

## **7 Implementation**

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The proposed implementation of the Sacramento Valley IRWMP will build from the success of ongoing planning and implementation efforts across the valley. The following sections summarize the proposed phased implementation approach for those projects, programs, and investigations that have been formulated to date, and identify recommendations to assist in future program and project formulation and direction. The phased approach reflects the readiness of program participants to implement their projects in the near and long term with respect to known funding sources. The final section contains recommendations (based in large part on comments received on earlier drafts of the IRWMP and from the county plans summarized in Section 6, Land and Water Use/Development Trends) to help local entities implement the projects and actions in the IRWMP.

### **7.1 Implementation Responsibility**

NCWA, as the administrator of JEPA, and in cooperation with local entities throughout the region, will be responsible for coordinating the following activities:

- Continued development and refinement of the Sacramento Valley IRWMP with water purveyors, local governments, conservation organizations, and other interested parties in the region
- Project formulation and implementation
- Development and implementation of the Sacramento Valley IRWMP with state and federal agencies
- Communication with other entities within the Sacramento River Hydrologic Region that are outside the IRWMP
- Work with the appropriate local, state, and federal agencies to prepare and complete necessary environmental documents
- Pursuit of opportunities to fund the projects and overall program consistent with the IRWMP

### **7.2 Sacramento Valley IRWMP Project Financing**

Depending on the characteristics and scope of a particular project, some activities and projects currently identified in this IRWMP and future activities will likely be in some part contingent on securing funding from federal, state, and/or local sources. The following summarizes project funding approaches to date, as well as anticipated funding strategies.

### **7.2.1 Federal Funding**

Since the early 1990s, federal funding has been available for environmental restoration in the valley. Sacramento Valley water purveyors, in partnership with the U.S. Department of the Interior, have been upgrading or constructing fish screens and fish passage improvement projects along the Sacramento River and its tributaries. The continued improvement of Chinook salmon runs has made the program one of the biggest recent environmental successes in the state. Many purveyors and local agencies in the region have worked with federal and state resource agencies in environmental restoration activities and have provided cost share through significant direct staff involvement and out-of-pocket costs.

Reclamation's Challenge Grant Program provides funding for water management programs and projects in the western United States. This grant program might help fund the implementation of the Sacramento Valley IRWMP, particularly its water conservation projects. In addition, funding can be directed to the Sacramento Valley IRWMP, or elements of the IRWMP, through the Federal Energy and Water Development Appropriations legislation.

### **7.2.2 State Grant Funding**

State funding is a significant source of funding for implementing the Sacramento Valley IRWMP. Current key state funding sources include the following:

- Water Use Efficiency Program, which is currently administered by the Department and is funded through various bond initiatives, provides grant funding for agricultural and urban water conservation programs.
- The Department's AB303 Local Groundwater Assistance Program funds groundwater management, data collection, modeling, monitoring, and assessment programs. AB303 is a potential source of funding for a range of groundwater management projects.
- The Integrated Regional Water Management Grant Program is well-suited for funding most of the projects developed for the Sacramento Valley IRWMP.
- Proposition 204 funding provided \$25 million for the SVWMP. This program provides flexible sources of funding for Sacramento Valley projects; however, its funding level has become limited.
- The Agricultural Water Quality Grant Program administered by the SWRCB supports baseline monitoring, implementation of management measures, and demonstration projects. This program has been identified as a potential source of funding for actions that reduce the volume of agricultural discharges, improve water quality, or control timing of surface water discharges.

### 7.2.3 Local Agency Contributions

Local entities are implementing cost-effective projects and actions at the local level. The Coalition and California Rice Commission continue to collect and spend over \$1 million annually in landowner contributions to its respective programs to improve water quality in the region. Although most of the projects proposed throughout region would benefit areas beyond the project boundaries, they are not locally cost effective. Therefore, a major constraint in implementing many of the projects in this IRWMP is the lack of financial capacity and funding availability at the local level. Table 7-1 shows the MHI for eight Sacramento Valley counties. Every county's income is below the California MHI. Except for Sutter and Yolo Counties, all of the counties are considered economically disadvantaged (i.e., their median income is less than 80 percent of the average).

**TABLE 7-1**  
Statewide and Sacramento Valley Median Household Incomes

	<b>Number of Households</b>	<b>Median Household Income (\$)</b>	<b>% of Median Household Income (%)</b>
<b>Sacramento Valley Counties</b>			
Butte	79,674	31,934	67.2
Colusa	6,081	35,062	73.8
Glenn	9,197	32,107	67.6
Shasta	63,497	34,335	72.3
Sutter	27,098	38,375	80.8
Tehama	21,090	31,206	65.7
Yolo	59,358	40,769	85.8
Yuba	20,552	30,460	64.1
Sacramento Valley	286,547	34,818	73.3
California	11,512,020	47,493	

Source: U.S. Census Bureau, 2000, census data

California has an average household income of \$47,493. As a region, Sacramento Valley has an MHI of \$34,818, or 73.3 percent of the California MHI. Therefore, the region is considered economically disadvantaged. Chapter 8 of Proposition 50 requires local agencies to share cost of implementing their project, unless the project is in an economically disadvantaged community, in which case, Sacramento Valley could be qualified for exemption from local cost-sharing requirements (see Figure 7-1).

Because implementing portions of the Sacramento Valley IRWMP would have significant statewide water quality and water supply reliability benefits, local agencies expect that funding assistance would be required to implement many of the projects under this IRWMP. It is anticipated that Sacramento Valley water entities will contribute both direct funding and

in-kind services to support project implementation. Typical contributions might include the following:

- Project formulation and grant application preparation
- Contract management
- Project management
- Coordination and collaboration
- Program progress reporting
- Collection and preparation of basic project data

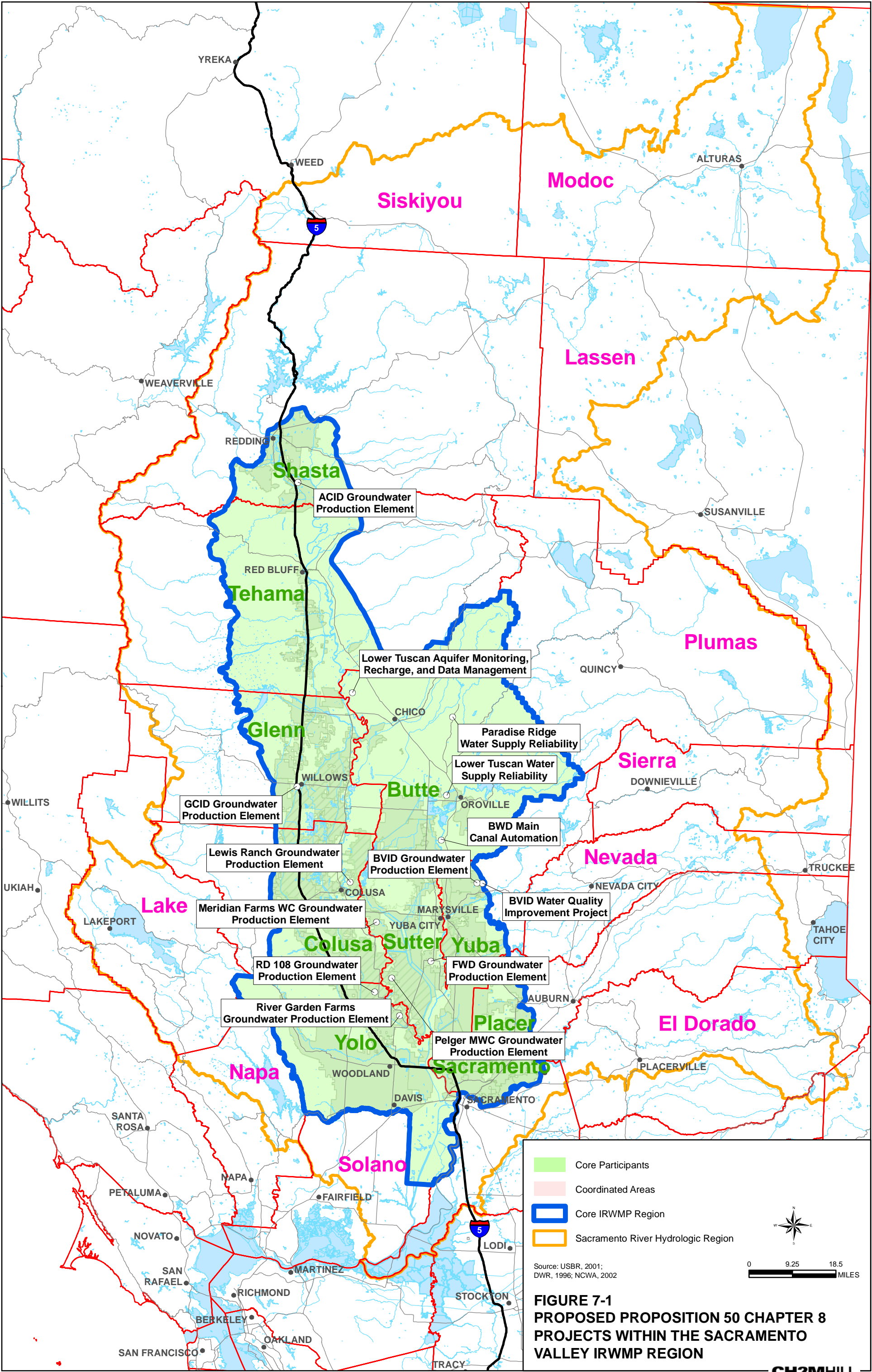
The extent and the costs of these contributions will vary from project to project, and from proponent to proponent.

### **7.3 Prioritization**

In addition to meeting local and regional needs, the objectives listed in Section 2, Sacramento Valley IRWMP Objectives, of this IRWMP, and summarized below, directly support state-wide water management objectives and priorities, including planning related to the California Water Plan update process. In particular, the Sacramento Valley IRWMP will facilitate implementation of projects and programs, many of which simultaneously meet several local and regional priorities. Prioritizing projects as part of implementing the Sacramento Valley IRWMP would be based on the following criteria:

- Meeting the Sacramento Valley IRWMP objectives
- Consistency with the water management strategies
- Readiness of projects and programs for implementation
- Availability of local, state, or federal funding, depending on scale of project

Water leaders in the region propose that the program be implemented in an adaptive management manner. Given the planning area, and variety of stakeholders and participants in the Sacramento Valley, it is anticipated that priorities will continue to vary according to different current and future perspectives. The regional objectives identified in Section 2, Sacramento Valley IRWMP Objectives, of this IRWMP, and summarized below, provide the basis for determining project feasibility, and allow for the determination and modification of priorities as agreed appropriate by the Sacramento Valley IRWMP participants.



### **7.3.1 Meeting Sacramento Valley IRWMP Objectives**

The following five primary objectives were identified to guide the development of regional policy, project identification, and implementation:

- Improve the economic health of the region
- Improve regional water supply reliability
- Improve flood protection and floodplain management
- Improve and protect water quality
- Protect and enhance the ecosystem

These objectives are considered to be the primary measuring tools by which project feasibility will be evaluated. Each project listed in Section 4, Assessment of Water Management Strategies, and summarized in Appendix A, was required to meet at least one of these five objectives with most of the projects meeting several. Table 4-1 shows how the proposed projects meet these objectives.

### **7.3.2 Support of Water Management Strategies**

As discussed in Section 4, Assessment of Water Management Strategies, water interests in the region have formed the region's objectives and priorities through more than a decade of extensive discussions, negotiations, and agreements. Local governments and water purveyors have and continue to work closely with state and federal agencies, local water interests, and others to formulate projects and identify necessary future efforts to meet these objectives across a number of the water management strategies. The result of this work has been the development of projects that support one or, in most cases, many of the water management strategies. As also described in Section 4, Assessment of Water Management Strategies, this IRWMP identifies where particular water management strategies (i.e., system improvement projects and actions) have been developed to better reflect the dynamics and physical processes of the Sacramento Valley. Appendix A shows how the proposed IRWMP projects and investigations relate to the water management strategies. As the participants in the IRWMP process continue to work together and are joined by other participants, the group of projects and proposed actions will continue to grow in response to local and regional needs in accordance with the IRWMP objectives.

The principles of integrated regional water management are used in the California Water Plan (Bulletin 160-05) to evaluate potential water solutions for regions across the state. Bulletin 160-05 includes a diverse set of 25 resource management strategies to meet the water-related resource management needs of each region and the state. All projects need to be consistent with and support the strategies identified in Bulletin 160-05. Consistency with these strategies is discussed in Section 4, Assessment of Water Management Strategies. The projects in this IRWMP support one or, in most cases, many of the resource management strategies outlined in Bulletin 160-05.

### **7.3.3    *Readiness of Projects and Programs for Implementation***

Readiness to proceed will continue to be a key factor in prioritizing projects. Given that the proposed program includes many projects that meet several of the IRWMP objectives, and spans multiple water management strategies, readiness to proceed will be a significant factor in moving forward. To date, many of the projects identified in Appendix A have progressed to the point that they are ready to proceed, either as a study or a project ready to be implemented.

Readiness to proceed is not the only factor in project implementation prioritization. Funding availability, given many of the proposed projects will result in multiple benefits beyond the local area, is also a primary factor in prioritizing projects.

### **7.3.4    *Availability of Local, State, or Federal Funding Sources***

Projects and implementation efforts, such as the ongoing Coalition effort, are funded through local participants or landowners. Funding larger-scale projects with similar regional and statewide benefits, and other future projects is more challenging. Given the primarily agricultural nature of the valley, and the fact that most communities in the valley are economically disadvantaged, proponents of large-scale, multi-benefit projects and programs often must seek additional funding sources. Thus, availability of grant funding has and will continue to play a major role in project implementation prioritization.

For many of the anticipated grant applications, all or a significant portion of the local funding would likely be in the form of in-kind services during program planning and implementation. The total number of projects that will be submitted for grant funding will depend on the amount of funding available for each program, specific evaluation criteria, and readiness of each project to proceed. Additional projects, programs, and investigations will be developed and prioritized depending on local need and regional benefits.

NCWA hosted a series of meetings to identify those projects ready to proceed in terms of a defined work plan and costs (essentially feasibility study or pre-design level of development), as well as scientific merit and interest to move forward to implementation. As anticipated, many projects were determined to meet this readiness-to-proceed criteria. Project participants determined how to best prioritize projects (including reducing the scope of some projects) so as to advance the goals of the region. Integral to the project selection was the priority objective that the group of projects must address local, regional, and state water reliability needs. Projects ready to proceed to implementation were identified as Tier 1 projects. The same coordination process used to initially group the projects into Tiers 1 and 2 will be used to periodically update the project priority list and to develop future implementation recommendations.

## 7.4 Impacts and Benefits

The full implementation of the proposed Sacramento Valley IRWMP will result in multiple benefits associated with meeting the objectives identified in Section 2, Sacramento Valley IRWMP Objectives, of this IRWMP.

Key public and overall benefits include the following:

- Significant improvement in water supply reliability for local use, the region, and the state, including during drought conditions
- Additional water supplies to help meet water quality standards both within the region and in the Bay-Delta (including up to 185,000 ac-ft of water made available through the implementation of the projects associated with the SVWMA)
- Improved water quality through the continued efforts of the Coalition, and implementation of system improvement projects across the region
- Enhancement of water-dependent environmental assets including fisheries and terrestrial habitat in the valley, and improved land management
- Improved understanding of the region's water resources, including the potential increased use of the Lower Tuscan Aquifer, and focused regional monitoring to ensure groundwater is used in a sustainable manner
- Improved and coordinated flood management both locally and regionally
- Improved coordination across water districts, counties, and the region through sharing of ideas and mutually beneficial management or project opportunities
- Coordinated development of water management strategies and associated projects

The potential impacts from implementing the Sacramento Valley IRWMP are anticipated to be limited to short-term facility construction impacts. It is proposed that all conjunctive water management projects be developed and sited to minimize any potential impacts and limit the potential for pumping interference. Monitoring and assessment elements will provide data and tools to evaluate and modify project operation to mitigate potential impacts. Additionally, it is recommended that all groundwater pumping use facilities that are either currently electrically powered, or new facilities (including those proposed as part of this application), use electric motors or solar sources as feasible.



## 7.5 Environmental Documentation and County Ordinance Compliance

Permitting and environmental documentation will be required for any new project facilities in accordance with federal, state, and local laws and ordinances. The project-specific environmental compliance will be performed by project proponents on a case-by-case basis prior to project construction. Impacts and benefits of the proposed actions will be further assessed. All actions and investigations will be coordinated with local, state, and federal agencies to share information and ensure compliance with applicable laws, ordinances, and BMOs.

## 7.6 Recommendations

The IRWMP encourages local entities throughout the region to advance their projects and actions in a manner that will:

- Support the IRWMP objectives
  - Implementation of the Sacramento Valley IRWMP should directly support the achievement of the objectives outlined in Section 2, Sacramento Valley IRWMP Objectives, as follows: improve the economic health of the region, improve regional water supply reliability, improve flood protection and floodplain management, improve and protect water quality, and protect and enhance the ecosystem. Actions and projects developed through the IRWMP should address one or more of these objectives.
- Implement the Water Management Strategies
  - The water management strategies described in Section 4, Assessment of Water Management Strategies, provide the framework for implementation of the IRWMP. These strategies should be further developed and integrated to achieve the IRWMP objectives.
- Coordinates Groundwater Management
  - Participants in the IRWMP should increase coordination of the groundwater monitoring, assessment, recharge identification, and production components being developed as part of the IRWMP. This coordination should occur across jurisdictional boundaries and can include exchange of data and information as well as coordinating monitoring and production elements of the IRWMP. The IRWMP also encourages the development and refinement of BMOs using good science and local considerations, as well as the coordination of these BMOs across the region.

- Implement the Conservation Strategies
  - The IRWMP should foster implementation of projects and programs supporting the conservation strategies described in the “Future Actions” subsections of Section 5, Conservation Strategies.
- Implement Land and Water Use Recommendations
  - The IRWMP should assist in the development and implementation of the “Next Steps/Recommendations” described in each of the county subsections contained in Section 6, Land and Water Use/Development Trends.