

NORTH LOS ANGELES/KERN COUNTY REGIONAL RECYCLED WATER PROJECT

Final Program Environmental Impact Report
SCH No. 2007101125

Prepared for:
Los Angeles County
Waterworks District 40,
Antelope Valley

November 2008

NORTH LOS ANGELES/KERN COUNTY REGIONAL RECYCLED WATER PROJECT

Final Program Environmental Impact Report
SCH No. 2007101125

Prepared for:
Los Angeles County
Waterworks District 40,
Antelope Valley

November 2008

707 Wilshire Blvd.
Suite 1450
Los Angeles, CA 90017
213.599.4300
www.esassoc.com

Oakland

Petaluma

Portland

Sacramento

San Diego

San Francisco

Seattle

Tampa

Woodland Hills

206359



TABLE OF CONTENTS

North Los Angeles / Kern County Regional Recycled Water Project

	<u>Page</u>
ES. Executive Summary	ES-1
1. Introduction and Project Background	1-1
1.1 Purpose of the PEIR.....	1-1
1.2 Intended Use of the PEIR.....	1-1
1.3 Organization of the Draft PEIR.....	1-3
1.4 CEQA Process.....	1-4
1.5 Project Background.....	1-8
2. Project Description	2-1
2.1 Introduction.....	2-1
2.2 Background.....	2-1
2.3 Purpose and Need for Project.....	2-2
2.4 Project Objectives.....	2-2
2.5 Description of Proposed Project.....	2-3
2.6 Construction Details.....	2-18
2.7 Project Construction Schedule.....	2-20
2.8 Operation and Maintenance Details.....	2-20
2.9 Alternatives.....	2-21
2.10 Project Approvals.....	2-22
3. Environmental Setting, Impacts, and Mitigation Measures	3-1
3.1 Aesthetics.....	3.1-1
3.2 Air Quality.....	3.2-1
3.3 Biological Resources.....	3.3-1
3.4 Cultural Resources.....	3.4-1
3.5 Geology and Soils.....	3.5-1
3.6 Hazards and Hazardous Materials.....	3.6-1
3.7 Hydrology and Water Quality.....	3.7-1
3.8 Land Use and Agriculture.....	3.8-1
3.9 Noise.....	3.9-1
3.10 Environmental Justice.....	3.10-1
3.11 Transportation and Traffic.....	3.11-1
3.12 Utilities and Service Systems.....	3.12-1

	<u>Page</u>
4. Cumulative Impacts	4-1
4.1 Introduction	4-1
4.2 Related Projects	4-1
4.3 Description of Select Related Projects.....	4-4
4.4 Impacts and Mitigation Measures	4-6
5. Growth Inducement and Secondary Effects of Growth.....	5-1
5.1 Introduction	5-1
5.2 Methodology	5-2
5.3 Population Projections	5-2
5.4 Water Demand Projection.....	5-3
5.5 Growth Inducement Potential	5-5
5.6 Secondary Effects of Growth	5-5
6. Alternatives Analysis.....	6-1
6.1 Introduction	6-1
6.2 Project Alternatives.....	6-2
6.3 Summary of Alternatives Analysis	6-5
6.4 Environmentally Superior Alternative.....	6-5
7. References	7-1
8. Report Preparers.....	8-1
8.1 Lead Agency & Project Sponsors	8-1
8.2 EIR Authors	8-2
8.3 Consultants.....	8-3
9. Acronyms	9-1
10. Comment Letters	10-1
11. Response to Comments.....	11-1
11.1 CEQA Requirements	11-1
11.2 Comments on the Draft EIR and Responses to Comments.....	11-1
11.3 Corrections and Additions to the Draft EIR	11-2
11.4 Responses to Comments	11-2
12. Lead Agency Revisions to Final PEIR.....	12-1
 Appendices	
A. Notice of Preparation	
B. Notice of Preparation Scoping Report	
C. Initial Study Checklist	
D. URBEMIS Air Quality Calculations	
E. Biological Resources Technical Report	
F. EDR Report Executive Summary	
G. Flood Insurance Rate Maps	
H. Land Use Maps	

List of Figures

ES-1	Existing and Proposed Facilities.....	ES-4
1-1	Antelope Valley Service Areas	1-10
2-1	Existing and Proposed Facilities.....	2-4
2-2	Recycled Water End Users	2-5
2-3	Proposed Construction Phases.....	2-6
2-4	Parcels Being Considered for Storage Reservoir 1	2-8
2-5	Parcels Being Considered for Storage Reservoir 2	2-9
2-6	Parcels Being Considered for Storage Reservoir 3	2-10
2-7	Parcels Being Considered for Storage Reservoir 4	2-11
2-8	Parcels Being Considered for Distribution Pump Station 1	2-13
2-9	Parcels Being Considered for Distribution Pump Station 2	2-14
2-10	Parcels Being Considered for Booster Pump Station 1	2-15
2-11	Parcels Being Considered for Booster Pump Station 2	2-16
3.1-1	Visual Character of Project Components	3.1-3
3.3-1	Habitat Type	3.3-3
3.3-2	Significant Ecological Areas	3.3-9
3.5-1	Regional Faults	3.5-2
3.5-2	Alquist-Priolo Fault Zones	3.5-4
3.5-3	Landslide and Liquefaction Zones.....	3.5-6
3.6-1	Potential Soil Contamination	3.6-3
3.7-1	Antelope Valley Surface Waters.....	3.7-2
3.7-2	Antelope Valley Groundwater Sub-Basins	3.7-4
3.7-3	Soil Profile	3.7-7
3.7-4	FEMA Flood Areas	3.7-10
3.8-1	Jurisdictional Boundaries	3.8-2
3.8-2	Airports in Project Vicinity.....	3.8-5
3.8-3	Sensitive Receptors	3.8-7
3.8-4	Agricultural Resources	3.8-8
3.8-5	PMD Airport Influence Area.....	3.8-15
3.8-6	General William J. Fox Airfield Airport Influence Area.....	3.8-16
3.8-7	PMD Clear Zones and Accident Potential Zones	3.8-18
3.8-8	Rosamond Skypark Airport Airport Influence Area	3.8-21
3.8-9	Five Mile Radii – Public Use Airports	3.8-26
3.9-1	Effects of Noise on People	3.9-2
3.9-2	Land Use Compatibility on Community Noise Environment	3.9-6
3.10-1	Census Tracts	3.10-2

Page**List of Tables**

ES-1	Summary of Impacts and Mitigation Measures for the North Los Angeles / Kern County Recycled Water Project	ES-7
1-1	Profiles of Antelope Valley Retail Water Agencies	1-11
1-2	Regulatory Requirements for Recycled Water Uses in California	1-16
2-1	CEQA Coverage by Project Component	2-7
2-2	Proposed Storage Reservoirs	2-7
2-3	Proposed Pump Stations.....	2-12
3.2-1	Air Quality Data Summary (2004 – 2006).....	3.2-2
3.2-2	State and National Criteria Air Pollutant Standards, Effects, and Sources.....	3.2-6
3.2-3	County Attainment Status.....	3.2-7
3.2-4	Recommended AB32 Greenhouse Gas Measures to be Initiated by CARB between 2007 and 2012	3.2-9
3.2-5	Air Quality Significance Thresholds.....	3.2-12
3.2-6	Unmitigated Emissions from Pipeline Project Construction	3.2-16
3.2-7	Unmitigated Emissions from Reservoir and Pump Station Construction	3.2-19
3.4-1	Previously Recorded Cultural Resources within or adjacent to the Project APE (Kern County)	3.4-15
3.4-2	Previously Recorded Cultural Resources within or adjacent to the Project APE (Los Angeles County)	3.4-16
3.4-3	Summary of Construction Phases, APE Segments, and Cultural/Paleontological Resources	3.4-19
3.6-1	Potential Contamination of Soils in the Project Area	3.6-4
3.7-1	Summary of Run-on and Run-off Discharges for Proposed Storage Reservoirs and Pump Stations	3.7-27
3.8-1	City and County Land Use Categories by Project Component.....	3.8-4
3.8-2	Recommended Land Use for Clear Zones and Accident Potential Zones.....	3.8-19
3.9-1	Noise Compatible Land Use Objectives	3.9-8
3.9-2	Exterior Noise Standards	3.9-10
3.9-3	Thresholds of Significance for Noise Exposure	3.9-11
3.9-4	Typical Construction Noise Levels	3.9-13
3.9-5	Typical Noise Levels from Construction Equipment	3.9-13
3.9-6	Vibration Velocities for Construction Equipment	3.9-16
3.9-7	Storage Reservoir Construction Noise	3.9-16
3.9-8	Pump Station Construction Noise.....	3.9-17
3.10-1	Race/Ethnicity by Census Tract	3.10-3
3.10-2	Household Income and Poverty Status by Census Tract	3.10-4
4-1	Antelope Valley Related Projects	4-3
5-1	SCAG Projections 2004	5-3
5-2	Population Projections.....	5-4
5-3	Water Demand Projections	5-4
5-4	Palmdale Water District Demand Projections.....	5-4
6-1	Summary of Alternative Analysis.....	6-6