



Final Environmental Impact Report

Michelson Water Reclamation Plant Phase 2 and 3 Capacity Expansion Project

State Clearinghouse No. 2005051174



FEBRUARY 2006

PREPARED FOR:

Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, California 92178



PREPARED BY:

Dudek & Associates, Inc.
605 Third Street
Encinitas, California 92024



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PREFACE

Background

On November 14, 2005, the Irvine Ranch Water District (IRWD) as the lead agency distributed the Draft Environmental Impact Report (DEIR) for the Michelson Water Reclamation Project (MWRP) Phase 2 and 3 Capacity Expansion Project for public review. The MWRP is located at 3512 Michelson Drive, City of Irvine, Orange County, California. The Proposed Project would expand the MWRP capacity from 18 million gallons per day (mgd) to 33 mgd to meet ultimate 2025 demands for recycled water.

The Proposed Phase 2 and 3 Capacity Expansion to the MWRP would take place entirely within the existing footprint of the MWRP. No acquisition or alteration of additional land would be necessary. Construction of Phase 2 is anticipated to begin in 2007 and Phase 3 would begin in 2011.

In accordance with the California Environmental Quality Act (CEQA) Guidelines (14 Cal. Code Regs.), the 45-day public review period for the DEIR ended December 28, 2005. In addition, a public information meeting was held in the IRWD's Board Room on December 6, 2005 to respond to questions and provide clarification regarding the impact analysis and conclusions presented in the Draft EIR.

Purpose of Response to Comments Document

This document, in conjunction with the MWRP Phase 2 and 3 Capacity Expansion Project DEIR (SCH 2005051174, November 2005), constitutes the Final EIR on the Proposed Project.

This volume of the Final EIR contains all comments on the DEIR, and responses thereto. The focus of the responses to comments is on the disposition of significant environmental issues as raised in the comments, as specified by Section 15088(b) of the State CEQA Guidelines. Detailed responses are not provided to comments on the merits of the Proposed Project. However, when a comment is not directed to significant environmental issues, the responses indicate that the comment has been noted and that no further response is necessary.

Organization

The Response to Comments document includes the following:

Preface: Provides an introduction to this document, Response to Comments.

Section 1, Executive Summary: Provides a brief summary of the proposed action and its consequences.

Section 2, Comments and Responses on the DEIR: Provides all the written comments received during the established public review period (November 14, 2005 through December 28, 2005) on the DEIR, and presents responses to significant environmental issues raised in the comments (as required in the State CEQA Guidelines Section 15132). Where a comment results in a change to the DEIR text, a notation is made in the comment indicating that the text is revised. Although not required by CEQA, this section also includes all written comment letters received by IRWD after the close of public review (after November 14 through December 28, 2005) and presents responses to significant environmental issues raised.

Section 3, Revisions to the DEIR: All changes to the DEIR, as well as administrative corrections, are compiled in this section.

Appendix A, Public Distribution of DEIR: Provides the Notice of Availability and Final EIR distribution list.

SECTION 1.0

Introduction

1.1 BACKGROUND

Irvine Ranch Water District's (IRWD) "*Wastewater Treatment Master Plan*" identifies the proposed Michelson Water Reclamation Plant (MWRP) Phase 2 and 3 Capacity Expansion Project from several scenarios for expansion necessary to meet ultimate demands through 2025 for non-potable water. The Proposed Project would expand the MWRP capacity from 18 million gallons per day (mgd) to 33 mgd to meet ultimate 2025 demands for recycled water. The Project is located within the City of Irvine, Orange County, California. The proposed expansion would occur within the existing MWRP footprint, and no acquisition or alteration of additional land would be necessary.

IRWD is the lead agency pursuant to the California Environmental Quality Act (CEQA) and is responsible for carrying out or approving the proposed MWRP Phase 2 and 3 Capacity Expansion Project. As lead agency, IRWD is responsible for preparing the environmental documents on the project pursuant to the full disclosure requirements of CEQA.

This EIR has been prepared by the IRWD as lead agency pursuant to CEQA Public Resources Code 21000 et. seq., and the State CEQA Guidelines (California Code of Regulations, Section 15000 et. seq.).

In arriving at a decision whether to proceed with the project or an alternative to the project, IRWD will consider the potential environmental impacts discussed in the EIR.

1.2 PROJECT OBJECTIVES

The primary objectives of the Proposed Project are as follows:

- Based on need, expand in phases, IRWD's recycled water production capability by 15 mgd to meet projected ultimate (year 2025) demands for non-potable water from recycled water.
- Enhance water supply reliability in the IRWD service area by maximizing the use of recycled water to meet demands for non-potable water in lieu of using imported water from the Colorado River and State Water Project.
- Minimize the need for purchases of freshwater to meet non-potable water use demands and thereby meet state law mandates to reduce cumulative urban use demands on the

State's freshwater supplies in order to maximize freshwater availability for wildlife needs and resource uses such as agriculture on a statewide basis.

- Reduce the amount of wastewater that is diverted to the Orange County Sanitary District (OCSD).
- Optimize water supply, wastewater treatment, life cycle and construction cost economics.

1.3 PROJECT DESCRIPTION

The Proposed Project involves expanding the existing MWRP capacity using conventional activated sludge and gravity filtration processes. The Proposed Project would add new low-profile structures to the existing MWRP site including the following:

Influent Trunk Sewers

- Modifications to portions of the North Irvine Interceptor Sewer and South Irvine Interceptor Sewer located within the MWRP site.

Preliminary Treatment

- Replacement of existing headwork's intake system

Primary Treatment

- Five additional primary clarifiers
- One additional primary sludge pumping station

Flow Equalization

- Flow equalization basin will be increased in size
- One additional flow equalization basin influent pump

Secondary Treatment

- Expansion to secondary treatment capacity including:
 - 3 additional aeration tanks
 - 3 additional secondary clarifiers
 - 3 additional return activated sludge (RAS) pumps
 - 3 additional waste activated sludge (WAS) pumps

Effluent Filtration

- Five additional filters

Disinfection

- A 0.25 million gallon expansion of the chlorine contact tank

Recycled Water Pumping

- Three reclamation pumps replaced

Odor Control

- Odor control features such as wet scrubbers on applicable facilities such as the new headworks and primary clarifiers

Dewatering Pumping System

- New pumps for dewatering

1.4 PROJECT LOCATION

The MWRP is located at 3512 Michelson Drive, City of Irvine, Orange County, California. The IRWD property, containing both the MWRP site and the San Joaquin Marsh, is bounded by Michelson Drive, the San Diego Creek Channel, Campus Drive, and Carlson Avenue. The site is generally flat varying between 10 and 15 feet above mean sea level (msl). A 15 to 20 foot high levee exists along the southeastern extremity of the plant separating the site from the San Diego Creek Channel. Access to the site is via IRWD's private drive, Riparian View. The property is located in an area characterized by mixed land uses, including recreational, light commercial, institutional and residential use.

1.5 ENVIRONMENTAL REVIEW ISSUES RAISED

Pursuant to the requirements of Section 15365 of the State CEQA Guidelines, IRWD prepared an Initial Study. The Initial Study is included in *Appendix A (Notice of Preparation [NOP] and Initial Study [IS])* of this EIR. The NOP/IS was publicly circulated for 30 days beginning on May 31, 2005; the circulation period ended on July 1, 2005. In addition, IRWD held a public scoping meeting on June 14, 2005 to provide public and governmental agencies information on the CEQA process and to give further opportunities to identify environmental issues and alternatives for consideration in the EIR.

On November 14, 2005, IRWD filed a Notice of Completion (NOC) of the Draft EIR (DEIR) with the Governor's Office of Planning and Research. A public meeting on the DEIR was held at the IRWD's Board Room on December 6, 2005. A Notice of Availability of the DEIR and the date of the public meeting was published concurrently with distribution of the DEIR. A 45-day public review period was established for the DEIR (November 14, 2005 through December 28,

2005). The Notice of Availability was published in the Orange County Register and sent to property owners and homeowner's associations adjacent to the project on November 14, 2005. A copy of the Notice of Availability and DEIR distribution list is provided in *Appendix A* of this document. The Response to Comments document provides all written and oral comments received on the DEIR.

The specific issues raised during the public scoping and DEIR review process are summarized below according to the following major themes:

- Project Description and Objectives
- Alternatives
- Human Environment Issues
- Natural Environment Issues

Project Description and Objectives. Public comment expressed concern regarding the need for the 15 MGD expansion to the MWRP. It was also stated that further details regarding proposed dewatering be described and evaluated.

Alternatives. Public comment suggested alternatives, including water conservation, expansion to LAWRP, as well as alternative locations in areas of lower biological resource sensitivity.

Human Environment Issues. Public comment raised concerns regarding the potential impacts of the Proposed Project on the human environment, expressing concerns with noise and odor as well as public health and safety associated with production of recycled water.

Natural Environment Issues. Public comment raised concerns with the potential impacts that the Project would have on the natural environment, particularly impacts to plants, wildlife, and habitats, including the San Joaquin Marsh, UC Natural Reserve System, Upper Newport Bay State Ecological Habitat Reserve and San Diego Creek Watershed. Comments were also provided discussing geology in particular subsidence impacts due to proposed dewatering, hydrology/water quality issues due to proposed dewatering and use of recycled water, as well as potential impacts to the Project resulting from flooding hazards.

These areas of concern are analyzed in the appropriate sections of the DEIR. Response to these concerns raised during public review of the DEIR are provided in *Section 2* of this document.

Other areas which did not generate concerns and were found through the public scoping and DEIR review process to have less than significant effects are aesthetics, agricultural resources, cultural resources, paleontological resources, land use and planning, mineral resources,

population/housing, public services, recreation, transportation and circulation, and utilities and service systems.

1.6 ENVIRONMENTAL ANALYSIS

Results of the EIR analysis conclude that implementation of environmental commitments incorporated into the project along with proposed mitigation would insure that impacts to biological resources, air quality, hydrology and water quality, public health and safety, noise and geologic hazards would be less than significant.

1.7 AVAILABILITY OF EIR

The EIR is available for public review at the following locations:

- Irvine Ranch Water District, 15600 Sand Canyon Avenue, Irvine, CA 92618
- Heritage Park Regional Library, 14361 Yare Avenue, Irvine, CA 92604
- Newport Beach Public Library, Central Library, 1000 Avocado Avenue, Newport Beach, CA 90660

The EIR may also be reviewed on IRWD's website: www.irwd.com.

1.8 DECISION MAKING PROCESS

IRWD is the lead State agency ensuring compliance of the MWRP Phase 2 and 3 Capacity Expansion Project with CEQA. In arriving at a decision whether to proceed with the Proposed Project or an alternative to the Project, IRWD will consider the potential environmental impacts and alternatives discussed in the EIR, as well as engineering, operation, cost, and public input issues. Under CEQA requirements, prior to making a decision on the project, IRWD will determine the adequacy of this Final EIR and, if adequate, will certify the document as complying with CEQA.

SECTION 2.0

Responses To Comments

Section 2.1, List of Commentors and Responses, provides a list of all agencies, organizations and individuals that provided comments during the established public review period on the accuracy and sufficiency of the DEIR. The verbatim comment letters, and responses to environmental issues raised in these letters, are presented in *Section 2.2, Written Comments and Responses*. Comment letters are presented chronologically, in the order of the date of the comment under the following categories: A) Public Agencies; and B) Community Groups, Non-profit organizations and Private Companies. No private individuals provided comments on the DEIR.

2.1 LIST OF COMMENTORS AND RESPONSES

The following provides an index to all respondents and response numbers. Numbered responses correspond to the numbered comments at the point the comment occurs.

INDEX TO RESPONSE TO COMMENTS

Document No.	Agency/Respondent	Response No.
A	Public Agencies	
A-1	Governor's Office of Planning and Research State Clearinghouse – December 29, 2005	A1-1
A-2	Department of Transportation – November 15, 2005	A2-1
A-3	Orange County Fire Authority – November 28, 2005	A3-1, A3-2
A-4	County of Orange, Resources & Development Management Department – January 3, 2006	A4-1 through A4-16
A-5	City of Newport Beach – January 11, 2006	A5-1 through A5-10
B	Community Groups, Non-Profit Organizations and Private Organizations	
B1	Bethel Korean Church – November 30, 2005	B1-1



Arnold
Schwarzenegger
Governor

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



Sean Walsh
Director

December 29, 2005

Gregory Herr
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92619

Subject: Michelson Water Reclamation Plant Phase 2 and 3 Capacity Expansion Project
SCH#: 2005051174

Dear Gregory Herr:

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 December 28, 2005, 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."

A1-1

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
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

2.0 RESPONSES TO COMMENTS

Document Details Report State Clearinghouse Data Base

SCH# 2005051174
Project Title Michelson Water Reclamation Plant Phase 2 and 3 Capacity Expansion Project
Lead Agency Irvine Ranch Water District

Type EIR Draft EIR
Description The proposed project would expand the MWRP capacity from 18 million gallons per day (mgd) to 33 mgd by 2025. The proposed project would occur within the existing MWRP footprint, and no acquisition or alteration of additional land would be necessary.

Lead Agency Contact

Name Gregory Herr
Agency Irvine Ranch Water District
Phone (949) 453-5865 **Fax**
email
Address 15600 Sand Canyon Avenue
City Irvine **State** CA **Zip** 92619

Project Location

County Orange
City Irvine
Region
Cross Streets Michelson Drive / Jamboree Road
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways I-405
Airports John Wayne Airport
Railways
Waterways San Diego Creek
Schools
Land Use Public Facilities / Institutional / Existing Water Reclamation Plant

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 5; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 7; Department of Health Services; Native American Heritage Commission; State Lands Commission; Regional Water Quality Control Board, Region 8; State Water Resources Control Board, Clean Water Program; Integrated Waste Management Board; Caltrans, District 12

Date Received 11/14/2005 **Start of Review** 11/14/2005 **End of Review** 12/28/2005

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

Response to Document A1

State of California
Governor's Office of Planning and Research
State Clearinghouse – December 29, 2005

A1-1 This letter is a formal disclosure of which State agencies received a copy of the DEIR for review and acknowledges that the IRWD has complied with the State Clearinghouse review requirements for draft environmental documents pursuant to the California Environmental Quality Act.

Please refer to response to Document A2 which provides responses to comments received from the State of California Department of Transportation's November 15, 2005 DEIR comment letter.

Document A2

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION

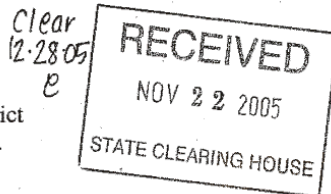
District 12
3337 Michelson Drive, Suite 380
Irvine, CA 92612-8894



*Flex your power!
Be energy efficient!*

November 15, 2005

Mr. Gregory K. Herr
Irvine Ranch Water District
15600 Sand Canyon Ave.
Irvine, CA 92618



File: IGR/CEQA
SCH#: 2005051174
Log #: 1564A
SR: I-405

Subject: Environmental Impact Report for the Water Reclamation Plant Phase 2 and 3 Capacity Expansion Project

Dear Mr. Herr:

Thank you for the opportunity to review and comment on **the Environmental Impact Report for the Water Reclamation Plant Phase 2 and 3 Capacity Expansion Project**. The proposed project would expand the Michelson Water Reclamation Plant (MWRP) capacity from 18 million gallons per day (mgd) to 33 mgd by 2025. The proposed expansion project would occur within the existing MWRP footprint, and no acquisition or alteration of additional land would be necessary. The project is located in the City of Irvine, California.

Caltrans District 12 is a reviewing agency on this project, and has no comment.

Please continue to keep us informed of any future developments, which could potentially impact the transportation facilities. If you have any questions or need to contact us, please do not hesitate to call Lan Zhou at (949) 756-7827.

A2-1

Sincerely,

ROBERT F. JOSEPH
Chief of IGR/Community Planning Branch
District 12

c: Terry Roberts, Office of Planning and Research
Terri Pencovic, Caltrans HQ IGR/Community Planning
Gale McIntyre, Deputy District Director for Planning and Local Assistance

"Caltrans improves mobility across California"

Response to Document A2

State of California

Department of Transportation – District 12

November 15, 2005

A2-1 Comment noted.

Document A3



ORANGE COUNTY FIRE AUTHORITY

P.O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Rd., Irvine, CA 92602

Chip Prather, Fire Chief

www.ocfa.org

(714) 573-6000

November 28, 2005

Irvine Ranch Water District
Gregory Herr
15600 Sand Canyon Av
Irvine, CA 92618

SUBJECT: EIR Michelson Water Expansion

Dear Mr. Herr:

Thank you for the opportunity to review the subject document. While no additional public safety resources are anticipated as a result of this project, all standard conditions and guidelines will be applied to the project during the normal plan review process.

A3-1

Page ES-2 Disinfection – “A 0.25 million gallon expansion of the chlorine contact tank” Please note that any changes to the chlorine system shall require CalARP Management of Change (MOC) approval by OCFA.

A3-2

Thank you for providing us with this information. Please contact me at 714-573-6199 if you have any questions.

Sincerely,

Michele Hernandez
Management Analyst, Strategic Services

Serving the Cities of: Aliso Viejo • Buena Park • Cypress • Dana Point • Irvine • Laguna Hills • Laguna Niguel • Laguna Woods • Lake Forest • La Palma • Los Alamitos • Mission Viejo • Placentia • Rancho Santa Margarita • San Clemente • San Juan Capistrano • Seal Beach • Stanton • Tustin • Villa Park • Westminster • Yorba Linda • and Unincorporated Areas of Orange County

RESIDENTIAL SPRINKLERS AND SMOKE DETECTORS SAVE LIVES

Response to Document A3

Orange County Fire Authority

November 28, 2005

A3-1 Comment noted.

A3-2 Comment noted. The proposed 0.25 million-gallon expansion of the existing chlorine contact tank is not a bulk storage chlorine tank. As stated in the DEIR Section 4.4.3.2, continued compliance by the MWRP with respect to the storage and handling of hazardous materials including compliance with the requirements of the existing Hazardous Materials Business Plan and Process Safety Management and Risk Management Plan Requirements as managed by the Orange County Fire Authority would ensure that public health and safety impacts due to release of hazardous materials during project operation would be less than significant.

01/04/2006 11:19 714-657-8344

COMM. & ADU. PLNG.

Document A4



COUNTY OF ORANGE

RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

Bryan Speegle, Director
300 N. Flower Street
Santa Ana, CA

P.O. Box 4048
Santa Ana, CA 92702-4048

Telephone: (714) 834-2300
Fax: (714) 834-5188

NCL 05-051

January 3, 2006

Gregory Herr
Irvine Ranch Water District
15600 Sand Canyon Avenue
Irvine, CA 92618

SUBJECT: DEIR for the Michelson Reclamation Plant Phase 2 & 3 Capacity Expansion Project

Dear Mr. Herr:

The above referenced item is a Draft Environmental Impact Report (DEIR) for the Irvine Ranch Water District (IRWD). The proposed project would expand the Michelson Water Reclamation Plan (MWRP) capacity from 18 million gallons per day (mgd) to 33 mgd to 33 by 2025. The proposed expansion project would occur within the existing MWRP footprint, and no acquisition or alteration of additional land would be necessary. The project site is at 3512 Michelson Drive in the City of Irvine.

The County of Orange has reviewed the DEIR and offers the following comments:

FLOOD

Section 4.2 Hydrology and Water Quality

1. Information presented in the subsection entitled "Floodplain" (pg 4.2-14) appears to imply that the San Diego Creek Channel is currently able to convey the 100-year storm event or even "greater" discharges adjacent to the proposed project location. The facility currently cannot convey 100-year storm peak discharges. A4-1
2. Page 4.2-15, 2nd paragraph, 1st sentence states the Orange County Flood Control District (OCFCD) as being "responsible" for maintenance of San Diego Creek. As indicated in our comments to the Notice Of Preparation (NOP), OCFCD and IRWD share a common responsibility for maintenance of San Diego Creek per Agreement No. D98-035. A4-2
3. Page 4.2-15, 2nd paragraph, 2nd sentence states that OCFCD has "full authority...for long-term operation and maintenance". Currently, OCFCD is limited in its ability to carry out A4-3

various maintenance activities until it obtains environmental resource agencies permits that will allow for long-term operation and maintenance of the channel facility.

↑ A4-3
Cont.

4. Page 4.2-15, 2nd paragraph, 2nd sentence also states that OCFCD "...has committed to the restoration of the Lower San Diego Creek Channel Sections and In-Line Channel Sediment Basins (Jamboree to I-405)..." Agreement D98-035 outlines the responsibilities of OCFCD and IRWD with regards to maintenance of the in-line sediment basins. OCFCD is committed to the goal of providing 100-year storm conveyance to San Diego Creek.

A4-4

5. Page 4.2-15, 3rd paragraph states that OCFCD plans to restore capacity in the channel sometime in 2006/2007. As expressed in our previous comments as well as at the public scoping meeting on June 14, 2005, it is uncertain as to when OCFCD's effort to restore 100-year channel capacity will be accomplished due to pending permit approvals from various environmental resource agencies.

A4-5

6. No adverse impacts or worsening of existing conditions should result to County and OCFCD facilities as a result of MWRP expansion project. MWRP should analyze impacts and propose mitigation measures in consultation with County's Flood Control Division to ensure flooding is not worsened, floodplains and flooding problems are not shifted elsewhere and erosion is not caused by the proposed project.

A4-6

7. All work within, over and/or under the OCFCD and the County of Orange right-of-way should be conducted only after receiving an encroachment permit from the County. For information regarding the County permit application process, Valerie Oxford of the County's Property Permits Section should be contacted at (714) 834-3474.

A4-7

Section 4.4 Public Health and Safety

8. The DEIR correctly recognizes that there currently exists a potential for flooding at the MWRP facility. It is OCFCD's goal to provide 100-year flood protection from San Diego Creek. However, that goal may not be realized within IRWD's proposed development schedule due to environmental permits and mitigation requirements. Therefore, it may be necessary for IRWD to work with the County of Orange to consider other means of providing flood protection to its facility until the San Diego Creek is able to contain the 100-year discharge.

A4-8

OPEN SPACE/RECREATION

Regional Trails

9. General: The County's Master Plan of Regional Riding and Hiking Trails identifies the Peters Canyon Regional Riding and Hiking Trail along the west levee of San Diego Creek. The trail begins at Irvine Regional Park and continues southwest-ward to Upper Newport Bay. Regional trails are typically surfaced with decomposed granite and are 10 feet wide with 3 feet of clearance on each side. They are used by equestrians, joggers, hikers, and mountain bicyclists.

A4-9
↓

Several years ago, County's Property Permits department permitted the IRWD to construct an asphalt-surfaced road (Riparian View) connecting Michelson Drive to the subject water reclamation plant. Since then, the County has received complaints from equestrians regarding the asphalt road encroaching on the regional trail width.

The subject project, with its extensive grading and reconstruction, offers the opportunity to perhaps realign Riparian View away from the levee and the regional trail. IRWD may wish to explore such opportunities which could be addressed in the Recreation section of the EIR.

**A4-9
Cont.**

10. Figure 3-3: Please label the San Diego Creek Bikeway (east levee) and the Peters Canyon Riding and Hiking Trail (west levee).

A4-10

11. Page 3-12, Section 3.4: IRWD should ensure that construction vehicles and equipment storage will not impact the west levee of San Diego Creek, which is the site of the existing Peters Canyon Riding and Hiking Trail. We recommend the following measures:

- a. The trail should remain open at all times. (Brief closures by flagmen, to allow for the movement of construction vehicles and equipment, are acceptable.)
- b. Signage should be provided notifying trail users of the subject construction work, including start and end dates.
- c. Any above-ground utility boxes, or any other item that would protrude above the surface of the trail, should be set back at least 3 feet from the edge of the trail. Please ensure that any manhole covers will be flush with the trail surface.
- d. In the construction area and vicinity, the trail should be kept free of debris at all times.
- e. Any vehicles using the trail for access to the construction site should exercise caution and proceed slowly, keeping alert for pedestrians, equestrians, and bicyclists. Upon the approach of trail users, vehicles should pull over to the side as far as possible, stop, and allow trail users to pass.
- f. After construction, the trail should be restored to its original condition. Repairs should be coordinated with the County's Ron Broadbelt, Supervising Maintenance Technician, at (714) 567-6222.

A4-11

12. Page 3-17, Traffic: Please ensure that truck hauling operations will not conflict with use of the Peters Canyon Riding and Hiking Trail.

A4-12

13. Figure 4.3-1: Please label the San Diego Creek Bikeway (east levee) and the Peters Canyon Riding and Hiking Trail (west levee).

A4-13

14. Page 4.4-7, Sensitive Receptors: Note the San Diego Creek Bikeway (east levee) and the Peters Canyon Riding and Hiking Trail (west levee). Class I (paved off-road) bikeways are used by pedestrians and bicyclists. Riding and hiking trails are used by hikers, joggers, equestrians, and mountain bicyclists. Trail and bikeway users will typically pass through the project vicinity during daylight hours—although some users may choose to travel during evening hours.

A4-14

15. Page 8-4, Recreation: We suggest changing the wording of the second paragraph, third sentence as follows: "Access to the Peters Canyon Trail on the west levee, and the San Diego Creek Bikeway on the east levee, would remain available to pedestrians, bicyclists, and equestrians. Any project-related damage to the levee surface would be repaired. Repairs to the trail and/or bikeway will be coordinated with the County's Supervising Maintenance Technician".

A4-15

Note that physical deterioration of a regional recreational facility (the Peters Canyon Trail) has occurred in the recent past, due to the encroachment of Riparian View road (see discussion above under "General"), and that the proposed project could potentially correct this situation and restore the trail.

A4-16

Thank you for the opportunity to respond to the DEIR. If you have any questions, please contact Charlotte Harryman at (714) 834-2522.

Sincerely,



Ronald L. Tippetts, Chief
Environmental Planning Division

Response to Document A4

County of Orange

Resources & Development Management Department

January 3, 2006

- A4-1** As stated in comment A4-8, the DEIR recognizes that there is a potential for flooding at the MWRP site. Although the creek was designed to convey the standard peak flood, which normally has a frequency between 200 and 500 years, but can be as low as 100 years (DEIR page 4.2-14), the DEIR, page 4.2-15, states that in August 2003, IRWD was notified by the Orange County Flood Control District (OCFCD) that the San Diego Creek Channel may not be able to convey the 100-year flood due to sediment and vegetation accumulation in the stream adjacent to the MWRP. The DEIR, under Impact H-9 “*Encroachment into a Floodplain*” (pages 4.2-37 through 4.2-40), acknowledges that the flood storage capacity within the San Diego Creek Channel has been reduced and restoration is necessary to the San Diego Creek to contain the 100-year flood. The DEIR impact analysis evaluates flooding impacts with or without restoration of the San Diego Creek necessary to contain the 100-year flood.
- A4-2** The quoted sentence in the DEIR, page 4.2-15, refers to flood control responsibility. Under Agreement No. D98-035, IRWD and OCFCD have agreed to cooperative arrangements for the removal of accumulated sediment from San Diego Creek In-Channel Basins 1, 2 and 3, in order to comply with the sediment TMDL. IRWD has rights and obligations under the agreement with respect to the In-Channel Basins. The agreement states that it is for sediment control purposes only and not intended to address or affect flood control matters. IRWD will continue to perform its In-Channel Basin sediment removal responsibilities as specified under the agreement.
- A4-3** Comment noted. As stated in the DEIR, page 4.2-15, “At this time, due to the environmental regulatory requirements needed, it is not certain when OCFCD’s goal and effort for restoring the San Diego Creek to contain the 100-year flood will be achieved...” Please refer to response A4-1 and A4-8.
- A4-4** Please refer to response A4-2. The quoted sentence in the DEIR, page 4.2-15, refers to the In-Channel Basins as part of the commitment of OCFCD to restore the channel capacity. This is consistent with the description in OCFCD’s May 14, 2004 NOP. It is also consistent with the IRWD’s and OCFCD’s cooperative arrangements contained in Agreement No. D98-035.

The agreement has been in effect since 1998. Since the agreement is subject to expiration and termination by either party, it is not known whether these cooperative arrangements will continue, be modified or discontinued by the parties. While IRWD and OCFCD continue to partner together on various issues/projects, the EIR correctly portrays OCFCD as statutorily having full authority and responsibility for long-term operation and maintenance of both the channel and in-line sediment basins, though such operation and maintenance of the sediment basins for TMDL sediment-control purposes is currently partially performed by IRWD under agreement.

A4-5 Please refer to response A4-1 and A4-3.

A4-6 The DEIR, Section 4.2.3.2, under Impact H-8 “Impacts Due to Increased Runoff from New Impervious Areas and Alteration of Drainage Patterns” (page 4.2-37) and Impact H-9, “Encroachment into a Floodplain” (pages 4.2-37 through 4.2-40), analyzes potential flooding impacts (e.g., potential to increase flooding, or shift elsewhere) and concludes that no adverse impacts or worsening of existing conditions should result as a result of the proposed MWRP Capacity Expansion Project.

In light of the DEIR’s analysis and conclusion that the Project impacts H-8 and H-9 would not result in significant impacts by worsening or shifting of flooding or flooding problems elsewhere or causing erosion, the DEIR states that no mitigation measures are proposed. The DEIR also states in Section 4.2-5 that adherence to the environmental commitments in Section 3.6 would reduce potential impacts to hydrology and water quality to less than significant. These commitments discuss existing IRWD operational procedures as a back-up to the restoration of channel capacity by OCFCD. IRWD will continue to coordinate and consult with OCFCD with respect to the channel capacity restoration to ensure the MWRP project does not adversely impact OCFCD facilities or their operational capacities.

A4-7 Comment noted. IRWD will obtain the necessary permits required by the City, County of Orange, and other agencies having permitting authority.

A4-8 Comment noted. Please refer to responses A4-1 and A4-6. As provided in the DEIR, Section 3.6, “Environmental Commitments Incorporated into the Project” (pages 3-15 and 3-16), the Proposed Project has incorporated back-up measures of protection in addition to the OCFCD restoration of the 100-year flood capacity of the San Diego Creek. In addition, IRWD will continue to coordinate with OCFCD with respect to channel capacity restoration to ensure that the MWRP is adequately protected as development of the project proceeds.

- A4-9** Comment noted. Realignment of Riparian View is not a component of the Proposed Project or necessary for project implementation and therefore not addressed in the subject DEIR. IRWD may discuss such opportunities with County staff separate and apart from this project.
- A4-10** Comment noted. As a result of this comment, the EIR has been revised to provide further clarification. Please refer to Section 3, Item 1 of this document.
- A4-11** Comment noted. As a result of this comment, the EIR has been revised to provide further clarification regarding standard construction methods that will be incorporated into the project. Please refer to Section 3, Item 2 of this document.
- A4-12** Comment noted. Please refer to response A4-11.
- A4-13** Comment noted. Figure 4.3-1 is intended to show biological resources within the San Joaquin Marsh and has not been revised. However, Figure 3-3 has been revised. Please refer to response A4-10.
- A4-14** Comment noted.
- A4-15** Comment noted. As a result of this comment, the EIR has been revised. Please refer to Section 3, Item 3 of this document.
- A4-16** Comment noted.

MAY. 21. 2001 1:04PM

NO. 630

Document A5



CITY OF NEWPORT BEACH

OFFICE OF THE MAYOR

Mayor

Don Webb

Mayor Pro Tem

Steven Rosansky

Council Members

Leslie J. Daigle

John Heffernan

Richard A. Nichols

Tod W. Ridgeway

Edward D. Selich

January 11, 2005

Mr. Gregg Herr

Irvine Ranch Water District

15600 Sand Canyon Avenue

Irvine, CA 92618

Irvine Ranch Water District Draft Environmental Impact Report for the Michelson Water Reclamation Expansion Project

Dear Mr. Herr:

The City of Newport Beach appreciates IRWD's courtesy in presenting the Project to our Environmental Quality Affairs Committee (EQAC) in December, and in agreeing to accept the City's comments on the Draft EIR after the deadline for comment on the document. As you are probably aware from past projects, EQAC reviews Draft EIRs and prepares comments for the City Council's consideration. The comments in this letter are based on those prepared by EQAC and are the comments approved by the City Council on January 10, 2006.

3.0 Project Description

"Reclaimed Water Pumping" (page 3-11): The DEIR states that additional pumps will be added to increase capacity to 33 mgd from a current capacity of 18 mgd. However, no information is given about how the additional 15 mgd capacity will be distributed to users. Are new transmission pipes and/or intermediate pumping stations needed? If so, where will they be placed and what environmental impact is expected? These questions need to be fully addressed in the final EIR.

A5-1

"3.6 Environmental Commitments Incorporated into the Project" (page 3-14): In Appendix A, County of Orange letter dated July 1, 2005 suggests items which the County considers important enough to be included in the EIR. The City of Newport Beach shares the County's concern with flooding potential, especially as flooding and dewatering for the new settlement basins may result in the runoff of pollutants into San Diego Creek and Upper Newport Bay. We support the County's request that the EIR analyze impacts and propose mitigation measures to ensure flooding potential is not worsened, floodplains and flooding problems are not

A5-2

A5-3

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Newport Beach California 92658-8915 • www.city.newport-beach.ca.us
(949) 644-3004

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Mr. Gregg Herr, IRWD
January 11, 2006
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shifted elsewhere and erosion is not caused by the project.

↑ A5-3
(cont.)

4.0 Environmental Analysis

4.2 Hydrology and Water Quality

"Table 4.2-2" (page 4.2-5): The final EIR should confirm that the numbers in the Table are correct. It would seem that the year average concentrations should be between the values for wet and dry seasons. Example: see Total Nitrogen (mg/l), year maximum and minimum.

A5-4

"NPDES Permit" (page 4.2-22, 3, 4): The text at the bottom of page 4.2-23 refers to a requirement to meet Total Dissolved Solids ("TDS") concentrations in the water delivered from the MWRP. It shows that the current facility meets the requirement, by a small margin, according to the "latest recycled water report." However, it goes on to imply that introduction of differing source waters in the future could prevent MWRP from meeting the NPDES permit requirements. The final EIR should fully analyze this potential impact and provide necessary mitigation to assure that permit requirements will be met.

A5-5

"Nutrients" (page 4.2-26): It is unclear from the text and Table 4.2-12 whether any nutrient effluent requirements in this proposed Project related to TMDLs. In fact, computations based on Table 4.2-1 and 4.2-2 could lead to the conclusion that the Total Nitrogen Daily Load requirement in 2012 on Table 4.2-12 is unachievable. Is that true? If not, a simple calculation of the San Diego Creek contribution to Total Nitrogen Load and the MWRP contribution would be essential. Why not do these calculations and present the results in clear tables with consistent units (acre-ft/yr, gals/yr, lbs, cf/s, mg/l).

A5-6

"Impact H-8" (page 4.2-37): The DEIR asserts, without proof, that the increased storm runoff due to added impervious surfaces will be more than offset by the fact that such runoff water will be pumped to the plant headworks and treated as part of the reclamation process. This assertion needs clarification. What is the additional runoff volume due to the facility expansion for a 25-year frequency, 24-hour duration storm? Will there be additional flooding over the settlement basins that could carry polluted water to the San Diego Creek and Upper Newport Bay?

A5-7

"4.2.6 Non-Regulated Pollutants Carried by Tertiary Treated Wastewater" (page 4.2-41): This is an informative exposition of the unresolved problems associated with the detection and mitigation of pharmaceuticals and personal care products in wastewater. Those sections are well written and useful as background, but there are currently

A5-8
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Mr. Gregg Herr, IRWD
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Page 3

no regulatory guidelines to follow. Since some of these pollutants could eventually prove to be problematical, it would be appropriate if IRWD/MWRP would agree to participate in one or more state-of-the-art research programs in this area. In this way, IRWD would be most prepared to take future corrective action regarding identified dangerous pollutants in this category.

A5-8
(cont.)

5.0 Cumulative Impacts

The DEIR concentrates on the cumulative impacts of "projects for which applications have been submitted as well as projects that may foreseeably have impacts that would cumulate with those of the Proposed Project ..." The study area for cumulative impacts includes the San Diego Creek Watershed.

However, our comments focus on the cumulative growth inducing impacts that the proposed Project may have. In 2004, IRWD expanded its storage capacity for recycled water with the expansion of the San Joaquin Reservoir. The cumulative effect of the expanded capacity at San Joaquin Reservoir, combined with the proposed Project, which increases the production of recycled water, will free up substantial quantities of potable water. The DEIR makes no attempt to analyze and, if necessary, mitigate such impacts.

A5-9

The potential impacts associated with the expansion of the San Joaquin Reservoir combined with the expansion of the Michelson facility should be

analyzed to evaluate the long term and cumulative impacts of the proposed Project on the District's Non-Potable Water Supply System. Piecemeal EIRs, according to CEQA, are illegal. The CEQA Guidelines provide that a "project" means "the whole of the action" which has the potential for resulting in "either direct physical change or a reasonably foreseeable indirect physical change in the environment." (CEQA Guidelines, Section 15378)

The final EIR should fully analyze the combined environmental impacts of the expansion of the San Joaquin Reservoir and the expansion of the Michelson facility.

6.0 Growth Inducement

The Executive Summary states that a Project Objective is to maximize freshwater availability for wildlife needs and resources uses such as agriculture. The DEIR Introduction states: "IRWD has developed water supplies that include: high quality and impaired quality (treated)

A5-10

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local groundwater, surface water captured in local reservoirs, treated and untreated imported water provided through the Metropolitan Water District of Southern California (MWD) and tertiary treated recycled water." In expanding IRWD's recycled water production capability, the proposed Project will free up potable water supplies, which will affect growth in the area.

The DEIR states that "(g)rowth-inducing factors in Orange County are primarily related to availability of buildable land and adequate infrastructure to support growth in new areas." However, in the arid Southern California climate, water availability affects land use decisions. Development entitlements are conditioned upon a showing of such availability.

Since 2001, with the passage of two laws linking development to water supply, project applicants in California have been required to obtain written confirmation from water suppliers that sufficient water will be available prior to developing a project. The laws apply to residential, commercial, office, hotel, industrial and mixed-use projects that meet certain thresholds. For residential developments, the threshold is the water demand equal to or greater than the amount of water demanded by a 500 dwelling unit project.

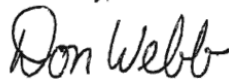
The additional availability of potable water supplies that will result from the proposed Project has the potential to lead to a greater level of development in the areas where there is available buildable land in Orange County.

The final EIR should fully analyze the potential growth-inducing impacts of the proposed Project.

Conclusion

Thank you for the opportunity to comment on the DEIR for the Project. We hope that these comments will assist IRWD in the final EIR and the final Project.

Sincerely,



Don Webb
Mayor

Cc: Environmental Quality Affairs Committee

A5-10
(cont.)

Response to Document A5

City of Newport Beach

January 11, 2005

- A5-1** As described in the DEIR, Section 3, “Project Description” and Section 7, “Alternatives,” the proposed MWRP Phase 2 and 3 Capacity Expansion would take place entirely within the existing MWRP footprint. The Proposed Project would expand the capacity of the existing MWRP to handle projected flows with no requirement to develop offsite distribution system pipelines or other offsite distribution facilities. Since the dual distribution system is mandated by IRWD for new development approval, facilities that may be necessary for new developments to connect to IRWD’s reclaimed water distribution system will be analyzed in accordance with CEQA under project-specific development proposals and are addressed in the DEIR, Section 5.0, Cumulative Impacts.
- A5-2** Please refer to response A4-11 and Section 3 of this EIR, Item 2. The EIR has been revised to provide further clarification regarding standard construction methods that will be incorporated into the project.
- A5-3** Please refer to response A4-6.
- A5-4** The values in Table 4.2-2 (page 4.2-5 of the DEIR) were copied directly from the source report referenced in the table. As shown on the table, the mean value for the year is between the values for wet and dry seasons. However, due to a difference in significant figures used, the maximum and minimum values for the year are not always equal to the maximum or minimum from the wet and dry seasons. For example, the year maximum for total nitrogen is listed as 12.14 mg/l, while the maximum of the wet and dry seasons is listed as 12.1 mg/l. The difference in these listed values is that the wet and dry values have been rounded. Revised maximum and minimum year values rounding to the tenths place are 12.1 and 2.8 mg/l for total nitrogen and 4.0 and 0.2 mg/l for total phosphorus as PO₄. These revisions to the values based on using a consistent number of significant figures do not affect the calculations or conclusions presented in the Draft EIR or the Water Quality and Hydrology Technical Report.
- A5-5** The MWRP is required to comply with the Regional Water Quality Control Board (RWQCB) NPDES permit. The permit lists two limits on TDS concentrations – a 12-month average concentration of 720 mg/l and a 12-month average mass rate of 108,086 pounds per day. As discussed in the Draft EIR, the latest published recycled

water report (IRWD 2001), listed a 12 month average for the year of 680 mg/l, which meets the requirements. More recent data submitted to the RWQCB as required by the NPDES permit, lists 12 month averages for 2003 and 2004 of 631 and 626 mg/l, respectively. Twelve-month average values of pounds per day of TDS reported in the 2003 and 2004 annual reports to the RWQCB were 60,518 and 63,618 pounds per day, which also meet the requirements.

The intent of the text on pages 4.2-23 and -24 of the DEIR was not to imply that introduction of differing source waters in the future could prevent MWRP from meeting the NPDES permit. The intent of the text was to state that the TDS of the incoming water could increase in the future due to the introduction of additional sources. However, IRWD is required to meet the NPDES permit and will insist that the incoming water supply is acceptable. IRWD has maintained TDS concentrations below the permitted limits. In addition to meeting the NPDES permit requirements for TDS, IRWD has managed TDS concentrations in order to meet customers' needs. Agricultural users, which make up the majority of the IRWD recycled water customers, generally insist on water with TDS concentrations less than approximately 700 mg/l. IRWD has spent significant funds in order to manage TDS concentrations to meet their customers' needs.

IRWD has to operate the MWRP to meet the NPDES permit requirements. If the NPDES permit requirements are not met, the RWQCB has the authority to prohibit additional discharges from the MWRP.

A5-6 As noted in the comment, current loading in the creek (based on data in Tables 4.2-1 and 4.2-2 of the DEIR) is greater than the 2012 allowable loading. The RWQCB has created TMDLs for nutrients in order to limit future loading and improve the water quality in the Creek. The RWQCB determines the limits based on what will improve the water quality of the Creek and what they determine is achievable. The RWQCB, in adopting the TMDLs, has stated that the limits are achievable.

Calculations of the San Diego Creek contribution to the total nitrogen load are provided in the DEIR (Page 4.2-34) and the Water Quality and Hydrology Technical Report (Appendix C of the DEIR, Page 37). These referenced pages state that the current nitrogen load in the Creek at Campus Drive is approximately 227 pounds per day in the dry season and 5909 pounds per day in the wet season.

The contribution of nitrogen from the MWRP recycled water was calculated in the Water Quality and Hydrology Technical Report and is discussed in the Technical

Report (Pages 38 and 39) and in the DEIR (Page 4.2-35). The calculation of nitrogen and phosphorus contributions tabulated in Tables D-2 and D-3 (DEIR Appendix D of the Water Quality and Hydrology Technical Report) presents the following estimated values. The calculations assume that IRWD water is the only source of water in the dry season. Such an assumption is conservative, likely over-estimating the contribution of IRWD water.

Dry Season Loading (pounds per day) from MWRP

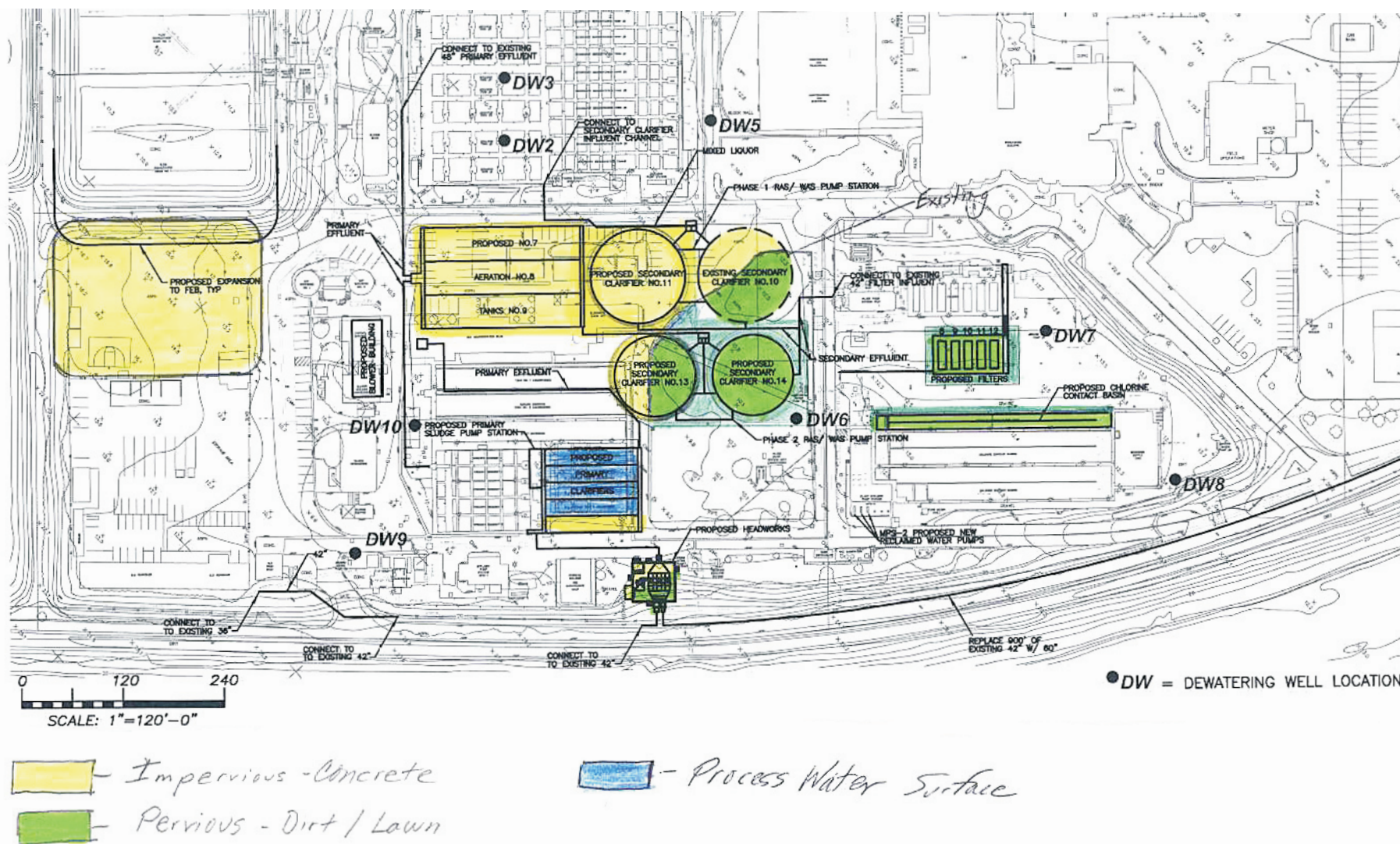
Current Nitrogen Loading in the Creek	Additional Nitrogen Loading due to Proposed Project	Total Nitrogen due to Proposed Project	Nitrogen TMDL	Current Phosphorus Loading in the Creek	Additional Phosphorus Loading due to Proposed Project	Total Phosphorus due to Proposed Project	Phosphorus TMDL
134	113	247	840	7	6	13	170

A5-7 The Draft EIR states that the pump stations, which collect and pump storm runoff to the plant headworks for treatment, are sized for the 25 year storm. The report also states that the SWPPP will be revised as the expansion of the MWRP will add new impermeable surfaces and runoff may increase. The DEIR calculated an increase in runoff just using surface categories of industrial areas, concrete/asphalt and lawn.

Calculations done in response to this comment indicate that while some areas that currently consist of lawn or dirt will be replaced with concrete, larger areas that are currently concrete will be replaced with open-top tanks or open water surface features. The following Figures 1 and 2 show the areas that currently are and will be, under the proposed project, lawn/dirt, concrete/asphalt, or open water surface.

As shown on the following Table 1, the current distribution of lawn/dirt, concrete/asphalt, and water surface areas as shown on Figure 1 is 0.7 acre, 1.7 acres, and 0.2 acre, respectively. Under the proposed project, the distribution of lawn/dirt, concrete/asphalt, and water surface areas as shown on Figure 2 is 0 acre, 2.2 acres, and 2.6 acres, respectively. Therefore, although new impermeable surfaces will be added and the area of concrete/asphalt will increase with respect to lawn/dirt areas, the area of open water surfaces will increase substantially compared to the increase in concrete/asphalt areas. These open water surfaces will not contribute runoff water. Therefore, the area contributing to storm water runoff will decrease by approximately two acres as a result of the proposed project.

Figure 1 Existing Land Surface Conditions

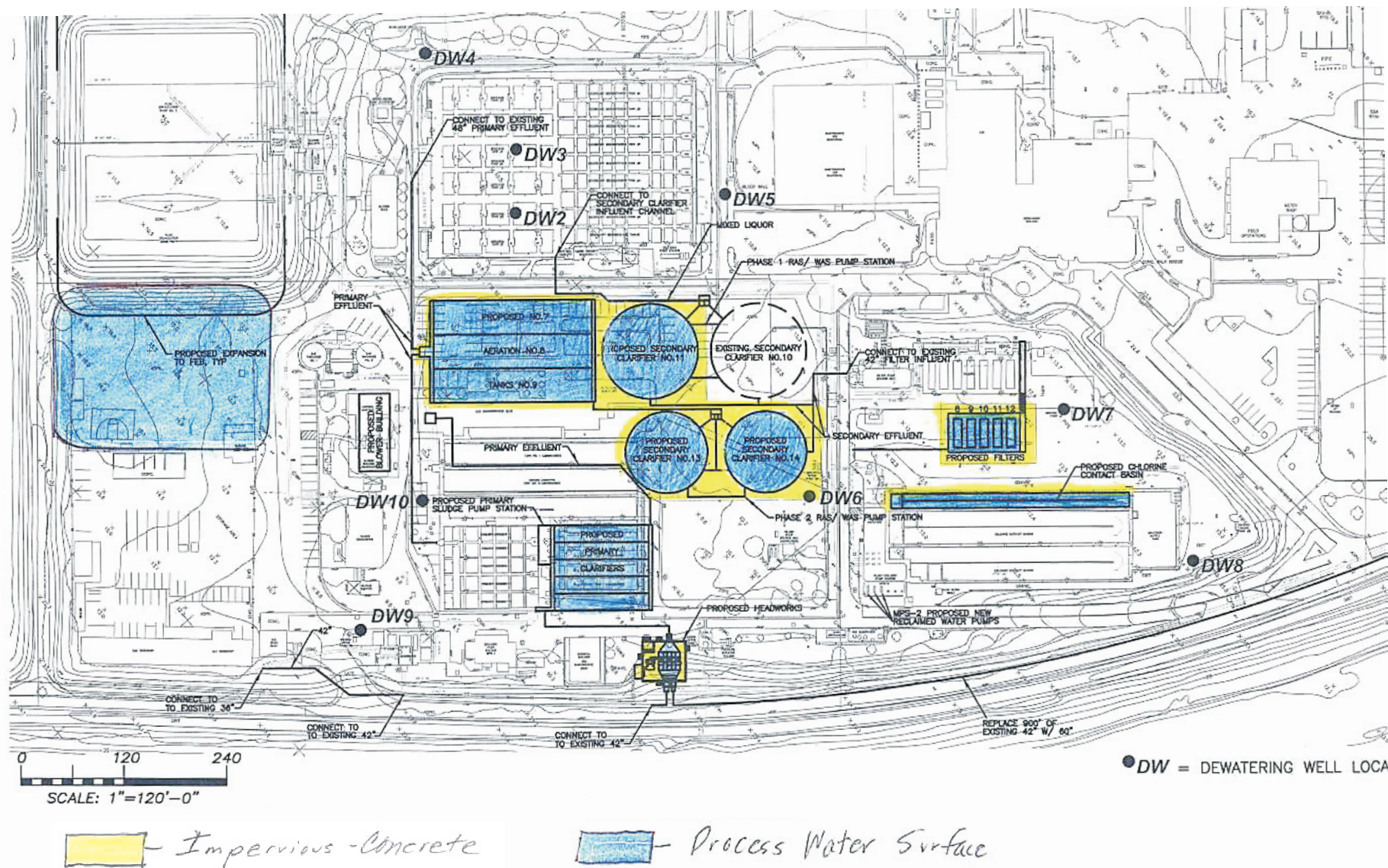


SOURCE: IRWD

MWRP Phase 2 and 3 Capacity Expansion Project - EIR Response to Comment A5.7
Existing Land Surface Conditions

FIGURE
 1

Figure 2 Land Surface Conditions Under Proposed Project



SOURCE: IRWD

MWRP Phase 2 and 3 Capacity Expansion Project - EIR Response to Comment A5.7
Land Surface Conditions Under Proposed Project

FIGURE
2

TABLE 1
Comparison of Existing Land Surface Conditions
To Phase 2 and 3 Process Modification Land Surface Conditions

Process	Current (sq ft, unless otherwise specified)				Revised (sq ft, unless otherwise specified)			
	Lawn/Dirt	Concrete/Asphalt	Water Surface	Total	Lawn/Dirt	Concrete/Asphalt	Water Surface	Total
New Primary Clarifiers	0	2200	8800	11000	0	0	11000	11000
Expanded FEB	0	30000	0	30000	0	0	30000	30000
Aeration Basins(scaled)	0	21204	0	21204	0	0	21204	21204
Surrounding Aeration Basin Impervious Area 1(scaled)	0	1152	0	1152	0	0	1152	1152
Surrounding Aeration Basin Impervious Area 2(scaled)	0	720	0	720	0	0	720	720
Phase 2 Secondary Clarifier(scaled)	3617.5	3617.5	0	7235	0	0	7235	7235
Surrounding Phase 2 Secondary Clarifier Area(scaled)	3600		0	3600	0	3600	0	3600
Phase 3 Secondary Clarifier 1(scaled)	0	9156	0	9156	0	0	9156	9156
Phase 3 Secondary Clarifier 2(scaled)	7235	0	0	7235	0	0	7235	7235
Surrounding Phase 3 Secondary Clarifier 1 Impervious Area (scaled)	0	5244	0	5244	0	5244	0	5244
Surrounding Phase 3 Secondary Clarifier 2 Pervious Area (scaled)	7165	0	0	7165	0	7165	0	7165
Expanded Filters(scaled)	4262	0	0	4262	0	0	4262	4262
Surrounding Expanded Filters Pervious Area(scaled)	266	0	0	266	0	266	0	266
Expanded Chlorine Contact(scaled)	4914	0	0	4914	0	0	4914	4914
Surrounding Expanded Chlorine Contact Pervious Area 1(scaled)	54	0	0	54	0	54	0	54
Surrounding Expanded Chlorine Contact Pervious Area 2(scaled)	819	0	0	819	0	819	0	819
Headworks	653.5	653.5	0	1307	0	653.5	653.5	1307
Totals	32586	73947	8800	115333	0	17801.5	97531.5	115333
Totals In Acres	0.7	1.7	0.2	2.6	0.0	0.4	2.2	2.6

Although the open process water tanks will collect rainwater that falls over the surface area of the tanks, the tanks operate using weirs that control the water level in the tanks and prevent overflowing.

A5-8 Comment noted.

A5-9 The analysis sought by the comment is contained in the DEIR, Section 5, “Cumulative Impacts” and Section 6, “Growth Inducement.”

As required by CEQA (Section 15130 et. seq. of the CEQA Guidelines), the proposed MWRP Phase 2 and 3 Capacity Expansion Project is analyzed in the DEIR in relation to other past, present and reasonably foreseeable future projects in the area, having impacts that are considered to overlap or interact in a cumulative manner with those of the Proposed Project. For purposes of the cumulative impact analysis, a list of projects in the immediate vicinity and expected to be constructed during the same time period as the MWRP Expansion Project has been used in accordance with CEQA (Section 15120[b][1]). These projects and their approximate geographic location are shown in Table 5-1 of the DEIR. Projects that are completed, or in operation such as the San Joaquin Reservoir Project, are considered in the EIR as part of current baseline conditions discussed by issue area in Section 4 of the DEIR. Analysis of cumulative impacts that may result due to these projects and evaluation of the project’s contribution to such impacts, is presented in Section 5 of the DEIR. Because the cumulative analysis takes into consideration the contribution of past, present and reasonably foreseeable future impacts in combination with the Proposed Project, the DEIR does address the combined environmental impacts of the San Joaquin Reservoir and proposed MWRP Capacity Expansion Project.

As discussed in the DEIR, Section 2, “Project Purpose and Objectives,” the Proposed Project has the primary purpose of expanding in phases, based on need, IRWD’s recycled water production capability to meet projected ultimate (year 2025) demands for non-potable water from recycled water. The San Joaquin Reservoir’s primary purpose is to store excess recycled water in winter months to be served in high demand summer months. As described in Section 2, and illustrated in Figure 2-4 of the DEIR, IRWD’s seasonal storage reservoirs, including the San Joaquin Reservoir, allows the MWRP treatment capacity (both existing and proposed) to be used more evenly and efficiently the entire year. IRWD’s seasonal storage reservoirs, including the San Joaquin Reservoir merely make the existing MWRP and proposed Capacity Expansion Project more efficient by enabling IRWD to meet demand for recycled water with a smaller and therefore more efficient direct production capacity.

The DEIR Section 6, “Growth Inducement,” acknowledges and analyzes the “freeing-up” of water related to the provision of additional recycled water as one aspect of the growth inducement analysis. Please refer to response A5-10.

A5-10 The DEIR Section 6.2, “Growth Related to Provision of Additional Recycled Water,” provides a discussion of the growth potential of “freeing-up supplies” within the Metropolitan Water District of Southern California (MWD) service area and specifically within Orange County. As discussed in the DEIR, the project is consistent with California State law mandates concerning California’s long-term water supply strategy and is not expected to directly induce growth in a predictable manner or defined location. The project merely expands IRWD’s reclaimed water production capacity to meet projected ultimate non-potable water demands within the District’s service area, which might potentially reduce the demand on other previously available supplies.

IRWD’s most recent water supply assessment, adopted on November 28, 2005, concluded that the total water supplies available to IRWD during normal and dry years within a 20-year projection will be sufficient to meet existing and planned future uses within IRWD’s entire service area. IRWD’s water supply assessment methodology aggregates total supplies and demands for IRWD’s service area. Each water supply assessment includes the water demands for full buildout of all presently undeveloped areas of IRWD based on current general plan and other information available to IRWD. Given the availability of imported non-potable water to supply the demands of growth if the project were not implemented, the Proposed Project neither supports nor encourages growth to a greater degree than presently estimated by SCAG or the agencies with land use jurisdiction within IRWD’s service area (cities of Irvine, Tustin, Orange, Newport Beach, Lake Forest, and County of Orange), and is therefore not inherently directly growth-inducing.

In analyzing whether reducing IRWD’s demand for supplemental water from MWD as a result of the project would induce growth within the MWD service area, several factors reduce the likelihood that a growth-inducing effect would actually take place. As stated in the DEIR, MWD’s March 25, 2003 analysis of the sufficiency of its water supply showed that in both average rainfall years, single dry and multiple dry years, it has existing supplies and supplies under development that are more than sufficient to meet projected demands through the next 20 years. Since the DEIR was completed, MWD adopted the Regional Urban Management Plan (RUMP) which extends through 2030 the demand supply reliability analysis contained in the March 2003 report. MWD’s RUMP adopted in November 2005, states that MWD’s

reliability analysis shows that MWD can maintain reliable supplies under the conditions that have existed in past dry periods through 2030. This includes a repeat of the multiple dry-year (1990-1992) hydrology, and the single dry-year (1977) hydrology. Since MWD's supplies are projected to exceed its demands over the next 20 years, growth is not water supply-limited on a regional basis, and any imported water freed up by the project should have no effect on growth in the MWD service area. If MWD's projections are erroneous and growth in the MWD service area is, in fact, water supply constrained, the growth inducement effect could only occur if and where other necessary growth supporting services are available and could occur anywhere in MWD's 5,200 square-mile service area. MWD delivers an average of 1.7 billion gallons of water per day to nearly 18 million people within a 5,200 square-mile area. In addition to Orange County, MWD's service area includes parts of Los Angeles, San Diego, Riverside, San Bernardino and Ventura counties. Any attempt to predict where this might occur within the 5,200 square-mile MWD service area would be speculative.

Document B1

Bethel Koran Church
18700 Harvard Ave.
Irvine, CA 92612
(949)854-4010 (Church Office)
Contact: Jae I. Park, Secretary
(949)717-6677 or (949)278-2920 (cell)

Irvine Ranch Water District
15600 Sand Canyon Ave.
Irvine, CA 92618

Attention: Mr. Gregory Herr
Re: unpleasant smell and air pollution

Nov. 30, 2005

Dear Mr. Gregory Herr,


We have been felt strong unpleasant smell in the air in our church parking lot near the site of San Diego Creek Channel. It is the north side of the church's main parking lot between the Vision Center building and Harvard Ave. The smell is like mixture of chemicals such as H_2S , SO_2 , and NH_3 .

Sometimes the stench is so severe that many of us complain about having headache after we are standing out there for a while.

Therefore we are here to request you to lock up the water recycling system so that we can have clear, fresh, and chemical free air.

If you have any question regarding to this matter, please feel free to call me.

Sincerely yours,


Jae I. Park, Secretary

B1-1

Response to Document B1

Bethel Korean Church

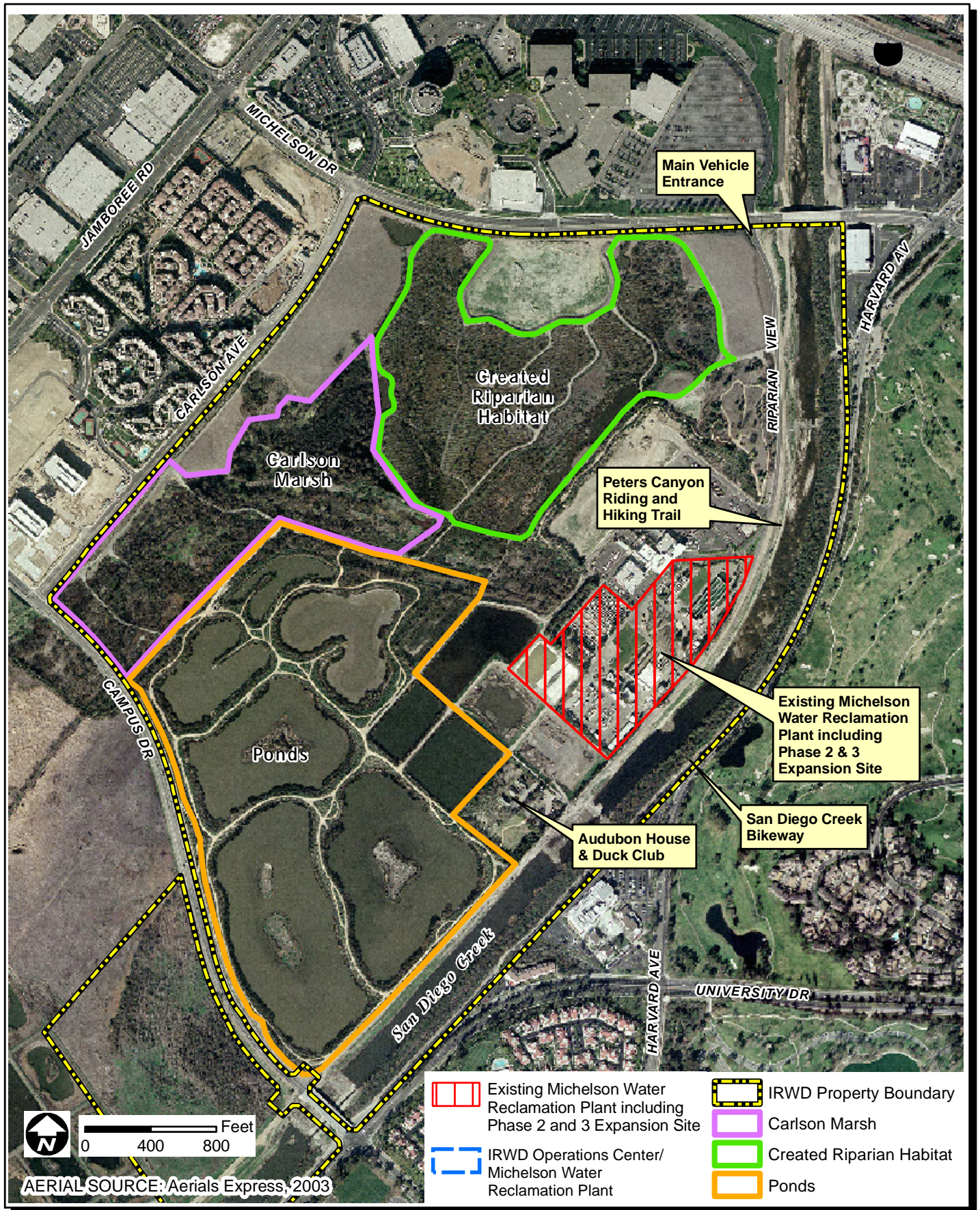
November 30, 2005

B1-1 The referenced odors near the Bethel Korean Church do not come from the MWRP. Rather, the odors are from three major sewer lines that come together beneath the parking lot of the church. The odors were coming to the surface through the manholes in this area. IRWD has addressed this issue by completing the following:

- Installed five (5) new manhole covers with rubberized gaskets designed to minimize odors. Each manhole has been bolted into place.
- Installed filters designed to reduce odors on all three sewer lines.
- Began adding chemicals to the sewer lines upstream of the church location to further reduce odors.
- Urged your church to have the grease trap on your property regularly maintained. Lack of proper grease trap maintenance can cause odors and sewer overflows.
- Began continuous monitoring of the sewer lines in the vicinity of the church for odors.

Since taking the steps listed above, our Collection Systems Department has noted a significant reduction in odor levels.

These capital projects completed to address odor issues are not related to the existing MWRP or proposed MWRP Capacity Expansion Project and therefore not addressed in the subject EIR.



MWRP Phase 2 and 3 Capacity Expansion Project - EIR
Site Map

FIGURE
3-3

SECTION 3.0

Revisions To The

Draft Environmental Impact Report

In accordance with Section 15132 of the CEQA Guidelines, this section presents the changes that were made to the DEIR as a result of comments received on the DEIR. Revisions made merely clarify information presented in the DEIR. Only minor technical changes or additions have been made. These changes and additions to the EIR do not raise important new issues about significant effects on the environment. Such changes are insignificant as the term is used in Section 15088.5(b) of the State CEQA Guidelines.

A compilation of revisions to the EIR is provided below. Changes in text are either signified as a replacement, addition or revision to existing text. Revisions to existing text are signified by strikeout (strikeout) where text is removed, and by underlined text (underlined) where text is added for clarification. The following revisions are organized sequentially, as they would appear in the EIR.

Revisions to Section 3, Project Description

- Item 1: Subsection 3.1, “Location and Setting,” Figure 3-3 has been revised to add the San Diego Creek Bikeway and the Peters Canon Riding and Hiking Trail.
- Item 2: Subsection 3.6, “Environmental Commitments Incorporated into the Project” under “General,” should read as follows:

General

During construction, IRWD will implement the following general measures ~~to restore all disturbed areas:~~

- All waste material will be disposed offsite at an approved location.
- Nighttime lighting of construction equipment will be discouraged and if required, it will be shielded from all local residences.
- IRWD will set up a phone line for residences to report problems and disturbances during construction and operation.
- During construction of the Proposed Project, equestrians, bicyclists, and hikers may use the San Diego Creek east levee and paved roadway consistent with standard construction safety practices.

Figure 3-3 Site Map (Revised)

- Signage will be provided notifying equestrians, bicyclists, and hikers of the San Diego Creek east levee and paved roadway of the proposed construction work, including start and end dates, and detour routes as required by standard construction safety practices.
- Any above-ground utility boxes, or any other item that would protrude above the surface of the trail, will be set back at least three feet from the edge of the trail. Any manhole covers will be flush with the trail surface.
- Any construction vehicles using the San Diego Creek east levee and paved roadway will do so consistent with standard construction safety practices.
- After construction, the San Diego Creek east levee and paved roadway will be restored to the original pre-construction condition.

Revisions to Section 8, “Other CEQA Considerations”

- Item 3: Subsection 8.1, “Effects Found Not to be Significant” under Recreation page 8-4, second paragraph, should read as follows:

The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No recreational facilities would be built or expanded as a result of the Proposed Project. Access to the existing San Diego Creek east levee and paved roadway will be available during construction of the Proposed Project to equestrians, bicyclists, and hikers consistent with standard construction safety practices. Signage will be provided notifying equestrians, bicyclists, and hikers of the San Diego Creek east levee and paved roadway of the proposed construction work, including start and end dates, and detour routes as required by standard construction safety practices. The construction staging area would be located inside the fenced MWRP. No impacts to recreational facilities from the construction staging area are anticipated.