EBMUD WATER TREATMENT AND TRANSMISSION IMPROVEMENTS PROGRAM

Draft Environmental Impact Report SCH # 2005092019



June 2006





Volume 3 of 3

EBMUD WATER TREATMENT AND TRANSMISSION IMPROVEMENTS PROGRAM

Draft Environmental Impact Report SCH # 2005092019



June 2006

225 Bush Street Suite 1700 San Francisco, CA 94104 415.896.5900 www.esassoc.com

Los Angeles

Oakland

Orlando

Petaluma

Sacramento

Seattle

Tampa

204369



TABLE OF CONTENTS

EBMUD Water Treatment and Transmission Improvements Program Draft Environmental Impact Report

<u>Page</u>

(Volumes 1 and 2 are bound separately)

Volume 1

- A. Acronyms
- S. Summary
- 1. Introduction
- 2. Project Description Maps

Volume 2

3. Environmental Setting, Impacts, and Mitigation Measures

Volume 3

4.	Growth Inducement Potential and Secondary Effects of Growth		4-1
	4.1	Approach to Analysis	4-1
	4.2	Growth-Inducement Potential	4-2
	4.3	Impacts and Mitigation Measures	4-20
5.	Cumulative Impacts		5-1
	5.1	Approach to Analysis	5-1
	5.2	Collective and Overlapping Impacts of the WTTIP	5-2
	5.3	Potential Projects with Related or Cumulative Effects	5-12
	5.4	Cumulative Impacts and Mitigation Measures	5-38
6.	Analysis of Alternatives		6-1
	6.1	Approach to Analysis and Overview	6-1
	6.2	No Project Alternative	6-2
	6.3	Membrane Filtration Alternative	6-5
	6.4	Modified Orinda WTP Site Plan	6-13
	6.5	Lafayette Reclaimed Water Pipeline Alternative	6-17
	6.6	Highland Reservoir Alternative Site	6-18

		<u>Page</u>
6.	 Analysis of Alternatives (continued) 6.7 Moraga Road Pipeline Alternative 6.8 Happy Valley Pumping Plant Alternative Site 6.9 Tice Pumping Plant Alternative Site 6.10 Alternatives Screening Process and Alternatives Eliminated 6.11 Comparison of Alternatives 	6-22 6-33 6-35 6-39 6-66
7.	Report Preparers	7-1
Appe	endices	
B. C. D. E. F. G. H. I.	Public Involvement Project-Specific Construction Assumptions Properties within 50 feet of Centerline of Proposed Orinda-Lafayette Aqueduct – Tunnel Portion Plans and Policies Biological Resources - Special-Status Species Recorded Cultural Resources in EBMUD Database City of Oakland Noise Mitigation Measures Hazards and Hazardous Materials Secondary Effects of Growth Alternatives	A-1 B-1 C-1 D-1 E-1 F-1 G-1 H-1 J-1
List o	of Figures	
5-1 6-1 6-2 6-3 6-4 6-5a 6-5b 6-6	Major Projects in the WTTIP Project Area with Potential for Cumulative Impacts Membrane Filtration Alternative Modified Orinda WTP Site Plan Alternative Lafayette Reclaimed Water Pipeline Alternative Highland Reservoir Alternative Site Moraga Road Pipeline Alternative	5-33 6-7 6-15 6-19 6-13 6-27 6-28 6-34
List	of Tables	
4-1 4-2 4-3 4-4 4-5 5-1	Districtwide Projected Average-Day Demands (2005–2030) Adjusted for Conservation and Recycling Communities Served by Pressure Zones with WTTIP Projects Projected Water Demands by Pressure Zone (2005–2030) ABAG Population Projections ABAG and City/County Population Projections Other Projects in the WTTIP Area with Potential for Cumulative	4-6 4-7 4-8 4-13 4-14
5-2 6-1	Impacts Proposed WTTIP Project Construction Schedules Summary of Alternatives Considered	5-13 5-36 6-3
6-2	Comparison of Proposed Lafayette WTP Improvements under Alternative 1 with Membrane Filtration Alternative	6-10
6-3	Comparison of Proposed Highland Reservoir and Pipelines Project with Highland Reservoir Alternative	6-25

		<u>Page</u>
List of 1	Tables (continued)	
6-4	Comparison of Proposed Moraga Road Pipeline Project with	
	Moraga Road Pipeline Alternative	6-30
6-5	Comparison of Proposed Happy Valley Pumping Plant and Pipeline	
	Project with Happy Valley Pumping Plant Alternative	6-36
6-6	Comparison of Proposed Tice Pumping Plant and Pipeline Project	
	with Tice Pumping Plant Alternative	6-40
6-7	Facilities Plan Alternatives	6-45
6-8	Project Objectives	6-49
6-9	Alternatives Screening Criteria	6-50
6-10	Weighting Scenarios	6-51
6-11	Alternative Ranks and Weighted Scores by Weighting Scenario	6-51
6-12	Comparison of Alternative 1 and Alternative 2	6-67