOAA Fisheries and MCWRA have been working closely to develop in-stream flow regimes that will

protect and/or enhance Steelhead fish passage on the Salinas River in addition to monitoring Salinas River water quality.

This project is a requirement from NOAA Fisheries for completing its Section 7 consultation process and issuing a Biological Opinion for the SVWP. This process is required for MCWRA to obtain a U.S. Army Corps of Engineers 404 permit and then certify its EIS. This additional project will tailor and ensure success of the SVWP. The benefits of the Water Quality and Fish Habitat Monitoring Program are summarized below:

- Improved Fish Passage,
- Improved Salinas River Lagoon Habitat,
- Improved Understanding of Salinas River Water Quality,
- Improved Understanding of SVWP Impacts and Benefits, and
- Improved Understanding of Steelhead Fish Habitat in the Salinas Valley Region.

8.2.3 Well No. 33, Booster Station and Reservoir Project

Well No. 33, Booster Station and Reservoir project will provide important benefits to the development of the former Fort Ord. Evidence of seawater intrusion has become clear with the recent contamination of wells No. 29 and No. 32, leading MCWD to develop an additional well inland of these two wells in the 900-Foot Aquifer of the Salinas Valley Groundwater Basin. Furthermore, the Ord community will benefit from the increased water quality obtained from the new source. The booster station and associated 1.3 million gallon reservoir will help the Ord Community to have availability for future capacity expansion for future water needs.

8.2.4 Soledad Water Recycling/Reclamation Project

The project is expected to improve the water quality of the groundwater immediately surrounding the City's plant and also reduces the impact on the extraction of groundwater by reusing the recycled water for irrigation of agricultural crops and landscaping. It is expected that the effect of this project along with other projects included in the FEP will, with time, show improvements in water quality to the groundwater basin.

8.3 Advantages of a Regional Plan

8.3.1 Salinas Valley Integrated Planning

There are multiple advantages for a regional plan in the Salinas Valley. Residents and landowners in the Salinas Valley are under the threat of continued seawater intrusion, which could lead to adjudication of the groundwater basin. This would have widespread regional consequences for urban and agricultural interests. A regional plan encompassing regional objectives and delineating strategies to meet these objectives is, in the long run, a more sustainable and efficient process, and a process that will preserve the economic, environmental, and social values of the Salinas Valley region.

One major step in creating a regional plan to meet the Salinas Valley objectives was the involvement of stakeholders in the region. Through several workshops and meetings, the regional group was able to involve different parties and put forward a set of projects that are ready to proceed. Other projects were also identified and incorporated as future regional projects. Present and future project implementation in the Salinas Valley through a regional plan will provide greater benefits than individual project implementation. Individual projects focus on local priorities and usually do not take into account the regional needs. Through a regional plan and intensive stakeholder involvement, projects and alternatives can be evaluated at a screening level to solve the region's water management issues. These processes lead to prioritization of projects

that will have greater regional benefits in the Salinas Valley. Table 8-1 summarizes regional objectives that will be accomplished by implementing the proposed priority projects described in this FEP.

8.3.2 Greater Monterey Bay Regional Planning

The greater Monterey Bay IRWM Plan will be an effort undertaken by local water districts signatory to a MOU for Integrated Regional Water Management in the Monterey Bay Area. This MOU has been approved by MCWRA the Pajaro Valley Water Management Agency, and the Monterey Peninsula Water Management Agency. A copy of the MOU is included in Appendix F.

The Monterey Bay IRWM Plan, and the associated MOU, demonstrates a recognized need for increased coordination, collaboration and communication in the region among public agencies, contributing entities, and regulatory agencies. The desired result is more effectively managed resources, cost efficiencies and better service to the public. Participatory agencies plan to link and integrate the respective IRWM planning efforts and address - at a minimum - water supply, water quality, wastewater, recycled water, water conservation, storm water/flood control, watershed planning and aquatic habitat protection and restoration on a regional scale. The region, or geographic scope, for the Monterey Bay IRWM Plan will include the watersheds and associated groundwater basins contributing to Monterey Bay.

The goals of the Monterey Bay IRWM Plan effort are:

1. To develop a comprehensive IRWM Plan for the Monterey Bay area that incorporates regional water supply, water quality, flood control, and environmental protection and enhancement objectives consistent with regional IRWM planning efforts currently underway;
2. To improve and maximize coordination of individual water district plans, programs and projects for mutual benefit and optimal regional gain;
3. To help identify, develop, and implement collaborative plans, programs, and projects that may be beyond the scope or capability of a single water district, but which would be of mutual benefit if implemented among multiple districts;
4. To facilitate regional water management efforts that include multiple water supply, water quality, flood control, and environmental protection and enhancement objectives;
5. To foster coordination, collaboration and communication between water districts and interested stakeholders, to achieve greater efficiencies, enhance public services, and build public support for vital projects; and,
6. To realize regional water management objectives at the least cost possible through mutual cooperation, elimination of redundancy and enhanced competitiveness for State and Federal grant funding.

Table 8-1 List of Objectives that will be Met with the Salinas Valley Priority Projects

• Stop seawater intrusion • Improve the long-term hydrologic balance between recharge and withdrawal • Provide sufficient water supply to meet all water needs through the year 2030 • Increase groundwater recharge through the Salinas River • Increase groundwater storage • Optimize the use of groundwater storage • Diversify water supply sources • Optimize conjunctive use of the Salinas River, its tributaries, and the Groundwater Basin	• Meet or exceed recycled water quality targets established by stakeholders. • Aid in meeting TMDL's established for the Salinas River Watershed • Protect surface waters from contamination and threat of contamination • Protect groundwater basins from contamination and the threat of contamination • Manage groundwater levels to minimize water quality impacts to existing land uses while preserving environmental habitats

8.4 Impacts and Benefits to Disadvantaged Communities

Disadvantaged communities in the Salinas Valley will benefit from the implementation of the proposed projects. Disadvantaged communities occur throughout the Salinas Valley and are often found to be communities (or localized regions) with a large number of agricultural workers. The disadvantaged communities, along with the population of all of the communities in the region are shown in Figure 8-1. The proposed projects are, in general, water management projects that will halt seawater intrusion, make available other sources of supply, improve groundwater quality, and increase groundwater storage. These goals will allow agriculture in the Salinas Valley to sustain and succeed (agriculture in the Salinas Valley generates approximately $3.4 Billion in annual revenue). In addition, these projects will allow for development of infrastructure (i.e. City of Soledad) that has the potential for job creation and community involvement through educational outreach for the use of recycled water. The regional group has not identified any project that will negatively impact disadvantaged communities in the Salinas Valley.

8.5 Impacts to Energy and Air Quality

Energy resources will be partially impacted with the implementation of the proposed projects. Proposed projects that have energy requirements include (1) Pump station at the Salinas River diversion facility, (2) Pump Station and Well Pump for the Ord Community water distribution system, and (3) Pump stations for the city of Soledad Recycling Reclamation Project. The projects do not require any greater supplies of energy than the existing water supply facilities that they are replacing.

The SVWP EIR, certified in June, 2002, evaluated air quality impacts of project implementation. It was determined that air quality impacts associated with construction would be significant and unavoidable, although they would be relatively short-term and restricted to fugitive dust (PM_{10}) concerns. The same conclusion will probably be reached when the CEQA process for other proposed projects are finalized. MCWD and the City of Soledad are committed to mitigating any necessary measure that their projects might require.

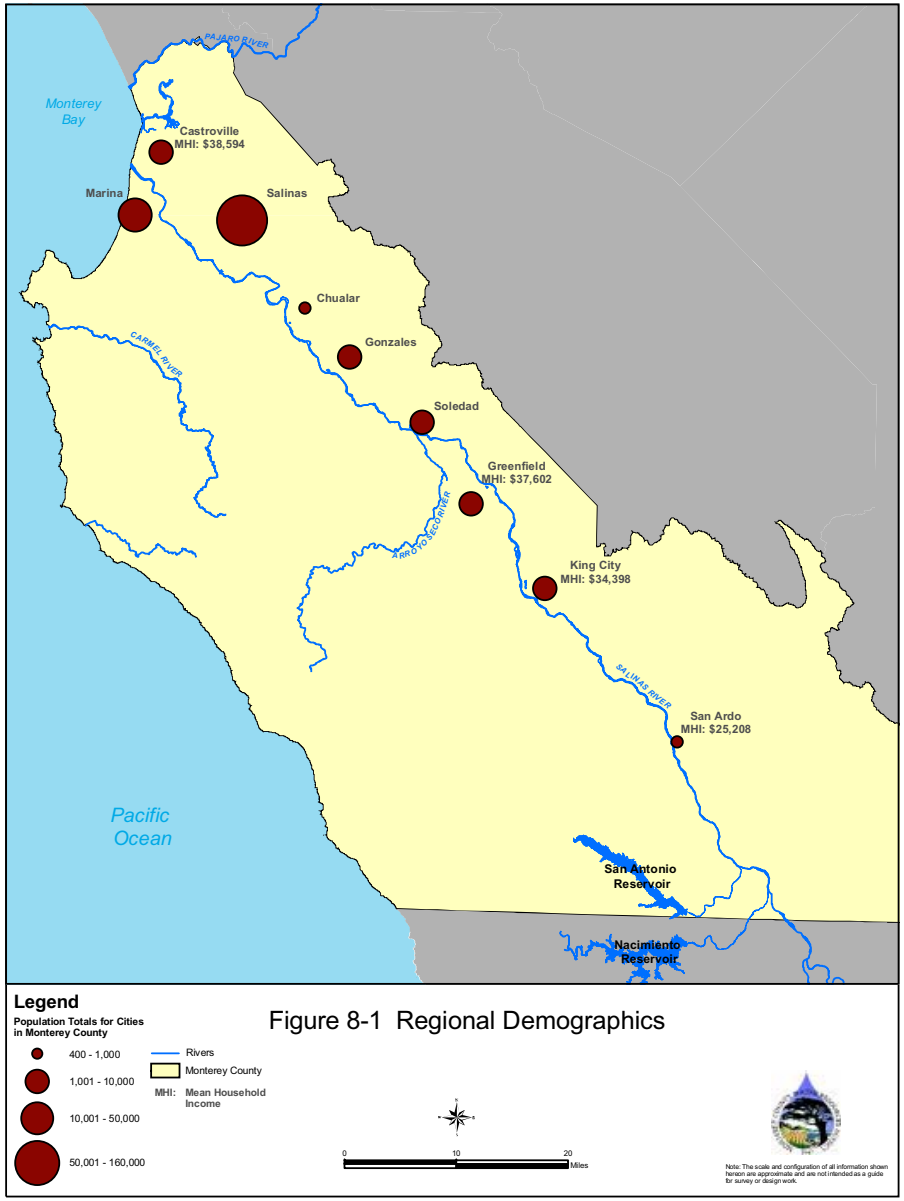


Figure 8-1 Regional Demographics

9 Technical Analysis and Plan Performance

IRWM Standard I

This section includes a discussion of data, technical methods, and analyses used in development of the Plan. Included in this section are:

- a discussion of measures that will be used to evaluate Project/Plan performance,
- monitoring systems that will be used to gather performance data,
- and mechanisms to adapt project operations and Plan implementation based on performance data collected.

9.1 Technical Analysis

This section outlines the technical analysis and plan performance for the Salinas Valley projects. Seawater intrusion in the Salinas Valley was first documented in 1946 when the California Department of Public Works published the Salinas Basin Investigation; also known as Bulletin No. 52. Monterey County Water Resources Agency (MCWRA) is the lead agency in the County of Monterey responsible for monitoring seawater intrusion and managing the groundwater resources of the Salinas Valley. Many studies have been conducted in the region to solve seawater intrusion since the publication of Bulletin No. 52. Of special importance are the Salinas Valley Water Project Summary Report and the Salinas Valley Water Project EIR/EIS.

These two documents, along with other studies and documents conducted and published during the late 1990's and early 2000's, addressed four main issues: 1) Refinement of the Salinas Valley Integrated Ground and Surface water Model (SVIGSM), 2) Evaluation of alternative water management strategies to address water supply, water quality, and seawater intrusion, 3) Hydrologic and water supply benefits, including the benefits that the operation of reservoirs and operation of the proposed Salinas River Diversion Facility have on increased groundwater levels, reliability of supply, preservation of aquifer storage, and reduction in seawater intrusion, and 4) The benefits of reducing and/or eliminating pumping in the aquifers immediately adjacent to Monterey Bay.

9.1.1 Technical Analysis of Strategic Water Management Measures

The Salinas Valley Integrated Ground and Surface water Model (SVIGSM) was used to estimate and quantify the hydrologic benefits of the Salinas Valley Water Project (SVWP). SVIGSM is a comprehensive hydrologic model that simulates the various components of the water cycle, including the agricultural and urban land water uses, evapotranspiration and deep percolation through the soil and unsaturated zones, flows in the river systems, subsurface flows in the groundwater basin, and the dynamic interaction of these components over time. The SVIGSM was adapted for use in the Salinas Valley from the Integrated Ground and Surface Water Model developed by the California Department of Water Resources, the California State Water Resources Control Board, and the Bureau of Reclamation,

The SVIGSM was developed for MCWRA in 1993 and revised in 1995. Subsequently, the SVIGSM was updated with additional data and recalibrated for the 1970-1994 hydrologic period. The SVIGSM was used to model all of the alternatives evaluated in the SVWP 2001 EIR/EIS in addition to the well relocation project for MCWD. During the NOAA fisheries Section 7 consultation process, multiple model runs were completed to better understand how required water for fish passage would benefit and/or impact the Salinas Valley Groundwater Basin. The SVIGSM is a reliable tool that stakeholders in the Salinas Valley trust and has been the basis for assessing the validity of multiple alternatives developed for the proposed projects.

9.1.2 Identification of Data Gaps and Solutions

Identification of data gaps was an important component of the IRWM Plan development. MCWRA, MCWD and their technical advisory committee constantly looked for opportunities where the performance of the proposed projects could be assessed. During analysis of the steelhead fish conditions in the Salinas Valley, and in consultation with NOAA fisheries, MCWRA agreed to include a water quality and fish habitat monitoring program that will allow for better understanding of project benefits on Steelhead Trout migration through the Salinas River. This monitoring program will also help MCWRA to understand non-point source pollution affecting river water quality.

The Water Management Group is committed to looking for technically and scientifically sound solutions for the implementation of its proposed and long term projects. A general consensus exists among partners that the SVIGSM will continue to be utilized and/or updated for the assessment of any water management alternative. Solutions will continue to be established with the identification of data gaps during project implementation.

9.2 Project Evaluation and Performance

9.2.1 Project Evaluation and Performance

The MCWRA has an existing monitoring program that is focused on monitoring how water supply and water quality changes over time. Conditions currently tracked by the MCWRA include: groundwater elevation and water quality network in the northern portion of the Salinas Valley for monitoring of seawater intrusion, nitrates and other groundwater quality conditions; general hydrologic data (i.e., rainfall, streamflows, reservoir operations, and valley-wide groundwater levels); and land use and water needs. Existing monitoring efforts by the MCWRA have been very successful in generating data necessary for the public, water managers, and relevant regulatory agencies to understand and evaluate problems facing the Basin.

In order to accurately monitor and understand the relative effectiveness of the proposed projects, MCWRA is proposing to tailor, and supplement where necessary, existing monitoring efforts. To accomplish this, MCWRA is conducting a thorough review of the existing groundwater monitoring network and making recommendations for possible modification and refinement for its use in measuring the success of the project. Once updated, the monitoring program will become an important tool for use in the future refinement of project operations. Monitoring will occur over time. It will determine if the proposed projects are successful in halting seawater intrusion.

A Project Assessment & Evaluation Plan (PAEP) will be established for each project that establishes quantifiable and measurable metrics for determining project progress. These plans will be prepared with input, cooperation and approval from the SWRCB and DWR. Each PAEP will address the following aspects of evaluation:

- *Planning, Research, Monitoring and assessment*
- *Education, Outreach and Capacity Building*
- *Habitat Restoration*
- *Load Reduction*
- *Beneficial Use Improvement and Protection*

The methods developed and described in the PAEP's will be used to evaluate and document project progress to the State as well as regulating agencies and stakeholders.

10 Data Management

IRWM Standard J

This section discusses mechanisms by which data will be managed and disseminated to stakeholders and the public, and includes discussion of how data collection will support statewide data needs. Included is an assessment of the state of existing monitoring efforts for water quantity and water quality, and identification of data gaps where additional monitoring is needed.

Seawater Intrusion in the Salinas Valley was first documented in 1946. Monterey County Water Resources Agency (MCWRA) is the lead agency in the Salinas Valley that collects and disseminates data and other information to stakeholders, public, and State agencies, and is therefore the responsible party of the Salinas Valley Water Management Group for data management. MCWRA considers surface and groundwater data collection and management very important to managing and maintaining water quality. This section discusses current data management measures and future improvements that will allow broader dissemination of data to stakeholders, public, and State agencies.

10.1 Current Data Collection and Dissemination

10.1.1 MCWRA Data Collection

MCWRA currently collects data for the following:

1. Groundwater elevation,
2. Groundwater quality,
3. Surface water quality,
4. Streamflow, and
5. Reservoir elevation and release

These data give the Agency a picture of the status of its water supplies. The collection of these data is important for the MCWRA and its stakeholders as well as the urban water providers in the region, whose groundwater supplies are linked to the agricultural water supplies. The data collection and analysis methods are described in the following sections.

Groundwater Elevation and Quality

Annual and Monthly Elevation Data Collection

MCWRA collects groundwater elevation data every December from approximately 350 wells throughout the Salinas Valley. MCWRA also monitors 80 of these wells for groundwater elevation on a monthly basis.

August Trough Program

In August, MCWRA collects groundwater elevation data from approximately 140 wells. This program is called the "August Trough Program". This groundwater elevation data program occurs only in the Northern Salinas Valley, with data collected in a single 12-hour period. The objective of the "August Trough Program" is to monitor how groundwater extraction affects groundwater elevation and to provide groundwater elevation data during a time of high pumping stress on the aquifer. This program allows better understanding of local hydrologic interactions and their relationships with seawater intrusion.

Water Quality Data Collection

Water quality data is obtained during the summer months of June, July and August. MCWRA collects groundwater and analyzes for Calcium (Ca^{+2}), Magnesium (Mg^{+2}), Potassium (K^{+}), pH, Sulfate (SO_4^{-2}), Conductivity, Chloride (Cl^{-}), and Nitrate (NO_3^{-}). Some wells where collected water is analyzed for water quality parameters are also part of the "August Trough Program". It is during these three summer months that groundwater Nitrate concentration data are collected. Table 10-1 provides a summary of the groundwater elevation and quality monitoring program and their schedules in the Salinas Valley.

Table 10-1: Groundwater Data Collection and Schedule

Number of Wells	Groundwater Collection Frequency	Data Collected	Notes
350	December	• Groundwater elevation	• Data from approximately all of the monitoring wells in the Salinas Valley are collected annually.
140	August	• Groundwater elevation	• Northern Salinas Valley August Trough Program
80	Monthly	• Groundwater elevation	• Data from a subset of the monitoring wells in the Valley are collected monthly
90	June, July and August	• Groundwater elevation • Water quality analysis: Ca^{+2}, Mg^{+2}, K^{+}, SO_4^{-2}, pH, Conductivity, Chloride, NO_3^{-}	• Some of these wells are part of the Northern Salinas Valley August Trough Program

Surface Water Quality

Surface water quality data are collected by MCWRA and the Elkhorn Slough Foundation (ESF). The ESF manages a local water quality monitoring volunteer program established in the early 1990's that is partially funded by MCWRA. Volunteers collect monthly surface water data from 24 locations in the Elkhorn Slough and Salinas River. Table 10-2 lists the sampling stations at Elkhorn Slough and Salinas River.

Table 10-2 Elkhorn Slough Surface Water Quality Stations

Station Number	Station Name	Station Number	Station Name
1	Carneros Creek	13	Bennett Slough East
2	Hudson Landing West	14	Jetty Rd.
3	Hudson Landing East	15	Skipper's
4	Upper Pond	16	Moss Landing Rd. North
5	Mid Pond	17	Moss Landing Rd. South
6	Lower Pond	18	Moro Cojo Slough
7	Kirby Park	19	Potrero Rd. North
8	North Marsh/Strawberry	20	Potrero Rd. South
9	South Marsh	21	Monterey Dunes Way
10	Reserve Bridge	22	Salinas River Lagoon
11	Struve Pond	23	Salinas River Bridge
12	Bennett Slough West	24	Tembladero Slough

In addition to the Elkhorn Slough monitoring, MCWRA collects dissolved oxygen (DO) and nutrients data from the Nacimiento and San Antonio Reservoirs.

Streamflow

USGS collects daily streamflow data from the San Antonio, Nacimiento, Salinas and Arroyo Seco Rivers. This information is used by MCWRA and the Reservoir Operations Committee to operate the San Antonio and Nacimiento Reservoirs. This information helps the Committee with the establishment of water release and flood protection policies.

Reservoir Elevation and Release

Reservoir elevation information and release schedule is a guide to assist MCWRA in making water conservation releases from both Nacimiento and San Antonio Dams.

Prior to cessation of natural flow in the Salinas River each year, MCWRA staff drafts a Preliminary Reservoir Release Schedule that considers various factors contained in the Dams' Operations Policies. The schedule considers the following priorities: 1) provide maximum groundwater recharge for the entire Salinas Valley, 2) operate the lakes to provide recreation benefits, 3) provide for the needs of fish and wildlife, and 4) waste as little water as possible to evaporation or to the ocean.

Each spring, usually at its annual April meeting, the Reservoir Operations Committee reviews the Preliminary Release Schedule and recommends a Proposed Release Schedule to the Board of Directors for adoption. The Reservoir Operations Committee reviews the adopted Release Schedule monthly and makes recommendations or changes as needed.

Current Data Dissemination

Groundwater elevation and quality data are currently stored in the Water Resources and Information Management Systems (WRAIMS) database. The WRAIMS database is the most recent data management system that MCWRA has implemented and is capable of storing multiple data sets for ground and surface water. In addition, the WRAIMS database stores well construction logs helping MCWRA to keep track of active and inactive groundwater extraction locations in the Salinas Valley. Groundwater extraction data is shared with the SWRCB through

MCWRA Groundwater Extraction Annual Reports where information from the WRAIMS database is tabulated in a concise format.

Surface water collected monthly by the ESF volunteers and MCWRA is sent to the Consolidated Chemistry Laboratory, a certified environmental laboratory operated by the County of Monterey. The data is stored in the laboratory database called Laboratory Information Management System (LIMS). At the end of the year, the Consolidated Chemistry Laboratory downloads a selected data set from the LIMS database and shares it with MCWRA and the Central Coast Ambient Monitoring Program (CCAMP). This information is then disseminated to the public through to the Regional Board internal procedures. MCWRA maintains a website with up to date daily information on reservoir elevation and release schedule. The public, stakeholders, and state Agencies can assess this data. On the MCWRA website, one can also find USGS stream gage data for the San Antonio, Nacimiento, Salinas and Arroyo Seco Rivers.

10.1.2 MCWD Data Collection

The District's state-certified laboratory performs extensive water quality monitoring of the Marina and Fort Ord's drinking water supply. The District monitors for coliform bacteria in the distribution system every week. One water sample from each of five sampling sites in Marina and from each of five in Fort Ord is collected and analyzed each week. A different set of five is analyzed each week in a month for each water system. There are a total of twenty different sample sites in Marina and twenty different sample sites in the former Fort Ord community from which water samples are collected.

To make sure that water quality is maintained from the source to the tap, the District laboratory also performs weekly monitoring of general physical and chemical parameters. Each of these five water samples are collected from the Marina and Fort Ord coliform sampling sites, from the Marina and Fort Ord source wells and from the two water reservoirs in Marina. The water samples are tested for color, odor, turbidity, temperature, pH, conductivity, free chlorine residual and sulfides. In addition, the Marina and Fort Ord source wells are also tested for chloride, fluoride, nitrate, bromide and sulfate.

The State requires that the District monitor water quality at different stages of the Marina Desalination Plant treatment processes. Water samples are collected from the ocean (Monterey Bay), its seawater intake well and its finished product water, daily, weekly, monthly or quarterly. Water samples are tested for coliform organisms, free chlorine residual, pH, turbidity, conductivity, total dissolved solids, temperature, chloride, sulfate, alkalinity, hardness and corrosive index. This monitoring program ensures that the desalination plant is operating properly and is producing water that meets or exceeds state and federal standards.

The District's state certified contract laboratory monitors for compliance over 110 constituents in drinking water in varying schedules. Many of these constituents are naturally occurring substances. The Marina and Fort Ord's source wells and Marina's reservoirs and the desalination plant are tested for general minerals such as calcium, magnesium, hardness; inorganic chemicals such as arsenic, chromium and other metals; organic chemicals such as solvents, pesticides and herbicides; radioactivity including radon; asbestos and other chemicals that are still not regulated and have no state or federal standards. Regulations also require that the District test for disinfection by-products such as total trihalomethanes and haloacetic acids in the distribution system. Lead and copper are tested from indoor water samples to check if materials used in home or building plumbing contribute to levels of lead and copper.

The District publishes its monitoring information for the public in monthly Distribution System Water Quality Reports as well as annual Consumer Confidence Reports.

10.1.3 Soledad Data Collection

The starting point for the data that will be generated, maintained and reported will be through Monitoring and Reporting Program of Order No. R3-2005-0074 and subsequent updates. The city also has dedicated staff assigned to collecting the data, storing it and reporting it in the format spelled out by the regulatory agency. In addition, the city will also disseminate the ongoing data collected to the MCWRA in such format to facilitate the sharing of information. As the city is a public entity, it will also make all these records available to the public as public records. City staff will also report to the city council on a periodic basis, the condition and performance of the plant and its improvements, including its continual compliance with agency reporting requirements.

10.2 Future Data Collection and Dissemination

10.2.1 Future Data Collection

MCWRA has plans for expanding its data collection opportunities. In addition to the present data collection program, MCWRA will collect additional information on Salinas River water quality as well as Steelhead Trout habitat and population parameters in conjunction with the implementation of the Salinas Valley Water Project (SVWP). The Steelhead Trout habitat and population monitoring program will be implemented to assess the success of Steelhead Trout migration into and use of the Salinas River Basin.

The Water Management Group is committed to cooperation with the state to provide data that is consistent with statewide data needs. The data acquired in the IRWMP process is managed in a format compatible with State and Federal databases such as Surface Water Ambient Monitoring Program (SWAMP), Groundwater Ambient Monitoring Assessment (GAMA), and California Environmental Resources Evaluation System (CERES). Reports that are developed through the IRWMP process will be provided to the appropriate State and Federal Agencies for use in their programs.

10.2.2 Future Data Dissemination

Data dissemination to stakeholders and the public will continue to occur after the implementation of the proposed projects. The Management Group will utilize the regularly scheduled MCWRA Board of Director's (Board) and Committee meetings as the primary vehicle for data dissemination to the public as well as through websites and Board approved reports.

Moreover, one component of the proposed Salinas Valley Water Project is a water quality and Steelhead Trout habitat and population monitoring program in the Salinas River. Data obtained from this program will be shared with the California Department of Fish and Game and NOAA Fisheries to ensure compliance with project permit requirements. Water quality information collected will assist the MCWRA, state agencies, public and stakeholders to better assess water quality issues in the Salinas Watershed. Both the water quality data and Steelhead Trout related monitoring parameters will be stored in the Water Resources Agency Information Management System (WRAIMS) database.

11 Financing

IRWM Standard K

This section identifies beneficiaries and identifies potential funding/financing for Plan implementation. Included is a discussion of ongoing support and financing for operation and maintenance of implemented projects.

11.1 Salinas Valley Water Project

Apart from grant funding obtained from the Prop 50 Chapter 8 application, the Salinas Valley Water Project (SVWP) will be financed by the landowners of the Salinas Valley. In the late 1990's, MCWRA and key stakeholders in the Salinas Valley created the Cost Allocation Committee (CAC). The CAC was formed to provide a basis for evaluating the benefits of the SVWP and developing a methodology for assigning its benefits. The CAC consisted of 19 members of the public that were selected as representatives of the wide range of Salinas Valley water user interests.

The CAC formed the basis for the Proposition 218 land based assessment initiative, which allowed Salinas Valley landowners to vote on the cost allocation for the SVWP. A Proposition 218 Ballot was passed with 85% of the vote for the assessment of every irrigated acre in the affected region. The result is a total of $18.8 million available from the landowners for the implementation of the SVWP. The assessments on the landowners will be adjusted if grant money is obtained for this project. Annual operations and maintenance (O&M) costs were taken into account during the SVWP CAC process and were included in the Proposition 218 land based assessments. As a result, O&M will also be paid by the Salinas Valley landowners and beneficiaries of the project.

The implementation of the SVWP will benefit the entire Salinas Valley. Seawater intrusion has already impacted over 24,000 acres of land and will continue to deteriorate the quality of the Salinas Groundwater Basin if no other measures are taken. In addition, the SVWP provides increased groundwater storage and preserves groundwater as a long-term supply for all residents and landowners of the Salinas Valley. MCWRA, its partners and stakeholders consider the SVWP their priority project for the region, and are committed to providing a 60 percent match to any grant funds provided through Proposition 50, Chapter 8 funding.

A group called Salinas Valley Property Owners for Lawful Assessments (SVPOLA) filed a legal challenge to the basis of the SVWP assessments in Monterey County Superior Court. On March 16th, 2006, the judge in the case entered a stipulated judgment settling the case and establishing modified assessments for the plaintiffs. The judgment will not hurt MCWRA's ability to implement and fund the project. The modified assessments will result in approximately $130,000.00 less per year in funding for the SVWP. The total assessment is approximately $4 million annually. This loss can be recouped through reallocation of project resources, acquisition of increased outside funding, and/or increased water delivery charges.

11.2 Well No. 33, Booster Station and Reservoir

This project consists of MCWD's first priority CIP projects for the development of facilities to meet the water supply needs of the former Fort Ord redevelopment. These projects are necessary due to the changing water demands, the existence of seawater intrusion into the basin, as well as the aging infrastructure of the former Fort Ord. The beneficiaries of this project will be the District's water customers on the former Fort Ord.

MCWD Well No. 33, Booster Station and Reservoir projects will be funded by borrowing money to fund the Ord community's Capital Improvement Projects (CIP). MCWD will acquire new debt for the implementation of its CIP and repay its debt by charging water users in capacity charges, consumer surcharges, rates, etc. O&M cost will also be recovered with water consumer's charges. MCWD has a separate rate structure for the former Fort Ord facilities specifically to address these issues, and is committed to providing a 60 percent match to any grant funds provided through Proposition 50, Chapter 8 funding.

11.3 Water Quality and Fish Habitat Monitoring Program

The Water Quality and Fish Habitat Monitoring Program is an extension of the SVWP. NOAA Fisheries and MCWRA have been working closely to develop in-stream flow regimes that will protect and/or enhance Steelhead fish passage on the Salinas River.

This project is a requirement from NOAA Fisheries to complete its Section 7 consultation process and issue a Biological Opinion for the SVWP. MCWRA is currently determining whether this project should be conducted with its current staff or subcontracted to a consultant. This project is estimated to cost approximately $170,000 per year if a consultant is chosen. Funding for this project will partially come from the Salinas Valley landowners through the CAC process. MCWRA is committed to providing a 60 percent match to any grant funds provided through Proposition 50, Chapter 8 funding.

11.4 Soledad Water Recycling/Reclamation Project

The primary beneficiaries of this project will be the residents of Soledad. The city, through its bonding and borrowing capacity and capital improvement components of its enterprise funds has the ability to finance this project with the assistance of Proposition 50 grant opportunities. In addition to the capital costs of the project, the city's sewer enterprise fund is yearly funded to assure that the proper and ongoing operations and maintenance of its facilities, including those that are planned in this project, are carried out.

The City of Soledad is committed to providing a 60 percent match to any grant funds provided through Proposition 50, Chapter 8 grant funding.

11.5 Ongoing Support for Projects

Operation and maintenance costs have been taken into account during the planning and design of each project due to a "lifecycle cost" approach to planning. Financing of these O&M costs has been considered in the financing plan for each project. For the SVWP and the Fish Habitat Monitoring Project, the O&M funds were included in the land-based assessments that were established and approved in the Prop 218 Election. The Well 33,Booster Station and Reservoir Project and the Water Recycling/Reclamantion Project will recover O&M costs through service fees.

12 Statewide Priorities

IRWM Standard L

This section identifies statewide or State agency priorities that will be met or contributed to by implementation of the Plan, proposal, or specific projects. The section describes how the Plan, proposal, or specific projects were developed pursuant to Statewide Priorities.

The Salinas Valley Integrated Water Management Plan proposes the implementation of four projects in the Salinas River watershed:

- Salinas Valley Water Project
- Water Quality and Fish Habitat Monitoring Program
- MCWD Well 33, Booster Station and Reservoir Project
- Soledad Water Recycling/Reclamation Project

12.1 Previous State Involvement in Region

12.1.1 Adjudication Proceedings

In a letter dated June 12, 1997 to MCWRA, the SWRCB initiated the Salinas Valley Groundwater Adjudication process by holding a public hearing as specified in Section 2101 of the Water Code. This potential adjudication proceeding was due to a concern by the SWRCB of seawater intrusion and nitrate contamination in the groundwater basin. In March of 1998, the SWRCB cited that MCWRA had made significant progress on addressing some of the issues it needed to accomplish in order to address that Board's concerns. In the same letter, the SWRCB stated that it "considers the water quality problems in the Salinas Valley to be among the most critical water resources issue in the State" and consequently "encourages continued cooperation from all of the stakeholders to find a local solution for the groundwater problems."

The SWRCB has stated that it "considers the water quality problems in the Salinas Valley to be among the most critical water resources issue in the State."

These water quality concerns have been addressed through the Nitrate Management Program established by the agency, as well as the public planning processes that have lead to the Salinas Valley Water Project. The implementation of the Salinas Valley Water Project, the Well Relocation Project, the Urban Recycled Water Project, and the Salinas River Fish Habitat Monitoring Program will complement efforts that are currently taking place in the Salinas River watershed in assisting DWR and SWRCB in meeting statewide priorities. A description of considered statewide priorities is provided below.

12.2 Statewide Priorities Considered

12.2.1 Implementation of RWQCB Watershed Management Initiative, Chapter, Plans and Policies

In October 22, 1999 the Central Coast Regional Water Quality Control Board (Regional Board) published the Salinas River Watershed Management Action Plan (Plan). The purpose of the plan was to describe the Regional Board approach to watershed management in the Salinas River watershed, to increase Regional Board presence in the watershed through development of

partnerships, and better improve water quality in the watershed by reducing point and non point source pollution.

The Salinas River watershed has several water quality issues and has been listed by the Regional Board on the Clean Water Act's 303(d) list of impaired water bodies. All water bodies on the 303(d) list are scheduled for development and implementation of Total Maximum Daily Loads (TMDL's) within the next several years. The Salinas River is on the TMDL list for nutrients, pesticides, priority organics, salinity and siltation.

12.2.2 Implementation of TMDL's that are established or under development

TMDL's for the Salinas River are under development. The Regional Board has allocated funds to the California State University Monterey Bay (CSUMB) for the completion of technical studies for nutrient and sediment TMDL's. CSUMB finished and has delivered its studies to the Regional Board. The study is also published on CSUMB's website. This study will be used by the Regional Board for an assessment and future implementation of TMDL's in the Salinas River.

MCWRA has been involved with the Salinas River water quality programs. Two important strategic projects that are part of this proposal are the Nitrate Management Plan and the Monterey Regional Storm Water Management Program. The Nitrate Management Plan was prepared in 1998 as part of the Salinas Valley Water Project (SVWP) and is being implemented. The Plan outlines 13 management strategies and deliverables. Ten strategies (77%) have already been completed and final completion is estimated to occur in the near future. The specific goals established for the plan are:

- Improve irrigation and fertigation practices through grower outreach and education programs
- Reduce the net nitrate/nitrogen load to the groundwater system through improved irrigation and fertigation practices
- Better define the extent and fate of nitrate contamination in the Salinas Valley groundwater basin
- Define programs to protect domestic water supplies from nitrate contamination

These efforts carried out by MCWRA are intended to solve one of the two critical water quality problems in the Salinas Valley Watershed. The Nitrate Management Plan will reduce the amount of net nitrogen load to the Salinas River and the groundwater basin.

Another project that will supplement the Regional Board in the development of TMDL's is the Salinas River Fish Habitat Monitoring Program. The goal of this project is to monitor water quality and fish habitat patterns in different stretches of the Salinas River system. A database will be created to store the collected data which will then be shared with stakeholders and state agencies through the SWAMP website.

12.2.3 Implementation of the SWRCB's Non Point Source Pollution Plan

MCWRA with other regional entities completed the Monterey Regional Storm Water Management Plan (MRSWMP) on December 8, 2004. The Central Coast Regional Water Quality Control Board held a public hearing on this plan on May 12, 2005. At that hearing, the Regional Board requested that modifications be made to the plan. The Regional Board will reconsider approving the plan in 2006. The purpose of the MRSWMP is first to comply with NPDES phase II regulations then to implement and enforce a series of management practices, referred to as "Best Management Practices" (BMP's). These BMP's are designed to reduce the discharge of pollutants from the municipal storm sewer systems to the "maximum extent practicable," to

protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The achievement of these objectives will be gauged using a series of measurable goals, which also are contained in the MRSWMP.

The BMP's are grouped under the following six "Minimum Control Measures", which are required under the Phase II regulations of the NPDES program:

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping

Program accountability is critical to reassure the public of the State's commitment to deal with the NPS pollution problem. The Program Plan contains actions that will result in consistent and timely evaluation and reporting of the Program's progress in effectively dealing with NPS pollution. This includes annual, biennial, and five-year reporting cycles and the use of Internet-based interactive information tools. Also important is greater public participation through: (1) development of the five-year implementation plans; (2) tracking the implementation of and assessing effectiveness of management measures; (3) use of public reports; (4) expanded volunteer monitoring and education programs; (5) use of the Internet; and, (6) expansion of public outreach workshops.

13 Relation to Local Planning

IRWM Standard M

This section discusses how the IRWM Plan relates to planning documents and programs established by local agencies. It demonstrates coordination with local land-use planning decision-makers, and discusses how local agency planning documents relate to the IRWM strategies and the dynamics between the two planning documents. Included is a discussion of the linkages between the Plan and local planning documents.

Throughout the planning process, the water management agencies have coordinated with and have been involved in local land use planning processes. This section documents the interconnected efforts of the water management and land use planning processes for all of the projects.

13.1 Monterey County General Plan

13.1.1 Coordination with Monterey County

The current General Plan for County of Monterey was adopted in 1982. In 1999, the County began working on an update to the General Plan for the current planning conditions of the County. The planning effort included extensive public outreach and public participation. A Draft General Plan Update and Draft EIR document were produced in 2004, but the update was opposed by several interest groups in the County. In May of 2004, the County Board of Supervisors voted to retain some aspects of the Draft Update and create a new Draft General Plan Update. This extensive effort has resulted in a March 2006 General Plan Update Draft. The March 2006 draft addresses all unincorporated areas of the county and considers the general plans of all cities within the county to allow for cooperative planning.

The MRWCA and other water management agencies in the County have provided input to the General Plan update efforts throughout the entire process, by providing information related to water quality, water supply, flood protection, and environmental enhancements. The goals, objectives and projects in this FEP have been incorporated into that input. MCWRA and its partners support a collaborative approach with the planning community and provide support and resources where necessary.

13.1.2 Dynamics Between FEP and Monterey County General Plan

The March 2006 draft of the Monterey County General Plan Update integrates elements of the FEP and addresses the FEP issues by including compatible goals relating to Water Supply, Water Quality, Flood Protection and Environmental Enhancement. The FEP will utilized by the Monterey County Water Resources Agency as a basis for assisting the County in meeting and implementing the General Plan goals and the follow- on policies. The relationships between the FEP goals (as outlined in Section 4.1) and General Plan goals are shown in the following paragraphs.

FEP Goals - Water Supply and Water Quality

General Plan Goal PS-2: Assure an adequate and safe water supply to meet the county's current and long-term needs.

General Plan Update Goal PS-3: Ensure that new development is assured a long-term sustainable water supply.

FEP Goal - Flood Protection

General Plan Update Goal S-7: Reduce the amount of new development in floodplains and for any development that does occur, minimize the risk from flooding and erosion.

General Plan Update Goal S-3: Ensure effective storm drainage and flood control to protect life, property and the environment.

FEP Goal - Environmental Enhancement

General Plan Update Goal OS-4: Protect and conserve the quality of coastal, marine and river environments.

General Plan Update Goal OS-5: Conserve natural habitats for native plant and animal species designated as federal or state Threatened or Endangered species and Critical Habitats designated in area plans and promote preservation of these species.

13.2 Fort Ord Reuse Authority Planning

13.2.1 Coordination with Fort Ord Reuse Authority

The Fort Ord Reuse Authority (FORA) is responsible for the redevelopment of the former Fort Ord Military Installation, a 45 square mile/28,000 acre facility. Following a competitive selection process in 1997, the FORA Board approved MCWD as the purveyor to own and operate the water and wastewater collection systems on the former Fort Ord. By agreement with FORA, MCWD is tasked to assure that a Capital Improvement Program (CIP) is in place and implemented to accommodate repair, replacement and expansion of the water and wastewater systems. To provide uninterrupted service to existing customers, track with system expansion, and keep pace with proposed development, MCWD and FORA staffs continue to coordinate system(s) needs with respect to anticipated development.

13.2.2 Dynamics Between FEP and Fort Ord Reuse Authority Planning

MCWD is fully engaged in the FORA CIP Process, and adjusts its program for the noted systems to be coincident with the FORA CIP. The FORA Board, by its action in 1997, has also established a Water and Wastewater Oversight Committee (WWOC), which serves in an advisory capacity to the Board. A primary function of the WWOC is to meet and confer with MCWD staff in the development of operating and capital budgets and the corresponding customer rate structures. The WWOC and staff annually prepare recommended actions for the Board's consideration with respect to budget and rate approvals.

This process provides the proper tracking mechanism to assure that capital development of the systems is in sequence with development needs on the former Fort Ord.

13.3 City of Soledad General Plan

Understanding the importance of integrating the various planning efforts, the City of Soledad was cognizant of the efforts undertaken in developing and implementing the Salinas Valley Water Project, including the fact that its Mayor has played an important role in the MCWRA and its ongoing efforts. Building on this, the City has incorporated in its General Plan Update, the City's Wastewater Treatment Plant and Disposal Master Plan. By incorporating the Wastewater Master Planning Document into the City's General Plan, the City has incorporated land use planning and water management planning on the most basic level.

14 Stakeholder Involvement and Coordination

IRWM Standard N and O

This section identifies how stakeholders were identified, how they participate in planning and implementation efforts and how they can influence decisions made regarding water management. Included in this section is documentation of stakeholder involvement by means of letters of support from non-agency stakeholders. Included is a discussion of:

- mechanisms and processes that have been and will be used to facilitate stakeholder involvement and communication during implementation,
- watershed or other partnerships developed during the planning process,
- disadvantaged communities within the region and their involvement in the planning process,
- efforts to identify and address environmental justice needs and issues within the region, and
- possible obstacles to implementation.

This section also identifies State or Federal agencies involved with strategies, actions, and projects.

14.1 Outreach for Functionally Equivalent Plan

The Salinas Valley water management process has fully integrated key stakeholders throughout its development. Along with the partner agencies, there are three key stakeholders identified for the Salinas Valley Planning Region:

- *Monterey Regional Water Pollution Control Agency*
- *The Elkhorn Slough Foundation, and*
- *The City of Soledad*

See Section 2.2 for a discussion of these stakeholders and other supporters, including a list of stakeholders.

The efforts to address water resource management, including groundwater overdraft and seawater intrusion, have been on-going since the 1940s. Since that time, numerous studies that address water management options have been completed, and numerous projects that address the water supply needs of the Salinas Valley have been constructed and put into operation. The projects identified in this Plan are components of those previous planning efforts that have been developed with extensive stakeholder and public involvement over the last several years. Development of this plan has been publicly noticed and reported twice through the proceedings of the Castroville Water District Board of Directors, the Monterey County Water Resources Agency Board of Directors, the Marina Coast Water District Board of Directors and once through the City of Soledad's City Council.

The SVIRWM Plan process was underscored by several key events. First, in 1977, the State Water Resources Control Board listed the Salinas Valley as a candidate for adjudication. Later, in 1996, the State Water Resources Control Board adopted a budget and conducted a public meeting as a first step in an adjudication process. Following that public meeting, the SWRCB elected to provide funds to the MCWRA to aid in the MCWRA's efforts to develop a local solution, while awaiting the outcome of that effort before proceeding with a formal adjudication process.

That commitment by the SWRCB provided the impetus for MCWRA and the local interests to focus on a solution to the groundwater overdraft and seawater intrusion problem. Following that

public meeting in 1996, a series of major planning activities were undertaken that included extensive public involvement, leading ultimately to the SVIRWM Plan.

14.2 Ongoing Stakeholder Processes

The Salinas Valley Regional Management Group is modifying the composition of the key stakeholder group for the project implementation and the next phase of planning efforts. The stakeholder group is being expanded to include a broader range of urban interest groups, environmental resource groups, business groups and the agricultural community. A similar process that proved so successful to date will be utilized to facilitate this group's discussions and direction. A series of public meetings was held in the Spring of 2006 in the Cities of Marina, Salinas, and Soledad to gain input and raise public awareness of the SVIWMP process and the Prop 50 grant application. These meetings, called "Community Forums on Prop. 50 Integrated Water Planning" were advertised on the MCWRA's website as well as in local newspapers. They took place on April 25th, May 1st, and May 3rd, 2006. The meeting in Salinas included a Spanish language interpreter.

14.3 Project Specific Outreach

MCWRA has developed the Salinas Valley Water Project that provides the basis for solving the groundwater overdraft and seawater intrusion problems.

Outreach efforts included:

- *Monthly, publicly noticed and attended Basin Management Planning (BMP) Committee meetings. This is a standing committee of the Board of Directors of MCWRA that has been used as a forum to discuss Salinas Valley water management issues and strategies.*
- *A series of public meetings to identify alternatives, present the analyses of the identified alternatives, and solicit public input. These meetings were very effective at identifying issues of importance to the various stakeholders. As a result of these meetings, one group of stakeholders took on the responsibility of developing an alternative project that was presented to the MCWRA and the community, and which became the proposed Salinas Valley Water Project.*
- *Creation of a workshop process for evaluating the effectiveness of the Salinas Valley Integrated Ground and Surface water Model (SVIGSM) for use in evaluating benefits to the level necessary for public support as a basis for establishing benefit assessments. The result of this process is an updated model that has become the community basis for evaluating alternatives, benefits, and effectiveness of management strategies.*
- *Creation of the Cost Allocation Committee (CAC). The CAC was formed to provide a basis for evaluating the benefits of the Salinas Valley Water Project and developing a methodology for assigning its benefits. The CAC consisted of 19 members of the public that were selected as representatives of the wide range of Salinas Valley water user interests. The members of the CAC and their affiliations are shown in Table 14-1.*

Table 14-1 Cost Allocation Committee

Individual	Interest	Region
Dan Anderson	Agriculture	Forebay Area
Bob Antle	Agriculture	Pressure Area
Mike Armstrong	Urban	Marina Coast Water District
Chris Bunn	Agriculture	Pressure Area
Don Chapin	Urban	North Monterey County
Carl Chase	Urban	North Monterey County
Jan Collins	Urban	City of Salinas
Matt Gourley	Urban	City of Gonzales
Chris Indelicato	Agriculture	Upper Valley Area
Nancy Isakson	Agriculture	Arroyo Seco Area
Steve Jensen	Agriculture	East Side Area
Jim Manassero	Agriculture	East Side Area
Bob Martin	Agriculture	Forebay Area
Roger Moitoso	Agriculture	Upper Valley Area
Arvid Myhre	Agriculture	Upper Valley Area
Greg O'Neal	Agriculture	Pressure Area
Jim Perrine	Urban	Former Fort Ord
Rich Smith	Agriculture	Arroyo Seco Area
Jim Smith	Urban	Salinas and King City

The results of this stakeholder outreach process are borne in the successful development and certification of the Salinas Valley Water Project. The success of the Salinas Valley Water Project is due in large part on the extensive public outreach effort conducted through the late 1990s through today. ***The best test of the effectiveness of these stakeholder efforts, however, is the results obtained in the Salinas Valley Water Project Proposition 218 land based assessment initiative. That ballot process resulted in an 85% vote of support, a true testament to the effectiveness of MCWRA's outreach efforts.***

14.4 Environmental Justice Concerns

One key area of environmental justice was actively discussed by the stakeholder group, namely the impacts of nitrate contamination on disadvantaged communities within the Salinas Valley. This issue became a major topic following the 1996 identification of nitrates in excess of 45 mg/l in the water supply for Chualar, a 900-resident, economically disadvantaged community just south of Salinas.

14.5 Disadvantaged Communities

In the Proposition 218 proceeding, approximately 85 percent of the Salinas Valley landowners that voted supported the levy of a new assessment to fund the Project, evidencing a keen appreciation of the need to protect the quantity and quality of the water supplies that are critical to the improvement and continued vitality of the urban and agricultural communities within the Salinas Valley. The cities of San Ardo, King City and Greenfield participated in the proposition

218 process and are also in charge of paying for their shared benefit obtained from the implementation of the project. These regions receive the following benefits from the project:

- increased groundwater recharge,
- groundwater quality,
- timing and location of recharge, and
- drought protection benefits

14.6 Coordination

The Management Group has entered into extensive coordination with state and federal agencies for the planning process and for implementation of each of the identified projects. The major state and federal agencies that have been involved are described below.

California State Water Resources Control Board

MCWRA has been in extensive contact with the SWRCB Division of Water Rights regarding the status of development of a solution to the groundwater overdraft and seawater intrusion issues. During the late 1990's, MCWRA made regular presentations to the SWRCB. In addition, MCWRA has filed a petition to change the place of diversion and place of use for water presently diverted and stored in Nacimiento and San Antonio Reservoirs and released to the Salinas River for recharge.

Key contact: Kathy Mwroka (916) 341-5363

California Department of Water Resources, Division of Safety of Dams (DSOD)

MCWRA has been in extensive contact with the DSOD regarding the evaluation of the proposed modification to the Nacimiento Dam Spillway and the proposed changes in the operating rule curve associated with the SVWP.

Key contact: Y-Nhi Enzler (916) 227-4624

California Regional Water Quality Control Board, Region 3 (Regional Board)

MCWRA has worked closely with the Regional Board in development of the Nitrate Management Plan and other programs, including non-point source, TMDL, and other management programs. MCWRA has also applied for a 401 Water Quality Certification for the SVWP.

The City of Soledad has worked closely with the Regional Board in developing the Water Recycling/ Reclamation Project.

Key contacts: Bill Hoffman, Donette Dunaway, Allison Jones, Amanda Bern , and John Goni

US Environmental Protection Agency (EPA)

MCWRA has received grant funding from the EPA to complete a regional water management plan for the Salinas Valley.

Key contact: Kathleen A. Dadey (415) 972-3474

California Department of Fish and Game (Fish and Game)

MCWRA has worked closely with Fish and Game on issues associated with the SVWP, including coordination for a Stream Alteration Agreement and issues associated with endangered species that may be impacted by the proposed SVWP.

Key contact: Serge Glushkoff

US Army Corps of Engineers (COE)

The COE served as the lead NEPA agency for the SVWP and preparation of the Environmental Impact Statement (EIS) for that project. In addition, a 404 Permit from the COE is required for construction of the diversion structure associated with the SVWP.

Key contact: Robert Smith (415) 977-8450

US Fish and Wildlife Service (FWS)

MCWRA has worked closely with FWS on issues associated with the SVWP, including evaluation of impacts and appropriate mitigations for endangered species that may be impacted by the proposed SVWP. MCWRA is now participating in Section 7 consultation for the SVWP, through the COE, for Snowy Plover, a federally listed species.

Key contact: David Pereksta (805)-644-1766

National Oceanographic and Atmospheric Administration, Marine Fisheries (NOAA Fisheries)

MCWRA has worked closely with NOAA Fisheries on issues associated with the SVWP, including evaluation of impacts and appropriate mitigations for endangered species that may be impacted by the proposed SVWP. MCWRA is now participating in Section 7 consultation for the SVWP, through the COE, for Steelhead, a federally listed species.

Key contact: Dick Butler (707)-575-6064

14.7 Potential Obstacles to Implementation

The Management Group has worked diligently to obtain public, key stakeholder, and agency support for the proposed projects. Regional water projects in California commonly focus more energy on litigation than developing solutions to water resources management; the Management Group is very pleased that only three areas of potential obstacle currently remain to the implementation of the IRWM Plan. The Management Group feels that all potential obstacles will be effectively resolved in favor of project development.

Water Rights Petition Protest

MCWRA has petitioned the SWRCB for a change in the place of use and the addition of a new point of diversion for the water rights for Nacimiento and San Antonio Reservoirs. NOAA Fisheries is the sole protestor of this petition. However, NOAA Fisheries and MCWRA have been working closely to develop in-stream flow regimes that will protect and/or enhance Steelhead fish passage on the Salinas River. As a result of these efforts and very recent progress in these negotiations, NOAA Fisheries has begun to better appreciate the hydrology of the Salinas River system and the proposed SVWP relative to its potential to enhance flows for fish passage.

NOAA Fisheries has agreed to remove its protest once successful negotiations are completed, which would then allow NOAA fisheries to complete its Section 7 consultation process and issue a Biological Opinion for the project and would allow the SWRCB Division of Water Rights to administratively process the water rights petition. On this basis, MCWRA now believes the protest of the water rights petition by NOAA Fisheries is not a significant obstacle to implementation of the IWRM Plan.

Legal Challenge by Salinas Valley Property Owners for Lawful Assessments (SVPOLA)

A group called Salinas Valley Property Owners for Lawful Assessments (SVPOLA) filed a legal challenge to the basis of the SVWP assessments in Monterey County Superior Court. On March 16th, 2006, the judge in the case entered a stipulated judgment settling the case and establishing modified assessments for the plaintiffs. The judgment will not hurt MCWRA's ability to implement and fund the project. The modified assessments will result in approximately $130,000.00 less per year in funding for the SVWP. The total assessment is approximately $4 million annually. This loss can be recouped through reallocation of project resources, acquisition of increased outside funding, and/or increased water delivery charges.

Legal Challenge by Water World Resorts, Inc.

MCWRA prepared and certified an EIR for the SVWP that fully addresses the issues, impacts, and mitigation measures associated with the SVWP. Based on the information presented in the SVWP EIR, Water World Resorts, Inc. - operators of the recreational facilities at San Antonio Reservoir and owner of similar facilities at Nacimiento Reservoir - has filed a suit contending impacts on reservoir levels that will result from implementation of the SVWP, negatively affecting their business. Water World is not challenging the project, but is seeking monetary compensation for the affects caused by the IRWM Plan implementation to Water World's operations at the two reservoirs. Therefore, the legal challenge by Water World Resorts, Inc. is not an obstacle to the project, but is an attempt to resolve the financial impacts to the owner/operators of recreational facilities at the two reservoirs. This challenge is scheduled to be heard in Los Angeles County Superior Court in October of this year.

14.8 Provisions for Changing IRWMP

The elements of this IRWMP reflect the current understanding of the Salinas Valley Region and specific problems or areas of concern about that resource. While this Functionally Equivalent Plan provides a framework for present and future actions, new data will be developed as a result of implementing the Plan Projects. That new data could define conditions which will require modifications to currently definable management actions. As a result, this IRWMP is intended to be a living document which can be updated to modify existing elements and/or incorporate new elements as appropriate in order to recognize and respond to future groundwater and surface water conditions. Although not intended to be a rigid schedule, review and updating of this IRWMP will initially be conducted in five years, with subsequent updates to be scheduled as appropriate.

15 References

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Appendix A Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING
among the
MONTEREY COUNTY WATER RESOURCES AGENCY,
MARINA COAST WATER DISTRICT
and
CASTROVILLE WATER DISTRICT
for
COORDINATION OF WATER RESOURCES PLANNING

This Memorandum of Understanding (MOU) dated June 20, 2005 is entered into among the Monterey County Water Resources Agency (MCWRA), the Marina Coast Water District (MCWD), and the Castroville Water District (CWD) (hereafter the "Parties") for the purpose of coordinating water resources planning activities undertaken by the three water agencies.

WHEREAS, the MCWRA is a state-chartered water management district formed to manage, protect, and enhance the quantity and quality of water and provides specified flood control services for present and future generations of Monterey County; and,

WHEREAS, the MCWD was organized as a County Water District under the provisions of Division 12 of the California Water Code as a political subdivision of the State of California, is located in Monterey County, is governed by a board of directors, and is authorized to provide water and wastewater services within its boundaries and service areas; and,

WHEREAS, the CWD was organized as a County Water District under the provisions of Division 12 of the California Water Code and is a political subdivision of the State of California, is located in Monterey County, is governed by a board of elected directors, and is authorized to provide water and wastewater services within its boundaries and service areas; and,

WHEREAS, it is in the interests of the signatory Parties and the region served by the Parties that the water resources the Parties share in common are responsibly managed, protected and conserved to the extent feasible; and,

WHEREAS, the Parties wish to coordinate their long-term water resources management planning efforts to ensure that the benefits of conservation, water recycling, water quality protection, environmental improvement, groundwater management and other water resources management initiatives undertaken by each of the Parties on behalf of their constituents inure primarily to the party making the financial investment to create such programs and contribute to meeting the needs of the region; and,

WHEREAS, the Parties anticipate the potential need for future agreements on specific projects or programs and with other affected agencies to further coordinate long-term water resources management planning.

NOW, THEREFORE, it is mutually understood and agreed as follows:

SECTION 1: AUTHORITY OF PARTIES

1.1 The MCWRA is a special purpose district formed under State Law pursuant to the Monterey County Water Resources Agency Act.

1.2 The MCWD is a California County Water District under the provisions of Division 12 of the California Water Code.

1.3 The CWD is a California County Water District under the provisions of Division 12 of the California Water Code.

SECTION 2: DEFINITIONS

The abbreviations and capitalized words and phrases used in this MOU shall have the following meanings:

2.1 **"MCWRA"** means the Monterey County Water Resources Agency.

2.2 **"MCWD"** means the Marina Coast Water District.

2.3 **"CWD"** means the Castroville Water District

2.4 **"Parties" or "Party"** means the MCWRA, MCWD and CWD.

SECTION 3: PURPOSES AND GOALS OF THIS MOU

3.1 **Purposes and Goals:**

This MOU is to memorialize the intent of the Parties to coordinate and share information concerning water resources management planning programs and projects and other information, and to improve and maintain overall communication among the Parties involved. It is anticipated that coordination and information sharing among the three Parties will assist the agencies in achieving their respective missions in a cost-effective and environmentally responsive manner and contribute to the overall well being of the region. Coordination and information sharing will focus on the following issue areas of water supply planning that are of common interest:

3.2 **Common Issues and Interest:**

3.2.1 Water resources management programs and projects that may provide mutual benefits in improving water supply reliability, water quality, and groundwater management.

3.2.2 Coordination of near-term and long-term water supply and water quality planning activities.

3.2.3 Development of regional approaches to problem-solving and issues resolution as well as to further common interests.

SECTION 4: JOINT AGENCY PLANNING FOR PROJECTS AND PROGRAMS

4.1 **Projects and Programs Covered by this MOU:** It is the intent of MCWRA, the MCWD and the CWD that they coordinate and collaborate to address the common issues identified. The Parties may develop and implement projects and programs individually or jointly in groupings of two or three, or enter into additional agreements in furthering those goals. Applicable projects and programs include, but are not limited to, the following:

4.1.1 An Integrated Regional Water Management Plan that will incorporate the common issues of the Parties relating to water supply, water quality, and groundwater management.

4.1.2 Solicitation of external funding for implementation of the Integrated Regional Water Management Plan

4.1.3 Other meritorious projects or programs consistent with the purposes of this MOU.

4.2 **Communication and Coordination:** It is the intent of the Parties to meet on at least a quarterly basis in order to carry out the purposes and goals of this MOU.

SECTION 5: GENERAL PROVISIONS GOVERNING THIS MOU

5.1 **Term:** The term of this MOU is indefinite. The MOU may be terminated by any of the Parties by written notice at least 45 days prior to the requested termination date.

5.2 **Construction of Terms:** This MOU is for the sole benefit of the Parties and shall not be construed as granting rights to any person other than the Parties or imposing obligations on a Party to any person other than another Party.

5.3 **Good Faith:** Each Party shall use its best efforts and work wholeheartedly and in good faith for the expeditious completion of the objectives of this MOU and the satisfactory performance of its terms.

5.4 **Governing Law:** This MOU is made under and shall be governed by the laws of the State of California.

5.5 **Rights of the Parties and Constituencies:** This MOU does not contemplate the Parties taking any action that would:

5.5.1 Adversely affect the rights of any of the Parties; or,

5.5.2 Adversely affect the customers or constituencies of any of the Parties.

IN WITNESS WHEREOF, the Parties have executed this Memorandum of Understanding as of the day and year indicated on the first page of this MOU.

MONTEREY COUNTY WATER RESOURCES AGENCY

By: 6/20/05

Curtis Weeks
General Manager

Date

APPROVED AS TO FORM

By:

General Counsel

MARINA COAST WATER DISTRICT

By: 6-14-05

Michael D. Armstrong
General Manager

Date

APPROVED AS TO FORM

By:

~~General Counsel~~ SPECIAL COUNSEL

CASTROVILLE WATER DISTRICT

By: 5-18-05

Eric Tynan
General Manager

Date

APPROVED AS TO FORM

By:

General Counsel

Appendix B Letters of Support

MONTEREY COUNTY

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July 12, 2005

Curtis V. Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

Subject: Letter of Support for Integrated Regional Water Management Planning and Proposition 50 Implementation Grant Application

Dear Mr. Weeks:

The Monterey County Board of Supervisors supports your Agency's continued work toward integrated regional water management planning, and is on record as having supported construction of the Salinas Valley Water Project (SVWP).

The SVWP is a cornerstone for stopping seawater intrusion that has been recognized by the State of California since the 1930's as a groundwater problem in Monterey County. It is fundamental to long-term, high-quality water supplies in the Salinas Valley, including its urban population and internationally significant agricultural industry. It also serves as a building block for individual water supply and water quality improvement projects of other agencies. It helps reinforce one component of a regional water supply portfolio including water conservation, recycling, desalination, surface water storage, and groundwater recharge, and it helps continue the strong record of water independence in the Salinas Valley.

We are pleased to support both the integrated regional planning that the forthcoming grant application implements, as well as the additional funding support for the SVWP and related projects that are a part of the application with your partner agencies.

Sincerely,

W. B. "Butch" Lindley, Chair
Monterey County Board of Supervisors

STANDING COMMITTEES
AGRICULTURE & WATER RESOURCES
BANKING, COMMERCE & INTERNATIONAL TRADE
SUBCOMMITTEE ON ASIA TRADE & COMMERCE
EDUCATION
SUBCOMMITTEE ON HIGHER EDUCATION
ENVIRONMENTAL QUALITY
VICE CHAIR
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California State Senate

SENATOR
JEFF DENHAM
TWELFTH SENATE DISTRICT

SELECT COMMITTEES
AIR QUALITY IN THE CENTRAL VALLEY
THE CALIFORNIA CORRECTIONAL SYSTEM
CALIFORNIA-MEXICO COOPERATION
CENTRAL VALLEY ECONOMIC DEVELOPMENT

JOINT COMMITTEES
FAIRS ALLOCATION & CLASSIFICATION
CALIFORNIA'S WINE INDUSTRY

RULES COMMITTEE APPOINTMENTS
CALIFORNIA EMERGENCY COUNCIL
NATIONAL CONFERENCE OF STATE LEGISLATURES
COUNCIL OF STATE GOVERNMENTS - WEST

Curtis V. Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

Re: Support for Integrated Regional Water Management Planning in the Salinas Valley

Dear Mr. Weeks:

Our office is aware that the Monterey County Water Resources Agency is partnering with the Marina Coast Water District and the Castroville Water District to file a Proposition 50 Chapter 8 Implementation Grant for the Salinas Valley in Monterey County. Our office supports your efforts to develop long-term, high quality water supplies for the Salinas Valley independent of either the State or federal water projects.

Your agencies have included within their grant ready-to-go projects resulting from integrated regional planning with other agencies and stakeholders in the Greater Monterey Bay area. In addition, your agency has shown leadership in following the legislative intent of Proposition 50 as you have developed your own grant application while also helping others in adjacent watersheds.

The Salinas Valley Water Project is vital to stopping seawater intrusion, improving flood protection and establishing sustainable water supplies for the Salinas Valley. The project serves as the basis for future economic development and support of the developing urban population in the Valley. The additional projects included in the implementation grant package are complementary and significant.

We strongly support your Proposition 50 Implementation Grant application.

Sincerely,

Senator Jeff Denham
12th Senatorial District

JD: dlf

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Elkhorn Slough Foundation

Conserving and Restoring Elkhorn Slough and its Watershed

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Kevin Contreras, *Land Acquisitions Coordinator*
Greg Hofmann, *Communications & Development*

July 12, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan

Dear Mr 'Weeks':

The Elkhorn Slough Foundation supports the Salinas Valley Integrated Regional Water Management Plan Implementation process and application for proposition 50 funding. We believe that regional coordination and integrated planning are critical to sustain the sound and environmentally sensible management of water resources and look forward to seeing the implementation of the Salinas Valley Water Project and to working with the agencies on specific wetlands, conservation and water restoration projects in the Elkhorn watershed. These projects are an excellent step in meeting the overall goals of stopping seawater intrusion, balancing the groundwater basin and securing water supplies for current and future needs at the same time we enhance and maintain critical environmental resources. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, improved water quality and environmental protection and enhancement.

The Elkhorn Slough Foundation has worked for the past twenty-three years to balance competing needs in the central Monterey Bay area. We have successfully protected thousands of acres of key lands and habitats while maintaining valuable farm land, reducing extraction of ground water and increasing recharge. We look forward to continuing this work in collaboration with the Water Resources Agency and its partners.

We appreciate the efforts to include us in the process and the look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops or other opportunities to participate.

Sincerely,

Mark Silberstein
Executive Director

Post Office Box 267 • Moss Landing • California • 95039
Tel: (831) 728-5939 • Fax: (831) 728-1056
Elkhorn Slough Foundation office is located on the Elkhorn Slough National Estuarine Research Reserve
1700 Elkhorn Road • Watsonville • 95076
www.elkhornslough.org

CALIFORNIA WATER SERVICE COMPANY
254 COMMISSION STREET • SALINAS, CA 93901-3737
(831) 757-3644 • FAX (831) 757-0497

SALINAS DISTRICT

June 29, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks,

The California Water Service Company would like to extend its support of the Salinas Valley Integrated Regional Water Management Plan Implementation process and grant application. We recognize the value and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Salinas Valley Water Project. These projects are an excellent step in meeting the overall goals of stopping seawater intrusion, balancing the groundwater basin and securing water supplies for current and future needs. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, improved water quality and environmental protection and enhancement.

We appreciate the efforts to include us in the process and the look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops or other opportunities to participate.

Sincerely,

Michael L. Jones
Acting District Manager
California Water Service Company
Salinas District

FORT ORD REUSE AUTHORITY
100 12TH STREET, BUILDING 2880, MARINA, CALIFORNIA 93933
PHONE: (831) 883-3672 · FAX: (831) 883-3675
WEBSITE: www.fora.org

July 7, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

Mike Armstrong, General Manager
Marina Coast Water District
11 Reservation Road
Marina, CA 93933

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Messrs. Armstrong and Weeks:

The Fort Ord Reuse Authority has reviewed the Salinas Valley Integrated Regional Water Management Plan Implementation process and grant application and extends its support. We recognize the value and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Water Project, the Augmentation of the Fort Ord supply, and regional coordination of water resources. These projects are significant in meeting the overall regional efforts to stem seawater intrusion, balance the Salinas Valley groundwater basin and ensuring sufficient urban and rural water supplies for existing and upcoming needs. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood prevention, improved water quality and environmental protection and enhancement.

In particular, Fort Ord Reuse Authority existing policy calls for supporting methods to prevent seawater intrusion, augment our existing water supplies, and appropriately manage resources to provide for the buildout of the approved Base Reuse Plan adopted in 1997. This effort will support FORA's goals in completing our redevelopment work and could enhance the opportunities for augmenting our water supply with recycled or others resources.

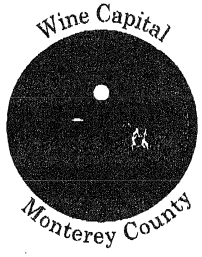
We very much appreciate the efforts to include us in the process and the look forward to continued collaboration in this process and expect to be informed of opportunities to participate.

Sincerely,

Michael A. Houlemard, Jr.
Executive Officer

H:\MSOFFICE\MHSHARE\Correspondence\Prop doc

RECEIVED 7-8-05



City of Gonzales

P.O. BOX 647
PHONE: (831) 675-5000

147 FOURTH ST.
FAX: (831) 675-2644

GONZALES, CALIFORNIA 93926
www.ci.gonzales.ca.us

Matt Gourley
Mayor

George A. Worthy
Mayor Pro Tem

Maria Orozco
Councilmember

Joe L. Gunkle
Councilmember

Delia Gutierrez
Councilmember

René L. Mendez
City Manager

July 11, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks:

The City of Gonzales would like to extend its support of the Salinas Valley Integrated Regional Water Management Plan Implementation process and grant application. We recognize the value and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Salinas Valley Water Project. These projects are an important step in meeting the overall goals of stopping seawater intrusion, balancing the groundwater basin and securing water supplies for current and future needs. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, improved water quality and environmental protection and enhancement.

We appreciate the efforts to include us in the process and look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops or other opportunities to participate.

Sincerely,

René L. Mendez
City Manager

City of Greenfield

CITY HALL: P.O. Box 127 / 45 El Camino Real / Greenfield, California 93927
(831) 674-5591 FAX (831) 674-3149
CORPORATION YARD: (831) 674-2635 FAX (831) 674-3259

July 5, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks:

The City of Greenfield would like to extend its support for the Salinas Valley Integrated Regional Water Management Plan Implementation process and grant application. We recognize the value and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Salinas Valley Water Project. This project is a crucial step in meeting the overall goals of stopping seawater intrusion, balancing the Salinas Valley groundwater basin and securing high quality water supplies for current and future needs. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, improved water quality and environmental protection and enhancement. The projects that are proposed will ensure the City of Greenfield's potable water supply will be replenished.

We appreciate the efforts to include us in the process and look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops or other opportunities to participate.

Sincerely,

Anna A. Vega, City Manager
City of Greenfield

CITY OF GREENFIELD

RESOLUTION NO. 2005-55

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GREENFIELD SUPPORTING THE SALINAS VALLEY INTEGRATED REGIONAL WATER MANAGEMENT PLAN IMPLEMENTATION PROCESS AND GRANT APPLICATION

WHEREAS, the City of Greenfield recognizes the values and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Salinas Valley Water Project; and

WHEREAS, this project is an important step in meeting the overall goals of stopping seawater intrusion, balancing the Salinas Valley groundwater basin and securing high quality water supplies for current future needs; and

WHEREAS, the Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, improved water quality and environmental protection and enhancement; and

WHEREAS, the projects that are proposed will ensure the City of Greenfield's potable water supply will be replenished; and

WHEREAS, the City Manager is authorized to send a letter of support on behalf of the City of Greenfield.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Greenfield supports the Salinas Valley Integrated Regional Water Management Plan Implementation process and grant application.

PASSED AND ADOPTED by the City Council of the City of Greenfield at a regular meeting duly held on the 5th day of July 2005, by the following vote:

AYES, and in favor thereof, Councilmembers: Mayor Huerta, Mayor Pro-tem Teneyuque, Councilmembers Moreno, Vazquez and Gonzalez
NOES, Councilmembers:
None
ABSENT, Councilmembers:
None

Ann F. Rathbun, City Clerk

I HEREBY CERTIFY that the foregoing is a true and correct copy of the resolution duly and regularly adopted by the City Council of the City of Greenfield at a meeting held on the 5TH day of July, 2005 and that the same appears of record in my office.
IN WITNESS THEREOF, I have hereunto set my hand and affixed my official seal this 6TH day of July, 2005.

City Clerk

Grower-Shipper Association
of Central California

OFFICERS:
JOHN R. BAILLIE, CHAIRMAN
JOSEPH PEZZINI, VICE-CHAIRMAN
KAY FILICE, TREASURER
JAMES W. BOGART, PRESIDENT/SECRETARY

512 PAJARO STREET
P.O. BOX 828
SALINAS, CALIFORNIA 93902
TELEPHONE (831) 422-8844
FACSIMILE (831) 422-0868
WEBSITE: WWW.GSVA.ORG
E-MAIL: GROWERSHIPPERASSN@YAHOO.COM

Our Members: Partners Producing Prosperity

July 8, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks:

The Grower-Shipper Association of Central California would like to extend its support of the Salinas Valley Integrated Regional Water Management Plan (IRWMP) implementation process and Proposition 50 grant application. We recognize the value and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Salinas Valley Water Project. That project is a critical step in meeting the overall goals of stopping seawater intrusion, balancing the groundwater basin and securing water supplies for current and future needs. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, and improved water quality.

We appreciate the efforts to include us in the process and the look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops or other opportunities to participate.

Sincerely,

James W. Bogart
President & General Counsel

BOARD OF DIRECTORS
BARDIN BENGARD JOHN R. BAILLIE RICHARD BASCOU RODNEY BRAGA DENNIS DONOHUE SAMMY DUDA KAY FILICE
KURT GOLLNICK STEPHEN GRIFFIN DAVID C. MARTELLA JAMES L. MILLS DOMINIC J. MUZZI JOSEPH PEZZINI

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N. ISAKSON CONSULTANT, INC.

TRANSMITTED VIA EMAIL

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P. O. Box 930
Salinas, Ca 93902

30 June, 2005

Re: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks;

This letter is written in support of Monterey County Water Resources Agency (Agency) seeking funds for the Salinas Valley Water Project through an application for Proposition 50 Grant funding.

I am attaching a copy of the February 4, 2003 "Resolution of Support for the Salinas Valley Water Project" which provides a partial list of those who supported adoption of the SVWP Proposition 218 Assessment ballot on that date. As an independent government affairs consultant, I was part of the 'campaign/public outreach team' for the Proposition 218 vote for the Salinas Valley Water Project. As you will recall, 85% of the voters said YES, adopt the Assessment Ballot as proposed. This support was based on the understanding that the Salinas Valley Water Project would halt seawater intrusion, improve flood control, improve the long-term hydrologic balance between recharge and withdrawal in the groundwater basin, and restructure Zones 2 and 2A to form one new Zone in the Salinas Valley, thereby protecting the fresh groundwater supply, and providing some level of benefit to all areas of the Valley.

The Salinas Valley Water Project's Assessment ballot was not only a resounding victory for Monterey County, but also set a record success for Proposition 218 ballots throughout the State. I believe this success was due in large part to the Agency's willingness to include the participation of the various stakeholders and its willingness to resolve outstanding issues. The Agency is to be applauded.

I encourage and support the Agency seeking all available funds, including Proposition 50 Grant funding, to assist in reducing the overall debt of the Salinas Valley Water Project, and to continue to work with stakeholders to resolve outstanding issues associated with the implementation of the Project. I look forward to working with the Agency toward completion of the SVWP and its full implementation.

Sincerely,

Nancy Isakson
Government Affairs Consultant

PO Box 804◆Carmel, CA 93921
Phone (831) 583-0971◆FAX (831) 583-0972◆email◆nisakson@mbay.net

A Resolution of Support for Salinas Valley Water Project

WHEREAS, **WE** rely on the groundwater resources in the Salinas Valley for our ***agriculture, industrial and/or domestic water supply*;** and

WHEREAS, the seawater intrusion is contaminating about 9,000 acre-feet of groundwater a year, creating a problem for irrigation of farms and threatening to contaminate drinking water supplies; and

WHEREAS, the Nacimiento and San Antonio Reservoirs are operated as a system, it is necessary to restructure the existing Zones 2 and 2A to form **one** new Zone for the operation and maintenance of both reservoirs, and;

WHEREAS, **WE** recognize the need to Halt Seawater Intrusion **NOW,** to provide a reliable water supply for agriculture **NOW**, to prevent contamination of drinking water supplies **NOW,** to improve flood control **NOW**, to protect the local fresh water supply **NOW**; and

WHEREAS, the Monterey County Water Resources Agency (MCWRA) has prepared the **SVWP Assessment Ballot** pursuant to Proposition 218; and

WHEREAS, the **SVWP Assessment Ballot,** if approved by the voters, would provide the authority for MCWRA to implement and fund the **Salinas Valley Water Project** to halt seawater intrusion, improve flood control, improve the long-term hydrologic balance between recharge and withdrawal in the groundwater basin, and restructure Zones 2 and 2A to form one new Zone in the Salinas Valley, thereby protecting the fresh groundwater supply;

NOW, THEREFORE, BE IT RESOLVED **WE** support the efforts of the MCWRA and urge the adoption of the **SVWP Assessment Ballot.**

The Monterey County Board of Supervisors voted unanimously to support the SVWP

- **Supervisor Fernando Armenta, Chair**
- **Supervisor Lou Calcagno**
- **Supervisor Dave Potter**
- **Supervisor Edith Johnsen**
- **Supervisor W. B. Lindley**

The Monterey County Water Resources Board of Directors voted unanimously to support the SVWP

- **Steve Collins, Chair MCWRA**
- **Richard Morgantini, Vice-Chair MCWRA**
- **Paul Martin, Director MCWRA**
- **Richard Ortiz, Director MCWRA & Mayor of Soledad**
- **Roy Alsop Jr., Director MCWRA**
- **Mary Mecartney, Director MCWRA**
- **Warren Church, Director MCWRA**
- **Timothy Handley, Director MCWRA**

- **Leo Poppoff, Director MCWRA**

Congressman Sam Farr **Senator Bruce McPherson**
Assemblyman Simon Salinas
City of King **City of Salinas**
City of Greenfield **City of Gonzales**
City of Soledad **Salinas Chamber of Commerce**
Pajaro Valley Water Management Agency **Monterey County Hospitality Association**
Marina Coast Water District **Castroville Water District**
Monterey County Business Council **Monterey County Business PAC**
Special Ad-Hoc North Monterey County Water Issues Advisory Committee
Monterey County Farm Bureau **Grower-Shipper Vegetable Association**
Salinas Pressure Zone Coalition **Salinas Valley Water Coalition**
Eastside Water Alliance **Salinas River Channel Coalition**
California Water Service, Salinas and King City

John D'Arrigo	**D'Arrigo Bros.**	**Henry Hibino**
David Nunes	**Jon Fanoe**	**Mike Bassetti**
Hugo Scattini	**Marvin Borzini**	**Bill Tarp**
Richard Breschini	**Gary Caraccioli**	**Enos Barera**
Tanimura & Antle Inc.	**L & J Farms**	**R C Farms**
Eric Tynan	**Chris Bunn**	**Bob Antle**
Bob Martin	**Dennis Caprara**	**Dan Andersen**
Laura Plaskett	**Rob Goodwin**	**Bob McKenzie**
Rich Smith	**Nancy Isakson**	**Alex Hulanicki**
Mark Zanko	**Chris Randall**	**Agapito Vazquez**
David Bunn	**Ann Myhre**	**Margarita Lopez**
Chemical Lime Company	**Arvid Myhre**	**Byron Lynn**
Roger Moitoso	**John Baillie**	**Robert Tamez**
Marilyn Dorman	**Martin Vonnegut**	**John Myers**
Michael Cling	**Jim Bogart**	**Ralph Riva**
Michael J. Griva	**Allan Giudici**	**Richard Bascou**
Michael Hearne	**Frankie Hearne**	**Patrick Collins**
John Nino	**Louie Betancourt**	**Michael Scattini**
Pat Kirby	**Betsy Roth**	**Greg Scattini**
Ted Mills	**Joann Davis**	**Frank Fedema**
Ray Diaz	**Juan Garcia**	**Andrew Sirolak**
Benny Jefferson	**David Hart**	**LeRoy Martella**
Gordon Rosenberg	**Robert Silacci**	**Alicia Greenan**
Vicki Rosenberg	**Jim Manassero**	**George Higashi**
Gary Tanimura	**Keith Tanimura**	**David Gill**
John Marihart	**Jim Smith**	**Mike Thorp**
Terry Hughes	**Kurt Gollnick**	**Jim Giannolini**
Jeff Davi	**LuAnn Meador**	**Luchessa Company**
Ed Boutonnet	**Alfred Diaz-Infante**	**Basil Mills**
John Anderson	**Jay Brown**	**Roger Mills**
Don Chapin	**Christine Gianascol**	**David Mills**
Aaron Johnson	**Don Nucci**	**James Mills**
Nick Lombardo	**Steve Jensen**	**Mills, Inc.**

David Martella **David Costa** **Norman Martella**
Crown Packing Company, Inc. **General Farm Investment** **Norm Braga**

KING CITY
CALIFORNIA

RECEIVED
JUN 16 2005
BY:

June 14, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA. 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks:

The City of King City would like to extend its support of the Salinas Valley Integrated Regional Water Management Plan Implementation process and related grant application. King City recognizes the value and importance of regional coordination and integrated planning of our water resources. This grant project is an excellent opportunity for the Monterey County Water Resources Agency to meet its overall goals to stop seawater intrusion; balance the groundwater basin; secure water supplies for current and future needs.

The Salinas Valley Integrated Regional Water Management Plan is a valued component of this planning effort within Monterey County. It is consistent with the goals of improving water supply reliability, flood protection, improved water quality, environmental protection and enhancement.

King City appreciates the opportunity to solicit our input into the process. The City looks forward to continued collaboration. Please keep us informed of stakeholder workshops or other opportunities to participate, as they become available.

Sincerely,

Ann Marie Gallant
City Manager
City of King City

City Hall, 212 South Vanderhurst Ave. King City, CA 93930
Tel: (831) 385-3281 • Fax (831) 385-6887 • www.kingcity.com

Mission Statement
"The City of King is dedicated to providing quality services in a fiscally responsible manner to assure a safe annd prosperous environment."

COMMITTEES
CHAIR, BUDGET
JUDICIARY
LABOR & EMPLOYMENT
NATURAL RESOURCES

Assembly
California Legislature
JOHN LAIRD
ASSEMBLYMEMBER, TWENTY-SEVENTH DISTRICT

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0027
(916) 319-2027
FAX (916) 319-2127
DISTRICT OFFICES
SANTA CRUZ COUNTY
701 OCEAN STREET, SUITE 318B
SANTA CRUZ, CA 95060
(831) 425-1503
FAX: (831) 425-2570
MONTEREY AND SANTA CLARA COUNTIES
99 PACIFIC STREET, SUITE 555-D
MONTEREY, CA 93940
(831) 649-2832
(408) 782-0647
FAX: (831) 649-2935

July 11, 2005

Curtis V. Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

RE: Support for Integrated Regional Water Management Planning in the Salinas Valley

Dear Mr. Weeks:

I am writing in regard to the Proposition 50 Chapter 8 Implementation Grant that Monterey County Water Resources Agency, in partnership with the Marina Coast Water District and the Castroville Water District, plans to file for various projects in Monterey County. I am strongly supportive of the longstanding and successful efforts to develop long-term, high-quality water supplies for Monterey County, specifically the Salinas Valley.

The agencies involved have included within their grant ready-to-go projects resulting from integrated regional planning with other agencies and stakeholders in the Greater Monterey Bay area. Your efforts to develop and strengthen communication and collaboration across watershed and county boundaries between the counties of Monterey, San Benito, Santa Clara and Santa Cruz are commendable. I am also aware that the State of California has long supported your Agency's efforts to stop seawater intrusion.

The Salinas Valley Water Project is key to stopping seawater intrusion, improving flood protection and establishing sustainable water supplies for the Salinas Valley. The project's importance for the entire valley was demonstrated in March 2003, when it received 85 percent support at the ballot box. The project is the foundation for integrated regional water management in this $3 billion agricultural valley. It also serves as the basis for future economic development and support of the developing urban population in the Salinas Valley.

The additional projects included in the implementation grant package are complementary and include significant support for:

- evaluating and improving habitat for endangered steelhead;
- continuing to build a diversified portfolio of water supply projects by expanding recycling for the City of Soledad; and

- improving reliability of domestic water supplies for the former Fort Ord and the community of Castroville.

I support your efforts on these projects and applaud your agency's initiative in taking the lead with the collaborating agencies applying for Proposition 50 Chapter 8 Implementation Grant funds. I trust that your application will be given all due consideration and wish you well in this process.

Sincerely,

JOHN LAIRD
Assemblymember, 27th District

JL:co

City of Marina

211 HILLCREST AVENUE
MARINA, CA 93933
TELEPHONE (831) 884-1278
FAX (831) 384-9148

July 6, 2005

Mr. Michael Armstrong, General Manager
Marina Coast Water District
11 Reservation Road
Marina, CA 93933

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Armstrong:

The City of Marina would like to extend its support of the Salinas Valley Integrated Regional Water Management Plan Implementation process and grant application. We recognize the value and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Salinas Valley Water Project and the MCWD Well No. 33 project.

These projects are an excellent step in meeting the overall goals of stopping seawater intrusion, balancing the groundwater basin and securing water supplies for current and future needs. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, improved water quality and environmental protection and enhancement.

In particular, we strongly support locating MCWD's new Well No. 33 further inland as an important first step to remove the threat of seawater intrusion, as well as contamination from volatile organic compounds, from the Ord Community drinking water supply.

We appreciate the efforts to include us in the process and the look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops or other opportunities to participate.

Sincerely,

Anthony J. Altfield
City Manager
City of Marina

Monterey County Farm Bureau

Mailing address: P. O. Box 1449 Salinas, California 93902
Street address: 931 Blanco Circle Salinas, California 93901
Telephone 831-751-3100 ***Fax 831-751-3167***
E-Mail mocofb3@redshift.com
Visit our website at **www.MontereyCountyFarmBureau.org**

July 1st, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks:

Monterey County Farm Bureau supports the Monterey County Water Resources Agency seeking Proposition 50 grant funds for the Salinas Valley Water Project (SVWP). We support that these funds be applied toward Salinas Valley Water Project capital cost reductions for the Nacimiento dam spillway remodification and construction of the inflatable diversion dam on the lower Salinas River, intended to provide water for irrigated agriculture on the coast to stop seawater intrusion.

These Project Components have our support per our Board resolution of January 15th, 2003 (see attached) and as adopted by the voters of Monterey County in March 2003.

We appreciate the Agency's efforts to include us in the process and look forward to continued collaboration in the Integrated Regional Water Management Plan (IRWMP). Please keep us informed of stakeholder workshops or other opportunities to participate in the successful completion of the Salinas Valley Water Project. .

Sincerely,

Bill Hammond
President

Attachments:
MCFB Board resolution, January 15th, 2003

CC: MCFB Board of Directors

A Resolution of Support for Salinas Valley Water Project

WHEREAS, **Monterey County Farm Bureau** relies on the groundwater resources in the Salinas Valley for our ***agriculture, industrial and/or domestic water supply***; and

WHEREAS, the seawater intrusion is contaminating about 9,000 acre-feet of groundwater a year, creating a problem for irrigation of farms and threatening to contaminate drinking water supplies; and

WHEREAS, the Nacimiento and San Antonio Reservoirs are operated as a system, it is necessary to restructure the existing Zones 2 and 2A to form **one** new Zone for the operation and maintenance of both reservoirs, and;

WHEREAS, **Monterey County Farm Bureau** recognizes the need to Halt Seawater Intrusion **NOW**, to provide a reliable water supply for agriculture **NOW**, to prevent contamination of drinking water supplies **NOW**, to improve flood control **NOW**, to protect the local fresh water supply **NOW**; and

WHEREAS, the Monterey County Water Resources Agency (MCWRA) has prepared the **SVWP Assessment Ballot** pursuant to Proposition 218; and

WHEREAS, the **SVWP Assessment Ballot**, if approved by the voters, would provide the authority for MCWRA to implement and fund the **Salinas Valley Water Project** to halt seawater intrusion, improve flood control, improve the long-term hydrologic balance between recharge and withdrawal in the groundwater basin, and restructure Zones 2 and 2A to form one new Zone in the Salinas Valley, thereby protecting the fresh groundwater supply;

NOW, THEREFORE, BE IT RESOLVED **Monterey County Farm Bureau** supports the efforts of the MCWRA and urges the adoption of the **SVWP Assessment Ballot.**

CONFIRMED on **January 15, 2003** with the following signature(s):

President _____ **Past Pres.** _____

V.P. _____ **V.P.** _____

V.P. _____ **V.P.** _____

MONTEREY COUNTY

PLANNING AND BUILDING INSPECTION DEPARTMENT

☐ 230 CHURCH STREET, BLDG 1, SALINAS, CALIFORNIA 93901 PLANNING: (831) 755-5025 BUILDING: (831) 755-5027 FAX: (831) 757-9516
MAILING ADDRESS: P.O. BOX 1208, SALINAS, CALIFORNIA 93902
☐ COASTAL OFFICE, 2620 FIRST AVENUE, MARINA, CALIFORNIA 93933 PLANNING: (831) 883-7500 BUILDING: (831) 883-7501 FAX: (831) 384-3261
☐ KING CITY OFFICE, 522 N. SECOND STREET, KING CITY, CALIFORNIA 93930 BUILDING: (831) 385-8315 FAX: (831) 385-8387

http://www.co.monterey.ca.us/pbi/

July 11, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks:

The Monterey County Planning & Building Inspection Department would like to extend its support of the Salinas Valley Integrated Regional Water Management Plan Implementation process and grant application. We recognize the value and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Salinas Valley Water Project. This project is an excellent step in meeting the overall goals of stopping seawater intrusion, balancing the groundwater basin and securing water supplies for current and future needs. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, improved water quality and environmental protection and enhancement.

Monterey County is one of the few California counties that is entirely dependent on its local watersheds and groundwater basins to support its urban development and large agriculture industry. The stakeholders and partners in the grant application have a record of producing projects that have significant positive impacts on the regional water needs of the county.

We appreciate the efforts to include us in the process and look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops or other opportunities to participate.

Sincerely,

Scott Hennessy

Scott Hennessy, Director

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

5 HARRIS COURT, BLDG. G
POST OFFICE BOX 85
MONTEREY, CA 93942-0085 • (831) 658-5600
FAX (831) 644-9560 • http://www.mpwmd.dst.ca.us

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

July 7, 2005

SUBJECT: Support for Proposition 50 Implementation Grant Application for Salinas Valley Integrated Regional Water Management Plan

Dear Mr. Weeks:

The Monterey Peninsula Water Management District (MPWMD) extends its support of the Salinas Valley Integrated Regional Water Management Plan implementation grant application. MPWMD recognizes the value and importance of regional coordination and integrated planning and looks forward to seeing the implementation of the projects described in the grant application including the Salinas Valley Water Project (SVWP) by the Monterey County Water Resources Agency and the Regional Urban Recycled Water Project (RURWP) by the Monterey Regional Water Pollution Control Agency.

The SVWP is an excellent step in meeting the overall goals in Salinas Valley of stopping seawater intrusion, balancing the Salinas Valley groundwater basin and securing water supplies for current and future needs. MPWMD also recognizes that the RURWP could directly reduce the demand for groundwater from the Seaside Groundwater Basin, for which MPWMD is developing a groundwater basin management plan. This basin is currently being overdrafted and needs to be brought back into balance.

We appreciate the efforts to include us in the process and look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops and other opportunities to participate.

Sincerely,

for David A. Berger,
General Manager

cc: Keith Israel, General Manager, Monterey Regional Water Pollution Control Agency

U:\Prop50\Greater_Monterey_Bay_IRWM_Plan\Letter_of_Support_MCWRA_SVWP_06_27_2005_v2.doc

Monterey Regional Water Pollution Control Agency

MRWPCA

"Dedicated to meeting the wastewater and recycled water needs of our member agencies, while protecting the environment."

Post-it® Fax Note 7671	Date 7/8	# of pages ▶ 2
To Curtis Weeks	From Keith Israel	
Co./Dept.	Co.	
Phone #	Phone #	
Fax # 424-7935	Fax #	

July 5, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

RECEIVED
JUL 06 2005
BY: BP

Dear Mr. Weeks:

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

The Monterey Regional Water Pollution Control Agency (MRWPCA) would like to extend its support of the Salinas Valley Integrated Regional Water Management Plan (SVIRWMP) Implementation process and grant application. We recognize the value and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Salinas Valley Water Project and the Regional Urban Recycled Water Project (RURWP), which we understand is included in the SVIRWMP. These projects are an excellent step toward meeting the overall goals of stopping seawater intrusion, balancing the groundwater basin and securing water supplies for current and future needs. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, improved water quality and environmental protection and enhancement.

Dating back to the early 1990s MRWPCA has been actively involved in the planning for an urban recycled water project. The project would benefit both the Salinas Valley and the Monterey Peninsula cities by providing a new water source to help reduce reliance on limited potable water supplies in both of those areas of Monterey County. MRWPCA will be a partner with the Marina Coast Water District in advancing the RURWP. MRWPCA is also in the early planning stages for a

Groundwater Replenishment Project (GRP) in the Seaside Groundwater Basin, which will further aid the water supply for the Monterey Peninsula cities and help the California American Water Company reduce its take of potable water from the Carmel River basin. The GRP is included in the Integrated Regional Water Management Plan being submitted by the Monterey Peninsula Water Management District.

We appreciate the efforts to include us in the process and the look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops or other opportunities to participate.

Sincerely,

Keith E. Israel
General Manager

PAJARO VALLEY WATER MANAGEMENT AGENCY
36 Brennan Street • Watsonville, CA 95076
Tel: (831) 722-9292 • Fax: (831) 722-3139
email: info@pvwma.dst.ca.us • www.pvwma.dst.ca.us

July 5, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, California 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan

Dear Mr. Weeks:

The Pajaro Valley Water Management Agency (PVWMA) would like to extend support for the Salinas Valley Integrated Regional Water Management Plan (IRWMP) process and implementation grant application. As the PVWMA is participating in a parallel IRWMP process for the Pajaro River watershed, we recognize the value and importance of your work in the Salinas Valley. In addition, we strongly support strategies to integrate and enhance our separate efforts by collaborating on a broader regional basis.

Our two agencies have participated actively in developing a "Memorandum of Understanding for Integrated Regional Water Management in the Greater Monterey Bay Area." The PVWMA views this broad regional planning effort as an important complement to more specific planning and project implementation efforts within our respective watershed areas. The broader integrated planning will show its benefits in several ways. It will stimulate partnerships for overall program efficiency, cost-effectiveness, and reduction of redundancy. It will help ensure that our respective capital project investments are mutually compatible and additive in value. It will facilitate developing effective strategies for water quality programs, environmental enhancement, water conservation and other measures general to the Monterey Bay area but not strictly related to any one watershed.

The PVWMA recognizes the significant accomplishments of the Monterey County Water Resources Agency in terms of managing groundwater overdraft and seawater intrusion problems in the Salinas Valley. Confronting very similar problems, we in the neighboring Pajaro Valley can learn and profit from your experiences. In particular, your pioneering work in implementing the Castroville Seawater Intrusion Project serves as an invaluable model for us as we proceed with our own Watsonville Area Water Recycling

Project. The Salinas Valley Water Project is also important from our perspective, since PVWMA's Basin Management Plan strategies for addressing groundwater overdraft in the North Monterey County area rely on successful implementation of not only our own projects but yours as well.

We appreciate the collaboration and mutual support we have enjoyed over the years working with your agency. We look forward to continuing this positive relationship in the years ahead. We also look forward to seeing the implementation of critically needed water projects around the greater Monterey Bay area – including the Salinas and Pajaro Valleys.

Sincerely,

Charles McNiesh
General Manager

cc. Michael Armstrong, Marina Coast Water District
Eric Tynan, Castroville Water District

Salinas River Channel Coalition
P.O. Box 7602
Spreckels, CA 93962
Phone/Fax (831) 385-8008

July 12, 2004

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P. O. Box 930
Salinas, CA 93902

Subject: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks,

The Salinas River Channel Coalition supports the Monterey County Water Resources Agency (MCWRA) seeking Proposition 50 grant funds for the Salinas Valley Water Project (SVWP). We understand an increase in costs has resulted from additional requirements for seismic safety by the Federal Energy Regulatory Commission (FERC) and Division of Safety of Dams (DSOD) on the Nacimiento Dam spillway modification, as well as treatment of water at the Salinas River surface diversion project (rubber dam) to address water quality concerns. Our members support the application of the Proposition 50 grant funds toward the SVWP capital cost reductions for the rubber dam and the spillway modification projects.

The SRCC recognizes the importance of meeting the MCWRA's goals for the SVWP as described in the Resolution of Support for the Salinas Valley Water Project signed by our Board of Directors in 2003: halt seawater intrusion, improve flood control, improve long-term hydrologic balance between recharge and withdrawal in the groundwater basin, and restructure Zones 2 and 2A to form one new Zone (2C) in the Salinas Valley, thereby protecting the fresh groundwater supply.

We appreciate the MCWRA's efforts to include us in the process and look forward to continued collaboration in the Integrated Regional Water Management Plan (IRWMP). Please keep us informed of stakeholder workshops or opportunities to participate in the process to successfully complete the SVWP. Thank you.

Sincerely,

Benny Jefferson
Chairman

cc: Richard Morgantini, Chair, MCWRA Board of Directors

City of Salinas
OFFICE OF THE MAYOR • 200 Lincoln Avenue • Salinas, California 93901 • (831) 758-7201 • Fax (831) 758-7368

July 1, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks:

Consistent with the City Council's February 4, 2003 action, the City of Salinas would like to extend its support of the Salinas Valley Integrated Regional Water Management Plan Implementation process and grant application. We recognize the value and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Salinas Valley Water Project. This project is an excellent step in meeting the overall goals of stopping seawater intrusion, balancing the groundwater basin and securing water supplies for current and future needs. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, improved water quality and environmental protection and enhancement.

We appreciate the efforts to include us in the process and look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops or other opportunities to participate.

Sincerely,

Anna M. Caballero
Mayor

cc: Salinas City Council

RECEIVED
JUL 0 5 2005
BY: B. P.

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0028
(916) 319-2028
FAX: (916) 319-2128

DISTRICT OFFICE
100 WEST ALISAL ST., SUITE 134
SALINAS, CA 93901
(831) 759-8676
FAX: (831) 759-2961

Assembly
California Legislature

SIMÓN SALINAS
ASSEMBLYMEMBER, TWENTY-EIGHTH DISTRICT

CHAIR
LOCAL GOVERNMENT
COMMITTEES
AGRICULTURE
HOUSING & COMMUNITY DEVELOPMENT
TRANSPORTATION

July 7, 2005

Curtis V. Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

RE: Support for Integrated Regional Water Management Planning in the Salinas Valley

Dear Mr. Weeks:

My office is aware that the Monterey County Water Resources Agency is partnering with the Marina Coast Water District and the Castroville Water District to file a Proposition 50 Chapter 8 Implementation Grant for the Salinas Valley in Monterey County. My office strongly supports your longstanding and successful efforts to develop long-term, high quality water supplies for the Salinas Valley, independent of either the State or federal water projects.

Your agencies have included within their grant ready-to-go projects resulting from integrated regional planning with other agencies and stakeholders in the Greater Monterey Bay area. I am aware of your efforts to both develop and strengthen communication and collaboration across watershed and county boundaries between the counties of Monterey, San Benito, Santa Clara and Santa Cruz. I am likewise aware that the State of California has long supported your Agency's efforts to stop seawater intrusion.

The Salinas Valley Water Project is key to stopping seawater intrusion, improving flood protection and establishing sustainable water supplies for the Salinas Valley. Its importance to the whole valley was demonstrated by 85 percent support at the ballot box in March, 2003. That project is the foundation for integrated regional water management in this valley's $3 billion agricultural industry. It also serves as the basis for future economic development and support of the developing urban population in the Valley. The additional projects included in the implementation grant package are complementary and include significant support for evaluating and improving habitat for endangered steelhead, continuing to build a diversified portfolio of water supply projects by expanding recycling for the City of Soledad and improving reliability of domestic water supplies for the former Fort Ord and the community of Castroville.

Printed on Recycled Paper

I strongly support your Proposition 50 Implementation Grant application. I applaud your efforts to strengthen integrated regional water resources planning in the Greater Monterey Bay area.

Sincerely,

Simón Salinas
Assemblymember, 28th District

SS/jn

SOLEDAD
Feel the Momentum

July 11, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks:

On behalf of the Soledad Community, I am writing to express our support for the Salinas Valley Integrated Regional Water Management Plan Implementation process and grant application.

We recognize the value and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Salinas Valley Water Project inclusive of the Soledad Reclamation Project and other agency's projects that together represent components of the implementation of the IRWMP. Through a collaborative effort these projects will be vital in meeting the overall goals of stopping seawater intrusion, balancing the groundwater basin and securing water supplies for current and future needs. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, improved water quality and environmental protection and enhancement.

We appreciate the efforts to include us in the process and the look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops or other opportunities to participate.

Sincerely,

Richard Ortiz
Mayor

Post Office Box 156 ◆ Soledad, California 93960 ◆ Phone (831) 678-3963 ◆ Fax (831) 678-3965

Salinas Valley Water Coalition

P.O. Drawer 2670 • Greenfield, CA 93927
(831) 674-3783 • FAX (831) 674-3835

TRANSMITTED VIA EMAIL

Mr. Curtis Weeks, General Manager
Monterey County Water Resources
P. O. Box 930
Salinas, Ca 93902

30 June, 2005

Re: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Mr. Weeks;

The Salinas Valley Water Coalition (SVWC) supports the Monterey County Water Resources Agency application for Proposition 50 Grant funds for the Salinas Valley Water Project. We support the Agency using these funds to reduce the debt for all of the Project Components of the Salinas Valley Project as adopted by the voters in March 2003.

The Salinas Valley Water Coalition is a non-profit organization whose members have supported, and continue to support Monterey County in its pursuit of long-term balance of the supply and demand of water in the Salinas River basin and its effort to halt seawater intrusion. Representatives of the Coalition participated in good faith in the various Monterey County Water Resource Agency (MCWRA) 'activities' pertaining to the issues surrounding Zones 2/2A as well as the development and implementation of the Salinas Valley Water Project. This participation included an effort to evaluate and better understand the Agency, its administrative and operational systems, and to develop a new and proportional form of assessment(s) to replace the Agency's existing Zone 2 and 2A water standby charges.

The Salinas Valley Water Project (SVWP) has been designed to halt seawater intrusion and restructure the Agency's Zone 2 and 2A zones to better manage our reservoir operations. The SVWP will manages our resource in such a way that some level of benefit is provided throughout the community. The Coalition has supported the SVWP because of this and the belief that it would mitigate many of the issues that remained outstanding from prior projects. The Coalition continues to support the implementation of the SVWP, and its goals and the resolution of outstanding issues.

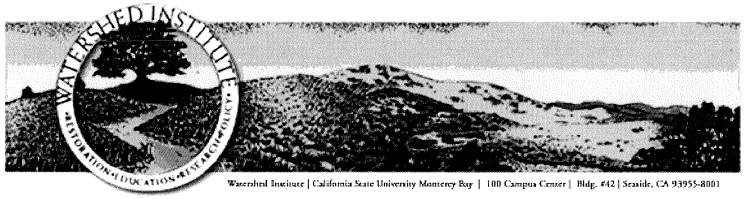
The Coalition has appreciated the Agency's willingness to include participation of the various stakeholders – we believe this has made a tremendous difference within the Community. The Coalition encourages the Agency to continue stakeholder participation and we look forward to working with the Agency toward completion of the SVWP and its full implementation.

Thank You,

Nancy Isakson

Nancy Isakson, Consultant
Salinas Valley Water Coalition

Cc: MCWRA
SVWC Board of Directors



June 22, 2005

Mr. Curtis Weeks, General Manager
Monterey County Water Resources Agency
P.O. Box 930
Salinas, CA 93902

SUBJECT: Salinas Valley Integrated Regional Water Management Plan Implementation

Dear Curtis Weeks:

On behalf of the Watershed Institute of CSU Monterey Bay I would like to extend our support of the Salinas Valley Integrated Regional Water Management Plan implementation process and grant application. We recognize the value and importance of regional coordination and integrated planning and look forward to seeing the implementation of the Salinas Valley Water Project and other projects such as our Carr Lake/Gabilan Watershed Project in the near future. Each of these projects are steps in meeting the overall goals of stopping seawater intrusion, balancing the groundwater basin, enhancing habitat and securing water supplies for current and future needs. The Salinas Valley Integrated Regional Water Management Plan is a valued component of the larger planning efforts within Monterey County and is consistent with the goals of improving water supply reliability, flood protection, improved water quality and environmental protection and enhancement.

As the Monterey County Water Resources Agency and your principal partners move forward with the Salinas Valley Water Management Plan Implementation we applaud your work at combating sea water intrusion and to hydrologically balance the basin and we are encouraged by your inclusion of wide stakeholder groups in the process and by your consideration of environmental protection and enhancement aspects of all your projects. We appreciate the efforts to include us in the process and the look forward to continued collaboration in the IRWMP process. Please keep us informed of stakeholder workshops or other opportunities to participate.

Sincerely,

Laura Lee Lienk
Co-Director, Watershed Institute

Appendix C Planning Documents

The following adopted reports were used as the basis for the Functionally Equivalent Plan (FEP). They are included in the CD that has been provided as a part of this proposal.

1. Salinas Valley Water Project Summary Report, October 2001.
2. Salinas Valley Water Project Figure 13.
3. Salinas Valley Water Project Engineer's Report, January 2003.
4. Salinas Valley Water Project Draft EIR, June 2001.
5. Salinas Valley Water Project Final EIR, Volume I, April 2002.
6. Salinas Valley Water Project Final EIR, Volume II, April 2002.
7. Monterey Regional Storm Water Management Program, December 2004.
8. Montgomery Watson and Raines, Melton and Carella, Inc., Draft Nitrate Management Plan, October 1998.
9. Urban Water Management Plan, MCWD, June 2001.
10. Water Distribution System Master Plan Ord Community, June 2004.
11. Regional Urban Water Augmentation Project Draft EIR, June 2004.
12. Regional Urban Water Augmentation Project Final EIR, September 2004.
13. Engineering Feasibility Study Report, MCWD Regional Urban Water Augmentation Project, August 2003.
14. Regional Urban Recycled Water Distribution Project, MCWD and MRWPCA, July 2003.
15. City of Soledad, Wastewater Treatment and Disposal Master Plan, 2005.

Appendix D Project Prioritization

Project Prioritization

Project Prioritization in the Salinas Valley Region occurred in four steps.

1. First, a list of current and future water related projects was created. This list consisted of a range of potential projects; including projects in the design phase and projects that have not undergone feasibility assessments. Projects were included for all of the water management entities in the Region.

Primary List of Projects		
Additional Diversion of Salinas River for M&I Use	Implementation of Best Management Practices	Salinas River Lagoon Habitat Improvement
Agricultural irrigation audits	Increased Urban/Ag Recycled Water Use	Salinas Valley Integrated Water Management Plan
Aquifer Storage and Recovery	Indirect Potable Reuse	Salinas Valley Water Project
Central Coast RWQCB Ag. Waiver Program	Industrial Wastewater Source Control Programs	Salinity and Nitrate Education and Incentive Programs
Cloud Seeding	Local Treatment Facility/Infrastructure Improvements	Seasonal Storage of Recycled Water
Conservation Ad Campaign	Low flow toilet rebates, shower heads and kitchen and lavatory faucets	Soledad Water Recycling/Reclamation Project
Continued Enhancement of Groundwater/Surface Water Models	M&I Water Treatment Plants	Storm Water Capture and Management
Continued implementation of Nitrate management programs	MCWD Desalination plant expansion	Storm Water Management Plan
Continued Reservoir Operations and Maintenance	MCWD Well No. 33, Booster Station and Reservoir Project	Surface water storage and diversion for urban delivery and agriculture during irrigation periods
Coordination with County General Plan Update	Mobile Irrigation Laboratory Program	Tiered Water Rates
Delivery to Expanded CSIP	Modification of pumping practices along the Coast	Urban Recycled Water Project - Former Ft. Ord
Desalination	MRWPCA Plant Membrane Treatment	Urban Runoff Management Program
Desalination plant at Moss Landing	On-Farm Tile Drain Management	Wastewater Disposal Management
Elkhorn Slough Conservation Plan	On-going Channel Maintenance Program	Water Quality Improvement delivered to CSIP
Elkhorn Slough Wetland Enhancement	On-going GW extraction, elevation, and quality monitoring and data collection. Maintain and enhance data management tools.	Water Quality and Fish Habitat Monitoring Program
Groundwater extraction/transfer/banking	On-going waterway flow and water quality monitoring and data collection w/USGS	Water Use Efficiency Studies
Groundwater Pump for GW Level Management	Regional Urban Water Augmentation Project	Water Use/Metering Programs
Grower education and demonstration projects	Relocation of groundwater pumping	Well Construction and Abatement Ordinance, Well Management Programs
High-efficiency washing machine rebates	Salinas River Coalition Projects	Wetland Augmentation with Recycled Water, Groundwater, diverted Surface Water

2. The second step of the process focused on choosing projects from the primary list that were potential projects for inclusion in the current round of Salinas Valley Integrated Regional Water Management. The criteria for this step included projects that were either currently being implemented or are currently under development and at a stage of development that their scope was clear.

Secondary List of Projects		
Cloud Seeding	Elkhorn Slough Wetland Enhancement	Regional Urban Water Augmentation Project
Continued implementation of Nitrate management programs	MCWD Well No. 33, Booster Station and Reservoir Project	Salinas Valley Water Project
Continued Reservoir Operations and Maintenance	On-going Channel Maintenance Program	Soledad Water Recycling/Reclamation Project
Coordination with County General Plan Update	On-going GW extraction, elevation, and quality monitoring and data collection. Maintain and enhance data management tools.	Storm Water Management Plan
Desalination	On-going waterway flow and water quality monitoring and data collection w/USGS	
Elkhorn Slough Conservation Plan		

3. The third step was to determine which projects from the secondary list of projects would be included in the IRWM Planning process. These projects were identified to be in the planning or design process and scheduled to begin the bidding/construction process by December 31, 2006. The reason for this readiness-to-proceed criterion is that the IRWM Plan implementation is critical to meeting the primary objectives of stopping seawater intrusion, hydrologically balancing the basin, increasing groundwater storage, and meeting water quality objectives.

The projects that were identified through this step were

- MCWD Well No. 33, Booster Station and Reservoir Project,
- Salinas Valley Water Project,
- Soledad Water Recycling/Reclamation Project, and
- Water Quality and Fish Habitat Monitoring Program.

Additional projects that will be considered in future IRWM planning are:

- Regional Urban Water Augmentation Project,
- Castroville Water District Well Relocation and Replacement Project, and
- Urban Recycled Water Project - Former Fort Ord.

4. The last step was the prioritization of the projects in the proposal. The projects were ranked based on the following criteria:

Regional Project

The projects were given three points if they covered a large part of the region as opposed to a localized area. The Salinas Valley Water Project and the Water Quality and Fish Habitat Monitoring Program both cover and provide benefit the entire region.

Number of Regional Priorities Addressed

The Water Management Group identified eight regional priorities:

- Projects that Stop Seawater Intrusion and Balance the Basin
- Projects that Help Meet Existing Water Demands
- Projects that Re-Establish Steelhead in Arroyo Seco
- Projects that Protect and Improve Groundwater Quality
- Meet Future Water Demands
- Establish Steelhead Upstream of Arroyo Seco
- Continue Efforts to Improve Groundwater Quality
- Implement Watershed Management

The projects got one point for every priority addressed. However, projects that met the priority of helping to stop seawater intrusion and balance the basin received three points because it is the highest priority of the region. The projects met these priorities in the following way:

Project	Short Term Priorities Addressed	Positioning for Long Term Priorities
Salinas Valley Water Project	Stop Seawater Intrusion/Balance Basin	Meet Future Water Demand
	Meet Existing Water Demands	
	Re-Establish Steelhead in Arroyo Seco River	Re-Establish Steelhead Upstream of Arroyo Seco
Water Quality and Fish Habitat Monitoring Program	Re-Establish Steelhead in Arroyo Seco River	Re-Establish Steelhead Upstream of Arroyo Seco
MCWD Well 33, Pump Station and Reservoir Project	Stop Seawater Intrusion/Balance Basin	Meet Future Water Demand
	Meet Existing Water Demands	
Soledad Water Recycling/Reclamation Project	Meet Existing Water Demands	Meet Future Water Demand
	Protect and Improve Groundwater Quality	Continue to Improve Groundwater Quality

Number of Water Management Strategies Integrated

The projects received one point for every water management strategies that they employed. The projects matched up with the water management strategies as follows:

Project	Strategies Employed
Salinas Valley Water Project	Ecosystem Restoration
	Environmental and Habitat Protection and Improvement
	Water Supply Reliability
	Flood Management (Protection)
	Groundwater Management
	Conjunctive Use
Water Quality and Fish Habitat Monitoring Program	Ecosystem Restoration
	Environmental and Habitat Protection and Improvement
	Water Quality Protection and Improvement
MCWD Well No. 33, Booster Station and Reservoir Project	Water Supply Reliability
	Groundwater Management
Soledad Water Recycling/Reclamation Project	Water Supply Reliability
	Groundwater Management
	Water Quality Protection and Improvement
	Water Recycling
	Water and Wastewater Treatment

Member Salinas Valley Water Management Group

Finally, the projects received three points each if they were to be implemented by a partner in the Salinas Valley Water Management Group (Group). The Group has taken the lead in IRWM Planning in the Salinas Valley Region. The Salinas Valley Water Project, the Water Quality and Fish Habitat Monitoring Program, and the Well No. 33, Booster Station and Reservoir Project each earned three points for meeting this criterion.

The prioritization process yielded the following results:

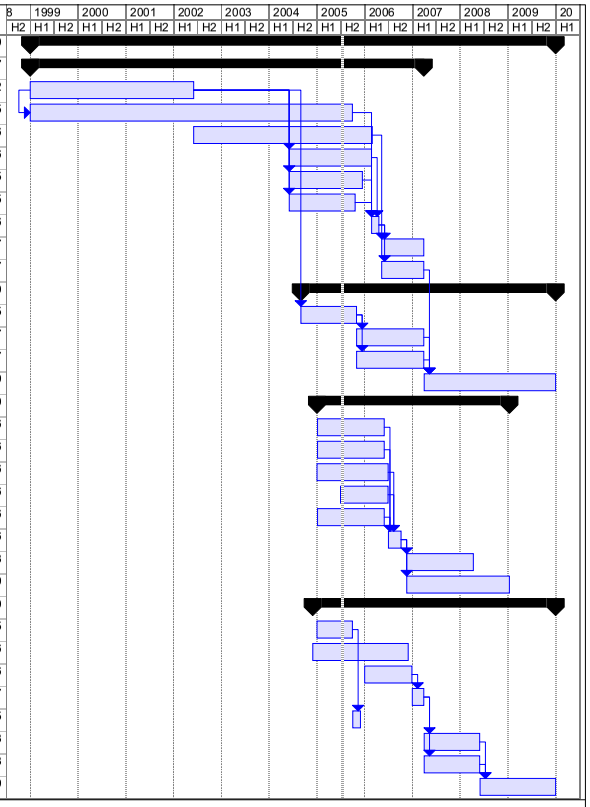
	MCWD Well No. 33, Booster Station and Reservoir Project	Salinas Valley Water Project	Soledad Water Recycling/ Reclamation Project	Water Quality and Fish Habitat Monitoring Program
Regional Project		3		3
Number of Regional Priorities Addressed	5	7	4	2
Number of Water Management Strategies Integrated	2	6	5	3
Member Salinas Valley Water Management Group	3	3		3
Total	**10**	**19**	**9**	**11**

Therefore, the projects are prioritized in the following order:

1. Salinas Valley Water Project
2. Water Quality and Fish Habitat Monitoring Program
3. MCWD Well No. 33, Booster Station and Reservoir Project
4. Soledad Water Recycling/Reclamation Project

Appendix E Implementation Schedule

ID	Task Name	Start	Finish
1	**Salinas Valley FEP Implementation**	**Fri 1/1/99**	**Thu 12/31/09**
2	**Salinas Valley Water Project**	**Fri 1/1/99**	**Thu 3/29/07**
3	CEQA Certification	Fri 1/1/99	Tue 6/4/02
4	NEPA	Fri 1/1/99	Fri 9/30/05
5	Identification and acquisition of permits	Tue 6/4/02	Tue 2/28/06
6	Project Design	Fri 6/4/04	Thu 2/23/06
7	Land Acquisition and Right of Way	Fri 6/4/04	Thu 12/15/05
8	Permits Acquisition	Fri 6/4/04	Thu 10/20/05
9	Bid Solicitation Process	Fri 2/24/06	Thu 4/20/06
10	Project Construction	Fri 5/12/06	Thu 3/29/07
11	Environmental Mitigation/Enhancement	Fri 5/12/06	Thu 3/29/07
12	**Water Quality and Fish Habitat Monitoring Program**	**Wed 9/1/04**	**Thu 12/31/09**
13	Consultation with NOAA Fisheries	Wed 9/1/04	Mon 10/31/05
14	Program Planning	Tue 11/1/05	Thu 3/29/07
15	Identification and acquisition of permits	Tue 11/1/05	Fri 3/30/07
16	Monitoring Program Implementation	Mon 4/2/07	Thu 12/31/09
17	**MCWD Well # 33 Booster Station and Reservoir Project**	**Mon 1/3/05**	**Mon 1/12/09**
18	CEQA Certification	Thu 1/6/05	Wed 5/31/06
19	NEPA	Thu 1/6/05	Wed 5/31/06
20	Identification and acquisition of permits	Mon 1/3/05	Fri 6/30/06
21	Project Design	Fri 7/1/05	Thu 6/29/06
22	Land Acquisition and Right of Way	Thu 1/6/05	Wed 5/31/06
23	Bid Solicitation Process	Mon 7/3/06	Fri 10/6/06
24	Project Construction	Mon 11/20/06	Fri 4/11/08
25	Environmental Mitigation/Enhancement	Mon 11/20/06	Mon 1/12/09
26	**City of Soledad Water Recycling/Reclamation Project**	**Wed 12/1/04**	**Thu 12/31/09**
27	CEQA/NEPA Compliance	Mon 1/3/05	Fri 9/30/05
28	Identification and acquisition of permits	Wed 12/1/04	Thu 11/30/06
29	Project Design	Mon 1/2/06	Fri 12/29/06
30	Bidding Process	Mon 1/1/07	Fri 3/30/07
31	Land Acquisition	Mon 10/3/05	Wed 11/30/05
32	Construction	Mon 4/2/07	Fri 5/30/08
33	Environmental Mitigation/Enhancement	Mon 4/2/07	Fri 5/30/08
34	Ongoing Monitoring	Mon 6/2/08	Thu 12/31/09



Project: Salinas Valley FEP Implement
Date: Sun 7/10/05

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

Memorandum of Understanding for Integrated Regional Water Management in the Greater Monterey Bay Area

1. PURPOSE

The purpose of this Memorandum of Understanding (MOU) is to recognize a mutual understanding among public agencies in the greater Monterey Bay area regarding their joint efforts toward Integrated Regional Water Management (IRWM) planning. That understanding will continue to increase coordination, collaboration and communication for comprehensive management of water resources in the greater Monterey Bay area.

2. RECITALS

A. The State of California desires to foster IRWM planning and encourages local public agencies to define planning regions appropriate for managing water resources and to integrate strategies within these planning regions.

B. Water resources management authority in the greater Monterey Bay area is currently distributed among various public agencies with a range of legal powers and regulatory responsibilities. These public agencies have definite jurisdictional boundaries, whereas sensible water resources planning and management frequently requires actions in multiple jurisdictions.

C. Four public agencies in the greater Monterey Bay area with responsibility for integrated management of water resources have each defined an appropriate Planning Region that takes into consideration jurisdictional limits, powers and responsibilities, and watershed and groundwater basin boundaries. These agencies are: 1.) the County of Santa Cruz; 2.) the Pajaro Valley Water Management Agency (PVWMA); 3.) the Monterey County Water Resources Agency (MCWRA); and 4.) the Monterey Peninsula Water Management District (MPWMD).

D. These four public agencies are taking the lead in developing detailed IRWM Plans within each respective Planning Region, which may be described generally as: 1.) Northern and Central Santa Cruz County through and including the Soquel Creek watershed; 2.) the Pajaro River watershed in parts of Santa Cruz, Monterey, Santa Clara and San Benito Counties; 3.) the Salinas River watershed in Monterey and San Luis Obispo Counties; and 4.) the Carmel Bay, Monterey Peninsula, and southern Monterey Bay watersheds and Seaside groundwater basin in Monterey County.

E. In addition to developing IRWM Plans for each respective Planning Region, the public agencies signatory to this MOU desire to link and integrate their respective IRWM Plans to jointly develop a comprehensive Integrated Regional Water Management Plan for the entire Monterey Bay area.

3. GOALS

The goals of the collaborative effort undertaken pursuant to this Memorandum of Understanding are:

3.1 To develop a comprehensive IRWMP for the greater Monterey Bay area that will consider the strategies that are required by the State under CWC 79562.5 and 79564 including at a minimum: ecosystem restoration, environmental and habitat protection and improvement, water supply reliability, flood management, groundwater management, recreation and public access, storm water capture and management, water conservation, water quality protection and improvement, water recycling, and wetlands enhancement and creation. Optional additional elements that may be considered include: conjunctive use, desalination, imported water, land use planning, nonpoint source pollution control, surface storage, watershed planning, water and wastewater treatment, and water transfers.

3.2 To develop a comprehensive IRWMP for the greater Monterey Bay area that incorporates regional water supply, water quality, flood control, and environmental protection and enhancement objectives.

3.3 To improve and maximize coordination of individual public agency plans, programs and projects for mutual benefit and optimal gain within each Planning Region.

3.4 To help identify, develop, and implement collaborative plans, programs, and projects that may be beyond the scope or capability of a single public agency or Planning Region group, but which would be of mutual benefit if implemented among multiple Planning Regions.

3.5 To facilitate regional water management efforts that include multiple water supply, water quality, flood control, and environmental protection and enhancement objectives.

3.6 To foster coordination, collaboration and communication between public agencies and interested stakeholders, to achieve greater efficiencies, enhance public services, and build public support for vital projects.

3.7. To realize regional water management objectives at the least cost possible through mutual cooperation, elimination of redundancy, and enhanced regional competitiveness for State and Federal grant funding.

4. DEFINITIONS

4.1 **Comprehensive Integrated Regional Water Management Plan.** The plan for the greater Monterey Bay area proposed by the agencies signatory to this MOU that incorporates the Integrated Regional Water Management Plan developed for each Planning Region and integrates the water management strategies proposed for each Planning Region.

4.2. **Greater Monterey Bay Area.** The greater Monterey Bay area consists of groundwater and surface water basins tributary to Carmel Bay and Monterey Bay and may be described generally as: Northern and Central Santa Cruz County through and including the Soquel Creek watershed, the Pajaro River watershed in parts of Santa Cruz, Monterey, Santa Clara and San Benito Counties, the Salinas

River watershed in Monterey and San Luis Obispo Counties, and the Carmel Bay, Monterey Peninsula, and southern Monterey Bay watersheds and Seaside Groundwater Basin.

4.3. **Integrated Regional Water Management Plan (IRWMP)**. The plan envisioned by state legislators and state resource agencies that integrates the plans and projects for management of water resources proposed by public agencies, non-profit agencies, and stakeholders within a defined Planning Region.

4.4 **Integration**. The combining of water management strategies to be included in an IRWMP.

4.5. **Lead Agency.** One of the four public agencies in the greater Monterey Bay area charged with establishing a Planning Region and leading the development of an Integrated Regional Water Management Plan for the Planning Region. These agencies will also take the lead as described in "Approach to developing the Comprehensive IRWMP" below.

4.6. **Management Plan**. A public agency's plan that addresses how that entity will provide service in the future in one or more of the following service functions: water supply, water quality, wastewater, recycled water, water conservation, stormwater/flood control, watershed planning or aquatic habitat protection and restoration.

4.7. **Planning Group.** A group of public agencies, non-profit agencies, and stakeholders that develops an Integrated Regional Water Management Plan within a defined Planning Region.

4.7. **Planning Region.** The area defined by one of the four lead public agencies in the greater Monterey Bay area.

4.8. **Project**. A specific project that addresses a service function.

4.9. **Public Agency**. A state-authorized water district, water agency, water management agency or other public entity, be it a special district, city or other governmental entity, responsible for providing one or more services in the areas of water supply, water quality, wastewater, recycled water, water conservation, stormwater/flood control, watershed planning and aquatic habitat protection and restoration.

4.10. **Service Function.** A water-related individual service function provided by a public agency, i.e. water supply, water quality, wastewater, recycled water, water conservation, stormwater/flood control, watershed planning, and aquatic habitat protection and restoration.

4.11. **Water Management Strategies**. Plans for and activities to be considered in an IRWMP include, but are not limited to, ecosystem restoration, environmental and habitat protection and improvement, water-supply reliability, flood management, groundwater management, recreation and public access, storm water capture and management, water conservation, water quality improvement, water recycling, and wetlands enhancement and creation.

5. IRWMP PARTICIPANTS

5.2 **Signatory Agencies.** One of the four public agencies in the greater Monterey Bay area signatory to this MOU that leads the development of an Integrated Regional Water Management Plan within their respective Planning Region and coordinates the development of a comprehensive Integrated Regional Water Management Plan for the greater Monterey Bay area.

5.2. **Contributing Entities**. Other entities, such as other public agencies, business and environmental groups, and private water companies, are considered valuable contributors and will be invited and encouraged to participate and assist in the development of the comprehensive IRWMP.

5.3. **Regulatory Agencies**. These agencies, including, but not limited to, the Central Coast Regional Water Quality Control Board, California Coastal Commission, U.S. Army Corps of Engineers, California Public Utilities Commission, National Marine Fisheries Service (NOAA Fisheries), U.S. Fish and Wildlife Service, and the California Department of Fish and Game, will be invited to participate in the development of the comprehensive IRWMP.

6. MUTUAL UNDERSTANDING

6.2. **Subject matter scope of the comprehensive IRWMP**. The comprehensive IRWMP for the greater Monterey Bay will include, but may not necessarily be limited to, water supply, water quality, wastewater, recycled water, water conservation, stormwater/flood control, watershed planning and aquatic habitat protection and restoration. It is acknowledged that the IRWM plans of each signatory agency may be based, in part, on the land-use plans of the general purpose local governments located within a Planning Region. Therefore, the resultant comprehensive IRWMP will by design have incorporated the land-use plans and assumptions intrinsic to the respective water-related service function.

6.3. **Geographical scope of the comprehensive IRWMP.** The greater Monterey Bay area for this Memorandum is defined as the watersheds and associated groundwater basins contributing to the Monterey Bay and Carmel Bay that are under the jurisdiction of the public agencies that are signatories to this Memorandum.

6.4. **Approach to developing the comprehensive IRWMP**. It will be the responsibility of each public agency signatory to this Memorandum to provide existing water management plans or to identify the need for a water Management Strategy for each service function carried out in individual Planning Regions. In order to be part of a comprehensive IRWMP, all management plans must meet the minimum plan standards as shown in Appendix A of "Integrated Regional Water Management Grant Program Guidelines, November 2004, Department of Water Resources and State Water Resources Control Board, Proposition 50, Chapter 8," as revised. A technical advisory panel consisting of staff representatives from the signatory agencies and such other organizations as may become contributing entities, will review management plans for consistency with Appendix A and recommend compilation of the relevant plans into one integrated document to form

the functional equivalent of a comprehensive IRWMP for the greater Montery Bay area.

6.5. **Approval of the comprehensive IRWMP**. Plan adoption will occur by approval of the governing board of each public agency that is a signatory to this MOU.

6.6. **Relationship between the comprehensive IRWMP, individual IRWM plans for each Planning Region and individual public agency planning efforts.** ~~and~~ Participation in this comprehensive IRWMP effort is intended to complement IRWM Plans developed in each Planning Region and the pursuit of individual projects by public agencies.

6.7 **Termination**. A public agency signatory to this MOU may withdraw from participation upon 30 days advance notice to the other signatory agencies, provided it agrees to be financially responsible for any previously committed but unmet resource commitment.

6.8. **Personnel and financial resources**. It is expected that the General Managers of the participating public agencies will agree on a detailed work program describing the contribution of staff and financial resources by each participating public agency necessary to develop the comprehensive IRWMP, and that the work program will be updated as necessary by mutual consent of the General Managers.

6.9. **Other on-going regional efforts**. Development of the comprehensive IRWMP is separate from efforts of other organizations to develop water-related plans on a regional basis. As the comprehensive IRWMP for the greater Monterey Bay area is developed, work products can be shared to provide other agencies and groups with current information.

6.10. **Reports and communications**. The technical advisory review panel will regularly report to the General Managers and Governing Boards of the participating public agencies regarding progress on the development of the comprehensive IRWMP.

7. SIGNATORIES TO THE MEMORANDUM OF UNDERSTANDING

We, the duly authorized undersigned representatives of our respective public agencies, acknowledge the above as our understanding of the intent and expected outcome in developing a proposed "Greater Monterey Bay Area Integrated Regional Water Management Plan".

Signature

Curtis V. Weeks
Printed Name

General Manager
Monterey County Water Resources Agency

7/26/05
Date

Signature

DAVID A. BERGER
Printed Name

GENERAL MANAGER
Monterey Peninsula Water Management District

7/26/05
Date

Signature

MARY BANNISTER
Printed Name

Interim General Manager
Pajaro Valley Water Management Agency

11/16/05
Date

(Originally signed by Charles McNiesh, General Manager, on July 7, 2005)

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