



PUBLIC NOTICE

CITY OF HUNTINGTON BEACH DEPARTMENT OF PLANNING

NOTICE OF RECIRCULATION FOR DRAFT ENVIRONMENTAL IMPACT REPORT NO. 00-02 FOR THE SEAWATER DESALINATION PROJECT AT HUNTINGTON BEACH

Draft Recirculated Environmental Impact Report No. 00-02 for the Seawater Desalination Project at Huntington Beach

The City of Huntington Beach has prepared a Draft Recirculated Environmental Impact Report (EIR) No. 00-02 (State Clearinghouse # 2001051092) for the proposed Seawater Desalination Project at Huntington Beach. The EIR includes an analysis of potential environmental impacts associated with construction and implementation of the project. An unavoidable significant impact has been identified in regards to construction-related air quality.

In accordance with California Environmental Quality Act (CEQA) Section 15088.5 (Recirculation of an EIR Prior to Certification), the EIR for the Seawater Desalination Project at Huntington Beach is being recirculated for public review due to the addition of significant new information intended to address concerns expressed during review of the originally circulated EIR. No impact conclusions have changed as part of the Recirculated EIR, although a substantial amount of information has been added throughout the document to clarify and further support the conclusions provided.

The EIR will be available for public review and comment for 45 days, commencing Tuesday April 5, 2005 and ending Thursday May 19, 2005. Although already part of the administrative record, previous comments on the originally circulated draft EIR do not require a written response in the final EIR. As such, if you wish to comment on the Recirculated EIR, a new comment letter must be provided. Written comments on the EIR must be submitted to Ricky Ramos, City of Huntington Beach Planning Department, 2000 Main Street, Huntington Beach, California 92648 and must be received no later than 5:00 p.m., Thursday May 19, 2005, in order to be considered prior to the City's final determination on the project. The Recirculated EIR is on file at the following locations:

City of Huntington Beach Department of Planning, 2000 Main Street, Huntington Beach;
Central Library, 7111 Talbert Avenue, Huntington Beach; and
Banning Branch Library, 9281 Banning Avenue, Huntington Beach.

In addition, the Recirculated EIR may be reviewed electronically on the City's website at: www.ci.huntington-beach.ca.us/government/departments/planning/major_projects

Project Description:

The project, proposed by Poseidon Resources Corporation, consists of the construction and operation of a 50 million gallon per day seawater desalination facility within the City of Huntington Beach. The facility would consist of seawater intake pretreatment facilities, a seawater desalination plant utilizing reverse osmosis technology, product water storage, two pump stations, materials storage tanks, and 42 to 48-inch diameter product water transmission pipeline possibly up to 10 miles in length in Huntington Beach and Costa Mesa. The facility would utilize existing AES Huntington Beach Generating Station (HBGS) seawater intake and outfall pipelines for its operations. The proposed desalination facility is located on an 11-acre portion of the 22-acre HBGS facility located at 21730 Newland Street, off Pacific Coast Highway. The project includes construction of an underground pump station in a portion of unincorporated Orange County, south of Bonita Canyon Drive, near the eastern border of the City of Newport Beach. A second pump station is proposed in a church parking lot located at 4949 Alton Parkway within the City of Irvine.

At this time, no date has been set for a public hearing on the project. For further information, please contact Ricky Ramos at 714-536-5624.

DRAFT RECIRCULATED
ENVIRONMENTAL IMPACT REPORT

SEAWATER DESALINATION PROJECT AT HUNTINGTON BEACH

APRIL 5, 2005

Lead Agency:

City of Huntington Beach

Consultant:

RBF Consulting

**DRAFT RECIRCULATED
ENVIRONMENTAL IMPACT REPORT
2001051092**

**SEAWATER DESALINATION PROJECT
AT HUNTINGTON BEACH**

Lead Agency:

CITY OF HUNTINGTON BEACH
2000 Main Street
Huntington Beach, CA 92648
Contact: Mr. Ricky Ramos, Associate Planner
(714) 536-5271

Consultant:

RBF CONSULTING
3536 Concourse, Suite 220
Ontario, CA 91764
Contact: Mr. Kevin Thomas, Environmental Services Manager
(909) 941-5204

April 5, 2005

JN 10-101409.002

TABLE OF CONTENTS

	<u>Page</u>
1.0 EXECUTIVE SUMMARY	1-1
2.0 INTRODUCTION AND PURPOSE	
2.1 Purpose of EIR.....	2-1
2.2 Compliance with CEQA	2-1
2.3 Scope of EIR	2-3
2.4 Public Scoping Process	2-3
2.5 EIR Organization.....	2-7
2.6 Use of the EIR.....	2-7
2.7 Incorporation By Reference	2-8
2.8 Technical References	2-10
3.0 PROJECT DESCRIPTION	
3.1 Project Location	3-1
3.2 Environmental Setting.....	3-1
3.3 Project Characteristics	3-2
3.4 Project Need and Objectives	3-36
3.5 Project Phasing.....	3-45
3.6 Agreements, Permits and Approvals Required	3-46
4.0 EXISTING CONDITIONS/ENVIRONMENTAL SETTING	
4.1 Project Site.....	4-1
4.2 Pipeline Route.....	4-9
4.3 Underground Booster Pump Stations.....	4-10
4.4 Local Marine Species and Communities Occurring in the Waters at Huntington Beach	4-10
4.5 Huntington Beach Surf Zone Studies	4-12
4.6 Ocean Water Quality at the HBGS Intake	4-21
4.7 Ocean Water Quality at the Desalination Facility Intake	4-21
4.8 Orange County Water Supply and Distribution System	4-21
5.0 ENVIRONMENTAL ANALYSIS	
5.0 Overview of EIR Methodology and Significance Determination.....	5.0-1
5.1 Land Use/Relevant Planning	5.1-1
5.2 Geology, Soils, and Seismicity.....	5.2-1
5.3 Hydrology, Drainage, and Storm Water Runoff.....	5.3-1
5.4 Air Quality.....	5.4-1
5.5 Noise	5.5-1
5.6 Public Services and Utilities.....	5.6-1
5.7 Aesthetics/Light & Glare	5.7-1
5.8 Hazards and Hazardous Materials	5.8-1
5.9 Construction Related Impacts.....	5.9-1
5.10 Ocean Water Quality and Marine Biological Resources	5.10-1
5.11 Product Water Quality.....	5.11-1

6.0	LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT	
6.1	Significant Irreversible Environmental Changes	6-1
6.2	Growth-Inducing Impacts of the Proposed Action.....	6-2
6.3	Cumulative Impacts	6-13
7.0	ALTERNATIVES TO THE PROPOSED ACTION.....	7-1
8.0	EFFECTS FOUND NOT TO BE SIGNIFICANT	8-1
9.0	ORGANIZATIONS AND PERSONS CONSULTED.....	9-1
10.0	BIBLIOGRAPHY.....	10-1
11.0	APPENDICES (provided under separate cover)	
A.	Noise Data	
B.	Air Quality Data	
C.	Hydrodynamic Modeling Report	
D.	Pressure Surge Analysis	
E.	Watershed Sanitary Survey	
F.	Marine Biological Analysis	
G.	Preliminary Pipeline Assessment	
H.	Geological Report - Desalination Site	
I.	Geological Report - Aboveground Product Water Storage Tank	
J.	Correspondence	
K.	RO Membrane Cleaning Solution Discharge Test Stream Data	
L.	Underground Booster Pump Station Biological Constraints Survey	
M.	Underground Booster Pump Station Cultural Resources Assessment Reports	
N.	Disinfection Byproduct Formation Study	
O.	Distribution System Corrosion Control Study	
P.	Growth Assessment and General Plan Evaluation	
Q.	Report on Local and Regional Power Requirements and Generation Resources	
R.	Local Alternative Site Investigation	
S.	Marine Biological Considerations	
T.	Intake Effects Assessment	
U.	Receiving Water Chemistry and Quality Report	
V.	Preliminary Seismic Assessment	
W.	Supplemental Report on the Effects of a Retrofitted Diffuser on the Discharge Outfall for the Proposed Seawater Desalination Project at Huntington Beach	
X.	Desalination Facilities Located Throughout the World	

LIST OF EXHIBITS

3-1 Regional Vicinity Map..... 3-3

3-2 Site Vicinity Map..... 3-4

3-3 Conceptual Pipeline Alignments 3-5

3-4 OC-44 Booster Pump Station Location Map 3-6

3-5 Coastal Junction Booster Pump Station Location Map 3-7

3-6 Conceptual Site Plan 3-10

3-7 Administration Building Plan/Exterior Elevations..... 3-11

3-8 Reverse Osmosis Building Plan/Exterior Elevations 3-12

3-9 Pretreatment Filter Structure Plan/Exterior Elevations 3-13

3-10 Solids Handling Building Plan/Exterior Elevations 3-14

3-11 Chemical Storage Structure Plan/Exterior Elevations 3-15

3-12 Electrical Room/Substation Building Plan/Exterior Elevations 3-16

3-13 Storage Tank Plan/Exterior Elevations 3-17

3-14 Carbon Dioxide Tank Plan/Exterior Elevations 3-18

3-15 Product Water Storage Tank Plan/Exterior Elevations 3-19

3-16 Conceptual Landscape Masterplan 3-22

3-17 Desalination Facility/HBGS Cooling Water Connection 3-23

3-18 Desalination Treatment Process Flow Schematic..... 3-24

3-19 Approximate Desalinated Water Distribution Area 3-33

4-1 HBGS Intake and Outfall Location Map..... 4-5

4-2 Imported Water Transmission System in Orange County..... 4-24

5.1-1 Zoning 5.1-5

5.1-2 Land Use Designations..... 5.1-6

5.2-1 Regional Geology and Seismicity 5.2-5

5.5-1 Sound Levels and Human Response 5.5-3

5.7-1 Desalination Facility Site Photographs 5.7-3

5.7-2 Pipeline Alignment Photographs..... 5.7-4

5.7-3 Booster Pump Station Site Photographs 5.7-5

5.7-4	Desalination Facility Visual Simulation – Magnolia Street.....	5.7-8
5.7-5	Desalination Facility Visual Simulation – Newland Street	5.7-9
5.10-1	Location Map of Local Surface and Wastewater Discharges	5.10-3
5.10-2	Projected Mid-Depth Salinity Over the HBGS Outfall - “Low Flow” Scenario	5.10-30
5.10-3	Projected Seafloor Salinity at the HBGS Outfall - “Low Flow” Scenario	5.10-31
5.10-4	Projected Mid-Depth Salinity Over the HBGS Outfall - “Average Flow” Scenario	5.10-32
5.10-5	Projected Seafloor Salinity at the HBGS Outfall - “Average Flow” Scenario	5.10-33
5.10-6	HBGS Intake Screening Process	5.10-38
6-1	Infill Percentages by Regional Statistical Areas	6-11
7-1	Alternative Site Location Map	7-9

LIST OF FIGURES

3-1 Orange County Water Supply Sources 3-43

4-1 Southern California Bight 4-11

4-2 Geometric Means for Fecal Indicator Bacteria at Huntington State Beach 4-14

4-3 Total Coliforms at HBGS, Summer 2001 4-18

4-4 Total Coliforms at HBGS, Summer 2002 4-19

5.10-1 Interannual Variation in Huntington Beach Infaunal Abundance and Species
Richness, 1975-1993 5.10-9

5.10-2 Interannual Variation in Huntington Beach Macrofauna Abundance and
Species Richness, 1975-2001 5.10-11

7-1 Horizontal (Ranney) Beach Well 7-13

7-2 Horizontal (Ranney) Beach Well Photo 7-14

7-3 Horizontal (Ranney) Beach Well System Illustration 7-15

7-4 Conceptual Horizontal (Ranney) Well Intake Configuration at Huntington Beach ... 7-15

7-5 Infiltration Gallery 7-16

7-6 Seabed Infiltration System 7-18

7-7 Seabed Infiltration System Cross-Section..... 7-18

7-8 Seabed Infiltration System Approximate Impact Area 7-19

LIST OF TABLES

3-1 Desalinated Water Quality – Key Parameters 3-32

3-2 Desalting in California for New Water Supply 3-40

3-3 Updated Resource Targets (with Supply Buffer)..... 3-41

3-4 Projected Orange County Water Demand Through 2020..... 3-42

4-1 Rated Capacity Flow Rate at HBGS..... 4-6

4-2 State Standards for Beach Postings..... 4-13

4-3 Beach Postings in Huntington Beach from April to October..... 4-13

4-4 OCSD Treatment Facility Operational Goals..... 4-17

5.4-1 National and California Ambient Air Quality Standards..... 5.4-4

5.4-2 SCAQMD Rules and Regulations..... 5.4-6

5.4-3 South Coast Air Basin Ambient Air Quality Classifications 5.4-7

5.4-4 Local Air Quality Levels..... 5.4-8

5.4-5 SCAQMD Emissions Thresholds..... 5.4-12

5.4-6 Mobile Source Emissions..... 5.4-13

5.5-1 California Land Use Compatibility Noise Guidelines 5.5-4

5.5-2 City of Huntington Beach Noise Ordinance Exterior Noise Standards 5.5-6

5.5-3 City of Huntington Beach Noise Ordinance Interior Noise Standards..... 5.5-6

5.5-4 Existing On-Site and Surrounding Ambient Noise Levels 5.5-8

5.5-5 Existing Off-Site Pipeline/Pump Station Ambient Noise Levels 5.5-8

5.5-6 Significance of Changes in Cumulative Noise Exposure 5.5-10

5.5-7 Predicted Pump Station Noise Levels at Three Feet 5.5-11

5.8-1 Product Water Treatment Chemical Usage Summary..... 5.8-6

5.9-1 Demolition Process Details..... 5.9-4

5.9-2 Site Grading Details 5.9-5

5.9-3 Pipeline Alignment Details 5.9-5

5.9-4 Pipeline Construction Details..... 5.9-6

5.9-5 OC-44 Booster Pump Station Construction Details..... 5.9-7

5.9-6 Coastal Junction Booster Pump Station Construction Details 5.9-10

5.9-7	SCAQMD Emissions Thresholds.....	5.9-12
5.9-8	Construction Emissions	5.9-17
5.9-9	Predicted Project Emission Rates	5.9-19
5.9-10	Screen3 Predicted Emission Concentrations	5.9-20
5.9-11	Seawater Desalination Facility Construction Equipment Noise Levels.....	5.9-21
5.9-12	Construction Noise Exemption Periods.....	5.9-22
5.10-1	Major Groups of Infaunal Animals at Huntington Beach, 1975-1993.....	5.10-7
5.10-2	Order of Abundance of Infaunal Animals at Huntington Beach, 1975-1993.....	5.10-8
5.10-3	Macrofaunal Invertebrates at Huntington Beach, 1976-2001	5.10-10
5.10-4	Yearly Abundance of Demersal Fish Species Collected By Otter Trawl at Huntington Beach, 1976-2001	5.10-12
5.10-5a	Comparison of HBGS Intake Well Monitoring Data to Primary Maximum Contaminant Levels	5.10-23
5.10-5b	Comparison of HBGS Intake Well Monitoring Data to Primary Maximum Contaminant Levels	5.10-24
5.10-6a	Comparison of HBGS Intake Well Monitoring Data to Secondary Maximum Contaminant Levels	5.10-25
5.10-6b	Comparison of HBGS Intake Well Monitoring Data to Secondary Maximum Contaminant Levels	5.10-25
5.10-7	Cycle Water Discharges to the HBGS Cooling Water System	5.10-26
5.10-8	Reverse Osmosis Membrane Solution Discharge Volumes	5.10-37
5.11-1	DHS Drinking Water Notification Levels.....	5.11-10
5.11-2	Response Levels	5.11-10
5.11-3	Product Water Quality Comparison	5.11-11
6-1	Orange County Projections: 2000-2030	6-6
6-2	General Plan Housing Element Summary.....	6-7
6-3	Proposed New Residential Development Projects in Orange County (over 500 D.U.).....	6-10
6-4	Proposed Desalination Facilities along the Southern California Coast.....	6-19
6-5	SCE 230 KV Substations Serving Load in Orange County.....	6-23
6-6	Summary of Estimated Loads (MW).....	6-23
6-7	Changes in Estimated Loads due to Addition of the Project (%)	6-24
7-1	Comparison of Alternatives.....	7-2

7-2 MWD Updated Resource Targets (With Supply Buffer)..... 7-3
7-3 Alternative Site Comparison 7-10