

CHAPTER 1

INTRODUCTION

1.1 PURPOSE OF THE EIR

The Pajaro Valley Water Management Agency (PVWMA) has prepared this Draft Environmental Impact Report (DEIR) to provide the public, and Responsible and Trustee Agencies reviewing this project, with information about the potential effects of implementation of the Revised Basin Management Plan (Revised BMP) on the local and regional environment. This EIR was prepared in compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended), the CEQA Guidelines, and California Administrative Code, Title 14, Chapter 3.

The EIR primarily addresses the environmental impacts of two alternatives developed through the Revised BMP: the Local-Only Alternative and the BMP 2000 Alternative. Both alternatives are intended to address groundwater overdraft and sea water intrusion conditions in the Pajaro Valley Basin. Components of the BMP 2000 Alternative include water conservation measures; a Groundwater Banking program, which includes construction of a 23-mile-long pipeline to convey water from the Central Valley Project (CVP) to the PVWMA service area for agricultural uses; the existing Harkins Slough project; Murphy Crossing and the Coastal and Inland Distribution Systems projects; and implementation of a water recycling facility at the Watsonville Wastewater Treatment Facility. Components of the Local-Only Alternative include water conservation and other demand management options; a water recycling facility; expansion of College Lake; new diversions at Corralitos Creek, Pinto Lake, and Watsonville Slough; and an aquifer storage and recovery project. The potential environmental impacts of these alternatives are evaluated in this EIR.

The EIR also addresses two variants of these alternatives: the Modified BMP 2000 and Modified Local-Only alternatives, as well as a “No Project” alternative.

The impact analyses in this report are based on a variety of sources, including agency consultation, the EIR completed on PVWMA’s Local Water Supply and Distribution Project (“Local Projects” EIR), archaeological reports on the project area, and field surveys completed by Environmental Science Associates staff. The General and Specific Plans for the City of Watsonville and Santa Cruz, Monterey, San Benito, and Santa Clara counties also were used.

1.2 CEQA PROCESS

1.2.1 BACKGROUND

PVWMA adopted its first Basin Management Plan in 1993. This plan described and evaluated a wide variety of options for water supply and its management. Through the analysis of the BMP and the development of a Programmatic EIR (PEIR) on the BMP, a preferred Water Supply Project was identified and adopted by the PVWMA Board of Directors (Resolution No. 93-18) for further consideration and development. The Local Water Supply and Distribution Project (evaluated in the Local Projects EIR, 1999) was developed as part of the recommended program of the 1993 BMP. The Revised BMP updates the 1993 BMP. Implementation of the Revised BMP meets the definition of a “project” and therefore is subject to CEQA. The PVWMA serves as the lead agency for development of the EIR for the project, with input and coordination provided by other responsible agencies and local jurisdictions.

1.2.2 INITIAL STUDY AND NOTICE OF PREPARATION

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the PVWMA, as Lead Agency, prepared a Notice of Preparation (NOP) and an Initial Study for this EIR. These were circulated to local, state, and federal agencies and other interested parties in June 2000. A second revised NOP was published in 2001 to add consideration of the Local-Only Alternative to the EIR. The NOPs provided a general description of the proposed project and a preliminary list of potential environmental impacts. Additional coordination with public agencies was provided through informal consultation and telephone interviews conducted throughout the EIR process.

Two public scoping meetings were held on PVWMA’s Revised BMP, in Watsonville (June 22, 2000 and March 29, 2001), to present the proposed project to interested parties to solicit their input as to the scope and content of the EIR. Public notices were placed in local newspapers informing the general public of the scoping meetings.

ISSUES RAISED DURING SCOPING

Table 1.1 summarizes many of the issues raised during the scoping periods for the EIR.

1.2.3 DRAFT EIR

The Draft EIR focuses on the potentially significant environmental effects of the project. Significance criteria (indicating what constitutes a significant impact) have been developed for each environmental issue analyzed in this EIR, and are defined at the beginning of each impact analysis section. Impacts are categorized as follows:

- 1) significant, unavoidable

TABLE 1.1
SUMMARY OF ISSUES RAISED DURING SCOPING

| Issues Raised | Section Addressing These Issues |
|--|---|
| Project costs and economic effects in Pajaro Valley | PVWMA is currently developing a rate study to establish a stable revenue stream to fund the capital debt and operating costs of the proposed facilities. Refer to Chapter 8 of this EIR (Socioeconomic Effects) |
| Effect on biological and agricultural resources | Chapters 4 and 5, Land Use and Vegetation, Fish and Wildlife sections |
| Growth inducement in Pajaro Valley | Chapter 7 |
| Water quality standards of recycled water and groundwater (specifically nitrate contamination) | Section 3.3 |
| Wetland preservation and enhancement | Impacts and mitigation measures addressing wetlands are presented in the Vegetation, Fish and Wildlife sections of Chapters 4 and 5. |
| Cultural resources impacts | Sections 4.A.5, 4.B.5, 5.A.5, 5.B.5, 5.C.5, and 5.D.5 |
| Cumulative impact analysis of the present and future groundwater overdraft | Section 8.2 and Chapter 6 (No Project Alternative) |
| Rubber dam in the Pajaro River | Chapter 6 (River Conveyance discussion) |
| Bureau of Reclamation CVP contract | Chapter 2 |
| Pumping by Granite Rock Quarry | The quarry is outside the PVWMA service area. PVWMA has no jurisdiction over pumping by Granite Rock Quarry. |
| Impacts to steelhead at College Lake | Section 5.B.4 |
| Use most recent data for projections of average annual supply to be provided by each alternative. | The average annual supply provided by each alternative is from the draft Revised BMP. |
| Consider permit issues; encroachment permit required to tunnel under Highway 1. | Section 2.5 |
| Impacts of surface water withdrawals on area hydrology and the City of Watsonville water supply; level and consistency of surface water quality. | Sections 5.C.3, Section 8.2. The alternatives are designed to have a beneficial effect on the groundwater basin, which supplies the City of Watsonville. See also Section 8.2. |

**TABLE 1.1 (Continued)
SUMMARY OF ISSUES RAISED DURING SCOPING**

| Issues Raised | Section Addressing These Issues |
|--|--|
| Groundwater extraction on surface water-groundwater interactions; nitrate contamination; impacts of well deepening. | The proposed project includes deeper wells and includes mitigation to address those wells (refer to Hydrology Sections). Sections 4.B.3 and 5.D.3 pertain to groundwater extraction. The Hydrology and Water Quality sections in Chapters 3, 4, and 5 address nitrate. See also Section 8.2. |
| Impacts of injecting Central Valley Project water on groundwater quality; injecting recycled wastewater; impacts of potentially high salt levels in recycled water on agriculture. | Chapter 6; injection of recycled water is not proposed; Sections 4.B.3 and 5.A.3. |
| Potential increase of mosquito habitat/breeding areas if surface waters are improperly managed. | PVWMA will comply with mosquito abatement guidance provided by the local abatement district. |
| Capacity, size, and depth of the College Lake well field; impacts of the well field on existing wells and water rights. Impacts of the extraction area on the slough system. | Wells would be located along ASR Pipeline. Sections 4.B.3 and 5.D.3. |
| Impacts, including cost and loss of prime agricultural land, of farm reservoirs; allocation of costs of constructing and responsibility for having farm reservoirs. Use (and loss) of agricultural resources compared with using less valuable land off-site. Adequacy of impact analysis if it is done before location and size of farm reservoirs is determined. | The farm reservoir component of the Local-Only Alternative has not been developed in enough detail to analyze in this EIR; additional CEQA analysis would be required prior to approval and implementation of this component. |
| Project impacts with respect to Total Maximum Daily Loads (TMDLs) that are yet to be established; potential constraints on project implementation when the TMDLs are established. ¹ | Section 3.3.2, Regulatory Setting and Section 8.2, Cumulative Impacts (Hydrology and Water Quality discussion). |
| Impacts on endangered species; need for biological resource surveys; impacts on fisheries of the project in conjunction with TMDLs. | Sections 4.A.4, 4.B.4, 5.A.4, 5.B.4, 5.C.4, 5.D.4 |
| Impacts on cultural resources in or near the project area; need for archaeological surveys. | Sections 4.A.5, 4.B.5, 5.A.5, 5.B.5, 5.C.5, 5.D.5 |

¹ This comment pertains to recently enacted federal regulations addressing contaminant loading from nonpoint sources in water bodies (e.g., run-off from farms).

TABLE 1.1 (Continued)
SUMMARY OF ISSUES RAISED DURING SCOPING

| Issues Raised | Section Addressing These Issues |
|---|--|
| Impacts on air quality; identification of mitigation measures for any significant impacts; consistency with the 1997 Air Quality Management Plan; applicability of federal General Conformity rule, if required. Permit(s) for stationary sources will be needed from the Monterey Bay UAPCD. | Sections 4.A.7, 4.B.7, 5.A.7, 5.B.7, 5.C.7, 5.D.7. Conformity rule applies and determination will be addressed in the forthcoming EIS. |
| Methodology and assumptions underlying the selection of the proposed pipeline route; analyze alternative pipeline routes. | Section 2.3.3, Groundwater Banking |
| Compare the effectiveness of project alternatives in solving the basin's water problems while sustaining existing agriculture. | Section 2.2.3, Ability of the Alternatives to Meet Project Objectives |
| Impacts on agricultural lands in terms of types of crops affected and extent or value of lost agricultural productivity. | Discussed in general terms in Chapter 8 (Socioeconomic Issues). |
| Installation of tertiary treatment components at areas with less productive soils as an alternative to expanding the Watsonville Wastewater Treatment Facility. | It would be impractical to locate the Recycled Water Facility remote from the WWTF. The WWTF is surrounded by prime agricultural land on three sides and the Pajaro River on the fourth. |
| Consider the economic and cumulative costs of the No Project Alternative. | Chapter 6 |
| Evaluate appropriate alternatives to any injection component. | Chapter 6. The BMP 2000 Alternative does not have an injection component; the Local-Only Alternative does. |
| Add to BMP 2000 the joint management of the Aromas Red Sands aquifer with Soquel Creek Water District. | Chapter 6 |
| The growth-inducing impacts on air quality, particularly ozone precursor emissions; growth-inducing impacts of the Local-Only Alternative. | Chapter 7. |
| Impacts of fallowing prime farmland, and explanation of how land to be fallowed will be determined. | Discussed generally in Chapter 8 (Socioeconomic Issues). PVWMA likely would lease land on an annual basis. |

TABLE 1.1 (Continued)
SUMMARY OF ISSUES RAISED DURING SCOPING

| Issues Raised | Section Addressing These Issues |
|--|---|
| Reliance of Local-Only Alternative on an aggressive conservation program; the level, extent, and location of land to be fallowed and the associated environmental, economic, and social effects. Effectiveness, cost, and impacts on agriculture of reliance on conservation. Need for effective enforcement of conservation restrictions. | Section 2.2.3, Ability of the Alternatives to Meet Project Objectives. Socioeconomic issues are discussed in general terms in Chapter 8. |
| Baseline water use data is needed to measure the effectiveness of conservation measures. | Refer to draft Revised BMP for a discussion of effectiveness of conservation measures. |
| Define any proposed drought contingency plan and the objective of such a plan. | Modeling for the project incorporates periods of drought in the hydrologic sequence. |
| Effects of agricultural chemicals and groundwater use from agriculture on hydrology, water quality, and biological resources on land and in the Monterey Bay Sanctuary. | The practice of agriculture is not the project evaluated in this EIR. The project's effect on water quality and biological resources are described in Chapters 4 and 5. |
| Cumulative impact analysis | Chapter 8 |

- 2) significant, but can be mitigated to a less-than-significant level
- 3) less than significant (mitigation is not required under CEQA, but may be recommended)
- 4) no impact
- 5) cannot be determined (project design information needed to determine impact significance has not been developed)

CEQA requires that a lead agency shall neither approve nor carry out a project as proposed unless the significant environmental effects have been reduced to an acceptable level (CEQA Sections 15091 and 15092) or the project objectives outweigh the unavoidable significant impacts (requiring the Lead Agency to make a Statement of Overriding Considerations) (CEQA Section 15093). An acceptable level is defined as eliminating, avoiding, or substantially lessening the significant effects.

The scope of the EIR was determined by preliminary screening of possible environmental impacts in an Initial Study, the written responses to the NOPs, and issues raised at the public scoping meetings. The mitigation measures identified as "Mitigation Identified in this EIR" are measures identified during the EIR process that could be implemented to mitigate project impacts. At the discretion of the PVWMA Board, these mitigation measures may or may not be incorporated into the project's design, construction, and/or operation.

The BMP 2000 Alternative and Local-Only Alternative both include water conservation. The proposed water conservation measures would not involve construction of any new facilities and would not result in direct physical changes to the environment. The Initial Study that was included with the Notice of Preparation determined that the water conservation measures would not result in significant environmental impacts. For this reason, the water conservation component of the Recommended Program is described in Chapter 2, Project Description, of this EIR, but it is not addressed in the impact analyses. The proposed local water supply projects at Harkins Slough and Murphy Crossing and the Coastal and Inland Distribution Systems were evaluated in the Local Water Supply and Distribution EIR, which was certified by the PVWMA Board of Directors on May 6, 1999; consequently, the impacts specific to the construction and operation of those components are not evaluated in this EIR.

1.2.4 PUBLIC REVIEW OF THE DRAFT EIR

This document is being circulated to local, state and federal agencies, and to interested organizations and individuals wishing to comment on the EIR. Publication of this Draft EIR marks the beginning of a 45-day public review period, during which written comments may be sent to PVWMA, 36 Brennan Street, Watsonville, California, 95076.

During this 45-day review period, the PVWMA will hold a formal public meeting on the Draft EIR to receive oral comments on the contents of the EIR. Comments should be focused on the adequacy and accuracy of the content of the EIR.

1.2.5 FINAL EIR CIRCULATION

Written and public hearing comments received in response to the Draft EIR will be addressed in a Response to Comments addendum document that, together with the Draft EIR, will constitute the Final EIR. The Final EIR will contain responses to comments solely on the content of the Draft EIR. The Final EIR will be circulated for public review, and the PVWMA will hold a public hearing on the Final EIR to consider EIR certification. The PVWMA Board of Directors will then consider a resolution for EIR certification (i.e., a finding that the EIR complies with the requirements of CEQA). Following EIR certification, the PVWMA may proceed with consideration of project approval actions, including selection of one of the alternatives evaluated in this EIR or a combination thereof, and adoption of any environmental mitigation requirements.

1.2.6 MITIGATION MONITORING AND REPORTING

CEQA requires lead agencies to adopt a reporting and mitigation monitoring program for the changes to adopt the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. A specific "reporting or monitoring" program will be developed at the time PVWMA makes findings on the project. All mitigation measures adopted by the PVWMA as conditions for approval of the project will be included in the Mitigation Monitoring and Reporting Program.

1.3 PROJECT APPROVAL AND PERMITTING PROCESS

Before the project could be constructed, it would require the certification of this EIR as described above, approval of the project and filing of the Notice of Determination. CEQA requires that if a Lead Agency is approving a project for which an EIR has identified one or more significant effects, the Agency must produce written findings describing these effects (CEQA Section 15091). As implementation of the Revised BMP would have a significant effect on the environment as described in this EIR, the PVWMA Board of Directors will be required to make findings. Possible findings include the following:

1. a description of changes in the project or mitigations that have been required which avoid or lessen the significant effect;
2. a description of those responsible for carrying out mitigation, and under what jurisdiction; and
3. a description of considerations that could make mitigation measures or project alternatives identified in the EIR more feasible.

If the lead agency approves the project, even though significant impacts identified by the EIR cannot be mitigated to a less-than-significant level, the agency must state in writing the reasons for approving the project, termed Statement of Overriding Considerations. All findings must be included in the record of the project approval and mentioned in the Notice of Determination (CEQA Guidelines Section 15093.c).

PVWMA will hold a public hearing on the proposed project. This hearing will be a separate public hearing from that held for EIR certification and will specifically serve to receive public comment about whether or not the project should be adopted. Public comment on the findings may be made at that time.

Following these actions PVWMA could proceed with engineering design. Implementation would require PVWMA to secure permits and approvals from several local, regional and State agencies. Depending on final design, permits may be required from various agencies. These potential permits and approvals are presented toward the end of Section 2, Project Description.

1.4 ORGANIZATION OF THE DRAFT EIR

The other chapters of this Draft EIR are as follows:

1. **Summary.** This chapter summarizes the contents of the Draft EIR.
2. **Project Description.** This section provides an overview of the project, describes the need for and objectives of the project, and provides detail on the characteristics of the BMP 2000 Alternative and Local-Only Alternative.
3. **Regional Setting.** This chapter presents a description of the physical and regulatory setting of the project by environmental issue area (land use and planning, geology, et al).

4. **BMP 2000 Alternative – Environmental Setting, Impacts and Mitigation Measures.** This chapter describes the environmental setting and identifies impacts and measures to mitigate those impacts for the projects comprising the BMP 2000 Alternative. This chapter is divided into the following sections: 4.A, Water Recycling, 4B, Groundwater Banking, and 4C, Change in Place of Use. Each section is further divided by environmental issue area (land use and planning, geology, et al).
5. **Local-Only Alternative – Environmental Setting, Impacts and Mitigation Measures.** This chapter describes the environmental setting and identifies impacts and measures to mitigate those impacts for the projects comprising the Local-Only Alternative. This chapter is divided into the following sections: 5.A, Water Recycling, 5.B, Expanded College Lake, 5.C, Corralitos Creek and Pinto Lake Diversions, and 5.D, Aquifer Storage and Recovery. Each section is further divided by environmental issue area (land use and planning, geology, et al).
6. **Other Alternatives.** This chapter presents an overview of the alternatives development process and describes other alternatives considered, including the Modified BMP 2000 Alternative and Modified Local-Only Alternative.
7. **Growth Inducement Potential.** This chapter describes the potential for the project to induce development.
8. **Impact Overview.** This chapter presents a summary of impacts identified in the EIR, identifies cumulative impacts, and describes socioeconomic issues related to project funding.
9. **Report Preparers.** This chapter identifies those involved in preparing this Draft EIR.