VOLUME 2

FINAL
PROGRAM ENVIRONMENTAL IMPACT REPORT

FOR THE

OPTIMUM BASIN MANAGEMENT PROGRAM

VOLUME II

Prepared for:

Inland Empire Utilities Agency
Attn: Neil W. Clifton
9400 Cherry Avenue, Bldg. A
Fontana, California 92335
Tel: (909) 357-0241

Prepared by:

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July 2000

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MEMORANDUM

TO: Richard Atwater

FROM: Tami Fincher

DATE: June 30, 2000

SUBJECT: Completion of the Final Program Environmental Impact Report (PEIR) for the Optimum Basin Management Program

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The Inland Empire Utilities Agency received written comments on the Draft PEIR for the Optimum Basin Management Program from thirteen agencies. This package of responses, combined with the Draft PEIR, constitutes the final PEIR for the proposed project. The following agencies submitted written comments which are addressed in the attached Responses to Comments:

1. Southern California Association of Governments
2. State of California Department of Justice
3. Chino Basin Water Conservation District
4. County of Riverside Transportation and Land Management Agency
5. Santa Ana Watershed Project Authority
6. Metropolitan Water District of Southern California
7. Santa Ana River Water Company
8. Jurupa Community Services District
9. California Regional Water Quality Control Board, Santa Ana Region
10. Best Best and Krieger LLP
11. City of Chino
12. California Department of Fish and Game
13. Jackson DeMarco & Peckenpaugh
14. Orange County Water District
15. Western Municipal Water District
16. City of Ontario
17. City of Chino Hills
18. City of Pomona

The Mitigation Monitoring and Reporting Program will be made available prior to the July 12,2000 Public Hearing. Tom Dodson and myself will both be attending the Board meeting on July 12, 2000 to address any question that the Board members or other parties may have regarding the certification of the Final PEIR for the proposed project. Do not hesitate to give me a call if you have any questions.

/tcf

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse

Gray Davis
GOVERNOR

Steve Nissen
ACTING DIRECTOR

ACKNOWLEDGEMENT OF RECEIPT

DATE: June 27, 2000

TO: Richard Atwater
Inland Empire Utilities Agency
9400 Cherry Avenue, Building A
San Bernardino, CA 92335

RE: Optimum Basin Management Program
SCH#: 2000041047

This is to acknowledge that the State Clearinghouse has received your environmental document for state review. The review period assigned by the State Clearinghouse is:

Review Start Date: May 10, 2000
Review End Date: June 23, 2000

We have distributed your document to the following agencies and departments:

Caltrans, District 8
Department of Conservation
Department of Fish and Game, Region 6
Department of Food and Agriculture
Department of Health Services
Department of Parks and Recreation
Department of Water Resources
Native American Heritage Commission
Office of Historic Preservation
Regional Water Quality Control Board, Region 8
Resources Agency
State Lands Commission
State Water Resources Control Board, Clean Water Program
State Water Resources Control Board, Division of Water Rights

The State Clearinghouse will provide a closing letter with any state agency comments to your attention on the date following the close of the review period.

Thank you for your participation in the State Clearinghouse review process.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse

Gray Davis
GOVERNOR

Steve Nissen
ACTING DIRECTOR

June 26, 2000

Richard Atwater
Inland Empire Utilities Agency
9400 Cherry Avenue, Building A
San Bernardino, CA 92335

Subject: Optimum Basin Management Program
SCH#: 2000041047

Dear Richard Atwater:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on June 23, 2000, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Senior Planner, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2000041047
Project Title Optimum Basin Management Program
Lead Agency Inland Empire Utilities Agency

Type EIR Draft EIR

Description This Draft Program Environmental Impact Report (PEIR) addresses the environmental and physical impacts of implementing the Optimum Basin Management Program to manage the Chino Groundwater Basin (the Basin) for maximal long-term beneficial use by all appropriators and parties within the approximately 225,000 acre project area. Implementation of the OBMP is designed to maintain and enhance the Basin's safe-yield and will assist in minimizing overproduction of groundwater resources. A water supply plan is also included and evaluated under the OBMP. This plan will allow appropriators to meet future demands using a variety of source water supplies, and will allow appropriators to provide an adequate supply of both potable and recycled water throughout the twenty-year planning period encompassed in the document.

Lead Agency Contact

Name Richard Atwater
Agency Inland Empire Utilities Agency
Phone 909-357-0241 **Fax**
email
Address 9400 Cherry Avenue, Building A
City San Bernardino **State** CA **Zip** 92335

Project Location

County San Bernardino
City
Region
Cross Streets
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways
Airports
Railways
Waterways
Schools
Land Use

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Economics/Jobs; Flood Plain/Flooding; Drainage/Absorption; Geologic/Seismic; Job Generation; Housing; Minerals; Noise; Public Services; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Game, Region 6; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Caltrans, District 8; Department of Food and Agriculture; Department of Health Services; State Water Resources Control Board, Clean Water Program; State Water Resources Control Board, Division of Water Rights; Native American Heritage Commission; Regional Water Quality Control Board, Region 8; State Lands Commission

Date Received 05/10/2000 **Start of Review** 05/10/2000 **End of Review** 06/23/2000

Note: Blanks in data fields result from insufficient information provided by lead agency.

COMMENT LETTER #1

SOUTHERN CALIFORNIA

ASSOCIATION of GOVERNMENTS

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May 24, 2000

Mr. Richard W. Atwater
Inland Empire Utilities Agency
9400 Cherry Avenue, Building A
Fontana, CA 92335

RE: **Comments on the Draft Program Environmental Impact Report for the Optimum Basin Management Program - SCAG No. I 20000227**

Dear Mr. Atwater:

Thank you for submitting the **Draft Program Environmental Impact Report for the Optimum Basin Management Program** to SCAG for review and comment. As areawide clearinghouse for regionally significant projects, SCAG assists cities, counties and other agencies in reviewing projects and plans for consistency with regional plans.

The attached detailed comments are meant to provide guidance for considering the proposed project within the context of our regional goals and policies. If you have any questions regarding the attached comments, please contact Jeffrey Smith, Senior Planner, at (213) 236-1867. Thank you.

Sincerely,

J. DAVID STEIN
Manager, Performance Assessment and Implementation

COMMENTS ON THE
DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT
FOR THE
CHINO BASIN MANAGEMENT PROGRAM
SCAG NO. I 20000227

PROJECT DESCRIPTION

The proposed Project considers the Optimum Basin Management Program (OBMP) for the Chino Groundwater Basin for maximal long-term beneficial use by all appropriators and parties within the 225,000-acre project area. Implementation of the proposed Project is designed to maintain and enhance the Basin's safe-yield, and will assist in minimizing the overproduction of groundwater resources. A water supply plan is also included and evaluated under the OBMP. This plan will allow appropriators to meet future demands using a variety of source water supplies, and will allow appropriators to provide an adequate supply of both potable and recycled water throughout the 20-year planning period.

The OBMP will consist of two phases. Phase One, consists of defining the state of the Chino Groundwater Basin, establishing goals concerning major issues by stake holders, and affirming a management plan for the achievement of said goals. Phase Two, considers the development of the specific implementation plans that will effectively allow for the physical construction, operation, management and monitoring of OBMP facilities.

INTRODUCTION TO SCAG REVIEW PROCESS

The document that provides the primary reference for SCAG's project review activity is the Regional Comprehensive Plan and Guide (RCPG). The RCPG chapters fall into three categories: core, ancillary, and bridge. The Growth Management (adopted June 1994), Regional Transportation (adopted April 1998), Air Quality (adopted October 1995), Hazardous Waste Management (adopted November 1994), and Water Quality (adopted
1-1 January 1995) chapters constitute the core chapters. These core chapters respond directly to federal and state planning requirements. The core chapters constitute the base on which local governments ensure consistency of their plans with applicable regional plans under CEQA. The Air Quality and Growth Management chapters contain both core and ancillary policies, which are differentiated in the comment portion of this letter. The Regional Transportation Plan (RTP) constitutes the region's Transportation Plan. The RTP policies are incorporated into the RCPG.

Ancillary chapters are those on the Economy, Housing, Human Resources and Services,

RESPONSES TO COMMENT LETTER #1
SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

1-1 This comment indicates that the Draft Program Environmental Impact Report (PEIR) provides a minimal discussion of the relationship of the proposed project to applicable regional plans. The Draft PEIR is not a development project which would typically fall within the standard applicable plan sections of the Regional Comprehensive Plan Guide (RCPG). The focus of the analysis in this document was on whether the proposed Optimum Basin Management Program (OBMP) met the Water Resources chapter of the RCPG. The OBMP is inherently consistent with the Growth Management, Regional Transportation, and Air Quality core chapters. The analysis and discussion contained in the Chapters on Land Use, Population and Housing, Air Quality and Transportation and Circulation clearly indicate that the proposed OBMP will be fully consistent with the Water Resources Chapter (see pages 4-15 and 4-16); will not cause or induce significant growth (see pages 4-23 through 4-25); air quality planning requirements (see page 4-281) which presents data verifying that the proposed project will not alter growth within the South Coast Air Basin (SCAB) and is therefore in conformity with the Air Quality Management Plan for the region; and for Regional Transportation pages 4-303 and 4-404 demonstrate that the proposed project will not generate significant traffic, nor contribute to induced growth which would increase future trips in the SCAB beyond those already forecast based on existing general plans for communities within the region. Based on this project's lack of potential to impact the applicable core policies in the RCPG, it was concluded that no further comparative evaluation with each of these policies would be necessary. The conclusion remains the same as presented in the Draft PEIR, i.e., no significant conflict with the RCPG or its core or ancillary policies is forecast to occur from implementing the proposed OBMP. Please note that in the SCAG's subsequent comments in its May 24, 2000 letter, the same general conclusion is presented.

Finance, Open Space and Conservation, Water Resources, Energy, and Integrated Solid Waste Management. These chapters address important issues facing the region and may reflect other regional plans. Ancillary chapters, however, do not contain actions or policies required of local government. Hence, they are entirely advisory and establish no new mandates or policies for the region.

Bridge chapters include the Strategy and Implementation chapters, functioning as links between the Core and Ancillary chapters of the RCPG. 1-1 cont.

Each of the applicable policies related to the proposed project are identified by number and reproduced below in italics followed by SCAG staff comments regarding the consistency of the Project with those policies.

GENERAL SCAG STAFF COMMENTS (REVISE AND REWRITE)

1. The Draft PEIS, in Sections 4.2 (Land Use), 4.6 (Air Quality) and 4.7 (Transportation and Circulation) provides a minimal discussion regarding the relationship of the proposed project to **applicable regional plans** as required by Section 15125 [d] *of Guidelines for the Implementation of the California Environmental Quality Act.*

CONSISTENCY WITH REGIONAL COMPREHENSIVE PLAN AND GUIDE POLICIES

The Growth Management Chapter (GMC) of the Regional Comprehensive Plan and Guide contains a number of policies that are particularly applicable to the Optimum Basin Management Program.

Core Growth Management Policies

3.01 The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.

1-2 SCAG staff comments. The Draft PEIR in Sections 4.2 (Population and Housing) references SCAG's 1998 Adopted Growth Forecasts and provides a discussion on the relationship of the proposed Project to SCAG's population, housing and employment forecasts. The proposed Project will not have an impact on population and housing. The Project is consistent with this core RCPG policy.

3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.

1-2 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

1-2 cont.

SCAG staff comments: The Draft PEIR, on page 3-3 includes a discussion on project phasing. The proposed Project will consist of two phases that will be implemented over a twenty-year period. The Project is consistent with this core RCPG policy.

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPROVE REGIONAL STANDARD OF LIVING

The Growth Management goals to develop urban forms that enable individuals to spend less income on housing cost, that minimize public and private development costs, and that enable firms to be competitive, strengthen the regional strategic goal to stimulate the regional economy. The evaluation of the proposed project in relation to the following policies would be intended to guide efforts toward achievement of such goals and does not infer regional interference with local land use powers

3.09 Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.

1

SCAG staff comments. The Draft PEIR in Sections 4.12 (Public Services) and 4.13 (Utilities) identifies public services, utility and service facilities to serve the proposed Project. The Project would not have an impact on public services, phone, natural gas, electricity, water, wastewater, and solid waste facilities. Mitigation measures, however, are recommended as conditions of project approval for the aforementioned utility and service systems. The Project is supportive of this ancillary RCPG policy.

3.10 Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.

SCAG staff comments. The Draft PEIR on page 3-4 includes project goals and activities that support actions to minimize red tape and expedited the permitting process and maintain economic vitality and competitiveness. The Project is supportive of this ancillary RCPG policy.

GMC POLICIES RELATED TO THE RCPG GOAL TO IMPRPVE THE REGIONAL QUALITY OF LIFE

1-4

The Growth Management goals to attain mobility and clean air goals and to develop urban forms that enhance quality of life, that accommodate a diversity of life styles, that

1-3 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

1-4 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

preserve open space and natural resources, and that are aesthetically pleasing and preserve the character of communities, enhance the regional strategic goal of maintaining the regional quality of life. The evaluation of the proposed project in relation to the following policies would be intended to provide direction for plan implementation, and does not allude to regional mandates.

3.18 *Encourage planned development in locations least likely to cause adverse environmental impacts.*

SCAG staff comments. The proposed Project is located primarily in San Bernardino County, with a lesser proportion of the project area overlying Riverside County and a very small section located in eastern Los Angeles County. The Project is designed in a manner, which will minimize identified environmental impacts. The mitigation measures included in the Draft PEIR have been developed to address the identified environmental impacts; and to identify implementation procedures, responsibilities and timing for each mitigation measure. The Project is supportive of this ancillary RCPG policy.

3.19 *SCAG shall support policies and actions that preserve open space areas identified in local, state and federal plans.*

SCAG staff comments. The Draft PEIR on page 4-18 includes a short discussion on Recreational and Open Space Resources identified in plans and policies adopted by agencies with jurisdiction over the proposed Project. The discussion suggests that mitigation measures have been identified to ensure recreational and open space resources are given consideration and protection. Mitigation measures 4.8-1 and 4.8-2 emphasize the preservation of natural open space and wildlife habitat areas. The Project is supportive of this ancillary RCPG policy.

3.20 *Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.*

SCAG staff comments. The Draft PEIR in Section 4.8 (Biological Resources) includes a discussion on plant communities and flora and faunal resources. The proposed Project will have impacts on the aforementioned items. There are over 11 mitigation measures that specifically address these items. The Project is supportive of this ancillary RCPG policy.

3.22 *Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.*

SCAG staff comments. The Draft PEIR in Section 5.4 (Geology and Soils)

identifies potential impacts related to fault rupture, seismic ground shaking, liquefaction, soils, erosion and subsidence. Mitigation measures included in this section have been developed to address identified impacts through the implementation of building codes, specific requirements and/or project design. The Project is supportive of this ancillary RCPG policy.

3.23 *Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.*

1-4 cont.

SCAG staff comments. See SCAG staff comments on policies 3.09, 3.18, 3.20 and 3.22. The Draft PEIR in Section 4.11 (Noise), identifies noise impacts due to construction and operation related activities. Mitigation measures described in this section have been developed to address the identified impacts. The Project is supportive of this ancillary RCPG policy.

AIR QUALITY CHAPTER CORE ACTIONS

The Air Quality Chapter core actions that are generally applicable to the Project are as follows:

5.11 *Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.*

1-5

SCAG staff comments. The Draft EIR/EIS in Section 5.6 (Air Quality) addresses air quality impacts related to construction and operation activities. Mitigation measures outlined in this section will address the identified impacts. Despite the mitigation measures, the identified operational impacts remain potentially significant. The Project is partially consistent with this core RCPG policy.

WATER QUALITY CHAPTER RECOMMENDATIONS AND POLICY OPTIONS

The Water Quality Chapter core recommendations and policy options relate to the two water quality goals: to restore and maintain the chemical, physical and biological integrity of the nation's water; and, to achieve and maintain water quality objectives that are necessary to protect all beneficial uses of all waters. The core recommendations and policy options that are particularly applicable to Project include the following:

1-6

1-5 With regards to air quality, the Draft PEIR identifies that the project has potentially significant operational impacts. Mitigation is provided to mitigate these impacts to the maximum extent feasible, however, even with mitigation, there are still potentially significant. Thus, the proposed OBMP was determined to be only partially consistent with SCAG's core RCPG policy number 5.11. These impacts are identified and discussed in the Air Quality section of the document (pages 4-270 to 4-295), and air quality impacts have been mitigated where feasible.

The potential significant impacts that are presented in the air quality discussion represent a worst case scenario related to electricity consumption for pumps in support of desalinization projects and transport of storm water and recycled water to various locations within the Chino Basin. The single potential significant air quality impact is associated with nitrogen oxide emissions associated with consumption of large amounts of electricity for optimum management of water resources. To a high degree this potential impact is an artifact of the air emission forecast method required by the South Coast Air Quality Management District's (SCAQMD) "CEQA Air Quality Handbook". Specifically, for electricity consumption, the Handbook requires that all electricity consumption related air emissions be assigned to the SCAB which results in a significant overestimate of emissions because only about 1/3 of electricity used in southern California is generated here. Further, in the future electricity can be directly purchased from private companies, many of which do not generate any of their electricity within the SCAB. It is reasonable to assume that the proposed project's significant impact on air quality will be nonsignificant based on future energy purchases and reduced energy demand, but for the analysis at this program level of review, the worst case scenario indicates that an exceedance of the SCAQMD nitrogen oxide emission threshold is indicated. However, this does not mean that the project is only "partially consistent" with the RCPG policy 5.11. In fact, all of the requirements stated in the policy have been fulfilled by the Draft OBMP PEIR.

It should be noted that the air quality analysis may actually have slightly overestimated total operational emissions related to the 30 potential new wells that could be implemented under the OBMP. The OBMP PEIR document air quality estimates are based on pumps sized at 500 Bhp for all thirty wells estimated both for desalter well fields. According to more recent information received as a result of the June 2000 Water Supply Plan Phase I Desalting Project Facilities Report, prepared by Black and Veatch, the pumps associated with the desalter well field may only need to be between 125-150 (personal communication between Dave Argo of Black and Veatch, and Tami Fincher of Tom Dodson and Associates, June 29, 2000).

Other wells may be necessary as part of a conjunctive use program's "take" element and the relative size of the pumps associated with such wells is not defined at this time, but they are expected to be below 500 Bhp. The booster pump stations associated with the desalter distribution system are estimated by Black and Veatch to be 142 Bhp and 347 Bhp. This pumping capacity is within the scope previously identified in the OBMP PEIR since the desalter well pumps are actually going to be substantially smaller than originally evaluated in the OBMP PEIR. Even if desalter well pumping requirements turn out to be less than those forecasted and analyzed in the PEIR, the NO_x emissions will still be significant as a result of the electrical consumption for the actual operation of the reverse osmosis units at the desalters. When combined with emissions resulting from well pumping, plus other emissions associated with energy require to operate water distribution facilities throughout the Basin (not just desalter related distribution), the NO_x emissions will still be greater than the 55 lbs/day threshold established in the South Coast Air Quality Management District "CEQA Air Quality Handbook".

It should be noted that the energy requirements associated with the no-OBMP alternative, which would require pumping large quantities of State Project Water into the Basin, are much greater than the total energy requirements (and thus emissions) associated with OBMP implementation.

1-6 This comment relates to SCAG's Policy 11.02 which is "to encourage 'watershed management' programs and strategies, recognizing the primary role of local government in such efforts." The OBMP, by definition is a watershed management program with the participation of most of the local governmental agencies. It is fully consistent with and supplements the Regional Water Quality Control Board's (RWQCB) Water Quality Control Plan (Basin Plan) and the Santa Ana Watershed Project Authority's (SAWPA) Watershed Management Plan. These plans are regional watershed management plans for the Santa Ana Watershed, of which the Chino Basin is one of the primary sub-basins. By being consistent with the Basin Plan beneficial use objectives and the Watershed Management Plan and by creating a detailed program to implement the Basin Plan to protect these objectives, the OBMP project is fully consistent with and encourages "watershed management" programs and strategies. This is particularly the case when considering the OBMP's goals to work cooperatively with state and local agencies (including the RWQCB and SAWPA that manage the Santa Ana Watershed).

11.02 Encourage "watershed management" programs and strategies, recognizing the primary role of local government in such efforts.

SCAG staff comments. The Draft PEIR does not address the subject of "watershed management" programs and strategies. It would be helpful if the Final PEIR would provide a discussion and address the manner in which the Project is supportive of or detracts from the achievement of this policy. Based on the information provided in the Draft PEIR, we are unable to determine whether the Project is consistent with this core RCPG policy.

1-6 cont.

11.06 Clean up the contamination in the region's major groundwater aquifers since its water supply is critical to the long-term economic and environmental health of the region. The financing of such clean-ups should leverage state and federal resources and minimize significant impacts on the local economy.

SCAG staff comments. The Draft PEIR, on page 3-3, includes a mission statement that suggests, "The purpose of the Optimum Basin Management Program is to develop a groundwater management program that enhances the safe yield and water quality of the basin, enabling all groundwater users to produce water from the Basin in a cost-effective manner." Project goals outlined on page 3-4 support this policy. The Project is consistent with this core RCPG policy.

1-7

11.07 Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.

SCAG staff comments. The Draft PEIR in Section 4.13 (Utilities) provides a discussion on wastewater collection and treatment facilities. The Inland Empire Utilities Agency operates a number of wastewater treatment facilities. One of these facilities is designed to produce recycled water that can be used for non-potable purposes including industrial and irrigation purposes in the western region of the Chino Basin (page 4-413). The Project is consistent with this core RCPG policy.

CONCLUSIONS AND RECOMMENDATIONS:

1. As noted in the staff comments, the Optimum Basin Management Program is consistent with or supports many of the core and ancillary policies, actions and goals in the Regional Comprehensive Plan and Guide (RCPG), and Regional Transportation Plan (RTP).

1

1-7 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

1-8 Please refer to the response to comment 1-6 provided above which clearly demonstrates consistency with core policy 11.02.

1-8 cont. 2. Based on the information in the Draft EIR, we are unable to determine whether the Project is consistent with core policy 11.02. The Project is partially consistent with core policy 5.11.

1-9 3. The Final EIR should address the relationships (consistency with core policies and support of ancillary policies) to SCAG's Regional Comprehensive Plan and Guide and discuss any inconsistencies between the proposed project and applicable regional plans. The response should also discuss any inconsistencies between the proposed project and applicable regional plans. We suggest that you identify the specific policies, by policy number, with a discussion of consistency or support with each policy.

1-10 4. All mitigation measures associated with the project should be monitored in accordance with CEQA requirements.

1-9 The responses above fully address the consistency of the proposed project, implementation of the OBMP, with the RCPG's core and ancillary policies. For the reasons outlined under response to comment 1-1, there is no need to review this project on a policy by policy basis. Please refer to pages 4-16 through 4-19 and the specific topical discussions for an analysis of the project's consistency and conformance with regional plans and environmental policies.

1-10 The Final PEIR for the OBMP project contains a detailed mitigation monitoring program to ensure compliance with the mitigation measures set forth in this document. Each agency that adopts and implements the OBMP will oversee their individual project to ensure conformance with these measures in accordance with CEQA requirements.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Roles and Authorities

THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS is a *Joint Powers Agency* established under California Government Code Section 6502 et seq. Under federal and state law, the Association is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). Among its other mandated roles and responsibilities, the Association is:

Designated by the federal government as the Region's ***Metropolitan Planning Organization*** and mandated to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program pursuant to 23 U.S.C. 134(g)-(h), 49 U.S.C. 1607(f)-(g) et seq., 23 C.F.R. 450, and 49 C.F.R. 613. The Association is also the designated ***Regional Transportation Planning Agency***, and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080.

Responsible for developing the demographic projections and the integrated land use, housing, employment, and transportation programs, measures, and strategies portions of the ***South Coast Air Quality Management Plan***, pursuant to California Health and Safety Code Section 40460(b)-(c). The Association is also designated under 42 U.S.C. 7504(a) as a ***Co-Lead Agency*** for air quality planning for the Central Coast and Southeast Desert Air Basin District.

Responsible under the Federal Clean Air Act for determining ***Conformity*** of Projects, Plans and Programs to the State Implementation Plan, pursuant to 42 U.S.C. 7506.

Responsible, pursuant to California Government Code Section 65089.2, for ***reviewing all Congestion Management Plans (CMPs) for consistency with regional transportation plans*** required by Section 65080 of the Government Code. The Association must also evaluate the consistency and compatibility of such programs within the region.

The authorized regional agency for ***Inter-Governmental Review*** of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12,372 (replacing A-95 Review).

Responsible for reviewing, pursuant to Sections 15125(b) and 15206 of the CEQA Guidelines, ***Environmental Impact Reports*** of projects of regional significance for consistency with regional plans.

The authorized ***Areawide Waste Treatment Management Planning Agency***, pursuant to 33 U.S.C. 1288(a)(2) (Section 208 of the Federal Water Pollution Control Act)

Responsible for preparation of the ***Regional Housing Needs Assessment***, pursuant to California Government Code Section 65584(a).

Responsible (along with the San Diego Association of Governments and the Santa Barbara County/Cities Area Planning Council) for preparing the ***Southern California Hazardous Waste Management Plan*** pursuant to California Health and Safety Code Section 25135.3.

BILL LOCKYER
Attorney General

COMMENT LETTER #2

State of California
DEPARTMENT OF JUSTICE

RONALD REAGAN BUILDING
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June 22, 2000

VIA UPS NEXT DAY MAIL

Neil Clifton
INLAND EMPIRE UTILITIES AGENCY
9400 Cherry Ave., Bldg. A
Fontana, Ca 92335

RE: OBMP Programmatic DEIR Comments

Dear Mr. Clifton:

Enclosed are the Comments on the Draft Program Environmental Impact Report prepared by Geomatrix Consultants, Inc., for the State of California producers in the Chino Basin.

In addition, attached are previous comments filed on December 16, 1999 and February 1, 2000.

If you have any questions, please contact me.

Very truly yours,

Marilyn H Levin

MARILYN H. LEVIN
Deputy Attorney General

For BILL LOCKYER
Attorney General

cc: Jack Hagerman

c:\dat\wp8\levin\letter\Clifton-062200-OBMP

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GEOMATRIX

June 15, 2000
2064.08

Ms. Marilyn Levin
Deputy Attorney General
California Department of Justice
Ronald Reagan Building
300 South Spring Street, Suite 5212
Los Angeles, CA 90013

Subject: Comments on Draft Program Environmental Impact Report for Chino Basin OBMP

Dear Ms. Levin:

At your request, Geomatrix Consultants, Inc. (Geomatrix) has prepared this letter to transmit our comments regarding the Draft Program Environmental Impact Report (DPEIR) for the Optimum Basin Management Program (OBMP) for the Chino groundwater basin. The comments presented here are based on our review of the DPEIR. Our review has focused on DPEIR content related to groundwater flow, groundwater quality, and land subsidence. The comments are organized as follows:

Broad Issues: comments in this category relate to relatively fundamental areas in which the DPEIR may need to be revised or supplemented for completeness or accuracy.

Specific Comments: comments in this category relate to specific areas or language in the DPEIR that may need to be revised for completeness or accuracy.

Broad Issues

2-1

Groundwater Flow and Management Zone Boundaries

The DPEIR (page 4-92) appears to overstate the degree of hydraulic separation between certain management zones. Specifically, the boundary between MZ1 and MZ2 near CIM appears to reflect parallel flow lines rather than a geologic structure or other physical feature. Historical groundwater elevation contours are relatively smooth and continuous across this boundary, suggesting absence of a physical barrier. It may be misleading to present an expectation that water resources management activities in one zone have little to no impact on others. For example, Figures 4.5-50 and 4.5-51 both show simulated flow of groundwater from MZ1 into MZ2, either with or without OBMP facilities. This issue is of concern for CIM, which straddles the boundary between these two zones, and is relatively near potential locations for future OBMP desalter extraction wells anticipated for MZ2. The potential influence of groundwater extraction from MZ2 on groundwater levels and groundwater flow in nearby parts of MZ1 in the southern part of the basin must be considered for the OBMP and component projects.

RESPONSES TO COMMENT LETTER #2
STATE OF CALIFORNIA
DEPARTMENT OF JUSTICE

2-1 Geomatrix Consultants believes that the degree of hydraulic separation between management zones is overstated in the DEIR on page 4-92. The issue of concern for CIM, which straddles the boundary, is that desalter extraction wells from MZ 2 may affect groundwater levels and flow in MZ 1. The description of management zones given in the document is consistent with that definition given on page 2-3 of the OBMP Phase I Report prepared by Wildermuth Environmental, and also that definition given in the TDS and Nitrogen Study (Wildermuth, 2000). The management zone boundaries were developed based on groundwater level maps for several years including 1965, 1969, 1974, 1977,1983, 1991, and 1997. The management zone boundaries described in the OBMP and in the PEIR are representative of the flow systems seen in each of these historical groundwater level maps. In some cases the management zone boundaries represent no-flow boundaries such as bedrock outcrops and faults. The boundary between Management Zones 1 and 2 can move slightly with wet year and dry year recharge and with changes in pumping patterns. The modeling work done thus far suggests that these boundaries change very little if the OBMP is implemented. The boundary between Management Zones 1 and 2 will change dramatically if the OBMP is not implemented. This occurs because groundwater production in the southern part of the basin will no longer resemble the historical pumping patterns.

While these management zones are helpful for identifying general trends for administering the Basin, they do not preclude the management of Chino Basin as a whole. Prior to desalter installation, groundwater modeling must occur to identify impacts to surrounding areas. Mitigation measures for potential desalter-related impacts have been provided, and the location of the management zone boundaries does not affect how the mitigation measures must be implemented for this issue. Thus, the potential influence of groundwater extraction from Management Zone 2 on groundwater levels and on groundwater flow in nearby parts of Management Zone 1 will be addressed when project specific impacts can be forecasted following the modeling studies that will be performed. In this way, potential impacts will be adequately addressed, and no significant impacts will result.

Groundwater Quality

The potential impact of OBMP activities on movement or expansion of existing areas of degraded groundwater is discussed in several places in the DPEIR in context of recharge or desalter wellfield activities. In item 2 on page 4-151, Figure 4.5-55, which shows simulated
2-2 movement of groundwater plumes with and without the OBMP, is used as a basis for concluding that there is no significant difference in mobilization of plumes between the OBMP and non-OBMP conditions. The type and detail of analysis completed for the DPEIR do not appear to be sufficient to support this conclusion. To our understanding, the groundwater flow model used as a basis for this simulation of plume movement has not been developed as a tool for simulation of chemical fate and transport in groundwater, and its application for this purpose is not appropriate. Figure 4.5-55 also appears to neglect the fact that certain areas of degraded groundwater are already hydraulically contained or managed by existing remediation programs. These programs, such as that in progress at CIM, have been developed independently of the OBMP, have been reviewed and approved by the RWQCB and/or other regulatory agencies, and will prevent or substantially reduce the potential for movement or expansion of these areas of
2-3 groundwater degradation with or without the OBMP. Thus, it is inaccurate and misleading to suggest that a "plume" of degraded groundwater such as that shown at CIM will move laterally a significant distance, either with or without the OBMP. The DPEIR acknowledges that additional project or site-specific studies would need to be done to confirm the future validity of this conclusion; this point should be emphasized more clearly.

Mitigation measure 4.5-15 states that modeling shall be conducted to evaluate potential impacts of recharge if proposed for a location near a known groundwater quality anomaly, and specifies
2-4 conditions under which expected impacts would require relocation of the recharge. These conditions include impact of a domestic water production well a minimum of one year earlier than would otherwise occur, or contamination of more than 5,000 acre-feet of additional groundwater within a five year period. These conditions may not address a sufficiently broad range of scenarios under which impacts of recharge on an existing groundwater quality anomaly could result in adverse consequences to parties attempting to manage the anomaly.

Subsidence

The PEIR correctly identifies that continued or increased groundwater extractions from deeper aquifer zones in the southwest part of the basin may contribute to additional subsidence and related ground distress. However, it suggests that potential subsidence is restricted to an area within MZ1, and describes or shows several somewhat contradictory interpretations of the limits
2-5 of existing subsidence. For example: mitigation measure 4.4-14 refers to Figure 4.4-16, but this figure does not clearly show limits, may not reflect current conditions, and does not address conditions within CIM; text on page 4-64 states part of the existing SAWPA desalter wellfield is in the subsidence zone; labeled areas on 4.5-18 and 4.5-19 do not show this, and may not coincide with Figure 4.4-16. Definition of existing areas of subsidence will be important in context of the mitigation measures identified in the DPEIR, and the DPEIR should distinguish

2-2 IEUA disagrees with this conclusion. The analysis used to estimate the movement of known water quality anomalies is based on advection only and represents a conservative estimate of the relative rate of transport of these anomalies. Note that most of the known water quality anomalies in the basin are not well characterized and to apply more detailed transport modeling at this stage of review and analysis techniques is not justified nor would it add to the accuracy of the model predictions. There is, however, sufficient data to make a forecast for the Basin as a whole which will be followed by more detailed engineering investigations and modeling evaluations as specific projects are proposed and evaluated.

2-3 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. For this analysis it was assumed that existing mitigation measures were not in place to estimate the effects of the OBMP on the rate of transport of the water quality anomalies. This primarily affects the estimated rate of transport of the General Electric Flat Iron plume in northwest Ontario and a VOC plume on the CIM facility. A remediation plan to mitigate the GE plume has been implemented and a remediation plan for CIM is under construction but not yet operational.

It should first be noted that remediation programs are actually borne out of prior actions that have resulted in negative environmental effects, and these past actions should not constrain IEUA and other parties, from implementing the OBMP with the intent of having a largely beneficial impact on the Basin. IEUA and related parties actions under the OBMP will have almost wholly positive impacts on the Basin, without having previously caused negative impacts to the Chino Basin that require remediation activities. Thus it remains the burden of the entity responsible for causing the need for remediation to contain the plume in the future, regardless of OBMP implementation, which is intended to benefit the majority of basin producers.

2-4 It is true that there may be additional financial burdens incurred by parties attempting to manage the anomaly that they was created by a specific party, resulting from plume mobilization due to the implementation of the OBMP. The engineering investigations and modeling required for specific recharge projects will assure that the significance of impacts will be controlled to a nonsignificant level of impact. Also, please refer to comments in Subchapter 4.10 which provides additional information on this topic.

2-5 Please refer to responses to comment letter #11 which addresses subsidence issues in some detail. Figure 4.4-16 shows subsidence contours in the City of Chino as measured during ground level surveys by Kleinfelder (1993, 1996, 1999), as well as the locations of ground fissures at CIM as delineated by Geomatrix (1994). Together, these areas are outlined in Figures 4.5-18 and 4.5-19, are labeled as the "Estimated Area of Regional Subsidence," and represent the area of known and measured subsidence and ground fissuring. However, recent synthetic aperture radar imagery suggests that ground surface is occurring on a more regional (Basin-wide) scale. Based on the data at this stage, it is assumed that subsidence impacts can be fully controlled or mitigated. If future modeling does not verify this finding, then an subsequent EIR will be required.

more clearly between the existing subsidence area and area(s) of future potential subsidence. Although MZ1 clearly contains the area of greatest recorded subsidence, the potential for subsidence may also exist in MZ2 or elsewhere in the basin.

The specific performance criteria listed for mitigation of subsidence concerns may be ambiguous or difficult to interpret or implement. These criteria include the following.

- *The implementation of OBMP facilities shall not in any way contribute to subsidence conditions in pre-existing subsidence zones (as shown in Figure 4.4-16).* This standard may be problematic to implement without clearer definition of baseline conditions. As noted above, it is not clear that the DPEIR has sufficiently defined areas of known subsidence. Aquitard compaction resulting in subsidence is a relatively slow process; the onset will lag behind the start of pumping, and it may continue even after pumping is reduced or stopped. Accordingly, it may be difficult to associate subsidence of small magnitude with any specific groundwater extraction event or project, and it may be difficult to demonstrate or agree on whether a project will (or has) contributed to subsidence.

2-5 cont.

- *The OBMP will not cause or contribute to any new, significant subsidence impacts greater than a total of six inches in magnitude over the planning period. Impacts less than 6 inches are considered to be less than significant.* As with the preceding discussion, important issues here include establishing current baseline conditions and defining "contribute to."

- Parts of mitigation measure 4.4.15a are ambiguous or may conflict with the preceding two measures. The condition "impacted by declines in water levels" has not been clearly defined. Deepening of another producer's well is suggested as a potential mitigation measure, but deepening a well would shift production to deeper aquifer zone(s), which could contribute to subsidence. If subsidence at a distance of ¼ mile from a wellfield is 6 inches, subsidence nearer the wellfield may be greater, and would appear to conflict with mitigation measure 4.4-13.

Specific Comments

In discussions of OBMP Element 4 on page 3-19 of the DPEIR, and possibly elsewhere in the document, it should be noted that CIM already is conducting or planning groundwater management actions consistent with the OBMP. For example, CIM currently produces most of its groundwater from relatively shallow zones within the aquifer system, and will be further decreasing its production from deeper zones as part of planned activities. In addition, CIM already is producing and treating groundwater as part of a remediation program, and is in the process of constructing a centralized treatment plant for removal of nitrate, hardness, and VOCs.

2-6

2-7 The DPEIR states on page 4-2 that it addresses uncertainty in specific project plans by incorporating worst-case assumptions. It is noted that because of the very complicated and

2-6 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

2-7 The commentator appears to have taken this example out of context to support the comment regarding "worst case" assumptions. In reality, this mitigation measure takes just such an example into consideration. If one reads the mitigation measure in its entirety, it provides an alternative to deepening a well if such deepening may adversely impact subsidence zones. The measure states that "alternative access to equivalent quantity and quality of water will be provided to affected surrounding parties. This water may be provided through distribution of funding to affected parties for the deepening of existing wells, or may be provided through the delivery (paid for by the implementing agency) of comparable or improved quality and quantity of water from other sources." If such deepening of a well is forecast to have a significant subsidence-related impact, then according to this DEIR, such a measure could not be implemented, and instead an alterative water source would be required to be provided to the affected party at no additional cost. Thus, the worst-case scenario is adequately address by this DEIR and the proposed suite of mitigation measures.

2-7 cont. interconnected set of issues involved in management of the basin, an assumption that is "worst-case" relative to certain criteria may be much less conservative in context of others. This is illustrated by the preceding comment on mitigation measure 4.4.15a, in which it is noted that deepening a well may mitigate a decrease in well yield, but could have an adverse impact on subsidence. It may be appropriate to acknowledge this in the DPEIR.

2-8 Page 4-59 of the DPEIR (second bulleted item, lower part of page) suggests that Geomatrix's interpretation of causes of subsidence and ground fissuring were based in part on ground level surveys (1987 – 1999). This statement should be clarified because Geomatrix's study of subsidence was completed in 1994 and thus did not utilize data collected through 1999. In addition, it should be made clear that the subsequent paragraph is not a continuation of interpretations or reasoning attributed to Geomatrix. Although Geomatrix agrees with the interpretation that depressurization of deeper aquifer zones is a likely cause of recent subsidence, we do not necessarily agree with the suggestion in that paragraph that "continuity between the forebay and deep aquifers" must be "interrupted" for depressurization of aquitards or subsidence to occur.

2-9 On page 4-94 in the DPEIR or elsewhere if appropriate, it should be specifically noted that water level data have been collected from water supply wells and monitoring wells at CIM by the State as part of its ongoing groundwater management efforts.

2-10 In the mitigation measures listed on pages 4-162 and 4-163 of the DPEIR, it may be appropriate to state that wells should be constructed in a manner that will reduce the risk of movement of groundwater between zones of different water quality. Although this is required under California well standards, it may be appropriate to mention it given the amount of detail included in mitigation measures associated with other drilling and construction activities.

2-11 The location of the Stringfellow Superfund Site is shown on Figure 4.5-46. It may also be appropriate to show this location on Figure 4.5-55.

2-12 As shown on figure 4.5-50 of the DPEIR, predicted groundwater elevations for ultimate conditions without the OBMP are on the order of 40 to 60 feet above ground surface in the vicinity of CIM. These water levels are substantially higher than those shown for 1933. It is not clear whether geologic conditions in the area would allow development of such hydraulic conditions. The likelihood of these conditions should be evaluated and the projection revised if necessary.

2-8 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Geomatrix Consultant's comments are acknowledged and will be reflected in the final document that is presented to the Board for consideration. Page 4-59 of the DEIR references a Geomatrix ground level survey and incorrectly dates the survey from 1987-1999. This statement is inaccurate and should instead reference studies from 1987-1994. Further, as a point of clarification, the last italicized paragraph on page 4-59 is a continuation of Wildermuth Environmental's Task Memorandum: Program Element 4, 9-11, 1999, not a continuation of Geomatrix's analysis. It is acknowledged that Geomatrix does not necessarily agree with the suggestion that "continuity between the forebay and deep aquifer must be interrupted for depressurization of aquitards or subsidence to occur" (DEIR, 4-59).

2-9 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

2-10 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The text of the OBMP PEIR will be modified to include this comment.

2-11 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Figure 4.5-55 will be modified to show the Stringfellow Superfund Site.

2-12 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The basis for findings in Figure 4.5-50 has been evaluated and will be revised prior to finalizing the OBMP PEIR.

It may be necessary for the DPEIR to clarify:

- to what extent or under what circumstances projects being planned or constructed separately from the OBMP would be considered "related to" or providing mitigation under the OBMP; and

2-13

- to what extent or under what circumstances projects being planned or constructed separately from the OBMP would be subject to mitigation measures required under the OBMP.

Geomatrix appreciates the opportunity to provide continued services on this matter. Please call us if you have any questions.

Sincerely,
GEOMATRIX CONSULTANTS, INC.

Craig Stewart

Craig Stewart
Principal Hydrogeologist

cc: Jack Hagerman, CIM

2-13 Projects that are being implemented totally independent of the OBMP will be evaluated on a case-by-case basis. Such projects may be considered related to the extent that they fulfill OBMP objectives. Project's being independently implemented would not be required to implement OBMP PEIR mitigation measures. It is assumed that independent projects would implement mitigation measures as defined in compliance with the CEQA determination made for such projects.

The Department of Justice included a copy of their comments submitted on the Notice of Preparation and a February 1, 2000. These letters do not comment on the OBMP PEIR and are therefore not provided responses.

BILL LOCKYER
Attorney General

State of California
DEPARTMENT OF JUSTICE

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December 16, 1999

Neil Clifton
INLAND EMPIRE UTILITIES AGENCY
Post Office Box 698
Rancho Cucamonga, California 91729-0697

RE: Notice of Preparation of a Program Environmental Impact Report to Address Implementation of the Optimum Basin Management Program for the Chino Basin

Dear Mr. Clifton :

The following comments are provided in response to the above-referenced Notice of Preparation dated November 9, 1999, on behalf of the State of California and its departments or agencies that own land and/or produce groundwater in the Chino Basin. The State of California is a member of the Agricultural Pool as defined in the 1978 Chino Basin Judgment. It is my understanding that receipt of comments has been extended to December 17, 1999. Individual state agencies and departments may be submitting separate comment letters.

DESCRIPTION OF STATE OF CALIFORNIA INTERESTS

The California Department of Corrections owns approximately 2600 acres in the Southern portion of the Chino Basin. Three correctional facilities operate on the State held property in the Basin. These facilities are the California Institution for Men(CIM), the California Institution for Women (CIW), and the Herman G. Stark Youth Training School (YTS). Among the other facilities on the CIM site is the Prison Industries dairy (PIA) that utilizes significant acreage for agricultural operations.

The California Institution for Men has nine (9) agricultural wells - (8 active) , four (4) domestic water wells, and a sewage treatment plant that provides secondary treatment to the wastewater effluent for its Minimum Support Facility, Reception Center Central and its Reception Center West facility. The CIM Reception Center East and the YTS are connected to the City of Chino's Wastewater System. CIW has four (4) inactive wells and one (1) active well and discharges its waste to the Santa Ana Regional Interceptor line to Orange County. There are plans to drill two additional domestic wells south of the Central facility and reduce pumping from two other domestic wells. These changes are being implemented to address a localized PCE contamination problem at the CIM site and, we believe, may have a positive effect on the subsidence issue.

The Department of Corrections is constructing an Ion Exchange Treatment Plant east of the

water storage reservoir on the site to address water quality problems among the three correctional facilities, including nitrates and total dissolved solids. The plant will provide domestic water treatment to soften water, lower the TDS to comply with sewage treatment plant effluent discharge requirements, will lower nitrate levels and will include a Granular Activated Carbon component for PCE and TCE removal. The plant will produce brine waste to be discharged into the SARI line.

The State of California, Department of General Services, has initiated a study of the CIM Waste Water Treatment System to determine whether the treatment plant should be expanded to accept additional sewage flows from the CIM East facility and the Youth Training School and whether tertiary treatment should be considered so that CIM's recycled water can be utilized for additional non-potable uses.

In addition to the Department of Corrections activities, the California Department of Transportation purchases its water from municipal entities instead of pumping groundwater and the California Department of Fish and Game previously utilized one well on its property. The Department of Fish and Game has filed separate comments dated December 14, 1999. The State of California, on behalf of the Department of Toxic Substances Control, presently owns the land identified as the Stringfellow superfund site and is involved in a major cleanup of the area.

PROGRAM EIR

The Program EIR should specifically identify the State of California and its agencies and departments owning land and producing water from the Chino Basin. The EIR should include identification of potential beneficial projects identified by the state and potential impacts to these projects, including adverse water quality and quantity impacts. The EIR should additionally address the impact of the proposed projects on the continued use of the State's existing wells and its ability to drill new wells in the vicinity of its land. Specifically, the State is interested in a discussion of the impact of the proposed wellfields and the water supply projects proposed in the Draft Water Supply Facilities Report dated November 9, 1999 on the State's wells and the surrounding groundwater.

The Program EIR should address the impact of the OBMP proposals for recharge (storm water, supplemental water, recycled water), extraction, development of new sources of supplemental water, direct use of recycled water, treatment and use of degraded groundwater, reduction of groundwater outflow, conjunctive use, basin yield maintenance , and all the additional goals identified in the Notice of Preparation, including the Program Elements 1 through 9.

The State encourages you to review prior environmental documents prepared for the Chino Basin Groundwater Storage Program by the Metropolitan Water District in 1988. Some of the concerns identified in that document may need to be revisited. including raised elevations of ground water

and increased degradation of water quality, especially in the lower portions of Chino Basin where the State of California is mainly situated.

Lastly, the EIR should address the impacts and mitigation for issues identified in the November 9th Notice of Preparation, including geologic problems, biological resource impacts, impacts from creation and expansion of water-related facilities, impact of recycling reclaimed water from increased levels of TDS and increased impairment of groundwater quality, disposal from desalting and treatment facilities, use of flood control basins for percolation of storm water and recycled water, treatment of degraded water, air quality impacts, visual, noise and cultural resource impacts by construction of program element facilities. Thank you for this opportunity to comment. The State reserves its right to submit additional comments following a more specific description of the projects to be implemented in the Program EIR.

Sincerely,

MARILYN H. LEVIN
Deputy Attorney General

For BILL LOCKYER
Attorney General

MHL:dm

BILL LOCKYER
Attorney General

State of California
DEPARTMENT OF JUSTICE

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February 1, 2000

Tom Dodson & Associates
Environmental Consultants
2150 N. Arrowhead Avenue
San Bernardino, California 92405
Attn: Tami Fincher

VIA OVERNIGHT MAIL

RE: Optimum Basin Management Program EIR

Dear Mr. Dodson:

Thank you for the opportunity to comment on Chapters 2 and 3 of the Draft Program EIR for the OBMP (See Attached). In general, I have found that the draft includes some conclusions not necessarily reached by the Watermaster group during the OBMP process.

Specifically, the report seems to:

1) De-emphasize desalters and emphasize supplemental water and conjunctive use.

2) Includes statements as conclusions without mentioning the author of the conclusion (especially where the "conclusions" are controversial).

3) Includes statements and conclusions about Management Zone 1 to which not all producers agree.

4) The section on Salt Management needs to be clearer. Explain why it is necessary to have better quality water for a conjunctive use program to be successful. I do not believe it is necessary to include as much historical analysis.

Please review the comments I have provided on each page. Thank you.

Sincerely,

Marilyn H. Levin

MARILYN H. LEVIN
Deputy Attorney General

For BILL LOCKYER
Attorney General

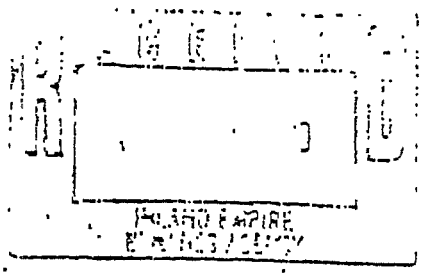
MHL:ghb

COMMENT LETTER #3

Chino Basin Water Conservation District

May 31, 2000

Inland Empire Utilities Agency
Attn: Mr. Neil Clifton
9400 Cherry Ave. Building A
Fontana, CA 92335



Re: Draft PEIR for the OBMP

Dear Mr. Clifton:

Upon review of the referenced draft PEIR the Conservation District has the following comments and concerns.

3-1 1. A considerable number of "mitigation measures" were identified for the construction of recharge facilities and their appurtenances. As I am sure you are aware, there are many "statutory" and "categorical" exemptions under CEQA and protections under that Judgment that are available to the agencies constructing such facilities. The Conservation District believes that the PEIR should have given more attention to these exemptions and protections. Subsequently, the PEIR should be amended to clearly indicate that the mentioned mitigation measures only apply when the recharge project construction work is not otherwise exempt under CEQA or protected under the terms of the Judgment.

3-2 2. There are two main purposes and at least one secondary purpose for constructing the recharge facilities and their appurtenances required under the "OBMP" and identified in the "PEIR for the OBMP." The first main purpose is that there is the need for the Watermaster to have new and enhanced recharge capacities in order for Watermaster to meet its obligation to recharge "replenishment water" under the 1978 Chino Basin Judgment. The second main purpose is to either maintain or enhance the "Safe Yield" of the Chino Groundwater Basin. Finally, a secondary, but very important reason for acquiring new recharge basin property and for constructing the noted recharge works is to conduct a "Conjunctive-use" program, the profits from which are intended to off-set various costs and expenses of Watermaster. As usual, the Conservation District wants to be a good neighbor and in doing so, it is committed to ensure that the recharge of good quality stormwater is maximized in the Chino Basin. In this regard, the Conservation District will entertain participation in joint projects of this nature when acceptable financial arrangements and agreements relating thereto are made. However, it is not the Conservation District's obligation to finance projects made necessary by the actions of others or that, as a

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P.O. Box 2400
Montclair, CA 91763

RESPONSES TO COMMENT LETTER #3
CHINO BASIN WATER CONSERVATION DISTRICT

3-1 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The Conservation District's comment expresses a concern about future processing under the California Environmental Quality Act (CEQA) and the application of mitigation measures to future projects. In fact, all of the available CEQA review procedures are available to individual agencies that implement projects under the OBMP framework.

To begin with, any future project implemented under the umbrella of the OBMP PEIR may not need any additional documentation, depending upon the project being within the scope of the certified OBMP PEIR in accordance with State CEQA Guideline Sections 15162 (Subsequent EIRs and Negative Declarations) and 15168 (Program EIR). IEUA envisions the following procedure for future site specific projects that it may implement on a case-by-case basis. The first step will be to prepare an Initial Study to determine if the specific project falls "within the scope of the program approved earlier" and the "program EIR adequately describes the activity for the purposes of CEQA" (Section 15168 (e) (1) and (2) of the State CEQA Guidelines). In preparing the Initial Study, a determination would be made regarding which, if any, of the identified mitigation measures should be brought forward from the OBMP PEIR to mitigate impacts for the specific project. If the specific project is adequately addressed in the OBMP EIR, then the process permits the implementing agency to publish a notice of this finding, adopt the finding at the hearing where the project is funded by the agency, and a Notice of Determination can be filed.

Because of concerns expressed by other agencies commenting on the OBMP PEIR, IEUA intends to afford other agencies that may have an interest in a project an opportunity to review the documentation (such as engineering reports or investigations and the Initial Study) with adequate time to effectively participate in the IEUA decision on the project. However, each agency that adopts the OBMP and certifies the OBMP PEIR retains the right to comply with CEQA in any fashion that meets the requirements of the statute and the State CEQA Guidelines. This would include the use of exemptions where appropriate, adoption of Negative Declarations for projects, and preparation and certification of an Addendum to an EIR, or of a Supplemental or Subsequent EIR. The procedures for making these decision are outlined in detail in Articles 18 and 19 and Sections 15180 through 15168 of the State CEQA Guidelines. Each agency must select the appropriate review process for future specific projects, but the availability of the OBMP PEIR provides an additional processing mechanism, and identifies general mitigation measures that can be used by the agency where such mitigation is required.

A flow chart outlining the proposed IEUA CEQA review process and a sample initial study evaluation form are included at the end of this Final OBMP PEIR for information.

3-2 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The financial and responsibility issues raised in this comment are complex and require resolution, but the OBMP PEIR is not the appropriate forum for this resolution. Based on discussions with the Chino Basin Watermaster, the parties to the adjudication have completed a draft document termed "Peace Agreement Chino Basin" which is addressing the issues of equitable financial arrangements and agreements relating thereto. It is anticipated that under this agreement (Article II), a review procedure by the Watermaster (Watermaster Process) would address the financial arrangements for each specific project being implemented under the umbrella of the OBMP and the concerns (such as beneficiaries of the identified recharge projects and agencies responsible for financing recharge facilities) raised in your comment are expected to be fully addressed under this process. Not only is it infeasible to effectively identify the parties involved with specific future projects at this stage of the OBMP review, the economic issues of concern raised in this comment are not considered to be issues of environmental significance in accordance with Section 15131 of the State CEQA Guidelines.

result of the construction of such works, others would receive financial rewards to the financial detriment of the Conservation District. The PEIR fails to clearly identify the ultimate beneficiaries of the identified recharge projects. It also fails to identify the agencies ultimately responsible for financing the purchase of new lands and construction of the envisioned recharge facilities in the event State Water Bond funds are either unavailable or insufficient.

3-2 cont.

3. Using State Project water for replenishment water recharge purposes has been shown to cause "midge fly" problems in and around the areas of recharge. Long-term use of State Project water may also cause "chemical" reactions between local soil and water properties. Further, as has occurred in other areas, the RWQCB may adopt standards relating to urban runoff that may result in the need to "pre-treat" urban runoff prior to recharge. The PEIR should mention these potential problems and identify potential mitigation measures, their costs, and who pays for the mitigation when the need arises from replenishment operations, when it involves conjunctive-use type operations, and when it involves "yield enhancement and maintenance" activities.

3-3

On behalf of the Conservation District I thank you for the opportunity to voice our concerns relative to this all-inclusive undertaking for the benefit of the Chino Groundwater Basin. However, the Conservation District believes that in its present form the PEIR is insufficient. In this regard however, the Conservation District is fully cognizant that the mentioned major deficiencies can in a timely manner be corrected by Watermaster by properly addressing such issues in the OBMP Implementation Agreement. As such, the Conservation District encourages Watermaster, the IEUA, and others to address these very important issues at an early date in order to avoid challenges to or delays in certification of the PEIR.

3-4

Sincerely yours,

Barrett Kehl

Barrett Kehl
General Manager

Cc: Watermaster Parties via the Chief of Watermaster Operations

OBMP-PEIR 5-31-00-2

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3-3 Discussions with IEUA and Watermaster staff indicate that potential midge fly problems associated with recharge is not dependent upon the presence of State Project Water, but any water used for recharge depending on the time of year and temperature. According to the Watermaster, the control of midge flies is funded through their office, and upon determination that midge flies are causing a local problem, appropriate chemical treatment can be applied to the standing water where problems arise. Based on long-term experience at recharge basins in the western portion of the Chino Basin, the type of chemicals used to control midges does not cause any degradation of groundwater quality in the aquifer beneath the recharge sites. The Watermaster or any other owner/operator of a specific recharge basin would use similar or newer control measures/techniques at the new recharge basins and would fund the midge fly control efforts at the recharge basins for OBMP related activities. Specific costs for such control cannot be predicted at this stage of review.

In discussing the long-term use of State Project Water (SPW) for recharge, the Watermaster staff indicates that any chemical reactions between the local soils and SPW can be mitigated using routine maintenance procedures within the recharge basins. State project water chemistry is slightly different from local or native water in that the predominant cations and anions in the water are sodium and chloride, respectively, and are calcium and bicarbonate in local water, respectively. This different chemistry may result in chemical reactions with clays in the Chino Basin and result in lower recharge rates. Watermaster has been recharging State project water in the Chino Basin since 1978 and is not aware of any decrease in recharge capacity. Such maintenance procedures could include, discing the surface, removal of algal buildup in the soil, or the mixing of soil amendments, such as lime, where appropriate. Also, Watermaster could lengthen the recharge period, use additional recharge basins or utilize injection wells. Again, the Watermaster or any other owner/operator of a specific recharge basin would utilize similar control techniques and would fund such controls as part of ongoing maintenance costs for the specific basin.

Regarding pretreatment of urban stormwater runoff before its use in recharge basins, the ultimate decision regarding need for pretreatment will be determined by the actual quality of the stormwater runoff at different locations. The State is implementing ever more rigorous non-point source pollution controls at the points of generation, so the actual stormwater runoff delivered to collection or recharge locations may not require pretreatment in the future. However, in the event that such pretreatment is required, it is assumed that the agency proposing to utilize the stormwater runoff for blending purposes at recharge basins will fund such pretreatment, or will reach agreement through the Watermaster review process to share the cost of funding in an equitable manner as outlined in the Draft "Peace Agreement Chino Basin".

3-4 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

COMMENT LETTER #4

COUNTY OF RIVERSIDE

TRANSPORTATION AND LAND MANAGEMENT AGENCY

Planning Department

Richard K. Lashbrook
Agency Director

Alexa J. Laurence, A.I.C.P.
Planning Director

June 5, 2000

Mr. Richard W. Atwater
INLAND EMPIRE UTILITIES AGENCY
9400 Cherry Avenue, Building A
Fontana, CA 92335

Dear Mr. Atwater;

We would like to comment on the Optimum Basin Management Program (OBMP) draft EIR. Riverside County is currently undertaking significant planning efforts in the Riverside County portion of the Chino Basin. For instance, the Eastvale Community Plan is located entirely within the boundaries of the IEUA OBMP and lays the groundwork for the transition of the area from dairy and other agricultural uses to urban uses. We are therefore very interested in the recommendations and findings contained in the program.

We have some concerns regarding the following conclusions/findings in the contained in Table 1.2 of the draft EIR which can be summarized by the following:

4-1 1) Potential conflicts with County General Plan and/or zoning designations for the construction of future desalination sites.

4-2 2) Increased potential for property damage from a higher risk of liquefaction in the Chino Basin

4-3 3) Water level declines in areas surrounding desalter pumping locations, which may contribute to subsidence in ground levels greater than six inches.

4-4 4) Who would bear the burden of funding the deepening of existing water wells if desalter pumping locations impact surrounding wells and producers of groundwater.

4-5 5) Possible changes in groundwater absorption rates and groundwater drainage patterns resulting from disturbances associated with the installation and maintenance of proposed monitoring equipment

4-6 6) Whether salts and contaminated material from desalination activities will be stored/transported in Riverside County after being removed.

4-7 7) Possible spread of existing contaminated groundwater plumes due to recharge activities of recycled water and the possible increase in the local hydraulic gradient. We are especially concerned about mobilizing major contaminated groundwater plumes within the Basin for recharge of 300,000 acre-feet of water in the conjunctive use alternative.

4-8 8) Conflict with the Western Riverside County Habitat Conservation plan, especially for endangered/threatened

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species within the Prado Flood Control Reservoir area. We are concerned with activities that would raise
4-8 cont. the water level in the reservoir above 505' in elevation or below 498' in elevation. There are no mitigation measures aimed at keeping the water level above 498' in elevation. We would encourage consultation with the Western Riverside County Habitat Conservation Plan representatives.

4-9 9) Land use issues associated with the displacement or loss of acreage that could be used for development. For instance, the conjunctive use alternative anticipates 250 acres of spreading basins or a substantial number of injection wells for 300,000 acre-feet of water storage.

We are particularly interested in any recommendations regarding land-use and development on soils containing manure and other dairy related pollutants. We support the IEUA's plan to clean up the basin and look forward to your completed plan and its response to the concerns we have mentioned above. If we can be of any assistance, please don't hesitate to contact us at 909-955-3265.

Respectfully,

Aleta J. Laurence

Aleta J. Laurence
Director of Planning

AJL/jrs

F:\Letters\EIOScomt2.wpd

RESPONSES TO COMMENT LETTER #4
COUNTY OF RIVERSIDE
TRANSPORTATION AND LAND MANAGEMENT AGENCY

4-1 The OBMP EIR addresses potential conflicts with local jurisdiction General Plans and zoning designations in Subchapter 4.2. The evaluation concludes that no potential for conflicts with general plans or zoning designation will occur because water facilities are permitted within all zones. This specific comment addresses potential conflicts between future desalination facilities and General Plans/zoning designation. Essentially, desalination facilities will be located in the southern portion of the Chino Basin, either just north of the San Bernardino/Riverside County boundary or within Riverside County. Throughout the OBMP EIR, the potential for land use incompatibilities is discussed, such as noise, fugitive dust, hazardous materials, loss of functioning prime agricultural land, and aesthetic requirements. Mitigation has been provided, either through avoiding the potential for such conflicts by relocating a facility, or by onsite measures designed to ensure that activities related to desalination facility operation do not significantly conflict with adjacent uses. By applying such measures to future desalination facilities on a case by case basis, IEUA is confident that such facilities can be developed without significantly conflicting with the general plan and zoning designations of the affected local land use jurisdiction.

4-2 One of the primary goals of the OBMP is to establish and maintain hydrologic control or balance within the Chino Basin. The OBMP contains a balance of recharge, pumping and water importation that is designed to achieve this long-term hydrologic balance throughout the Basin. As the analysis of liquefaction concluded on page 4-62 of the PEIR, the potential for liquefaction will be greater under the no-OBMP alternative than with implementation of the OBMP. This is because the gradual phasing out of agricultural pumping in the southern portion of the Chino Basin would not necessarily be offset by increased pumping without the OBMP. The result of this curtailment of agricultural pumping will be to increase the elevation of the groundwater table in these areas. The evaluation in the OBMP PEIR also concluded that a conjunctive use program could raise the groundwater table in the southern portion of the Chino Basin and this might contribute to increased liquefaction hazards. Therefore, mitigation was identified to control this potential adverse impact. Essentially, modeling studies will be used to determine the potential for greater liquefaction hazards within the southern portion of the Basin at the time a conjunctive use program is proposed, and it would be monitored and offset by increased pumping of groundwater within those areas which might be adversely impacted. The groundwater produced could be used directly by local water purveyors if the quality is adequate; it could be treated in a desalter for subsequent use; or it could be used for other purposes not yet defined. The net result is that liquefaction hazards can be controlled to a nonsignificant level of impact within those areas where a potential conflict with surface land uses would occur.

4-3 The subsidence issue is particularly complex because the effects of lowering the ground water table on the ground surface is more difficult to forecast than other geotechnical hazards, such as liquefaction. A potential does exist for subsidence impacts to occur, and the six-inch subsidence threshold has been established to permit adjustments in pumping regimes within such areas to reduce the potential for significant subsidence to occur over a large area of the southern portion of the Chino Basin. The goal in the OBMP is to ultimately achieve a level of hydrologic control where extractions will be balanced by recharge over the long-term, and as a result, major declines in groundwater level will not occur. The finding in the OBMP EIR is that through a variety of programs available to the Watermaster and participating agencies, significant adverse subsidence can be either avoided or controlled. It is recognized that this will require site specific hydrogeological investigations for specific well fields in the future, the establishment of a more comprehensive and detailed baseline for existing subsidence, an effective, continuous subsidence monitoring network, and the prompt implementation of measures to counter subsidence should it be determined to be occurring once a major groundwater extraction program is initiated.

4-4 Please refer to the responses to comments above under comment letter #3. In discussions with the Watermaster and IEUA regarding the existing desalter operations, the operating agency has assumed responsibility for bearing the burden, i.e. compensating, any producers whose groundwater production costs rise as a result of the desalter operations. The Watermaster is in the process of finalizing an agreement ("Peace Agreement Chino Basin) that establishes a process for identifying the responsible participants in a specific OBMP project in the future and this process will also identify the parties that receive benefits and assume responsibilities for constructing and operating such future specific facilities. Thus, more than one participating agency may assume the burden of funding measures to offset increases in costs of groundwater production by a producer in the vicinity of an OBMP project requiring groundwater production. At a minimum, the single entity constructing and operating such a facility would assume the responsibility for holding an adjacent producer "whole".

4-5 The proposed monitoring wells and equipment are forecast to affect approximately 11.5 acres out of ~225,000 acres within the Chino Basin. Mitigation measures identified in Subchapter 4.5 ensure that even for this limited area of surface disturbance, no significant impacts result from increasing impervious surface or altering drainage patterns. See specifically, several of the measures beginning with 4.5-12 through 4.5-7.

4-6 Based on operation of the existing desalter operations, all rejected salts will be transported in the SARI line or other brine lines serving the project area. In the future, it is possible that contaminated materials, such as used activated carbon, may need to be transported to regeneration locations. The OBMP PEIR discussed the requirements and procedures for handling hazardous materials and wastes, and identifies mitigation measures where existing regulations do not appear to be sufficient to assure that such handling and transport can be conducted safely. It is not anticipated that large volumes of acutely hazardous materials/wastes will have to be transported to or from the site for activities in support of the OBMP.

4-7 Detailed discussions of potential spreading of existing ground water contamination is analyzed in two Sections 4.5 and 4-10. Such a potential exists, but procedures have been established to control this potential impact to a nonsignificant level. See mitigation measures 4.10-9 through 4.10-11 and 4.5-12 and 4.5.13.

4-8 Detailed mitigation measures have been identified to address the OBMP's potential impacts on listed and sensitive species located within the Chino Basin, particularly the Prado Basin area. See measures under Subchapter 4.8. As previously explained, see responses to comments 4.2 and 4.3 above, the OBMP goal is to achieve hydrologic control or long-term balance within the Chino Basin through the use of recharge and pumping programs at optimal locations in the Basin. The text in Subchapter 4.8 discusses surface water levels within the Prado Basin area, and the greatest concern is too much surface water (caused by a combination of surface runoff and rising groundwater) in the Prado area, not too little. The likelihood is that near-term population growth within the watershed (above Prado Dam) will provide sufficient additional storm runoff flows to the Santa Ana River to more than offset the potential acceleration of inflow to the Chino Basin from the river that might lower the water level behind the dam below the 498' elevation. In response to this comment, the IEUA will include an evaluation of surface water reductions in their modeling evaluations to determine whether a proposed OBMP project may lower surface water below the 498' elevation. Note, that it is not possible to address the potential for such water elevation declines to occur naturally, nor can participating agencies affect the activities of other agencies within other portions of the Santa Ana River watershed. All the participating agencies can address is the future man-made causes of water elevation fluctuations. Further, the Western Riverside County Habitat Conservation Plan representatives will be notified when any OBMP project is being considered in the future that could directly or indirectly modify the water level in the Prado Basin.

4-9 The maximum of 250 acres necessary for recharge and/or injection facilities constitutes less than one percent of the 225,000 acre project area. These areas will primarily be located in the northern and middle portions of the Basin, outside of Riverside County. This impact to the amount of area available for development in Riverside County will be *de minimus*. Further, other water related facilities would need to be constructed by various water agencies in the future to meet customer needs if the OBMP is not implemented. Implementation of the OBMP will result in an organized and planned water supply system for the Chino Basin that will likely occupy less area than that which would be required if individual agencies each constructed separate facilities. Land use impacts associated with the displacement or loss of acreage that could be used for development is forecast to be less than significant. Impacts may even be beneficial due to the implementation of the OBMP, when compared to future no-project conditions. Note that proposals to utilize areas of potential development for conjunctive water use would require that the land be acquired by the agency proposing conjunctive use and that the effect of removing such acreage from potential land development would not conflict with future growth projections within the Chino Basin. Equally important, areas for recharge would typically be located in the vicinity of active flood plains where the use of the land may already be restricted.

Santa Ana Watershed Project Authority

SAWPA

COMMISSION FOR THE PROJECT AUTHORITY
EASTERN MUNICIPAL WATER DISTRICT
INLAND EMPIRE UTILITIES AGENCY
ORANGE COUNTY WATER DISTRICT
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT
WESTERN MUNICIPAL WATER DISTRICT

GENERAL MANAGER

P. JOSEPH GRINDSTAFF

June 6, 2000

Mr. Richard W. Atwater
Inland Empire Utilities Agency
9400 Cherry Avenue, Building A
Fontana, CA 92335

Re: Draft PEIR for the OBMP

Dear Mr. Atwater:

SAWPA staff has received the draft Program Environmental Impact Report for the Optimum Basin Management Program and is supportive of ongoing efforts to move quickly into the implementation phase of the program. Staff has reviewed the report and has prepared the following comments:

Under Section 5.4, a Santa Ana Watershed Project Authority (SAWPA) Alternative is described. We have identified several discrepancies, which should be clarified.

5-1 1) In the first sentence of this section, the SAWPA alternative is described as a proposed project to be effectuated by SAWPA rather than local agencies in Chino Basin. This statement is in error. At no time has SAWPA ever indicated that the conceptual plan, described as the " Chino Basin Cleanup and Conjunctive Use Plan", would be implemented by SAWPA and not the local agencies. It has been the policy and intent of SAWPA to work with our member districts and local agencies in planning and implementing studies and projects to accomplish mutual water resource goals. Since the commencement of the OBMP process, SAWPA has clearly indicated in several OBMP meetings that it was not our intent to develop an alternative plan for effective water resource management of the Chino Basin but rather to share conceptual plans in support of the OBMP process. SAWPA's draft conceptual plans developed only a year ago were primarily for the purpose of justifying the funding requests for Proposition 13 and was not intended to be a definitive plan. SAWPA fully supports the development of the Watermaster's memorandum of principles and the implementation of the OBMP implementation plan.

5-2 2) The SAWPA Alternative describes SAWPA's program for the Santa Ana River Watershed. It is composed of several components that are applied to vast areas outside of the Chino Basin area. In evaluating alternatives, the SAWPA Alternative should not necessarily be considered as an alternative to the OBMP but as a complimentary watershed-wide strategy. The projects and plans laid out for the Santa Ana River watershed seek to support local agency goals for Chino Basin of long-term water storage as in conjunctive use storage, water quality

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RESPONSES TO COMMENT LETTER #5
SANTA ANA WATERSHED PROJECT AUTHORITY

5-1 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The text on page 5-7 will be modified to indicate that projects contained in the conceptual plan ("Chino Basin Cleanup and Conjunctive Use Plan") would be implemented by local agencies in the Chino Basin, not SAWPA. The identification of this conceptual plan as an alternative was included in the OBMP PEIR because it contained different, or additional projects, not contained in the OBMP. To this extent the projects contained within the conceptual plan was considered as a "CEQA" alternative for comparative evaluation.

5-2 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Although the OBMP PEIR alternative evaluation is more comprehensive than the conceptual plan alone, it did include the identified conjunctive use projects mentioned in this comment.

cleanup, and water reclamation and conservation; however, only the section of the SAWPA program description entitled "Chino Basin Cleanup and Conjunctive Use Plan" focuses on the Chino Basin area.

A better approach for Section 5.4 would be to compare the OBMP to the section of the SAWPA Watershed program relating to Chino Basin Cleanup and Conjunctive Use Plan only. Under this conceptual plan, SAWPA proposed a number of new water conveyance facilities that link the new desalting system to new reservoirs near the WFA/JPA Agua de Lejos WTP and the Three Valleys Miramar WTP to allow agencies to substitute desalted water for MWD imported water. Also, a far more aggressive conjunctive use storage quantity is proposed over the next 20 years with 325,000 AF identified for provide drought storage to serve local needs and an additional 500,000 AF for regional conjunctive use. It was understood that the impacts beyond 323,000 AF would need to be environmentally addressed and mitigated for. SAWPA fully supports the concept of a Chino Basin conjunctive use plan that can develop up to 500,000 AF of new regional groundwater storage.

5-2 cont.

3) The first paragraph on Page 5-8 indicates that the SAWPA program seeks to manage the whole of the environment by placing equal importance on native habitat enhancement while managing water supply and quality. It is not SAWPA's intention to manage the environment nor to place equal importance of native habitat to managing water supply and quality. It is true that native habitat enhancement is very important and should be kept in balance with any water supply and quality improvement project. This was our intent by placing this component in the SAWPA program. By balancing these needs, greater effectiveness in reaching water resource goals can be achieved. Further, many of the native habitat enhancement projects actually increase water supply by replacing high water use exotic plants with native habitat. Water quality cleanup can often occur through natural processes of new wetlands and open space.

5-3

We hope these comments clarify several statements indicated in Section 5.4 of the report. If you have any questions regarding these statements, please feel free to contact us.

Very truly yours

Mark R. Norton, P.E.
Sr. Water Resources Engineer

5-3 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

COMMENT LETTER #6

MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Office of the General Manager

June 12, 2000

Mr. Neil W. Clifton
Inland Empire Utilities Agency
9400 Cherry Avenue, Bldg. A
Fontana, California 92335

Dear Mr. Clifton:

Draft Program Environmental Impact Report for the
Optimum Basin Management Program for the Chino Basin

The Metropolitan Water District of Southern California (Metropolitan) has received the Draft Program Environmental Impact Report (PEIR) for the Optimum Basin Management Program (OBMP) for the Chino Basin. The purpose of the OBMP is to develop a groundwater management program that enhances the safe yield and the water quality of the basin, enabling all groundwater users to produce water from the Basin in a cost-effective manner.

6-1 As a potentially affected public agency, Metropolitan recognizes your efforts to protect and enhance the groundwater supplies and is supportive of these types of water management programs throughout the State. In addition, Metropolitan recognizes that the future potential for the expansion of the proposed facilities for conjunctive use purposes will require additional environmental analysis as outlined in the Draft PEIR. Furthermore, please refer to the attached letter, dated January 27, 2000, regarding recharge in the Chino Basin. Metropolitan's ability to recharge supplemental water may have constraints and replenishment deliveries are interruptible for an unspecified period of time.

We look forward to continue working with you and providing input to the planning process. If you have any questions, please do not hesitate to call Mr. James Bodnar at (213) 217-6099.

Very truly yours,

Laura J. Simonek

Laura J. Simonek
Principal Environmental Specialist

DTF:
Enclosure

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RESPONSES TO COMMENT LETTER #6
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

6-1 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Office of the General Manager

January 27, 2000

Ms. Traci Stewart
Chief of Watermaster Services
Chino Basin Watermaster
8632 Archibald Avenue, Suite 109
Rancho Cucamonga, California 91730

Dear Ms. Stewart:

Comments on Draft Memorandum of Agreement – Maximization of Recharge in the Chino Basin

Thank you for the opportunity to comment on the Draft Memorandum of Agreement – Maximization of Recharge (Draft MOA) in the Chino Basin provided by your January 4, 2000 transmittal to the active and concerned parties in Chino Basin Case No. RCV51010. Listed below are The Metropolitan Water District of Southern California's (Metropolitan) comments to the Draft MOA.

1. Phase 2, Task 6 of Recharge Master Plan - Phase 2, Task 6 of the Recharge Master Plan, should be a coordinated effort with Metropolitan. Because of various constraints, it is important to identify patterns of demand, capacity requirements, availability of capacity and pipelines that would be affected for recharge of supplemental water. From those efforts, it may be necessary to identify other recharge facilities.

6-2 2. Interruptibility of Deliveries - Currently, all replenishment deliveries are interruptible for an unspecified period of time. In return for this interruptibility, agencies receive discounted rates on this type of water. The interruptions may be due to lack of supplies, outages on Metropolitan's system, system capacity constraints, use of water to meet blending requirements, or emergencies. Thus, when Metropolitan must curtail these types of deliveries, agencies should continue to produce their local supplies and there should be a reduction of flows to that agency from Metropolitan. Direct spreading deliveries are interruptible with immediate notice and long-term in-lieu replenishment deliveries are interruptible with 15 days notice.

3. Cyclic Storage – Metropolitan currently has about 37,000 acre-feet (AF) in a cyclic storage account for which the agreement has expired as to rights to place additional water in storage. As you are aware, Metropolitan would sell this water out of the account instead of delivering surface water when replenishment is requested unless an unusually large surplus condition exists. Metropolitan would like to work with Chino Basin Watermaster and Inland Empire Utilities Agency to develop a way to optimize the use of this water.

6-2 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

If you have any questions, please call Nina Jazmadarian at (213) 217-6583 or Eddie Rigdon at (213) 217-5757.

Very truly yours,

Jill T. Wicke
Water System Operations Group Manager

NJ/ms
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cc: Mr. Richard W. Atwater
General Manager
Inland Empire Utilities Agency
P. O. Box 697
Rancho Cucamonga, CA 91729-0697

COMMENT LETTER #7

SANTA ANA RIVER WATER COMPANY

June 13, 2000

Mr. Richard W. Atwater
Inland Empire Utilities Agency
9400 Cherry Avenue, Building A
Fontana, CA 92335

RE: Draft Program Environmental Impact Report for the Optimum Basin Management Program, May 2000

Dear Mr. Atwater:

Santa Ana River Water Company (Water Company) has reviewed the subject PEIR. As a participant in the OBMP process, we appreciate the difficulty of evaluating a program of this nature and magnitude. The following addresses those program components, related impacts of concern to the Water Company, and recommendations to address our concerns.

7-1 Program Components of Concern to the Water Company. As a member of the Chino Basin Appropriative Pool, the Water Company currently does not pump water from adjudicated portions of the basin because of the high nitrate level in the area. In order to address this problem and to maintain the safe yield of the basin, the OBMP proposes to construct an East desalter to supply the various water purveyors in the area with potable water. We believe that this project should be studied in detail to determine the potential ramifications of pumping up to 50,000 acre-feet in the lower portions of the groundwater basin. We would like to see studies made of the potential benefit of an aggressive recharge program (with excess storm flow and State Water Project water) will have on the groundwater basin in our service area in concert with the desalting program.

7-2 If the Water Company takes the preponderance of its water supply from the proposed desalter we potentially lose all our flexibility to peak off the system. Hence to provide the greatest flexibility to the desalter project as a source of water supply provisions should be made to sell a portion of the treated water to The Metropolitan Water District of Southern California during the non-peak water demand periods of the year.

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RESPONSES TO COMMENT LETTER #7
SANTA ANA RIVER WATER COMPANY

7-1 The program level evaluation of both an east desalter and an aggressive groundwater recharge program are evaluated in Subchapter 4.5 of the OBMP PEIR. One of the primary goals of the OBMP is to establish and maintain hydrologic control within the Chino Basin. The OBMP contains recharge, pumping and water importation that is designed to achieve a long-term hydrologic balance throughout the Basin. Mitigation measures identified in Subchapter 4.5 require a detailed evaluation or engineering investigation and possible hydrologic modeling of future recharge and desalter proposals. Such investigations will define both benefits that can be achieved with these future specific projects and potential adverse impacts that will have to be managed to ensure that the existing environment and utility infrastructure systems will not incur a significant adverse impact from pumping up to 40,000 acre-feet of groundwater per year for treatment and use. To the extent that both future recharge and desalter projects may interact with one another, the cumulative effects of these projects will be evaluated. Such evaluations will include the groundwater basin within the Santa Ana River Water Company's (SARWC) service area, if it will be adversely impacted. However, as this OBMP PEIR indicates, it will not be possible to evaluate the consequences of either an east desalter or an aggressive recharge program until such projects are adequately defined to permit such analyses. SARWC will be placed on the list of agencies to be notified and invited to participate in the review of such projects when they are considered in the future.

7-2 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The OBMP PEIR is undergoing review concurrent with a variety of other implementing activities under the auspices of the Chino Basin Watermaster. One of the items currently being considered in draft form is a "Peace Agreement Chino Basin" which is a document that outlines agency participation in programs, responsibilities, and opportunities under the OBMP. Article II of the "Peace Agreement" includes the ability for participating agencies to sell a portion of the desalted water to other agencies, which could include the Metropolitan Water District or other water agencies in southern California. The goal would be to create operating conditions for the desalter that would enhance the financial and operational viability of such a facility. Thus, the "Peace Agreement" appears to provide a mechanism to achieve the goal identified in this comment, as long as it the potential environmental impacts are acceptable to the participating agencies and regulatory agencies.

7-3 Summary and Recommendation. The draft program EIR does not address potential impacts at a level of specificity that provides assurances that the general mitigation measures identified in the EIR will, in fact, adequately mitigate impacts upon the groundwater resources that the Water Company has utilized to supply its customers with water.

7-4 The OBMP EIR and related documents include repeated references to further environmental "evaluation" of future implementing actions. While this language appears to be directed at the subsequent documentation provisions of CEQA Guidelines Section 15162, this language is too vague to provide the assurance the Water Company requires to ensure that future implementing actions that may affect Basin water quality and supply are only implemented after all interested and affected parties are afforded the opportunity to review the detailed environmental analysis in an open review process. Considering the very general nature of analysis presented in the draft EIR and potentially significant ramifications of future implementing actions, the Water Company requests that a stronger commitment to subsequent documentation be incorporated as an integral component of the OBMP, and the related EIR and implementing agreements. This will ensure that the Water Company has an opportunity to consider the specifics of future implementing actions, to review the related environmental analysis, and to concur in the conclusions as to impact significance and effectiveness of proposed mitigation. The following language is suggested:

> Any future implementing actions in furtherance of Program Elements 2 through 9 that meet the definition of "Project" under CEQA, shall be subject to further environmental documentation in the form of a negative declaration, mitigated negative declaration, supplemental EIR or subsequent EIR.

Thank you for your consideration of these comments. Please provide a copy of the final EIR for the Water Company review prior to the upcoming decision-making hearing.

Sincerely,

SANTA ANA RIVER WATER COMPANY

Frank Abacherli, President
Board of Directors

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7-3 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. For the obvious reasons outlined in the OBMP PEIR, the impact forecasts were only capable of being evaluated at the most general level. The OBMP PEIR acknowledges, and in fact is specifically structured, so that detailed engineering investigations and environmental evaluations will be required for future specific projects being implemented under the OBMP. Mitigation measures were identified with the goal of being as applicable as possible for future specific project. However, these measures were designed to establish performance standards that, when the standards/thresholds are met, the potential environmental impacts are inherently reduced to a nonsignificant level of impact. Note that a mitigation monitoring program is being adopted by the IEUA to ensure that such measures are implemented for future projects that it proposes to implement. Keep in mind that the achievement of hydrologic control or balance is one of the primary objectives of the OBMP; therefore, the measures should be even more protective of existing water resources in the Chino Basin or in adjacent or downstream regions. For further discussion of the environmental review process, refer to response to comment number 3-1.

The assurance that SARWC has that the OBMP and the PEIR measures will protect the groundwater resources upon which it is dependent consists not only of the analysis in the OBMP PEIR and the proposed mitigation measures, but also, such assurance is inherent in the CEQA process for a program environmental document, like the OBMP PEIR. This occurs because each future specific project must undergo a subsequent review to determine whether the project can be implemented within the scope of the program EIR and that the program EIR adequately describes the activity for the purposes of CEQA. See the response to comment #3-1. If the potential environmental impacts fall outside of the impact forecasts contained in the OBMP PEIR, after implementing the mitigation measures outlined in this document, then a new impact will occur, or an identified impact will be worsened, i.e. made more significant. Under such circumstances a new environmental document (Negative Declaration, Supplemental or Subsequent EIR) must be prepared and circulated in the same manner as the OBMP PEIR. IEUA believes that the CEQA process is fully protective of the environment as a result of these requirements, including the groundwater resources upon which SARWC relies to meet its customers demands.

7-4 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. After fully considering the proposed text for future specific project reviews presented by SARWC, the IEUA Board concludes that adequate review procedures are in place under CEQA to ensure full protection of the environment. The response to comment #3-1 above summarizes the review procedure that will be used by IEUA as it implements future specific projects under the OBMP. This procedure fully complies with CEQA, both the statute and the State CEQA Guidelines.

However, the CEQA process is not the only forum that will be available for review of future specific projects being implemented under the OBMP umbrella. The Watermaster is finalizing a draft "Peace Agreement Chino Basin" which outlines a process for implementing OBMP projects that is designed to ensure participation by all of the participating agencies. It is anticipated that all projects that may affect hydrologic control in the Chino Basin, or where water credits and financing alternatives will be at issue, will undergo peer review under the framework established in the "Peace Agreement".

Further, in recognition of concerns expressed by SARWC regarding adequate opportunity to participate in an open review process, IEUA makes a commitment to provide all parties interested in a future specific project with a minimum of 30 days to review the engineering investigation documents and the Initial Study prepared for a project that has been found to be within the scope of the OBMP PEIR. Of course, for projects undergoing additional review for a Negative Declaration or a Supplemental or Subsequent EIR, public review periods are dictated by CEQA and these requirements will be followed. With the Watermaster review process combined with IEUA's commitment to provide adequate time for interested parties to review future specific project proposals in detail, IEUA concludes that adequate review procedures are in place to ensure effective participation by interested parties in the CEQA process. Since many future projects (for example groundwater monitoring wells, pipelines, small recharge projects, etc.) are expected to fully comply with CEQA by relying on the OBMP PEIR, IEUA does not believe it is necessary to restrict the available processing options for complying with CEQA. Please note that as each future specific project is considered and then approved by the IEUA Board, a new Notice of Determination will be filed which provides a backstop provision for any interested party if it does not believe that full compliance with CEQA has been achieved.

JUN 16 2000

COMMENT LETTER #8

Jurupa
COMMUNITY SERVICES DISTRICT

June 12, 2000

Mr. Richard W. Atwater
Inland Empire Utilities Agency
9400 Cherry Avenue, Building A
Fontana, CA 92335

RE: DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE OPTIMUM BASIN MANAGEMENT PROGRAM

Dear Mr. Atwater:

Jurupa Community Services District (District) has reviewed the referenced document. As a participant in the OBMP process, we appreciate the difficulty of evaluating a program of this nature and magnitude. The following addresses (1) our evaluation of the treatment of issues raised by the District via correspondence from John Schatz dated December 13, 1999 in response to the notice of preparation (NOP), (2) those program components and related impacts of concern to the District, and (3) recommendations to address our concerns.

Response to NOP Comments. The District's response to the NOP requested that the EIR address impacts of recycled water use in a manner specific to individual supplies. The proposed use of several recharge basins upstream of the District's well field for recharge of wastewater presents the potential for degradation of the District's supply, which would constitute a significant impact. While the proposed mitigation measures in the DPEIR reference protection of adopted water quality objectives and beneficial uses, the program implementation structure as presented in the DPEIR does not of itself provide for protection of individual supplies, nor an opportunity for further public evaluation of the impacts of specific recharge supplies. Although we understand individual programs and projects are intended to be addressed through further environmental documentation, this should be unequivocally stated. Our recommendation in this regard is addressed below.

8-1

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RESPONSES TO COMMENT LETTER #8
JURUPA COMMUNITY SERVICES DISTRICT

8-1 Please refer to responses to comments 7-1 through 7-4. At this time there is not sufficient detailed information to evaluate use of recycled water recharge at recharge locations upstream of the District's groundwater supplies. Each site has its own specific geological conditions and for each location, a decision on the appropriate blend of water sources is required by the agency seeking to recharge recycled water. IEUA commitments are outlined in the responses referenced above, and the existing programs, including CEQA, Watermaster process, and IEUA commitments ensure an adequate opportunity to review the potential for adverse impacts from groundwater recharge prior to a recycled water project being approved by IEUA. Furthermore, the mitigation measures contained in the OBMP PEIR (see measures in Subchapter 4.5 and 4.10) are performance standards that will ensure protection of water quality in the groundwater supplies utilized by the District to serve its customers. If IEUA were to choose not to fulfill these performance requirements (except where specific State laws or regulatory standards are referenced do not permit Statements of Overriding Consideration), a new EIR (Supplemental or Subsequent) would have to be prepared which would fully meet the Districts' request for commitments from IEUA to address significant impacts to water resources.

Program Components of Concern to the District. As a member of the Chino Basin Appropriative Pool, the District draws water from the basin for delivery as municipal supply to its customers. The quality of water in the District's wells has declined in recent years, due to both the general decline in basin groundwater quality and the influence of the plume extending from the abandoned RP-3 facility. As noted above, the introduction of wastewater recharge upstream of the District's wells presents the potential for further degradation of the wells and potential loss of this source of supply. This is of concern because: 1) the migration of legacy/existing salts from sources including but not limited to RP-3 will be accelerated towards the District's wells; and 2) recharge with wastewater increases salt loading in the basin without addressing legacy salts in that the proposed remediation through desalters for such wastewater recharge does not appear to be sufficient for purpose of addressing legacy contamination. The potential changes in recharge and pumping regimes under the OBMP present the potential for significant water quality impacts that may, in turn represent a significant water supply impact if the District is faced with discontinuing use of its wells. The comment noted above with respect to lack of mitigation measures to address individual supplies and lack of commitment to a public forum for evaluation of future implementing actions is also relevant to these concerns.

8-2

Summary and Recommendation. While recognizing the need to respect and foster the monumental effort that has transpired to date to bring the various parties in the Basin together in this cooperative program, it is also paramount that the District consider the potential ramifications upon the quantity and quality of its water supply, and the associated costs of production. The proposed OBMP clearly presents the potential for adverse impacts upon the District's well field that could result in diminished supply, diminished quality, and increased costs of production. The draft program EIR does not address potential impacts at a level of specificity that provides assurances that the general mitigation measures identified in the EIR will, in fact, adequately mitigate impacts upon the District's water supply.

8-3

8-2 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The potential impacts of concern in this comment are acknowledged in Subchapter 4.5 and 4.10 of the OBMP PEIR.

The District is concerned with: (1) acceleration of the movement of legacy/existing salts towards the District's wells (including the RP 3 recycled water plume); (2) salt loading impacts due to the proposed recharge of recycled water; (3) proposed desalters do not appear to be sufficient to remediate legacy salts and mitigate recycled water recharge; and (4) recharge and pumping changes in the OBMP present potential water quality impacts to the District's wells.

It is not the intention of the OBMP to accelerate existing plumes of any kind into the District's wells nor to degrade water quality in these wells. The individual recharge and desalter projects listed in the OBMP will be subject to additional environmental analysis as outlined above. During these reviews detailed analyses will be undertaken to estimate the water quality impact to the District's wells and to identify more specific mitigation measures that may be necessary to protect District wells that may be impacted. The District will be afforded every opportunity to participate in and ensure that adequate protections are in place prior to implementing a recharge project to protect the District's water resource base. The salt removal capacity of the desalters in the OBMP will remove about 36,000 tons of salt per year by 2003 and is forecast to reach about 77,000 tons per year over the next 20 to 30 years. Please refer to the updated table (Table 3) included with these responses. By contrast, the mass of salt added to the basin from recycled water recharge projects proposed in the OBMP, above the existing and proposed TDS objectives, is estimated to be about 4,700 and 7,100 tons per year, respectively. Clearly, there is salt removal capacity in the OBMP desalters that greatly exceeds the salt added through recharge of recycled water. Please refer to the RWQCB's letter for further clarification on recycled water recharge and the Board's position on the legacy of salt issues in the Basin.

Impacts associated with future OBMP projects will be accounted for as future specific projects are evaluated by incorporating such salts as background conditions that can be agreed upon by interested parties during the engineering and modeling investigations for such a recycled water recharge project. Through the Watermaster process and "Peace Agreement", the CEQA review process (discussed in responses to comment letter #7) and the IEUA review process, IEUA believes that more than ample opportunity is being provided for District participation which will have the specific goal of combining the best locations with the appropriate blend of water sources (recycled, stormwater, imported water, etc.) that will allow OBMP recharge goals to be met. This can be accomplished while ensuring protection of District groundwater resources, or by defining other mutually acceptable programs.

8-3 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Please refer to response to comment #8-1. IEUA concludes that the mitigation measure performance standards contained in measures identified for Subchapter 4.5 and 4.10 will be sufficient to protect the quality of the groundwater resources utilized to meed customer demands.

The general mitigation measures (4.5-12 for TDS and 4.5-14 for nitrogen) state that when the TDS or TIN exceeds either background or Basin Plan objectives, that engineering investigations and modeling will be done to estimate the "volume and rate of recharge" (including blending of water sources) that can be done without causing the Basin Plan objectives to be exceeded. In the case of TDS mitigation measures 4.5-12 goes on further to state that the mass added to the Basin in excess of the objective will be computed and subsequently be mitigated, if BPO's or assimilative capacity is violated.

Western Municipal Water District has suggested some modifications to mitigation measures 4.5-12 and 4.5-14 which would alter the wording but retain the same level of protection. These measures can be read under responses to comments 15-6 through 15-9.

The OBMP EIR and related documents include repeated references to further environmental "evaluation" of future implementing actions. While this language appears to be directed at the subsequent documentation provisions of CEQA Guidelines Section 15162, this language is too vague to provide the assurance the District's requires to ensure that future implementing actions may affect Basin water quality and supply are only implemented after all interested and affected parties are afforded the opportunity to view the detailed environmental analysis in a open review process. Considering the
8-4 very general nature of analysis presented in the draft EIR and potentially significant ramifications of future implementing actions (particularly those related to recharge and desalting), the District requests that a stronger commitment to subsequent documentation be incorporated as an integral component of the OBMP, and the related EIR and implementing agreements. This will ensure the District has an opportunity to consider the specifics of future implementing actions, to review the related environmental analysis, and to concur in the conclusions as to impact significance and effectiveness of proposed mitigation. The following language is suggested:

> Any future implementing actions in furtherance of Program Elements 2 through 9 that meet the definition of "Project" under CEQA, shall be subject to further environmental documentation in the form of a negative declaration, mitigated negative declaration, supplemental EIR or subsequent EIR.

Thank you for your consideration of these comments. Please provide a copy of the final EIR for District review prior to the upcoming decision-making hearing.

Sincerely,
Jurupa Community Services District

Don Galleano, President
Board Of Directors

Copy: John Schatz, Esq.
7020 Administ/dw

8-4 Please refer to responses to comment 7-1 through 7-4.

COMMENT LETTER #9

California Regional Water Quality Control Board
Santa Ana Region

Winston H. Hickox
Secretary for
Environmental
Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb8
3737 Main Street, Suite 500, Riverside, California 92501-3348
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Gray Davis
Governor

June 19, 2000

Mr. Richard W. Atwater
Chief Executive Officer and General Manager
Inland Empire Utilities Agency
9400 Cherry Avenue, Bldg. A
Fontana, CA 92335

DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT (PEIR) FOR THE OPTIMUM BASIN MANAGEMENT PROGRAM (OBMP)

Dear Mr. Atwater:

We have received the above-referenced PEIR, prepared by Tom Dodson and Associates, dated May 2000. Inland Empire Utilities Agency (IEUA) determined that a program environmental impact report was most applicable to the Optimum Basin Management Program (OBMP) because it consists of a series of actions that are characterized as one large project, and are related geographically and are a logical part in a chain of contemplated actions. These actions include the following, along with our general comments:

1. A comprehensive water and land surface monitoring program. This program involves monitoring surface and groundwater quality, and land surface and water table elevations. The PEIR states that this program has very little potential to adversely affect water resources or water quality. Based upon the description of the program we agree.

9-1

2. A comprehensive recharge program. This program focuses on implementing Phase 2 of the Chino Basin Recharge Master Plan. Phase 2 involves developing additional facilities and structures to enable increased groundwater recharge of storm water, recycled water, and imported water. The PEIR states that developing and implementing this program has the potential to cause direct and indirect significant unavoidable adverse water resource and water quality impacts. Based upon our review and understanding of such programs, we find that construction and development of recharge facilities and structures will not have significant adverse environmental impacts provided standard best management practices (BMPs) for construction sites are utilized.

9-2

We agree, however, that recharge of recycled water and imported water could have significant adverse water quality impacts. Mitigation or offset measures must be taken, and waste discharge requirements (WDRs) must be obtained from the Santa Ana Regional Water Quality Control Board (Regional Board) prior to implementation of recycled water recharge activities. Recharge of imported water may also require issuance of WDRs if concentrations of certain constituents in the imported water exceed Basin Plan Objectives (BPOs). Based upon results of the Nitrogen/TDS Task Force Study, the Regional Board plans to review and modify, as necessary, BPOs and subbasin boundaries in the near future. We plan to work with and coordinate with Chino Basin water resource managers to enable development and

RESPONSES TO COMMENT LETTER #9
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

9-1 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

9-2 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The findings in the OBMP PEIR conclude that construction and operation activities for all proposed OBMP facilities can be fully mitigated to a level of insignificance by use of Best Management Practices during construction and operation to control erosion, sedimentation and accidental releases of chemicals used to support these activities. Mitigation and offset measures are outlined in the OBMP PEIR to allow for the safe and advantageous recharge of recycled and imported water in the Chino Basin. It is acknowledged that waste discharge requirements (WDR's) may be required if concentrations of certain constituents exceed Basin Plan Objectives (BPO's). The requirement to apply for and obtain WDR's for certain projects is in addition to the mitigation measures, modeling and monitoring programs proposed in the OBMP PEIR. Such additional standards will further ensure that recharge activities associated with the OBMP do not cause significant degradation of groundwater quality. The Board's commitment to modify Basin Plan Objectives in accordance with maximum benefit principles, including adequate offset or mitigation measures, will provide essential flexibility to meet the goals of the OBMP.

9-2 cont.

implementation of this program. Based upon implementation of adequate offset or mitigation measures, the Regional Board is willing to consider setting BPOs in accordance with maximum benefit principles.

3. A water supply plan for the impaired areas of Chino Basin (Basin). This plan seeks to provide water users in the impaired areas with high quality water. This will be accomplished primarily by developing groundwater treatment systems/programs (i.e., desalters) to treat degraded groundwater for direct beneficial use. These projects have very little potential to adversely affect water quality. Rather, implementation of these projects is more likely to have beneficial water resource impacts.

9-3

As stated in the PEIR, municipal and industrial demands are projected to increase up to 30% over the next 20 years, and agricultural production is projected to decrease. The installation of desalter systems in the southern part of the Basin has the potential to accomplish objectives beyond simply providing municipal and industrial water supply. Not only will high quality water be provided to producers in the Basin, but safe yield will be maintained, and discharge of poor quality rising water to the Santa Ana River (SAR) will be minimized or eliminated (thus enabling ratepayers to avoid paying to desalt wastewater effluent). Desalter facilities may also be sized to remove enough degraded groundwater to provide adequate mitigation to allow recharge of recycled water and implementation of conjunctive use programs within the Basin.

4. A groundwater management plan for Management Zone 1 (MZ1). In recent years, portions of MZ1 have experienced dramatic decreases in water table elevations, as well as land surface subsidence. Consequently, Watermaster plans to more thoroughly analyze this issue so that appropriate mitigation measures can be developed to stabilize land surface conditions and increase water table elevations in MZ1. Anticipated mitigation options include groundwater recharge, injection, and/or changes in extraction patterns. This plan has potential to adversely affect water quality depending upon the quality of water used for recharge or injection, and the potential for mobilizing pollutants currently residing in the vadose zone. We agree that the potential for adverse water quality effects can be reduced to insignificant levels, provided that water of appropriate quality is used for recharge or that adequate desalting facilities are provided within the Basin. In addition, please note that Waste Discharge Requirements are required for operation of injection wells.

9-4

5. A regional supplemental water program. In the PEIR, this program element was paired with element No. 3; however, there was no detailed description of the regional supplemental water program. Other than stating that supplemental water could be used in place of production in impaired areas, the manner in which supplemental water is to be utilized, and any potential changes in current operations, are not made clear. The description in the PEIR focused on maintaining the safe yield of the Basin by installing desalter facilities in the impaired areas of the Basin (Element No. 3). If additional treatment and conveyance facilities are to be constructed to access additional supplemental water, the details and adverse environmental impacts of, and alternatives to, such projects should be described and evaluated.

9-5

6. A cooperative Basin management improvement program involving the Regional Board and other agencies. This program focuses on establishing cooperative working relationships with regulatory agencies, sharing monitoring responsibilities, and facilitating information distribution. The PEIR identifies this element as being more ministerial than physical in nature. Consequently, no significant adverse environmental impacts to water quality are expected to occur in association with this element. Based upon the information contained in the PEIR we agree. In the description for this program (page 3-20 in the PEIR), it is stated that, in the past, because of resource restrictions, the Regional Board has not

9-6

9-3 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The Board's conclusions in this comment mirror the findings contained in the OBMP PEIR. A specific goal of installing the groundwater treatment systems is to remove enough degraded groundwater to provide mitigation for recycled water recharge and implementation of conjunctive use programs within the Basin.

9-4 The Board's concurrence that the potential for adverse water quality impacts related to recharge, injection and potential mobilization of pollutants in the vadose zone can be minimized to a less than significant level is appreciated, provided that water of appropriate quality is used or that adequate desalting facilities are constructed in the Basin. As each future recharge project is evaluated, a key step will be to identify the appropriate blend of water resources for recharge that will not significantly degrade water quality from a mix of recycled water, State Project Water and stormwater. All injection wells will be constructed in accordance with DHS Title 22 Requirements, and ongoing monitoring studies can ensure that impacts do not reach a level of significance, by allowing adjustments in the blend of water being recharged. The IEUA recognizes the WDR's are required before operation of injection wells. This regulatory control serves as an additional mechanism to ensure that potential adverse water quality impacts remain less than significant with the implementation of the OBMP.

9-5 The attached Water Supply Plan table lists the additional sources of supplemental water that could be utilized in the Chino Basin. As an example, installation of the Baseline Feeder could allow up to 40,000 acre-feet of water to be transferred from the Bunker Hill Basin to the Chino Basin. Such water would be of sufficient quality to permit direct use. The specifics associated with this potential facility are not yet well enough defined to permit a more detailed analysis, and as this project reaches the point where it may be implemented, a more detailed project description and environmental evaluation will be implemented.

9-6 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. A primary objective of the OBMP is the gradual cleansing of the Chino Basin so that it is no longer an impaired water body. Obviously, this can only be accomplished over a long period of intensive water management under the OBMP. By combining resources with the Board as the TMDL's are considered and, if necessary, established, the objective will be to make the TMDL's flexible enough to allow the programs in the OBMP to gradually eliminate any impairment within the Basin.

9-6 cont.

taken action when pollution sources were not easily identified or when the sources were diffuse (i.e., non-point sources). It should be noted that implementation of state and federal programs related to impaired water bodies and Total Maximum Daily Load (TMDL) allocations is resulting in increased funding to address non-point sources of pollutants. The Regional Board is already benefiting from resource augmentations, and it can be expected that TMDL work for the Chino Basin will be necessary, unless implementation of the OBMP obviates that need.

7. A salt management program. This program will focus on developing a method for measuring progress towards improving groundwater quality within the Basin. The PEIR describes a method that combines monitoring and managing a salt budget as the most practical approach. This approach consists of accounting for the salt mass balance within the basin as a whole by inflows and outflows. Similar to Element No. 6, the PEIR identifies this element as being more ministerial than physical in nature, and no significant adverse environmental impacts to water quality are expected to occur in association with this element. Since this appears to be an "assessment" program element, we agree that it would not be expected to cause adverse environmental effects.

9-7

8. A groundwater storage management program. Watermaster is concerned about the magnitude of rising groundwater lost to the SAR from the Basin when groundwater is stored in local storage, cyclic, conjunctive use, and other storage accounts. This program focuses on developing methods to account for losses in storage accounts and setting limits on storage if necessary. The PEIR states that development of a storage management program has little potential in itself of causing any adverse environmental effects. Based upon the information contained in the PEIR, we agree.

9-8

9. A conjunctive use program. Watermaster will develop conjunctive use programs to store supplemental water in the Basin for other water resource agencies and organizations. This program will assist in balancing production and recharge in the Basin. The details of this program were undefined at the time the PEIR was printed. Consequently, attempting to make environmental impact forecasts was considered speculative, and no detailed evaluation was performed. The PEIR states that before a conjunctive use program is implemented, further detailed environmental evaluation will be required. However, a comparative evaluation with a conjunctive use program was provided in the Alternatives Section. Several adverse environmental impacts were identified in this evaluation including mobilization of water quality anomalies (i.e., organic compound and isolated salt plumes), salt balance, and rising water issues. However, the main concern identified involved the potential for additional water in the aquifer increasing the water table elevation such that existing contaminants currently located in the vadose zone are dissolved and mobilized; consequently, water quality degradation is increased. We agree that there is a strong potential for these adverse water quality impacts to occur, and, therefore, this program must be carefully evaluated and implemented with utmost caution. We suggest that the rising water impacts might have very serious adverse effects on downstream beneficial uses.

9-9

10. The adverse environmental impacts of adopting a No Project Alternative are discussed in Section 5.2. The PEIR states that a no project alternative means that the OBMP and its program elements would not be implemented as currently envisioned. However, it does not negate the need for producers in the Basin to provide water. "Ultimately, the Judgment will mandate that water supplies be provided in a manner that will not adversely impact Basin safe yield." It is stated several times in the PEIR that a failure to adequately implement the OBMP will result in an increase of poor quality rising water to the SAR and a consequent decline in safe yield. The PEIR further states that a consequence of this increase in rising water will likely be a requirement by the Regional Board to reduce the concentrations of TDS

9-10

9-7 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

9-8 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

9-9 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The Watermaster is committed to pursuing sufficient hydrologic control/balance within the Chino Basin to ensure that a conjunctive use program will not cause any of the significant adverse water quality impacts discussed in the OBMP PEIR and recited in this comment. Until sufficient hydrologic control is in place to provide all parties, including the Regional Board, assurance that significant water quality degradation will not occur, conjunctive use programs will be considered on an incremental basis only.

9-10 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. This appears to be a case where no action can cause more severe water quality impacts downstream of the Basin which can only be offset by expenditure of substantial funds to treat wastewater to remove more TDS and nitrate. IEUA concurs that the implementation of OBMP programs is a more desirable solution to this problem.

9-10 cont. and nitrates in wastewater discharges to near zero to balance the subsequent contributions made by poor quality rising water. We agree that this will likely be the case.

11. The PEIR states that under the No Project Alternative (Section 5.2), the ability of Chino Basin stakeholders to attain the goals and objectives of the OBMP would be virtually eliminated. Further, "the stakeholders would be disabled in their attempt to collectively correct and mitigate conditions of water quality impairment and reduced water supplies to meet their build-out development needs. In the final analysis, the no project alternative cannot be considered the environmentally superior alternative, from a total environmental standpoint, to the proposed project because the environmental damage from implementing water supply on a case-by-case basis is forecast to be substantially more significant than implementing the OBMP." We would add that as Watermaster's own analysis has shown during development of the OBMP, failing to implement the OBMP would be more financially costly as well. Not only is the OBMP environmentally superior, it also appears to be the most financially feasible alternative in the long term.

9-11

12. A Conjunctive Use Alternative and a Santa Ana Watershed Project Authority (SAWPA) Alternative are briefly discussed in Sections 5.3 and 5.4 respectively. The description of these alternatives and their environmental effects are particularly vague. There does not appear to be enough details provided in the PEIR to perform a proper evaluation.

9-12

Certain specific points of the PEIR are unclear or inaccurate. Our comments regarding these specific points follow:

9-13 1. On page 1-1, the PEIR states that Chino Basin has about 5 million acre-feet of groundwater storage. This differs significantly from previous estimates in past years. These differences should be explained.

9-14 2. In Table 1.2-1, on page 1-13, it is stated that recycled water shall not be discharged to streams with storm flows unless modeling verifies that the discharge will not exceed BPOs. A permit will be required regardless of modeling verification.

9-15 3. In Table 1.2-1, on page 1-14, well abandonment is discussed. Please note that County agencies must be notified of well abandonment activities.

9-16 4. In Table 1.2-1, on page 1-15, recharge of recycled water is discussed in the second paragraph. Please note that recycled water requirements must be obtained from the Regional Board.

9-17 5. On page 4-135, the Water Quality Objective (WQO) for total dissolved solids (TDS) in Reach 3 of the SAR was identified as 650 mg/l. Please note that the WQO for this portion of the SAR is 700 mg/l.

9-18 6. On page 4-146, item No. 2, the PEIR states that there appears to be some assimilative capacity in Chino Subbasin III and that the TDS BPO for this subbasin is 770 mg/l. Please note that recent data analyses (N/TDS Study) have shown that there is very little, if any, assimilative capacity in this subbasin. Further, the TDS BPO for Chino III is 740 mg/l.

In addition, at the same location, the PEIR states that the Regional Board has recognized some assimilative capacity in Chino I. Again recent data analyses, completed as part of the N/TDS Study, have provided current water quality data for Chino I. These data show Chino I at 249 mg/l for TDS,

9-11 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

9-12 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. As is often the case when examining alternatives to a program, the only alternative that permits extensive comparison is the no project alternative. However, even though the SAWPA alternative (see responses to comment letter #5) and the conjunctive use alternative are not well defined, it was possible to examine and forecast the large-scale environmental impacts associated with these two alternatives. In particular, the increased potential for adverse impacts associated with conjunctive use programs were identified.

9-13 Based on better hydrogeologic data and modeling techniques, the Watermaster has concluded that the five million acre-feet value (actually the estimate is for 5.3 million acre-feet) for groundwater storage is more accurate. Note that all of the five million acre-feet is not available nor suitable for production as potable water; this value is simply an estimate of total groundwater in the Chino Basin.

9-14 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. As part of future specific project implementation involving recycled water discharges to streams, participating agencies will conduct appropriate CEQA evaluation and obtain all necessary regulatory permits prior to initiating such discharges.

9-15 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. As part of future specific project implementation involving well closures, participating agencies will conduct appropriate CEQA evaluation and obtain all necessary regulatory permits prior to initiating well abandonment activities.

9-16 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. As part of future specific project implementation involving recycled water recharge projects, participating agencies will conduct appropriate CEQA evaluation and obtain all necessary regulatory permits prior to initiating recharge of recycled water.

9-17 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The text in the OBMP PEIR will be modified to incorporate this correction.

9-18 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The text in the OBMP PEIR will be modified to incorporate this correction. Regarding comments on assimilative capacity in the Chino Subbasins, the text of the OBMP PEIR will be corrected in accordance with this comment.

9-18 cont.

which is above the BPO of 220 mg/l. It should no longer be indicated that the Regional Board recognizes any assimilative capacity in Chino I.

7. On page 4-158, the PEIR states that we assert that there is no assimilative capacity for TDS or TIN in Chino I or II Subbasins. Results of the N/TDS Study indicate that the current ambient TDS concentration for Chino I is 249 mg/l (BPO - 220 mg/l); the current ambient TDS concentration for Chino II is 326 mg/l (BPO - 330 mg/l); and, the current ambient TDS concentration for Chino III is 726 mg/l (BPO - 740 mg/l). Regional Board staff will recommend to the Board that these data show no assimilative capacity in any of the Chino Subbasins, even without any changes in subbasin boundaries.

9-19

8. On page 4-159, the PEIR states that approximately 2 million pounds (1,000 tons) of salt would be removed from the Basin daily if 5.25 million gallons of brine water with a TDS concentration of 5,000 mg/l are discharged to the SARI line daily. This estimate may be a decimal point error. Our calculations show that 5.25 million gallons of water with a TDS concentration of 5,000 mg/l contain about 200,000 pounds (100 tons) of salt.

9-20

If you have any questions, please contact me at (909) 782-3284 or William Rice of my staff at (909) 782-4459.

Sincerely,

Gerard J. Thibeault
Executive Officer

Cc: Regional Board

WBR/c:data/bill/chbasin/wtrmstr/PEIR comment letter.doc

9-19 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Regarding comments on assimilative capacity in the Chino Subbasins, the text of the OBMP PEIR will be corrected in accordance with this comment.

9-20 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Your assumption was correct, the text in the OBMP PEIR will be modified to incorporate this correction. Please refer to attached Table 3 which projects the salt removal from the proposed OBMP desalters.

COMMENT LETTER #10

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June 22, 2000

File No. 04342.00029

VIA FACSIMILE AND UPS OVERNIGHT

Mr. Richard W. Atwater
Chief Executive Officer/General Manager
Inland Empire Utilities Agency
9400 Cherry Avenue, Building A
Fontana, California 92335

Re: Comments on Draft Program Environmental Impact Report for the Inland Empire Utilities Agency Optimum Basin Management Program (SCH #2000041047)

Dear Mr. Atwater:

The following comments are submitted on behalf of our client, Cucamonga County Water District ("CCWD"), in response to the above referenced Draft Program Environmental Impact Report ("PEIR") prepared by the Inland Empire Utilities Agency ("IEUA"). IEUA prepared the PEIR for implementation of the Optimum Basin Management Program ("OBMP") in the approximately 225,000 acre project area of the Chino Groundwater Basin ("Chino Basin"). Pursuant to section 21069 of the Public Resources Code, CCWD is a responsible agency for the OBMP, as it will likely be involved in implementing various components of the OBMP. We appreciate the opportunity to review the PEIR, and submit the following comments for consideration by IEUA prior to preparation and certification of the Final PEIR:

10-1

General Comments

1. In general, the PEIR is well-organized and comprehensively addresses the elements required for an environmental impact report under the California Environmental Quality Act ("CEQA"). As a programmatic environmental impact report, the PEIR appropriately defers environmental analysis and possible mitigation for components of the OBMP which are only conceptual and not sufficiently defined in terms of scope and/or location. Under Section

RESPONSES TO COMMENT LETTER #10
BEST BEST & KRIEGER LLP

10-1 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

15145 of the State CEQA Guidelines, any attempt to provide an environmental analysis of these general program concepts in the OBMP would be purely speculative and of no analytical value. Appropriately, the PEIR informs the public of the deferral of the environmental analysis until such time as the general program concepts are more specifically articulated.

2. Where components of the OBMP are sufficiently defined, the PEIR provides a thorough analysis of the potential environmental impacts of implementing the OBMP, and for the environmental issue most affected by the OBMP, water resources, the PEIR separately analyzes the potential environmental impacts of each of the nine program elements of the OBMP. This level of detailed analysis is important in fully assessing the potential environmental impacts of the OBMP, despite the general nature of the activities that will be undertaken to implement the OBMP. 10-1 cont.

In addition, the PEIR makes frequent and appropriate use of "performance standards" in its mitigation measures. Because some of the components of the OBMP have not been completely defined or specifically located, the use of performance standards allows the mitigation measures developed in the PEIR to remain applicable and useful as the details of the OBMP change during implementation. Where performance standards are not appropriate, the PEIR creates defined environmental review procedures that will develop the necessary data for the full assessment and mitigation of potential environmental impacts before the project is commenced. Again, these types of mitigation measures allow the PEIR to remain flexible with the anticipated continual evolution of the OBMP.

Project Description

3. In general, the Project Description (Chapter 3) does a good job at providing a comprehensive overview of the nine program elements that comprise the OBMP.

4. Section 3.3.1 lists the four goals of the OBMP and correlates with each goal the specific activities called for in the OBMP. The next section of the PEIR begins a discussion on the OBMP program elements and it would be helpful if each activity listed in Section 3.3.1 included a cross-reference to the specific OBMP program element in which the activity is more fully discussed. This cross-referencing was provided in the Notice of Preparation for the PEIR. 10-2

5. The anticipated specific locations for the proposed desalter facilities under Program Elements 3 and 5 (corners of street intersections) are discussed on pages 3-12 and 3-13. However, Figures 3.3-4 and 3.3-5, which provide a map of the proposed desalter facilities and pipelines, are very difficult to use for purposes of locating the desalter facilities and pipelines. Given the relatively specific knowledge of the proposed locations for the desalter facilities, a more detailed map should be prepared that would assist in a better environmental analysis, especially for land use impacts (Section 4.2). As a matter of housekeeping, it should also be 10-3

10-2 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The cross-referencing requested in this comment will be incorporated into the Final OBMP PEIR.

10-3 A more detailed map of the potential locations for desalter facilities is attached to these responses and will be incorporated into the Final OBMP PEIR. The text and tables of the Final OBMP PEIR will be corrected for the "Ion Exchange" facility as requested.

10-3 cont.

noted that the "Ion Exchange" facility proposed by the OBMP is mistakenly referred to several times in the text (p. 4-12) and tables (3.3-4 and 3.3-5) of the PEIR as the "Anion Exchange" facility.

10-4

6. The numbers used in the second and third paragraphs on page 3-14 for pipeline diameters and the horsepower of the desalter pumps are different. We assume this is simply a typographical error and should be corrected for consistency. If the numbers are intended to be different, a more clear explanation of why they are different is needed.

10-5

7. As discussed further below under the Land Use and Water Resources sections, we are generally concerned about the lack of detail provided in the project description of the facilities to be developed under Program Element 2. Recognizing that the groundwater recharge plan called for in Program Element 2 has not been fully developed, it nevertheless appears that the PEIR has not effectively described the full extent to which the details of this program element are known.

For example, the first paragraph on Page 3-11 states that for Program Element 2, a list of prospective recharge basins, along with lists of potential modifications required to use these basins for recharge purposes, has been prepared by Wildermuth Environmental as part of the OBMP. In addition, Figure 3.3-1 provides a fairly detailed location map of the basins that are likely to be used to implement Program Element 2 for groundwater recharge.

10-6

Section 4.4 also contains important details regarding Program Element 2 that are not included in the overview of the program element in Section 3.3.3. For example, the third paragraph on Page 4-122 appears to be the first time the reader is made aware that there are eleven existing basins which have a current recharge capacity of 69,000 afy, that each acre in the basins has the ability to percolate one-acre foot of water per day for 210 days of water deliveries, and that an additional 50 acres or recharge basins will need to be constructed to implement Program Element 2. The second paragraph on Page 4-158 states that three additional basins, Wineville, Jurupa, and the RP-3 site (all of which appear to be existing basins used only for flood control), will be used for recycled water recharge of up to 40,000 afy.

There are numerous instances of important information regarding Program Element 2 scattered throughout the PEIR which should be consolidated and summarized in Section 3.3.3, so the reviewer has a good understanding of the groundwater recharge program. As stated several times in the PEIR, the recharge program is a central element to the OBMP. Without a good synthesis of the known components and details of Program Element 2, the environmental analysis for this program element, especially in the Land Use and Water Resources sections of the PEIR (Sections 4.2 and 4.4) appears disjointed and potentially incomplete.

10-4 The commentator's statements are noted and corrections regarding pipeline diameters and horsepower specifications will be incorporated into the Final OBMP PEIR. The corrected minimum pipeline size for the distribution system of the desalter and/or ion exchange facilities is twelve inches.

10-5 At the time the Draft OBMP PEIR was distributed for public review, the only data available was that listed in the document. The recharge project definition has continued to evolve and the current information on each potential recharge basin is provided as an attachment to these responses to comments. Although more completely defined at this stage, the types of activities required to utilize these basins remains within the scope of the implementation activities identified and evaluated in the Draft OBMP PEIR.

10-6 The attached table provides much of the requested information. The additional information that was incorporated into Chapter 4 will be abstracted and incorporated into the Project Description, Chapter 3 in the Final EIR. By incorporating this information into the impact analysis sections of the Draft OBMP PEIR, IEUA believes that all of the potential impacts of Program Element 2 have been adequately addressed.

8. In the first and second paragraphs on Page 3-25, the numbers used for the salt removal capacity of the desalters appear contradict each other. The first paragraph, states that by 2020, the salt removal capacity of the desalters will reach 80,000 tons per year. The second paragraph, however, indicates that salt removal capacity will not exceed 56,000 under Program Elements 3 and 5. If the numbers are correct, an explanation for the discrepancy in the numbers is needed.

10-7

9. While we recognize that Program Element 9 is the least developed program element of the OBMP and that the bulk of the environmental analysis has been deferred until this program elements is further refined, it appears the conclusions about this program element on Page 3-28 are not supported by the data. The first full paragraph on Page 3-28 concludes that the conjunctive use program contemplated in Program Element 9 (up to 300,000 afy of additional storage) is "conservative" and "could be implemented under the existing environmental conditions without significant facility augmentation." While the PEIR likely contains the data supporting this conclusion, this section fails to present that data so the reviewer can arrive at the same conclusion as the author.

10-8

Furthermore, we do not understand the statement that the conjunctive use program "could be implemented under the existing environmental conditions." Does this mean that there would not be significant environmental impacts from the storage of an additional 300,000 afy in the Chino Basin? If so, the data supporting this conclusion needs to be presented because the sections discussing the environmental impacts of implementing Program Element 9 consistently state that no environmental analysis has been performed since the details of the program element are too vague.

Land Use

10. In general, we are concerned that this section fails to adequately assess the potential environmental impacts of the proposed desalter facilities and recharge basins contemplated under the OBMP. While water facilities are exempt from local zoning restrictions under Section 53091 of the Government Code, this does not relieve the IEUA from the obligation to discuss the potential conflicts created by the development of water facilities and the planned land uses adjacent to such facilities.

10-9

As discussed above, the anticipated locations of the proposed desalter facilities are discussed on Pages 3-12 and 3-13, even to the extent of identifying the likely street intersections. While no specific sites have been selected, certainly the general vicinity is known for both the desalter facilities and the accompanying well fields. Given this general location information and the proposed general plan land uses for these areas detailed in Figure 4.2-3, it would appear that some general mitigation measures (buffering, separation, proximity to residential versus commercial or industrial land uses) could be developed to help reduce the potential for incompatibility between the proposed general plan land uses and the contemplated desalters and water wells in these areas.

10-7 The commentators statements have been noted, and the Final OBMP PEIR has been corrected to reflect more recent data, which indicates that 56,000 tons of salt is the most appropriate value to use on page 3-25.

10-8 This comment raises several issues that require a response. First, according to the Watermaster's hydrology consultant, the basis for concluding that up to 300,000 afy could be recharged as part of a conjunctive use program is best professional judgment at this time. Specifically, in recent history, the Chino Basin was mined (prior to 1978). The value of 300,000 to 500,000 acre-feet constitutes roughly 30 to 50 percent of the volume of water that was mined. The 300,000 acre-foot value was judged as reasonably safe based on best engineering judgment as an amount of water that can be stored for conjunctive use without causing significant adverse water quality impacts as outlined in Chapter 5. A firmer conjunctive use value, to be based on technical verification, is required by the OBMP. The term "could be implemented under the existing environmental conditions" reflects the current water table levels in the Basin and the estimated volume of water storage that could occur without intercepting contamination in the vadose zone, again based on best professional engineering judgment. Larger volumes of water stored for conjunctive use were evaluated as having a potential to intercept significant vadose zone pollutants or to have a potential to cause mobilization of groundwater quality anomalies, i.e., contaminated plumes of groundwater. See Subchapter 4.5, 4.10 and Chapter 5 for discussions of this issue at the most detailed level possible given the data available.

10-9 All of the existing recharge locations proposed for utilization are already in existence and are typically located along existing stream channels or areas that do not have conflicting land uses. However, land use incompatibility is determined by a combination of existing and potential land uses on adjacent properties and the activities and their associated changes in the environment that would occur with the proposed use, which in this case recharge of groundwater. The Draft OBMP PEIR focuses on potential land use incompatibility by examining these specific activities, such as generation of fugitive dust (Subchapter 4.6); use and accidental release of toxic or hazardous materials related to site use (Subchapter 4.10); generation of noise (Subchapter 4.11), and aesthetic and visual resource impacts (Subchapter 4.15). The activity of recharging water and related vector problems was raised by the Conservation District and this issue is fully discussed in response to comment #3-3. Given that these existing basins already function for recharge, the potential impact from continued use for this purpose, albeit more intensely, was determined to be nonsignificant. However, in response to your comment, an additional mitigation measure has been added to the Final OBMP PEIR with the goal of integrating all of the impact specific issues (noise, fugitive dust, aesthetics, etc.) in a land use compatibility evaluation. This measure will read: *Prior to implementing each proposed water facility, the land use compatibility of the proposed facility with both existing and future potential adjacent uses will be evaluated for consistency relative to general plan goals. This evaluation will examine the specific activities associated with the proposed facilities and determine whether specific incompatibilities, such as noise, fugitive dust, hazards or risk, or aesthetics would conflict with adjacent uses. Measures identified in the Subchapter of the OBMP*

PEIR will be used to mitigate potential incompatibilities where they are identified, or alternative locations will be selected. It should still be noted, however, that water supply facilities remain exempt from land use designation requirements as per the State of California Water Resources Code.

10-9 cont.

The discussion under Section 4.3.2.1(c) on Pages 4-19 through 4-21 appears to avoid doing this relatively easy task. For example, in the first paragraph on Page 4-21, the PEIR states that "activities associated with a desalter would be considered incompatible where adjacent uses include residential uses or sensitive biological resource habitat." A mitigation measure more specific than Mitigation Measure 4.2-1 should be developed for this identified potential environmental impact.

Similarly, from the data in Table 4.2-3, the map in Figure 3.3-1, and facts scattered throughout the PEIR, it appears that the location of the basins to be used for groundwater recharge under Program Element 2 are sufficiently known to assess at a general level the impact of these uses on the general plan land uses (identified in Figure 4.2-3) for the area surrounding the basins.

10-10

Finally, as a general comment, it appears that no new recharge basins will be constructed to implement Program Element 2. Instead, there are existing basins throughout the Chino Basin that are either used exclusively for flood control or groundwater recharge, or for both. Program Element 2 appears to contemplate implementing the OBMP groundwater recharge program by making the existing flood control-only basins suitable for conjunctive use for both flood control and groundwater recharge. If this is the case, this should be made clear in both Sections 3.3.3 and 4.2.3, and statements or implications in various sections of the PEIR that "new," "proposed," or "future" basins will be developed should be eliminated or reworded because they are confusing (see examples, Pages 4-15, 4-18, 4-22, 4-97, 4-132; Table 4.2-3 on Page 4-11; and the title of Figure 3.3-1).

Even if this is not a completely accurate characterization of Program Element 2, as discussed above, some clarification regarding how Program Element 2 will be implemented with existing recharge and flood control facilities in the Chino Basin is needed. For example, it would be helpful if Table 4.2-3 identified which of the 15 basins listed in the table are used only for flood control or groundwater recharge, or both, and which basins are contemplated for future conjunctive use as both a flood control and recharge basin.

Water Resources

11. At the top of Page 4-134, the PEIR states that the Wineville, Jurupa, and RP-3 basins are not included in Tables 4.5-21 and 5.4-22. Both the Wineville and Jurupa basins are included in these tables and this error should be corrected. In addition, the titles for these tables are confusing. Table 5.4-22 summarizes the existing recharge activity by facility in the Chino Basin and Table 5.4-21 summarizes the proposed recharge activity by facility under full implementation of OBMP Alternative A1 (the preferred alternative). New titles for the tables should be considered. Finally, the RP-3 facility is mentioned a number of times throughout the PEIR, but we never found a good description of this facility and its function, plus it is not located on the map listing all the recharge facilities (Figure 3.3-1).

10-11

10-10 The issue regarding future recharge basins is not as simple as portrayed in this comment. First, the number of potential basins has been increased, as shown on the attached Table 1. Second, the construction of new basins is not precluded, but since sufficient capacity appears to exist to meet OBMP needs, it is probable that no new basins will be constructed. The term "proposed recharge basins" refers to the use of existing basins for recharge, not necessarily the construction of new basins. The Final OBMP PEIR will be modified to clarify this issue and to ensure that the text on the referenced pages contains the appropriate language.

10-11 For a summary description of the RP-3 facility, please refer to the attached table summarizing recharge basins. The commentator's statements are noted and the correction has been made to the statement at the top of Page 4-134. Further, new titles for Tables 5.4-21 and 5.4-22 have been included in the Final OBMP PEIR. Their new titles, respectively, are Proposed Recharge Activity by Facility and Existing Recharge Activity by Facility.

10-12

12. The first paragraph on Page 4-137 discusses that if implementation of the OBMP causes the TDS and TIN standards at Prado Dam to be exceeded, the TDS and TIN discharge limitations for Chino Basin water recycling plants would need to be lowered to protect the downstream beneficial uses. Mitigation Measures 4.5-12 and 4.5-14 address increasing the TDS and TIN levels in the Chino Basin groundwater through the control of groundwater recharge with water from the State Water Project and recycled water. No mitigation measure, however, addresses the potential environmental impact identified above, and consideration should be given to developing a performance standard mitigation measures to protect the TDS and TIN standards at Prado Dam.

10-13

13. At the bottom of Page 4-140 and the top of Page 4-141, the PEIR concludes that implementation of the recharge plans in Program Element 2 will not change the amount of surface water reaching Prado Dam because the diversion of stormwater flows for recharge in the Chino Basin would be offset by the increase in wastewater flows from the Chino Basin which presumably reach the Prado Dam. While it appears there is evidence elsewhere in the PEIR to support this conclusion, consider providing either a cross-reference to this information or a summary of the pertinent facts that support this conclusion. The relevant discussion supporting this conclusion appears on Pages 4-333 and 4-334.

10-14

14. The last paragraph on Page 4-143 and continued on Page 4-144, appears to contain a contradiction that needs to be clarified. The paragraph states that the OBMP's planned groundwater recharge with stormwater flows will require the construction of new diversion works to redirect stormwater from flood control channels into recharge basins. The paragraph goes on to conclude, however, that these diversion works will not change the direction or movement of any surface waters. Please explain.

10-15

15. As a housekeeping matter, the second numbered paragraph on Page 4-146 and the second and third numbered paragraphs on Page 4-147, all discuss impacts to groundwater quality in a section of the analysis devoted to impacts to groundwater quantity. Consider moving these paragraphs to Pages 4-153 through 4-161 where groundwater quality impacts are assessed.

10-16

16. The last full paragraph on Page 4-154 concludes that all groundwater recharge with stormwater flows, even stormwater flows occurring in the lower sub-basins, should occur in the two upper sub-basins in order to avoid contamination of the high-quality stormwater and the loss of a potable water source. A specific mitigation measure should be developed to ensure that implementation of the OBMP does not cause the identified potentially significant impact of degrading this important potable water source.

10-12 A review of the referenced mitigation measures indicates that the language in them is inclusive enough to cover the TDS and TIN objectives at Prado Dam, and the modeling conducted prior to implementing a project must evaluate the potential for changing the TDS/TIN concentrations in rising water in the Prado Dam area. If you refer to comment letter #9, comment #9-10, the Regional Board addresses this issue and points out that if future OBMP specific projects do increase the TDS/TIN in the Prado Dam area, the increased removal of TDS/TIN from wastewater would be among the only options available to compensate or offset such increases. This would be required by the Regional Board, which means that additional mitigation, beyond that already identified is not necessary.

10-13 The commentator's statements are noted and the suggested cross-reference will be brought forward in to Chapter 3 in the Final PEIR. Note also, the primary reason that rising water is not forecast to increase as a result of recharge is that increased groundwater extraction in support of desalters and potable water supplies is forecast to balance the volume of water recharged into the Chino Basin over the long-term.

10-14 This error in the text has been noted and in fact direction of surface flow will be altered, but this will not have a significant adverse impact since the relative amount of surface water reaching Prado Dam will not change significantly due to increases in wastewater flows.

10-15 The commentator's statements are noted, and the suggested paragraphs on Pages 4-146 and 4-147 will be moved to the suggested location under the discussion of impacts to groundwater quality. This change will be included in the Final OBMP PEIR.

10-16 The loss of high quality stormwater recharged to Subbasin III is one of the present or existing conditions that the OBMP is attempting to correct. Due to the fact that the statement regarding capture and recharge of stormwater flows is a specific part of the proposed OBMP, a specific mitigation measure is not necessary to further ensure this action is carried out. One of the goals of recharging any water is to be able to capture the water and make it available for appropriate beneficial uses. Since the desalter well fields will be designed to establish and enhance hydraulic control of the basin, recharge in Subbasin II would be planned for capture or controlled by the desalters.

Biological Resources

10-17 17. On Page 4-332, the PEIR states that impacts from the OBMP to plant life and sensitive species is considered potentially significant because so much of the Chino Basin has already been developed and the specific sites for the OBMP projects have not yet been identified. While construction of the OBMP facilities could have a direct impact on plant life and sensitive species if such facilities are located in or adjacent to important habitat areas, we think it is important to reiterate in this section the overall minimal impact to land in the Chino Basin from full implementation of the OBMP and the insignificance of any potential indirect impact to biological resources. In the Land Use section of the PEIR (Page 4-22), it was noted that construction of all desalter and well facilities contemplated under the OBMP would at most disturb 100 acres of the 225,937 acres in the Chino Basin, of which over 75,000 was vacant in 1990. Thus, over the next 20 years, the OBMP would potentially consume only one-tenth of one percent of the open space acreage that existed in the Chino Basin in 1990.

10-18 18. On Pages 4-333 and 4-334, the PEIR discusses the potential impacts to biological resources in and around the Prado Reservoir from a potential decrease in water quantities reaching the Prado Reservoir from the Chino Basin due to the OBMP. Although discussed thoroughly in the Water Resources section of the PEIR, consider adding a section analyzing the impact on biological resources, if any, of changes in the water quality reaching the Prado Reservoir from the Chino Basin as a result of the OBMP.

10-19 19. Mitigation Measure 4.8-11 denotes mitigation measures for "tortoise." Is this a specie of concern in the Chino Basin? It is not listed in Table 4.8-1. Please explain.

If you have any questions regarding our comments on the DEIR, please feel free to contact me at (909) 686-1450. Again, thank you for the opportunity to comment.

Sincerely,

James P. Morris
of BEST BEST & KRIEGER LLP

JPM:wp
RVFUBUP\657233

cc: Robert DeLoach, CCWD General Manager (via facsimile)
Tom Dodson, Dodson & Associates (via facsimile)

10-17 The commentator's statements are noted and the suggested information will be included on in the text of the Final OBMP PEIR.

10-18 The commentator's statements are noted and a short discussion as to the net result of the project being an improvement and benefitting the Prado Basin environment will be included in the text of the Final OBMP PEIR.

10-19 The commentator's statements have been noted and the reference to "tortoise" in mitigation measure 4.8-11 has been removed as this animal is not a species of concern in the Chino Basin.

COMMENT LETTER #11

CITY of CHINO

June 23, 2000

Mr. Richard W. Atwater
Inland Empire Utilities Agency
9400 Cherry Avenue, Building A
Fontana, CA 92335

Subject: Optimum Basin Management Program – Draft Programmatic Environmental Impact Report

Dear Mr. Atwater:

The City of Chino appreciates the opportunity to review the Draft Programmatic Environmental Impact Report (PEIR) for the proposed Optimum Basin Management Program (OBMP), and submits the following comments:

Pages 4-13 & 4-14

11-1 Table 4.2-3 includes descriptions of proposed facilities related to the OBMP. Missing from this table is the City of Chino's proposed nitrate removal water treatment facility. As proposed, the facility would be located at the southwest corner of the street intersection of Central and Phillips Avenues, on property owned by the City. The proposed ultimate capacity of the facility is approximately 11,000 AFY. A description of this facility should be added to Table 4.2-3.

Page 4-64

11-2 The last paragraph on page 4-64 includes a statement as follows: *"The only groundwater pumping proposed as part of the OBMP is that associated with future desalter construction and operation."* We do not believe this is an accurate statement. It is our understanding that OBMP groundwater production would include not only desalter well production, but also all other proposed Chino Basin groundwater production by individual producer's wells (as described in Table 4.5-19, Water Supply Plans for the OBMP, beginning on page 4-188).

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RESPONSES TO COMMENT LETTER #11
CITY OF CHINO

11-1 In addition to adding the proposed nitrate removal water treatment facility to Table 4.2-3 in the Final OBMP EIR, the attached Table 2 contains the most current Regional Water Supply Plan for the OBMP, which lists the Nitrate Removal Plan on the first page.

11-2 The Regional Water Supply Plan shown on Table 4.5-19 identifies individual agency wells that produce groundwater from the Chino Basin. However, these wells are not directly a part of the OBMP and no evaluation of future individual agency well installation and operation has been included in the OBMP PEIR. The collective water demand from all the individual water agencies has been identified as a component of the Regional Water Supply Plan in Table 4.5-19 (see also the updated information in the attached Table 2), but no specific well projects were considered as part of the proposed project. The discussion of water supply plans, see page 4-118, is an aggregate discussion, and it is assumed that individual water supply agencies implement their new wells under their adopted Urban Water Supply Plans.

11-3

We understand that desalter wells may contribute to localized land subsidence, and we agree that monitoring and hydrogeologic studies should be conducted to ascertain the impacts, if any, of localized recharge and production on subsidence. However, we believe that these evaluations must consider the cummulative effects of all proposed groundwater production. The statement referenced above gives the impression that only the production of the proposed desalter wells would be evaluated for the purpose of ascertaining subsidence-related impacts. Please clarify.

Page 4-67

The discussion of land subsidence includes mitigation measures (i.e., 4.4-13 and 4.4-15b) that are predicated on a threshold of six-inches.

11-4

Measure 4.4-13 indicates that *"The implementation of OBMP facilities shall not in any way contribute to subsidence conditions in pre-existing subsidence zones (as shown on Figure 4.4-16)."* The measure also indicates that *"The OBMP will not cause or contribute to any new, significant impacts greater than a total of six inches in magnitude over the planning period. Impacts less than six inches are considered to be less than significant."* The mitigation measure would seem to indicate that implementation of the OBMP will not be allowed to cause any (i.e., zero-inches) land subsidence in areas that have already exhibited subsidence. Whereas, for the duration of the planning period, six-inches of subsidence in "new areas" (i.e., areas that have not exhibited subsidence, as of this printing), is considered acceptable. Is this correct?

Measure 4.4-15b states: *"If desalter well fields are demonstrated to cause or exacerbate impacts to subsidence areas measurable by a decline of over six inches in ground level at a ¼ mile radius, or at the radius of the nearest non-OBMP-participating structure, then pumping patterns for the desalters shall be modified to reduce impacts to cause no more than six inches of decline in ground level at the smallest of the two radii."* This measure does not distinguish between areas of pre-existing subsidence and no pre-existing subsidence. Also, it does not indicate any particular time frame.

11-3 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The statement regarding focus on wells associated with desalters is in reference to future specific OBMP projects that are anticipated to be implemented by participating agencies. CEQA requires a cumulative impact evaluation for all proposed projects, and this includes all past, present and proposed projects related to a particular activity. It is anticipated that as desalter well fields are designed and engineering investigations and modeling is carried out, the existing and proposed wells for water production will be included in the evaluations. The same would apply for an agency proposing a water supply well in an area within a desalter well field after it is proposed or installed. The water supply agency would be expected to evaluate potential subsidence, based on cumulative water production, within the area of impact of the proposed well.

11-4 Subsidence is one of the more complex issues evaluated in the Draft OBMP PEIR. Three measures were identified to address the effects of both areawide groundwater table drawdown and specific well cones of depression. Measure 4.4-13 requires a focus on monitoring existing subsidence hazards and areas susceptible to subsidence. It requires future OBMP projects not to contribute to additional subsidence within pre-existing subsidence zones. The goal of this measure is to ensure that future OBMP projects do not contribute to existing subsidence hazards. Within new areas of groundwater pumping for desalter projects, a maximum subsidence of six inches was established as a performance threshold beyond which a significant impact would occur. However, the purpose of the measure was to serve as a threshold that would require specific actions to be taken to control or eliminate the OBMP project contributions to subsidence. Measure 4.4-14 is intended to reinforce measure 4.4-13 for areas within subsidence areas. Measure 4.4-15 a. addresses localized cone of depression impacts, and 4.4-15 b. further refines the maximum extent of the six inch threshold with the goal of limiting the area of subsidence. Measure 4.4-15 b. applies only to new areas of groundwater extraction and subsidence.

What is the technical basis for establishing six inches as a threshold for acceptable subsidence? Would not the site-specific conditions dictate how much subsidence is acceptable?

It is our understanding that the planning period is twenty years in duration. Why is this time frame linked to 4.4-13? Most, if not all, above and below ground permanent structures would exist for more than twenty years.

11-5

It is our understanding that only a relatively small portion of the study area has been surveyed for the purpose of evaluating the existence of land subsidence. Additionally, data exists which indicates that pre-existing subsidence is present in an area larger than that presented by Figure 4.4-16. Despite this, we do not understand why measure 4.4-13 distinguishes between areas of pre-existing subsidence and no pre-existing subsidence. Should not all areas receive the same level of concern?

4.4-15b specifically describes desalter well fields, and their potential for causing subsidence over a measurable area. Again, what is the basis for the six-inches? And, what is the basis for ¼ mile radius? Are we to understand that the six-inches over ¼ mile threshold applies only to desalter wells, but not to other existing or future wells? Also, 4.4-15b indicates that the determining radius of influence may be smaller than ¼ mile if a non-OBMP-participating structure is affected. Why is the measure limited to non-OBMP-participating structures? OBMP-participating structures could also be affected and should be the subject of similar consideration.

Pages 4-150, 4-151, 4-157, 4-160, 4-163, 4-268, 4-363, 4-365, 5-6, 5-7

11-6

These pages (and possibly elsewhere in the draft PEIR) include discussions on the subject of water recharge and the potential for associated groundwater quality impacts. The draft PEIR indicates (pages 4-150 and 4-151) that proposed recharge would increase the hydraulic gradient from north to south, resulting in slightly increased groundwater flowrates. The draft PEIR acknowledges (pages 4-157, 4-363) the

11-5 The six inch threshold was selected as a criteria to be used to initiate two actions designed to prevent potential subsidence impacts from becoming significant: first, it is designed to ensure that back-up measures are available to reduce pumping or to ensure that additional recharge is carried out to offset pumping; second, it establishes a significance threshold that can be used as a performance standard that can be forecast and measured. Based on the City's comment, IEUA is recommending an additional mitigation measure: *If an engineering study is prepared prior to installing a well or well field by a qualified geologist and hydrologist and demonstrates that subsidence greater than six inches can be permitted without causing significant subsidence hazards, then the investigation shall define the new threshold for the specific location and it will be observed as the alternative threshold of significant subsidence.*

The planning period was utilized as time performance standard to measure against. It is assumed that over the 20-year period the OBMP will achieve or will have made substantial progress in achieving the hydrologic control of the Chino Basin that is envisioned in the Program. Thus, by measuring subsidence impacts over a longer period of time, it is possible to include the effects of recharge in the Basin as an offset to the withdrawals for desalters and water supply production wells.

There is a difference between new areas of pumping for desalters and existing areas with subsidence that may already be experiencing significant hazards or impacts. This was the basis for bifurcating the thresholds. In fact the same level of concern is being exercised for both areas, but the thresholds are different for the reasons outlined above.

OBMP facilities can be designed to accommodate forecast subsidence, existing facilities cannot avoid such impacts. This was the basis for establishing the above threshold. As noted above, if the thresholds are designed to permit management actions to be taken that can control or eliminate potential for significant subsidence impacts. An agency could choose to not purchase a structure within the identified radius if it concluded that subsidence impacts might be significant from implementing a future specific project. As long as a protective threshold (performance standard) is established before impacts occur, then potential adverse impacts can be mitigated.

11-6 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Although the use of injection of higher quality groundwater is one of the measures available for implementation under the measures identified in the OBMP PEIR, a mitigation measure will be added to specifically address the concern expressed in this comment. It will read: *Among the alternatives available to reduce or control adverse effects caused by recharge is the use of injection of water of higher quality to resident poor quality groundwater to serve as a barrier against the migration of the poor quality groundwater.*

concerns expressed by the City of Chino, that recharge may cause or contribute to accelerated migration of poor quality groundwater towards otherwise unaffected groundwater wells.

The draft PEIR indicates that preliminary examinations of the potential for water quality impacts related to accelerated migration of poor quality groundwater under the influence of recharge have been conducted. It is our understanding, that the results of these examinations indicate, the proposed OBMP recharge activities are not forecasted to cause significant adverse impacts, and that any adverse impacts that may occur are considered to be less than significant and/or can be successfully mitigated. It is also our understanding that proposed OBMP recharge (including recharge of recycled water, storm water, imported water, and/or other storage and recovery [i.e., conjunctive use water]) will be further examined, using modeling techniques, before recharge proceeds, and after implementation to ensure that adverse impacts do not occur. We suggest that these examinations include consideration of thresholds of tolerance that should be established for potentially affected areas.

11-6 cont.

Mitigation measures described on pages 4-363 and 4-365 include replacement of adversely impacted groundwater supply, treatment of impacted supply, and avoidance of recharge. To this list of mitigation measures we suggest adding injection of water that is superior in quality to resident poor quality groundwater, such as State Project water, which could serve as barrier against the migration of the poor quality groundwater.

Pages 4-442, 4-443, 4-444

At the bottom of page 4-442 and continuing at the top of page 4-443 is the statement *"For structures, such as desalters and well housings, compliance with local agency design guidelines will ensure that new facilities do not cause significant negative aesthetic effects."* Mitigation measure 4.15-4 (page 4-444) states *"When OBMP above ground facilities are constructed in the future, the local agency design guidelines for the*

11-7

11-7 cont.

project site shall be followed to the extent that they do not conflict with the engineering and budget constraints established for the facility." We suggest that 4.15-4 be revised to reflect the discussion appearing on pages 4-442 and 4-443, by deleting the last phrase *"to the extent that they do not conflict with the engineering and budget constraints established for the facility."*

The City of Chino supports the proposed Optimum Basin Management Program, and activities that enhance the safe yield and water quality of the Chino Basin.

Thank-you for your consideration of the foregoing comments. Please contact me if you require clarification.

Sincerely,

David G. Crosley, P.E.
Water & Environmental Manager

DGC:pr

11-7 The inclusion of the qualifications on design requirements, "to the extent that they do not conflict with the engineering and budget constraints established for the facility", is essential to preserve the ability of the participating agency to implement an essential OBMP facility. If engineering or budget limitations require a certain design to ensure the effectiveness of a facility, then it is essential to have the option to proceed, after coordinating design requirements with the local land use agency.

COMMENT LETTER #12

STATE OF CALIFORNIA - THE RESOURCES AGENCY GRAY DAVIS, Governor

DEPARTMENT OF FISH AND GAME
Eastern Sierra - Inland Deserts Region
4775 Bird Farm Road
Chino Hills, California 91709
(909) 597-9043

June 23, 2000

By Facsimile

Mr. Neil W. Clifton
Inland Empire Utilities Agency
9400 Cherry Avenue, Bldg. A
Fontana, CA 92335

Re: **Chino Basin Optimum Basin Management Program**
Programmatic Draft Environmental Impact Report (PDEIR)

Dear Mr. Clifton

12-1 The California Department of Fish and Game (Department) thanks you for the opportunity to comment on the proposed project. In a previous letter dated December 14, 1999 Department staff forwarded the basic Notice of Preparation comment letter. This letter discusses Department requirements for identification of biological resources, measures to avoid or minimize impacts on sensitive biological resources, the necessity for 1601-1603 Streambed Alteration Agreements for specific impacts to jurisdictional streams, and a discussion of the California Endangered Species Act. The Department is particularly interested in any program elements which affect existing in-stream flow, the flooding regime of streams, result in channelization of streams, reduction of the existing riparian/wetland vegetative cover and lowering of the water table and attendant impacts on riparian vegetation.

12-2 The Department recognizes that a PDEIR may be appropriate for the proposed general project at this early stage of the process. However, the Department requests clarification from you regarding the California Environmental Quality Act (CEQA) process to be utilized for specific projects. The Department has concerns as to whether the proposed mitigation measures in the PDEIR are adequate to protect the sensitive biological resources. Therefore, we would like clarification regarding the subsequent CEQA process you intend to use. In addition, we request that the Department, as a responsible agency, be consulted with in regards to future CEQA documentation, 1601 - 1603 Streambed Alteration Agreements and California

RESPONSES TO COMMENT LETTER #12
DEPARTMENT OF FISH AND GAME

12-1 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

12-2 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Please refer to responses to comments 7-1 through 7-4 which outlines the future CEQA review process. The Department of Fish and Game (DFG) will be one of the interested parties that will be given ample opportunity to participate in each future OBMP specific project evaluation. Each future site will have its own specific biological conditions, and for each location a decision on the appropriate level of action and commitments will be made according to the review process outlined in responses to comment letter #7. When projects are implemented under the OBMP, if further environmental review indicates that a sensitive species may be impacted, the appropriate action will be taken to minimize or mitigate for impacts in accordance with the OBMP PEIR. IEUA will conduct consultation with DFG where natural biological resources will be affected and where appropriate, will obtain permits/agreements from the Department, Corps of Engineers, Fish and Wildlife Service, and Regional Board.

12-2 cont. Endangered Species Act incidental take permits.

The PDEIR involves the following activities: treatment of contaminated groundwater; new recharge facilities; groundwater quality and monitoring program; development of new sources of water from other basins; and development of a comprehensive stormwater recharge plan. Some of these activities, such as cleaning up contaminated water, are beneficial and would not necessarily involve adverse impacts to biological resources. Other activities, such as pipelines, wells, roads, and storage of water could have direct and indirect impacts on biological resources.

12-3 The Department acknowledges that implementation of the proposed development will involve impacts to biological resources which are not known at this time. The biological section of the PDEIR states that because the PDEIR discussion is broad, there is room for further site specific biological surveys in the future. Certainly focused surveys will be required in areas where there are sensitive and endangered plants or wildlife. Furthermore, specific projects with potential impacts to sensitive plant and wildlife resources will require Federal and/or State endangered species permits. The PDEIR states that the proposed mitigation measures will reduce future environmental impacts to a less than significant level. Therefore, it is incumbent upon the Department to review and comment on these mitigation measures. The Department appreciates the emphasis placed in the mitigation measures on the avoidance and preservation of existing sensitive resources, preservation of habitat linkages, and the use of conservation or open space easements.

12-4 As part of an overall basin management program the lead agency should address some concerns the Department has regarding the restoration of native species and habitat (i.e., bullfrog management, invasive plant management, native plant enhancement, and cowbird trapping programs). For instance, ponding of water may create breeding grounds for bullfrogs and non-native fish which would adversely impact native amphibians and fish. An appropriate mitigation measure to counter this would be ongoing bullfrog and fish monitoring and eradication programs.

12-5 The Department requests that the lead agency comply with it's obligations under CEQA to consult with us prior to conducting surveys. In addition, we request that, upon identification of the biological values and possible impacts from a specific project, the project proponent meet with us as early as possible to identify appropriate mitigation/compensation measures, including those for wetlands, riparian areas and upland habitats.

12-6 The Department recommends that the project applicants meet with the Army Corps of Engineers, the United States Fish and Wildlife Service, the Regional Water Quality Control Board and ourselves to begin discussing some of these issues, in order to resolve them as early as possible.

12-3 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

12-4 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. As part of the consultation process for future specific projects being implemented under the OBMP, the following actions will be taken by the IEUA. In reviewing specific projects with the potential to cause ponding of water, the District will be consulted regarding potential to implement bullfrog management, invasive plant management, native plant enhancement, cowbird trapping programs, and other native biological resource enhancement programs, where appropriate. This consultation will be included as part of the overall CEQA process as outlined in responses to comment letter #7.

12-5 It is IEUA's intent to consult with the DFG as part of future CEQA reviews, including biological surveys where appropriate. To comply with its obligations under CEQA and various biological resource laws and regulations, the lead agency will consult with DFG prior to conducting surveys for a specific site with natural biological resources. The intent of scheduling such meetings as early on in the review process as possible is to help identify and resolve potential issues in a timely manner and to identify appropriate mitigation/compensation measures.

12-6 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Please refer to responses to comments 7-3, 7-4 and 12-2.

Thank you for this opportunity to comment. Questions regarding this letter and further coordination on these issues should be directed to Robin Maloney-Rames, Environmental Specialist III, Chino Hills, (714) 817-0585

Sincerely,

Glenn Black

Glenn Black
Supervisor
Habitat Conservation - South
Region 6

cc: Jeff Newman, USFWS, Carlsbad
Ms. Nancee Murray, Department of Fish and Game, Legal Office

COMMENT LETTER #13

JACKSON DEMARCO & PECKENPAUGH
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June 23, 2000

VIA FACSIMILE AND HAND DELIVERY

Inland Empire Utilities Agency
Attn: Garth Morgan
9400 Cherry AV, Bldg. A
Fontana, CA 92335

Chino Basin Watermaster
Attn: Traci Stewart
8632 Archibald Avenue, Suite 109
Rancho Cucamonga, CA 91730

Re: ***Program Environmental Impact Report for the Chino Basin Optimum Basin Management Plan, Peace Agreement, OBMP Implementation Plan, Revised Draft Water Supply Plan Phase I Desalting Project Facilities Report***

Dear Mr. Morgan and Ms. Stewart:

We represent Santa Ana River Water Company ("Santa Ana"). The following are Santa Ana's objections, conditional opposition and comments on the Draft Program Environmental Impact Report ("PEIR"), the Peace Agreement, the OBMP Implementation Plan and the Revised Draft Water Supply Phase I Desalting Project Facilities Report. Due to the upcoming Court hearing, Santa Ana's objections, conditional opposition and comments were also filed with the Court.

13-1 Santa Ana requests that the Watermaster not approve the Peace Agreement, the OBMP Implementation Plan, or the Revised Draft Water Supply Phase I Desalting Project Facilities Report unless they are first revised to require that the Chino II Desalter be designed to deliver water to Santa Ana. Santa Ana also requests that Inland Empire Utilities Agency not certify the PEIR until the requested revisions are made to the documents.

RESPONSES TO COMMENT LETTER #13
JACKSON DEMARCO & PECKENPAUGH

13-1 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

1. Santa Ana opposes amendments made to the Revised Draft Water Supply Plan Phase 1 Desalting Project Facilities Report to Exclude Santa Ana From Participation in the Chino II Desalter.

Santa Ana is a non-major appropriator located in the lower (southern) end of the Chino Basin. The OBMP calls for several activities to be undertaken in order to increase the
13-2 yield and improve the overall quality of water supplies in the Chino Basin.

Santa Ana relies exclusively on groundwater for its water supplies. Santa Ana has two wells located outside of the Chino Basin that supply a portion of its municipal water demands. The remainder of Santa Ana's water is supplied by wells owned and operated by Jurupa Community Services District ("Jurupa"). Santa Ana is no longer able to operate its own wells in the Chino Basin due to high nitrate levels.

None of the OBMP elements would improve the declining groundwater quality in the lower Chino Basin for many years. As a result, the quality of groundwater produced by
13-3 Jurupa and served to Santa Ana is expected to continue to deteriorate. The proposal to recharge the basin upstream of those wells with recycled wastewater is expected to increase total dissolved solids and nitrates.

The OBMP calls for the construction and operation of two desalters (Chino I Desalter and Chino II Desalter) and the expansion of the Chino I Desalter. The two new desalters are intended to provide mitigation for the expanded use of recycled water to recharge
13-4 the basin. See Implementation Plan, p. 21. In order to mitigate the existing and future water quality impacts to Santa Ana's water supplies, it is necessary for Santa Ana to secure delivery of desalter product water supplies to blend with its groundwater supplies. Since Santa Ana's groundwater supplies are expected to continue to decline in the short-term, it is important that Santa Ana obtain the highest quality of desalter product water possible.

Since April 2000, numerous confidential meetings among certain parties have resulted in documents making significant changes to the OBMP to Santa Ana's detriment. Those documents have been submitted for approval by the Watermaster and the Court. Participation in
13-5 the meetings was restricted to invited parties. Santa Ana was not among the parties invited to participate in the meetings and was not informed that an overriding framework for a part of the OBMP was being discussed at those meetings. See the attached memorandum from Ray Wellington, San Antonio Water Company, p.1, Exhibit "A".

13-2 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

13-3 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. This is a valid statement as far as it goes. It ignores the installation of desalters to remove salts and a requirement not to cause or contribute to significant degradation of groundwater quality within the Chino Basin. Please refer to the responses to comment letter #9, Regional Water Quality Control Board, for a more detailed discussion of regulatory issues.

13-4 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

13-5 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

By the time the Program Environmental Impact Report was circulated, several key documents related to developing and implementing the OBMP had been developed and were incorporated by reference in the PEIR. Among those documents is the November 1999 OBMP Water Supply Plan Desalting Project Facilities Report by Black & Veatch. See PEIR pages 2-6 - 2-8.

The preferred Chino II Desalter alternative was among several alternatives identified in the Desalting Project Facilities Report. Under the preferred alternative, Chino II Desalter product water would be delivered directly to Santa Ana. Since that time, Santa Ana has been planning its future water supply needs based on its expectation of receiving Chino II Desalter water.

13-6 Consistent with the November 1999 Desalting Project Facilities Report, the PEIR describes and depicts the basic design of the Chino II Desalter as including a delivery point to Santa Ana, as well as deliveries to Norco, Ontario and Jurupa for the two different configurations analyzed. Santa Ana analyzed the project as described in the PEIR with its expectation to take the preponderance of its water supplies from the desalter product water.

One week ago, on June 15, the Desalting Project Facilities Report was revised to account for "recent policy decisions" made by the Chino Basin stakeholders. See Revised Report, p. 1-5. The new Chino II Desalter preferred alternative would serve water to everyone identified in the original preferred plan, with the exception of Santa Ana. Likewise, the June 15 version of the Peace Agreement, Section 7.3(b), only requires the Chino II Desalter to be designed to deliver water to Jurupa and the City of Ontario. The desalter may serve others (presumably including Santa Ana) "subject to the limitations of available funding."

As a result of the very recent changes to the Desalting Project Facilities Report and the emergence of the Peace Agreement and OBMP Implemental Plan, mandatory design criteria have been established for the Chino II Desalter that omit Santa Ana.

2. Santa Ana objects to the closed door negotiations that excluded Santa Ana's participation from significant policy-making decisions.

13-7 Contrary to the open negotiation and discussion process employed over the past 2 years in developing the OBMP and desalter alternatives, Santa Ana was not notified of or included in any of the recent discussions to amend the design criteria for the Chino II Desalter.

13-6 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. It does not appear that the conclusion reached in this comment is accurate. In developing the responses to comments for the OBMP PEIR, a more current version of the Regional Water Supply Plan (see Table 2 attached to these responses to comments) is provided and it continues to list the Santa Ana River Water Company as a recipient of desalted water.

13-7 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

After receiving the Revised Desalting Project Facilities Report and Peace Agreement one week ago, Santa Ana requested that the plan and the Peace Agreement be revised to conform to the preferred alternative analyzed in the PEIR and to include Santa Ana among the entities that would receive water from the Chino II Desalter. However, the discussion of Santa Ana's request centered around the inability to obtain the approval of all of the signatories to the Peace Agreement in the short time remaining before the June 29 Court hearing rather than the reasons for the recent change or the merits of Santa Ana's request.

13-7 cont.

3. The revised Desalting Project Facilities Report, the Peace Agreement, and the Implementation Plan constitute a significant change in the project described and analyzed in the PEIR in violation of the California Environmental Quality Act.

The Peace Agreement, the OBMP Implementation Plan, and the Revised Desalting Project Facilities Report are within the definition of the OBMP "project" for purposes of CEQA. Yet, they were not included in the project description or in the environmental analysis in the PEIR in violation of the California Environmental Quality Act. Additionally, they are not consistent with the project described in the PEIR. The changes made to the design of the Chino II Desalter increase the severity of the OBMP's potential environmental impacts to Santa Ana's water supply. Since the documents did not even exist until well after the Draft PEIR was circulated for public comment, the impacts from the OBMP resulting to Santa Ana's municipal water supply in light of the revisions made to the Chino II Desalter design criteria were not analyzed and could not be analyzed in the PEIR. The "project" as defined and analyzed in the PEIR is therefore flawed.

13-8

4. The closed door negotiations resulted in bureaucratic momentum building for the Peace Agreement and Implementation Plan to the point where genuine flexibility no longer remained by the time Santa Ana attempted to reinsert itself among the entities to be served by the Chino II Desalter.

Santa Ana respectfully requests that the Peace Agreement, Implementation Plan, and Revised Desalting Project Facilities Report be revised as necessary to require the Chino II Desalter to be designed to deliver water to Santa Ana consistent with the PEIR.

13-9

Sincerely,

Michele A. Stapies

MAS/jaa
166309.1

13-8 The project defined in the OBMP PEIR is still considered accurate and consistent with the Draft OBMP. To the extent that it identifies the total amount of treated water that will be produced by all of the proposed desalters, it the impact forecast remains conservative. If the volume of water that will be treated and produced by future desalters differs from that collectively identified in the Draft OBMP and the OBMP PEIR, then it will be the responsibility of the participating agency(ies) implementing these future specific OBMP facility(ies) to prepare an second tier environmental document in accordance with Sections 15162 and 15168 of the State CEQA Guidelines. For the time being the water supply requirements of Santa Ana River Water Company are included in the OBMP and therefore, the project description is considered accurate and the impact forecast is considered to adequately address all potential environmental impacts at a program level.

13-9 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

Comment Letter 14

ORANGE COUNTY WATER DISTRICT

June 23, 2000

JUN 2 6 2000

Mr. Neil W. Clifton
Inland Empire Utilities Agency
9400 Cherry Avenue, Bldg A
Fontana, CA 92335

Dear Neil:

The Orange County Water District (OCWD) is vitally concerned with water quality in the Santa Ana River and the problem of increasing total dissolved solids (TDS) and nitrate.

14-1 The Porter-Cologne Act emphasizes "that the quality of all the waters of the state shall be protected for the use and enjoyment by the people of the state." Approximately 2 million people are dependent on the Orange County groundwater basin for their drinking water supply. The primary source of replenishment water for the basin is the Santa Ana River. Because the Santa Ana River is so essential for recharge of the groundwater basin, OCWD is committed to the protection of the water quality in the river.

The Inland Empire Utilities Agency has published a Draft Program Environmental Impact Report (PEIR) for the Optimum Basin Management Plan (OBMP) dated May 2000. We applaud the efforts of parties involved in developing the Optimum Basin Management Plan. OCWD supports projects that protect the quality of the Santa Ana River.

Following are OCWD's comments on the PEIR:

14-2 Page 4-114 – Mobilization of contaminants in the vadose zone is not addressed in the report. The PEIR indicates that the potential effect of flushing contaminants already in the vadose zone into the saturated zone could not be modeled because of problems with the model. The PEIR also indicates that real-world experiments to investigate this issue are not practical. Neither of these items obviate the need to address the impact of contamination in the vadose zone.

P.O. Box 8300, Fountain Valley, CA 92728-8300 • 10500 Ellis Avenue, Fountain Valley, CA 92708
Telephone (714) 378-3200 Fax (714) 378-3373 Web Page www.ocwd.com

RESPONSES TO COMMENT LETTER #14
ORANGE COUNTY WATER DISTRICT

14-1 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

14-2 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. As results of the Chino Basin TIN/TDS study indicate, the implementation of a 700,000 acre-ft storage program may have the potential to flush contaminants already in the vadose zone into the saturated zone. If such a conjunctive use program utilizing more than 300,000 acre-feet per year is implemented, further investigations, possibly including modeling and other analysis will be necessary prior to project approval. Please refer to the CEQA process outlined in response to comments 7-1 through 7-4. Furthermore, the statement that occurs on page 4-114 of the PEIR regarding "problems with the model" is inaccurate. In fact, the Chino Basin Water Resources Management study model conducted for a 300,000 acre foot conjunctive use program shows virtually no adverse impacts for utilization of this quantity of additional storage capacity in the basin. The model at this level is fully adequate to evaluate impacts associate with this 300,000 acre-foot volume. This model was not designed to be run for a 700,000 acre-foot program, thus it would not be appropriate to draw conclusions regarding such an expanded conjunctive use program unless a model had been designed and run, in order to verify whether or not contamination may occur from such a program.

If an expanded conjunctive use program is considered in the future, it is required that additional investigations be conducted before implementation, and another model with appropriate parameters, or some other investigations, will be necessary to fully address whether or not there is the potential for contamination in the vadose zone associated with a 700,000 acre-foot program. If adverse impacts are forecast to occur after such investigations, further environmental documentation will need to be prepared. As additional information for consideration with regards to this issue, it should be noted that in the past, the CBWRMS model has been successfully run and observed by Wildermuth Environmental to not show any significant increase in TDS concentrations by management zone, even when significant quantities of water with extremely high TDS values were utilized.

The proposed maximum quantity of water for conjunctive use considered in the Draft PEIR is approximately 300,000 acre-feet. Past historical practices were utilized to establish this threshold, namely the "mining" of the Basin that occurred prior to 1978, which was on the order of 500,000 acre-ft. Current safe-yield management of the Basin utilizes this capacity that was previously "mined" and has not demonstrated any further contamination of the saturated zone from such activity. To be even more conservative, a best engineering judgment was made to limit the conjunctive use capacity to 300,000 acre-ft, well within the previously demonstrated capacity of the Basin. Please refer to responses to comment letter #9 and comment #10-8 for additional information on this subject.

14-3 Table 4.5–24 - This table describes OBP Alternative A – other sections of the report describes Alternative A1 and A2. Is Table 4.5-24 for Alternative A1 or A2? The same question applies to Table 4.5-25

14-4 Page 4-136 – Urban storm water runoff total dissolved solids is listed as generally being less than 100 mg/L. Data supporting this statement should be included in the PEIR. We cannot evaluate the appropriateness of assuming stormwater runoff TDS is 100 mg/L without supporting documentation for the TDS value of 100 mg/L.

14-5 Page 4–136 The total dissolved solids objective of OC Forebay subbasin is listed as 650 mg/L. The Regional Board's Basin Plan lists this objective as 600 mg/L.

14-6 Page 4–136 The next to last paragraph speculates on potentially higher total dissolved solids concentrations in the Santa Ana River below Prado Dam that may result from increased use of recycled water upstream of Prado Dam. The last sentence of the next to last paragraph says "When placed in this context, the potential for degradation of surface water quality downstream of Prado Dam is not considered to significant and adverse." This statement is without merit. In the first place, when evaluating potential impacts in a CEQA document, it is improper to speculate on how future conditions may cause the potential impacts under consideration to be insignificant. Concluding that an impact is not significant or adverse based on speculative statements about the quality of future discharges to the Santa Ana River is lacking in foundation. Secondly, the statement "When placed in this context, the potential for degradation..." is based on the unfounded view that since additional salts will be added to the Santa Ana River flow from other sources, more salts resulting from the Optimum Basin Management Program will not be significant. Such a view is contrary to state and federal law.

14-7 Page 4-136 and 4-137 – For the no-OBMP alternative and OBMP alternative, the total dissolved solids concentrations in the Santa Ana River below Prado Dam are described as remaining about the same or decreasing. This conclusion is based partially on regulation of storm water discharges in the Santa Ana River watershed. This assumption is speculative because there are no physical methods to control the total dissolved solids of storm water discharges. It is not proper to base a conclusion on a speculative assumption such as this.

14-8 Page 4-141 The ability of desalters in the southern portion of the Chino Basin to control groundwater discharge to the Santa Ana River and its tributaries is important. Discharge of poor quality groundwater to the river can degrade water quality and impact the beneficial use of the Santa Ana River flow for groundwater recharge. It is critical that the ability of the desalters to control groundwater discharge be adequately evaluate. The environmental documentation should include a thorough description of the evidence that the desalters can control

14-3 The commentator appears to be referring to two alternatives that are unrelated to the data being portrayed in Table 4.5-24. The two alternatives refer to installation of desalting facilities. One alternative presents a facility that strictly treats groundwater for TDS, while the other alternative also involves denitrification. Both alternatives treat approximately the same volume of water and cause no significant difference in the volume of groundwater in storage in the Chino Basin.

14-4 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The 100 mg/L value for stormwater runoff TDS is based on values provided by the Watermaster and this value is referenced to Mark Wildermuth's 1998 document, TIN/TDS Phase 2A: Task 1-4. Nitrogen Losses from Recycled Water Systems and in Table B-1 of Phase I of the Final Water Recharge Master Plan when one considers the basins receiving and storing water in the singular form of urban runoff such as Montclair, Brooks, 15th Street and Upland Basins. Note that the absolute value (100 mg/L) is not the critical issue for use of stormwater in future recharge. Additional data will have to be collected and analyzed from each stormwater runoff source to determine the appropriate blend of water to be recharged at each proposed recharge location to meet the specific TDS, TIN and other regulatory and environmental requirements for recharge in the Chino Basin.

14-5 The commentator's statements are noted and the suggested correction will be made in the Final OBMP PEIR that is provided to the IEUA Board of Directors for their certification.

14-6 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The evaluation on page 4-136 is noted as being speculative, but it is based on adopted population forecasts for the Chino Basin. In this case, IEUA has projected future wastewater flows based upon historic growth and future growth forecasts that have been occurring for more than 50 years in southern California. The TDS values in the recycled water being generated from IEUA treatment plants is of high enough quality (less than 500 mg/L) that it serves to reduce the overall concentration of surface water in the Prado Dam area. Therefore, increased flows of recycled water in the future are forecast to continue diluting, not increasing, the TDS in the Prado Dam area. Second, the Regional Board (see response to comment #9-10) has made it clear that if Santa Ana River TDS concentration exceed the Basin Plan Objective in the Prado Dam area, it would require additional treatment of wastewater to protect the beneficial uses in Orange County. The OBMP is designed to achieve a level of hydrologic control/balance that will minimize the potential for higher TDS values in the Prado Dam area, as could be caused by either rising water or discharge of recycled water. This is the basis for the conclusion presented on page 4-136.

14-7 The commentator's statement is in error in the reference. Several methods are identified to ensure TDS concentrations do not exceed BPO's downstream of Prado Dam. There are methods available to reduce concentrations of specific elements comprising TDS in storm water discharges. See Attached Figure 4 from *Supplement "A" of the Riverside County Drainage Area Management Plans: Selection and Design of Stormwater Quality Controls* that provides numerous methods for the treatment of stormwater discharges. Also, as the installation of desalters will act as a hydraulic isolating mechanism, this will help to prevent poor quality water from rising and flowing out the south end of the Basin and contributing to adverse groundwater quality impacts. In addition, the Regional Board has expressed its intent to protect BPO's in this area by requiring greater removal of TDS from recycled water if necessary. A more recent water supply facility plan has been prepared in June of 2000 and will be made available as an Attachment to the Final OBMP PEIR.

14-8 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The modeling performed in support of the OBMP assumes a certain volume of poor quality groundwater will be extracted (estimated to be 40,000 acre-feet ultimately) in Chino Subbasin III for removal of salts, including nitrates. The modeling does indicate that the proposed desalters will be able to prevent an increase in rising water and prevent additional TDS degradation to surface water downstream of Prado Dam. Therefore, based on the data available to support both the OBMP and the OBMP PEIR, it is appropriate to conclude at this program level of evaluation that groundwater discharges can be controlled, in accordance with the overall hydrologic control goals of the OBMP. Also, as a program document, the level of monitoring required to verify control of groundwater has been described at a program level, but the specific program has not yet been defined, which is again consistent with a program level of evaluation. As each of the OBMP program elements, including future specific facilities are identified, they will be evaluated in the context of meeting the general conclusions contained in the OBMP PEIR. Currently, Wildermuth Environmental is in the process of preparing a report on hydraulic control for Watermaster and IEUA. Preliminary results of the investigation were provided in a memorandum from Mark Wildermuth prepared for use by Tom Dodson and Associates prior to completion of the Draft PEIR. The final report will provide greater detail on this topic, and is fundamental to reaching OBMP goals for hydraulic control. This report and other additional environmental documentation will necessarily be completed prior to OBMP desalter installation.

14-8 groundwater discharge to the river, but the PEIR does not. The environmental documentation should also describe the monitoring program that will be implemented to verify control of groundwater discharge to the river, but the PEIR does not.

14-9 Page 4-146 The recycled water total dissolved solids concentrations used in the PEIR are not consistent. Recycled water total dissolved solids is listed as 420 mg/L on page 4-146. Tables 4.5-24 & 4.5-25 list 487 mg/L. Table 4.5 –23 has 390 mg/L. There is no explanation regarding why different values are used.

14-10 Page 4-146 Statements in the PEIR regarding the presence or absence of assimilative capacity are not consistent. For example, on Page 4-146, the PEIR states "Under the 1995 Santa Regional Water Quality Control Plan (Basin Plan), the Chino Subbasins are defined as having no assimilative capacity for salts." About ten lines later, the PEIR states "Also, in the lower subbasin, there appears to be some assimilative capacity as a result of discharging recycled water with TDS concentrations about 300 mg/L below the Basin Plan objective (420 mg/l vs. 770 mg/l)." These two statements are not consistent. Assimilative capacity requires that the current subbasin concentration be less than the subbasin objective. Based on the Basin Plan, and other information contained in the PEIR, the current subbasin concentration is greater than the subbasin objective. Recharging water below the Basin Plan objective does not create assimilative capacity.

14-11 Page 1-146 – The PEIR states "If the 40,000 afy had the Basin Plan TDS objective of 200 mg/l, there would be a net addition of 10,137 tons of salt per year. The input of recycled water into the basin would cause a net increase over the Basin Plan objective of 12,132 tons. This would be the only potential adverse impact associated with an increase in the groundwater quantity due to recycled water recharge." This statement ignores the impact on nitrate concentrations. The addition of tons of nitrogen and the impact on nitrate concentrations must be evaluated.

14-12 Page 4-147 The text under item #3 does not make it clear if the desalters can remove sufficient salt to offset recharge at concentrations greater than the Basin Plan objectives and also address excess salt accumulation currently present in the Chino Basin. If there is no assimilative capacity in the Chino Basin as stated in the PEIR, then the desalters must address the recharge of water at concentrations above the Basin Plan objectives and the excess salt already accumulated in the basin.

14-13 Page 4-154 The PEIR states "... therefore, all stormwater recharge, including stormwater recharge generated within the lower subbasin, will be carried out in the two upper subbasins." Accomplishing this would require substantial new facilities. and the PEIR should but does not describe the facilities required to carry out all stormwater recharge in the two upper subbasins.

14-9 A TDS concentration of 390 mg/L was used in early studies to present a conservative impact to the Santa Ana River resulting from future recycled water recharge of Regional Plant effluents in the Chino Basin. Table 4.5-23 was revised and is included following these responses to comments to show a consistent TDS concentration with Tables 4.5-24 through 4.5-27. The value of 487 mg/L was used in the salt budget update to reflect a possible worst case scenario in the future where TDS average of combined effluent from RP-1 and RP-4 was higher than the currently observed combined average of 420 mg/L which is monitored by IEUA.

14-10 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Please refer to comments and responses 9-18 and 9-19 which presents the Regional Board's position on this issue. IEUA believes that under certain circumstances there may be locations and conditions where assimilative capacity may be demonstrated in relation to future recharge projects. However, it is recognized that a positive demonstration must be made to a skeptical Regional Board staff on this issue based on the referenced comments.

14-11 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Nitrate issues, will of course be, further evaluated on a specific project basis as noted in this comment.

14-12 Please refer to response to comment #8-2 which addresses the issue of "legacy" salt within the Chino Basin.

14-13 The commentator's conclusion is correct. Pipelines to transport stormwater runoff to the upper subbasins has been discussed, but accumulation points (such as collection basins) has not been identified because this program has not been fully defined at this point. Regardless, the mitigation measures for site specific facilities are in place and the accumulation points, booster pumps and pipelines for transfer of stormwater for specific projects can be evaluated under the programmatic concept when the projects are adequately defined.

14-14 Page 4-155 The PEIR evaluates the effect of recharging State Project Water with a total dissolved solids concentration greater than 330 mg/L, using 330 mg/L as a threshold. On page 4-147, the PEIR states "For the same volume of water with a TDS concentration equal to the Basin Plan objective of 220 mg/l, the salt addition would be 25,662 tons per year." The PEIR appears to use the Basin Plan objectives in some sections, and potential revisions to the Basin Plan objectives in other sections. The PEIR should be consistent and use one set of values, or clearly describe why various objectives are being used in different sections.

14-15 Page 4-147 - State Project Water total dissolved solids concentrations are stated as ranging from 250 to 400 mg/l. Tables 4.5-24 and 4.5-26 list the total dissolved solids as 250 mg/l, which is the low end of the range and therefore likely to be overly optimistic. The value used in the salt budget calculations in Tables 4.5-24 and 4.5-26 is not justified in the PEIR.

14-16 Page 4-156 – The PEIR states "Recent experience in measuring water quality impacts associated with recycled water recharge indicates that it can be recharged without significantly degrading water quality." This statement is not supported in the PEIR. What "recent experience" is referred to? Data or other information are not provided in the PEIR to support this statement.

14-17 Table 4.5-24 - The volume water from deep percolation of applied water from dairies seems to be low. The basis for this number should be described in the PEIR.

14-18 Tables 4.5-24, 4.5-25, 4.5-26, 4.5-27 – The outflow total dissolved solids concentration and tons of salt in the outflow are the same in each of the tables, even though inflow total dissolved solids concentrations are different. If more salts are present in the inflow, then more salts must be present in the outflow in year 2020. This discrepancy should be resolved in the PEIR.

14-19 Tables 4.5.24, 4.5-25, 4.5-26, 4.5-27 – The total dissolved solids of deep percolation of applied water from all other sources is different for the OBMP compared to the No OBMP. Justification for this difference is not provided in the PEIR. The basis for this difference should be provided in the PEIR.

14-20 Page 4-158 The expected change in storage for Alternative A1 is listed as 5,900,000 acre-feet. This seems high compared to what is described in other sections of the report.

14-21 Page 4-158 – The PEIR discusses the San Gabriel Valley Recycled Water Demonstration Project and indicates that the IEUA RP-1 and RP-4 effluent is of higher quality than the water for the San Gabriel project. The comparison of San Gabriel Valley project recycled water quality to RP-1 and RP-4 quality is not

14-14 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The differences in the BPO values is based on the specific subbasin being referenced. Thus, the 220 mg/L value reflects the Chino I Subbasin and the 330 mg/L value reflects the Chino II Subbasin. Additional references will be placed in the text to identify the Subbasin being referenced by BPO values.

14-15 Based on Watermaster and IEUA experience, state project water delivered to the Chino Basin has consistently contained the lower TDS values, with occasional spikes. Regardless, when making salt budget forecasts on an annual basis for recharge basins, it will be possible to identify the specific TDS value based on data from the State. These values can then be taken into consideration in creating salt budgets and allocating salt removal credits, as may be necessary.

14-16 Preliminary modeling data from a proposed 2,800-3,000 acre-ft recycled water recharge project is the basis for making the statement referenced in the project. The supporting documentation is a recently completed draft feasibility study for recharging recycled water produced by IEUA Regional Plants 1 & 4. The report indicates that recharge of the referenced volume of water will not result in significant impacts and may even result in a net improvement in groundwater quality at the project location.

14-17 The total amount of salt estimated to be present in the applied water from the dairies has been taken into account in the Salt Budget Model. The amount of water may at first appear low, but in actuality represents an appropriate value when one considers the observation that little of the applied water is actually successfully recharged into the Basin. Much of this water is captured and utilized by various grasses that grow at the location of the dairy waste water application. This capture and use prevents much of the water from percolating into the groundwater aquifer. Specific tables regarding dairies and applied water quantities and qualities are included at the end of the responses to comments.

14-18 The fact that the TDS does not change significantly in the Basin outflow as the TDS in the inflow increases is based on the fact that the Chino Basin Water Resources Model does not yet have an ability to change outflow relative to inflow concentrations. While this model may not reflect that an increase may occur, in truth, such an increase would be only slight and less than significant because the water quality in the Chino Basin is extremely stable due to the sheer size of the Basin and the mass of the water contained within it. Even with higher TDS inflows, the relative quality of the Basin will not change that much over time as shown by the Basin Planning model used by the RWQCB. Also, old CBWRMS Chino Basin Model studies do not show any great changes no matter how you alter the initial conditions of the model to reflect unrealistically high TDS inflow concentrations and/or high TDS outflow concentrations.

14-19 Under OBMP and no-OBMP conditions, the source water supplies and their respective water quality values differ, thus, the associated TDS values for these supplies are not the same since individual agencies would have water supply plans that may differ from the water supply plan of the OBMP if the no-project alternative was implemented.

14-20 The 5,900,000 acre-foot value represents the forecast net change in storage based on a conjunctive use program from recharging up to 500,000 acre-feet plus local recharge programs. This value is higher than would occur if a 300,000 acre-foot conjunctive use program were implemented. The text will be modified to clarify discussion regarding a conjunctive use program of *"up to 5,900,000 acre-foot"* which is what was originally intended by the author.

14-21 The concentration of TDS in the effluent from RP-1 and RP-4 is approximately 400-420 mg/L based on data provided by IEUA. The San Gabriel Valley Project water quality thresholds are present in Appendix 8.3 of the DEIR. The TDS value of the San Gabriel water is not provided, however, the letter states that the effluent meets all drinking water standards, so TDS is assumed to be less than the MCL of 1,000 mg/L. The RP-1 and RP-4 effluent is significantly below this limit. Also, the concentration of total nitrogen as nitrogen is less than that currently being recharged in the San Gabriel Valley. The relevance of the comparison presented in the document is to demonstrate that in some situations, environmental conditions may allow the implementation of recycled water recharge without significant environmental impacts. The purpose of providing the information regarding the San Gabriel Valley Project is to serve as an illustration that with appropriate modeling, engineering investigations, and monitoring programs, it is possible to develop a sound implementation strategy to allow for recycled water recharge. This recharge element will serve in the future as an effective tool to support the safe-yield management goals of the OBMP. It should also be noted that prior to implementation of any recycled water recharge within the Chino Basin, the necessary investigations and studies are required to be conducted under this OBMP PEIR in order to ensure that no significant adverse environmental impacts occur. Only after such investigations have been completed could a recycled water recharge project be implemented.

14-21 supported in the PEIR since the quality of the San Gabriel Valley project recycled water is not provided. We were unable to find a numerical description of the RP-1 and RP-4 recycled water quality in the PEIR. Also, the relevance of this comparison is not clear since there are different ambient water quality conditions and Basin Plan objectives in the San Gabriel Valley.

14-22 Page 4-160 – The PEIR states "It will carry out the direct removal of a significant quantity of salt from the Basin, through discharge of recycled water, SARI line discharges and anticipated increases in rising groundwater." OCWD objects to increases in rising groundwater as a means of salt removal from the Chino Basin. Increases in rising groundwater produce discharges to the Santa Ana River and its tributaries with elevated TDS and nitrate concentrations. The PEIR states on page 4-112 that "Nitrate values in samples from the Chino Agricultural Preserve all exceeded the MCL by at least a factor of six." Figure 4.5-38 shows wells in the southern portion of the Chino Basin with average TDS concentrations exceeding 1,000 mg/L. If these nitrate and TDS concentrations are indicative of the quality of rising groundwater, such increased salt loads threaten the beneficial use of the Santa Ana River for groundwater recharge and can impose a burden on the residents of Orange County through increase consumer costs. Increasing nitrate concentrations also pose potential health threats to sensitive segments of the population.

14-23 Page 4-160 – With respect to rising groundwater, the current rate of discharge of rising groundwater to the Santa Ana River and its tributaries is not well defined. The rate of rising groundwater discharge is estimated in Table 4.5-13 of the PEIR as 7,200 acre-feet per year. Information from various other reports, such as the Phase 1A Final Task 2.2 and 2.3 TIN/TDS Task Force report prepared by Mark J. Wildermuth dated September 1997, indicate the range may be from 5,000 to 13,000 acre-feet per year. Given the uncertainty in this estimate, it is important to better define the current rate of rising groundwater discharge so that future changes in the rate can be measured. Without a better estimate of current conditions, it will be difficult for the involved parties to reach agreement on the magnitude of impacts associated with rising groundwater discharge.

14-24 Page 4-162 - Item 4.5-8 describes modeling verification that the volume of recycled water and the TDS will not cause the TDS of the storm flows to exceed the Basin Plan objective for TDS at the location where recycled water is discharged into the storm flow. Monitoring should also be conducted, not just modeling.

14-25 Page 4-163, Item 4.5-12 - The PEIR states "In addition, the amount of additional salt added to the Basin above the background groundwater quality condition shall be calculated and this amount shall be offset, either by blending with better quality TDS water (storm water) or shall be offset by desalters or other measures that remove salts from the Basin." Blending with storm water is not an offset

14-22 The statement on Page 4-160 in the PEIR referring to "increases in rising groundwater" is inaccurate and will be deleted in the Final PEIR. The OBMP will actually result in a *decrease* in rising groundwater flows, not an increase, and these are not considered to be a means of salt removal from the Basin. The commentator's statements are noted and will be provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

14-23 The value of 7,200 acre feet per year is based upon current estimates utilized in the groundwater modeling studies conducted for current conditions. One of the goals of the OBMP is to implement and conduct a more detailed monitoring program for the Chino Basin to establish a baseline from which to evaluate impacts. When the hydraulic control study is completed, it will contain a better estimate of the rising groundwater occurring in the southern portion of the Basin. This study is being conducted for Watermaster and IEUA to provide more detailed information under Program Element 1 and to meet the goals and objectives of the OBMP outlined in the project description (Chapter 3 of the PEIR) The commentator's statement regarding estimates of rising groundwater will be one focus of the proposed monitoring program, which is designed to provide a better database from which to assess effects of the OBMP and provide feedback for ongoing and future management activities and proposals. The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

14-24 One of the goals of the OBMP is to implement and conduct a more detailed monitoring program for the Chino Basin to establish a baseline from which to evaluate impacts (See discussion Page 3-6 to 3-8, Section 3.3.2). Monitoring programs developed under Program Element 1 will be sufficient to determine if and when rising water is occurring in the Basin. This monitoring will involve cooperative efforts with all agencies involved in Santa Ana River monitoring and sampling programs. This data will be used to refine desalter location and operation to establish hydraulic control. This requirement for additional monitoring is already established as part of the project description, thus no additional mitigation is required.

14-25 The commentator's statement is not quite accurate. Past historical practice and decisions made by the RWQCB indicate their position that blending with stormwater can be considered an offset as long as stormwater values for concentrations of water components is less than that of the underlying groundwater, and thus results in a net dilution of (and benefit to) the water component under consideration. If the input into the Basin contains a TDS value below the Basin Plan Water Quality Objectives, and does not degrade beneficial uses, then no offset need occur. The intent of the OBMP is to maintain the beneficial use of the groundwater in the Basin, and to continue the discharge of salt in accordance with direction provided by the RWQCB in its comment letter (Letter Number 9). It should be noted that, in fact, the OBMP will result in an increase in the discharge of salts from the basin and will benefit the basin salt balance (for example additional desalters), so the total volume of salt will be reduced within the Chino Basin. Please refer to Comment Letter Number 15, Sections 15-6 through 15-9 for further resolution as to the mitigation measures for this issue.

14-25 measure. The offset measures implemented should remove salts from the Basin.

14-26 Page 4-163, Item 4.5-12 - The term "cumulative" should be defined. We cannot evaluate the meaning of the last sentence in this section 4.5-12 because of the use of the ambiguous word 'cumulative'.

14-27 Page 4-163, Item 4.5-12 – The PEIR states "Under no circumstances shall discharge of SPW or recycled water cause or contribute to a cumulative violation of Basin Plan assimilative capacity or interfere with a designated beneficial use for a water or groundwater body." Violations of Basin Plan objectives would seem to be more relevant in this context, not violations of 'assimilative capacity'. If the phrase 'violation of Basin Plan assimilative capacity' will continue to be used, please define it.

14-28 Page 4-163, Item 4.5-12 – Groundwater monitoring is needed to verify the modeling described in Item 4.5-12.

14-29 Page 4-163, Item 4.5-13 - The PEIR uses the phrase "critical water supply aquifers". We could not find where the PEIR defined a "critical water supply aquifers". This phrase should be defined or eliminated.

14-30 Page 4-163, Item 4.5-14 - The term "cumulative" should be defined. We cannot evaluate the meaning of the last sentence in this section 4.5-14 because of the use of the ambiguous word 'cumulative'.

14-31 Page 4-163, Item 4.5-14 – Our comment on Item 4.5-12 regarding violations of 'assimilative capacity' applies here. If the phrase 'violation of Basin Plan assimilative capacity' will continue to be used, please define it.

14-32 Page 4-163, Item 4.5-14 - Groundwater monitoring is needed to verify the modeling described in Item 4.5-14.

14-33 Page 4-163, Item 4.5-15 The PEIR describes modeling work to be conducted. Groundwater monitoring should also be conducted to assess actual field conditions.

14-34 Page 4-164, Item 4.5-18 – This section attempts to address the issue of the level of salt offset required. Based on the California Environmental Quality Act, OCWD's position is that if the amount of groundwater recharge in the Chino Basin increases and this causes an increase in the amount of rising groundwater discharge to the Santa Ana River or its tributaries, then the offset must address the salts in the rising groundwater discharge.

14-26 The term cumulative, as it is related to impacts associated with mitigation measure 4.5-12, is defined under CEQA Guidelines Section 15065. "Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in Section 15130" (Page 176 of the *1999 Guide to the California Environmental Quality Act*). Further discussion and clarification of the definition of cumulative impact is provided in Section 15130 of the CEQA Guidelines.

14-27 Please refer to comments and responses #9-17 and #9-18 regarding the assimilative capacity issue. The term "assimilative capacity" is best defined in the Santa Ana River Basin "Water Quality Control Plan", in Chapter 5, under the Salt Balance and Assimilative Capacity - Upper Santa Ana Basin discussion. Fundamentally, the term assimilative capacity was utilized in the mitigation measure because it is more flexible because it allows engineering demonstrations that assimilative capacity exists. This term would be defined on a case-by-case basis, if not already defined as per the responses by the Regional Board. If there is no assimilative capacity, as stated in the Board comments, then the BPO for each Subbasin automatically becomes the performance threshold.

14-28 One of the goals of the OBMP is to implement and conduct a more detailed monitoring program for the Basin (Program Element 1, Page 3-6 to 3-8, Section 3.3.2). This is part of the project description of the OBMP, and thus does not require further mitigation measures to ensure implementation.

14-29 The term "critical" will be deleted as requested in this comment.

14-30 Please refer to response to comment#14-26.

14-31 The commentator's statements are noted and the suggested changes have been made and provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Please refer to response to comment number 14-27.

14-32 One of the goals of the OBMP is to implement and conduct a more detailed monitoring program for the Basin (Program Element 1, Page 3-6 to 3-8, Section 3.3.2). This program is part of the project description of the OBMP, and thus does not require further mitigation measures to ensure implementation. Please refer to responses to comments 14-24, and 14-28.

14-33 One of the goals of the OBMP is to implement and conduct a more detailed monitoring program for the Basin (Program Element 1, Page 3-6 to 3-8, Section 3.3.2). This program is part of the project description of the OBMP, and thus does not require further mitigation measures to ensure implementation. Please refer to responses to comments 14-24, 14-28 and 14-32.

14-34 One objective of OBMP implementation is to obtain hydraulic control over the Chino Basin, to decrease rising groundwater, and to thus minimize impacts to Orange County. Compared to the non-OBMP project, the implementation of the OBMP will result in overall beneficial impacts to Orange County since desalters will help to reduce impacts associated with rising groundwater in the southern portion of the Basin. Past historical practice indicates that the proposed stormwater recharge program is within the available containment capacity for the Basin and will not cause a significant increase in rising groundwater. Prior to any specific project implementation, further investigation will be required to demonstrate this (such as the hydraulic control study currently being conducted by Wildermuth Environmental). Pumping associated with the desalter will help to minimize outflow from the Basin and improve the water quality of this region. The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

14-35 Page 4-166, Section 4.5.5.6 - The wording in the last sentence appears to be in error. We could not understand the last sentence. The pilot conjunctive use project requires additional evaluation and potentially may require mitigation.

14-36 Page 4-166, Section 4.5.6 - This section does not address impacts to the Santa Ana River such as changes in the amount of rising groundwater and TDS increases in the Santa Ana River resulting from additional capture of stormwater in the Chino Basin.

We look forward to working with the parties involved in the OBMP to ensure that the projects developed in the OBMP protect the quality of the Santa Ana River.

Sincerely,

William R. Mills Jr., P.E.
General Manager

14-35 The Watermaster is considering a pilot scale conjunctive use program to evaluate the effects on the groundwater basin. Details will need to be defined and further evaluation of the potential impacts of such a pilot scale program will be provided prior to implementing such a program.

14-36 The capture of stormflow proposed under the OBMP is consistent with the Santa Ana River Judgement and entitles Chino Basin to the entirety of stormwater that flows within the Basin. It is acknowledged that the BPO's must still be maintained at Prado Basin. Should they be exceeded, actions may be taken by the Regional Board to ensure that the beneficial uses of Orange County are protected. For discussion of rising groundwater issues and TDS concentrations in the Santa Ana River, please refer to response to comment number 14-34.

Comment Letter 15

WESTERN MUNICIPAL WATER DISTRICT

June 22, 2000

Mr. Neil Clifton
Inland Empire Utilities Agency
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JUL 26 2000

PROGRAM ENVIRONMENTAL IMPACT REPORT FOR OPTIMUM BASIN MANAGEMENT PROGRAM

The stated purpose of the subject draft PEIR is to evaluate potentially significant adverse environmental impacts from implementing the OBMP and to provide means of mitigating such adverse impacts to the environment. Section 1.2 of the PEIR includes Table 1.2-1 which sets forth impacts and mitigation measures necessary to reduce the impact to less than significant (except for air quality).

The second paragraph of Section 1.2 indicates "... that no significant impacts would occur to the natural resources and man made systems if the project is implemented as described in the Chapter 3, Project Description of this PEIR." This sentence should include reference to the need for mitigation measures and a finding of "less than significant" after mitigation.

15-1 The sentence should be modified to read as follows:

"... that ***less than*** significant impacts would occur to the natural resources and man made systems if the project is implemented as described in the Chapter 3, Project Description of this PEIR ***and if adverse environmental impacts are mitigated to a less than significant level as provided in Table 1.2-1.***

Similarly the last sentence in the paragraph should be modified to read as follows:

" The issues where ***less than*** significant impact is forecast to occur ***after mitigation*** include:"

15-2 Also, air quality should probably not be included among the list of issues that can be mitigated to less than significant level. Air quality impacts are previously identified as unattainable".

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RESPONSES TO COMMENT LETTER #15
WESTERN MUNICIPAL WATER DISTRICT

15-1 The commentator's statements are noted and the Final OBMP PEIR will be corrected accordingly.

15-2 Construction impacts can be reduced to a nonsignificant level of impact. That is the reason for including this issue on this list. Operational emissions are forecast to remain potentially significant. Please refer to the discussion presented under response to comment number 1-5.

Chapter 1, the Executive Summary should also include statements regarding the purpose and value of the PEIR and more importantly statements should be made regarding the necessity for further environmental assessment.

15-3 Section 4.5.1 (Pages 4-87 and 4-88) provides an excellent detailed description of the CEQA process using a program EIR. The paragraph starting at the bottom of page 4-87 which includes a statement indicating that every specific OBMP project needs to undergo further environmental analysis should be a part of the summary in Chapter 1. Such further analysis may require refinement or revision of mitigation measures.

15-4 Chapter 4 provides a forecast of the type and significance of potential adverse environmental impacts of implementing the OBMP. Since the purpose of the OBMP is to effectively manage the yield and water quality of the basin, it is not surprising that most of the potential impacts and needs for mitigation are dealt with in Section 4.5, Water Resources / Water quality.

Impacts of OBMP implementation on groundwater quality is a significant issue and is addressed in section 4.5 commencing on Page 4-153. On page 4-156 the PEIR indicates that the highest potential for adverse impact to groundwater quality occurs when recycled water is utilized for recharge. Increased salinity and salt balance problems are the most significant adverse effect of recharging recycled water.

15-5 After extensive identification and evaluation of potential impacts the PEIR identifies several mitigation measures intended to reduce the adverse environmental impacts of the use of recycled water for recharge to a level of less than significant. Among such measures there are four measures that are intended to address the adverse impact of recharge of recycled water on the TDS and nitrate of the groundwater in Chino Basin. Each of the four mitigation measures related to use of recycled water is discussed in the following paragraphs and modification of the measures are recommended.

MITIGATION MEASURE 4.5-8.

4.5-8 **Recycled water shall not be discharged to streams that are transporting storm flows (except as authorized by existing discharge permits issued by the Regional Board), unless modeling verifies that the volume of recycled water and TDS will not cause the TDS of the storm flows to exceed the Basin Plan objective for TDS at the location where recycled water is discharged into the storm flow.**

15-6

Clarification is needed with respect to what the combined storm flow and recycled water is being used for. If it is assumed that the combined flow is being used to recharge the groundwater basin, a second matter needs to be addressed. That is, whether or not the assimilative capacity of the storm water components is a part of the total assimilative capacity of the basin which has already been fully allocated. If this is the case, then mitigation for the recycled component of the recharge would be the same as that

15-3 The commentator's statements are noted and the suggested changes have been made and provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Regarding the need to refine or revise mitigation measures in the future, the programmatic evaluation process envisions such revisions and provides for its occurrence under Sections 15162 and 15168 of the State CEQA Guidelines.

15-4 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

15-5 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. Please refer to responses to comments 15-6 through 15-9 to see how specific issues were further addressed.

15-6 Mitigation measure 4.5-8 was modified in the text provided to the IEUA Board of Directors for their consideration in acting on the OBMP as follows:

> 4.5-8 Recycled water shall not be discharged to streams that are transporting storm flows *for subsequent groundwater recharge* (except as authorized by existing discharge permits issued by the Regional Board), *unless mitigation as identified in mitigation measure 4.5-12 is provided. If the storm water component of the combined flow is a part of the total sub-basin assimilative capacity, which is fully allocated, then mitigation pursuant to mitigation measure 4.5-12 for recharge of the recycled water shall be the same as if the recycled water had been directly recharged. However, if the assimilative capacity of the storm water has not been allocated, then mitigation shall be based on the quality of the commingled storm flow and recycled wastewater quality values relative to BPO's and the assimilative capacity of the underlying groundwater based on project specific investigative studies that may include modeling and/or simple salt-balance and concentration calculations.*

All suggested text was incorporated into this revised mitigation measure which is much more specific and provides a clearer explanation while maintaining as stringent requirements as those intended in the original measure. Impacts will remain less than significant upon implementation of this mitigation measure. Text from the original measure was also retained in this revised measure to maintain the intent and integrity of the original mitigation measure.

associated with direct recharge of the recycled water and would be subject to mitigation measure 4.5-12. If the assimilative capacity of the storm water has not been allocated, then mitigation pursuant to mitigation measure 4.5-12 would be based on the quality (TDS and NO_3) of the combined flow.

Recommended revision of mitigation measure 4.5-8 is as follows:

15-6

4.5-8 *Revised* Recycled water shall not be discharged to streams that are transporting storm flows *for subsequent groundwater recharge unless mitigation as identified in mitigation measure 4.5-12 is provided. If the storm water component of the combined flow is a part of the total sub-basin assimilative capacity which is fully allocated, then mitigation pursuant to mitigation measure 4.5-12 for recharged of the recycled water shall be the same as if the recycled water had been directly recharged. However, if the assimilative capacity of the storm water has not been allocated, then mitigation shall be based on the quality of the commingled storm flow and recycled wastewater."*

MITIGATION MEASURE 4.5-12

4.5-12 **When recharge of State Project Water (SWP) or recycled water with TDS greater than the background TDS at a recharge site is utilized, the entity conducting the recharge will conduct modeling to identify the volume and rate of recharge that can be conducted without causing the Basin Plan water quality objective for TDS to be exceeded. In addition, the amount of additional salt added to the Basin above the background groundwater quality condition shall be calculated and this amount shall be offset, either by blending with better quality TDS water (storm water) or shall be offset by desalter or other measures that remove salts from the Basin. The program should take SWP when it has the best quality, i.e., lowest TDS. Under no circumstances shall discharge of SWP or recycled water cause or contribute to a cumulative violation of Basin Plan assimilative capacity or interfere with a designated beneficial use for a water or groundwater body.**

15-7 This mitigation measure should provide for further analysis in the form of modeling if the TDS is greater than background *and* if the TDS is greater than the Basin Plan objective in the same manner that mitigation measure 4.5-14 provides such dual criteria for TIN.

The use of storm water for blending needs to be qualified in the same manner as proposed previously for mitigation measure 4.5-8.

The priority for the use of SWP water needs clarification. Lastly, the last sentence needs to reference the potential to violate water quality objectives rather than assimilative capacity.

Recommended revision of mitigation measure 4.5-12 is as follows:

4.5-12 *Revised* When recharge of the State Project Water (SPW) or recycled water with TDS greater than the background groundwater TDS *or the Basin Plan water quality objective is utilized at a recharge site*, the entity conducting the recharge will conduct *additional analysis including* modeling to identify the volume and rate of recharge that can be conducted without causing the Basin plan water quality objective for TDS to be exceeded. In addition, the amount of additional salt added to the Basin

15-7 With the exception noted below, the recommended changes to this mitigation measure will be incorporated in the Final OBMP PEIR. The language "The program should utilize SWP water for recharge when such water is available and when such water is better in quality than recycled water (i.e. lowest TDS)" will not be included in the measure because it is too restrictive and would not provide additional protection for water quality. As long as recycled water meets the standards outlined in the mitigation measure, IEUA believes it should be able to use this resource as circumstances allow. The use of recycled water for recharge is supported by law in the form of the Water Recycling Act of 1991 (See Attached Bill Number SB2103). Also, the term "assimilative capacity" is retained to remain consistent with other mitigation measures in Section 4.5.

The revised mitigation measure is as follows:

4.5-12 When recharge of State Project Water (SPW) or recycled water with TDS greater than the background groundwater TDS *or the Basin Plan water quality objective is utilized at a recharge site,* the entity conducting the recharge will conduct *additional analysis including* modeling to identify the volume and rate of recharge that can be conducted without causing the Basin plan water quality objective for TDS to be exceeded. In addition, the amount of additional salt added to the Basin above the background groundwater quality condition or the Basin Plan water quality objective shall be calculated and *the greater of the two amounts* shall be offset, either by desalters or other measures that remove salts from the basin or by blending the better TDS water (storm water) *provided that the assimilative capacity of the storm water has not already been allocated as more thoroughly described in mitigation measure 4.5-8.* Under no circumstance shall discharge of SWP or recycled water cause of contribute to a cumulative violation of Basin Plan *water quality objectives or assimilative capacity* or interfere with a designated beneficial use for a water or groundwater body.

above the background groundwater quality condition or the Basin Plan water quality objective shall be calculated and *the greater of the two amounts* shall be offset, either by desalters or other measures that remove salts from the basin or by blending with better quality TDS water (storm water) *provided that the assimilative capacity of the storm water has not already been allocated as more thoroughly described in mitigation measure 4.5-8. The program should utilize SWP water for recharge when such water is available and when such water is better in quality than recycled water (i.e. lowest TDS).* Under no circumstance shall discharge of SPW or recycled water cause or contribute to a cumulative violation of Basin Plan *water quality objectives* or interfere with a designated beneficial use for a water or groundwater body.

15-7

MITIGATION MEASURE 4.5-14

4.5-14 When recharge of recycled water with TIN greater than the background groundwater TIN or the Basin Plan objective at a recharge site is utilized, the entity conducting the recharge will conduct modeling to identify the volume and rate of recharge that can be conducted without causing the Basin Plan water quality objective for TIN to be exceeded. Under no circumstance shall discharge of SPW or recycled water cause or contribute to a cumulative violation of Basin Plan assimilative capacity or interfere with a designated beneficial use for a water or groundwater body.

15-8 This mitigation measure needs minor modification to reference the concern for violation of a water quality objective rather than assimilative capacity.

4.5-14 *Revised* When recharge of recycled water with TIN greater than the background groundwater TIN or the Basin Plan objective at a recharge site is utilized, the entity conducting the recharge will conduct modeling to identify the volume and rate of recharge that can be conducted without causing the Basin Plan water quality objectives for TIN to be exceeded. Under no circumstance shall discharge of SPW or recycled water cause or contribute to a cumulative violation of Basin Plan *water quality objective* or interfere with a designated beneficial use for water or groundwater body.

MITIGATION MEASURE 4.5-18

4.5-18 In order to offset salt additions above the objective for the appropriate Sub-basin defined in the 1995 Basin Plan, desalters will be constructed. Recharge of water with TDS concentrations above the Basin Plan objectives will not occur until it can be adequately demonstrated that the salt tonnage leaving the basin through the SARI line from the desalter is equal to or greater than the increment of additional salt tonnage above established objectives. Desalters shall be designed to capture any increase in rising water.

15-9 This mitigation measure needs to be modified to create a better nexus between the location of the adverse impact of the recharge and the location of water extracted for desalting. For example, if the recharge of poor quality water occurs high in the basin and desalting occurs low in the basin, producers of groundwater between those two locations could be adversely affected. Under this circumstance, offset type mitigation could still be accomplished using the desalter; however, such use of the desalter needs to directly

benefit the adversely affected producers to insure that the quality of water delivered and the cost of such delivery is not greater than it would have been in the absence of the recharge. If there are no adversely affected producers between the point of recharge and the desalter extraction wells, the mitigation measure language in the PEIR is adequate.

Recommended revision of Mitigation Measure 4.5-18 is as follows:

15-9

4.5-18 *Revised* In order to offset salt additions above the objective for the appropriate Sub-basin defined in the 1995 Basin Plan, desalters will be constructed. Recharge of water with TDS concentrations above the Basin Plan objectives will not occur until it can be adequately demonstrated that the *users of pumped groundwater which are adversely affected by such recharge will be appropriately compensated or will receive sufficient amounts of high quality water to offset the adverse effects of the poorer quality pumped groundwater at an overall cost no greater than that which would have been incurred by the adversely affected producers in the absence of the recharge. Desalters may be the source of higher quality water needed for mitigation. If the recharge of water with TDS in excess of water quality objectives is recharged in such close proximity to the desalter extraction wells that other producers are unaffected, then mitigation shall be accomplished when it is demonstrated that* the salt tonnage leaving the basin through the SARI line from the desalter is equal to or greater than the increment of additional salt tonnage above established objectives. Desalters shall be designed to capture any increase in rising water.

We appreciate the opportunity to comment on the draft PEIR. If you would like to clarify or discuss our concerns, we would be pleased to do so.

DONALD L. HARRIGER
General Manager

DH/ac

cc: Jerry Johnson, City of Norco
Carol McGreevy, Jurupa CSD
Arnold Rodriguez, Santa Ana River Water Company
Jerry Thibeault, Regional Board

15-8 The recommended change to this measure will be incorporated in the Final OBMP PEIR along with the original wording. To remain consistent with other mitigation measures in Section 4.5, text regarding "assimilative capacity" has been added to the following mitigation measure. Note in responses to comments #9-17 and #9-18 the Regional Board states its position regarding assimilative capacity and by default the BPO becomes the performance standard. The text will be altered in the final document as follows:

4.5-14 When recharge of recycled water with TIN greater than the background groundwater TIN or the Basin Plan objective at a recharge site is utilized, the entity conducting the recharge will conduct modeling to identify the volume and rate of recharge that can be conducted without causing the Basin Plan water quality objectives for TIN to be exceeded. Under no circumstance shall discharge of SWP or recycled water cause or contribute to a cumulative violation of Basin Plan *water quality objectives or assimilative capacity,* or interfere with a designated beneficial use for a water or groundwater body.

15-9 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. With the exception noted below, the recommended changes to this mitigation measure will be incorporated in the Final OBMP PEIR. The language has been slightly altered. Where "poorer quality" was the suggested text, instead the language reads "high TDS." Also, as per the Peace Agreement Chino Basin, recharge will be appropriately compensated up to $375, pursuant to the conditions set forth in Section 7.6, Subparagraph (d). To remain consistent with other mitigation measures in Section 4.5, text regarding assimilative capacity has been added to the following mitigation measure. Note in responses to comments #9-17 and #9-18 the Regional Board states its position regarding assimilative capacity and by default the BPO becomes the performance standard. The text will be altered in the final document as follows:

4.5-18 In order to offset salt additions above the objective for the appropriate Sub-basin defined in the 1995 Basin Plan, desalters will be constructed. Recharge of water with TDS concentrations above the Basin Plan objectives will not occur until it can be adequately demonstrated that the *users of pumped groundwater which are adversely affected by such recharge will be appropriately compensated up to $375 per acre foot or will receive sufficient amounts of high quality water to offset the adverse effects of the high TDS pumped groundwater at an overall cost no greater than that which would have been incurred by the adversely affected producers in the absence of the recharge. Desalters may be the source of higher quality water needed for mitigation. If the recharge of water with TDS in excess of water quality objectives is recharged in such close proximity to the desalter extraction wells that other producers are unaffected, then mitigation shall be accomplished when it is demonstrated that* the salt tonnage leaving the basin through the SARI line from the desalter is equal to or greater than the increment of additional salt tonnage above established *Basin Plan water quality objectives or Basin assimilative capacity.* Desalters shall be designed to capture any increase in rising water.

COMMENT LETTER #16

CITY OF ONTARIO

PUBLIC WORKS AGENCY

ONTARIO MUNICIPAL SERVICES CENTER

GARY C. OVITT
MAYOR

ALAN D. WAPNER
MAYOR PRO TEM

GERALD A. DuBOIS
PATRICK J. KING
PAUL S. LEON
COUNCIL MEMBERS

GREGORY C. DEVEREAUX
CITY MANAGER

KENNETH L. JESKE
PUBLIC WORKS DIRECTOR

MARY E. WIRTES, CMC/AAE
CITY CLERK

JAMES R. MILHISER
TREASURER

June 22, 2006

Inland Empire Utilities Agency
Attention: Neil W. Clifton
9400 Cherry Avenue, Building A
Fontana, CA 92335

Subject: Comments to PEIR for the Optimum Basin Management Plan

The City of Ontario has been an active participant in the development of the OBMP, a Program which is designed to function as an water supply and environmental enhancement. The City submits the following comments:

Mitigation Measures:
Page 1-28 item c. The comment related to playing fields is confusing. No OBMP facilities are planned to contain playing fields. If this mitigation measure is intended to pertain to all development projects in all cities, then the measure is inappropriate. Each city has it's own development standards and must comply with code provisions regarding water conservation. The OBMP is not intended to supercede city general plans or development policies.

16-1

Page 1-28 item d. The comments regarding use of "grey water" separation and transmission for irrigation is inappropriate and confuses "grey water" with recycled water. The OBMP includes provisions regarding recycled water use and recharge. Cities are moving forward with recycled water plans. If this mitigation measure is intended to pertain to all development projects in all cities, then the measure is inappropriate. Each city has it's own development standards and must comply with code provisions regarding water conservation. The OBMP is not intended to supercede city general plans or development policies.

16-2

1425 S. BON VIEW AVENUE • ONTARIO, CALIFORNIA 91761-4406 • (909) 391-2507 • FAX: (909) 391-0653

RESPONSES TO COMMENT LETTER #16
CITY OF ONTARIO

16-1 All mitigation measures identified in the OBMP PEIR are specific to future OBMP projects, not any other projects within a community. It may be possible to combine both recreation and water supply facilities into a single element in order to help offset impacts associated with reduction in open space and recreational facilities for future projects. For example, in basins that are not intended to remain filled with water for a significant portion of the year, it may be possible to have an alternative conjunctive use of the facility as a playing field such as a soccer/ football/ or baseball field. This mitigation measure is not intended to supercede any city general plans or development policies, but rather to ensure that effective and efficient usage of land is, at minimum, considered when implementing specific projects under OBMP.

16-2 The term grey water is appropriate for use in this mitigation measure. As stated in response to comment 16-1, this mitigation measure is not intended to supercede any city general plans or development policies, but rather to ensure that effective and efficient usage of water is considered when implementing specific projects under the OBMP. Grey water may be generated by future OBMP facilities and it could be used for irrigation in accordance with Title 24, Part 5 of the California Administrative Cove.

16-3 Page 1-29 first item regarding "developer capacity fee". This mitigation measure appears to require a developer capacity fee for importation and distribution facilities. That is not a function of the OBMP or watermaster. Water purveyors set the capacity fees based on total needs of that purveyor. Any implication that the OBMP or watermaster can set or levy a development fee is not appropriate.

16-4 Page 1-29 Items listed under Interior. The first four are appropriate for OBMP constructed facilities. The next three items are inappropriate. Standards regarding restaurant, hotel and laundry development are set by the cities. If this mitigation measure is intended to pertain to all development projects in all cities, then the measure is inappropriate. Each city has it's own development standards and must comply with code provisions regarding water conservation. The OBMP is not intended to supercede city general plans or development policies.

16-5 Page 1-29 and 1-30 Items listed under Exterior. The first five items are appropriate for OBMP constructed facilities. The next three items are inappropriate. The OBMP does not address development standards such as requiring "cluster development". The OBMP program element 2 - recharge is in fact a series of mitigation measures intended to provide enhanced recharge. Standards regarding type, "clustering", density, and drainage are set by the cities. If this mitigation measure is intended to pertain to all development projects in all cities, then the measure is inappropriate. Each city has it's own development standards. The OBMP is not intended to supercede city general plans or development policies.

16-6 Page 2-6 The Ontario City General Plan now includes a major amendment covering the newly annexed area to the south entitled " City of Ontario Sphere of Influence General Plan Amendment" which was adopted in 1998.

16-7 The area referenced above was annexed to the City in 1999, hence the City no longer has a sphere of influence which extends beyond the City limits. All references to this area should be titled "New Model Colony" area and listed as within the City. This General Plan Amendment includes numerous policies regarding water/utilities, drainage and environmental mitigation and have undergone rigorous review and public hearing. The OBMP does not propose to supercede or supplant City General Plans, which have gone through such comprehensive public review. All mitigation measures which imply pertaining to city development standards/general plans should be removed and the proposed mitigation measures should be those which pertain to the OBMP facilities and programs.

Section 4.2 Land Use

16-8 Section 4.2.2.1, page 4-7 Paragraph 3 on this page discusses the area of the Agricultural Preserve that was recently annexed by the City of Ontario. Please indicate in the text that the area was annexed on November 30, 1999, and is called the New Model Colony.

16-3 This measure will be deleted in the Final OBMP PEIR.

16-4 The three items referring to hotel, laundry and restaurant facilities have been deleted per the commentator's suggestion. Further, it is in no way to be construed that the intent of the remaining mitigation measures is to supercede city general plans or development policies. It is the intent of projects implemented under the OBMP to remain consistent with the overall goals of the cities' general plans, however, it should also be noted that under the State of California Water Resources code, the water supply related facilities can occur within any land use jurisdiction. Whenever and whereever possible, it is the intent of this document to attempt to provide consistency between proposed facilities and adjacent land uses.

16-5 As per the commentator's suggestion, the last three items in this mitigation measure have been deleted from the text of the Final OBMP PEIR.

16-6 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

16-7 The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

16-8 The commentator's statements are noted and the suggested changes will be incorporated into the Final OBMP PEIR.

16-8	Figure 4.2-1 on page 4-27	Planning area 23 is listed as San Bernardino Agricultural Preserve. The portion of the preserve that has been annexed by the City of Ontario should be included with planning area 15
	Figure 4.2-4 on page 4-30	The recently annexed area on the map called "City of Ontario Sphere of Influence" should be called "City of Ontario New Model Colony".
	Figure 4.2-6 on page 4-32	Water Service Area (WSA) 19 is listed as San Bernardino Agricultural Area. The portion of the preserve that has been annexed by the City of Ontario should be included with WSA 8.

Section 4.3 Population and Housing

16-9 The projected population for the New Model Colony in the year 2020 is 101,845. The total number of dwelling units is estimated to be 31,188, with 20,396 Single Family units and 10,792 Multi-family units. These numbers should be incorporated into the tables in section 4.3.

Thank you for the opportunity to comment. Question should be directed to me at 395-2611.

Sincerely,

Ken Jeske
Public Works Director

16-9 The commentator's statements are noted and the suggested changes will be incorporated into the Final OBMP PEIR.

COMMENT LETTER #17

CITY OF CHINO HILLS

2001 GRAND AVENUE
CHINO HILLS, CALIFORNIA 91709-4869
(909) 364-2600 • (909) 364-2695 FAX

CITY COUNCIL:
ED M. GRAHAM
GARY G. LARSON
GWEN R. NORTON-PERRY
JAMES S. TIHALMAN
MICHAEL G. WICKMAN

June 23, 2000

Neil W. Clifton
Inland Empire Utilities Agency
9400 Cherry Avenue, Bldg. A
Fontana, CA 92335

Re: Draft Program Environmental Impact Report for the Optimum Basin Management Program for the Chino Groundwater Basin

Dear: Mr. Clifton

The City of Chino Hills has reviewed and analyzed the Draft Program Environmental Impact Report (DPEIR) for the Optimum Basin Management Program (OBMP) for the Chino Groundwater Basin and submits the following comments:

17-1

Subsidence

The DPEIR discusses subsidence in the southern portion of the Basin. There is a correlation drawn between the drilling of a series of wells into deeper aquifers by the City of Chino Hills and the subsidence that is occurring in the Basin. It should be noted that subsidence is not a localized problem. The data and maps referenced to in the DPEIR do not identify the full extent of the subsidence area and do not reflect the most current data on the expansion of the subsidence. Therefore, the reference that was made in the DPEIR that the drilling and production by Chino Hills is somehow correlated to the subsidence in the area, is unsubstantiated.

Sincerely,

Michael Maestas, Water and Sewer Manager
City of Chino Hills

RESPONSES TO COMMENT LETTER #17
CITY OF CHINO HILLS

17-1 A variety of activities may have contributed to subsidence in the Chino area and many of these are discussed in the Draft OBMP PEIR. It is the intent of the OBMP to study this phenomenon in greater detail in the future. However, exact contributions to or causes of the subsidence noted thus far have not been specifically allocated among the potential contributors to this problem. Recent data not included in the PEIR demonstrates that while subsidence within the Chino Basin may be more widespread than mapped in the PEIR, recent ground fissuring has been observed in very close proximity to wells operated by Chino Hills. The discussion of the subsidence issue provided in the PEIR is still believed to be accurate based on information available at the time of DEIR distribution. The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

COMMENT LETTER #18

Department of Economic Development
William L. Bopf
Director

THE CITY OF
POMONA

Planning Division

June 27 2000

Richard Atwater, Chief Executive Officer
Inland Empire Utilities Agency
P.O. Box 697
Rancho Cucamonga, CA 91729
FAX (909) 357-3884

Subject: **Draft Program Environmental Impact report (DPEIR) for the Optimum Basin Management Program**

Dear Mr. Atwater,

Thank you for inviting the City of Pomona to comment on the Draft PEIR for the above project. While there are no installations or operation of OBMP facilities within the City of Pomona as presented in the DPIER, we are eager to offer input in establishing objectives and possible means of attaining them with regard to the major issues of this proposal. As a stakeholder, the City of Pomona is greatly concerned with shaping a management plan for Chino Water Basin.

18-1

A significant portion of Pomona's water supply is acquired from the Chino Basin groundwater. Therefore it is the City's request that the language in the PEIR conform to previous agreements, specifically the Peace Agreement and Revised OBMP Agreement, between the City of Pomona and other parties with rights to the basin.

Again, thank you for the opportunity to review and comment on the DPEIR for the Optimum Basin Management Program.

Sincerely,

Rami Talleh
Planning Aide

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RESPONSES TO COMMENT LETTER #18
CITY OF POMONA

18-1 The commentator's statements are noted and the suggested changes have been made and provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

TOM DODSON & ASSOCIATES
2150 N. ARROWHEAD AVENUE
SAN BERNARDINO, CA 92405
TEL (909) 882-3612 • FAX (909) 882-7015
E-MAIL tda@tstonramp.com

MEMORANDUM

July 8, 2000

To: Richard Atwater

From: Tom Dodson

Subj: Corrections to the Responses to Comments for the OBMP PEIR and additional comments/responses received since June 30, 2000

At your request Tom Dodson & Associates has prepared this memorandum to address corrections to the Responses to Comments on the Optimum Basin Management Plan (OBMP) Final Program Environmental Impact Report (PEIR) which was published on June 30, 2000. In addition, since the completion of the responses to comments, Inland Empire Utilities Agency (IEUA) received a comment letter from the South Coast Air Quality Management District. This letter was submitted well outside the mandated public review period, but as a courtesy to the District responses to the comment letter have been prepared and are attached to this document. This information is being provided to ensure that a complete administrative record is compiled in support of the Final OBMP PEIR.

The following revisions to the responses submitted by Western Municipal Water District will be incorporated into the Final OBMP EIR. Changes in the responses are shown as deletions (strikeouts) and additions (shading).

1. Response to comment 15-6 is modified to read:

15-6 Mitigation measure 4.5-8 was modified in the text provided to the IEUA Board of Directors for their consideration in acting on the OBMP as follows:

4.5-8 Recycled water shall not be discharged to streams that are transporting storm flows *for subsequent groundwater recharge* (except as authorized by existing discharge permits issued by the Regional Board), *unless mitigation as identified in mitigation measure 4.5-12 is provided. If the storm water component of the combined flow is a part of the total sub-basin assimilative capacity, which is fully allocated, then mitigation pursuant to mitigation measure 4.5-12 for recharge of the recycled water shall be the same as if the recycled water had been directly recharged. However, if the assimilative capacity of the storm water has not been allocated, then mitigation shall be based on the quality of the*

commingled storm flow and recycled wastewater; ~~quality values relative to BPO's and the assimilative capacity of the underlying groundwater based on project specific investigative studies that may include modeling and/or simple salt-balance and concentration calculations.~~

2. Response to comment 15-7 is modified to read:

15-7 With the exception noted below, the recommended changes to this mitigation measure will be incorporated in the Final OBMP PEIR. The language "The program should utilize SWP water for recharge when such water is available and when such water is better in quality than recycled water (i.e. lowest TDS)" will not be included in the measure because it is too restrictive and would not provide additional protection for water quality. As long as recycled water meets the standards outlined in the mitigation measure, IEUA believes it should be able to use this resource as circumstances allow. The Recycled Water Act of 1991 supports the use of recycled water for recharge (See Attached Bill Number SB2103). Also, the term "assimilative capacity" is retained to remain consistent with other mitigation measures in Section 4.5.

The revised mitigation measure is as follows:

4.5-12 When recharge of State Project Water (SPW) or recycled water with TDS greater than the background groundwater TDS *or the Basin Plan water quality objective is utilized at a recharge site,* the entity conducting the recharge will conduct *additional analysis including* modeling to identify the volume and rate of recharge that can be conducted without causing the Basin plan water quality objective for TDS to be exceeded. In addition, the amount of additional salt added to the Basin above the background groundwater quality condition or the Basin Plan water quality objective shall be calculated and *the greater of the two amounts* shall be offset, either by desalters or other measures that remove salts from the basin or by blending ~~the better~~ with lower TDS water (storm water) *provided that the assimilative capacity of the storm water has not already been allocated as more thoroughly described in mitigation measure 4.5-8.* The program could utilize SWP water for recharge when such water is available and when such water is better in quality than recycled water (i.e. lowest TDS). Under no circumstance shall discharge of SWP or recycled water cause of or contribute to a cumulative violation of Basin Plan *water quality objectives ~~or assimilative capacity~~* or interfere with a designated beneficial use for a water or groundwater body.

3. Response to comment 15-8 is modified to read:

15-8 The recommended change to this measure will be incorporated in the Final OBMP PEIR along with the original wording. To remain consistent with other mitigation

measures in Section 4.5, text regarding "assimilative capacity" has been added to the following mitigation measure. Note in responses to comments #9-17 and #9-18 the Regional Board states its position regarding assimilative capacity and by default the BPO becomes the performance standard. The text will be altered in the final document as follows:

4.5-14 When recharge of recycled water with TIN greater than the background groundwater TIN or the Basin Plan objective at a recharge site is utilized, the entity conducting the recharge will conduct modeling to identify the volume and rate of recharge that can be conducted without causing the Basin Plan water quality objectives for TIN to be exceeded. Under no circumstance shall discharge of SWP or recycled water cause or contribute to a cumulative violation of Basin Plan *water quality objectives ~~or assimilative capacity~~*, or interfere with a designated beneficial use for a water or groundwater body.

4. Response to comment 15-9 is modified to read:

The commentator's statements are noted and have been provided to the IEUA Board of Directors for their consideration in acting on the OBMP. With the exception noted below, the recommended changes to this mitigation measure will be incorporated in the Final OBMP PEIR. The language has been slightly altered. Where "poorer quality" was the suggested text, instead the language reads "high TDS." Also, as per the Peace Agreement Chino Basin, recharge will be appropriately compensated up to $375, pursuant to the conditions set forth in Section 7.6, Subparagraph (d). To remain consistent with other mitigation measures in Section 4.5, text regarding assimilative capacity has been added to the following mitigation measure. Note in responses to comments #9-17 and #9-18 the Regional Board states its position regarding assimilative capacity and by default the BPO becomes the performance standard. The text will be altered in the final document as follows:

4.5-18 In order to offset salt additions above the objective for the appropriate Sub-basin defined in the ~~1995~~ Basin Plan, desalters will be constructed. Recharge of water with TDS concentrations above the Basin Plan objectives will not occur until it can be adequately demonstrated that the *users of pumped groundwater which are adversely affected by such recharge will be appropriately compensated ~~up to $375 per acre foot~~ or will receive sufficient amounts of high quality water to offset the adverse effects of the high TDS pumped groundwater at an overall cost no greater than that which would have been incurred by the adversely affected producers in the absence of the recharge. Desalters may be the source of higher quality water needed for mitigation. ~~If the recharge of water with TDS in excess of water quality objectives is recharged in such close proximity to the desalter extraction wells that other producers are unaffected, then mitigation shall be accomplished when it is demonstrated that~~* the salt ~~tonnage~~ leaving the basin, ~~as a result of the OBMP desalter capacity that has been allocated to mitigate the TDS impacts of recycled water recharge, through the SARI line from the desalter~~ is equal to or greater than the increment of additional salt ~~tonnage~~ above established *Basin Plan water quality objectives, ~~or Basin assimilative capacity~~*. Desalters shall be designed to capture any increase in rising water.

5. A copy of the South Coast Air Quality Management District comment letter and responses are attached for consideration by the IEUA Board.

For the time being this represents all of the changes and additional material that have been requested to date. I will be available at the IEUA Board meeting on July 12, 2000 to address any questions that the Board or Staff may have, and to respond to any additional input received on the Final OBMP PEIR.

Tom Dodson
Attachment

Comment Letter #19

South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • http://www.aqmd.gov

FAXED: JULY 6, 2000

July 6, 2000

Mr. Richard W. Atwater
CEO, General Manager
Inland Empire Utilities Agency
9400 Cherry Avenue, Building A
Fontana, CA 92335

Draft Environmental Impact Report for the Proposed 225,000-Acre Inland Empire Utilities Agency Optimum Basin Management Program – San Bernardino, Riverside and Los Angeles Counties

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final Environmental Impact Report.

19-1 Pursuant to Public Resources Code Section 21092.5, please provide the AQMD with written responses to all comments contained herein prior to the adoption of the Final Environmental Impact Report. The AQMD would be happy to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Gordon Mize, Transportation Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments.

Sincerely,

Steve Smith

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development & Area Sources

Attachment

SS:GM

SBC000511-07
Control Number

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 4

To Mr. Richard Watwater	From Gordon Mize
Co. CEO, Inland Empire	Co. SCAQMD
Dept. Inland Empire Utilities Agency	Phone # 909-396-3302
Fax # 909-357-3884	Fax # 909-396-3324

RESPONSES TO COMMENT LETTER #19
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

19-1 The commentator's statements are noted and the suggested changes have been made and provided to the IEUA Board of Directors for their consideration in acting on the OBMP.

Draft Environmental Impact Report for the Proposed 226,000-Acre Inland Empire Utilities Agency Optimum Basin Management Program – San Bernardino, Riverside and Los Angeles Counties

1. On page of the Draft EIR, it is stated that the Basin is designated as in attainment for the federal NO_2 ambient air standard. The basin was designated in attainment for NO_2 by the U.S. EPA in 1999. Similarly, on page 4-277, it is stated that the Basin is designated nonattainment for the state NO_2 standard. The Basin is also in attainment of the state NO_2 standard. 19-2

2. On page 2-279 of the Draft EIR, there is a brief summary of AQMD Rule 1401. It should be noted that the cumulative analysis requirement in Rule 1401 has been eliminated. Cumulative or facility-wide inventory requirements are considered to be included in AQMD Rule 1402. 19-3

3. It is stated on page 4-283 of the Draft EIR, in part "The SCAQMD construction thresholds are based on quantity and daily emissions from the project." Quantity should be replaced with quarterly. 19-4

4. On page 4-283 of the Draft EIR, it is stated that "Because construction schedules are not available at this time, the annual emissions will be circulated [sic] and converted to quarterly emissions." Although the Handbook recommends that quarterly construction emissions be calculated, it also recommends that peak daily construction emissions be calculated. Peak daily construction emissions are a better indicator of whether emissions from a project could cause or contribute to an exceedance of any ambient air quality standard. Further, nonattainment designations are generally based on daily exceedances of a standard. 19-5

   The Draft EIR contains sufficient information to allow peak daily construction emissions to be calculated. For example, similar types of construction activities, e.g., site preparation activities such as earth moving, grading, trenching, hauling, etc., could all be assumed to occur on the same day to provide a worst-case analysis. Finally, daily peak emission calculations should be based on peak emissions not averages.

5. Page 4-285 shows a Total Annual Pipe and Materials Delivery Emissions figure for ROC as 27 pounds per year. The ROC subtotals from page 4-284 are 3 pounds per year for pipe and materials delivery and 19 pounds per year for asphalt and base delivery totaling 22 pounds of ROC per year. Please correct or explain this inconsistency in the Final EIR. 19-6

19-2 The commentator's statements are noted and will be provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The requested change in the text will be incorporated in the Final OBMP PEIR.

19-3 The commentator's statements are noted and will provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The requested change in the text will be incorporated in the Final OBMP PEIR.

19-4 The commentator's statements are noted and will be provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The requested change in the text will be incorporated in the Final OBMP PEIR.

19-5 The daily emissions will be calculated for individual projects as they are implemented. In this instance, several participating agencies may be implementing different components of the OBMP at the same time, and it would be speculative to make a forecast of construction emission more detailed than the quarterly level, until specific projects are implemented under the umbrella of the OBMP PEIR. Such project specific reviews are required under the program concept being implemented by IEUA under the OBMP.

19-6 The commentator's statements are noted and will be provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The requested change in the text will be incorporated in the Final OBMP PEIR.

Draft Environmental Impact Report for the Proposed 225,000-Acre Inland Empire Utilities Agency Optimum Basin Management Program – San Bernardino, Riverside and Los Angeles Counties

6. In the calculation of the estimated construction emissions, the Draft EIR often references the SCAQMD CEQA Air Quality Handbook (Handbook) in general, but does not include the specific page of the applicable appendix, tables used, emission factors, methodologies, calculations, etc. To facilitate review of the emissions estimated for the proposed project by the AQMD and the general public, it is recommended that the lead agency include in an appendix the specific equations, emissions factors, calculations, assumptions, etc., used to calculate emissions from each emissions source. 19-7

6.1) Page 4-287, paragraph 4, states, in part "it is forecast that installation of the pipelines will generate the following daily fugitive PM_{10} emissions:" It appears that daily should be replaced with annual since the emissions are listed in pounds per year. In addition, the total listed in the Draft EIR is 643 pounds per year, yet the subcategories for the Dirt Storage Piles of 123 pounds per year of PM_{10} and 52 pounds per year of PM_{10} from the service and water trucks total 175 pounds per year of PM_{10}. In the Final EIR, please correct or explain this inconsistency. 19-8

6.2) Page 4-289, Total Well Development Emissions. The NOx total of 144 pounds per year seems incorrect based on simply adding the subtotal amounts. If the assumptions, emission factors, methodologies and calculations are correct, the total should be 1444 pounds per year including using a figure of 340 pounds per year of NOx for Well Test Pumping. 19-9

6.3) Page 4-291, The analysis of reservoir construction is confusing because the subtotal emissions for reservoir construction are calculated in pounds per day and the total emissions are described in pounds per year. In the Final EIR, please provide peak daily emission estimates (see comment #4). 19-10

7. The analysis of construction emissions from on-road mobile sources, e.g., worker commute vehicles, heavy-duty haul trucks, etc., relies on the various Handbook Tables A9-5 series. These tables were derived using an old version of CARB's EMFAC mobile source emission factors. On-road mobile source emission factors for this project (and future projects) should be calculated using the most currently approved version of EMFAC, which is currently EMFAC2000. These emission factors can be obtained online at CARB's website (http://www.arb.ca.gov). 19-11

19-7 Emission calculations are available for review by SCAQMD upon request.

19-8 The particulate matter emission forecast actually begins on page 4-283 and the total particulate matter emissions are compiled from all the activities described on the following four pages, not just page 4-287. Also, your comment is correct, the daily particulate matter emission should be annual. This will be corrected in the Final OBMP PEIR.

19-9 Your comment is correct the NOx emission total for the year should be 1,444 lbs per year. The value in the OBMP PEIR is a typographical error that will be corrected in the Final document.

19-10 Please refer to response to comment 19-5. As a program EIR the emission forecasts are about as accurate as possible at this stage of review and these forecast will be augmented by a project-by-project review in the future. The reservoir emissions reflect the assumption that only one new reservoirs will be constructed over the 20-30 year life of the proposed project.

19-11 The data emission in the Final EIR will be corrected by a factor for each pollutant based on the EMFAC2000 emission factors.

Draft Environmental Impact Report for the Proposed 225,000-Acre Inland Empire Utilities Agency Optimum Basin Management Program – San Bernardino, Riverside and Los Angeles Counties

8. Page 4-292, Section 4.6.3.3 of the Draft EIR describes construction of other facilities such as desalter units, pump stations, expansion of water treatment plants, and a recycled water distribution system, but does not estimate the emission impacts of these activities. In an effort to qualitatively evaluate potential air quality impacts from the other construction projects, the lead agency has compared the anticipated size of the projects to the screening tables in Chapter 6 of the Handbook, specifically Table 6-3. In general, the AQMD now recommends against using the screening tables in Chapter 6 because they were derived using an old version of EMFAC and an earlier edition of the ITE Trip Generation Manual than the current edition. Instead, the lead agency should make a reasonable effort to calculate construction emissions from these other projects (see also comment #7).

19-12

9. The Draft EIR lists mitigation measure 4.6-1 for construction impacts on page 4-294, "Water active grading sites at least twice daily and when dust is observed migrating from the site. The lead agency is reminded that this project would also be subject to SCAQMD Rule 403, Fugitive Dust, which includes the requirement to use best available control measures to control fugitive dust from project activities. Rule 403 also prohibits visible dust emissions beyond the property line of the emissions source.

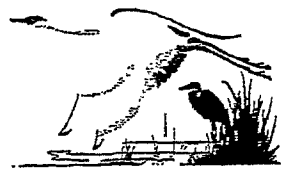
19-13

19-12 The project specific construction emissions will be calculated for individual projects as they are implemented. Such project specific reviews are required under the program concept being implemented by IEUA under the OBMP and the emissions can be more accurately forecast at the time the specific projects have reached the preliminary engineering stage.

19-13 The commentator's statements are noted and will provided to the IEUA Board of Directors for their consideration in acting on the OBMP. The requested addition in the text will be incorporated in the Final OBMP PEIR.

MITIGATION MONITORING / REPORTING PROGRAM

TOM DODSON & ASSOCIATES
2150 N. ARROWHEAD AVENUE
SAN BERNARDINO, CA 92405
TEL (909) 882-3612 • FAX (909) 882-7015
E-MAIL tda@tstonramp.com



MEMORANDUM

July 11, 2000

From: Tom Dodson

To: Garth Morgan

Subj: Transmittal of the Mitigation Monitoring and Reporting Program and the Statement of Overriding Considerations in support of the Optimum Basin Management Plan Program Environmental Impact Report

As part of the action that must be taken by the IEUA Board to certify the Optimum Basin Management Plan Program Environmental Impact Report (OBMP PEIR), the Board must adopt a Mitigation Monitoring and Reporting Program and a set of Findings and Statement of Overriding Considerations. I have coordinated the preparation of the latter document with Agency legal counsel, Jean Cihigoyenetche, and Peter Brown legal counsel working with the Watermaster. I believe it fully addresses all of the requirements outlined in Sections 15090, 15091 and 15093 of the State CEQA Guidelines for an EIR that identifies at least one significant adverse environmental impact.

The Mitigation Monitoring and Reporting Program outlines the procedures for monitoring all of the mitigation measures identified in the OBMP PEIR. This table complies with Section 15097 of the State CEQA Guidelines. It can and should be used to keep track of mitigation measures being implemented for specific projects by IEUA, or other participating agencies, when implementing specific OBMP projects in the future.

The final component of this transmittal is a memorandum from Tami Fincher of my office to Michelle Staples responding to her last minute concerns regarding the content of the tables and figures in the responses to comments. It should be provided to the Board as part of the overall record of decision for this project.

Combined with the materials that were hand delivered yesterday, I believe that the package constituting the PEIR is now complete, except for the Notice of Determination (NOD). I will prepare the NOD for Richard Atwater's signature tomorrow morning,

assuming that the Board certifies the Final OBMP PEIR and adopts the OBMP/Peace Agreement at their hearing.

I look forward to seeing you tomorrow, and if you have any questions, please do not hesitate to give me a call.

Tom Dodson

Tom Dodson

Tami
From: Tami [mstami@tstonramp.com]
Sent: Monday, July 10, 2000 5:59 PM
To: mstaples@jdplaw.com
Cc: garth morgan; Peter Brown
Subject: OBMP inclusions

Dear Ms. Staples,

In response to issues raised in your e-mail regarding the possible inclusion of more recent versions of specific attachments to the responses and comment letters on the PEIR, the following actions have been taken:

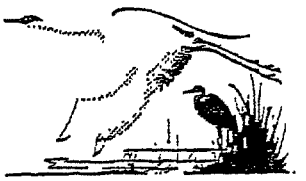
1) The latest version of Table 2 received from Watermaster on July 10, 2000 (which includes a statement regarding the potential for Santa Ana River Water Company to receive future water supplies from the OBMP desalter) has been included in both the Peace Agreement and in the Responses and Comment Letters Package that will be submitted to the IEUA Board for consideration; and,

2) Figures 3-1 and 3-2 were reviewed for consistency with those included in the most current version of Watermaster's Phase 1 Desalting Project Facilities Report, and were found to be the same. The only difference that we could identify is that the Watermaster report utilized 11"x17" black and white versions of the figures, while TDA's response package included 8.5"x11" color copies of the same figures. Both figures were prepared by Wildermuth Environmental, Inc. (WE, Inc.), and TDA received the current figures directly from WE, Inc.'s office. No other updated figures are known to exist. If you have identified any other inconsistencies between the figures please contact me as soon as possible at (909)882-3612 so that we can incorporate the most accurate information possible in the Final EIR.

Thank you for your interest and comments on the document.

Very truly yours,
Tami Fincher
Tom Dodson & Associates

TOM DODSON & ASSOCIATES
2150 N. ARROWHEAD AVENUE
SAN BERNARDINO, CA 92405
TEL (909) 882-3612 • FAX (909) 882-7015
E-Mail tda@tstonramp.com



MEMORANDUM

TO: Michelle Staples

FROM: Tami Fincher

DATE: July 11, 2000

SUBJECT: Figures 3-1 and 3-2 in the Draft Water Facilities Supply Plan and Phase I Desalting Project Facilities Report

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Per our phone conversation this morning, this memo serves as conformation that 11"x17" versions of the two figures that appear in the Facilities Report (Figures 3-1 and 3-2) will be included in the FEIR package that the IEUA Board of Directors considers on July 12, 2000. The enlarged versions clearly show a series of dashes along Belgrave Avenue that allows for possible deliveries to Santa Ana River Water Company in the future.

Thank you for your comments. If you have any further questions or comments, please do not hesitate to call.

/tcf

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E-Mail tda@tstonramp.com

MEMORANDUM

TO: Richard Atwater

FROM: Tami Fincher

DATE: 7/12/00

SUBJECT: Inclusion of Comment from City of Chino Dated 7/11/2000 and Response to Comment

---

The commentator's statements were received just prior to the IEUA Board of Directors Public Hearing regarding consideration of the OBMP Final PEIR. Prior to the certification of the Final PEIR, the Board heard verbal responses from Tom Dodson to the letter provided by City of Chino for consideration. Tom Dodson stated that the comments had been taken into consideration would be incorporated into the comment section of the Final PEIR package. The author's comment regarding the fact that subsidence impacts may be significant at levels less than six inches was noted. Further, as all future projects that could potentially contribute to subsidence are required to perform additional geotechnical, modeling, and/or engineering investigations and provide site specific mitigation measures, the issue was considered to already have been adequately addressed in the document.

In response to the second issue raised in the letter regarding the role that SAWPA may play in the implementation of the proposed project, the commentator's statements were noted and provided to the Board prior to the decision-making process.

The City of Chino's final comments, in addition to those provided in an earlier letter have been presented to the Board of Directors for their review, and will also be incorporated into the revised and Final PEIR document.

CITY of CHINO

July 11, 2000

Post-it® Fax Note 7671	Date 7/11	# of pages ▶ 3
To Richard Atwater	From DAVE Crosley	
Co./Dept. IEUA	Co. Chino	
Phone #	Phone # 591-9823	
Fax # 357-3884	Fax #	

cc: Jim Erickson/Chino

Mr. Richard Atwater
Inland Empire Utilities Agency
9400 Cherry Avenue, Building A
Rancho Cucamonga, CA 92335

Subject: PEIR Comments

Dear Mr. Atwater:

Based on our review of the IEUA's responses to the comments it received on the draft PEIR, we have the following comments for your consideration.

A) The Santa Ana Watershed Project Authority *("SAWPA")* letter to Richard Atwater of the Inland Empire Utilities Agency *("IEUA")* dated June 6, 2000, commencing on the *"Draft PEIR for the OBMP")* states that:

Under Section 5.4, a Santa Ana Watershed Project Authority (SAWPA) Alternative is described. We have identified several discrepancies, which should be clarified:

1) In the first sentence of this section, the SAWPA alternative is described as a proposed project to be effectuated by SAWPA rather than local agencies in Chino Basin. This statement is in error. At no time has SAWPA ever indicated that the conceptual plan, described as the *"Chino Basin Cleanup and Conjunctive Use Plan,"* would be implemented by SAWPA and not the local agencies....."

However, Section 7.1 of the *"Peace Agreement,"* which provides the essential legal framework of the OBMP, provides that:

"The OBMP requires construction and operation of Desalters [the Chino II Desalter and the Chino I Expansion]. *The Desalters shall be* ***owned, operated and maintained*** *by IEUA and WMWD acting independently or in their complete discretion,* ***acting through PC 14*** *consistent with the terms of this Agreement."* (emphasis added)

13220 Central Avenue, Chino, California 91710
Mailing Address: P.O. Box 667, Chino, California 91708-0667
(909) 627-7577 • (909) 591-9829 Fax

The following Section, 7.2(a) (I), acknowledges that:

*"The existing 'Chino I Desalter'.... **is owned and operated by SAWPA,** which has created 'The Project Committee No. 14' (PC14) comprised of SAWPA members, IEUA, WMWD and OCWD...which now constitutes the executive authority through which SAWPA acts with respect to the Chino I Desalter...."* (emphasis added)

The next Section, 7.2(b), further provides that:

"IEUA and WMWD acting independently or in their complete discretion through PC 14 must own and operate the Chino II Desalter and the Chino I Expansion in the same manner as the Chino I Desalter,...."

Thus, it appears clear that substantial physical facilities of the OBMP, the new Desalter facilities, are intended to be owned and operated by SAWPA acting through PC 14 as its executive authority, if IEUA and WMWD elect to do so rather than own and operate them independently of SAWPA. Moreover, the parties to the Peace Agreement understand that all three members of PC 14 have agreed to that alternative option, and no opposition has been expressed by SAWPA.

While the scope of the *"Chino Basin Cleanup and Conjunctive Use Plan"* referred to by SAWPA in its letter included more than the physical facilities of the OBMP, the latter is included within the former. The feasibility of this alternative of SAWPA ownership and operation of these new Desalter facilities, therefore, should be acknowledged in the PEIR response to the comments of SAWPA in this letter.

B) We understand that the IEUA is recommending an additional mitigation measure (Comment No. 11-5) in response to our comments pertaining to a six-inch subsidence threshold. The mitigation measure describes the preparation of individual location/project engineering studies that would more specifically define the thresholds of significant subsidence, and suggests that the results of such studies may demonstrate that *"...greater than six inches can be permitted without causing significant subsidence hazards..."* Conversely, it must be understood that the results of such studies may indicate that a more stringent threshold (i.e., less than six-inches) is possible, as well as the possibility of a less stringent threshold.

Should you have any questions regarding these comments, please contact me at (909) 591-9823.

Sincerely,

David G. Crosley, P.E.
Water & Environmental Manager

DGC:pr

cc: Garth Morgan IEUA
Jim Erickson, City of Chino

Table 1 – Recharge Projects to Increase Storm Water Recharge and Recharge Capacity of Supplemental Water

Sub-MZ	Current Owner	Native Water Conservation		Estimated Supplemental Recharge Capacity		Supplemental Water Sources	Improvements/Activities		Do Now (1) or Later (0)
		Current Estimate (acre-ft/yr)	Goal (acre-ft/yr)	Current Estimate (acre-ft/yr)	Maximum Potential (acre-ft/yr)		Description	Overall Priority (Highest to Lowest)	
Management Zone 1 Goals									
	Native Water		*3,960*						
	Supplemental Water		*30,100*						
Upland Basin									
1	City of Upland	890	1,100	0	5,000	Imported Water Recycled Water	Acquire property Facility improvements	C	0
							Expand MWDSC turnout OC 59	C	0
							New inlet from San Antonio Creek	A	1
							Emergency outlet to San Antonio Creek	A	1
							Removal of inert fill	A	1
							Recycled water pipeline and inlet	C	0
							Optimize the basin bottom geometry	A	1
College Heights Basins									
1	CBWCD	0	300	0	11,000	Imported Water Recycled Water	Facility Improvements		
							Expand MWDSC turnout OC 59	C	0
							New inlet from San Antonio Creek	A	1
							Emergency outlet to San Antonio Creek	A	1
							Removal of inert fill	A	1
							Recycled water pipeline and inlet	C	0
Cellar Basins									
1	CBWCD	1,960	3,400	13,200	13,300	Imported Water Recycled Water	Facility Improvements		
							Optimize the basin bottom geometry	A	1
							Recycled water pipeline and inlet	C	0
Brooks Street Basin									
1	CBWCD	810	1,200	0	4,000	Imported Water Recycled Water	Facility Improvements		
							Expand MWDSC turnout OC 59	C	0
							New inlet from San Antonio Creek	A	1
							Emergency outlet to San Antonio Creek	A	1
							Recycled water pipeline and inlet	C	0
							Optimize the basin bottom geometry	A	1
Grove Basin									
1	SBCFCD	300	300	0	0		Facility Improvements		
							Optimize the basin bottom geometry	A	1
Seventh and Eighth Street Basins									
1	SBCFCD	0	600	0	2,500	Imported Water Recycled Water	Facility Improvements		
							New MWDSC turnout	B	0
							Pipeline from new MWDSC turnout to West Cuc. Ch	B	0
							Recycled water pipeline and inlet	C	0
							Deepen basin	A	1
							Optimize the basin bottom geometry	A	1
							Modify outlet works to allow conservation storage	A	1
Subtotals		3,960	7,100	13,200	35,800				

Table 2 – Recharge Projects to Increase Storm Water Recharge and Recharge Capacity of Supplemental Water

in MZ	Current Owner	Native Water Conservation		Estimated Supplemental Recharge Capacity		Supplemental Water Sources	Improvements/Activities		Do Now (D) or Later (L)
		Current Estimate (acre-ft/yr)	Goal (acre-ft/yr)	Current Estimate (acre-ft/yr)	Maximum Potential (acre-ft/yr)		Description	Overall Priority Ranking Highest (1) to Lowest (3)	
Management Zone 2 and 3 Goals									
	Native Water		*33,300*						
	Supplemental Water				*26,700*				
Turner Basin No. 1									
2	SBCFCD	0	500	0	1,500	Imported Water	Facility Improvements		
						Recycled Water	New MWDSC turnout on Cucamonga Creek	B	0
							New inlet from Cucamonga Creek	A	1
							Misc. site improvements (grading, internal hydraulics, etc.)	A	1
							Recycled water pipeline and inlet	C	0
							Deepen basin to create conservation pool	A	1
							Optimize the basin bottom geometry	A	1
Turner Basin No. 2									
2	SBCFCD	0	500	0	1,500	Imported Water	Facility Improvements		
						Recycled Water	New MWDSC turnout on Deer Creek	B	0
							New inlet from Deer Creek	A	1
							Misc. site improvements (grading, internal hydraulics, etc.)	A	1
							Recycled water pipeline and inlet	C	0
							Deepen basin to create conservation pool	A	1
							Optimize the basin bottom geometry	A	1
Basins									
2									
	SBCFCD 1&2	2,750	2,300	500	4,000	Imported Water	Facility Improvements		
	CBWCD 3					Recycled Water	New MWDSC turnout	B	0
							New pipeline from new MWDSC turnout to west Cuc. Ch	B	0
							Recycled water pipeline and inlet	A	1
							Optimize the basin bottom geometry	A	1
							Modify outlet works to allow conservation storage	A	1
Expansion of Lower Day Basin									
2	SBCFCD	0	500	0	8,000	Imported Water	Facility Improvements		
						Recycled Water	Expand MWDSC turnout CB 15T	B	0
							New inlet pipeline to connect to MWDSC turnout	B	0
							Deepening basin	C	0
							Recycled water pipeline and inlet	C	0
							Optimize the basin bottom geometry	A	1
							Modify outlet works to allow conservation storage	A	1
Wineville Basin									
3	SBCFCD	1,730	2,600	0	9,300	Imported Water	Facility Improvements		
						Recycled Water	Expand MWDSC turnout CB 15T	A	1
							New inlet pipeline to connect turnout to Day Creek	A	1
							Recycled water pipeline and inlet	A	1
							Optimize the basin bottom geometry	A	1
							Modify outlet works to allow conservation storage	A	1
Riverside Basin									
3	SBCFCD	1,400	2,600	0	7,700	Imported Water	Facility Improvements		
						Recycled Water	Expand MWDSC turnout CB 15T	A	1
							New inlet pipeline to connect turnout to Day Creek	A	1
							Recycled water pipeline and inlet	A	1
							Optimize the basin bottom geometry	A	1
							Modify outlet works to allow conservation storage	A	1

Table 1 – Recharge Projects to Increase Storm Water Recharge and Recharge Capacity of Supplemental Water

MZ	Current Owner	Native Water Conservation		Estimated Supplemental Recharge Capacity[1]		Supplemental Water Sources	Improvements/ Activities		Do Now (1) or Later (0)
		Current Estimate (acre-ft/yr)	Goal (acre-ft/yr)	Current Estimate (acre-ft/yr)	Maximum Potential (acre-ft/yr)		Description	Overall Priority (Highest to Lowest)	
Expansion of Etiwanda Conservation Area (joint use of Etiwanda Debris Basin)									
2	SBCFCD	1,050	3,300	6,300	22,000	Imported Water	Acquire Market property		
	Private Parties					Recycled Water	Facility Improvements		
							Expand MWDSC turnout CB 14T	B	0
							Deepening and expansion of SBCFCD debris basin	A	1
							Recycled water pipeline and inlet	C	0
							Optimize the basin bottom geometry	A	1
							Modify outlet works to allow conservation storage	A	1
Improvements to Victoria Basin									
2	SBCFCD	0	500	0	4,000	Imported Water	Facility Improvements		
						Recycled Water	Expand MWDSC turnout CB 14T	B	0
							Recycled water pipeline and inlet	C	0
							New inlet from Etiwanda Creek	A	1
							Optimize the basin bottom geometry	A	1
							Modify outlet works to allow conservation storage	A	1
Improvements to San Sevaine No.'s 1 through 3									
2	SBCFCD	2,790	4,500	9,200	10,600	Imported Water	Facility Improvements		
						Recycled Water	Recycled water pipeline and inlet	C	0
							Optimize the basin bottom geometry	B	0
Improvements to San Sevaine No.'s 4 and 5									
2	SBCFCD	80	500	0	19,400	Imported Water	Potential improvements		
						Recycled Water	Expand MWDSC turnout CB 13T	B	0
							New inlet pipeline to connect to MWDSC turnout	B	0
							Recycled water pipeline and inlet	C	0
							Deepen basin to create conservation pool	B	0
							Optimize the basin bottom geometry	B	0
Banana Basin									
3	SBCFCD	0	400	0	500	Imported Water	Potential improvements		
						Recycled Water	Expand MWDSC turnout CB 13T	A	0
							Construct inlet in San Sevaine Creek and pipeline to convey MWDSC water to Banana Basin	A	0
							Recycled water pipeline and inlet	C	
							Deepen basin to create conservation pool	A	1
							Optimize the basin bottom geometry	A	1
							Modify outlet works to allow conservation storage	A	1
Hickory Basin									
2	SBCFCD	0	500	0	1,500	Imported Water	Facility Improvements		
						Recycled Water	Expand MWDSC turnout CB 13T	B	0
							Construct inlet in San Sevaine Creek and pipeline to convey MWDSC water to Hickory Basin	B	0
							Recycled water pipeline and inlet	B	
							Deepen basin to create conservation pool	A	1
							Optimize the basin bottom geometry	A	1
							Modify outlet works to allow conservation storage	A	1

Table 1 – Recharge Projects to Increase Storm Water Recharge and Recharge Capacity of Supplemental Water

Basin	MZ	Current Owner	Native Water Conservation Current Estimate (acre-ft/yr)	Native Water Conservation Goal (acre-ft/yr)	Estimated Supplemental Recharge Capacity[1] Current Estimate (acre-ft/yr)	Estimated Supplemental Recharge Capacity[1] Maximum Potential (acre-ft/yr)	Supplemental Water Sources	Improvements/Activities Description	Overall Priority (A-highest C-lowest)	Do Now (1) or Later (0)
Improvements to the Etiwanda Percolation Ponds										
	3	SBCFCD	0	500	0	4,000	Imported Water	Facility improvements		
							Recycled Water	Construct new MWDSC turnout and pipeline to Etiwanda percolation basins.	A	1
								Pipeline to rout MWDSC water around site	A	1
								New outlet to Old Etiwanda Creek (to Wineville Basin)	A	1
								Misc. site improvements (grading, internal hydraulics, etc.)	A	1
								Recycled water pipeline and inlet	A	1
								Optimize the basin bottom geometry	A	1
Jurupa Basin										
	3	SBCFCD	0	3,000	0	4,000	Imported Water	Facility improvements		
							Recycled Water	Expand MWDSC turnout CB 13T and/or CB 14T	A	1
								Optimize the basin bottom geometry	A	1
IEUA RP3 Ponds										
	3	IEUA	0	0	0	4,000	Imported Water	Facility improvements		
								Expand MWDSC turnout CB 13T and/or CB 14T	A	0
								Construct inlet in San Sevaine Creek and pipeline to convey MWDSC water to RP3	A	0
								Optimize the basin bottom geometry	A	0
[illegible]z Basin										
	3	SBCFCD	0	600	0	1,000	Imported Water	Expand MWDSC turnout CB 13T and/or CB 14T	A	0
								Construct inlet in San Sevaine Creek and pipeline to convey MWDSC water to Declez Basin	B	0
								Modify outlet works to allow conservation storage	A	1
								Deepen basin to create conservation pool	A	1
								Optimize the basin bottom geometry	A	1
Total All Management Zones				30,400	29,300	138,300				
Subtotal MZ 2 and MZ3				23,300	16,000	103,000				
Projects completed with Prop 13 money will accomplish the following:										
Management Zone 1										
Goals				7,100		33,000				
Current				3,960		13,300				
After Improvement				7,100		29,300				
Management Zone 2										
Goals				13,100		4,000				
Current				6,570		16,000				
After Improvement				13,100		15,500				
Management Zone 3										
Goals				9,700		29,000				
Current				3,180		0				
After Improvement				9,200		21,000				
Total Increase in Recharge				15,590		36,500				

Note 1 – [illegible]

Table 2
Regional Water Supply Plan for the OBMP[1]
(acre-ft/yr)

Purveyor / Source	Year 2000	2005	2010	2015	2020
City of Chino					
Chino Basin Wells	10,000	10,000	10,000	10,000	10,000
Nitrate Removal Plant (Chino Groundwater)	0	0	0	0	0
OBMP Desalter No. I	1,680	3,360	4,420	5,490	6,550
WFA Treatment Plant	4,020	2,640	2,830	3,010	3,200
Reclaimed Water	100	1,050	1,050	1,050	1,050
Total Supply	15,800	17,050	18,300	19,550	20,800
Total Demand	15,800	17,050	18,300	19,550	20,800
City of Chino Hills					
Chino Basin Wells	3,610	3,610	3,610	3,610	3,610
OBMP Desalter No. I	1,120	7,540	7,540	7,540	7,540
Reclaimed Water	400	1,020	1,020	1,815	2,610
WFA Treatment Plant	0	0	0	0	0
MVWD Supply Chino GW	12,510	6,930	8,500	9,385	9,480
Total Supply	17,640	19,100	20,670	22,350	23,240
Total Demand	17,640	19,100	20,670	22,350	23,240
City of Norco					
Chino Basin Wells	0	0	0	0	0
City of Corona	220	0	0	0	0
Temescal Basin Groundwater	5,880	5,870	5,560	5,070	4,650
Supply from JCSD	900	0	0	0	0
OBMP Desalter No. II	0	1,530	2,140	3,330	4,350
Total Supply	7,000	7,400	7,700	8,400	9,000
Total Demand	7,000	7,400	7,700	8,400	9,000
City of Ontario					
Chino Basin Wells	34,720	32,950	32,950	32,950	32,950
WFA Treatment Plant	6,590	7,660	10,020	17,950	20,630
Reclaimed Water	840	840	1,680	2,520	3,360
Supply from SAWC (Chino GW)	850	850	850	850	850
OBMP Desalter No. II	0	5,000	5,000	8,530	12,710
Total Supply	43,000	47,300	50,500	62,300	70,500
Total Demand	41,530	45,830	49,030	61,330	69,030
Supply to Sunkist (Chino GW)	1,470	1,470	1,470	1,470	1,470

Table 2
Regional Water Supply Plan for the OBMP[1]
(acre-ft/yr)

Purveyor / Source	Year 2000	2005	2010	2015	2020
City of Pomona					
Chino Basin Wells	5,220	5,220	5,220	5,220	5,220
Pomona Nitrate Treatment Plant (Chino GW)	13,880	13,880	13,880	13,880	13,880
Other Groundwater Basins	5,160	5,160	5,160	5,160	5,160
Reclaimed Water	7,000	7,000	7,000	7,000	7,000
Pedley Treatment Plant	3,800	3,800	3,800	3,800	3,800
TVMWD Weymouth Treatment Plant	2,140	3,380	4,520	5,840	7,044
Total Supply	37,200	38,440	39,580	40,900	42,104
Total Demand	37,200	38,440	39,580	40,900	42,104
City of Upland					
Chino Basin Wells	2,429	2,430	3,410	3,070	3,050
Supply from SAWC (non-Chino GW)	4,920	4,520	4,520	4,520	4,520
Supply from SAWC (San Antonio Canyon TP)	2,411	2,390	2,390	2,690	2,690
Supply from WECWC (Chino GW)	0	1,420	1,440	1,480	1,500
Supply from WECWC (other GW basins)	4,650	4,650	4,650	4,650	4,650
WFA Treatment Plant	7,590	7,590	7,590	7,590	7,590
Total Supply	22,000	23,000	24,000	24,000	24,000
Total Demand	22,000	23,000	24,000	24,000	24,000
Cucamonga County Water District					
Chino Basin Wells	8,000	10,160	10,160	10,160	10,160
Other Groundwater Basins	12,650	11,180	12,390	12,390	12,390
Reclaimed Water	0	0	0	2,402	4,804
CCWD Bridge Water Treatment Plant	1,000	1,000	1,000	1,000	1,000
CCWD Lloyd Michael Treatment Plant	21,710	25,550	28,360	30,978	33,096
CCWD Royer-Nesbit Treatment Plant	6,000	6,000	6,000	6,000	6,000
Deer Creek	550	550	550	550	550
Total Supply	49,910	54,440	58,960	63,480	68,000
Total Demand	49,910	54,440	58,960	63,480	68,000
Fontana Water Company					
Chino Basin Wells	16,700	22,825	16,050	20,375	24,800
Other Groundwater Basins	12,700	12,700	12,700	12,700	12,700
Reclaimed Water	0	0	0	1,685	3,370
Fontana Water Treatment Plant	0	0	18,600	16,915	15,230
Sandhill Treatment Plant	7,400	7,400	0	0	0
Total Supply	36,800	42,925	47,350	51,675	56,100
Total Demand	35,100	41,200	45,600	49,900	54,300
Supply to California Steel	1,700	1,725	1,750	1,775	1,800

Table 2
Regional Water Supply Plan for the OBMP[1]
(acre-ft/yr)

Purveyor / Source	Year 2000	2005	2010	2015	2020
Jurupa Community Services District[2]					
Chino Basin Wells (Potable)	14,425	11,275	12,385	13,265	13,625
Chino Basin Wells (Non-potable)	50	250	450	650	850
Other Groundwater Basins	500	500	500	500	500
OBMP Desalter No. I	1,800	0	0	0	0
OBMP Desalter No. II	0	5,000	5,790	7,810	9,850
Total Supply	16,775	17,025	19,625	22,225	24,825
Total Demand	14,200	17,000	19,600	22,200	24,800
Supply to Mira Loma SC	25	25	25	25	25
Supply to Norco	900	0	0	0	0
Supply to Swan Lake	350	0	0	0	0
Supply to SARWC	1,300	0	0	0	0
Subtotal	2,575	25	25	25	25
Mira Loma SC					
Chino Basin Wells	0	0	0	0	0
Supply from JCSD	25	25	25	25	25
Total Supply	25	25	25	25	25
Total Demand	25	25	25	25	25
Santa Ana River Water Company[2]					
Chino Basin Wells	0	0	0	0	0
Almost Chino Basin Wells (along SAR outside legal bndy)	700	790	660	490	320
Supply from JCSD	1,300	0	0	0	0
OBMP Desalter No. II (see note below)	0	1,300	1,460	1,650	1,850
Total Supply	2,000	2,090	2,120	2,140	2,170
Total Demand	2,000	2,090	2,120	2,140	2,170
Swan Lake					
Chino Basin Wells	0	0	0	0	0
Supply from JCSD	350	0	0	0	0
OBMP Desalter No. II	0	350	350	350	350
Total Supply	350	350	350	350	350
Total Demand	350	350	350	350	350
Marygold Mutual Water Company					
Baseline Feeder	1,450	1,580	1,620	1,660	1,700
Total Supply	1,450	1,580	1,620	1,660	1,700
Total Demand	1,450	1,580	1,620	1,660	1,700

Note – The Santa Ana Water Company may receive Desalter II water through either a direct connection paid for by the Company or through an interconnection with Jurupa Community Services District.

Table 2
Regional Water Supply Plan for the OBMP[1]
(acre-ft/yr)

Purveyor / Source	Year 2000	2005	2010	2015	2020
Monte Vista Water District					
Chino Basin Wells	26,670	21,090	22,660	23,545	23,640
WFA Treatment Plant	0	0	0	0	0
Total Supply	26,670	21,090	22,660	23,545	23,640
Total Demand	14,160	14,160	14,160	14,160	14,160
Supply to Chino Hills (Chino GW)	12,510	6,930	8,500	9,385	9,480
San Antonio Water Company – Domestic					
Chino Basin Wells	70	1,050	1,070	1,090	1,110
Other Groundwater Basins	400	400	400	400	400
San Antonio Canyon	0	0	0	0	0
San Antonio Tunnel	1,020	1,020	1,020	1,020	1,020
Total Supply	1,490	2,470	2,490	2,510	2,530
Total Demand	640	1,620	1,640	1,660	1,680
Supply to Ontario (Chino GW)	850	850	850	850	850
Southern California Water Company					
Chino Basin Wells	2,160	2,160	2,160	2,160	2,160
Other Groundwater Basins	4,950	4,490	4,850	4,850	4,850
TVMWD – Miramar Water Treatment Plant	7,090	8,300	8,670	8,670	8,670
Total Supply	14,200	14,950	15,680	15,680	15,680
Total Demand	14,200	14,950	15,680	15,680	15,680
West End Consolidated Water Company					
Chino Basin Wells	0	1,420	1,440	1,480	1,500
Other Groundwater Basins	4,650	4,650	4,650	4,650	4,650
Total Supply	4,650	6,070	6,090	6,130	6,150
Total Demand	0	0	0	0	0
Supply to Upland	4,650	6,070	6,090	6,130	6,150
West San Bernardino County Water District					
Other Groundwater Basins	5,330	6,835	9,520	9,510	9,510
SBVMWD Baseline Feeder	800	1,000	1,380	1,390	1,390
Total Supply	6,130	7,835	10,900	10,900	10,900
Total Demand	6,130	7,835	10,900	10,900	10,900

Table 2
Regional Water Supply Plan for the OBMP[1]
(acre-ft/yr)

Purveyor Source	Year 2000	2005	2010	2015	2020
Ameron					
Chino Basin Wells	9	9	9	9	9
Total Supply	9	9	9	9	9
Total Demand	9	9	9	9	9
San Bernardino County Division of Airports					
Chino Basin Wells (Potable (Domestic))	300	300	300	300	300
Total Supply	300	300	300	300	300
Total Demand	300	300	300	300	300
Reliant Energy					
Chino Basin Wells	800	0	0	0	0
Reclaimed Water	0	3,300	3,300	3,300	3,300
IEUA – MWD Water from CRA	2,500	0	0	0	0
Total Supply	3,300	3,300	3,300	3,300	3,300
Total Demand	3,300	3,300	3,300	3,300	3,300
Sunkist					
Chino Basin Wells	0	0	0	0	0
Supply from Ontario (Chino GW)	1,470	1,470	1,470	1,470	1,470
Total Supply	1,470	1,470	1,470	1,470	1,470
Total Demand	1,470	1,470	1,470	1,470	1,470
Kaiser Ventures					
Chino Basin Wells	670	670	670	670	670
Total Supply	670	670	670	670	670
Total Demand	670	670	670	670	670
San Bernardino County Parks Department					
Chino Basin Wells	75	75	75	75	75
Total Supply	75	75	75	75	75
Total Demand	75	75	75	75	75
Monte Vista Irrigation Company					
Chino Basin Wells	0	0	0	0	0
Total Supply	0	0	0	0	0
Total Demand	0	0	0	0	0
California Steel					
Chino Basin Wells	0	0	0	0	0
Fontana Water Company	1,700	1,725	1,750	1,775	1,800
Total Supply	1,700	1,725	1,750	1,775	1,800
Total Demand	1,700	1,725	1,750	1,775	1,800

Table 2
Regional Water Supply Plan for the OBMP[1]
(acre-ft/yr)

Purveyor / Source	Year 2000	2005	2010	2015	2020
Totals By Source Type and Pool					
Pool 1 Overlying Agricultural Pool (groundwater)	49,100	39,975	30,850	21,725	10,000
Pool 2 Overlying Non-Agricultural Pool					
Chino Basin Groundwater	3,624	2,474	2,474	2,474	2,474
OBMP Desalter No. II	0	350	350	350	350
Other Local Supplies	0	0	0	0	0
Imported Water	2,500	0	0	0	0
Recycled Water	0	3,300	3,300	3,300	3,300
Total Pool 2	6,124	6,124	6,124	6,124	6,124
Pool 3 Appropriative Pool					
Chino Basin Groundwater	137,634	138,370	135,995	141,505	146,605
OBMP Desalter No. II	0	12,830	14,390	21,320	28,760
OBMP Desalter No. I	4,600	10,900	11,960	13,030	14,090
Other Local Supplies	84,141	83,485	80,320	80,000	79,450
Imported Water					
WFA Treatment Plant	18,200	17,890	20,440	28,550	31,420
CCWD Lloyd Michael TP	21,710	25,550	28,860	30,978	33,096
CCWD Royer Nesbit	3,000	3,000	3,000	3,000	3,000
Other	11,730	11,680	31,790	31,425	30,944
Subtotal	49,940	56,120	82,470	92,343	96,850
Recycled Water	8,340	9,910	10,750	16,472	22,194
Total Pool 3	284,655	311,615	335,885	364,670	387,949
Total All Pools	339,879	357,714	372,859	392,519	404,073
Total Water Produced By Desalter Projects					
OBMP Projects					
OBMP Desalter No. II	0	13,180	14,740	21,670	29,110
OBMP Desalter No. II Raw Water Supply	0	15,506	17,341	25,494	34,247
OBMP Desalter No. I	4,600	10,900	11,960	13,030	14,090
OBMP Desalter No. I Raw Water Supply	5,292	12,540	13,759	14,990	16,210
Pomona Ion Exchange					
Production	13,880	13,880	13,880	13,880	13,880
Raw Water Supply	14,309	14,309	14,309	14,309	14,309
Total Chino Basin Groundwater Production Summary					
Pool 1	49,100	39,975	30,850	21,725	10,000
Pool 2	3,624	2,824	2,824	2,824	2,824
Pool 3	143,355	166,495	167,175	182,069	197,141
Total	196,079	209,294	200,849	206,618	209,965

Note 1 – Some of the water supply plans for agencies taking OBMP desalter water are different than the plans shown in the "Revised Draft Water Supply Plan, Phase 1 Desalting Project Facilities Report, June 2000. These difference are minor and will be reconciled in July 2000.

Note 2 – "Jurupa Community Services District" means Jurupa Community Services District and the Santa Ana River Water Company individually. Subject to provisions of the Peace Agreement, the design and delivery obligations for the Chino II Desalter set forth in Section 7.3 regarding Jurupa Community Services District include both Jurupa Community Services District and the Santa Ana River Water Company.

Table 3
Production and Salt Removal Capacity of Chino Basin Desalters

Year	Product Water Capacity (mgd) OBMP Desalters No I	No II	Total	Desalter roundwater Production (acre-ft/yr)	Salt Removal Capacity (tons) OBMP Desalters No I	No II	Total	Fraction of Ultimat Capacity
2000	4.7	0.0	4.7	5,292	5,436	0	5,436	7%
2001	8.0	0.0	8.0	8,960	9,205	0	9,205	12%
2002	8.0	0.0	8.0	8,960	9,205	0	9,205	12%
2003	10.0	10.0	20.0	25,372	12,881	22,697	35,578	46%
2004	10.0	12.0	22.0	27,905	12,881	27,176	40,057	52%
2005	10.0	12.0	22.0	27,905	12,881	27,176	40,057	52%
2006	12.0	12.0	24.0	29,124	14,134	27,176	41,309	53%
2007	12.0	12.0	24.0	29,124	14,134	27,176	41,309	53%
2008	12.0	14.0	26.0	31,100	14,134	30,755	44,889	58%
2009	12.0	14.0	26.0	31,100	14,134	30,755	44,889	58%
2010	12.0	14.0	26.0	31,100	14,134	30,755	44,889	58%
2011	12.0	14.0	26.0	31,100	14,134	30,755	44,889	58%
2012	12.0	14.0	26.0	31,100	14,134	30,755	44,889	58%
2013	12.0	20.0	32.0	40,484	14,134	45,215	59,348	77%
2014	12.0	20.0	32.0	40,484	14,134	45,215	59,348	77%
2015	12.0	20.0	32.0	40,484	14,134	45,215	59,348	77%
2016	14.0	20.0	34.0	41,704	16,651	45,215	61,865	80%
2017	14.0	26.0	40.0	50,457	16,651	60,573	77,224	100%
2018	14.0	26.0	40.0	50,457	16,651	60,573	77,224	100%
2019	14.0	26.0	40.0	50,457	16,651	60,573	77,224	100%
2020	14.0	26.0	40.0	50,457	16,651	60,573	77,224	100%
21-Year Totals ater Production (acre-ft/yr)				683,128				
Salt Removal (tons)					287,080	708,326	995,406	

	A	B	C	D	E
1		Dairies			
2					
3	Description	Year 2000		Year 2020	
4					
5	Number of lactating cows	280,000		0	
6	Number of calves and heifers	80,000		0	
7	Total number of animals	360,000		0	
8					
9	Number of equivalent lactating cows	300,000	elc's	0	elc's
10					
11	Mass of manure produced per elc at	4.6	tons per elc	4.6	tons per elc
12	67 % solids				
13					
14	Mass of manure produced by calves and	1.3	tons per animal	1.3	tons per animal
15	heifers at 67 % solids				
16					
17	Total manure produced per year	1,389,600	tons/year	0	tons/year
18					
19					
20	Salt content of manure	0.11	tons per ton of manure	0.11	tons per ton of manure
21	NO3-N conent of manure	0.015	tons per ton of manure	0.015	tons per ton of manure
22					
23	Wash water used per lactating cow	50	gallons per day	50	gallons per day
24	Wash water used by lactating cows	15,675	acre-ft/yr	0	acre-ft/yr
25					
26	Fraction of manure in wash water	10.0%		10.0%	
27					
28	Source water TDS for wash water	800	mg/L	800	mg/L
29	Source water NO3-N for wash water	20	mg/L	20	mg/L
30					
31	TDS in wash water disposed to land	1,461	mg/L	#DIV/0!	mg/L
32	TDS in wash water disposed to land	32,347	tons/year	0	tons/year
33	NO3-N in wash water disposed to land	110	mg/L	#DIV/0!	mg/L
34	NO3-N in wash water disposed to land	2,511	tons/year	0	tons/year
35	NO3-N uptake in pastures (sudan grass)	0.163	tons/acre/yr	0.163	tons/acre/yr
36	NO3-N uptake in pastures (sudan grass)	731	tons/year	0	tons/year
37	NO3-N to groundwater	1,780	tons/year	0	tons/year
38					
39					
40	TDS from calves and heifers to soil	11792	tons/yr		
41	NO3-N from calves and heifers to soil	1608	tons/yr		
42					
43					
44	Land suitable for land application of dry	500	acres	500	acres
45	manure				
46	Application rate	15	tons/acre/yr	15	tons/acre/yr
47	Manure applied to land	7500	tons/yr	7500	tons/yr
48	TDS to soil in land application	1.65	tons/acre/yr	1.65	tons/acre/yr
49	TDS to soil in land application	825	tons/yr	825	tons/yr
50	NO3-N to soil in land application	0.225	tons/acre/yr	0.225	tons/acre/yr
51	NO3-N to soil in land application	450	lbs/acre/yr	450	lbs/acre/yr
52	NO3-N to soil in land application	112.5	tons	112.5	tons
53	NO3-N uptake	300	lbs/acre/yr	300	lbs/acre/yr
54	Net NO3-N to soil	150	lbs/acre/yr	150	lbs/acre/yr
55	Net NO3-N to soil	0.075	tons/acre/yr	0.075	tons/acre/yr
56					
57	Total water used for lactating cows	70	gallons per day	70	gallons per day
58	Total water used for lactating cows	21,945	acre-ft/yr	0	acre-ft/yr
59					
60	Total water used by calves and heifers	10	gallons per day	10	gallons per day
61	Total water used by calves and heifers	896	acre-ft/yr	0	acre-ft/yr
62					
63	Total water demand by dairies	22,840	acre-ft/yr	0	acre-ft/yr
64					
65	Wash water disposed onto pasture	100%		100%	
66	Wash water disposed onto pasture	21,945	acre-ft/yr	0	acre-ft/yr
67	Wash water percolation to groundwater	5,489	acre-ft/yr	0	acre-ft/yr
68					
69	Wash water used for other irrigation	0	acre-ft/yr	0	acre-ft/yr
70					
71	Note – salt content and TDS are in terms of leachable salt to groundwater				
74					

	G	H	I	J	K	L	M	N	O
1	**Fate of Dairy Wash Water**								
2									
3	Month	Evapotranspiration		Application, ET and Deep Percolation					
4		of Pasture		Year 2000			Year 2020		
5		Bull 73-113		Application	ET	Deep Perc	Application	ET	Deep Perc
6		(inches)	(ft)						
7									
8	Oct	3.8	0.3	1,829	1,425	404	0	0	0
9	Nov	2.3	0.2	1,829	863	966	0	0	0
10	Dec	1.3	0.2	1,829	675	1,154	0	0	0
11	Jan	1.7	0.1	1,829	638	1,191	0	0	0
12	Feb	2.4	0.2	1,829	900	929	0	0	0
13	Mar	3.3	0.3	1,829	1,238	591	0	0	0
14	Apr	4.2	0.4	1,829	1,575	254	0	0	0
15	May	5.1	0.4	1,829	1,913	0	0	0	0
16	Jun	6.0	0.5	1,829	2,250	0	0	0	0
17	Jul	6.6	0.6	1,829	2,475	0	0	0	0
18	Aug	6.7	0.6	1,829	2,513	0	0	0	0
19	Sep	5.2	0.4	1,829	1,950	0	0	0	0
20									
21	Totals	49.1	4.1	21,945	18,413	5,489	0	0	0
22									
23	Average Disposal area			15	acres		15	acres	
24	Number of daires			300			0		
25	Disposal area			4500	acres		0	acres	
26									
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	A	B	C	D	E
75	Irrigated Agriculture				
76					
77	Description	Year 2000		Year 2020	
78					
79					
80					
81	Total irrigated ag	6,057	acres	2,490	acres
82	Truck crops	500	acres	500	acres
83	Alfalfa and other field crops	5,557	acres	1,990	acres
84					
85	Et for alfalfa	3.3	ft/year	3.3	ft/year
86	Et for alfalfa	18,523		6,633	
87	Irrigation effeciency for alfalfa	75%		75%	
88					
89	Et for truck crops	2.3	ft/year	2.3	ft/year
90	Et for truck crops	1,167		1,167	
91	Irrigation effeciency for truck crops	75%		75%	
92					
93	Water demand for alfalfa	24,698	acre-ft/yr	8,844	acre-ft/yr
94	Water demand for truck crops	1,556	acre-ft/yr	1,556	acre-ft/yr
95					
96	Total Water Demand	26,253	acre-ft/yr	10,400	acre-ft/yr
97					
98	Return flows to Groundwater	7,341	acre-ft/yr	3,378	acre-ft/yr
99					
100	Waste increments from fertilizers				
101	TDS - alfalfa	0.176	tons/acre/yr	0.176	tons/acre/yr
102	NO3-N - alfalfa	0.030	tons/acre/yr	0.030	tons/acre/yr
103	TDS - truck crops	1.650	tons/acre/yr	0.296	tons/acre/yr
104	NO3-N - truck crops	0.075	tons/acre/yr	0.039	tons/acre/yr
105					
106	Total Waste added				
107	TDS - alfalfa	978	tons/yr	350	tons/yr
108	NO3-N - alfalfa	167	tons/yr	60	tons/yr
109	TDS - truck crops	825	tons/yr	148	tons/yr
110	NO3-N - truck crops	38	tons/yr	20	tons/yr
111					
112	Source water quality				
113	TDS	800	mg/L	800	mg/L
114	NO3-N	20	mg/L	20	mg/L
115					
116	Composit return flow quality				
117	TDS	3,041	mg/L	2,572	mg/L
118	NO3-N	92	mg/L	79	mg/L
119					
120	Return flow mass				
121	TDS	30,378	tons/yr	11,818	tons/yr
122	NO3-N	919	tons/yr	362	tons/yr
123					
124					

Table 7
Flow and TDS Impacts of the OBMP for the Santa Ana River Below Prado For Ultimate Conditions

Month	Baseline		OBMP Alt A1							
	Total Discharge At Below Prado		Recycled Water Recharge				Storm Water Recharge		Total Discharge At Below Prado	
	Volume (af/m)	TDS (mg/L)	Volume (af/m)	TDS (mg/L)			Volume (af/m)	TDS (mg/L)	Volume (af/m)	TDS (mg/L)
6/97	26,872	524	2,842	487	24,031	529	0	0	24,031	529
7/97	25,104	531	2,842	487	22,263	537	0	0	22,263	537
8/97	24,353	541	2,842	487	21,512	548	0	0	21,512	548
9/97	25,839	537	2,842	487	22,998	544	0	0	22,998	544
10/97	27,505	528	2,842	487	24,664	533	0	0	24,664	533
11/97	31,484	504	2,842	487	28,642	505	0	0	28,642	505
12/97	42,759	456	2,842	487	39,917	454	0	0	39,917	454
1/98	44,383	437	2,842	487	41,542	434	5666	100	35,876	487
2/98	194,889	287	2,842	487	192,048	284	5666	100	186,382	289
3/98	54,978	461	2,842	487	52,136	459	5666	100	46,470	503
4/98	47,119	471	2,842	487	44,278	469	0	0	44,278	469
5/98	73,953	380	2,842	487	71,111	376	0	0	71,111	376
6/98	37,101	463	2,842	487	34,259	461	0	0	34,259	461
7/98	26,646	526	2,842	487	23,805	531	0	0	23,805	531
8/98	27,377	526	2,842	487	24,536	530	0	0	24,536	530
9/98	27,311	524	2,842	487	24,469	529	0	0	24,469	529
Average	37,707	517	2,842	487			1,417	100	33,449	538
Max	236,968	614	2,842	487			5,666	100	228,460	713
Min	23,170	272	2,842	487			0	0	20,328	273
StDev	25,759	53	0	0			2,459	0	24,744	66
Coef of Var	68%	10%	0%	0%			174%	0%	74%	12%

Table 7
Flow and TDS Impacts of the OBMP for the Santa Ana River Below Prado For Ultimate Conditions

Month	Baseline		OBMP Alt A1							
	Total Discharge At Below Prado		Recycled Water Recharge				Storm Water Recharge		Total Discharge At Below Prado	
	Volume (af/m)	TDS (mg/L)	Volume (af/m)	TDS (mg/L)			Volume (af/m)	TDS (mg/L)	Volume (af/m)	TDS (mg/L)
4/93	48,349	471	2,842	487	45,508	470	0	0	45,508	470
5/93	37,456	504	2,842	487	34,615	505	0	0	34,615	505
6/93	31,956	542	2,842	487	29,115	547	0	0	29,115	547
7/93	26,185	548	2,842	487	23,343	556	0	0	23,343	556
8/93	24,891	541	2,842	487	22,049	548	0	0	22,049	548
9/93	23,170	539	2,842	487	20,328	546	0	0	20,328	546
10/93	24,760	549	2,842	487	21,918	557	0	0	21,918	557
11/93	31,133	557	2,842	487	28,292	564	0	0	28,292	564
12/93	30,150	512	2,842	487	27,308	514	0	0	27,308	514
1/94	30,469	548	2,842	487	27,627	555	5666	100	21,961	672
2/94	44,985	454	2,842	487	42,143	451	5666	100	36,477	506
3/94	40,539	591	2,842	487	37,698	598	5666	100	32,032	687
4/94	30,082	545	2,842	487	27,240	551	0	0	27,240	551
5/94	28,004	544	2,842	487	25,163	550	0	0	25,163	550
6/94	24,767	540	2,842	487	21,926	547	0	0	21,926	547
7/94	24,340	541	2,842	487	21,498	548	0	0	21,498	548
8/94	23,717	528	2,842	487	20,876	534	0	0	20,876	534
9/94	24,015	524	2,842	487	21,173	529	0	0	21,173	529
10/94	27,214	530	2,842	487	24,372	535	0	0	24,372	535
11/94	28,523	539	2,842	487	25,681	545	0	0	25,681	545
12/94	29,500	551	2,842	487	26,658	558	0	0	26,658	558
1/95	124,214	367	2,842	487	121,372	364	5666	100	115,706	377
2/95	50,930	478	2,842	487	48,088	477	5666	100	42,422	528
3/95	159,664	338	2,842	487	156,823	335	5666	100	151,157	344
4/95	54,125	494	2,842	487	51,283	495	0	0	51,283	495
5/95	41,622	523	2,842	487	38,781	526	0	0	38,781	526
6/95	37,126	512	2,842	487	34,284	515	0	0	34,284	515
7/95	24,150	514	2,842	487	21,308	518	0	0	21,308	518
8/95	25,141	543	2,842	487	22,299	550	0	0	22,299	550
9/95	24,918	537	2,842	487	22,076	543	0	0	22,076	543
10/95	25,933	535	2,842	487	23,091	541	0	0	23,091	541
11/95	27,856	543	2,842	487	25,014	549	0	0	25,014	549
12/95	29,461	522	2,842	487	26,620	525	0	0	26,620	525
1/96	33,790	548	2,842	487	30,948	554	5666	100	25,282	655
2/96	68,143	364	2,842	487	65,301	359	5666	100	59,635	384
3/96	39,929	493	2,842	487	37,087	493	5666	100	31,421	564
4/96	30,703	567	2,842	487	27,862	575	0	0	27,862	575
5/96	28,981	572	2,842	487	26,140	581	0	0	26,140	581
6/96	27,126	553	2,842	487	24,284	561	0	0	24,284	561
7/96	23,773	560	2,842	487	20,931	570	0	0	20,931	570
8/96	24,670	540	2,842	487	21,829	547	0	0	21,829	547
9/96	24,553	532	2,842	487	21,711	538	0	0	21,711	538
10/96	28,623	537	2,842	487	25,781	543	0	0	25,781	543
11/96	36,608	487	2,842	487	33,766	487	0	0	33,766	487
12/96	39,099	487	2,842	487	36,258	487	0	0	36,258	487
1/97	68,791	385	2,842	487	65,950	380	5666	100	60,284	406
2/97	31,668	524	2,842	487	28,827	528	5666	100	23,161	632
3/97	30,549	541	2,842	487	27,708	547	5666	100	22,042	661
4/97	28,575	533	2,842	487	25,734	538	0	0	25,734	538
5/97	27,537	536	2,842	487	24,696	541	0	0	24,696	541

Table 7
Flow and TDS Impacts of the OBMP for the Santa Ana River Below Prado
For Utlimate Conditions

Month	Baseline		OBMP Alt A1							
	Total Discharge At Below Prado		Recycled Water Recharge				Storm Water Recharge		Total Discharge At Below Prado	
	Volume (af/m)	TDS (mg/L)	Volume (af/m)	TDS (mg/L)			Volume (af/m)	TDS (mg/L)	Volume (af/m)	TDS (mg/L)
2/89	37,870	470	2,842	487	35,029	468	5666	100	29,363	539
3/89	33,096	533	2,842	487	30,255	538	5666	100	24,589	639
4/89	28,690	546	2,842	487	25,849	553	0	0	25,849	553
5/89	27,444	526	2,842	487	24,602	530	0	0	24,602	530
6/89	27,008	530	2,842	487	24,167	535	0	0	24,167	535
7/89	25,528	520	2,842	487	22,687	524	0	0	22,687	524
8/89	25,302	519	2,842	487	22,461	523	0	0	22,461	523
9/89	25,553	528	2,842	487	22,712	533	0	0	22,712	533
10/89	27,329	535	2,842	487	24,487	540	0	0	24,487	540
11/89	28,792	528	2,842	487	25,950	532	0	0	25,950	532
12/89	29,460	545	2,842	487	26,618	551	0	0	26,618	551
1/90	34,295	519	2,842	487	31,453	522	5666	100	25,787	615
2/90	43,413	470	2,842	487	40,572	469	5666	100	34,906	529
3/90	29,068	521	2,842	487	26,226	525	5666	100	20,560	642
4/90	28,200	537	2,842	487	25,358	543	0	0	25,358	543
5/90	28,135	532	2,842	487	25,293	537	0	0	25,293	537
6/90	25,764	527	2,842	487	22,923	532	0	0	22,923	532
7/90	23,867	530	2,842	487	21,025	536	0	0	21,025	536
8/90	24,773	520	2,842	487	21,931	525	0	0	21,931	525
9/90	24,229	524	2,842	487	21,388	529	0	0	21,388	529
10/90	25,483	537	2,842	487	22,641	544	0	0	22,641	544
11/90	27,713	534	2,842	487	24,871	539	0	0	24,871	539
12/90	27,878	547	2,842	487	25,037	553	0	0	25,037	553
1/91	34,035	530	2,842	487	31,193	534	5666	100	25,527	630
2/91	40,399	545	2,842	487	37,558	549	5666	100	31,892	629
3/91	85,216	365	2,842	487	82,374	360	5666	100	76,708	380
4/91	27,847	477	2,842	487	25,005	476	0	0	25,005	476
5/91	27,686	499	2,842	487	24,845	500	0	0	24,845	500
6/91	28,183	527	2,842	487	25,341	532	0	0	25,341	532
7/91	25,461	519	2,842	487	22,620	523	0	0	22,620	523
8/91	24,803	510	2,842	487	21,961	513	0	0	21,961	513
9/91	23,878	504	2,842	487	21,036	506	0	0	21,036	506
10/91	24,460	515	2,842	487	21,618	518	0	0	21,618	518
11/91	27,697	531	2,842	487	24,856	536	0	0	24,856	536
12/91	31,960	524	2,842	487	29,119	528	0	0	29,119	528
1/92	36,981	483	2,842	487	34,139	483	5666	100	28,473	559
2/92	65,554	370	2,842	487	62,713	364	5666	100	57,047	391
3/92	59,673	438	2,842	487	56,832	436	5666	100	51,166	473
4/92	28,618	467	2,842	487	25,776	465	0	0	25,776	465
5/92	27,908	535	2,842	487	25,066	541	0	0	25,066	541
6/92	25,240	532	2,842	487	22,398	538	0	0	22,398	538
7/92	25,376	529	2,842	487	22,534	534	0	0	22,534	534
8/92	25,381	497	2,842	487	22,540	498	0	0	22,540	498
9/92	24,702	524	2,842	487	21,860	529	0	0	21,860	529
10/92	28,158	547	2,842	487	25,317	554	0	0	25,317	554
11/92	27,061	542	2,842	487	24,219	548	0	0	24,219	548
12/92	50,744	447	2,842	487	47,903	445	0	0	47,903	445
1/93	236,968	272	2,842	487	234,126	269	5666	100	228,460	273
2/93	163,715	346	2,842	487	160,874	344	5666	100	155,208	352
3/93	70,811	441	2,842	487	67,969	439	5666	100	62,303	470

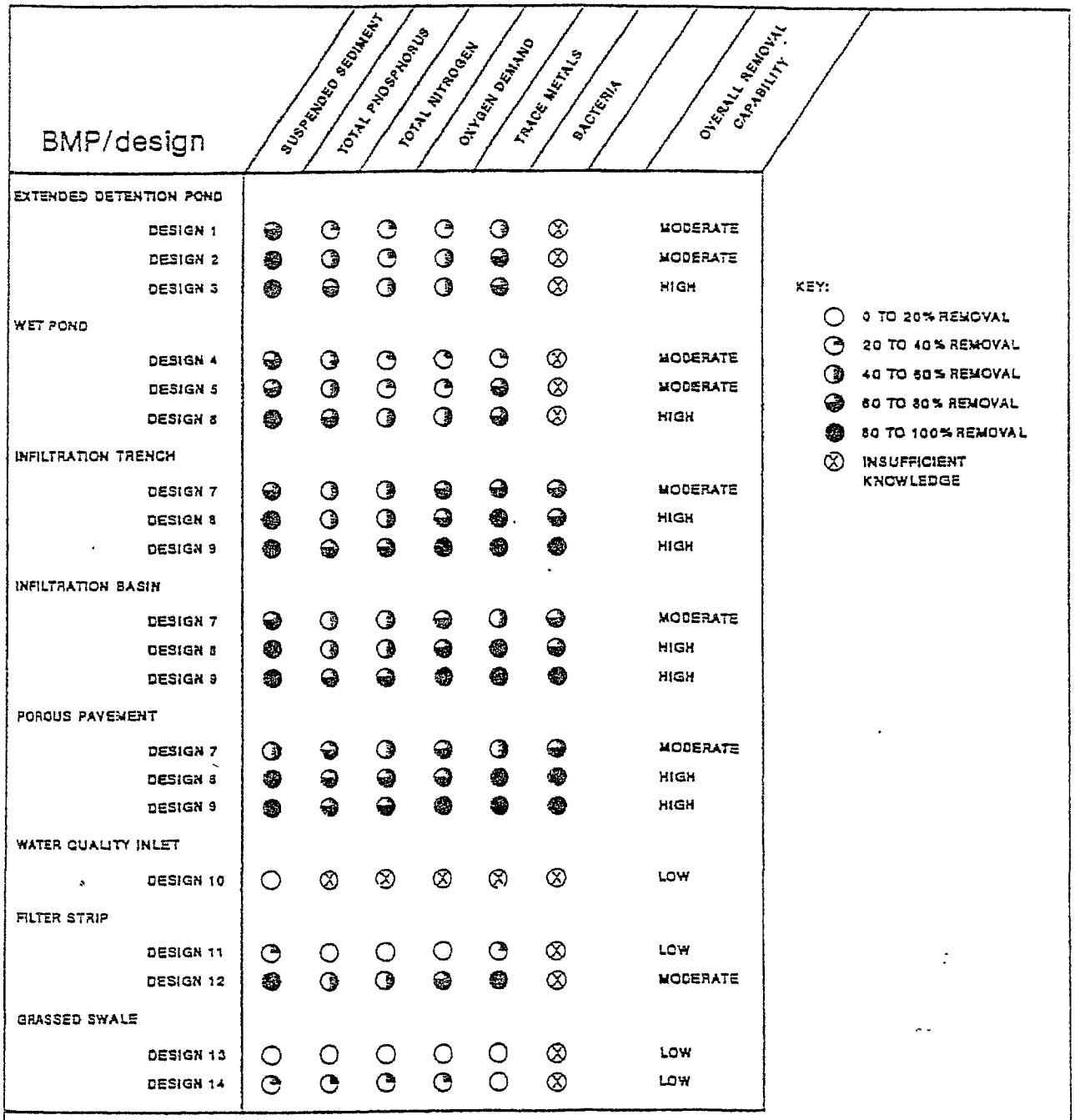
Table 7
Flow and TDS Impacts of the OBMP for the Santa Ana River Below Prado For Utlimate Conditions

Month	Baseline Total Discharge At Below Prado		OBMP Alt A1							
			Recycled Water Recharge				Storm Water Recharge		Total Discharge At Below Prado	
	Volume (af/m)	TDS (mg/L)	Volume (af/m)	TDS (mg/L)			Volume (af/m)	TDS (mg/L)	Volume (af/m)	TDS (mg/L)
12/84	52,286	454	2,842	487	49,444	452	0	0	49,444	452
1/85	38,896	527	2,842	487	36,054	530	5666	100	30,388	610
2/85	39,691	543	2,842	487	36,849	548	5666	100	31,183	629
3/85	36,440	561	2,842	487	33,598	567	5666	100	27,932	662
4/85	31,897	552	2,842	487	29,055	558	0	0	29,055	558
5/85	31,975	557	2,842	487	29,133	564	0	0	29,133	564
6/85	29,855	550	2,842	487	27,013	557	0	0	27,013	557
7/85	28,056	549	2,842	487	25,214	556	0	0	25,214	556
8/85	27,699	545	2,842	487	24,857	552	0	0	24,857	552
9/85	28,078	541	2,842	487	25,236	547	0	0	25,236	547
10/85	30,368	557	2,842	487	27,526	564	0	0	27,526	564
11/85	40,734	548	2,842	487	37,892	553	0	0	37,892	553
12/85	34,575	527	2,842	487	31,733	530	0	0	31,733	530
1/86	36,057	564	2,842	487	33,215	570	5666	100	27,549	667
2/86	54,529	444	2,842	487	51,687	441	5666	100	46,021	483
3/86	55,643	460	2,842	487	52,801	459	5666	100	47,135	502
4/86	36,711	535	2,842	487	33,869	539	0	0	33,869	539
5/86	31,082	552	2,842	487	28,240	558	0	0	28,240	558
6/86	29,589	551	2,842	487	26,747	558	0	0	26,747	558
7/86	27,939	534	2,842	487	25,097	539	0	0	25,097	539
8/86	27,086	536	2,842	487	24,244	542	0	0	24,244	542
9/86	29,091	535	2,842	487	26,249	540	0	0	26,249	540
10/86	30,193	541	2,842	487	27,352	546	0	0	27,352	546
11/86	31,016	544	2,842	487	28,174	549	0	0	28,174	549
12/86	32,942	545	2,842	487	30,100	550	0	0	30,100	550
1/87	38,546	513	2,842	487	35,705	515	5666	100	30,039	593
2/87	34,048	550	2,842	487	31,206	556	5666	100	25,540	657
3/87	37,541	533	2,842	487	34,699	537	5666	100	29,033	622
4/87	31,591	535	2,842	487	28,749	540	0	0	28,749	540
5/87	29,778	541	2,842	487	26,936	547	0	0	26,936	547
6/87	27,439	534	2,842	487	24,597	540	0	0	24,597	540
7/87	27,348	533	2,842	487	24,506	539	0	0	24,506	539
8/87	26,777	531	2,842	487	23,935	536	0	0	23,935	536
9/87	27,060	533	2,842	487	24,219	538	0	0	24,219	538
10/87	33,045	543	2,842	487	30,203	548	0	0	30,203	548
11/87	35,243	503	2,842	487	32,402	505	0	0	32,402	505
12/87	39,159	532	2,842	487	36,317	535	0	0	36,317	535
1/88	40,822	506	2,842	487	37,980	507	5666	100	32,314	579
2/88	34,940	542	2,842	487	32,098	547	5666	100	26,432	643
3/88	35,101	536	2,842	487	32,259	540	5666	100	26,593	634
4/88	36,135	519	2,842	487	33,293	522	0	0	33,293	522
5/88	29,431	525	2,842	487	26,589	530	0	0	26,589	530
6/88	27,634	534	2,842	487	24,792	540	0	0	24,792	540
7/88	26,406	532	2,842	487	23,564	538	0	0	23,564	538
8/88	26,497	533	2,842	487	23,655	538	0	0	23,655	538
9/88	26,120	530	2,842	487	23,278	535	0	0	23,278	535
10/88	27,996	540	2,842	487	25,154	546	0	0	25,154	546
11/88	30,111	552	2,842	487	27,269	559	0	0	27,269	559
12/88	42,926	487	2,842	487	40,085	487	0	0	40,085	487
1/89	32,535	522	2,842	487	29,693	526	5666	100	24,027	626

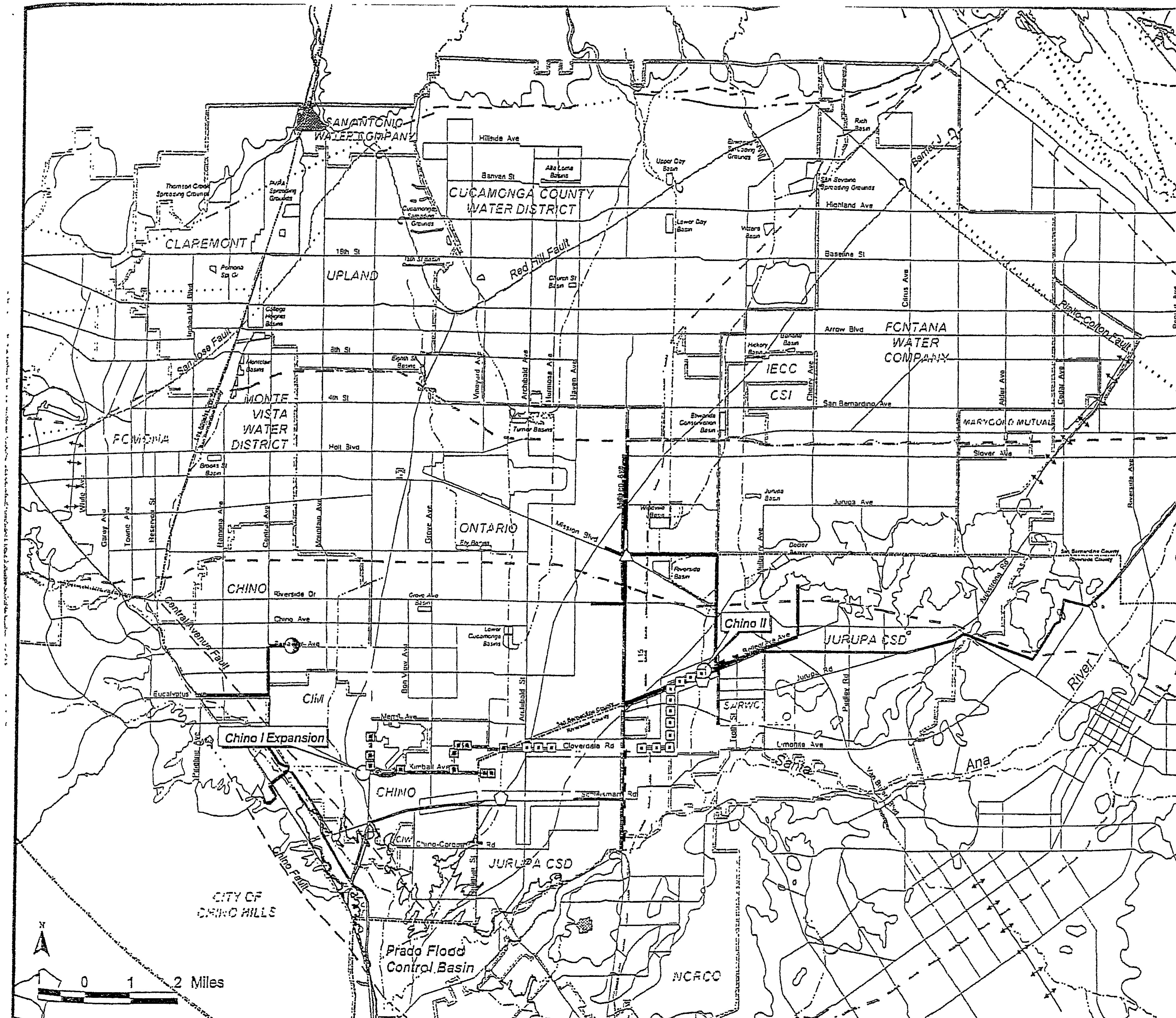
Table 7
Flow and TDS Impacts of the OBMP for the Santa Ana River Below Prado
For Utilimate Conditions

Month	Baseline		OBMP Alt A1							
	Total Discharge At Below Prado		Recycled Water Recharge				Storm Water Recharge		Total Discharge At Below Prado	
	Volume (af/m)	TDS (mg/L)	Volume (af/m)	TDS (mg/L)			Volume (af/m)	TDS (mg/L)	Volume (af/m)	TDS (mg/L)
10/80	27,795	548	2,842	487	24,954	555	0	0	24,954	555
11/80	30,865	577	2,842	487	28,024	586	0	0	28,024	586
12/80	37,261	612	2,842	487	34,420	622	0	0	34,420	622
1/81	41,410	614	2,842	487	38,569	623	5666	100	32,903	713
2/81	33,048	554	2,842	487	30,207	560	5666	100	24,541	667
3/81	39,333	563	2,842	487	36,492	569	5666	100	30,826	655
4/81	33,441	559	2,842	487	30,600	566	0	0	30,600	566
5/81	28,483	566	2,842	487	25,642	574	0	0	25,642	574
6/81	26,349	546	2,842	487	23,508	553	0	0	23,508	553
7/81	24,956	532	2,842	487	22,114	538	0	0	22,114	538
8/81	24,808	527	2,842	487	21,966	532	0	0	21,966	532
9/81	24,990	527	2,842	487	22,148	532	0	0	22,148	532
10/81	27,117	576	2,842	487	24,275	586	0	0	24,275	586
11/81	29,291	546	2,842	487	26,449	553	0	0	26,449	553
12/81	30,476	568	2,842	487	27,634	576	0	0	27,634	576
1/82	39,511	547	2,842	487	36,669	551	5666	100	31,003	634
2/82	34,385	518	2,842	487	31,543	521	5666	100	25,877	613
3/82	55,360	433	2,842	487	52,518	430	5666	100	46,852	470
4/82	42,045	431	2,842	487	39,203	427	0	0	39,203	427
5/82	29,442	488	2,842	487	26,600	489	0	0	26,600	489
6/82	26,951	521	2,842	487	24,109	525	0	0	24,109	525
7/82	26,820	543	2,842	487	23,978	549	0	0	23,978	549
8/82	25,454	528	2,842	487	22,612	533	0	0	22,612	533
9/82	26,378	541	2,842	487	23,536	548	0	0	23,536	548
10/82	26,112	538	2,842	487	23,270	544	0	0	23,270	544
11/82	39,376	568	2,842	487	36,534	574	0	0	36,534	574
12/82	42,389	463	2,842	487	39,547	461	0	0	39,547	461
1/83	57,259	511	2,842	487	54,417	512	5666	100	48,751	560
2/83	65,717	409	2,842	487	62,875	406	5666	100	57,209	436
3/83	145,291	329	2,842	487	142,449	326	5666	100	136,783	335
4/83	69,539	458	2,842	487	66,697	457	0	0	66,697	457
5/83	70,249	399	2,842	487	67,407	395	0	0	67,407	395
6/83	45,071	446	2,842	487	42,229	444	0	0	42,229	444
7/83	36,354	530	2,842	487	33,512	534	0	0	33,512	534
8/83	41,975	506	2,842	487	39,133	508	0	0	39,133	508
9/83	32,268	566	2,842	487	29,426	574	0	0	29,426	574
10/83	40,693	522	2,842	487	37,851	524	0	0	37,851	524
11/83	47,881	558	2,842	487	45,039	562	0	0	45,039	562
12/83	53,772	526	2,842	487	50,930	528	0	0	50,930	528
1/84	41,402	577	2,842	487	38,560	583	5666	100	32,894	666
2/84	34,101	575	2,842	487	31,259	583	5666	100	25,593	689
3/84	32,632	564	2,842	487	29,790	571	5666	100	24,124	682
4/84	30,708	548	2,842	487	27,866	554	0	0	27,866	554
5/84	29,357	549	2,842	487	26,515	556	0	0	26,515	556
6/84	28,483	541	2,842	487	25,641	548	0	0	25,641	548
7/84	27,963	540	2,842	487	25,121	546	0	0	25,121	546
8/84	27,658	536	2,842	487	24,816	542	0	0	24,816	542
9/84	27,374	535	2,842	487	24,532	540	0	0	24,532	540
10/84	28,719	549	2,842	487	25,877	555	0	0	25,877	555
11/84	32,190	564	2,842	487	29,348	571	0	0	29,348	571

FIGURE 4: Comparative Pollutant Removal Of Urban BMP Designs



Design 1: First-flush runoff volume detained for 6-12 hours.
Design 2: Runoff volume produced by 1.0 inch, detained 24 hours.
Design 3: As in Design 2, but with shallow marsh in bottom stage.
Design 4: Permanent pool equal to 0.5 inch storage per impervious acre.
Design 5: Permanent pool equal to 2.5 (Vr); where Vr=mean storm runoff.
Design 6: Permanent pool equal to 4.0 (Vr); approx. 2 weeks retention.
Design 7: Facility exfiltrates first-flush; 0.5 inch runoff/imper. acre.
Design 8: Facility exfiltrates one inch runoff volume per imper. acre.
Design 9: Facility exfiltrates all runoff, up to the 2 year design storm.
Design 10: 400 cubic feet wet storage per impervious acre.
Design 11: 20 foot wide turf strip.
Design 12: 100 foot wide forested strip, with level spreader.
Design 13: High slope swales, with no check dams.
Design 14: Low gradient swales with check dams.



Optimum Basin Management Program

Chino Basin Watermaster

Legend

Potable Water Transmission Pipelines
- Existing Chino I Delivery
- Proposed OBMP Ontario Interconnector
- Existing WSA Potable Delivery Pipeline
- Future WSA Potable Delivery Pipeline

Groundwater Conveyance Pipelines
- Chino-1 Main Groundwater Conveyance
- Chino-1 Bypass Groundwater Conveyance
- Proposed OBMP Groundwater Conveyance

- Proposed OBMP Groundwater Treatment Facility
- Proposed OBMP Phase 1 Extraction Well
- Existing Chino I Extraction Well
- OBMP Discharge Point to OCWD
- Chino/Chino Hills Intertie
- Proposed OBMP Booster Pump Station
- SARI Pipeline
- Proposed Ultimate OBMP Extraction Well Field
- Water Service Area Boundaries
- Management Zone Boundaries

- Streams, Lakes, & Spreading Grounds
- Prado Flood Control Basin
- Unconsolidated Sediments
- Consolidated Bedrock
- Faults: solid line where known, dashed where approximate, dotted where concealed, queried where uncertain.
- Groundwater Barrier (suspected fault)
- Groundwater Divide

Figure 3-1
OBMP Phase 1
Facilities Locations

WE WILDERMUTH ENVIRONMENTAL, INC.

BLACK & VEATCH Corporation

Prepared by: Wildermuth Environmental, Inc. | Date: June, 2000

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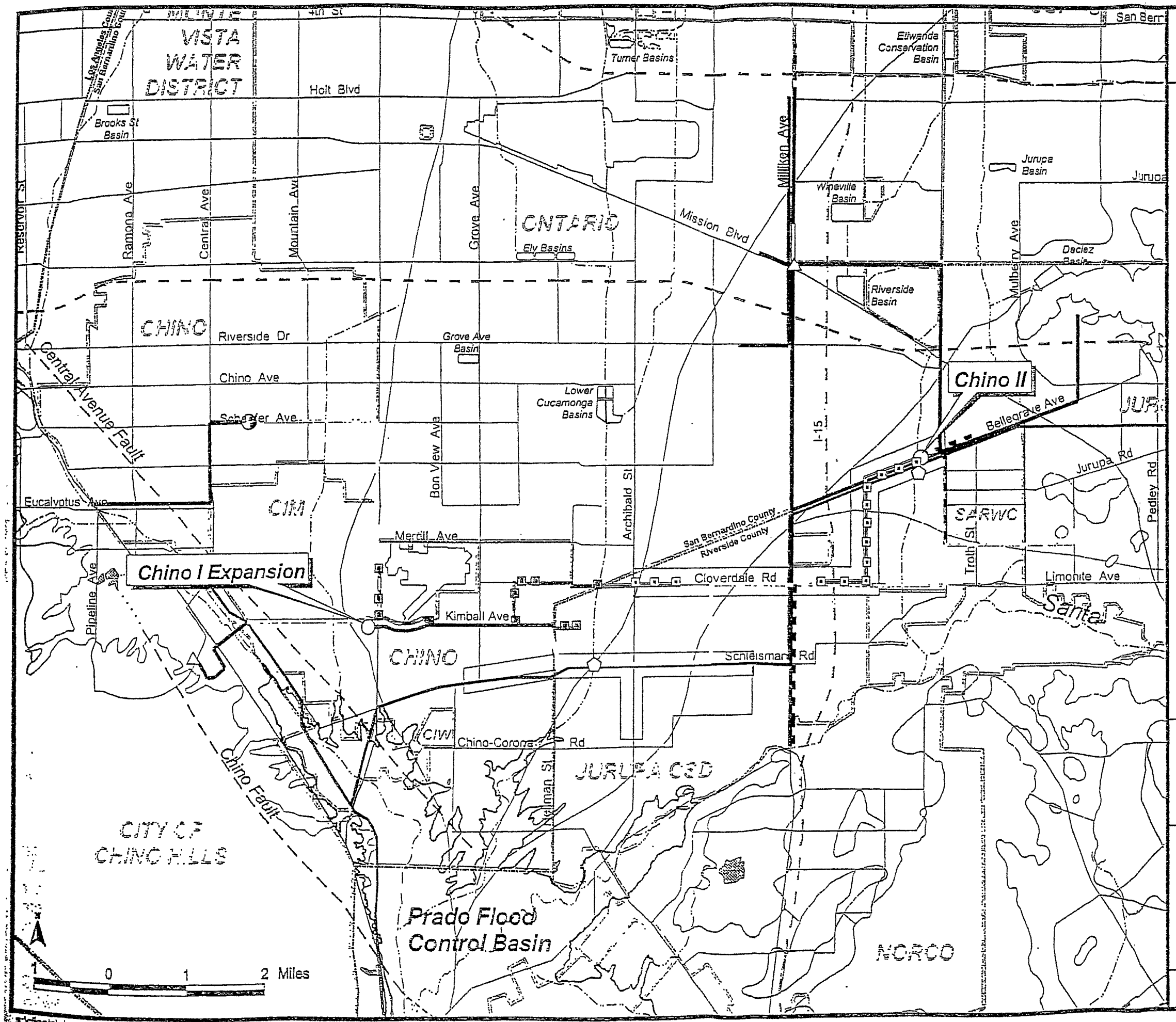

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Optimum Basin Management Program

Chino Basin Watermaster

Legend

Potable Water Transmission Pipelines
- Existing Chino I Delivery
- Proposed OBMP Ontario Interconnector
- Existing WSA Potable Delivery Pipeline
- Future WSA Potable Delivery Pipeline

Groundwater Conveyance Pipelines
- Chino-1 Main Groundwater Conveyance
- Chino-1 Bypass Groundwater Conveyance
- Proposed OBMP Groundwater Conveyance

- Proposed OBMP Groundwater Treatment Facility
- Proposed OBMP Phase 1 Extraction Well
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- Proposed OBMP Booster Pump Station
- SARI Pipeline
- Proposed Ultimate OBMP Extraction Well Field
- Water Service Area Boundaries
- Management Zone Boundaries

- Streams, Lakes, & Spreading Grounds
- Prado Flood Control Basin
- Unconsolidated Sediments
- Consolidated Bedrock
- Faults: solid line where known, dashed where approximate, dotted where concealed, queried where uncertain.
- Groundwater Barrier (suspected fault)
- Groundwater Divide

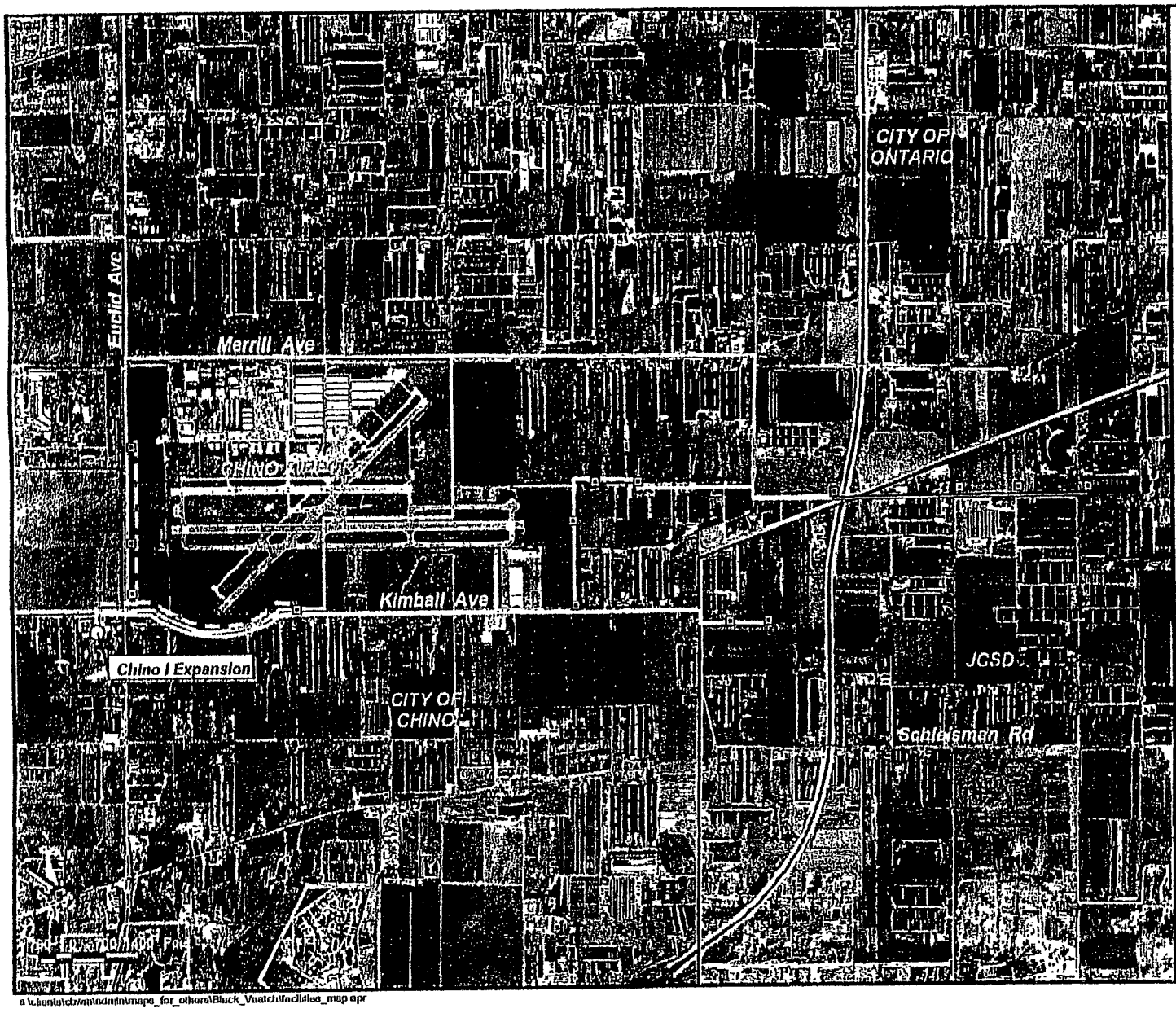
Figure 3-2
OBMP Phase 1 Facilities Locations

South Chino Basin

WE WILDERMUTH ENVIRONMENTAL, INC.

BLACK & VEATCH Corporation

Prepared by: Wildermuth Environmental, Inc. | *Date:* June, 2000



Optimum Basin Management Program

Chino Basin Watermaster

Legend

Groundwater Conveyance Pipelines
- Chino 1 Main Groundwater Conveyance
- Chino-1 Bypass Groundwater Conveyance
- Proposed OBMP Groundwater Conveyance

- Proposed OBMP Groundwater Treatment Facility
- Proposed OBMP Phase 1 Extraction Well
- Existing Chino I Extraction Well

Water Service Area Boundaries

Management Zone Boundaries

Figure 3-3
Chino I Expansion Phase 1
Source Water System

WE WILDERMUTH ENVIRONMENTAL, INC.

BLACK & VEATCH
Corporation

Prepared by:	Wildermuth Environmental, Inc	Date: June, 2000

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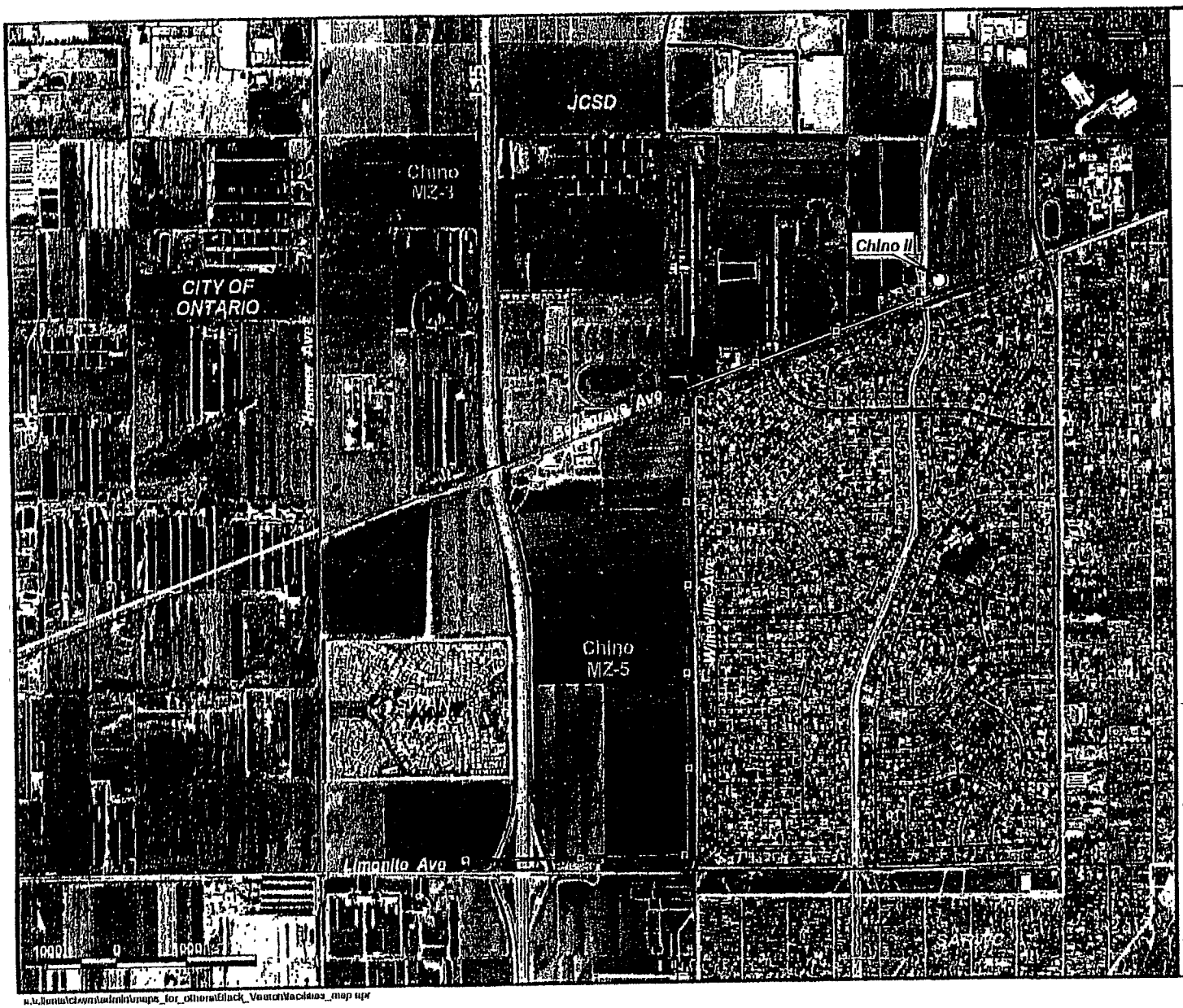

Optimum Basin Management Program

Chino Basin Watermaster

Legend

Groundwater Conveyance Pipelines

Proposed OBMP Groundwater Conveyance

Proposed OBMP Groundwater Treatment Facility

Proposed OBMP Phase 1 Extraction Well

Water Service Area Boundaries

Management Zone Boundaries

Figure 3-4
Chino II Phase 1
Source Water System

WE WILDERMUTH ENVIRONMENTAL, INC.

BLACK & VEATCH
Corporation

Prepared by: Wildermuth Environmental, Inc. | Date: June, 2000

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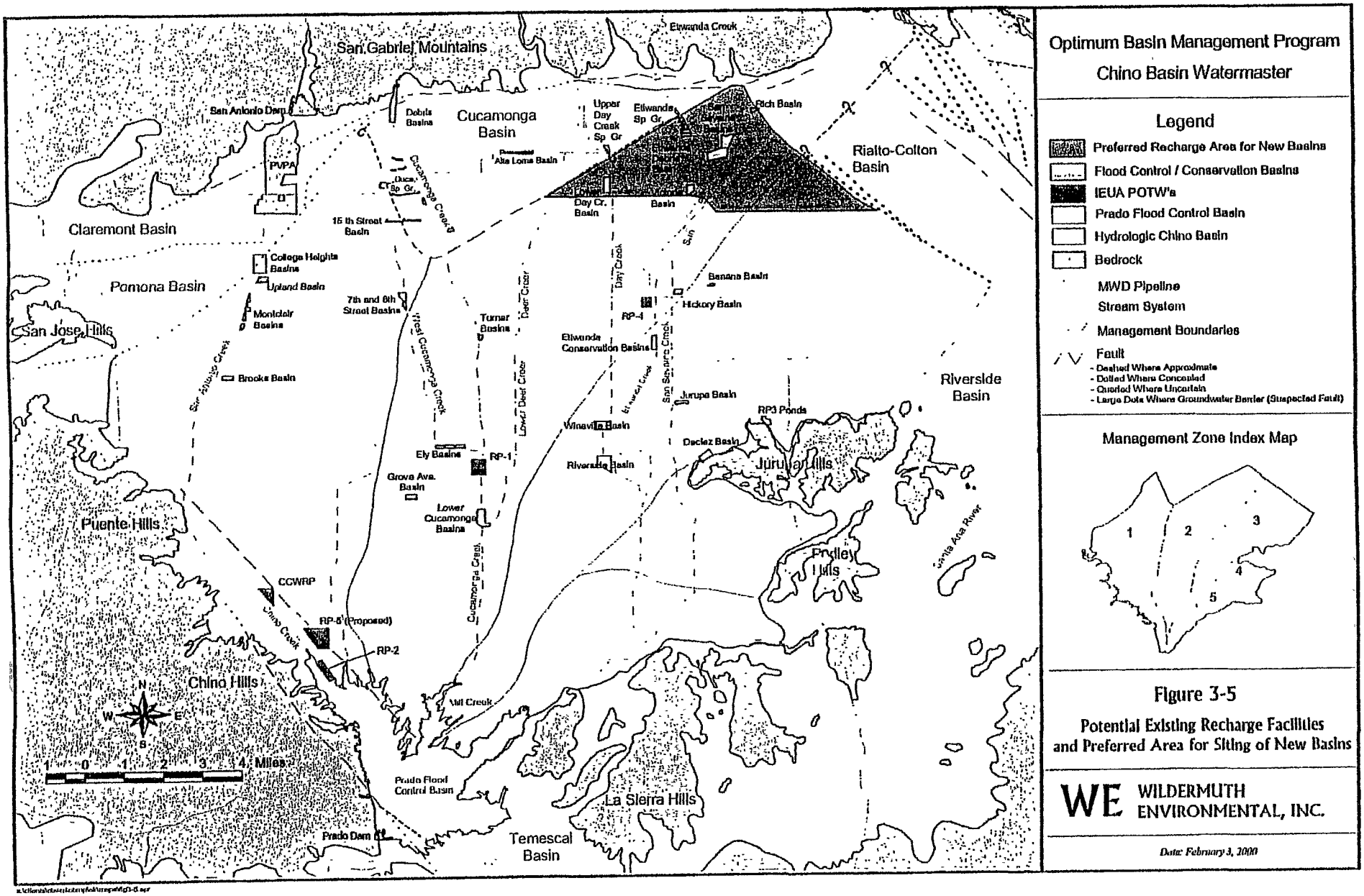


Optimum Basin Management Program

Chino Basin Watermaster

Legend

- Preferred Recharge Area for New Basins
- Flood Control / Conservation Basins
- IEUA POTW's
- Prado Flood Control Basin
- Hydrologic Chino Basin
- Bedrock
- MWD Pipeline
- Stream System
- Management Boundaries
- Fault
  - Dashed Where Approximate
  - Dotted Where Concealed
  - Queried Where Uncertain
  - Large Dots Where Groundwater Barrier (Suspected Fault)

Management Zone Index Map

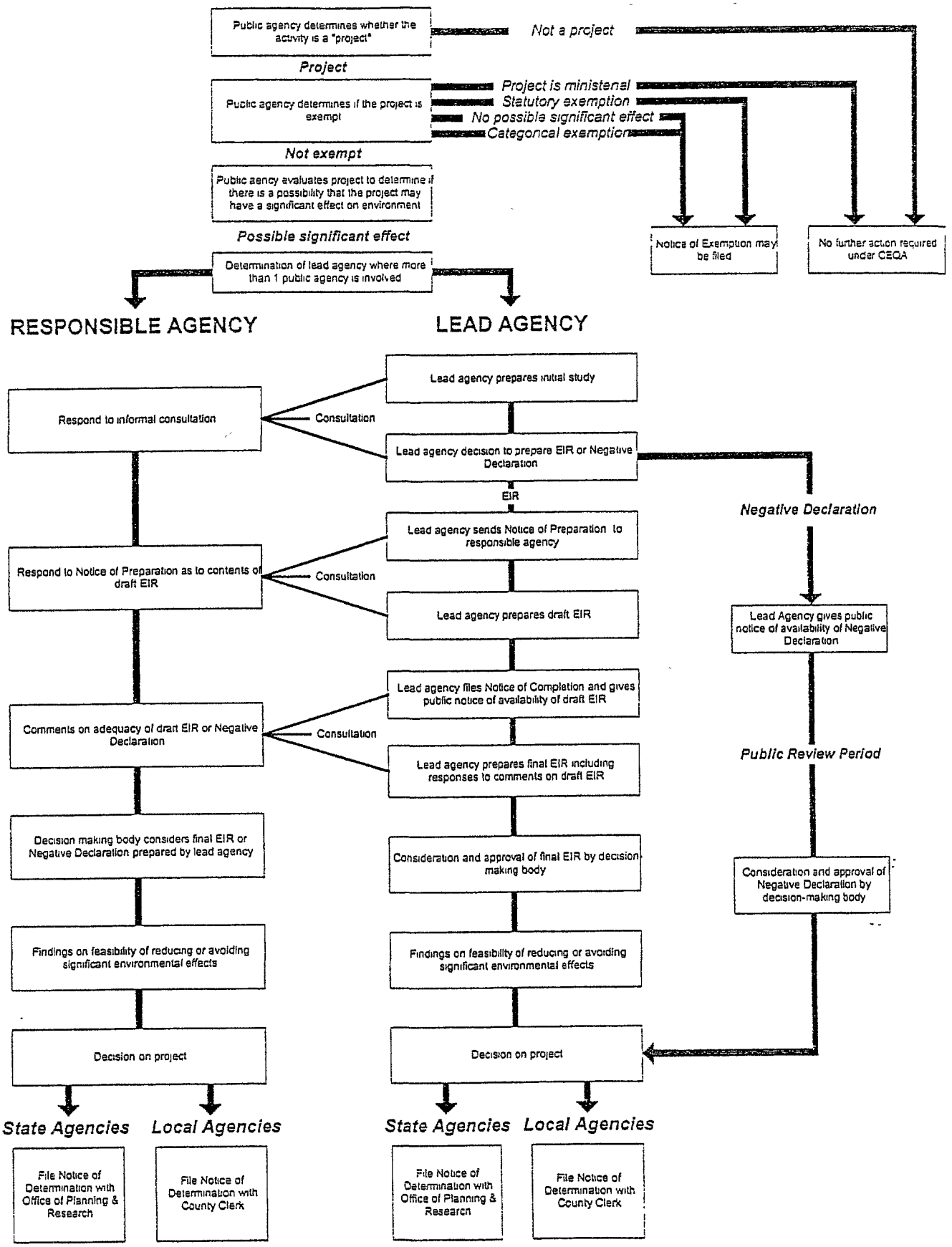
Figure 3-5

Potential Existing Recharge Facilities and Preferred Area for Siting of New Basins

WE WILDERMUTH ENVIRONMENTAL, INC.

Date: February 3, 2000

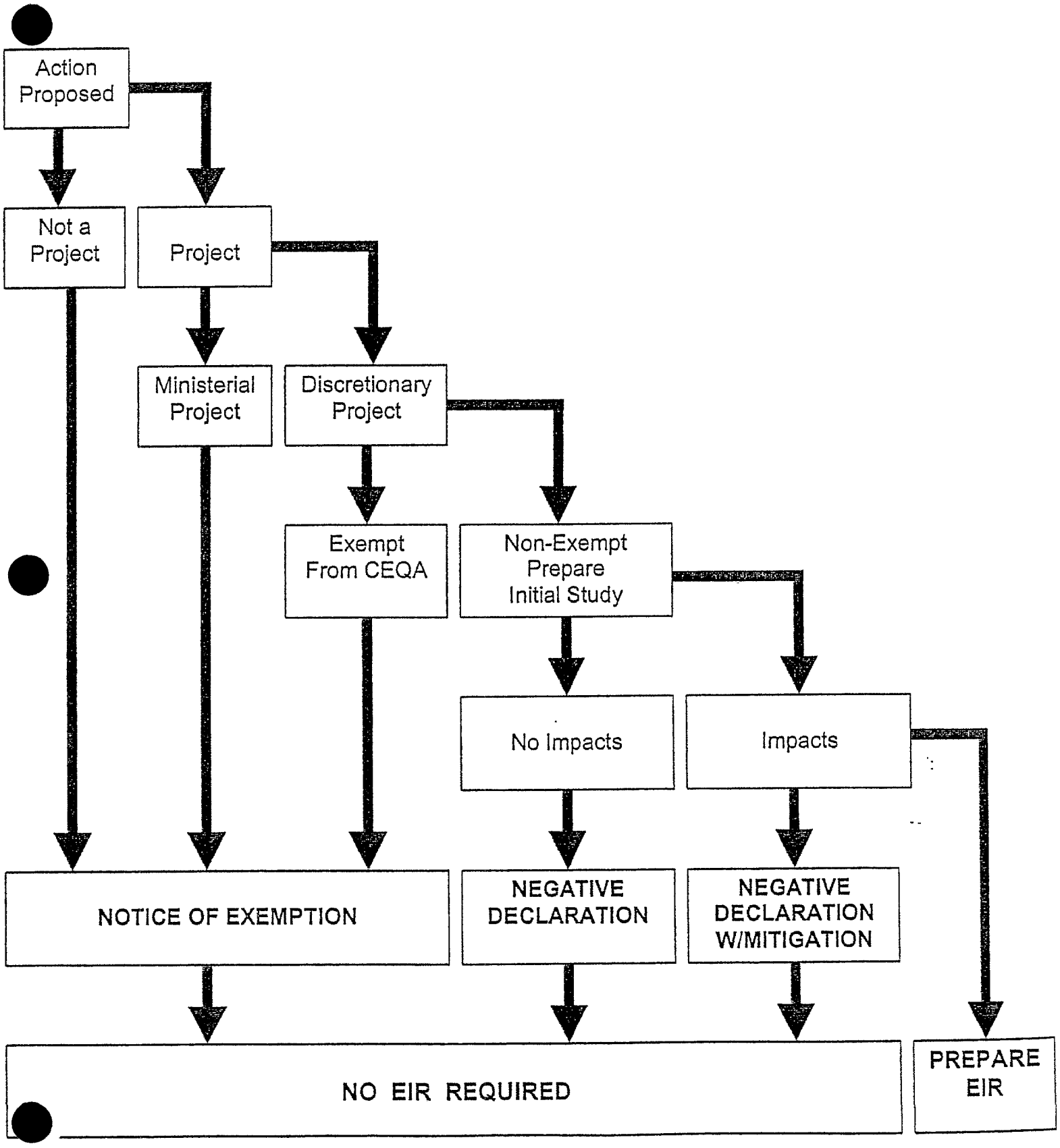
CEQA PROCESS FLOW CHART



NOTE: This flow chart is intended to illustrate the EIR process contemplated by the CEQA Guidelines. In case of discrepancies, the language in the Guidelines takes precedence.

Supplementary Document B

LEAD AGENCY DECISION TO PREPARE AN EIR



ENVIRONMENTAL CHECKLIST FORM

PROJECT LOCATION: _____
City *County*

PROJECT ADDRESS: _____

_____

DESCRIPTION OF PROJECT: _____

_____

_____

_____

ENVIRONMENTAL IMPACTS:

(CEQA requires that an explanation of all "yes" and "maybe" answers be provided along with this checklist, including a discussion of ways to mitigate the significant effects identified. You may attach separate sheets with the explanations on them)

		Yes	Maybe	No
I.	EARTH. Will the proposal result in:			
	a) Unstable earth conditions or in changes in geologic substructures?	☐	☐	☐
	b) Disruptions, displacements, compaction or overcovering of the soil?	☐	☐	☐
	c) Change in topography or ground surface relief features?	☐	☐	☐
	d) The destruction, covering or modification of any unique geologic or physical features?	☐	☐	☐
	e) Any increase in wind or water erosion of soils, either on or off the site?	☐	☐	☐
	f) Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	☐	☐	☐
	g) Exposure of people or property to geologic hazards, such as earthquakes, landslides, mudslides, ground failure, or similar hazards?	☐	☐	☐
II.	AIR. Will the proposal result in:			
	a) Substantial air emissions or deterioration of ambient air quality?	☐	☐	☐
	b) The creation of objectionable odors?	☐	☐	☐
	c) Alteration of air movement, moisture, or temperature, or any change in climate, either locally or regionally?	☐	☐	☐
III.	WATER. Will the proposal result in:			
	a) Changes in currents, or the course of direction of water movements, in either marine or fresh waters?	☐	☐	☐
	b) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	☐	☐	☐
	c) Alterations to the course or flow of floodwaters?	☐	☐	☐
	d) Changes in the amount of surface water in any water body?	☐	☐	☐
	e) Discharge into surface waters, or in any alteration of surface water quality, including, but not limited to, temperature, dissolved oxygen or turbidity?	☐	☐	☐
	f) Alteration of the direction or rate of flow of ground waters?	☐	☐	☐
	g) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	☐	☐	☐

	h) Substantial reduction in the amount of water otherwise available for public water supplies?	☐	☐	☐
	i) Exposure of people or property to water related hazards such as flooding or tidal waves?	☐	☐	☐
IV.	PLANT LIFE. Will the proposal result in:			
	a) Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?	☐	☐	☐
	b) Reduction of the numbers of any unique, rare, or endangered species of plants?	☐	☐	☐
	c) Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	☐	☐	☐
	d) Reduction in acreage of any agricultural crop?	☐	☐	☐
V.	ANIMAL LIFE. Will the proposal result in:			
	a) Change in the diversity of species, or numbers of any species of animals (birds; land animals, including reptiles; fish and shellfish, benthic organisms or insects)?	☐	☐	☐
	b) Reduction of the numbers of any unique, rare, or endangered species or animals?	☐	☐	☐
	c) Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	☐	☐	☐
	d) Deterioration to existing fish or wildlife habitat?			
VI.	NOISE. Will the proposal result in:			
	a) Increases in existing noise levels?	☐	☐	☐
	b) Exposure of people to severe noise levels?	☐	☐	☐
VII.	LIGHT AND GLARE. Will the proposal:			
	a) Produce new light or glare?	☐	☐	☐
VIII.	LAND USE. Will the proposal result in:			
	a) Substantial alteration of the present or planned land use of an area?	☐	☐	☐
IX.	NATURAL RESOURCES. Will the proposal result in:			
	a) Increase in the rate of use of any natural resources?	☐	☐	☐
X.	RISK OF UPSET. Will the proposal involve:			
	a) A risk of an explosion or the release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?	☐	☐	☐
	b) Possible interference with an emergency response plan or an emergency evacuation plan?	☐	☐	☐
XI.	POPULATION. Will the proposal:			
	a) Alter the location, distribution, density or growth rate of the human population of an area	☐	☐	☐
XII.	HOUSING. Will the proposal:			
	a) Affect existing housing, or create a demand for additional housing?	☐	☐	☐
XIII.	TRANSPORTATION/CIRCULATION. Will the proposal result in:			
	a) Generation of substantial additional vehicular movement?	☐	☐	☐
	b) Effects on existing parking facilities, or demand for new parking?	☐	☐	☐
	c) Substantial impact upon existing transportation systems?	☐	☐	☐
	d) Alterations to present patterns of circulation or movement of people and/or	☐	☐	☐

goods?

e) Alterations to waterborne, rail or air traffic? ☐ ☐ ☐
f) Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians? ☐ ☐ ☐

XIV. PUBLIC SERVICES. Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:

a) Fire protection? ☐ ☐ ☐
b) Police protection? ☐ ☐ ☐
c) Schools? ☐ ☐ ☐
d) Parks or other recreational facilities? ☐ ☐ ☐
e) Maintenance of public facilities, including roads? ☐ ☐ ☐
f) Other governmental services? ☐ ☐ ☐

XV. ENERGY. Will the proposal result in:

a) Use of substantial amounts of fuel or energy? ☐ ☐ ☐
b) Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy? ☐ ☐ ☐

XVI. UTILITIES AND SERVICE SYSTEMS. Will the proposal result in a need for new systems, or substantial alterations to the following utilities:

a) Power or natural gas? ☐ ☐ ☐
b) Communications systems? ☐ ☐ ☐
c) Water? ☐ ☐ ☐
d) Sewer or septic tanks? ☐ ☐ ☐
e) Storm water drainage? ☐ ☐ ☐
f) Solid waste and disposal? ☐ ☐ ☐

XVII. HUMAN HEALTH. Will the proposal result in:

a) Creation of any health hazard or potential health hazard (excluding mental health)? ☐ ☐ ☐
b) Exposure of people to potential health hazards? ☐ ☐ ☐

XVIII. AESTHETICS. Will the proposal result in:

a) The obstruction of any scenic vista or view open to the public? ☐ ☐ ☐
b) The creation an aesthetically offensive site open to public view? ☐ ☐ ☐

XIX. RECREATION. Will the proposal result in:

a) Impact upon the quality or quantity of existing recreational opportunities? ☐ ☐ ☐

XX. CULTURAL RESOURCES. Will the proposal:

a) Result in the alteration of or the destruction of a prehistoric or historic archaeological site? ☐ ☐ ☐
b) Result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object? ☐ ☐ ☐
c) Have the potential to cause a physical change which would affect unique ethnic cultural values? ☐ ☐ ☐
d) Restrict existing religious or sacred uses within the potential impact area? ☐ ☐ ☐

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

a) Potential to degrade: Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? ☐ ☐ ☐

b) Short-term: Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively, brief, definitive period of time. Long-term impacts will endure well into the future.) ☐ ☐ ☐

c) Cumulative: Does the project have impacts which are individually limited, resources where the impact on each resource is relatively small, but where the effect on the total of those impacts on the environment is significant.) ☐ ☐ ☐

d) Substantial adverse: Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ☐ ☐ ☐

XXII. DISCUSSION OF ENVIRONMENTAL EVALUATION.

XXIII. DISCUSSSION OF LAND USE IMPACTS

BILL NUMBER: SB 2103 CHAPTERED
BILL TEXT

CHAPTER 753
FILED WITH SECRETARY OF STATE SEPTEMBER 23, 1998
APPROVED BY GOVERNOR SEPTEMBER 22, 1998
PASSED THE SENATE AUGUST 27, 1998
PASSED THE ASSEMBLY AUGUST 24, 1998
AMENDED IN ASSEMBLY AUGUST 20, 1998
AMENDED IN ASSEMBLY JULY 19, 1998
AMENDED IN ASSEMBLY JUNE 25, 1998
AMENDED IN SENATE MAY 19, 1998
AMENDED IN SENATE APRIL 30, 1998

INTRODUCED BY Senator Haynes
(Coauthors: Assembly Members Oller and Thomson)

FEBRUARY 20, 1998

An act to amend Sections 13575, 13580, 13581, and 13582 of, and to add Sections 13580.5, 13580.7, 13580.8, 13580.9, 13581.2, and 13583 to, the Water Code, relating to recycled water service.

LEGISLATIVE COUNSEL'S DIGEST

SB 2103, Haynes. Recycled water.

(1) Existing law regulates the use of recycled water.

This bill would establish procedures for a customer to request recycled water service, for establishing the rate for that recycled water service, for resolving disputes between the customer and his or her retail water supplier, relating to the supply of that recycled water service, and for enforcing those procedures. The bill would prescribe related matters.

(2) Existing law authorizes a retail water supplier that has identified a potential use or customer to apply to a recycled water producer or wholesaler for a recycled water supply and authorizes a recycled water producer or wholesaler that has identified a potential use or customer to request, in writing, a retail water supplier to enter into an agreement to provide recycled water to the potential customer.

This bill would authorize an entity responsible for groundwater replenishment, as defined, that is a customer of a retail water supplier and that has identified the potential use of recycled water for groundwater replenishment purposes to request, in writing, that retail water supplier to enter into an agreement to provide recycled water for that purpose. The bill would prohibit that entity from obtaining recycled water for that purpose from a recycled water producer, a recycled water wholesaler, or another retail water supplier without the agreement of the entity's retail water supplier.

The bill would authorize an entity responsible for groundwater replenishment that is not the customer of a retail water supply and that has identified the potential use of recycled water for groundwater replenishment purposes to request, in writing, a retail water supplier, a recycled water producer, or a recycled water wholesaler to enter into an agreement to provide recycled water for that purpose.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 13575 of the Water Code is amended to read:

13575. (a) This chapter shall be known and may be cited as the Water Recycling Act of 1991.

(b) As used in this chapter, the following terms have the following meanings:

(1) "Customer" means a person or entity that purchases water from a retail water supplier.

(2) "Entity responsible for groundwater replenishment" means any person or entity authorized by statute or court order to manage a groundwater basin and acquire water for groundwater replenishment.

(3) "Recycled water" has the same meaning as defined in subdivision (n) of Section 13050.

(4) "Recycled water producer" means any local public entity that produces recycled water.

(5) "Recycled water wholesaler" means any local public entity that distributes recycled water to retail water suppliers and which has constructed, or is constructing, a recycled water distribution system.

(6) "Retail water supplier" means any local entity, including a public agency, city, county, or private water company, that provides retail water service.

(7) "Retailer" means the retail water supplier in whose service area is located the property to which a customer requests the delivery of recycled water service.

SEC. 2. Section 13580 of the Water Code is amended to read:

13580. (a) A retail water supplier that has identified a potential use or customer pursuant to Section 13579 may apply to a recycled water producer or recycled water wholesaler for a recycled water supply.

(b) A recycled water producer or recycled water wholesaler that has identified a potential use or customer pursuant to Section 13579 may, in writing, request a retail water supplier to enter into an agreement to provide recycled water to the potential customer.

(c) A customer may request, in writing, a retailer to enter into an agreement to provide recycled water to the customer.

(d) (1) An entity responsible for groundwater replenishment that is a customer of a retail water supplier and that has identified the potential use of recycled water for groundwater replenishment purposes may, in writing, request that retail water supplier to enter into an agreement to provide recycled water for that purpose. That entity may not obtain recycled water for that purpose from a recycled water producer, a recycled water wholesaler, or another retail water supplier without the agreement of the entity's retail water supplier.

(2) An entity responsible for groundwater replenishment that is not a customer of a retail water supplier and that has identified the potential use of recycled water for groundwater replenishment purposes may, in writing, request a retail water supplier, a recycled water producer, or a recycled water wholesaler to enter into an agreement to provide recycled water for that purpose.

SEC. 3. Section 13580.5 is added to the Water Code, to read:

13580.5. (a) (1) Subject to subdivision (d) of Section 13580.7, a retail water supplier that receives a request from a customer pursuant to subdivision (c) of Section 13580 shall enter into an agreement to provide recycled water, if recycled water is available, or can be made available, to the retail water supplier for sale to the customer.

(2) Notwithstanding paragraph (1), in accordance with a written agreement between a recycled water producer or a recycled water wholesaler and a retail water supplier, the retail water supplier may delegate to a recycled water producer or a recycled water wholesaler its responsibility under this section to provide recycled water.

(b) A customer may not obtain recycled water from a recycled water producer, a recycled water wholesaler, or a retail water supplier that is not the retailer without the agreement of the retailer.

(c) If either a recycled water producer or a recycled water wholesaler provides a customer of a retail water supplier with a written statement that it can and will provide recycled water to the retailer, the retail water supplier shall, not later than 120 days from the date on which the retail water supplier receives the written statement from the customer, by certified mail, return receipt requested, submit a written offer to the customer. A determination of availability pursuant to Section 13550 is not required.

(d) If the state board pursuant to Section 13550 makes a determination that there is available recycled water to serve a customer of a retail water supplier, the retail water supplier, not later than 120 days from the date on which the retail water supplier receives a copy of that determination from the customer, by certified mail, return receipt requested, shall submit a written offer to the customer.

SEC. 4. Section 13580.7 is added to the Water Code, to read:

13580.7. (a) This section applies only to a retail water supplier that is a public agency.

(b) If no rate is in effect for recycled water service within the service area of a retail water supplier, the rate and conditions of service for recycled water service shall be established by contract between the retail water supplier and the customer.

(c) A rate for recycled water service established by contract, ordinance, or resolution, shall reflect a reasonable relationship between the amount of the rate and the retail cost of obtaining or producing the recycled water, the cost of conveying the recycled water, and overhead expenses for providing recycled water service. Capital costs of facilities required to serve the customer shall be amortized over the economic life of the facility, or the length of time the customer agrees to purchase recycled water, whichever is less. The rate shall not exceed the estimated reasonable cost of providing the service, and any additional costs agreed to by the customer for recycled water supplemental treatment.

(d) The rate for recycled water shall be comparable to, or less than, the retail water supplier's rate for potable water. If recycled water service cannot be provided at a rate comparable to, or less than, the rate for potable water, the retail water supplier is not required to provide the recycled water service, unless the customer agrees to pay a rate that reimburses the retail water supplier for the costs described in subdivision (c).

(e) The offer required by subdivisions (c) and (d) of Section 13580.5 shall identify all of the following:

(1) The source for the recycled water.

(2) The method of conveying the recycled water.

(3) A schedule for delivery of the recycled water.

(4) The terms of service.

(5) The rate for the recycled water, including the per-unit cost for that water.

(6) The costs necessary to provide service and the basis for determining those costs.

(f) This section does not apply to recycled water service rates established before January 1, 1999, or any amendments to those rates.

SEC. 5. Section 13580.8 is added to the Water Code, to read:

13580.8. (a) This section applies only to a retail water supplier that is regulated by the Public Utilities Commission.

(b) Rates for recycled water that is provided to the customer by a retail water supplier regulated by the Public Utilities Commission shall be established by the commission pursuant to Section 455.1 of the Public Utilities Code. A regulated water utility may request the

commission to establish the rate or rates for the delivery of recycled or nonpotable water, with the objective of providing, where practicable, a reasonable economic incentive for the customer to purchase recycled or nonpotable water in place of potable water.

(c) A regulated water utility may propose a rate or rates for recycled or nonpotable water by tariff or by contract between the retail water supplier and the customer. Where the rate or rates are set by contract, the water utility and its customer shall meet, confer, and negotiate in good faith to establish a contract rate.

(d) The commission shall, as appropriate, provide a discount from the general metered rate of the water utility for potable water by either of the following means:

(1) Passing through to the customer the net reduction in cost to the water utility in purchasing and delivering recycled or nonpotable water as compared to the cost of purchasing and delivering potable water.

(2) Granting to the customer a uniform discount from the water utility's general metered potable water rate when the discount in paragraph (1) is determined to be an insufficient incentive for the customer to convert to the use of recycled or nonpotable water. If the commission provides for a discount pursuant to this paragraph that is greater than the water utility's reduction in cost, the commission shall authorize the water utility to include the aggregate amount of that discount in its revenue requirements to be applied to, and recovered in, rates that are applicable to all general metered customers.

SEC. 6. Section 13580.9 is added to the Water Code, to read:

13580.9. (a) Notwithstanding any other provision of law, and except as otherwise previously provided for in a contract agreed to by the customer and the City of West Covina, if the purchaser, contractor, or lessee of, or successor to, all or a portion of the water utility owned by the City of West Covina is a retail water supplier that is regulated by the Public Utilities Commission, rates for recycled or nonpotable water service to a closed hazardous waste and solid waste facility located within the boundaries of the City of West Covina for the purposes of irrigation, recreation, or dust suppression or any other use at that facility shall be established in accordance with subdivisions (a) to (e), inclusive, of Section 13580.7, and if there is a failure to agree on the terms and conditions of a recycled or nonpotable water supply agreement for the delivery of water for those purposes by that purchaser, contractor, lessee, or successor, Section 13581 shall apply.

(b) For the purpose of this section, nonpotable water that is not the result of the treatment of waste shall be treated as the equivalent of recycled water if it is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefor considered a valuable resource, if the use of that water will not adversely affect downstream water rights, degrade water quality, or be injurious to plant life, fish, or wildlife, as provided by statute or by regulations of the State Department of Health Services and the state board or a regional board, as appropriate.

SEC. 7. Section 13581 of the Water Code is amended to read:

13581. (a) If there is a failure to agree on terms and conditions of a recycled water supply agreement involving a retail water supplier that is a public agency within 180 days from the date of the receipt of a request for recycled water pursuant to subdivision (c) of Section 13580, a written statement pursuant to subdivision (c) of Section 13580.5, or a determination of availability pursuant to subdivision (d) of Section 13580.5, any party may request a formal mediation process. The parties shall commence mediation within 60 days after the mediation request is made. If the parties cannot agree on a mediator, the director shall appoint a mediator. The

mediator may recommend to the parties appropriate terms and conditions applicable to the service of recycled water. The cost for the services of the mediator shall be divided equally among the parties to the mediation and shall not exceed twenty thousand dollars ($20,000).

(b) If the parties in mediation reach agreement, both parties together shall draft the contract for the recycled water service. The parties shall sign the contract within 30 days.

(c) If the parties in mediation fail to reach agreement, the affected retail water supplier shall, within 30 days, by resolution or ordinance, adopt a rate for recycled water service. The agency action shall be subject to validating proceedings pursuant to Chapter 9 (commencing with Section 860) of Part 2 of Title 10 of the Code of Civil Procedure, except that there shall not be a presumption in favor of the retail water supplier under the action taken to set the rate for recycled water service. The mediator shall file a report with the superior court setting forth the recommendations provided to the parties regarding appropriate terms and conditions applicable to the service of recycled water. Each party shall bear its own costs and attorney's fees.

SEC. 8. Section 13581.2 is added to the Water Code, to read:

13581.2. If the retail water supplier is regulated by the Public Utilities Commission, and there is a failure to agree on terms and conditions of a recycle water supply agreement with a customer within 180 days from the date of the receipt of a request for recycled water pursuant to subdivision (c) of Section 13580, a written statement pursuant to subdivision (c) of Section 13580.5, or a determination of availability pursuant to subdivision (d) of Section 13580.5, the matter shall be submitted to the Public Utilities Commission for resolution, and the commission shall determine a contract rate or rates for recycled water as provided in Section 13580.8.

SEC. 9. Section 13582 of the Water Code is amended to read:

13582. This chapter is not intended to alter either of the following:

(a) Any rights, remedies, or obligations which may exist pursuant to Article 1.5 (commencing with Section 1210) of Chapter 1 of Part 2 of Division 2 of this code or Chapter 8.5 (commencing with Section 1501) of Part 1 of Division 1 of the Public Utilities Code.

(b) Any rates established or contracts entered into prior to January 1, 1999.

SEC. 10. Section 13583 is added to the Water Code, to read:

13583. (a) If a retail water supplier that is a public agency does not comply with this chapter, the customer may petition a court for a writ of mandate pursuant to Chapter 2 (commencing with Section 1084) of Title 1 of Part 3 of the Code of Civil Procedure.

(b) If a retail water supplier is regulated by the Public Utilities Commission and does not comply with this chapter, the Public Utilities Commission may order the retailer to comply with this chapter after receiving a petition from the customer specifying the provisions of this chapter with which the retailer has failed to comply.

Inland Empire Utilities Agency
Mitigation Monitoring / Reporting Program
for the Optimum Basin Management Program

Introduction

This mitigation monitoring and reporting program has been prepared for use by the Inland Empire Utilities Agency (Agency) as it implements mitigation measures for this project. This program has been prepared in compliance with the California Environmental Quality Act (CEQA) and the State and Agency CEQA Guidelines.

CEQA Section 21081.6 require adoption of a reporting or monitoring program for those measures or conditions imposed on a project to mitigate or avoid adverse effects on the environment. The law states that the monitoring or reporting program shall be designed to ensure compliance during project implementation.

The mitigation monitoring/reporting program is presented in a tabular form which contains the following elements shown in separate columns:

1. Column one contains a statement of the general impact that requires mitigation.

2. In column two the mitigation measure is listed in its full text as defined in the environmental document and adopted by the CEQA Lead Agency.

3. Column three identifies a process/procedure for compliance and verification has been outlined for each mandatory mitigation action. This procedure designates who will take the action, what action will be taken and when, and to whom and when compliance will be reported.

4. Column four identifies a mitigation milestone, i.e., an action that will trigger the requirement for the mitigation measure, to assist the monitoring agent to ensure the measure is being implemented at the appropriate time.

5. In column five, the party responsible for ensuring the mitigation measure is implemented and effective at achieving the required mitigation is defined.

6. Column six identifies the prerequisite action(s) that must occur before the project mitigation measure can be implementation.

7. Column seven provides space to make notes that verify the mitigation measure has been effectively mitigated.

The individual measures and the accompanying monitoring/reporting actions follow. They are numbered in the same sequence as presented in the Optimum Basin Management Program Program Environmental Impact Report.

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
	LAND USE					
Potential Land Use Incompatibilities	4.2-1 Following selection of alternative sites for construction of future desalters, each site shall be evaluated for potential incompatibility with adjacent existing or proposed land uses. Where desalter operations can create significant incompatibilities (lighting, noise, use of hazardous materials, traffic, etc.) with adjacent uses, an alternative site shall be selected, or a technical report shall be prepared that identifies the specific measures that will be utilized to reduce potential incompatible activities or effects to below thresholds established in the general plan for the jurisdiction where the facility will be located.	Prior to site selection, adjacent land uses will be reviewed for compatibility with a proposed OBMP facility by the implementing agency. If potential incompatibilities are identified, then the mitigation measure will be implemented	Identification of sites for consideration	Participating agency implementing the project.	Final Site Selection	
Adverse Impacts to Important Farmlands	4 2-2 Where future OBMP facilities are proposed on locations that support agricultural operations on important farmlands, alternative sites shall be selected that do not occupy such acreage (unless agricultural operations have already been terminated).	In considering potential sites for location of OBMP facilities, if valuable farmlands will be affected, this measure will be implemented	Identification of sites for consideration	Participating agency implementing the project	Final Site Selection	
Potential Land Use Incompatibilities	4 2-3 Prior to implementing each proposed water facility, the land use compatibility of the proposed facility with both existing and future potential adjacent uses will be evaluated for consistency relative to general plan goals. This evaluation will examine the specific activities associated with the proposed facilities and determine whether specific incompatibilities, such as noise, fugitive dust, hazards or risk, or aesthetics would conflict with adjacent uses. Measures identified in the Subchapter of the OBMP PEIR will be used to mitigate potential incompatibilities where they are identified, or alternative locations will be selected.	Prior to site selection, adjacent land uses will be reviewed for compatibility with a proposed OBMP facility by the implementing agency. If potential incompatibilities are identified, then the mitigation measure will be implemented.	Identification of sites for consideration	Participating agency implementing the project.	Final Site Selection	
	POPULATION AND HOUSING					
Potential Reduction in Housing (Especially Affordable Housing)	4 3-1 If future facilities must be located on parcels occupied by existing housing, the proponent of the facility will ensure that short- and long-term housing of comparable quality and value are made available to the home owner(s) prior to initiating construction of the facility.	Prior to final site selection, the implementing agency will determine if housing is present at the selected site. If so, the mitigation measure will be implemented.	Identification of the comparable housing that is available to residents prior to project construction initiation	Participating agency implementing the project.	Project approval for a site with pre-existing housing present	
	GEOLOGIC RESOURCES / CONSTRAINTS					
	Soils					
Erosion and Sedimentation Impacts	4 4-1 Add protective covering of mulch, straw or synthetic material (erosion control blankets, tacking will be required)	Incorporate appropriate site specific erosion control measures in construction plans	Selection of appropriate erosion control measures listed in the mitigation measure	Participating agency implementing the project	Occurrence of exposed/disturbed areas on an OBMP construction site	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Erosion and Sedimentation Impacts	4.4-2 Limit the amount of area disturbed and the length of time slopes and barren ground are left exposed. After pipeline installation, soil will be compacted to a level similar to pre-construction conditions.	Prior to construction initiation, the implementing agency will identify a construction specification that minimizes exposed areas and provides for revegetation or alternative cover at the earliest possible date.	Initiation of construction.	Participating agency implementing the project	Site selection and identification of pre-construction level of compaction at an OBMP facility site	
Erosion and Sedimentation Impacts	4.4-3 Construct diversion dikes and interceptor ditches to divert water away from construction areas.	Prior to construction initiation, final project designs (including specifications for all necessary diversion dikes and interceptor ditches to divert water away from construction areas) must be approved through the established review process of the implementing agency.	Initiation of construction	Participating agency implementing the project.	Site selection.	
Erosion, Sedimentation and Flood-Related Impacts	4.4-4 Install slope drains (conduits) and/or water-velocity-control devices to reduce concentrated high-velocity streams from developing.	Prior to construction initiation, final project designs (including specifications for all necessary slope drains/conduits and/or water-velocity-control devices, as necessary to prevent concentrated high-velocity streams from developing) must be approved through the established review process of the implementing agency.	Initiation of construction	Participating agency implementing the project.	Site selection and evaluation	
Potential Liquefaction-Related Impacts	4.4-5 Construction of facilities and structures areas with high liquefaction potential will be limited without further geologic and hazard-related studies conducted by a qualified geologist or geotechnical firm Such studies will provide guidelines to minimize the risks to humans and to capital-intensive facilities.	If a facility is proposed within a former artesian area or area of potential liquefaction having water within 40 feet of ground surface (see Figures 4.5-19 and 4.5-50) the mitigation measure will be implemented.	Site specific geology and hazard-related studies identify measures that will be used to minimize risks to less than significant levels	Participating agency implementing the project.	Identification of a proposed facility location within a high liquefaction potential area.	
Potential Liquefaction-Related Impacts	4.4-6 If a conjunctive use program might be implemented that would bring water levels up to a level that significantly increases the risk of liquefaction, a more detailed monitoring and geologic study focused on this issue will be conducted to determine whether or not liquefaction poses a hazard to surface structures and to human safety. If such a study finds the impacts to be significant, the volume of water permitted to be stored in the basin will be decreased sufficiently until a water level is achieved that does not pose any significant hazard to surface structures or people	If OBMP activities in the future propose an increase in groundwater storage greater than 300,000 acre-feet from 1999 conditions, or if water levels are observed to rise beyond levels predicted at ultimate conditions, then the mitigation measure will be implemented	Modeling and/or studies determine that the proposed program does not pose any significant hazards.	Participating agency implementing the project	Proposal of a conjunctive use program greater than 300,000 acre- feet is the pre-requisite action to prompt more detailed modeling and/or studies which will determine if the proposed program can be safely implemented.	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
	Geology					
Impacts Associated with Geologic Hazards	4.4-7 Mitigate the risks from geological hazards through a combination of engineering, construction, land use and development standards.	The implementing agency will review all pertinent General Plans for identification of hazards, or will obtain a geotechnical report for the project site, and if hazards exist, the agency will implement the mitigation measures.	Final facility designs show that risks from geological hazards can bn reduced to less than significant levels.	Participating agency implementing the project	Site selection process determines potential geologic hazards may be present	
Potential Liquefaction-Related Impacts	4.4-8 Require each site within identified Liquefaction Hazard Zones to be evaluated by a licensed engineer prior to design or land disturbance/construction.	If a site is selected which is located within a liquefaction hazard zone, prior to facility design and/or land disturbance, the implementing agency will ensure that a licensed engineer evaluates the proposed site and deems it suitable for the proposed use.	Site specific liquefaction hazard studies conducted by a licensed engineer identify measures that will be incorporated into final designs to minimize risks to less than significant levels	Participating agency implementing the project.	Identification of a proposed project location within a liquefaction hazard zone.	
Seismic Groundshaking Impacts	4.4-9 Apply appropriate design and construction criteria to all structures subject to significant seismic shaking.	The implementing agency will review the proposed design and construction criteria to ensure that all designs meet UBC standards and all other appropriate earthquake protective measures.	Final facility designs incorporate all appropriate construction measures to minimize impacts that may result in the even of seismic shaking	Participating agency implementing the project.	All proposed locations for structures may be subject to seismic shaking	
Seismic Groundshaking Impacts	4.4-10 Prohibit critical, essential, and high risk land uses near earthquake special studies areas shown on the Hazard Overlay Maps developed by the Counties of San Bernardino and Riverside	Prior to site selection for critical, essential and/or high risk facilities, the implementing agency will review the Hazard Overlay Maps for the appropriate county prior to final site approval. If such proposed facilities are located in a special studies zone, the mitigation measure will be implemented.	Proposed OBMP site locations for critical, essential and high risk land uses avoid special study areas	Participating agency implementing the project	Identification of a proposed site location within a special study area	
Potential for, and Impacts from Landslides	4.4-11 Require stability analysis for Landslide Hazard areas designated "Generally Susceptible" and "Mostly Susceptible" on the Hazards Overlay Maps.	Prior to site selection, the Hazards Overlay Maps for the appropriate county will be reviewed by the implementing agency for potential landslide hazard areas If the proposed location is within the boundaries of such a region, a soil stability analysis will be required to demonstrate sufficient stability to support the proposed project.	Stability analysis concludes that the proposed site is not subject to significant landslide hazards or provides means for minimization of potential risks that can be incorporated into the final project design	Participating agency implementing the project.	Identification of a proposed site location within a potential landslide hazard area	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For	Agency Verification
Potential for and Impacts from Landslides	4 4-12 Institute restrictions on construction in high landslide potential and steep-slope areas to ensure safe development	If a proposed site is located in an area with high landslide potential and/or areas with steep slopes (as defined by local jurisdiction) the implementing agency will prepare a geotechnical report to determine the appropriate development restrictions that will be implemented.	Site locations for high-capital, essential, high *risk or habitable facilities* will avoid potential landslide areas and/or steep-slope areas	Participating agency implementing the project.	Identification of a proposed site location within a potential landslide or steep-slope areas	
Potential for and Impacts Related to Subsidence	4.4-13 Continue to identify and study subsidence hazards and susceptible areas, and propose mitigation technology that is appropriate to the findings of the monitoring study. The implementation of OBMP facilities will *not* in any way *contribute to subsidence conditions in pre-existing subsidence zones* (as shown in Figure 4.4-16). The OBMP will not cause or contribute to any new, significant subsidence impacts greater than a total of six inches in magnitude over the planning period. Impacts less than 6 inches in new areas are considered to be less than significant	The monitoring program described in the OBMP will continue to gather data from periodic ground elevation measurements, SAR studies, and/or other sources. Information gathered in these studies will be used in the future management of groundwater resources in Chino Basin with the intent of minimizing adverse impacts (such as ground fissures) resulting from subsidence. When projects that may cause significant subsidence impacts are proposed, the mitigation measure will be implemented	Approval or consideration of any project that may contribute to significant subsidence impacts greater than six inches, ground fissuring, or exacerbate subsidence in identified areas	Watermaster for monitoring; implementing agency for project specific evaluations and impacts.	Adoption of the OBMP is the prerequisite for future studies Proposal of a specific project that may contribute to subsidence is the prerequisite action for further modeling and site specific studies Implementation of a project is the prerequisite action for further monitoring studies to observe actual subsidence from a specific project	
Potential for and Impacts Related to, Subsidence	4.4-14 If modeling and/or additional studies conducted for the expanded OBMP SAWPA desalter wellfield demonstrates that such pumping will contribute to subsidence in the existing subsidence area, then a potentially significant impact can occur, and a subsequent environmental document will be prepared No OBMP activities allowed under this document will be permitted to cause or contribute to the subsidence within the pre-existing subsidence area defined in the OBMP Phase I Report and Figure 4.4-16.*	Prior to final design approval, modeling and detailed geotechnical and hydrologic studies of potential subsidence impacts from proposed desalter(s) must be completed. The analysis will also including potential cumulative impacts. If impacts are, or can be reduced to, less than significant, then the project may be approved within the scope of the existing PEIR document. If impacts are potentially significant, the project can not be approved without the preparation of further environmental documentation in accordance with CEQA.	Completion of modeling and/or studies that conclude that existing subsidence zone impacts will not be exacerbated by an OBMP desalter.	Participating agency implementing the project.	Consideration of expanding SAWPA desalter and wellfield	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action Pare	Agency Verification
Potential for, and Impacts Related to, Subsidence and/or Water Level Declines	4 4-15 To ensure that pumping impacts in the vicinity of the desalter well field do not have an adverse impact on water levels and subsidence issues, the follow performance standards will be used to evaluate the desalters· a Water level declines in areas surrounding the desalter pumping locations will not be allowed to decline to the extent that pumping capabilities for surrounding wells are impacted. If surrounding wells and producers are impacted by declines in water levels, alternative access to equivalent quantity and quality of water will be provided to affected surrounding parties. This water may be provided through distribution of funding to affected parties for the deepening of existing wells, or may be provided through the delivery (paid for by the implementing agency) of comparable or improved quality and quantity of water from other sources. b. If desalter well fields are demonstrated to cause or exacerbate impacts to subsidence areas measurable by a decline of over six inches in ground level at a 1/4 mile radius, or at the radius of the nearest non-OBMP-participating structure, then pumping patterns for the desalters will be modified to reduce impacts to cause no more than six inches of decline in ground level at the smallest of the two radii. c If an engineering study is prepared prior to installing a well or well field by a qualified geologist and hydrologist and demonstrates that subsidence greater than six inches can be permitted without causing significant subsidence hazards, then the investigation will define the new threshold for the specific location and it will be observed as the alternative threshold of significant subsidence	The implementing agency will take part in monitoring programs for water levels around desalter well fields to ensure that surrounding producers are not impacted by water level declines. If water levels are observed to decline due to pumping, the mitigation measure will be implemented to provide water to affected parties. The implementing agency will take part in continuing monitoring studies to examine subsidence in areas surrounding desalters and/or OBMP production facilities. If ground surface levels are measured to decline more than six inches, or if any ground fissures are observed prior to 6 inches of subsidence occurring, the mitigation measure will be implemented. If an engineering study demonstrates that greater than 6 inches of subsidence can be sustained without significant adverse impacts, then the project may be considered for approval	Modeling and/or studies conclude that subsidence impacts for the proposed project are not exacerbated in existing subsidence zones, do not exceed six inches outside of identified subsidence zones, or may be greater than six inches and will not cause any significant impacts	Participating agency implementing the project.	Consideration of any proposed projects that have the potential to cause significant subsidence impacts. Ongoing monitoring is necessary to ensure that identified thresholds are not exceeded	
Liquefaction-Related Impacts	4.4-16 Require site-specific geotechnical investigations of proposed development to include an assessment of potential impacts and mitigation measures related to expansive and reactive soils and liquefaction. Under the OBMP, Watermaster will continue to monitor the areas with potential liquefaction hazards and will work with local jurisdictions to ensure that any future structures are constructed with the appropriate foundations to address increased liquefaction potentials apropos to the specific area. This mitigation measure will reduce impacts to a less than significant level	Prior to final site selection, all proposed project locations will be examined for potentially expansive or reactive soils. If such soils are identified near the proposed project, the mitigation measure will be implemented. An implementing agency proposing to locate an OBMP project facility within a liquefaction hazard area will implement the mitigation measure	A site specific geotechnical investigation concludes that no significant impact is posed by potentially hazardous soil conditions or liquefaction and provides measures that will be implemented in the project facility design to reduce impacts to a less than significant level	Participating agency implementing the project.	Identification of a proposed site location on potentially expansive and/or reactive soils or a site that may have a high risk for liquefaction.	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Erosion and Sedimentation Impacts	4.4-17 Apply provisions of hillside erosion and sediment control that reduce volume and velocity of flows and content of sediment to levels that do not cause significant rill or gully erosion in susceptible areas. In addition, provide for restoration of areas that do become eroded.	If the implementing agency proposes to locate an OBMP facility in any hillside area, then the mitigation measure will be implemented, and erosion control methods will be established and approved prior to construction initiation. Continued monitoring of the site for eroded areas will be conducted during construction, and twice yearly during operation. If erosion is observed, the implementing agency will restore the eroded area and make provisions to minimize future erosion potential	Implementation of control measures identified in the site evaluation that successfully reduce volume, velocity and sediment content of runoff from the site	Participating agency implementing the project.	Identification of a site and evaluation of hillside erosion potential determines that erosion and sediment control is necessary to reduce volume and velocity of flows and sediment content to levels defined in the mitigation measure	
Erosion and Sedimentation Impacts	4.4-18 Prevent unnatural erosion in erosion-susceptible areas by tailoring grading, land clearance, and by prohibiting use of off-road vehicles and grazing.	Prior to final design approval, the proposed project location will be examined for soils with high wind and/or water erosion potential and conditions. If an area is determined to be unnaturally susceptible to erosion, then grading and land clearance in that area will be deigned to reduce erosion potential. In these areas, grazing and off road vehicle usage will be prohibited	Grading plans and land clearance plans include necessary erosion control measures, designs and practices to reduce erosion to a less than significant level Signs will be posed onsite that prohibit use of off-road vehicles Grazing activities will be prohibited onsite and site access will be controlled	Participating agency implementing the project.	Identification of a site with erosion susceptible areas and soil types.	
Earthquake-Related Impacts, Hazardous Soil Conditions, and Likelihood of Causing Damage to People and/or Property	*Seismicity* 4.4-19 When determined necessary by the affected jurisdictions, geotechnical and soils engineering reports will be prepared in conjunction with the preparation of preliminary design layouts and grading plans for all new development projects implemented within the proposed Project Area. These studies will verify the presence or absence of hazardous soil conditions. If necessary, these reports will provide specific mitigation measures for the treatment of *potential* geologic and soils hazards.	If a proposed site location has potentially hazardous soil or geologic conditions, the mitigation measure will be implemented.	Geotechnical and engineering studies verify the absence of hazardous on-site conditions or include means that will be implemented by the implementing agency to make impacts nonsignificant	Participating agency implementing the project	Geologic conditions necessitate the preparation of geotechnical and soil engineering reports under local *jurisdictional* requirements	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Earthquake-Related Impacts to People and Property	4.4-20 Comprehensive geotechnical investigation will be required prior to engineering and design development or structural and/or substantial rehabilitation of structures identified under Risk Class I & II, e g., public facilities, as identified below: *Risk Class I & II, Structures Critically Needed after Disaster:* Structures which are critically needed after a disaster include important utility centers, fire stations, police stations, emergency communication facilities, hospitals, and critical transportation elements such as bridges and overpasses and smaller dams Acceptable Damage: Minor non-structural, facility should remain operational and safe, or be suitable for quick restoration of service. *Risk Class III:* High occupancy structures; uses are required after disasters, i e , places of assembly such as schools and churches. Acceptable Damage: Some impairment of function acceptable; structure needs to remain operational *Risk Class IV, Ordinary Risk Tolerance:* The vast majority of structures in urban areas; most commercial and industrial buildings, small hotels and apartment buildings, and single family residences. Acceptable Damage: An "ordinary" degree of risk should be acceptable The criteria envisioned by the Structural Engineers Association of California provide the best definition of the "ordinary" level of acceptable risk. These criteria require that buildings be able to: a. Resist minor earthquakes without damage; b. Resist moderate earthquakes without structural damage, but with some non-structural damage, or c. Resist major earthquakes, of the intensity or severity of the strongest experienced in California, without collapse, but with some structural, as well as non-structural damage. *Risk Class V, Moderate to High Risk Tolerance* Open space uses, such as farms, ranches and parks without high occupancy structures, warehouses with low intensity employment, and the storing of non-hazardous materials Acceptable Damage: Not applicable.	If the implementing agency proposes any structures that fall within the provisions identified for Risk Classes I & II, the mitigation measure will be implemented.	Facility designs include measures for appropriate Risk Classes to meet acceptable damage criteria in the event of a disaster	Participating agency implementing the project.	Identification of a proposed OBMP facility that can be classed under Risk Classes I or II If such facilities are identified, geotechnical investigations will be prepared	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Earthquake-Related Impacts to People and Property	4.4-21 All structures previously identified under 4.4-21, in categories III through V, will be designed in accordance with the applicable multiplier factor seismic design provisions of the Seismic Safety Report to promote safety in the event of an earthquake.	If the implementing agency proposes to construct any facilities that are considered to fall in Risk Classes III-V, the mitigation measure will be implemented	Facility Designs include measures for appropriate Risk Classes to meet acceptable damage criteria in the event of a disaster	Participating agency implementing the project	Identification of a proposed OBMP facility that can be identified under Risk Classes III, IV or V If such facilities are identified, geotechnical investigations will be prepared	
Fault Rupture and Seismic Groundshaking	4.4-22 The direct impacts of faults upon proposed projects will be considered during preliminary planning processes, and the engineering design phases	Prior to final site selection, the implementing agency will consider the proposed location relative to special study zones and to other known fault locations as identified in the PEIR, Section 4.4.	Project facility designs include engineering and planning measures that reduce potential impacts due to fault proximity to less than significant levels	Participating agency implementing the project	Site selection process identifies potential direct impacts on the proposed site location by faults	
Earthquake-Related Impacts	4.4-23 All rehabilitation and new development projects implemented as a result of the proposed Project will be built in accordance with current and applicable Uniform Building Code (UBC) standards and all other applicable City, County, State and Federal laws, regulations and guidelines, which may limit construction and site preparation activities such as grading, and will make provisions for appropriate land use restrictions, as deemed necessary, to protect residents and others from potential environmental safety hazards, either seismically induced or those resulting from other conditions such as inadequate soil conditions, which may exist in the proposed Project Area.	Prior to final design approval, the proposed facility designs will be reviewed and made consistent with all applicable, most current UBC standards.	Proposed facility designs have been reviewed and approved by a qualified engineer for compliance with all applicable codes, laws, rules, and regulations	Participating agency implementing the project.	Proposed rehabilitation and new development for any facility included under UBC and other governmental laws regulations and guidelines, including grading.	
Earthquake-Related Impacts	4.4-24 Local grading and building codes should reflect measures to minimize possible seismic damage.	Site specific facility designs will reflect local grading and building codes and will incorporate recommended measures to minimize potential seismic damage	Final project designs incorporate local grading and building code measures that minimize possible seismic damage	Participating agency implementing the project.	A proposed project location may be subject to seismic hazards	
Earthquake-Related Impacts	*Seismic-Related Hazards (Optional)* 4.4-25 Utilize geologic and seismic data in land planning so that identified risk areas, if any, are avoided, or structures and landforms treated and designed to reflect local site conditions	The implementing agency will review and consider available geologic and seismic data when planning site locations and structural designs.	Site Selection	Participating agency implementing the project.	Alternative sites defined for specific facility.	
Earthquake-Related Impacts	4.4-26 Inspect older facilities and improve earthquake design features when possible	When an existing facility will be used, inspections will be conducted and, where necessary, seismic design will be enhanced to meet current standards	Conducting inspection.	Participating agency implementing the project.	Decision to utilize an existing facility	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Natural or Manmade Disaster	4 4-27 Maintain a disaster preparedness plan	Utilize disaster preparedness plans of the local land use jurisdiction.	Decision to proceed with project at location subject to disaster.	Participating agency implementing the project.	Selection of a site with disaster potential.	
	WATER RESOURCES / WATER QUALITY					
Impacts to Surface Water Quality	4 5-1 To *minimize potential* ground disturbances associated with installation and maintenance of proposed monitoring equipment on existing wells, the equipment will be installed within or along existing disturbed easements or right-of-way or otherwise disturbed areas, including access roads and pipeline or existing utility easements	If the proposed OBMP activity involves potential ground disturbance due to pipeline and/or well installation, the mitigation measure will be implemented	Final site selection for equipment installation is within or along *existing disturbed* easements, right-of ways, or other disturbed areas	Participating agency implementing the project.	Initiation of site selection process for monitoring equipment on existing wells	
Potential Hazards due to Flooding	4.5-2 The Watermaster or other agencies implementing recharge programs will confer with the San Bernardino County Department of Transportation and Flood Control and for each flood control basin that is proposed to be utilized for recharging water to the Chino Basin, define the amount of water that can be set aside as a conservation pool within existing flood control basins and specific operational parameters (such as time and volume of water that can be diverted into each basin). This will ensure that recharge activities do not conflict with flood control operations at any flood control basins. Variable pooling and recharge schedules that are coordinated with storm forecasting to halt deliveries during storm events will ensure that flood-related hazards remain less than significant.	If a proposed project involves the use of a flood control basin, the mitigation measure will be implemented	A *management plan* for the use of a SBCFCD basin for both recharge and flood control purposes will be *completed and agreed* upon between the conferring parties of the implementing agency and the SBCFCD prior to recharge initiation. The management plan will include variable pooling and recharge schedules and storm forecasting requirements as mandated by the mitigation measure	Participating agency implementing the project.	A proposed recharge project location is owned and operated by the SBCFCD for flood control purposes	
Surface Water Discharge Impacts	4 5-3 Within each desalter site, surface runoff will be collected and retained (for use onsite) or detained, and treated when released by passing the runoff through a "first-flush" treatment system, which may include onsite riparian area, detention basin with filtration system at the outlet, or other system that removes the majority of urban storm runoff pollutants, such as petroleum products and sediment. The purpose of this measure is to remove the onsite contribution to cumulative urban storm runoff and ensure the discharge from the desalter sites is treated to reduce contributions of urban pollutants to downstream flows.	Prior to construction initiation at a desalter site, the *implementing agency will ensure* that the project design includes measures for collection, retention and first-flush treatment of surface runoff prior to that runoff intercepting other surface flows.	Completion of facility and installation that retains and treats surface runoff onsite in accordance with first flush criteria specified in the mitigation measure	Participating agency implementing the project.	Proposal for construction of a desalter facility	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure		Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Incomplete Salt Balance Data to Better Manage Basin-Wide Water Resources	4.5-4	In compiling local and *in lieu* groundwater storage balances, the Watermaster will include the estimated amount of water lost from the Basin due to rising water at the low end of the Basin and adjust storage salt balance accounts accordingly.	As part of future record-keeping practices, Watermaster will include rising water volumes and quality values to use in groundwater storage accounting. This information will be used as the basis for the equitable apportionment of this loss among those that have water in storage, and for salt balance determinations.	Equitable apportionment of groundwater storage losses from rising water	Watermaster	Implementing storage accounting practices and salt balance calculations	
Water Quality Impacts to Stormwater from Pollutant Discharge	4.5-5	For each OBMP construction site, regardless of size, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared and implemented Each plan will identify the best management practices (BMPs) that will be used for that site to minimize the potential for accidental releases of any chemicals or materials on the site that could degrade water quality, including solid waste and require that any spills be clean-up, contaminated material properly disposed of and the site returned to pre-discharge condition, or in full compliance with regulatory limits for the discharged material. The portion of the SWPPP that addresses erosion and related sediment discharge will specify the percentage of pollutant removal, as illustrated in the attached Figure 4.5-56 which was abstracted from Supplement A to the "Riverside County Drainage Area Management Plans, Attachment" publication. At a minimum BMPs will achieve 60 percent removal of sediment and other pollutants from disturbed sites.	For all proposed project locations that involve construction and/or ground disturbance, the mitigation measure will be implemented.	Completion of a site-specific SWPPP that includes means (BMP's) to reduce adverse impact associate with accidental chemical release, contamination, and disposal This report will also address site specific erosion conditions and potential sediment discharge (treated to remove a minimum of 60 percent of sediment and other pollutants)	Participating agency implementing the project.	Consideration or approval of a proposed OBMP project	
Water Quality Impacts Resulting from Sedimentation/Erosion	4 5-6	For long-term mitigation of site disturbances at OBMP facility locations, all areas not covered by structures will be covered with hardscape (concrete, asphalt, gravel, etc), native vegetation and/or man-made landscape areas (for example, grass). Revegetated or landscaped areas will provide sufficient cover to ensure that, after a two year period, erosion will not occur from concentrated flows (rills, gully, etc.) and sediment transport will be minimal as part of sheet flows. These measures and requirements will be applied to closure of abandoned well site disturbed areas.	Prior to construction initiation, the implementing agency will prepare a revegetation plan or other designs for hardscape of disturbed areas that are not occupied by OBMP facilities, but have been disturbed as part of OBMP facility construction and/or operation	Selection of plant material and/or hardscape and facilities to completely cover all disturbed areas	Participating agency implementing the project.	A plan for revegetation or hardscape of all areas disturbed as a result of OBMP facilities that are not covered by structures/facilities will be completed prior to ground disturbance	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Impacts to Stormwater and Groundwater Quality from Well-Capping Activities	4.5-7 Prior to cleaning out, refurbishing or capping a well, samples will be obtained and chemically analyzed to ensure that the discharge does not contain any contaminants exceeding regulatory thresholds. If contaminants are discovered, then they will be removed or lowered below the regulatory threshold prior to discharge to the environment. Discharge of non-stormwater into storm drains will require a NPDES permit.	If the implementing agency cleans, refurbishes, caps, or closes a well or exstensiometer, the mitigation measure will be implemented.	Sampling demonstrates that contaminants are not present in significant quantities or have been removed and disposed of in accordance with all applicable requirements prior to completion of the proposed action. Acquire NPDES permit.	Participating agency implementing the project	Proposed action ro clean out refurbish or cap an OBMP well	
Stormwater and Groundwater TDS Impacts from Recycled Water Recharge	4.5-8 Recycled water will not be discharged to streams that are transporting storm flows for subsequent groundwater recharge (except as authorized by existing discharge permits issued by the Regional Board), unless mitigation as identified in mitigation measure 4.5-12 is provided. If the storm water component of the combined flow is a part of the total sub-basin assimilative capacity, which is fully allocated, then mitigation pursuant to mitigation measure 4.5-12 for recharge of the recycled water will be the same as if the recycled water had been directly recharged. However, if the assimilative capacity of the storm water has not been allocated, then mitigation will be based on the quality of the of the commingled storm flow and recycled wastewater.*	If recycled water is to be discharged to any storm flows for subsequent groundwater recharge, the mitigation measure will be implemented.	Modeling demonstrates that discharge will not cause violations of Basin Plan objectives. Obtain	Participating agency implementing the project.	Consideration of proposed recharge project that will discharge recycled water into stormflows	
Environmental Contamination Impacts Related to Accidental Release of SARI Pipeline Flows	4.5-9 OBMP participants do not have responsibility and control over the SARI line, but they do internet with the agencies that would respond to an accidental release from the SARI line (or the Los Angeles County Nonreclaimable Wastewater Line). OBMP participants will provide support, as required or appropriate, and assist with control of and restoration of the environment damaged by an accidental release from the line.	In the event of accidental release of brine from the SARI line or the LA County Nonreclaimable Wastewater Line, the implementing agency of OBMP desalter(s) will provide appropriate support to assist with control and restoration.	Participation in the control, clean-up and restoration of environmental damage caused by the accidental release	Participating agency implementing the project and SARI line operator.	Accidental release from the SARI line or LA County Nonreclaimable Wastewater Line	
Stormwater and Groundwater Contamination	4.5-10 Prior to authorizing contracts for drilling monitoring or production wells under OBMP auspices, the entity funding the well drilling effort will require the well driller to identify all chemicals that will be used at the drilling site and require the submittal of a SWPPP for review and approval before allowing the drilling to commence A performance bond will be provided by the driller to ensure that any residual contamination from well drilling can be corrected	If the implementing agency proposes drilling of any type of well under the OBMP, the mitigation measure will be implemented	Submittal of chemical compounds list for the drilling site Completion and submittal of a SWPPP Posting of performance bond	Participating agency implementing the project.	Proposal to drill a monitoring well, extensiometer or production well	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Groundwater Well Contamination	4.5-11 When closing abandoned wells in the Chino Basin the entity closing the well will, where technically feasible, determine whether the groundwater in the well is contaminated. This will be accomplished by sampling and analyzing the well water. If contamination is identified, the entity will report the discovery to the appropriate parties, including the owner (if known) and the regulatory agencies. The Watermaster will monitor the status of the well until residual contamination is remediated	If the implementing agency proposed to close/cap any abandoned well, the mitigation measure will be implemented.	Completion of analytical report for water samples from the well that is to be closed If reports indicate no contamination, the well may be closed Monitoring of contaminated wells shows that remediation is complete and the well can be closed	Participating agency implementing the project.	Consideration of proposal to close abandoned wells	
TDS Impacts to Groundwater Quality Resulting from Recharge	4.5-12 When recharge of State Project Water (SPW) or recycled water with TDS greater than the background groundwater TDS or the Basin Plan water quality objective is utilized at a recharge site, the entity conducting the recharge will conduct additional analysis including modeling to identify the volume and rate of recharge that can be conducted without causing the Basin Plan water quality objective for TDS to be exceeded. In addition, the amount of additional salt added to the Basin above the background groundwater quality condition will be calculated and the greater of the two amounts will be offset, either by blending with lower TDS water (storm water) provided that the assimilative capacity of the storm water has not already been allocated as more thoroughly described in mitigation measure 4.5-8. The program could utilize SWP water for recharge when such water is available and when such water is better in quality than recycled water (i.e. lowest TDS). Under no circumstance will discharge of SPW or recycled water cause or contribute to a cumulative violation of Basin Plan water quality objectives or interfere with a designated beneficial use for a water or groundwater body.	When recharge of recycled water is proposed under the OBMP, the implementing agency will determine the concentration of TDS in the recycled water to be recharged. If the TDS concentration exceeds either groundwater TDS or the Basin Plan water quality objective, the mitigation measure will be implemented	Studies and/or modeling demonstrate that water quality objectives are not exceeded Salt additions to the basin are demonstrated to have been offset through the methodology listed in the mitigation measure Monitoring of recharge project demonstrates no violation of BPO's or assimilative capacity	Participating agency implementing the project.	Consideration of a proposal to recharge SPW or recycled water into the Basin	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Water Quality Impacts to Groundwater and Associated Potential Health Resulting from Recharge of Recycled Water	4.5-13 When recharge of recycled water is proposed for a specific location, the entity proposing such recycling will provide the following data to DHS: the area encompassed by the minimum six months detention period before use and the area encompassed by the long-term equilibrium concentration of 20 percent recycled water within the aquifer. Based on these area estimates, the entity will determine whether any existing WSA production wells or critical water supply aquifers will be impacted by these pumping constrained areas. If impacts will affect existing wells or critical water supply aquifers, the entity proposing to discharge recycled water will fund the provision of a comparable quality and quantity of potable water to the WSA [this can be done through installing new wells, direct water deliveries (for example from desalters), etc.].	If a proposed project includes the recharge or recycling of recycled water, the mitigation measure will be implemented	Confirmation that DHS has received the forecasted impacts listed in the mitigation measure prior to construction initiation Implementing agency's monitoring results demonstrate no significant impact to existing WSA production wells, or else an alternative water supply or additional funding has been provided to affected parties	Participating agency implementing the project.	Consideration of recycled water recharge in the Basin	
Nitrogen/Nitrate/TIN Impacts Resulting from Recycled Water Recharge	4.5-14 When recharge of recycled water with TIN greater than the background groundwater TIN or the Basin Plan objective at a recharge site is utilized, the entity conducting the recharge will conduct modeling to identify the volume and rate of recharge that can be conducted without causing the Basin Plan water quality objective for TIN to be exceeded. Under no circumstance will discharge of SPW or recycled water cause or contribute to a cumulative violation of Basin Plan water quality objectives or interfere with a designated beneficial use for a water or groundwater body.	If the implementing agency proposes to recharge recycled water with a TIN concentration that is greater than the Basin Plan objective at the recharge site, the mitigation measure will be implemented.	Studies and/or modeling demonstrate that water quality objectives are not exceeded Monitoring of recharge project demonstrates no violation of BPO's or assimilative capacity	Participating agency implementing the project.	Consideration of a proposal to recharge SPW or recycled water into the Basin	
Impaired Beneficial Use of Groundwater Resulting from Spread of Contamination Plumes	4.5-15 When recharge of water is proposed within the vicinity of an existing or known groundwater quality anomaly (contaminated groundwater plume), modeling will be conducted to determine whether recharge of the recycled water will increase the local hydraulic gradient and cause more rapid spread of the existing plume. If existing domestic water production wells will be impacted by the plume a minimum of one year earlier than under pre-existing conditions, or if significant quantities of additional groundwater (more than 5,000 acre-feet) will become contaminated within a 5-year period due to the recharge of water, an alternative location for recharge will be selected to avoid not only the loss of the recharged water due to contamination, but also additional high quality groundwater due to more rapid expansion of the contaminated plume.	Prior to recharge of water into the Basin, the surrounding area and areas down gradient of the proposed recharge location will be examined for known contaminated groundwater quality plumes (refer to Figure 4.5-46) If such an anomaly is identified proximate to, or could be affected by recharge, the mitigation measure will be implemented.	Completion of modeling and/or other studies that demonstrate recharge site's proximity to and effect on surrounding and down gradient groundwater contamination plumes is less than either threshold described in the mitigation measure Monitoring of recharge projects demonstrates no adverse impacts	Participating agency implementing the project.	Consideration of any recharge project location	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Flooding Hazards and Potential Risks to People and Property	4.5-16 Whenever possible and feasible, OBMP projects that are highly capital intensive, or that employ workers who are onsite for more than just maintenance activities, will consider Figure 4.5-17 when siting specific project locations for OBMP facilities. Areas defined on this map that potentially may be affected by flood-hazards will be avoided, unless conjunctive use and flood-control operations demand that facilities must be located within these areas. If facilities are constructed in a flood zone, the facility will be brought to a level above flood hazards, or hardened against flood related impacts. Additionally, if facilities must be located within flood plains or hazard areas, a flood management program to minimize impacts to people and surrounding property will be created and implemented for each facility that may occur within these hazard areas.	Prior to final site selection, all new OBMP facilities other than monitoring wells, extensiometers and minor pipelines will consider Figure 4.5-17, to avoid potential flood hazards whenever possible. If a facility must be located within a flood zone, the mitigation measure will be implemented.	Final site locations avoid flood hazard areas or document why no other possible locations may be utilized Final project design for facilities that must be located in flooding zones includes measures to harden facilities against flooding impacts or raise facilities above flood hazards Completion of flood management plan for facilities that must be located in flood zones prior to facility construction	Participating agency implementing the project.	Consideration of alternative site locations for capital intensive OBMP projects, or for facilities that require workers to be onsite for more that just infrequent service or maintenance visits	
Potential Hazard for Flooding Related to OBMP Facilities Operations	4 5-17 Prior to implementation of any recharge projects as either existing or new basins, a management plan will be established to the satisfaction of SBCFCD. This plan will be created specifically for each individual basin to ensure the safety of surrounding property and people from undue risks associated with water-related hazards (i e flooding). The management plan will firmly establish a priority of flood-control functions over and above recharge-related operations Weather forecasts of upcoming storm events will be carefully monitored and in the event of a significant forecasted storm-event, recharge deliveries the basins will be ceased until further notice is received from SBCFCD that it is safe for deliveries to resume. Additionally, no more than three days' percolative capacity of water will be allowed to sit in a basin at a time if such basin is also used for flood control activities. Additionally, each SBCFCD basin will have a specific management plan developed, so as to coordinate flood control with recharge This mitigation measure will ensure that people and property are not subject to additional risk associated with water-related hazards in the Basin, and will allow SBCFCD to make full utilization of the basin's flood control capacity in the event of a storm.	If a basin owned and/or operated by SBCFCD for flood control purposes is to be utilized under the OBMP, the implementing agency will implement the mitigation measure.	Completion of site specific basin management plan including operational criteria and safety elements Use of weather forecasting to modify and manage recharge operations	Participating agency implementing the project and Watermaster.	Proposal to utilize SBCFCD basins or other flood control basins for recharge of water into the Chino Basin	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Surface and Groundwater Quality Impacts Resulting from Addition of Salt to the Basin	4.5-18 In order to offset salt additions above the objective for the appropriate Subbasin defined in the Basin Plan, desalters will be constructed Recharge of water with TDS concentrations above the Basin Plan objectives will not occur until it can be adequately demonstrated that the users of pumped groundwater which are adversely affected by such recharge will be appropriately compensated or will receive sufficient amounts of high quality water to offset the adverse effects of the high TDS pumped groundwater at an overall cost no greater than that which would have been incurred by the adversely affected producers in the absence of the recharge. Desalters may be the source of higher quality water needed for mitigation. If water with TDS in excess of water quality objectives is recharged in such close proximity to the desalter extraction wells that other producers are unaffected, then mitigation will be accomplished when it is demonstrated that the salt leaving the basin, as a result of the OBMP desalter capacity that has been allocated to mitigate the TDS impacts of recycled water recharge is equal to or greater than the increment of additional salt above established Basin Plan water quality objectives. Desalters will be designed to capture any increase in rising water.	If recharge of water into the Basin is observed to adversely affect surrounding producer's beneficial uses, the implementing agency will implement the mitigation measure to ensure that a comparable quality and quantity of water is provided to affected parties. Recharge will not occur until adverse effects to groundwater quality and quantity from recharge are reduced.	Desalter construction and operation prior to recharge of water with concentrations of constituents above BPO's or assimilative capacity Monitoring to determine impacts on nearby water producers Immediate compensation or implementation of alternative (comparable quality) supply to parties observed through the monitoring program to be adversely affected	Participating agency implementing the project.	Consideration of proposals to recharge water with constituent concentrations above BPO's or Basin assimilative capacity	
Groundwater Quality Impacts Resulting from Recycled Water Recharge	4.5-19 Among the alternatives available to reduce or control adverse effects caused by recharge is the use of injection of water of higher quality to resident poor quality groundwater to serve as a barrier against the migration of the poor quality gorundwater.	If recharge is observed to be the direct cause of migration of poor quality groundwater causing significant adverse impacts, the mitigation measure will be implemented	Installation and operation of high quality water injection wells End of observed adverse impacts resulting from plume migration.	Participating agency implementing the project	If recharge is observed to be the direct cause of migration of poor quality groundwater the mitigation measure will be implemented	
	AIR QUALITY *Construction Impact*					
Increased PM_{10} Emissions	4.6-1 Water active grading sites at least twice daily and when dust is observed migrating from the site. The project will comply with SCAQMD Rule 403 requirements where applicable. Rule 403 prohibits visible dust emissions beyond the property boundaries.	*Disturbed ground areas and construction sites* will be managed to minimize fugitive dust emissions. If dust is observed to migrate from the site, the mitigation measure will be implemented.	Frequent watering of the construction site reduces dust emissions to invisible levels beyond property boundaries and less than 100 feet above ground surface	Participating agency implementing the project.	Observation of visible dust emissions extending outside of property boundaries.	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Increased PM_{10} Emissions	4.6-2 Suspend all grading and excavation operations when wind speeds exceed 25 mph.	If wind speeds exceed 25 mph, the mitigation measure will be implemented.	All grading, earth-moving, and excavation operations cease until wind speed decrease to less than 25 mph	Participating agency implementing the project.	Wind speeds are estimated or predicted to be greater than 25 mph	
Increased PM_{10} Emissions	4.6-3 Apply non-toxic chemical soil stabilizers according to manufacturers specifications to inactive construction areas (previously graded areas inactive for 10 days or more).	If graded areas on an OBMP construction site remain inactive for 10 days or more, the mitigation measure will be implemented.	Chemical soil stabilizers have been applied per manufacturer's specifications and documented in the construction log	Participating agency implementing the project.	Presence of disturbed, exposed construction areas that have remained inactive for 10 days	
Increased PM_{10} Emissions	4.6-4 Replace ground cover or pave disturbed areas immediately after construction is completed in the affected area	Upon completion of construction in a disturbed area, the mitigation measure will be implemented.	Installation of ground cover, vegetation or pavement (i.e. hardscape)	Participating agency implementing the project	Completion of construction activities in a disturbed, exposed or graded area	
Increased Erosion/ Stormwater TSS/Sedimentation Impacts and Elevated PM_{10} Emissions	4.6-5 Sweep streets once a day and when soil material is observed on traveled roadways	The implementing agency will observe roadways occurring onsite. If soil material is observed on traveled roadways, the mitigation measure will be implemented to remove the soil material resulting from OBMP operations. Other track-out control measures may be used in addition to street sweeping	No soil materials are observed emanating from construction sites at the end of a construction day	Participating agency implementing the project.	Observation on roadways of soil material being generated from OBMP construction activities	
Increased Nitrous Oxide Emissions	*Operation Impact (None Required)* See discussion in Subchapter 4.6, Section 4.6.3, Stagger Operations of High Emission Equipment and Utilize Energy Sources from Outside of the SCAB, where feasible, and or acquire emission credits.	Implementing agency explores the options to reduce energy consumption air pollutant emissions	Specific project emissions exceed the SCAQMD NOx threshold.	Participating agency implementing the project.	Cumulative OBMP project emissions that exceed SCAQMD NOx threshold.	
Impaired Traffic Flow	*TRANSPORTATION AND CIRCULATION* 4.7-1 For each development project that will increase traffic generation relative to current traffic generation, the *IEUA will prepare a traffic study that identifies* the net number of trips, and the effect on levels of service to maintain a LOS "E".	If a proposed project is forecast to increase traffic generation, the mitigation measure will be implemented.	Preparation of a site-specific traffic study Implementation of measures identified in a site-specific traffic study that result in the maintenance of a minimum LOS "E"	Participating agency implementing the project.	Consideration of a proposed project that has the potential to increase traffic relative to current levels	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Impaired Traffic Flow	4.7-2 The IEUA will require the construction contractor to provide adequate traffic management resources during construction (signing protective devices flag persons. etc.) to maintain safe traffic flow, particularly emergency access, on local streets at all times.	If construction of a proposed OBMP facility may impede traffic flow from no-project conditions, the mitigation measure will be implemented.	Site specific implementation of signage, protective devices, flag persons, etc is demonstrated to maintain safe traffic flow and emergency access standards in accordance with local jurisdictions	Participating agency implementing the project.	Consideration of a proposed project that has the potential to adversely impact traffic flow	
Impaired LOS and Increased Potential Hazards	4.7-3 During construction the IEUA will require traffic hazards for vehicles, bicycles, and pedestrians be adequately identified and such traffic controlled to minimize hazards	If a traffic hazard may exist during OBMP facility construction, the mitigation measure will be implemented.	Preparation of a site specific traffic study that identifies traffic control measures to minimize safety hazards to vehicles, bicycles and pedestrians Demonstration that identified site-specific measures have been implemented on-site	Participating agency implementing the project.	Consideration of a proposed project that has the potential to adversely impact traffic flow	
Hazards to Vehicles and Pedestrians from Open Trenches or Other Traffic Safety Hazards	4.7-4 The IEUA will require the contractor to ensure no open trenches or traffic safety hazards be left in roadways during periods of time when construction personnel are not present (nighttime. weekends. etc.).	For any proposed project involving open trenches, or that creates a traffic safety hazard, the implementing agency will implement the mitigation measure.	Any time when construction personnel are not monitoring potential hazard areas, the hazards will be removed from roadways and all trenches will be filled and/or marked with signs and have restricted access	Participating agency implementing the project.	Presence of potential safety hazards or open trenches on-site	
Hazards to Vehicles and Pedestrians Safety	4.7-5 The IEUA will require all roads be repaired adequately after pipeline installation to ensure that traffic can move in the same manner as before construction without damage to vehicles.	Any time pipeline is installed in or adjacent to a roadway, the implementing agency will implement the mitigation measure.	Roadway is left in the same condition as prior to construction, and traffic can move in the same manner as before without any adverse impact to vehicles	Participating agency implementing the project.	Consideration of any project that may involve roadway disturbance for pipeline or other facility installation	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Increased Transportation Demand and Air Quality Impacts	4 7-6 Emphasize transportation demand management or non-motorized transportation alternatives for OBMP project related employees, where feasible, to reduce demand for roadway capacity.	Prior to project construction initiation, documentation will be provided by the implementing agency to show that all workers on an OBMP project have been informed of alternative transportation means (including non-motorized transportation and car pooling) of reaching their job-site	Demonstration and documentation is present at the implementing agency's office that alternative transportation modes, non-motorized transportation modes and car pooling have been encouraged and emphasized to all employees (including temporary, construction and permanent workers)	Participating agency implementing the project.	Consideration of an OBMP project that may require more than one vehicle trip per day to implement	
Adverse Traffic Flow, Circulation Pattern, and Safety Impacts	4.7-7 Future OBMP facility ingress/egress will be reviewed with the agency having jurisdiction or the roadway providing access, and roadway improvements required to eliminate any traffic hazards associated with access to a facility in accordance with standard agency requirements or prudent circulation system planning requirements.	For all OBMP site locations, the mitigation measure will be implemented.	Absence of traffic hazards associated with ingress/egress areas into OBMP facilities and demonstrable compliance with all standard requirements established by the agency with jurisdiction over the access route	Participating agency implementing the project.	Consideration of any proposed OBMP site location where the implementing agency does not own and/or control site access	
Habitat Disturbance, Corridor Disturbance, and Adverse Impacts to Sensitive Species listed due to Critical Loss of Habitat	BIOLOGICAL RESOURCES 4.8-1 Place primary emphasis on the preservation of large, unbroken blocks of natural open space and wildlife habitat area, and protect the integrity of habitat linkages. As part of this emphasis, incorporate programs for purchase of lands, clustering of development to increase the amount of preserved open space, and assurances that the construction of pipelines and other facilities or infrastructure improvements meet standards identical to the environmental protection policies applicable to the specific project.	Prior to final site selection, projects involving disturbance of habitat will implement the mitigation measure.	Facility site locations avoid habitat linkages, large open-space blocks, wildlife habitat areas and preserve areas	Participating agency implementing the project.	Consideration of proposed site locations for OBMP facilities that may require disturbance of existing habitat or biological resources	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Habitat Disturbance and Adverse Impacts to Sensitive Species in Conflict with Open Space Requirements	4.8-2 When determining which portion of a facility site should be retained in open space, give emphasis to the preservation of habitat areas and linkages, avoiding destruction of viable, sensitive habitat areas and linkages as a trade-off for preserving open space for purely aesthetic purposes. Further, whenever feasible, avoid impacts and disturbances to individuals and species considered sensitive by jurisdictional agencies.	Prior to final project design approval for a project that will decrease areas retained in open space or will disturb habitat, the mitigation measure will be implemented.	Facility site locations avoid habitat linkages, large open-space blocks, wildlife habitat areas and preserve areas Priority has been given to open space preservation of large blocks of land over isolated, less biologically important areas	Participating agency implementing the project.	Consideration of proposed site locations for OBMP facilities that may require disturbance of existing habitat or biological resources	
Impacts to Designated Habitat, Corridors, Riparian Resources, and Other Sensitive Species	4.8-3 Require facility designs to be planned to protect habitat values and to preserve significant, viable habitat areas and habitat connection in their natural conditions. a. Within designated habitat areas of rare, threatened or endangered species, prohibit disturbance of protected biotic resources b. Within riparian areas and wetlands subject to state or federal regulations (e.g. blue line streams); riparian woodlands, oak and walnut woodland, and habitat linkages, require that the vegetative resources which contribute to habitat carrying capacity (vegetative diversity, faunal resting sites, foraging areas, and food sources) are preserved in place or replaced so as no to result in an measurable reduction in the reproductive capacity of sensitive biotic resources. c Within habitats of plants listed by the CNDDB or CNPS as "special" or "of concern," require that new facilities not result in a reduction in the number of these plants, if they are present.	Prior to final selection, and prior to final project design approval for a project that will decrease areas retained in open space or will disturb habitat, the mitigation measure will be implemented.	No protected biotic resources are adversely impacted No net loss of riparian/ wetland areas and/or reproductive capacity occurs as a result of project implementation No net reduction of the number of individuals of sensitive plant resources listed by the CNDDB or CNPS occurs as a result of project implementation	Participating agency implementing the project.	Consideration of proposed site locations for OBMP facilities that may require disturbance of existing habitat or biological resources	
Disturbances to Endemic Trees	4.8-4 Maximize the preservation of individual oak, sycamore and walnut trees within proposed development sites	For any proposed project site containing oak, sycamore and/or walnut trees, the mitigation measure will be implemented	No loss of oak, sycamore and walnut trees occurs due to project implementation either by avoidance or by successful transplantation prior to construction initiation	Participating agency implementing the project.	Consideration of a proposed project location where oak, sycamore or walnut trees are located	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Habitat Disturbance and Adverse Impacts to Sensitive Species from Increased Vehicular Traffic	4.8-5 Prohibit the use of motorized vehicles within sensitive habitat areas and linkages except for crucial maintenance and/or construction activities.	If a proposed project site is located within or adjacent to sensitive habitat areas or linkages, the mitigation measure will be implemented.	No motorized vehicles are used in sensitive habitat areas and linkages except for crucial maintenance and or construction activities deemed necessary in writing by the General Manager of the implementing agency	Participating agency implementing the project.	Consideration of a proposed project location where the potential exists for use of motorized vehicles within sensitive habitat areas and linkages	
Habitat Disturbance and Adverse Impacts to Sensitive Species that May Occur Adjacent to Proposed Facilities	4 8-6 Require the establishment of buffer zones adjacent to areas of preserved biological resources. Such buffer zones will be of adequate width to protect biological resources from grading and construction activities, as well as from the long-term use of adjacent lands. Permitted land modification activities with preservation and buffer areas are to be limited to those that are consistent with the maintenance of the reproductive capacity of the identifies resources. The land uses and design of project facilities adjacent to a vegetative preservation area, as well as activities within the designated buffer area are not to be permitted to disturb natural drainage patterns to the point that vegetative resources receive too much or too little water to permit their ongoing health. In addition, landscape adjacent to areas of preserved biological resources will be designed so as to avoid invasive species which could negatively impact the value of the preserved resource.	If a proposed project will disturb biological resources, or the proposed project locations adjacent to sensitive habitat, linkages or to biological resources, the mitigation measure will be implemented.	Design and establishment of buffer zones and revegetation plans for all sites proximate to sensitive biological resources has been conducted, evaluated, and established, and approved by a qualified biologist/ecologist per standard biological practices and principles	Participating agency implementing the project.	Consideration of proposed site locations for OBMP facilities that may require disturbance of existing habitat or biological resources	
Loss of Habitat and Linkages between Established Habitats	4.8-7 Require conservation or open space easements, granting of development rights, or other similar protections over biological habitats, and habitat linkages being preserved in their natural state.	The implementing agency will determine if biological habitats or linkages occur within an area that requires preservation If so, the mitigation measure will be implemented.	Sensitive biological habitats and linkages are preserved and not disturbed	Participating agency implementing the project.	Consideration of proposed site locations for OBMP facilities that may require disturbance of existing habitat or biological resources	

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General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For	Agency Verification
Impacts to Individuals and Populations of a Sensitive Species	4.8-8 Prior to facility construction or installation, project specific biological resource surveys will be conducted onsite when any previously undeveloped areas may be disturbed by project implementation. If any sensitive species have the potential to occur on the site where OBMP facilities are proposed, or if previous environmental studies have not been conducted, IEUA will conduct all surveys in accordance with all established state, federal and generally accepted biological survey protocols for each potential species that may be located onsite. Further, IEUA will implement all mitigation measures recommended by jurisdictional agencies.	If a previously undeveloped area, or an area containing biological resources may be disturbed by a proposed project, the mitigation measure will be implemented.	Completion of site-specific biological surveys conducted in accordance with all applicable standards/protocols determines the potential for a sensitive to occur on site If the potential exists for sensitive species or habitat to be present onsite, all appropriate rules and regulations set forth by CDFG, USFWS and/or COE are complied with by the implementing agency	Participating agency implementing the project	Consideration of proposed site locations for OBMP facilities that may require disturbance of existing habitat or biological resources or disturbance of a site that has not been previously developed	
Loss of Individuals of a Sensitive Species	4.8-9 Mitigation measures should be determined on a project by project basis. Potential mitigation measures may include avoidance or minimization of impacts. One means of minimizing impacts to sensitive plants, for example, has included transplanting individuals out of harm's way.	Once biological resources and/or natural habitat is identified for a proposed project location, specific mitigation measures will be defined for those resources, and the mitigation measure will be implemented.	Priority is given to avoidance and minimization of impacts to all biological resources	Participating agency implementing the project.	Consideration of a proposed project location that has the potential to impact biological resources or habitats	
Habitat Disturbance Including Adverse Impacts to Riparian Resources and to Sensitive Species	4.8-10 The amount of water taken from or added to the Santa Ana River will be coordinated where possible to maintain the water level below the 505' elevation mark but above the 498' mark. If weather and hydrologic forecasts and reservoir conditions indicate that the pool elevation may exceed 505' because of a projected disparity between inflow and outflow, the water control manager at the Reservoir Operation Center will take all steps necessary (including immediate release of water at the maximum possible rate to prevent the pool elevation from exceeding 505', or to reduce the amount of time the pool is above 505' (if, in fact, the maximum possible release rate does not succeed in keeping the pool elevation below 505'). This mitigation measure will help to ensure the preservation of critical habitat for the least Bell's vireo, and preservation of associated riparian resources.	If the water control manager at the Reservoir Operation Center for Prado Basin determines that the water elevation has the potential to exceed the 505' elevation mark, the mitigation measure will be implemented and OBMP implementing agencies will work cooperatively with the manager to preserve valuable biological resources.	Water levels in the Prado Basin remain between 498 and 505 feet above sea level	Participating agency implementing the project.	Consideration of a proposed project upstream or upgradient of Prado Basin that has the potential to affect water levels in the Basin	

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General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Adverse Impacts to Sensitive Species	4.8-11 Mitigation must be designed so that development of a given project will effectively benefit the species. The 2081 and 10(a) permits should be complimentary of one another to avoid conflicts between state and federal mitigation requirements. These permits will likely require land purchase, endowment funds, fencing funds, and mitigation measures to remove sensitive species from areas where they are found Section 7 consultations also usually include a land acquisition component.	If a proposed project has the potential to affect a sensitive species, the mitigation measure will be implemented and appropriate government agencies will be contacted as required by law.	There is an effective benefit to sensitive species effected by the proposed project as determined by the issuance of complimentary 2081 and 10 (a) permits and by land acquisition	Participating agency implementing the project.	Consideration of a proposed project location that has the potential to impact sensitive species	
Energy Consumption	ENERGY No mitigation is proposed, however, where feasible, energy consumption should be minimized through the use of energy-efficient devices.					
Potential for Accidental Release of Hazardous Materials	HAZARDS AND RISK OF UPSET 4.10-1 For OBMP facilities that handle hazardous materials or generate hazardous waste the Business Plan prepared and submitted to the county or local city will incorporate best management practices designed to minimize the potential for accidental release of such chemicals. The facility managers will implement these measures to reduce the potential for accidental releases of hazardous materials or wastes.	If the proposed OBMP facility may require handling of hazardous materials or generate hazardous waste, a Business Plan will be prepared and implemented as described in the mitigation measure.	Approval by the county or local city of the business plan prepared by the implementing agency for management of hazardous materials and accidental release situations Implementation of measures on-site as identified in the business plan	Participating agency implementing the project and local jurisdiction where the facility will be constructed and operated.	Consideration of a proposed project where hazardous materials may be present on-site	

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General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Clean-up and Containment of Hazardous Materials, in the Event of an Accidental Release	4.10-2 The business plan will assess the potential accidental release scenarios and identify the equipment and response capabilities required to provide immediate containment, control and collection of any released material. Adequate funding will be provided to acquire the necessary equipment, train personnel in responses and to obtain sufficient resources to control and prevent the spread of any accidentally released hazardous or toxic materials.	If hazardous materials or hazardous wastes are to be present at an OBMP facility location, the mitigation measure will be implemented.	Approval by the agency with jurisdiction of the business plan prepared for the site that includes assessment of accidental release scenarios and necessary response capabilities Implementation of measures to prevent the spread of any hazardous material that may accidentally be released and acquisition of necessary containment and/or control equipment	Participating agency implementing the project and local jurisdiction where the facility will be constructed	Consideration of a proposed project where hazardous materials may accidentally be released into the environment	
Potential for Accidental Release of Hazardous Materials	4.10-3 For the storage of any acutely hazardous material at an OBMP facility, such as chlorine gas, modeling of pathways of release and potential exposure of the public to any released material will be completed and specific measures, such as secondary containment, will be implemented to ensure that sensitive receptors will not be exposed to significant health threats based on the toxic substance involved.	Prior to final project design approval, If any acutely hazardous material may be present at an OBMP facility, the mitigation measure will be implemented.	Implementation of secondary containment measures identified in the completed modeling study	Participating agency implementing the project.	Consideration of a proposed project where acutely hazardous materials may accidentally be released into the environment	
Potential Impacts Associated with the Treatment, Disposal, and/or Recycling of Contaminated Materials and/or Hazardous Wastes	4.10-4 All contaminated material will be delivered to a licensed treatment, disposal or recycling facility that has the appropriate systems to manage the contaminated material without significant impact on the environment.	If a contaminated or hazardous material must be disposed of, the mitigation measure will be implemented.	Disposal, treatment or recycling of contaminated or hazardous materials from OBMP facilities is completed at a facility licensed for that purpose	Participating agency implementing the project.	Consideration of a proposed project where hazardous or contaminated materials may need to be disposed of, treated, or recycled	

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General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Accidental Release of Hazardous Materials and Necessary Level of Remediation	4.10-5 Before determining that an area contaminated as a result of an accidental release is fully remediated, specific thresholds of acceptable clean-up will be established and sufficient samples will be taken within the contaminated area to verify that these clean-up thresholds have been met.	If an accidental release of a hazardous or contaminated material occurs, the mitigation measure will be implemented.	Determination of specific clean-up thresholds by agencies with jurisdiction Ongoing monitoring and clean-up efforts will occur until identified thresholds are met	Participating agency implementing the project.	Accidental release of a hazardous material.	
Disruption During Construction	4.10-6 During construction activities within existing road rights-of-way or other easements where continuous access is required, a road operation management plan will be prepared and implemented. At a minimum this plan will define how to minimize the amount of time spent on construction activities, how to minimize disruption of vehicle and alternative modes of traffic at all times, but particularly during periods of high traffic volumes; adequate signage and other controls, including flaggersons, to ensure that traffic can flow adequately during construction, the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways will be prepared for continued utilization without any significant roadway hazards remaining.	If a proposed OBMP project occurs within an existing roadway, right-of-way or other easement, the implementing agency will examine if continuous access may be required. If required, the mitigation measure will be implemented.	Completion of a road operation management plan Implementation of site-specific measures defined in the plan to minimize the potential impacts to traffic flow and to safety to minimize risks of upset	Participating agency implementing the project.	Consideration of a project that may require construction or operational activities within existing roadways, rights-of-way, or easements	
Disruption of Emergency Services Response Ability During Construction Activities	4 10-7 To the extent feasible, installation of pipelines or other construction activities in support of the OBMP will not be located on major evacuation or emergency response routes within any communities in the Chino Basin Where construction on such routes is necessary, local emergency response providers will be contacted and emergency access and evacuation requirements will be maintained at a level sufficient to meet their needs.	Prior to final site selection, the mitigation measure will be considered, so as to avoid adverse effects to major evacuation and emergency response routes. If construction in such response routes in unavoidable, the mitigation measure will be implemented.	Avoidance of emergency response routes and evacuation routes, or contact and cooperation with the conditions set forth by local emergency response providers to meet their needs	Participating agency implementing the project	Consideration of project facility locations within a major evacuation or emergency response route	
Potential Health Risks	4.10-8 Where alternative treatment systems are available to reduce potential health risks at OBMP facilities, such alternatives will be selected if they meet defined technical, logistical and economic requirements for operation of such facilities.	Prior to final project design approval, alternative treatment systems for systems involving potential health risks will be investigated If alternatives exist, the mitigation measure will be implemented.	Selection of the alternative treatment system with the greatest ability to minimize health impacts while still meeting the technical logistical and economic requirements for the project	Participating agency implementing the project	Consideration of OBMP project facility operations where alternatives exist that can minimize potential health risks	

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General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For	Agency Verification
Water Production and Ability to Meet Demands Utilizing Existing Wells	4 10-9 Prior to approving specific recycled water recharge facility locations and volumes, the extent of the aquifer area that would be removed from water production to meet potable water production requirements (6-month detention and 20% concentration in groundwater) will be defined If it conflicts with significant water production wells (existing or proposed), an alternative recharge location will be selected, or wells will be closed and a new supply developed.	If a recycled water recharge project is proposed, the implementing agency will implement the mitigation measure.	Definition and identification of the extent of aquifer area that would be removed from meeting potable water production requirements per DHS Draft Title 22 Guidelines prior to project approval and final site selection The implementing agency will consider the impacts of removing this area from production capabilities when doing the final site selection for the project among alternatives	Participating agency implementing the project.	Consideration of recycled water recharge projects	
Further Spreading of Existing Contamination Plumes	4.10-10 Hydrogeologic studies, including modeling, will be done for each recharge site to define the recharge impacts on existing known contaminated plumes. If modeling demonstrates that the rate of contaminated plume expansion or secondary effects associated with such expansion will adversely impact groundwater or water production capabilities, the recharge facility will be moved to an alternative location where such impacts will not occur or impacted production facilities will be replaced	If a recycled water recharge project is proposed, the implementing agency will implement the mitigation measure.	Avoidance of areas where hydrogeologic studies, including modeling of the effect of recharge activities on contamination plumes, forecast potentially significant adverse impacts	Participating agency implementing the project.	Consideration of site locations for recycled water recharge projects	
Groundwater Quality and Quantity Impacts	4 10-11 All recycled water recharge operations will be monitored, and if impacts that were not forecast to occur demonstrate that the recharge operations are causing a significant adverse impact on the groundwater aquifer, the recycled recharge operations will be terminated or modified to eliminate the adverse impact	Once a recycled water recharge project is in operation, monitoring as proposed in DHS Draft Title 22 Guidelines will be conducted. If the monitoring or other observation detects significant adverse effects that were not forecast to occur, the mitigation measure will be implemented.	Ongoing monitoring studies continue to conclude that no significant adverse effects are observable as a result of project operations	Participating agency implementing the project.	Continued operation of recycled water recharge project	

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General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
	NOISE					
Impacts Due to Noise Levels that are Incompatible with Adjacent Land Uses	4.11-1 Construction will be limited to the hours of 7 a.m. to 7 p.m. on Monday through Friday, and between 9 a.m. to 6 p.m. on Saturday, and will be prohibited on Sundays and federal holidays.	Any OBMP project involving facility construction or modification that may generate noise above existing conditions will implement the mitigation measure.	No construction occurs other than between the hours listed in the mitigation measure	Participating agency implementing the project.	Agency approves OBMP project that requires construction.	
Impacts Due to Noise Levels that are Incompatible with Adjacent Land Uses and/or are Harmful to Sensitive Receptors	4.11-2 All construction vehicles and fixed or mobile equipment will be equipped with properly operating and maintained mufflers	All OBMP-related projects involving vehicles or equipment with mufflers will implement the mitigation measure.	All vehicles involved in construction activities for OBMP facilities will have a mechanic's written statement testifying to the fact that the vehicles are equipped with properly operating and maintained mufflers	Participating agency implementing the project.	Construction activities involving vehicles and/or equipment	
Noise Levels are Harmful to Sensitive Receptors (including employees)	4.11-3 All employees that will be exposed to noise levels greater than 75 dBA over an 8-hour period will be provided with adequate hearing protection devices to ensure no hearing damage will result from construction activities.	For any OBMP project facility where noise levels may reach or exceed 75 dB over an 8 hour period, the mitigation measure will be implemented.	All sensitive noise receptors to noise levels greater than 75 dBA for 8 hours or more are provided with ear protection that reduces noise levels to less than 75 dBA	Participating agency implementing the project	A proposed project has the potential to expose sensitive noise receptors to noise levels greater than 75 dBA for an 8 hour period	
Noise Levels Have the Potential to Cause Hearing Damage to Sensitive Receptors	4.11-4 If equipment is being used that can cause hearing damage at adjacent noise receptor locations (distance attenuation will be taken into account), portable noise barriers will be installed that are demonstrated to be adequate to reduce noise levels at receptor locations below hearing damage thresholds	If an OBMP facility may have equipment that could either cumulatively or individually cause hearing damage, the mitigation measure will be implemented to prevent adverse impacts to all sensitive noise receptors.	Protective noise barriers will be constructed to reduce noise levels at sensitive receptor locations to levels that will not cause hearing damage	Participating agency implementing the project	A proposed project has the potential to expose sensitive noise receptors to noise levels that can cause hearing damage	
Noise Levels are Incompatible with Surrounding Land Uses	4.11-5 All production wells or booster pumps will have their noise levels attenuated to 50 dBA CNEL at 50 feet from the well head.	If a production well or booster pump is proposed under the OBMP, the mitigation measure will be implemented.	Installation of noise attenuation structures or devices that reduce noise levels at production wells or booster pumps (at a distance of 50 feet away) to less than 50 dBA	Participating agency implementing the project.	Proposed use of a production well or booster pump for OBMP activities	

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General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Noise Levels are Incompatible with Surrounding Land Uses	4.11-6 Project design will include measures which assure adequate interior noise levels as required by Title 25 (California Noise Insulation Standards).	For all OBMP facilities having a structural interior, the mitigation measure will be implemented.	The constructed facility has interior noise levels consistent with the guidelines set forth by Title 25 California Noise Insulation Standards	Participating agency implementing the project	Consideration of a proposed project having an interior component facility	
Noise Levels are Incompatible with Surrounding Land Uses	4.11-7 Require that all parking for desalter uses adjacent to residential areas be enclosed within a structure or separated by a solid wall with quality landscaping as a visual buffer.	If an OBMP desalter and/or parking area is to be located adjacent to residential areas, the mitigation measure will be implemented.	Parking areas will be enclosed in a structure or separated by a solid wall with quality landscaping serving as a visual buffer	Participating agency implementing the project.	Proposal of a project where parking facilities are adjacent to residential or other sensitive land uses	
Noise Levels are Incompatible with Surrounding Land Uses	4.11-8 Desalters will be constructed and operated so that noise levels from operations do not exceed 50 dB during night hours and 65 dB averaged over the 12 hours of day time when located adjacent to existing or future sensitive land uses This can be achieved by siting desalters a sufficient distance from sensitive noise receptors; by incorporating attenuation features in the facility or designing attenuation features at the boundary of the property.	If desalters are located adjacent to existing or future sensitive land uses, the mitigation measure will be implemented.	Final designs incorporate measures to reduce noise levels at the nearest existing or future sensitive land use to less than 50 dBA during night hours and less than 65 dBA during daylight hours Once constructed, measurements confirm that the identified thresholds are not exceeded	Participating agency implementing the project.	Proposal of a desalter facility adjacent to noise sensitive uses	
	PUBLIC SERVICES					
Trespass and Hazards	4.12-1 OBMP facilities will be fenced or otherwise have access controlled to prevent illegal trespass to attractive nuisances, such as construction sites or recharge sites	The implementing agency will implement the mitigation measure for all OBMP facilities.	Access to OBMP facilities is fenced or otherwise controlled	Participating agency implementing the project.	Construction and/or operation on any OBMP facility	

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General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
	UTILITIES *Electricity*					
Installation of Electrical Facilities	4.13-1 Developers in the proposed Project Area should coordinate with SCE regarding the location and phasing of required on-site electrical facilities.	The implementing agency will implement the mitigation measure for all OBMP facilities requiring electricity.	SCE is contacted and electrical plans for the facility are consistent with SCE requirements	Participating agency implementing the project.	Proposal of a facility that requires electrical service	
Electrical Consumption	4.13-2 Proposed building construction should comply with Title 24 of the California Administrative Code.	For all OBMP building construction, the mitigation measure will be implemented	Final project designs and the constructed facility have been reviewed for consistency with Title 24 requirements by a licenced and qualified engineer	Participating agency implementing the project.	Proposal of a facility that requires electrical service	
Aesthetic Resource Impacts to Surrounding Viewsheds Associated with Electricity Transmission Facilities	4 13-3 Onsite electrical lines should be installed underground.	For all proposed OBMP facilities requiring electricity provided by electrical lines, the mitigation measure will be implemented.	Onsite electrical lines are below ground surface level	Participating agency implementing the project.	Proposal of a facility that requires electrical service	
Electrical Consumption	4.13-4 Project planners and architects should consult with SCE regarding current energy conservation techniques.	For all OBMP structures and facilities requiring electricity for operation, the mitigation measure will be implemented.	SCE is contacted, and where feasible, recommended current energy conservation techniques have been implemented	Participating agency implementing the project.	Proposal of a facility that requires electrical service	
Energy Consumption	4.13-5 Project planners and architects should also consider the use of energy-efficient architecture and landscape design concepts which will work to reduce the long-term demands for fossil fuels. Such measures should include the following • Architectural planning and design, to the extent feasible, should take full advantage of such concepts as natural heating and/or cooling through sun and wind exposure and solar energy collection system opportunities when practical; and • Landscape design should be tailored, where feasible, to the use requirements of individual structures, with the intent to minimize heat gain in summer, maximize heat gain in winter, and promote air circulation for heating and cooling purposes.	For OBMP facilities that consume electricity or other energy resources, the mitigation measure will be implemented.	Final facility designs include measures to reduce the long term demands for fossil fuels	Participating agency implementing the project.	Design of OBMP structures	

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General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Energy Consumption	*Natural Gas* 4.13-6 Natural gas service to the proposed Study Area should be in accordance with the appropriate purveyors policies and extension rules as required These are on file with the California Public Utilities Commission. In addition, the following general measures are recommended. • The thermal insulation installed in walls and ceilings should meet the standards established by the State of California. • All buildings should be constructed in conformance with Title 24, Part 6, Division T-20, Chapter 2 of the California Administrative Code. • Windowless walls for western exposures and sill orientation of buildings to use solar heating systems and efficient heating-cooling systems should be installed whenever feasible. • The use of landscaping to moderate building heat gain, such as the use of deciduous trees in parking areas and on the southern and western exposures of buildings to provide shade during the summer, yet allow maximum light and heat during the winter, should be encouraged. • Energy conservation methods that could be readily incorporated into a development should be conceived during the design phase of Plan related development projects Consultation with the appropriate purveyors during the design phase will facilitate the process of adapting the project's architectural design to maximize efficient energy use	For all proposed OBMP facilities that require natural gas service, the mitigation measure will be implemented.	The local gas service provider has been contacted for specific policies and extension rules, and the final facility designs comply with these policies and those listed in the mitigation measure	Participating agency implementing the project	Proposal of an OBMP facility that requires natural gas service	
Future Growth and Limitations on Waste Treatment Capacity	*Wastewater* 4.13-7 Wastewater treatment facilities/distribution system improvement/expansion projects will precede or be concurrent with all growth generating projects as required to maintain adequate system capacity levels	For all OBMP growth generating projects, the mitigation measure will be implemented	Wastewater treatment agencies verify that treatment facilities and distribution systems have adequate capacity to accommodate the proposed project	Participating agency implementing the project.	Proposal of a potentially growth generating project	
	~~4.13-8 Future developers should be assessed a sewer capacity and connection fee by the appropriate regulatory agency for the future expansion of trunk lines and treatment plant facilities.~~ This mitigation measure does not apply to any project that could be implemented under the OBMP, thus the measure has been removed.					

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General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Waste Disposal Capacity	4.13-9 All industrial and commercial users should take on-site measures to reduce the load strength of their sewage.	All OBMP facilities that qualify as industrial or commercial users of wastewater will implement the mitigation measure.	On site measures are implemented that reduce the load strength of raw sewage	Participating agency implementing the project.	Proposal of any OBMP facility that may generate sewage	
Solid Waste Treatment and Disposal Capacity	*Solid Waste* 4.13-10 All proposed development/redevelopment projects within the proposed Study Area that will generate solid waste, will be reviewed on a project-by-project basis by the permitting jurisdiction in coordination with County landfill officials to determine the degree of impact upon remaining landfill capacity. Projects should be approved only after it is determined that the additional solid waste generated can be disposed of within existing landfill facilities.	Prior to project approval, the implementing agency will implement the mitigation measure for all proposed OBMP facilities that will generate solid wastes.	The permitting jurisdiction for solid waste and landfills determines that the proposed project's solid waste volume is within that of the solid waste disposal capacity of existing landfills	Participating agency implementing the project.	Proposal of any project that may generate solid waste	
Water Consumption	*Water Supplies* 4.13-11 All program-related development/redevelopment projects including exterior landscape elements will employ xeriscape plant design and water conservation concepts. At a minimum xeriscape requirements will include the following: a The use of drought-tolerant species, drip irrigation systems, soil moisture sensors, and automatic irrigation systems, when appropriate. b Extensive use of mulch in all landscaped areas. Use of mulch will improve water holding capacities of the soil by reducing evaporation and erosion. c. A minimal use of lawn, except to accommodate-lawn dependent uses such as playing fields Warm-season grasses will be used. d. The use of gray water separation storage and transmission systems when feasible for irrigation purposes	If an OBMP-project or facility includes exterior landscape or revegetation elements, the mitigation measure will be implemented.	Landscape plans include the identified measures to reduce water consumption and excessive evaporation	Participating agency implementing the project.	Consideration of a proposed project that includes exterior landscape elements.	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Water Consumption	4.13-12 The conservation of water should be of significant concern to all citizens in Southern California, and some conservation proceedings are presently mandated by state legislation. As such, the following measures should be implemented for all Plan related construction projects when appropriate to comply with state legislation: • Plumbing fixtures that reduce water usage should be utilized (i.e., low-volume toilet tanks, flow-control devices for faucets and shower heads) in accordance with Title 24 of the California Administrative Code. • The use of drought-tolerant plant species and drip irrigation systems should be considered in order to reduce water usage. • Installation of ultra-low flush toilets in all new construction should occur. • Installation of low-flow showers and faucets in accordance with California Administrative Code, Title 24, Part 6, Article 1, T20-1406F should occur Recommendations to be implemented where applicable: <u>Interior</u> • Supply line pressure: recommend water pressure greater than 50 psi be reduced to 50 psi or less by means of pressure-reducing valve • Flush valve operated water closets: recommend three gallons per flush • Drinking fountains: recommend installation of self-closing valves. • Pipe insulation: recommend all hot water lines in dwelling units be insulated to provide hot water quickly with less water and to prevent hot pipes from heating cold pipes.	The mitigation measure will be implemented for all OBMP project-related activities, as appropriate.	Final project designs include specific measures and features to conserve water and other resources, such as those that are identified as being appropriate from the list in the mitigation measure	Participating agency implementing the project	Consideration of any OBMP project or facility that may consume water	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For	Agency Verification
Water Consumption	Exterior • Preserve and protect existing trees and shrubs. Established plants are often adapted to low water conditions and their use saves water needed to establish replacement vegetation. • Group plants of similar water use to reduce over-irrigation of low-water-using plants. • Provide information to occupants regarding benefits of low-water-using landscaping and sources of additional assistance. • Use pervious paving material whenever fensible to reduce surface water runoff and to aid in ground water recharge • Grade slopes so that runoff of surface water is minimized.	Continued from previous page	Continued from previous page	Continued from previous page	Continued from previous page	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
	CULTURAL RESOURCES *Archaeology*					
Potential Disturbance of and Impacts to Cultural Resources	4.14-1 Inventory: A required basic archaeological inventory should encompass the following guidelines: a *Literature and Records Search* - Existing maps, site reports, site records, and previous EIRs in the region of the subject area should be researched to identify known archaeological sites and works completed in the region. All maps, EIRs, historical maps and documents, and site records should be cited in text and references. Local historical societies should also be contacted and referenced. State Information Centers will provide the bulk of this information. The San Bernardino County Archives or the Eastern Information Center at UC Riverside should be contacted. b. Field Reconnaissance - Conduct a surface survey to obtain comprehensive examination of current status of the area and gather general understanding of the kinds of cultural and related phenomena present. At a minimum, all ground surfaces chosen for survey should be walked over in such a way that every foot of ground can be visually scanned. All previously recorded cultural resources should be revisited to determine their current status, and all newly discovered sites should be recorded on either State Form 422 or 523 and supplements, as appropriate. Trinomial designations will be obtained from the Information Center. For the inventory process, a compilation of all historical resources, including archaeological and historic resources older than 50 years, using appropriate State record forms, following guidelines in the California Office of Historic Preservation's handbook should be completed for all new discoveries Two copies should be submitted to the San Bernardino County Archeological Information Center for the assignment of trinomials if discovered within San Bernardino County. Otherwise, the appropriate comparable agency in Riverside County will be the recipient of these reports.	Prior to final site selection for all projects, an archaeological inventory will be conducted for any proposed project location within the sensitive areas shown on Figure 4.14-1, in accordance with the guidelines of the mitigation measure and mitigation measure 4.13-2.. For areas not located with the identified sensitive areas, a literature and records search and summary will be conducted per the guidelines of the mitigation measure. If the search does not rule out the potential for archeological resources at the site location, further evaluations as described in the mitigation measure and in measure 4.13-2 will be conducted.	Report on research conducted by a qualified archaeologist determines that there is no significant adverse impact to cultural resources resulting from construction activities Any measures identified in the report are incorporated into construction activities to reduce potential impacts to a less than significant level	Participating agency implementing the project.	Consideration of any project site location where earthmoving or ground disturbing activities may be necessary	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Disturbance and/or Destruction of Sensitive Cultural Resources	c. Report - A technical report should be prepared which fully describes both the methods and results of all efforts Research sources should be listed, and the information summarized The field work should be presented in detail, with all appropriate maps and graphics Any areas not inspected with full intensity should be specified, preferably using clear, easily understood maps, and the reasons for the deficiency presented. Site records should be prepared for all new discoveries, and amendments prepared to update old records where necessary; since vocational data are shielded from public access, the actual forms should be provided in the separable appendix, but the sites should be described in the main text. Each resource description should include a professional opinion of significance, with reference to the qualities or research potential which make it worthy of further consideration. Archaeological sites which need test excavation to confirm significance, integrity, and boundaries should be identified, and a sampling program recommended. For each potentially significant cultural resource, possible impacts should be listed and mitigating measures developed. All standards for compliance with the CEQA requirements and those of the lead agencies should be addressed.					
Disturbance and/or Destruction of Sensitive Cultural Resources	4.14-2 Assessment: Properties will be evaluated using a well-understood cultural context that describes the cultural development of an area and identifies the significant patterns that properties represent This same historic context is used to organize all identification, registration, and preservation decisions within the planning framework To be useful in subsequent stages of the planning process, evaluation decisions must make clear the significance of the property with the historic context. Potential preservation treatments should not influence the evaluation of significance. The nature and type of assessment will depend on the particular resource(s) and level of information for a particular region Consequently, it is not possible to prescribe specific methods to be utilized. However, there are certain basic elements that should be included and are as follows: a. Preparation of a Research Design - Archaeological documentation can be carried out only after defining explicit goals and a methodology for reaching them The goals of the documentation effort directly reflect the goals of the preservation plan and the specific needs identified for the relevant historic contexts	Final site selection avoids cultural resources if at all possible If cultural resources are encountered onsite, construction immediately ceases until a qualified archaeologist or historian gives permission for construction to commence again If an archaeologist or other qualified historian identifies a cultural resource onsite as being significant, an assessment is performed, and if necessary a recovery plan is prepared and implemented	The completed detailed cultural resources assessment report conforms to the guidelines of the mitigation measure along with those report guidelines in mitigation measure 4.14-1	Participating agency implementing the project.	Conditions at a proposed project site necessitate the preparation of a detailed cultural resource report as per mitigation measure 4 14-2	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action Port	Agency Verification
Disturbance and/or Destruction of Sensitive Cultural Resources	b. Field Studies - The implementation of the research design in the field must be flexible enough to accommodate the discovery of new or unexpected data classes or properties, or changing field conditions An important consideration in choosing methods to be used in the field studies should be assuring full, clear, and accurate description of all field operations and observations, including excavation and recording techniques and stratigraphic or inter-site relationships c. Report - The assessment report should evaluate the significance and integrity of all historical resources within the project area, using criteria established in Appendix K of the CEQA Guidelines for important archaeological resources and/or CFR 60.4 for eligibility for listing on the National Register of Historic Places The report should contain the following information and should be submitted to the San Bernardino county Archaeological Information Center or to the Eastern Information Center at UC Riverside for permanent archiving: (1) Description of the study area; (2) Relevant historical documentation/background research; (3) The research design; (4) The field studies as actually implemented, including any deviation from the research design and the reason for the changes; (5) All field observations; (6) Analysis and results, illustrated as appropriate with tables, maps, and graphs, (7) Evaluation of the study in terms of the goals and objectives of the investigation, including discussion of how well the needs dictated by the planning process were served, (8) Information on where recovered materials are curated and the satisfactory condition of those facilities to protect and to preserve the artifacts and supporting data The County of San Bernardino requests that historical resource data and artifacts collected within this project area be permanently curated at a repository within the County. d. In the event that a prehistoric or historic artifact over 50 years in age is encountered within the project area, especially during construction activities, all land modification activities in the immediate area of the finds should be halted and an onsite inspection should be performed immediately by a qualified archaeologist. This professional will be able to assess the find, determine its significance, and make recommendations for appropriate mitigation measures. Further, if human remains of any kind are encountered on the property, the San Bernardino or Riverside County Coroner's Office must be contacted within 24 hours of the find, and all work should be halted until a clearance is given by that office and any other involved agencies.					

SUMMARY OF MITIGATION

General Impact	Mitigation Measure		Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Disturbance and/or Destruction of Sensitive Cultural Resources	4.14-3	Monitoring: In situations where resources are potentially subject to direct or indirect impact and testing or data recovery is not proposed, an archaeological monitor and Native American observer/consultant should be present during subsurface work. One circumstance under which this might occur would be if a known resource was close to a area of impact and the site boundaries were ambiguous. Monitors help insure that exposed data or materials are collected and that if potentially significant cultural materials or features are encountered, they will be preserved either by realignment of the proposed facilities or by prompt evaluation and recommendations for any necessary mitigative measures.	If cultural resource monitoring is necessary due to close proximity to know resource locations, the mitigation measure will be implemented.	An qualified archaeological monitor is present onsite during all ground disturbing construction activities	Participating agency implementing the project.	A proposed project site has a high potential for encountering cultural resources	
Adverse Impacts to Unearthed Archaeological/Paleontological Resources	4.14-4	Data Recovery: If an archaeological resource is found to be significant and no other preservation option is possible, mitigation of adverse effects by scientific data recovery, including analysis and reporting is the method of last resort. Such a mitigation program is usually only developed after an assessment test has been completed to identify physical parameters and cultural complexity, and formulate a research design. Each specific program would have to be developed in response to the site and potential impact, with the concurrence of the appropriate agencies and in consultation with Native American representatives	If an on-site cultural resource is identified to be significant, and no other preservation option is possible, the mitigation measure will be implemented.	Construction will cease until a qualified archaeologist or historian gives approval for continuance A recovery plan prepared by a qualified archaeologist, paleontologist or other qualified professional is implemented to recover, analyze and report cultural resources as a method of last resort	Participating agency implementing the project.	Discovery of significant cultural resources at a project site	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure		Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Potential Disturbance of and Impact to Cultural Resources	4 14-5	Future Project Siting: Future project will be located, whenever possible or feasible, outside of the highly sensitive cultural resource areas depicted in Figures 4.14-1. Before any projects are located, and before any construction activities begin, any proposed project that will result in ground disturbance to any area that does not have a complete cultural resource survey on record with either the AIC or the EIC offices will conduct a site specific cultural resource evaluation and report prior to any ground breaking activity. Further, if cultural resources have been identified on the site, a qualified archeologist or paleontologist will be retained to devise an excavation and/or curation plan for the resources, and a qualified cultural resource monitor will be present onsite during all construction-related activities that could potentially uncover previously undiscovered resources. This monitor will examine excavated soils and have the authority to cease construction activities if resources are un-earthed	Prior to final site selection Figure 4.14-1 will be used in future project siting and any project that may result in ground disturbance will implement the mitigation measure.	Project locations avoid sensitive areas depicted on Figure 4.14-1 or else a completed cultural resource evaluation is on file with the AIC or EIC, or a site specific report, as per mitigation measures 4.14-1 and 4.14-2 has been conducted If resources are identified onsite, a qualified archaeologist or palaeontologist has been retained and has assisted the implementing agency in implemented measures for curation/excavation and/or will be onsite during all construction related activities with the authority to prevent disturbance to cultural resources	Participating agency implementing the project.	Site selection process for a proposed project where activities have the potential of encountering cultural resources	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
	Architectural Resources					
Disturbance and or Damage of Historic Buildings and/or Structures	4.14-6 Based solely upon this level of investigation and at this stage of project planning, it would be premature to propose specific mitigation measures. However, certain options can be presented presupposing a general level of knowledge regarding impacts. These options can be utilized to avoid impacts upon the cultural resources - the preferred result - or to lessen adverse effects. It should be emphasized that these options are not the only ones that may be applied. As such, these measures are not recommended as conditions of Project approval but are included for the Authority's consideration and implementation as appropriate. a. Conduct a comprehensive historic building survey which is integrated with economic development programs; b Adopt a preservation ordinance and create a preservation board, c. Ensure other planning programs, plans, and ordinances are compatible to the historic preservation goals and policies; d Direct existing funding sources and loan programs to historic neighborhoods in need of revitalization; e. Provide incentives and direction encouraging preservation and revitalization; and f Develop ongoing programs for enhancing public appreciation of historic resources. g Project Redesign A proposed project may be redesigned in either of two ways: (1) Outside of site boundaries, thus avoiding impact to the site; or (2) Restricting impacts to those areas of a site where previous impacts have already destroyed the integrity and research potential. Other options may also apply and may include capping of the site, relocation of structures, and integration of extant buildings into project design	Any OBMP-project facilities that may disturb historical architectural resources will implement the mitigation measure as appropriate to the proposed project location and design.	Identification and implementation of the specific measures required to reduce historical resource impacts to a nonsignificant level.	Participating agency implementing the project.	Consideration of a proposed project that may result in disturbance of historical architectural resources	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure		Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
	AESTHETICS AND VISUAL RESOURCES						
Incompatible Aesthetic Impacts to Surrounding Land Uses and to Existing Viewsheds	4.15-1	All surface areas disturbed by OBMP construction activities (except those areas used by structures or hardscapes) will be revegetated, either with native vegetation in natural landscapes or in accordance with a landscape plan in man-made landscape areas (note that native vegetation is also eminently suited to man-made landscapes and requires less maintenance). Once construction is completed, revegetation will begin immediately and, where a formal landscape plan is being implemented, it will be coordinated with the local agency and the local design guidelines for consistency.	At the end of construction activities, if an OBMP facility has resulted in the disturbance of areas that are not occupied by structures or hardscapes, the mitigation measure will be implemented.	All surfaces that were disturbed during construction are covered by landscaping, structures or hardscaping immediately following completion of facility construction	Participating agency implementing the project.	Consideration of proposed projects that may disturb surface areas	
Visual Resource Impacts to Viewsheds Located Along Scenic Highways and Corridors	4.15-2	Where facilities are proposed to be located adjacent to scenic highways, corridors or other scenic features identified in local agency planning documents, OBMP facility implementation will conform with design requirements established in these planning documents.	If a proposed project is located adjacent to a scenic highway, corridor or other scenic feature, the mitigation measure will be implemented.	Final project designs incorporate aesthetic measures to comply with local planning agency design requirements	Participating agency implementing the project.	Consideration of proposed project sites located adjacent to scenic highways, corridors or other scenic features	
Incompatible Aesthetic Impacts to Surrounding Land Uses and to Existing Viewsheds	4.15-3	Where facilities will disrupt views from occupied areas with significant scenic vistas, a visual simulation analysis will be performed of the facility's impact on the important view. If the analysis identifies a significant impact on a scenic vista, the facility will be relocated, redesigned to reduce the impact to a non-significant level, or a subsequent environmental evaluation will be prepared.	If OBMP facilities will disrupt occupied areas' views of a significant vista, the mitigation measure will be implemented.	Visual simulation analyses demonstrate that the proposed facility will not significantly affect views of significant scenic resources or an alternative project location is selected that will not impact viewsheds	Participating agency implementing the project	Proposed facilities have the potential to disrupt views from occupied areas with scenic vistas	
Incompatible Aesthetic Impacts to Surrounding Land Uses and to Existing Viewsheds	4.15-4	When OBMP above ground facilities are constructed in the future, the local agency design guidelines for the project site will be followed to the extent that they do not conflict with the engineering and budget constraints established for the facility.	The facility proponent will review local jurisdiction design guidelines and coordinate facility design to comply with the guidelines, except as noted.	Completion of design for structures in compliance with local design guidelines to the extent consistent with mitigation requirements.	Participating agency implementing the project.	Proposal for above ground facilities that are subject to local design guidelines.	

SUMMARY OF MITIGATION

General Impact	Mitigation Measure	Specific Process	Mitigation Milestone	Responsible Monitoring Party	Prerequisite Action For:	Agency Verification
Incompatible Aesthetic Impacts to Surrounding Land Uses and to Existing Viewsheds	4 15-5 All utilities for OBMP facilities will be placed underground unless such undergrounding is not technically feasible	For all OBMP facility locations requiring utilities services, the mitigation measure will be implemented.	Utility connections are installed below ground surface or else documentation is on file at the offices of the implementing agency that shows why undergrounding is not technically feasible	Participating agency implementing the project.	Proposal of an OBMP facility that requires new utility services	
Adverse Light and Glare Impacts to Sensitive Receptors	4.15-6 Future project review and implementation will implement the following: • Use of low pressure sodium lights where security needs require such lighting to minimize impacts of glare • Height of lighting fixtures will be lowered to the lowest level consistent with the purpose of the lighting to reduce unwanted illumination. • Directing light and shielding will be used to minimize off-site illumination. • No light will be allowed to intrude into sensitive light receptor areas.	Any OBMP-facility that will include lighting will implement the mitigation measure	Lighting design plans for the project facility incorporate measures such as those listed in the mitigation measure(where appropriate) to reduce glare and to prevent light pollution from reaching sensitive receptors	Participating agency implementing the project.	Proposal of and OBMP facility that requires additional lighting	