

## 7 Implementation Plan for Recommended Alternative

Implementation of the Recommended Alternative will necessitate numerous activities, ranging from engineering design, environmental documentation and permitting, financing, and construction. Environmental documentation for the Recommended Alternative includes two components: CEQA (California Environmental Quality Act) and NEPA (National Environmental Policy Act). CEQA compliance is scheduled for completion in February 2002. NEPA compliance is scheduled for completion in early 2003, and is being completed in a joint effort with the US Bureau of Reclamation. NEPA compliance is required for connection of the import pipeline to the CVP system and delivery of CVP water. NEPA compliance is also required for receipt of federal funding for the Recycled Water Project under Title XVI.

The purpose of this section is to identify project schedules and highlight significant tasks required for implementation of the Recommended Alternative. The identified tasks are focused on those required between the completion of this planning document (the Revised BMP) and completion of construction.

As previously discussed in Section 6, the Recommended Alternative is to be constructed in multiple phases. Construction of projects under Phase 1 has already begun and will be completed in 2002. Implementation of Phase 1 and 2 of the Recommended Alternative are described in detail below. A preliminary implementation plan for the Potential Future Phases is also included in Section 7.3.

Potential projects listed under future phases include options for in-basin water banking utilizing ASR, construction of an Inland Distribution System, and development of additional local water supplies. As funding becomes available in the future, the PVMWA should implement an in-basin banking option to address current peak demand periods, future increases in water use by 2040, and increase long-term reliability, flexibility, and local control of the CVP supplies. Construction of additional local water supply projects would be contingent on the need for additional water supply, results of environmental and flood control studies currently underway, and funding.

The projects included under each phase are shown below.

### Phase 1 (Scheduled Completion in 2002)

- Conservation: 7-year plan (currently underway with 5,000 AFY to be achieved in seven years);
- Harkins Slough with Harkins Slough Recharge Basin and Supplemental Wells and Connections (1,100 AFY);
- Harkins Slough Portion of the Coastal Distribution System (CDS);
- CVP Contract Assignment from Mercy Springs Water District for the Import Water Project.
- Watershed Management Programs; and
  - Water Metering Program; and
  - Water Resources Monitoring Program.

### Phase 2 (To be constructed in 2003 to 2007)

- Remaining Portion of the Coastal Distribution System;
- 54-inch Import Water Project with Out-of-Basin Storage (13,400 AFY);
  - Acquisition of additional CVP Water Supplies; and
  - Inland-alignment turnouts and five supplemental wells.
- Recycled Water Project (4,000 AFY); and
- Watershed Management Programs.
  - Nitrate Management Program;

- Wells Management Program; and
- Recharge Area Protection Program.

### **Potential Future Phases**

- Aquifer Storage and Recovery (ASR) of CVP Water;
- Inland Distribution System;
- Watsonville Slough Project and North Dunes Recharge Basin;
- Murphy Crossing Project with Murphy Crossing Recharge Basins; and
- College Lake Project in coordination with Corp flood protection project.

Project schedules and critical tasks for Phases 1 and 2, and the associated projects are described in the following sections. No schedules were developed for potential future phases as the PVWMA has not set a timeline to move forward with those future projects at this time.

## **7.1 Phase 1**

Implementation of Phase 1 of the Recommended Alternative is nearly complete. PVMWA has begun a conservation program to achieve levels of conservation identified in the Water Conservation 2000 (WC 2000) plan. The Enhanced Groundwater Monitoring and Enhanced Metering Programs will involve evaluation of the existing programs and building upon these evaluations to create a more effective monitoring and metering program for the PVWMA. Construction of the Harkins Slough project and Harkins Slough portion of the CDS was completed in fall of 2001. The final element of Phase 1 is construction/retrofitting and connection of the three supplemental wells that will initially provide a supplemental supply to the Harkins Slough portion of the CDS. Details of the implementation plan for the ongoing projects are discussed in the following sections.

### **7.1.1 Conservation Program Implementation**

In February of 2000, the WC 2000 was completed by the consultant and accepted by the Board of Directors. Since acceptance of the WC 2000, the PVWMA has implemented many programs identified in the WC 2000 plan to promote agricultural water conservation. Conservation efforts have included mobile laboratory evaluations, installation of an additional CIMIS weather station, demonstration projects, outreach efforts, and farm conservation plan reporting. Mobile laboratory evaluations receive high participation from growers and were funded in cooperation with the San Luis & Delta Mendota Water Authority. Future funding of the mobile laboratory evaluations will be done in part through grants from CALFED. Funding allocation decisions have limited the PVWMA from full implementation of the outlined programs. As a result, the financial assistance program for grower irrigation system improvements has not been implemented.

Implementation of the WC 2000 Program has been focused on elements that would make the biggest impact first. Hence, the urban outreach aspect of the WC 2000 has been largely left to the City of Watsonville, which has a Water Conservation Program originally established in 1992. The City of Watsonville's program includes elements such as low-flush toilet rebate, industrial loans for water efficient facility modifications, free low-flow shower heads, school water education programs, the retrofitting of schools with low-flow plumbing fixtures, and other similar activities.

Ongoing conservation efforts identified in the WC 2000 are scheduled to continue until at least 2007. Full implementation of all the elements identified in the WC 2000 will require additional funding and

resources. Depending on the level of conservation that has been achieved and the opportunities for additional conservation, the program could be extended.

### **7.1.2 Harkins Slough Project with Harkins Slough Recharge Basin and Supplemental Wells and Connections Implementation**

The Harkins Slough Project was the first water supply project to be implemented and constructed by the PVWMA. Construction of the diversion facilities and recharge basin were completed in 2001. Construction and retrofitting of the supplemental wells and connections is the final element of the project and is scheduled for completion in 2002. Approximately 150 AF of Harkins Slough water was diverted, treated, and percolated to storage in spring 2001 and full operations are scheduled for late winter or spring of 2002.

The Harkins Slough Project consists of pumping and treatment facilities located at the confluence of Harkins and Watsonville Sloughs, a transmission pipeline from the treatment facility to the recharge basin located off Dairy Road, and extraction wells with a connecting pipeline to the Coastal Distribution System.

### **7.1.3 Harkins Slough Coastal Distribution System Implementation**

In conjunction with the Harkins Slough Project, a portion of the Coastal Distribution System was constructed to deliver water from the Harkins Slough Project and begin elimination of coastal pumping. Design of the project was completed in 2000 and construction was completed in the fall of 2001.

Additional portions of the CDS are to be constructed in conjunction with the Harkins Slough supplemental wells. These facilities are scheduled for completion in early 2002. In all, approximately 35,000 feet, or approximately 25%, of the CDS will be constructed under Phase 1.

### **7.1.4 Watershed Management Programs**

As previously discussed in Section 3, PVMWA Staff is in the process of enhancing the Water Metering and Water Resources Monitoring Programs. Enhancements to the Water Metering Program, including development of a billing and meter tracking database, meter replacement, and regular maintenance, have been developed in 2000. The revamped metering program will improve revenue generation, allow evaluation of conservation efforts, and provide an increased understanding of water use in the basin.

The Water Resources Monitoring Program is currently undergoing evaluation so that the framework for enhancing this program could be developed. An enhanced Water Resources Monitoring Program will allow for better data collection necessary for accurate monitoring of contaminant migration, the seawater intrusion boundary, and surface water diversion. Surface water diversions monitoring will help the PVWMA study the effect of natural recharge and natural dilution of potential constituent concentrations of concern in the basin. In addition, the collected data would allow for evaluation of the effectiveness of water supply projects in eliminating seawater intrusion. The two programs will also provide PVMWA with data for protecting and managing water supplies while accurately evaluating and addressing future water needs for its service area.

#### **7.1.4.1 Water Metering Program**

In recognition of the importance of an accurate metering program, PVWMA has undertaken an evaluation of its existing metering program in 2000 and has identified a series of improvements. Recommendations

arising from this evaluation process include development of a comprehensive meter program database for tracking of billing and maintenance repair schedule, replacement of obsolete meter technology, and increased frequency of routine maintenance visits between scheduled meter readings. The goal is to implement all of the recommendations by the end of 2002.

#### **7.1.4.2 Water Resources Monitoring Program**

A comprehensive monitoring program will allow PVWMA to collect necessary data for evaluation of groundwater and surface water management issues. In addition to monitoring the progress of the Recommended Alternative in stopping seawater intrusion, an expanded groundwater monitoring program is also needed to provide a better understanding of the extent and changes in nitrate contamination. In the past, the groundwater quality monitoring program has been focused on agricultural related parameters. Hence, the PVWMA is in the process of reassessing and developing enhancements to its current groundwater monitoring program. These could include more analyses, such as water dating and isotope analyses, and expansion of the monitoring network for continued updates of the PVIGSM and modeling of contaminant transports. The new monitoring program could also include a database with Access 2000 and GIS compatibility.

Surface water monitoring is essential in understanding natural recharge in the basin and natural dilution of potential constituent concentrations of concern. In addition to water quality and flow monitoring, reporting, and management, enhancements to the surface water monitoring program should include stepped-up efforts to track, meter, and monitor surface water diversions. These tasks are keys to protecting and managing water supplies in the basin.

While the framework for the Water Resources Monitoring Program is being developed by PVWMA, implementation of the enhanced program will require additional budget and resources to perform laboratory analyses and update of the existing database and model. Although PVWMA currently has funds for groundwater monitoring, PVWMA is exploring future funding opportunities to offset the additional cost required for enhancing the Water Resources Monitoring Program.

#### **7.1.5 CVP Contract Assignment from Mercy Springs Water District for the Import Water Project**

As previously mentioned in Section 4.10, the PVWMA entered into an agreement for the assignment of 6,260 AFY of contracted CVP water from the Mercy Springs Water District in November 1998. At 60 percent long-term average reliability, the contracted amount equals to 3,750 AFY, or 28 percent of the 13,400 AFY needed by the Import Water Project. The facilities for the Import Water Project are scheduled for completion in Phase 2.

## **7.2 Phase 2**

Phase 2 of the Recommended Alternative would be implemented over the next five years and would provide facilities necessary to meet the existing basin overdraft and associated seawater intrusion problem during peak demand conditions assuming a 20 hour irrigation day. The capital projects in Phase 2 include the remaining portion of the CDS, the 54-inch Import Water Project with Out-of-Basin Storage, the Recycled Water Project, and some additional supplemental wells.

In addition to the capital projects, Phase 2 will also include development of the Nitrate Management Program, the Wells Management Program, and the Recharge Area Protection Program. The Nitrate Management Program would guide the PVWMA in taking the first step toward formally recognizing and addressing the potential nitrate contamination problem within the PVWMA service area. The Wells Management Program will help protect the groundwater quality in the Pajaro Valley by ensuring that wells are not a mechanism for transport of constituents from one aquifer to another. The Recharge Area Protection Program would help in enhancing groundwater stability by implementation of public outreach program designed to inform area residents and decision makers of the importance of protecting groundwater recharge areas.

Before construction of any capital projects in Phase 2 could begin, the PVWMA must secure additional CVP water supplies for the Import Water Project. The CDS and the Import Water Projects are dependent upon each other while the Recycled Water Project is dependent upon the Import Water Project for a reliable source of blending water to meet water quality objectives for irrigation. Hence, the start up scheduling for all three projects is set to coincide with each other in spring of 2007. Implementation details for the three projects are presented in the following sections.

### **7.2.1 Coastal Distribution System Implementation**

In order to eliminate coastal pumping and stop seawater intrusion, supplemental water supplies replacing the existing groundwater supply must be delivered via a CDS to the coastal agricultural areas. The proposed CDS will deliver agricultural water supply originating from Harkins Slough, recycled water from the City of Watsonville Wastewater Treatment Facility blended with import water from the CVP and supplemental groundwater wells. The CDS will be designed to accommodate additional water from potential future local projects at College Lake, Watsonville Slough, and the Pajaro River at Murphy Crossing.

The required tasks for implementation of the CDS are broken into three major categories: environmental documentation and permitting, project design, and construction. The environmental documentation process for the project was completed under the Local Water Supply Project EIR in 1999. As previously mentioned in Section 7.1.3, a portion of the CDS has been constructed in conjunction with the Harkins Slough Project. In spring of 2001, the PVWMA approved and authorized a conceptual study for the remaining portion of the CDS. The design and permitting of the total CDS is expected to be completed by mid 2003.

As part of the design process, the PVMWA will need to secure the required land parcels/easements and environmental, development, and encroachment permits. Since construction of the CDS will not result in a significant permanent loss of land use, the required land acquisition process will not be lengthy and is scheduled for completion by the end of 2002. The environmental, development, and encroachment permits necessary for construction of the remaining portion of the CDS are scheduled for completion in 2003.

The advertisement, award, and construction of the remaining portion of the CDS is currently scheduled to start at the end of 2004 and is contingent upon approval from the PVWMA Board of Directors and available funding. Since a CDS is needed for the delivery of water to the coastal area and a CVP pipeline is needed as a source of water supply for the CDS, these two co-dependent projects are scheduled for completion at the same time. Construction of the CDS is expected to begin in fall 2004 and is scheduled for completion in spring of 2007. The proposed implementation schedule for the project is shown in Figure 7-1.

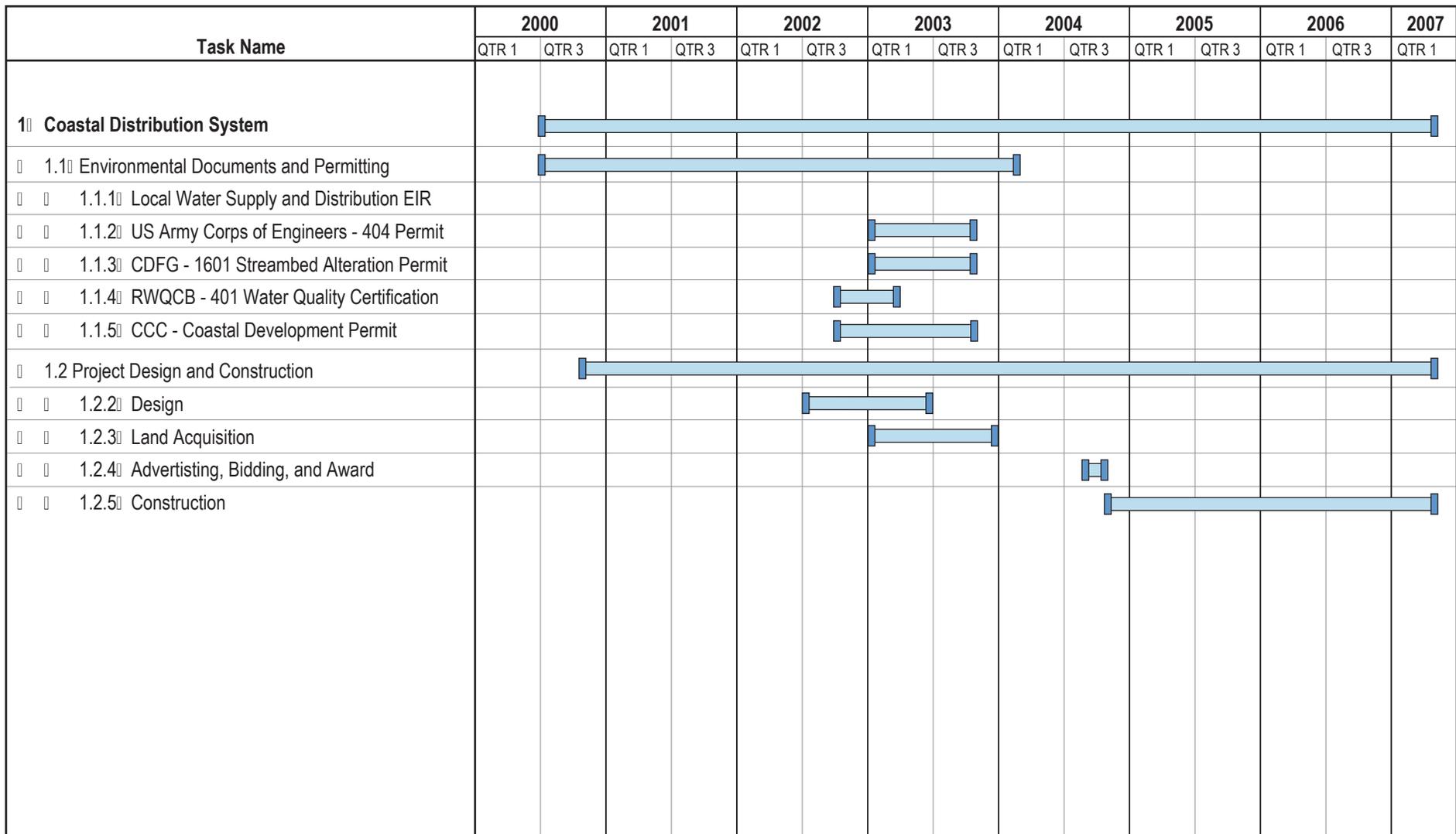


Figure 7-1: Coastal Distribution System Implementation Schedule

## **7.2.2 54-inch Import Water Project with Out-of-Basin Storage Implementation**

The Import Water Project is a major component of the Recommended Alternative and will bring 13,400 AFY of high quality water into the Pajaro Valley to meet water demand and enable the quality of water from the Recycled Water Project to be suitable for irrigation use after blending. Construction of the import water pipeline is contingent on completion of several significant tasks including securing additional CVP water supplies, and environmental review under NEPA.

A CVP contract assignment from Mercy Springs Water District in Phase 1 has secured 28 percent of the CVP supplies needed for the Import Water Project. However, in order to have enough supplies for the Import Water Project, the PVWMA must secure an additional 72 percent of the 13,400 AFY CVP water supplies needed through assignments of existing contracts from other CVP Contractors. Assignment of a CVP contract will involve negotiations with other CVP contractors and coordination of the agreements with the USBR. In addition, CEQA/NEPA requirements must be fulfilled for each assignment. Completion of the necessary tasks to secure additional CVP water supplies is estimated to be a 20-month process. The purchase of additional CVP supplies via assignment appears to be a viable option as PVWMA is currently in the process of exploring assignment opportunities with various CVP Contractors.

After additional CVP water supplies are secured, an out-of-basin banking agreement with one or several CVP contractors/agencies to store surplus CVP water during above average water delivery years will be needed. Out-of-basin banking will increase the reliability of the CVP supply and minimize the need for additional storage facilities and associated costs in the Pajaro Valley.

As previously discussed, the Import Water Project requires CEQA and NEPA compliance as part of the environmental review process in addition to individual CEQA/NEPA evaluations for each water assignment/agreement. The Revised BMP EIR will fulfill the CEQA requirements for the Import Water Project and is scheduled for completion in February 2002. NEPA requirements for the Import Water Project will be fulfilled through an EIS scheduled for completion in early 2003. CEQA/NEPA for any additional CVP contract assignment will be completed as soon as a specific assignment is proposed.

Design of the import pipeline is expected to begin in early 2003, following completion of the EIS and securing of an additional water supply agreement. Various local and jurisdictional agency permits are required prior to construction of the project, and the permitting process would be completed in conjunction with design. The jurisdictional agencies and their required permits/review process are listed in the schedule shown in Figure 7-2 under the Environmental Documents and Permitting section. Construction-related permits such as encroachment permits are considered to be part of the design process and hence are not listed under the Environmental Documents and Permitting section.

Necessary land acquisition and easements for the project will also be negotiated during the design stage, including the agreements to construct and five supplemental/peaking wells along the pipeline alignment. The proposed implementation schedule is shown in Figure 7-2.

Construction of the Import Water Project is scheduled to begin in the summer of 2004. Accounting for the mobilization and start-up/testing period, and the anticipated rate of pipeline construction approximately 180 feet of pipe per day, the Import Water Project will be completed by the spring of 2007.

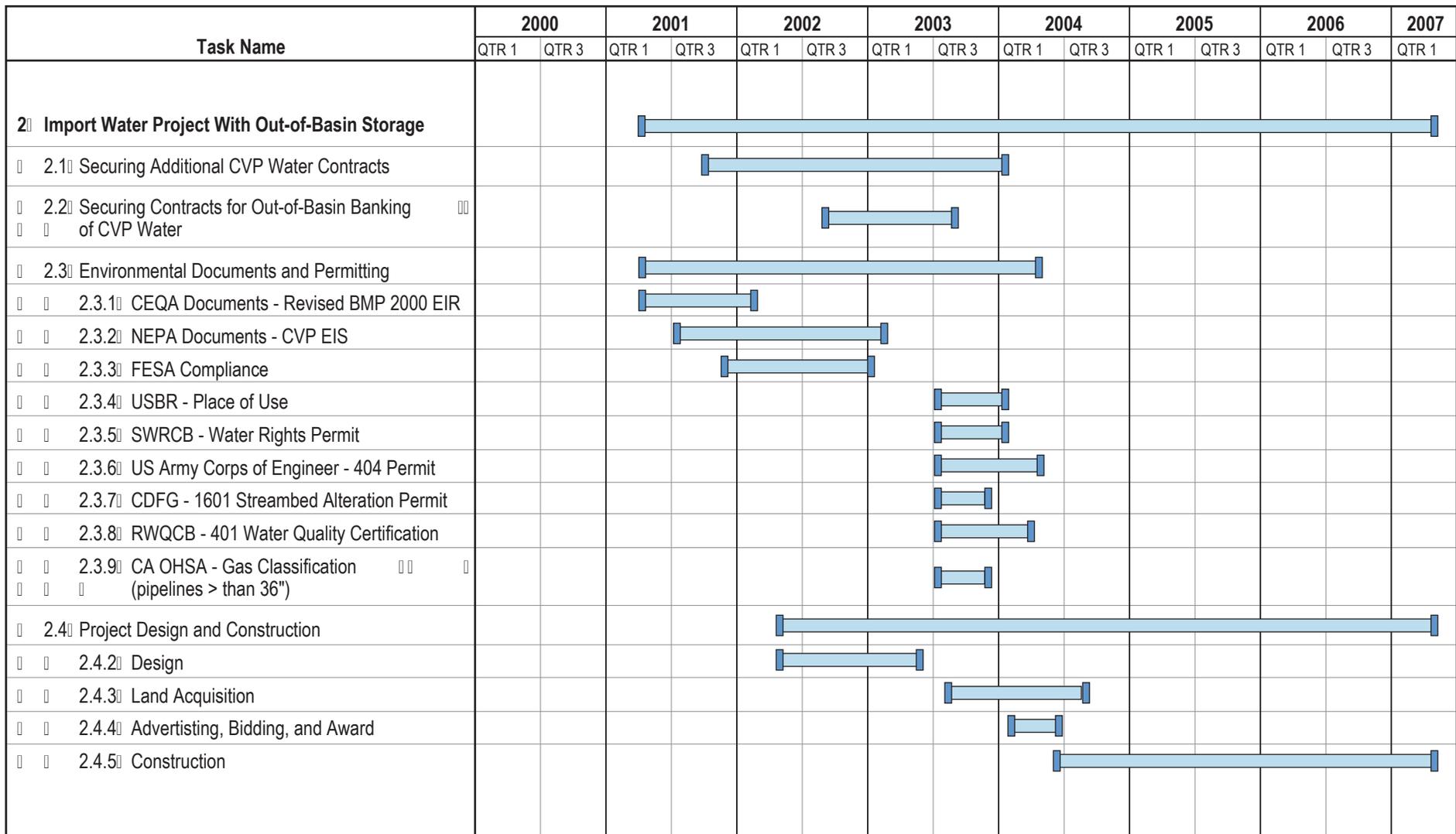


Figure 7-2: Import Water Project Implementation Schedule

### **7.2.3 Recycled Water Project Implementation**

Construction of the Recycled Water Project is contingent on completion of several key tasks including approval of Title XVI funding from the USBR, appropriation of funding by Congress, securing import water for blending, execution of a cooperative agreement between the City of Watsonville (City) and PVWMA, and NEPA compliance. These tasks need to be completed prior to construction of the project.

Implementation of the Recycled Water Project is contingent upon approval for grant funding from the USBR and appropriation of such funds by Congress. In order to receive Title XVI funding, NEPA compliance for the project must first be completed. The NEPA evaluation is being conducted in cooperation with the USBR, and is scheduled for completion in early 2003.

In addition to USBR approval for Title XVI funding, an appropriation of funds from Congress is necessary prior to the release of money for construction of the project. The appropriations process is expected to span a 20-month period and would begin following a record of decision from the USBR.

The Recycled Water Project would also require a blending water supply in order to meet the irrigation water quality objective. Without a blending supply the Recycled Water Project would not be viable due to water quality issues. CVP water from the Import Water Project is the only adequate blending supply for recycled water on a sustained basis. Therefore, sufficient CVP supplies must be secured before the Recycled Water Project is built.

Another necessary task for this project is the development of a cost sharing and delivery agreement between the City of Watsonville and PVWMA. The agreement is necessary, as the City of Watsonville and PVWMA are the major stakeholders in the project. The City owns and operates the WWTF while the PVWMA has jurisdiction over management of water resources within its area.

The design of the Recycled Water Project is scheduled to start at the end of 2003, after the environmental documents and federal appropriation for Title XVI funding. The City and PVWMA are currently completing a feasibility study to evaluate treatment options and processes for the production of recycled water. A Recycled Water Feasibility Study report is scheduled for completion in early 2002. Construction permitting for the project would be completed during the design process. Construction of the Recycled Water Project could begin in the summer of 2005, with a completion target for spring of 2007, in accordance with the CDS and Import Water Project schedule. The proposed implementation schedule is shown in Figure 7-3.

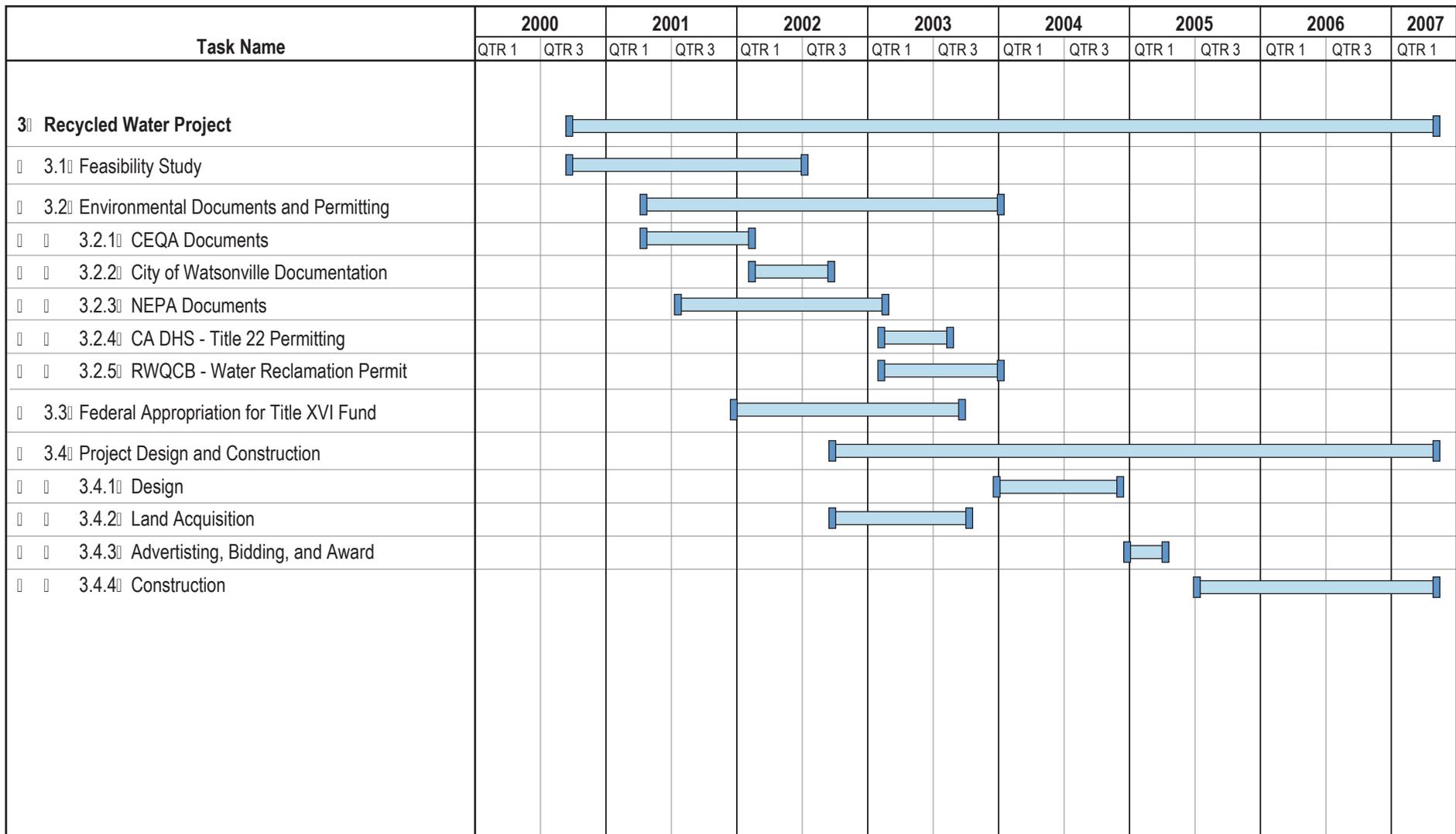


Figure 7-3: Recycled Water Project Implementation Schedule

## **7.2.4 Watershed Management Programs**

The Nitrate Management Program, Wells Management Program, and Recharge Area Protection Program will be developed in Phase 2. As part of the Nitrate Management Program, the PVWMA is proposing to address nitrate contamination within the PVWMA service area by developing and implementing a Nitrate Management Plan. The Nitrate Management Plan would provide guidance for managing and reducing the levels of contribution to nitrate contamination in the Pajaro Valley and serve to increase public awareness and understanding of the situation. The Wells Management Program involves formalizing and adopting a guideline for well decommissioning and well replacement. The Recharge Area Protection Program will include cooperation with other public agencies and public outreach to inform area residents and decision makers of the importance of protecting groundwater recharge areas.

Funding and staffing resources are necessary in order to develop and implement these programs. Currently, no specific implementation schedule has been developed due to resource limitations. However, it is expected that funding and staffing would become available during Phase 2 and that implementation of each program could ensue.

### **7.2.4.1 Nitrate Management Program**

The PVWMA is working with the Monterey County Water Resources Agency (MCWRA) to address agricultural and urban nitrate issues. Together, the two agencies have coordinated and sponsored public outreach events to educate the community on nitrates management and developed pocket guides for management of agricultural nitrates. However, increased efforts are necessary implemented to protect water resources within the Valley. Hence, the PVWMA should develop a Nitrate Management Plan that would identify management measures for reducing nitrate contamination. The plan would outline programs aimed at voluntary implementation of management measures as voluntary action is typically an effective means for reducing nitrate contamination. The goals of the plan would be similar to the Salinas Valley Water Project Nitrate Management Program (Montgomery Watson & RMC, 1998) and would include programs to:

1. Improve irrigation and fertilization practices to reduce the net nitrate/nitrogen load to the groundwater system via grower outreach and education program;
2. More accurate definition of the extent and fate of nitrate contamination in the Pajaro Valley groundwater basin; and
3. Define programs to protect domestic water supplies from nitrate contamination.

The program should include cooperative efforts with Monterey, Santa Cruz, and San Benito Counties to increase public awareness and outreach programs to educate the community on nitrate pollution in the Pajaro Valley. Implementation of the Nitrate Management Programs will require resources and personnel to develop the plan and manage the programs identified in the plan. The programs identified in the plan could be implemented using a phased approach consistent with available resources and funding. The phased approach would also give PVWMA a chance to evaluate and improve the programs applied before the implementation of subsequent phases. The Plan would also give a cost estimate for program implementation and identify potential grant and funding opportunities for nitrate management from regulatory agencies.

#### **7.2.4.2 Wells Management Program**

The development of the Wells Management Program will involve active monitoring of well decommissioning to ensure that the wells will not provide conduits for contaminants. The PVWMA currently has a program for notifying the respective county whenever an abandoned well is discovered. To go a step beyond monitoring, the PVWMA should also formalize and adopt guidelines for decommissioning of groundwater wells that are abandoned from operation. The guidelines could be based on existing regulations set by the California Department of Water Resources and an existing ordinance adopted by the Monterey County Water Resources Agency.

#### **7.2.4.3 Recharge Area Protection Program**

Protection of recharge areas within the PVWMA service area is critical in preserving water quality and supply within the basin. Recharge areas within the basin are primarily located in the eastern portion of the PVMWA service area. Contamination of, or development on, recharge areas would adversely affect the groundwater supplies of the entire basin. Therefore, it is critical that recharge areas are protected from both development and pollution.

A Recharge Area Protection Program is needed to preserve future groundwater supplies and quality. As previously discussed in Section 3.4.2, the local Counties are aware of key recharge areas and help in monitoring the water quality in these areas. However, a more formal program to spread awareness is recommended. The proposed program could consist of an outreach program designed to inform area residents and decision makers of the importance of protecting groundwater recharge areas. In addition, data from the Water Resources Monitoring Program could be used in developing a model for the key recharge areas and help in monitoring of the water quality in these areas.

### **7.3 Potential Future Phases**

Potential future phases are contingent on the availability of funding, operational strategy, and on future water needs within the Pajaro Valley. Potential future phases include two local water-banking projects and three local water supply projects. As previously mentioned, elimination of overdraft and seawater intrusion impacts during peak demand periods as well as future increases in water use by 2040 will require the construction of an in-basin banking system and/or additional water supply projects. The projects identified were the most feasible and practical at this time. Implementation schedules for these potential future projects are not presently defined. Key implementation tasks for each project are summarized in the following sections.

#### **7.3.1 Aquifer Storage and Recovery of CVP Water (ASR)**

Once construction of the import water pipeline is completed and as more funding becomes available, a water banking strategy to store water locally in years when above-average supplies are available should be developed to accommodate peak demand periods, future increases in water use by 2040, and increased long-term reliability, flexibility, and local control of the CVP supplies. Banking of water locally would likely be achieved through ASR, in-lieu recharge, or a combination of both. A local water banking strategy should be developed while considering overall operations requirements during low and high water delivery years. Besides banking, ASR wells could be used to meet peak water demands and provide reliability to the system.

Previous analysis and evaluation of ASR for CVP water with regards to water quality and regulatory requirements indicate treatment is necessary prior to injection of CVP water into the groundwater system. Feasibility level studies have resulted in the recommendation of ultrafiltration (UF) as the preferred treatment process alternative. Ultrafiltration would treat CVP water prior to injection into the groundwater aquifers to meet and comply with the Department of Health Services (DHS) and Central Coast Regional Water Quality Control Board (CCRWQCB) requirements. Upon extraction, water from the wells could be delivered directly to the CDS without additional treatment. A byproduct of UF treatment is reject water, which could be either discharged back into the import supply pipeline or discharged to the WWTF.

Prior to moving forward with full-scale implementation of the ASR project, PVWMA should conduct a more detailed evaluation of existing groundwater quality in the proposed ASR well area and perform a pilot study of the recommended treatment process to gather more information. The pilot study would help PVWMA address water chemistry issues associated with blending of CVP water with groundwater. Furthermore, PVWMA would need to work with property owners to site additional wells at locations that would minimize agricultural and environmental impacts.

### **7.3.2 Inland Distribution System (IDS)**

Construction of an IDS would allow for delivery of water from local or import supplies to inland growers and would reduce groundwater pumping leading to an in-lieu water bank. An IDS provides the ability to deliver water to lands not adjacent to the import pipeline, a benefit not afforded by any other project component.

One potential delivery system was identified in Section 4.10.1. However, the alignment and service area of the system is dependent on the specific needs of the owners and growers in the inland area. As future water needs and water resources are identified, the IDS can be designed to meet the goals and objectives of these inland owners and growers. By providing the inland growers with a water supply in lieu of groundwater pumping, the PVWMA would create an in-basin bank. This in-basin bank could be used to meet future water needs of the Pajaro Valley.

### **7.3.3 Watsonville Slough Project with North Dunes Recharge Basin**

Implementation of the Watsonville Slough Project is dependent upon the recommendations of the Watsonville Sloughs Resource Conservation and Enhancement Plan currently being completed. The plan is evaluating environmental enhancements and restoration options. Recommendations included in the Resource Conservation and Enhancement Plan could affect the cost effectiveness, availability of water, and the feasibility of a water supply project at Watsonville Slough. If recommendations from the plan are favorable, implementation of the project could commence.

The most significant tasks for this project are securing water rights from the SWRCB and ensuring that slough water can be successfully percolated and recovered. The water rights process would require coordination with environmental stakeholders such as NMFS, ACOE, CCC, RWQCB, and USFWS. These stakeholders would likely require significant environmental mitigation measures to protect endangered species and enhance the Slough prior to water rights approval.

### **7.3.4 College Lake Project Implementation**

The College Lake Project is not a viable project at this time due to flood protection evaluations being completed by the ACOE. Construction of the College Lake Project is contingent on completion of the flood protection studies and the recommended flood protection measures. If the evaluations by the ACOE recommend the use of College Lake for flood protection, then a multiuse project could be cost effective. The ACOE is currently completing outreach efforts and collecting public and stakeholder inputs for a planning investigation. To date, no schedule is available for the completion of the ACOE flood protection evaluation.

In addition, the development of College Lake as either a flood control or water supply project will face significant environmental issues, particularly as the project would impact steelhead fisheries. These issues would need to be addressed, including securing a water rights permit, prior to project implementation. In 1995, PVMWA applied for a water rights permit for the College Lake Project. However protests by several jurisdictional agencies and unresolved issues have resulted in delay of the permit being issued. Securing of the water rights permit would involve resolution of design and operations issues identified by the protesting agencies.

### **7.3.5 Murphy Crossing Project Implementation**

The Murphy Crossing Project is still facing several environmental issues and engineering challenges at this time even though the EIR documentation for this project has been certified. Additional investigations requested by the NMFS and DFG would need to be completed before the project could be implemented.

In addition to the environmental and engineering issues, the most practical delivery of water supplied by the Murphy Crossing Project would be adjacent to the project via an IDS. Alternatively, once an import pipeline is constructed, water from Murphy Crossing could be conveyed through that pipeline to the CDS.

## **7.4 Summary of Key Points**

Presented below is a summary of key points of this section.

- The Recommended Alternative will be implemented in multiple phases.
- Implementation of Phase 1 began in 2000 and includes Water Conservation and the Harkins Slough Project with supplemental wells along with a portion of the Coastal Distribution System.
- Phase 2 consists of the remaining portion of the Coastal Distribution system, the Import Water Project plus inland-alignment turnouts and five supplemental wells, the Recycled Water Project, and additional Watershed Management Programs.
- Since the CDS and Recycled Water Project are dependent upon the Import Water Project the construction completion date of all three projects is scheduled to coincide in the spring of 2007.
- Watershed Management Programs are integral parts of the Recommended Alternative and consist of the Water Metering Program, the Water Resources Monitoring Program, the Nitrate Management Program, the Wells Management Program, and the Recharge Area Protection Program.

- The enhanced Water Metering Program is being implemented; the framework for the Water Resources Monitoring Program is currently being developed; the development of the Nitrate Management Program, the Wells Management Program, and the Recharge Area Protection Program will be developed in Phase 2.
- Potential Future Phases consist of potential local water-banking projects and potential local water supply projects. An in-basin banking strategy may be needed to address current peak demand needs and future increases in water use. It should increase the long-term reliability and flexibility of the system, and provide more secure local control of the CVP supplies. The implementation of Potential Future Phases are contingent upon availability of funding and on future water needs within the Pajaro Basin.