TABLE OF CONTENTS

CalAm Monterey Peninsula Water Supply Project Final Environmental Impact Report / Environmental Impact Statement

		<u>Page</u>
List of Acronym	S	xxvii
ES. Executive Su		ES-1
ES.1 Introduc	tion	ES-1
ES.2 Project	Background	ES-2
ES.3 CEQA F	Project Objectives / NEPA Purpose and Need	ES-3
ES.3.1	Project Objectives	ES-3
ES.3.2	MBNMS Purpose and Need	ES-4
	Agency Involvement	ES-4
ES.4.1	Public and Agency Involvement	ES-4
ES.4.2	Final EIR/EIS and Revisions Made to the Draft EIR/EIS	ES-5
ES.4.3	Use of this EIR/EIS in Decision Making	ES-6
ES.5 The Pro	posed Project	ES-7
ES.5.1	Description of the Proposed Project	ES-7
ES.5.2	Summary of Potential Impacts and Mitigation Measures for	
	Proposed Project	ES-8
ES.6 Alternat	ives to the Proposed Project	ES-11
ES.6.1	No Project/No Action Alternative	ES-11
ES.6.2	Alternative 1 – Slant Wells at Potrero Road	ES-12
ES.6.3	Alternative 2 – Open-Water Intake at Moss Landing	ES-12
ES.6.4	Alternative 3 – Monterey Bay Regional Water Project	
	(MBRWP or DeepWater Desal Project)	ES-12
ES.6.5	Alternative 4 – People's Moss Landing Water Desalination	
	Project (People's Project)	ES-12
ES.6.6	Alternative 5a – Reduced Project 6.4 mgd Desalination Plant	
	(Intake Slant Wells at CEMEX)	ES-13
ES.6.7	Alternative 5b – Reduced Project 6.4-mgd Desalination Plant	
	(Intake Slant Wells at Potrero Road)	ES-13
	ison of Alternatives, Environmentally Superior/Environmentally	
	ed Alternative, and NOAA-Preferred Alternative	ES-13
	Key Impact Differences Between Alternatives	ES-13
ES.7.2	Environmentally Superior/Environmentally Preferred Alternative	
	and NOAA-Preferred Alternative	ES-16
ES.8 Areas o	f Controversy and Issues to be Resolved	ES-16

1.	Intro	oduction	and Background	1-1
	1.1	Introdu	ction	1-1
	1.2		gency Roles	1-3
			California Public Utilities Commission	1-3
		1.2.2		1-4
	1.3		Objectives and Purpose and Need	1-5
	-	•	Project Objectives	1-5
	1.4		Setting and Background	1-8
		•	The Coastal Water Project	1-9
			The Monterey Peninsula Water Supply Project	1-10
			Environmental Review: Context for this Final EIR/EIS	1-10
		1.4.4		
			2015 Draft EIR	1-12
	1.5	Enviror	mental Review Process and Use of This Document	1-14
		1.5.1	Notice of Preparation, Notice of Intent, and Scoping	1-14
		1.5.2	Draft EIR/EIS and Public Review	1-15
		1.5.3	Final EIR/EIS and Revisions Made to the Draft EIR/EIS	1-16
		1.5.4	Use of this EIR/EIS in Decision Making	1-17
	1.6	Organiz	zation of Final EIR/EIS	1-19
2.	Wate	er Dema	nd, Supplies, and Water Rights	2-1
	2.1	Introdu	ction	2-1
	2.2	Backgr	ound	2-2
		2.2.1	Existing Water System	2-2
		2.2.2	Historical Sources of Supply	2-4
		2.2.3	State Water Board Order 95-10 and Cease and	
			Desist Orders 2009-0060 and 2016-0016	2-7
		2.2.4	Seaside Groundwater Basin Adjudication	2-8
	2.3		Service Area Demand	2-10
		2.3.1		2-11
		2.3.2		2-13
		2.3.3	2010 Urban Water Management Plan Demand Estimates	2-16
	2.4		le Supplies	2-17
		2.4.1	,	2-18
		2.4.2		2-19
		2.4.3	Aquifer Storage and Recovery	2-19
			Sand City Coastal Desalination Plant	2-20
		2.4.5	Groundwater Replenishment Project	2-20
		2.4.6	Other supplies	2-21
	2.5		Supply and Demand Considerations	2-23
		2.5.1	Salinas Valley Groundwater Basin Return Water	2-23
		2.5.2	Potential Future Changes in Supply	2-24
		2.5.3	Potential Future Changes in Demand	2-25
	~ ~	2.5.4	Assumptions about the Allocation of MPWSP Water	2-30
	2.6	Water I	•	2-31
		2.6.1	State Water Resources Control Board Report	2-33
		2.6.2	Project Water Rights	2-36
		2.6.3	Effect of Monterey County Water Resources Agency Act	2-41
		2.6.4	Effect of Annexation Agreement	2-42

3.	Desc	cription (of the Proposed Project	3-1
	3.1	-		3-1
	0.1	3.1.1		3-1 3-1
		3.1.2	Summary of Changes Made by CalAm to Project Description	3-7 3-7
	3.2		, , , , ,	3-8
	3.2		Components	
		3.2.1		3-17
		3.2.2	MPWSP Desalination Plant	3-21
			Desalinated Water Conveyance	3-31
		3.2.4		3-45
		3.2.5	Electrical Power Facilities	3-48
	3.3	Constru		3-48
		3.3.1	Site Preparation and Construction Staging	3-48
		3.3.2	Well Drilling and Development and Related Site Improvements	3-49
		3.3.3	Desalination Plant Construction	3-51
		3.3.4	Pipeline Installation	3-52
		3.3.5	Carmel Valley Pump Station	3-56
		3.3.6	Installation of Powerlines	3-56
		3.3.7	Spoils Management and Disposal	3-57
		3.3.8	Construction Schedule	3-57
	3.4	Operati	ons and Maintenance	3-58
		3.4.1	Operation of the Seawater Intake System, MPWSP Desalination	
			Plant, and Brine Discharges	3-58
		3.4.2	Operation of the ASR System	3-60
		3.4.3	Desalinated Water Conveyance Facilities	3-61
		3.4.4	Payback to Seaside Groundwater Basin	3-61
		3.4.5	Power Demand	3-62
	3.5		, Approvals, and Regulatory Requirements	3-62
4.		ronment gation M	tal Setting (Affected Environment), Impacts, and easures	
	4.1	, Overvie		4.1-1
	7.1	4.1.1		4.1-5
			Resources/Issues Not Affected	4.1-7
			Baseline Conditions	4.1-7
			Impact Terminology	4.1-0
		4.1.5	Project Consistency Analysis	4.1-10
		4.1.6	Mitigation Measures	4.1-10
		4.1.7	Cumulative Effects	4.1-11
		4.1.7		4.1-12
			4.1.7.1 Approach to the Analysis of Cumulative Effects4.1.7.2 Cumulative Scenario	4.1-13
	4.2	Geology	y, Soils, and Seismicity	4.2-1
	1.2	4.2.1	Setting/Affected Environment	4.2-2
		4.2.2	Regulatory Framework	4.2-30
		4.2.2	Evaluation Criteria	4.2-30
		4.2.3	Approach to Analysis	4.2-45
		4.2.4	Direct and Indirect Effects of the Proposed Project	4.2-40
		7.2.5	4.2.5.1 Construction Impacts	4.2-53
			4.2.5.2 Operational and Facility Siting Impacts	4.2-54
		4.2.6	Cumulative Effects of the Proposed Project	4.2-50

				<u>Page</u>
4.			ntal Setting (Affected Environment), Impacts, and	
			leasures (continued)	
	4.3		e Water Hydrology and Water Quality	4.3-1
		4.3.1	Setting/Affected Environment	4.3-3
		4.3.2		4.3-19
		4.3.3		4.3-57
		4.3.4		4.3-58
		4.3.5	Direct and Indirect Effects of the Proposed Project	4.3-60
			4.3.5.1 Construction Impacts	4.3-60
			4.3.5.2 Operational and Facility Siting Impacts	4.3-68
			4.3.5.3 Secondary Impacts of Mitigation Measure 4.3-5	4.3-108
		4.3.6	Cumulative Effects of the Proposed Project	4.3-122
	4.4		dwater Resources	4.4-1
		4.4.1		4.4-3
		4.4.2		4.4-37
		4.4.3		4.4-47
		4.4.4		4.4-48
		4.4.5	Direct and Indirect Effects of the Proposed Project	4.4-61
			4.4.5.1 Construction Impacts	4.4-61
		4.4.0	4.4.5.2 Operations and Facility Siting Impacts	4.4-64
		4.4.6	Cumulative Effects of the Proposed Project	4.4-103
	4.5		Resources	4.5-1
		4.5.1	Setting/Affected Environment	4.5-2
		4.5.2	5 ,	4.5-29
		4.5.3 4.5.4		4.5-44 4.5-44
		4.5.4	Approach to Analysis Direct and Indirect Effects of the Proposed Project	4.5-44
		4.5.5	4.5.5.1 Construction Impacts	4.5-47
			4.5.5.2 Operational and Facility Siting Impacts	4.5-52
		4.5.6	Cumulative Effects of the Proposed Project	4.5-68
	4.6		trial Biological Resources	4.6-1
	- .0	4.6.1	Setting/Affected Environment	4.6-4
		4.6.2	-	4.6-91
		4.6.3	Evaluation Criteria	4.6-125
		4.6.4	Approach to Analysis	4.6-126
			Direct and Indirect Effects of the Proposed Project	4.6-128
			4.6.5.1 Construction Impacts	4.6-128
			4.6.5.2 Operational and Facility Siting Impacts	4.6-246
		4.6.6	Cumulative Effects of the Proposed Project	4.6-267
	4.7	Hazaro	ds and Hazardous Materials	4.7-1
		4.7.1	Setting/Affected Environment	4.7-1
		4.7.2	Regulatory Framework	4.7-13
		4.7.3	Evaluation Criteria	4.7-25
		4.7.4	Approach to Analysis	4.7-26
		4.7.5	Direct and Indirect Effects of the Proposed Project	4.7-26
			4.7.5.1 Construction Impacts	4.7-27
			4.7.5.2 Operational and Facility Siting Impacts	4.7-34
		4.7.6	Cumulative Effects of the Proposed Project	4.7-38

4.			tal Setting (Affected Environment), Impacts, and easures (continued)	
	4.8	4.8.1 4.8.2 4.8.3 4.8.4	5 ,	4.8-1 4.8-13 4.8-32 4.8-32 4.8-32 4.8-33 4.8-38
	4.9	Traffic a 4.9.1 4.9.2 4.9.3 4.9.4 4.9.5 4.9.6	and Transportation Setting/Affected Environment Regulatory Framework Evaluation Criteria Approach to Analysis Direct and Indirect Effects of the Proposed Project 4.9.5.1 Construction Impacts 4.9.5.2 Operational and Facility Siting Impacts Cumulative Effects of the Proposed Project	4.9-1 4.9-1 4.9-6 4.9-11 4.9-13 4.9-15 4.9-16 4.9-34 4.9-35
	4.10	4.10.2 4.10.3 4.10.4	lity Setting/Affected Environment Regulatory Framework Evaluation Criteria Approach to Analysis Direct and Indirect Effects of the Proposed Project 4.10.5.1 Construction Impacts 4.10.5.2 Operational and Facility Siting Impacts Cumulative Effects of the Proposed Project	4.10-1 4.10-2 4.10-8 4.10-17 4.10-18 4.10-21 4.10-21 4.10-29 4.10-32
	4.11	4.11.1 4.11.2 4.11.3 4.11.4 4.11.5	ouse Gas Emissions	4.11-1 4.11-2 4.11-5 4.11-10 4.11-11 4.11-15 4.11-23
	4.12	4.12.1 4.12.2 4.12.3 4.12.4 4.12.5	Ind Vibration Key Concepts and Terminology Setting/Affected Environment Regulatory Framework Evaluation Criteria Approach to Analysis Direct and Indirect Effects of the Proposed Project 4.12.6.1 Construction Impacts 4.12.6.2 Operational and Facility Siting Impacts Cumulative Effects of the Proposed Project	4.12-1 4.12-2 4.12-4 4.12-7 4.12-7 4.12-17 4.12-18 4.12-20 4.12-21 4.12-56 4.12-63
	4.13	Public 8 4.13.1 4.13.2	Services and Utilities Setting/Affected Environment Regulatory Framework Evaluation Criteria Approach to Analysis	4.13-1 4.13-2 4.13-7 4.13-13 4.13-13

				<u>Page</u>
4.	Envi	ronment	al Setting (Affected Environment), Impacts, and	
	Mitig	ation M	easures (continued)	
		4.13.5	Direct and Indirect Effects of the Proposed Project	4.13-14
			4.13.5.1 Construction Impacts	4.13-16
			4.13.5.2 Operational and Facility Siting Impacts	4.13-21
			4.13.5.3 Secondary Impacts of Mitigation Measure 4.13-5a	4.13-30
			4.13.5.4 Secondary Impacts of Mitigation Measure 4.13-5b	4.13-33
		4.13.6	Cumulative Effects of the Proposed Project	4.13-36
	4 14	Aesthet	ic Resources	4.14-1
	7.17		Introduction, Key Concepts, and Terminology	4.14-1
			Setting/Affected Environment	4.14-3
			Regulatory Framework	4.14-19
			Evaluation Criteria	4.14-27
		4.14.5	Approach to Analysis	4.14-27
			Direct and Indirect Effects of the Proposed Project	4.14-28
			4.14.6.1 Construction Impacts	4.14-29
			4.14.6.2 Operational and Facility Siting Impacts	4.14-38
		4.14.7	Cumulative Effects of the Proposed Project	4.14-46
	4.15	Cultural	and Paleontological Resources	4.15-1
	-		Introduction	4.15-1
		4.15.2	Setting/Affected Environment	4.15-4
			Regulatory Framework	4.15-29
			Evaluation Criteria	4.15-41
		4.15.5	Approach to Analysis	4.15-42
		4.15.6	Direct and Indirect Effects of the Proposed Project	4.15-44
			4.15.6.1 Construction Impacts	4.15-45
		4.15.7	Cumulative Effects of the Proposed Project	4.15-51
	4.16	Agricult	ural Resources	4.16-1
		4.16.1	Setting/Affected Environment	4.16-1
		4.16.2	Regulatory Framework	4.16-7
		4.16.3	Evaluation Criteria	4.16-13
		4.16.4	Approach to Analysis	4.16-13
		4.16.5	Direct and Indirect Effects of the Proposed Project	4.16-13
			4.16.5.1 Construction Impacts	4.16-14
			4.16.5.2 Operational and Facility Siting Impacts	4.16-17
		4.16.6	Cumulative Effects of the Proposed Project	4.16-21
	4.17	Mineral	Resources	4.17-1
		4.17.1	Setting/Affected Environment	4.17-1
		4.17.2	Regulatory Framework	4.17-4
		4.17.3	Evaluation Criteria	4.17-9
		4.17.4	Approach to Analysis	4.17-9
		4.17.5	Direct and Indirect Effects of the Proposed Project	4.17-9
			4.17.5.1 Construction and Facility Siting Impacts	4.17-10
		4.17.6	Cumulative Effects of the Proposed Project	4.17-12
	4.18	•••	Conservation	4.18-1
		4.18.1	Setting/Affected Environment	4.18-2
		4.18.2	Regulatory Framework	4.18-4
		4.18.3	Evaluation Criteria	4.18-11
		4.18.4	Approach to Analysis	4.18-11

				Page
4.			al Setting (Affected Environment), Impacts, and	
	Mitig	jation M	easures (continued)	
		4.18.5	Direct and Indirect Effects of the Proposed Project	4.18-13
			4.18.5.1 Construction Impacts	4.18-14
			4.18.5.2 Operational and Facility Siting Impacts	4.18-15
		4.18.6	Cumulative Effects of the Proposed Project	4.18-18
	4.19	Populat	ion and Housing	4.19-1
	-		Setting/Affected Environment	4.19-1
			Regulatory Framework	4.19-4
			Evaluation Criteria	4.19-4
		4.19.4	Approach to Analysis	4.19-4
		4.19.5	Direct and Indirect Effects of the Proposed Project	4.19-5
			4.19.5.1 Construction Impacts	4.19-5
			4.19.5.2 Operational and Facility Siting Impacts	4.19-6
		4.19.6	Cumulative Effects of the Proposed Project	4.19-7
	4.20		conomics and Environmental Justice	4.20-1
		4.20.1		4.20-2
			Regulatory Framework	4.20-9
			Evaluation Criteria	4.20-12
			Approach to Analysis	4.20-13
		4.20.5	Direct and Indirect Effects of the Proposed Project	4.20-14
			4.20.5.1 Socioeconomics 4.20.5.2 Environmental Justice	4.20-14
		1 20 6	Cumulative Effects of the Proposed Project	4.20-16 4.20-19
		4.20.0	Cumulative Effects of the Proposed Project	4.20-19
5.	Alter	natives	Screening and Analysis	
	5.1	Introduc	ction and Overview	5.1-1
		5.1.1	Alternatives Analysis – CEQA/NEPA Requirements	5.1-2
		5.1.2	Project Objectives and Significant Impacts	5.1-3
	5.2	Alternat	ives Not Evaluated in Detail	5.2-1
	0.2	5.2.1		5.2-1
		5.2.2	New Los Padres Dam and Reservoir/Carmel River Dam and	
			Reservoir Project	5.2-1
		5.2.3	CPUC Water Supply Contingency Plan ("Plan B")	5.2-2
		5.2.4	Coastal Water Project	5.2-4
		5.2.5	MCWRA Interlake Tunnel and Spillway Modification Project	5.2-5
		5.2.6	Pure Water Monterey Groundwater Replenishment Project	5.2-6
		5.2.7	Siting Alternatives for ASR-5 and ASR-6 Wells	5.2-7
	5.3		ives Development, Screening and Evaluation Process	5.3-1
		5.3.1	Regulatory Considerations	5.3-1
		5.3.2	Component Development and Screening Process	5.3-5
		5.3.3	Intake Options Screening Results	5.3-6
		5.3.4	Outfall Options Screening Results	5.3-19
		5.3.5	Desalination Plant Site Options Screening Results	5.3-27
		5.3.6	Evaluation of Intake, Outfall, and Desalination Plant Options	5.3-29
	5.4		tion of Alternatives Evaluated in Detail	5.4-1
		5.4.1	Overview	5.4-1
		5.4.2	No Project Alternative	5.4-4
			Alternative 1 Slant Wells at Detrore Dead	E / 10
		5.4.3 5.4.4	Alternative 1 – Slant Wells at Potrero Road Alternative 2 – Open-Water Intake at Moss Landing	5.4-12 5.4-17

_				<u>Page</u>
5.	Alte	rnatives	Screening and Analysis (continued)	
		5.4.5	Alternative 3 – Monterey Bay Regional Water Project	
			(MBRWP or DeepWater Desal Project)	5.4-21
		5.4.6	Alternative 4 – People's Moss Landing Water Desalination	
			Project (People's Project)	5.4-40
		5.4.7	Alternative 5a – Reduced Project 6.4-mgd Desalination Plant	
			(Intake Slant Wells at CEMEX)	5.4-50
		5.4.8	Alternative 5b – Reduced Project 6.4-mgd Desalination Plant	
			(Intake Slant Wells at Potrero Road)	5.4-59
	5.5	Alternat	tives Impact Analysis	5.5-1
		5.5.1	Overview	5.5-2
		5.5.2	Geology, Soils, and Seismicity	5.5-5
		5.5.3	Surface Water Hydrology and Water Quality	5.5-29
		5.5.4	Groundwater Resources	5.5-80
		5.5.5	Marine Biological Resources	5.5-110
		5.5.6		5.5-138
		5.5.7		5.5-172
		5.5.8	Land Use, Land Use Planning, and Recreation	5.5-187
		5.5.9		5.5-202
		5.5.10		5.5-217
		5.5.11		5.5-235
		5.5.12		5.5-246
		5.5.13		5.5-265
				5.5-281
		5.5.15	5	5.5-302
		5.5.16	5	5.5-314
		5.5.17		5.5-325
		5.5.18	6 ,	5.5-332
		5.5.19		5.5-343
		5.5.20		5.5-352
		5.5.21	Growth Inducement	5.5-372
	5.6		mentally Superior/Environmentally Preferred Alternative, and	
		-	Preferred Alternative	5.6-1
		5.6.1	Summary and Comparison of Impacts of Alternatives	5.6-2
		5.6.2	Determination of Environmentally Superior/Environmentally	
			Preferred and NOAA-Preferred Alternative	5.6-6
~		. .		• •
6.			derations	6-1
	6.1		ant and Unavoidable Environmental Effects	6-1
	6.2	-	ant Irreversible Changes and Short-Term versus Long-Term Uses	
		6.2.1	Irreversible Changes	6-3
		6.2.2	Short-Term versus Long-Term Uses	6-4
	6.3		-Inducing Impacts	6-5
		6.3.1	Introduction	6-5
		6.3.2	Relationship between Land Use Planning and Water Supply	6-6
		6.3.3	Regulatory Framework	6-10
		6.3.4	Approach to Analysis	6-11
		6.3.5	Growth-Inducement Potential	6-12
		6.3.6	Secondary Effects of Growth	6-38
	• •	6.3.7	Growth Inducement Potential of Cumulative Water Supply Projects	s 6-45
	6.4		Consistency with Monterey Bay National Marine Sanctuary	0.40
		Desalin	ation Guidelines	6-46

7.	-	ort Prepa			7-1
	7.1	Coordin 7.1.1		Consultations ered Species Act Section 7	7-1 7-1
		7.1.2	Magnus	on Stevens Fishery Conservation and Management	
		740		ential Fish Habitat Consultation	7-2 7-3
		7.1.3 7.1.4		Historic Preservation Act Section 106 Compliance Zone Management Act Federal Consistency Review	7-3 7-4
	7.2		Preparei		7-4
8.	Draf	t EIR/EIS	Comme	nts and Responses	
	8.1	Introduc			8.1-1
		8.1.1 8.1.2		ses to Comments Methodology and Organization ommenters	8.1-2 8.1-3
	8.2	Master	Response	es	
	0	8.2.1		Response 1: EIR/EIS Authorship	8.2-1
		8.2.2		Response 2: Source Water Components and Definitions	8.2-2
		8.2.3		Response 3: Water Rights	8.2-4
			8.2.3.1		8.2-5
			8.2.3.2		8.2-5
			8.2.3.3	Authority and Experience of SWRCB to Opine on Water Rights	8.2-7
			8.2.3.4	Description of Supply Water	8.2-7
			8.2.3.5	Water Rights Analysis and Conclusions	8.2-8
			8.2.3.6	Return Water	8.2-13
			8.2.3.7	Effects on Marina Coast Water District	8.2-13
			8.2.3.8		8.2-14
			8.2.3.9	Recirculation of Draft EIR/EIS	8.2-15
		8.2.4		Response 4: The Agency Act and Return Water	8.2-17
			8.2.4.1	Agency Act Compliance and Location of Return Water	8.2-17
			8.2.4.2 8.2.4.3	Required Amount of Return Water Anticipated versus Actual Amount of Return Water	8.2-19 8.2-19
		8.2.5		Response 5: The Role of the Hydrogeologic Working	0.2-19
		0.2.10		nd its Relationship to the EIR/EIS	8.2-24
			8.2.5.1	2013 Settlement Agreement	8.2-24
			8.2.5.2	Establishment and Role of HWG	8.2-24
			8.2.5.3	HWG Members	8.2-25
			8.2.5.4	HWG Activities	8.2-25
			8.2.5.5		8.2-26
			8.2.5.6	Potential Conflicts of Interest and Independent Judgement	8.2-27
		8.2.6	Master F	Response 6: The Sustainable Groundwater	-
				ment Act	8.2-31
			8.2.6.1	Sustainable Groundwater Management Act	8.2-31
				Basins and Subbasins	8.2-32
		0.0.7		Project Consistency with SGMA	8.2-36
		8.2.7		Response 7: The Deeper Aquifers of the Salinas Valley vater Basin	Q
			8.2.7.1	The Deeper Aquifers – Terms, Characteristics,	8.2-37
			0.2.7.1	and Production	8.2-37
			8.2.7.2	Computer Model Response in the Deeper Aquifer	8.2-38

				Page
8.	Draft EIR/EIS	Commen	ts and Responses (continued)	
	8.2.8	Master Re	sponse 8: Project Source Water and Seawater Intrusion	8.2-39
			Cone of Depression and Capture Zone	8.2-39
			Groundwater Quality within the Capture Zone	8.2-47
			Ocean Water Percentage	8.2-49
		8.2.8.4	Summary of Impact Conclusions	8.2-49
	8.2.9		esponse 9: Electrical Resistivity Tomography (ERT)	
			rne Electromagnetics (AEM)	8.2-53
		8.2.9.1	ERT Technology, Application, and Recent Studies	8.2-53
		8.2.9.2	ERT/AEM Requires Ground-Truthing: Correlation with	
			Actual Subsurface Data	8.2-55
		8.2.9.3	Use of ERT/AEM Results in the Analysis of	
			Groundwater Impacts in the EIR/EIS	8.2-57
	8.2.10	Master Re	esponse 10: Environmental Baseline under CEQA	
		and NEPA	A	8.2-63
	8.2.11	Master Re	esponse 11: CalAm Test Slant Well	8.2-65
		8.2.11.1	Background	8.2-65
			Coastal Development Permit and CEQA Review for	
			Test Slant Well	8.2-66
		8.2.11.3	MBNMS Authorizations and NEPA Review for Test	
			Slant Well	8.2-66
			Monitoring Wells	8.2-67
			The Long-Term Pump Test	8.2-67
			Use of the Test Well Data in the EIR/EIS	8.2-73
			Conversion of Test Slant Well to Permanent Well	8.2-73
			New Technology	8.2-74
			Slant Well Angle	8.2-77
	8.2.12		esponse 12: The North Marina Groundwater Model	o o T o
		(v.2016)		8.2-79
			NMGWM2016 Purpose and Approach	8.2-79
			Calibration Assessment	8.2-86
			Superposition	8.2-93
	0.0.40		Sensitivity Analysis	8.2-97
	8.2.13		esponse 13: Demand (Project Need) and Growth	8.2-99
			Purpose of the EIR/EIS Demand and Supply Information	
			Demand Assumptions	8.2-100 8.2-106
			Supply Assumptions Growth Inducement	
				8.2-114
	8.2.14		Alternative Supply and Demand Assumptions esponse 14: CEMEX Settlement Agreement	8.2-117 8.2-121
	0.2.14			8.2-121
			CEMEX and CCC Settlement Agreement Final EIR/EIS Considerations	8.2-122
	8.2.15		esponse 15: Alternative Desalination Projects –	0.2-123
	0.2.15		formation Sources, and Cumulative Scenario	8.2-127
			Monterey Bay Regional Water Project (MBRWP or	0.2-121
			DeepWater Desal) Status	8.2-127
			People's Project Status and Basis for Analysis	8.2-127
			Cumulative Impact Scenario Related to DeepWater	5.2 121
			Desal Project and People's Project	8.2-129

8.	Draft	t EIR/EIS	Comments and Responses (continued)	Page
	8.3	Federal	Agency Comments and Responses	8.3-1
		Federal	Agency Comment Letters	
		8.3.1 8.3.2	Department of the Army, Fort Ord Base Realignment and Closure Field Office (FOBRAC) Department of the Army, US Army Installation Management	8.3-3
			Command (USARMY)	8.3-5
		8.3.3	Monterey Bay National Marine Sanctuary Advisory Council, Research Activity Panel (MBNMS RAP)	8.3-16
		8.3.4 8.3.5	United States Army Corps of Engineers (USACE) United States Environmental Protection Agency (USEPA)	8.3-31 8.3-24
		Respon	ses to Federal Agency Comments	
		8.3.1	Department of the Army, Fort Ord Base Realignment and Closure Field Office (FOBRAC)	8.3-28
		8.3.2	Department of the Army, US Army Installation Management Command (USARMY)	8.3-31
		8.3.3	Monterey Bay National Marine Sanctuary Advisory Council, Research Activity Panel (MBNMS RAP)	8.3-50
		8.3.4 8.3.5	United States Army Corps of Engineers (USACE) United States Environmental Protection Agency (USEPA)	8.3-56 8.3-58
	8.4		gency Comments and Responses	8.4-1
			gency Comment Letters	
		8.4.1	California Coastal Commission (CCC)	8.4-3
		8.4.2	California Department of Fish and Wildlife (CDFW)	8.4-5 8.4-14
		8.4.3 8.4.4	California Department of Parks and Recreation (CA Parks) California State Lands Commission (CSLC)	8.4-14 8.4-17
		8.4.4 8.4.5	State Water Resources Control Board (SWRCB)	8.4-17
			ses to State Agency Comment Letters	
		8.4.1	California Coastal Commission (CCC)	8.4-25
		8.4.2	California Department of Fish and Wildlife (CDFW)	8.4-26
		8.4.3	California Department of Parks and Recreation (CA Parks)	8.4-30
		8.4.4	California State Lands Commission (CSLC)	8.4-34
		8.4.5	State Water Resources Control Board (SWRCB)	8.4-35
	8.5	-	gency Comments and Responses	8.5-1
		<i>Local A</i> (8.5.1	gency Comment Letters City of Marina	8.5-3
		0.5.1	City of Marina – Main Letter	8.5-3
			City of Marina – Jacobson James & Associates Letter	8.5-100
		8.5.2	Marina Coast Water District (MCWD)	8.5-129
		0.0.2	MCWD – Main Letter	8.5-129
			MCWD – Hopkins Groundwater Consultants (HGC)	8.5-251
			MCWD – GeoHydros (MCWD-GH)	8.5-345
			MCWD – EKI	8.5-386
			MCWD – IntakeWorks	8.5-418
			MCWD – Hopkins Groundwater Consultants2 (HGC2)	8.5-439
			MCWD – EKI2	8.5-512
		8.5.3	Monterey Bay Air Resources District (MBARD)	8.5-523
		8.5.4	Monterey County Resource Management Agency (MCRMA)	8.5-525
		8.5.5	Monterey County Water Resources Agency (MCWRA)	8.5-527

				<u>Page</u>
8.	Draf	t EIR/EIS	S Comments and Responses (continued)	
		Local A	gency Comment Letters (continued)	
		8.5.6	Monterey Peninsula Regional Water Authority (MPRWA)	8.5-529
		8.5.7	Monterey Peninsula Water Management District (MPWMD)	8.5-532
		8.5.8	Monterey Regional Waste Management District (MRWMD)	8.5-544
		8.5.9	Monterey Regional Water Pollution Control Agency (MRWPCA)	8.5-545
		Respor	nses to Local Agency Comment Letters	
		8.5.1	City of Marina	8.5-557
			8.5.1.1 City of Marina – Main Letter	8.5-557
			8.5.1.2 City of Marina – Jacobson James & Associates Letter	8.5-632
		8.5.2	Marina Coast Water District (MCWD)	8.5-649
			8.5.2.1 MCWD – Main Letter	8.5-649
			8.5.2.2 MCWD – Hopkins Groundwater Consultants (HGC)	8.5-728
			8.5.2.3 MCWD – GeoHydros	8.5-744
			8.5.2.4 MCWD – EKI	8.5-755
			8.5.2.5 MCWD – IntakeWorks	8.5-765
			8.5.2.6 MCWD – Hopkins Groundwater Consultants2 (HGC2)	8.5-773
		050	8.5.2.7 MCWD – EKI2	8.5-780
		8.5.3	Monterey Bay Air Resources District (MBARD)	8.5-787
		8.5.4 8.5.5	Monterey County Resource Management Agency (MCRMA)	8.5-792 8 5 705
		8.5.6	Monterey County Water Resources Agency (MCWRA) Monterey Peninsula Regional Water Authority (MPRWA)	8.5-795 8.5-797
		8.5.7	Monterey Peninsula Water Management District (MPWMD)	8.5-800
		8.5.8	Monterey Regional Waste Management District (MRWMD)	8.5-826
		8.5.9	Monterey Regional Water Pollution Control Agency (MRWPCA)	8.5-827
	8.6		zations Comments and Responses	8.6-1
		-	zations Comment Letters	
		8.6.1	Ag Lang Trust (ALT)	8.6-3
		8.6.1	Ag Land Trust (ALT) Ag Land Trust – Letter 1 (ALT1)	8.6-3 8.6-3
		8.6.1		
			Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3)	8.6-3
		8.6.1 8.6.2	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE)	8.6-3 8.6-7 8.6-9 8.6-10
			Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter	8.6-3 8.6-7 8.6-9 8.6-10 8.6-10
			Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter	8.6-3 8.6-7 8.6-9 8.6-10 8.6-10 8.6-99
			Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Owens Letter	8.6-3 8.6-7 8.6-9 8.6-10 8.6-10 8.6-99 8.6-152
		8.6.2	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Owens Letter CURE – Owens Letter CURE - Sobczynski Letter	8.6-3 8.6-7 8.6-9 8.6-10 8.6-10 8.6-99 8.6-152 8.6-200
		8.6.2	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Fox Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am)	8.6-3 8.6-7 8.6-9 8.6-10 8.6-10 8.6-99 8.6-152 8.6-200 8.6-234
		8.6.2 8.6.3 8.6.4	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Fox Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA)	8.6-3 8.6-7 8.6-9 8.6-10 8.6-10 8.6-99 8.6-152 8.6-200 8.6-234 8.6-259
		8.6.2 8.6.3 8.6.4 8.6.5	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Fox Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA) Carmel River Watershed Conservancy (CRWC)	8.6-3 8.6-9 8.6-10 8.6-10 8.6-99 8.6-152 8.6-200 8.6-234 8.6-259 8.6-260
		8.6.2 8.6.3 8.6.4 8.6.5 8.6.6	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Owens Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA) Carmel River Watershed Conservancy (CRWC) CEMEX	8.6-3 8.6-7 8.6-9 8.6-10 8.6-99 8.6-152 8.6-200 8.6-234 8.6-259 8.6-260 8.6-262
		8.6.2 8.6.3 8.6.4 8.6.5 8.6.6 8.6.7	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Fox Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA) Carmel River Watershed Conservancy (CRWC) CEMEX Citizens for Just Water (CJW)	$\begin{array}{c} 8.6-3\\ 8.6-7\\ 8.6-9\\ 8.6-10\\ 8.6-99\\ 8.6-99\\ 8.6-152\\ 8.6-200\\ 8.6-234\\ 8.6-259\\ 8.6-259\\ 8.6-260\\ 8.6-262\\ 8.6-273\end{array}$
		8.6.2 8.6.3 8.6.4 8.6.5 8.6.6	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Fox Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA) Carmel River Watershed Conservancy (CRWC) CEMEX Citizens for Just Water (CJW) Coalition of Peninsula Businesses (CPB)	8.6-3 8.6-7 8.6-9 8.6-10 8.6-99 8.6-152 8.6-200 8.6-234 8.6-259 8.6-260 8.6-262 8.6-273 8.6-284
		8.6.2 8.6.3 8.6.4 8.6.5 8.6.6 8.6.7 8.6.8	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Fox Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA) Carmel River Watershed Conservancy (CRWC) CEMEX Citizens for Just Water (CJW)	$\begin{array}{c} 8.6-3\\ 8.6-7\\ 8.6-9\\ 8.6-10\\ 8.6-99\\ 8.6-99\\ 8.6-152\\ 8.6-200\\ 8.6-234\\ 8.6-259\\ 8.6-259\\ 8.6-260\\ 8.6-262\\ 8.6-273\end{array}$
		8.6.2 8.6.3 8.6.4 8.6.5 8.6.6 8.6.7 8.6.8 8.6.9	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Owens Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA) Carmel River Watershed Conservancy (CRWC) CEMEX Citizens for Just Water (CJW) Coalition of Peninsula Businesses (CPB) Deep Water Desal, LLC (DWD)	8.6-3 8.6-7 8.6-9 8.6-10 8.6-99 8.6-152 8.6-200 8.6-234 8.6-259 8.6-260 8.6-262 8.6-273 8.6-284
		8.6.2 8.6.3 8.6.4 8.6.5 8.6.6 8.6.7 8.6.8 8.6.9	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Owens Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA) Carmel River Watershed Conservancy (CRWC) CEMEX Citizens for Just Water (CJW) Coalition of Peninsula Businesses (CPB) Deep Water Desal, LLC (DWD) Ecological Rights Foundation (ERF), the Center for Biological	8.6-3 8.6-7 8.6-9 8.6-10 8.6-10 8.6-29 8.6-200 8.6-234 8.6-259 8.6-260 8.6-262 8.6-262 8.6-273 8.6-284 8.6-284
		8.6.2 8.6.3 8.6.4 8.6.5 8.6.6 8.6.7 8.6.8 8.6.9 8.6.10 8.6.11 8.6.12	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Fox Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA) Carmel River Watershed Conservancy (CRWC) CEMEX Citizens for Just Water (CJW) Coalition of Peninsula Businesses (CPB) Deep Water Desal, LLC (DWD) Ecological Rights Foundation (ERF), the Center for Biological Diversity (CDB), and Our Children's Earth Foundation (OCEF) Fort Ord Rec Users (FORU) Just Water (JW)	8.6-3 8.6-7 8.6-9 8.6-10 8.6-99 8.6-152 8.6-200 8.6-234 8.6-259 8.6-262 8.6-262 8.6-262 8.6-273 8.6-284 8.6-288 8.6-316 8.6-339 8.6-347
		8.6.2 8.6.3 8.6.4 8.6.5 8.6.6 8.6.7 8.6.8 8.6.9 8.6.10 8.6.11 8.6.12 8.6.13	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Fox Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA) Carmel River Watershed Conservancy (CRWC) CEMEX Citizens for Just Water (CJW) Coalition of Peninsula Businesses (CPB) Deep Water Desal, LLC (DWD) Ecological Rights Foundation (ERF), the Center for Biological Diversity (CDB), and Our Children's Earth Foundation (OCEF) Fort Ord Rec Users (FORU) Just Water (JW) Land Watch Monterey County (LWMC)	8.6-3 8.6-9 8.6-10 8.6-10 8.6-200 8.6-234 8.6-259 8.6-262 8.6-262 8.6-262 8.6-273 8.6-284 8.6-284 8.6-288 8.6-316 8.6-339 8.6-347 8.6-353
		8.6.2 8.6.3 8.6.4 8.6.5 8.6.6 8.6.7 8.6.8 8.6.9 8.6.10 8.6.11 8.6.12 8.6.13 8.6.14	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Owens Letter CURE - Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA) Carmel River Watershed Conservancy (CRWC) CEMEX Citizens for Just Water (CJW) Coalition of Peninsula Businesses (CPB) Deep Water Desal, LLC (DWD) Ecological Rights Foundation (ERF), the Center for Biological Diversity (CDB), and Our Children's Earth Foundation (OCEF) Fort Ord Rec Users (FORU) Just Water (JW) Land Watch Monterey County (LWMC) Pebble Beach Company (PBC)	8.6-3 8.6-7 8.6-9 8.6-10 8.6-10 8.6-29 8.6-200 8.6-234 8.6-259 8.6-262 8.6-262 8.6-273 8.6-273 8.6-284 8.6-288 8.6-316 8.6-316 8.6-347 8.6-353 8.6-362
		8.6.2 8.6.3 8.6.4 8.6.5 8.6.6 8.6.7 8.6.8 8.6.9 8.6.10 8.6.11 8.6.12 8.6.13	Ag Land Trust – Letter 1 (ALT1) Ag Land Trust – Letter 2 (ALT2) Ag Land Trust – Letter 3 (ALT3) California Unions for Reliable Energy (CURE) CURE – Main Letter CURE – Fox Letter CURE – Fox Letter CURE – Owens Letter CURE - Sobczynski Letter California-American Water Company (Cal-Am) Carmel River Steelhead Association (CRSA) Carmel River Watershed Conservancy (CRWC) CEMEX Citizens for Just Water (CJW) Coalition of Peninsula Businesses (CPB) Deep Water Desal, LLC (DWD) Ecological Rights Foundation (ERF), the Center for Biological Diversity (CDB), and Our Children's Earth Foundation (OCEF) Fort Ord Rec Users (FORU) Just Water (JW) Land Watch Monterey County (LWMC)	8.6-3 8.6-9 8.6-10 8.6-10 8.6-200 8.6-234 8.6-259 8.6-262 8.6-262 8.6-262 8.6-273 8.6-284 8.6-284 8.6-288 8.6-316 8.6-339 8.6-347 8.6-353

			Page
8.		S Comments and Responses (continued)	
		zations Comment Letters (continued)	
	8.6.17	Public Water Now (PWN)	8.6-385
		Public Water Now – Letter 1 (PWN1)	8.6-385
		Public Water Now – Letter 2 (PWN2)	8.6-388
	0.0.40	Public Water Now – Letter 3 (PWN3)	8.6-411
	8.6.18	, , , , , , , , , , , , , , , , , , , ,	0.0.440
	0 0 10	Farm Bureau (MCFB)	8.6-413
		Surfrider Foundation (Surfrider)	8.6-419
	0.0.20	Water Ratepayers Association of the Monterey Peninsula (WRAMP) WRAMP – Letter 1 (WRAMP1)	8.6-433
		WRAMP – Letter 2 (WRAMP2)	8.6-433 8.6-439
		WRAMP – Letter 3 (WRAMP3)	8.6-440
		WRAMP – Letter 4 (WRAMP4)	8.6-441
	Deenen		0.0-++1
	Respon 8.6.1	oses to Organizations Comments Ag Land Trust (ALT)	8.6-449
	0.0.1	8.6.1.1 Ag Land Trust – Letter 1	8.6-449 8.6-449
		8.6.1.2 Ag Land Trust – Letter 2	8.6-452
		8.6.1.3 Ag Land Trust – Letter 3	8.6-453
	8.6.2	California Unions for Reliable Energy (CURE)	8.6-454
	0.0.2	8.6.2.1 CURE – Main Letter	8.6-454
		8.6.2.2 CURE – Fox Letter	8.6-465
		8.6.2.3 CURE – Owens Letter	8.6-496
		8.6.2.4 CURE - Sobczynski Letter	8.6-512
	8.6.3	California-American Water Company (Cal-Am)	8.6-519
	8.6.4	Carmel River Steelhead Association (CRSA)	8.6-527
	8.6.5	Carmel River Watershed Conservancy (CRWC)	8.6-528
	8.6.6	CEMEX	8.6-529
	8.6.7	Citizens for Just Water (CJW)	8.6-537
	8.6.8	Coalition of Peninsula Businesses (CPB)	8.6-541
	8.6.9	Deep Water Desal, LLC (DWD)	8.6-543
	8.6.10	Ecological Rights Foundation (ERF), the Center for Biological	
		Diversity (CDB), and Our Children's Earth Foundation (OCEF)	8.6-552
	8.6.11	Fort Ord Rec Users (FORU)	8.6-569
	8.6.12	Just Water (JW)	8.6-573
	8.6.13	Land Watch Monterey County (LWMC)	8.6-574
	8.6.14	Pebble Beach Company (PBC)	8.6-581
		Point Blue Conservation Science	8.6-582
		Public Trust Alliance (PTA)	8.6-584
	0.0.17	Public Water Now (PWN) 8.6.17.1 Public Water Now – Letter 1	8.6-592
		8.6.17.2 Public Water Now – Letter 2	8.6-592 8.6-592
		8.6.17.3 Public Water Now – Letter 3	8.6-605
	8.6.18	Salinas Valley Water Company (SVWC) and Monterey County	0.0-003
	0.0.10	Farm Bureau (MCFB)	8.6-607
	8.6.19	Surfrider Foundation	8.6-608
		Water Ratepayers Association of the Monterey Peninsula	5.0 000
	0.0.20	(WRAMP)	8.6-615
		8.6.20.1 WRAMP – Letter 1	8.6-615
		8.6.20.2 WRAMP – Letter 2	8.6-616
		8.6.20.3 WRAMP – Letter 3	8.6-616
		8.6.20.4 WRAMP – Letter 4	8.6-616

				Page
8.	Draf	t EIR/EIS	S Comments and Responses (continued)	
	8.7	Individu	ual(s) Comments and Responses	8.7-1
		Individu	ual Comment Letters	
		8.7.1	Michael Baer	8.7-3
		8.7.2	David Beech	8.7-14
			David Beech – Letter 1	8.7-14
			David Beech – Letter 2	8.7-21
			David Beech – Letter 3	8.7-27
			David Beech – Letter 4	8.7-31
			David Beech – Letter 5	8.7-45
			David Beech – Letter 6	8.7-48
		8.7.3	Kathy Biala	8.7-49
			Kathy Biala – Letter 1	8.7-49
			Kathy Biala – Letter 2	8.7-80
			Kathy Biala – Letter 3	8.7-85
		8.7.4	William Bourcier	8.7-86
		8.7.5	David Brown	8.7-91
		8.7.6	Charles Cech	8.7-94
		8.7.7	Bob Coble	8.7-101
		8.7.8	Margaret-Anne Coppernoll	8.7-102
		8.7.9	Herbert Cortez	8.7-124
		8.7.10	Bruce Delgado	8.7-129
			Bruce Delgado – Letter 1	8.7-129
			Bruce Delgado – Letter 2	8.7-131
		8.7.11	Myrleen Fisher	8.7-132
		8.7.12	David Gorman	8.7-138
		8.7.13	Jane Haines	8.7-140
			Clifton Herrmann	8.7-141
		8.7.15	Juli Hofmann	8.7-143
		8.7.16	Thomas Moore	8.7-154
		8.7.17	Hebard Olsen	8.7-157
		8.7.18	Larry Parrish	8.7-158
			Paula Pelot	8.7-160
		8.7.20	Carol Reeb	8.7-161
		8.7.21	Dick Rotter	8.7-164
		8.7.22	Nancy Selfridge	8.7-165
			Nancy Selfridge – Letter 1	8.7-165
			Nancy Selfridge – Letter 2	8.7-169
			Nancy Selfridge – Letter 3	8.7-174
		8.7.23	Jan Shriner	8.7-178
		8.7.24	Roy Thomas	8.7-181
		Respor	nses to Individual Comments	
		8.7.1	Michael Baer	8.7-183
		8.7.2	David Beech	8.7-189
			8.7.2.1 David Beech – Letter 1	8.7-189
			8.7.2.2 David Beech – Letter 2	8.7-190
			8.7.2.3 David Beech – Letter 3	8.7-192
			8.7.2.4 David Beech – Letter 4	8.7-195
			8.7.2.5 David Beech – Letter 5	8.7-197
			8.7.2.6 David Beech – Letter 6	8.7-198

8	Draf	t FIR/FIS	S Comments and Responses (continued)	Page
0.	Diai		nses to Individual Comments (continued)	
		8.7.3	Kathy Biala	8.7-199
		0.7.5	8.7.3.1 Kathy Biala – Letter 1	8.7-199
			8.7.3.2 Kathy Biala – Letter 2	8.7-213
			8.7.3.3 Kathy Biala – Letter 3	8.7-216
		8.7.4	2	8.7-218
		8.7.5		8.7-223
			Charles Cech	8.7-224
		8.7.7	Bob Coble	8.7-228
		8.7.8	Margaret-Anne Coppernoll	8.7-229
		8.7.9		8.7-243
		8.7.10	Bruce Delgado	8.7-244
			8.7.10.1 Bruce Delgado – Letter 1	8.7-244
			8.7.10.2 Bruce Delgado – Letter 2	8.7-244
		8.7.11		8.7-245
			David Gorman	8.7-248
			Jane Haines	8.7-249
			Clifton Herrmann	8.7-250
			Juli Hofmann	8.7-252
			Thomas Moore	8.7-261
			Hebard Olsen	8.7-262
			Larry Parrish	8.7-263
			Paula Pelot	8.7-266
			Carol Reeb Dick Rotter	8.7-267 8.7-272
			Nancy Selfridge	8.7-272
		0.7.22	8.7.22.1 Nancy Selfridge – Letter 1	8.7-274
			8.7.22.2 Nancy Selfridge – Letter 2	8.7-275
			8.7.22.3 Nancy Selfridge – Letter 3	8.7-280
		8723	Jan Shriner	8.7-282
		8.7.24	Roy Thomas	8.7-287
	8.8		etters and Responses	8.8-1
		Form L	etters	
		8.8.1	Form Letter 1	8.8-3
		8.8.2	Form Letter 2	8.8-10
		Respor	nses to Form Letters	
		8.8.1	Form Letter 1	8.8-27
		8.8.2	Form Letter 2	8.8-29
	8.9	Draft E	IR/EIS Public Meeting Verbal Comments	8.9-1
		8.9.1	Public Meeting Verbal Comments Transcript	8.9-3
		8.9.1	Responses to Public Meeting Verbal Comments	8.9-23
Ind	lex			I-1

Ар	pendices	
Α.	NOP and NOI Scoping Report	A-1
A1.	Draft and Final EIR/EIS Distribution List	A1-1
	MPWSP Plant Sizing Data: Various Five- and Ten-Year Normal, Dry, and Maximum Month Demand Scenarios	B1-1
B2.	State Water Board Final Analysis of the Monterey Peninsula Water Supply	
~	Project	B2-1
	Coastal Water Elevations and Sea Level Rise Scenarios	C1-1
	Analysis of Historic and Future Coastal Erosion with Sea Level Rise	C2-1
	Exploratory Borehole Results	C3-1
	Modeling Brine Disposal into Monterey Bay – Supplement, Final Report	D1-1
	Brine Discharge Diffuser Analysis	D2-1
	Ocean Plan Compliance Assessment	D3-1
	Lawrence Berkeley National Laboratories Peer Review	E1-1
E2.	North Marina Groundwater Model Review, Revision, and Implementation for Slant Well Pumping Scenarios	E2-1
E3.	HWG Hydrogeologic Investigation Technical Report	
F.	Terrestrial Special-status Plant and Wildlife Species Considered	F-1
G1.	Air Quality and Greenhouse Gas Emissions Estimates	G1-1
G2.	Trussell Technologies Inc. Technical Memorandum, Response to CalAm MPWSP DEIR	G2-1
Н.	Pure Water Monterey GWR Project Consolidated Final EIR Chapter 2 Project	
	Description	H-1
11.	Open-Water and Subsurface Intakes	11-1
12.	Component Screening Results – Component Options Not Carried Forward	l2-1
J1.	Coastal Water Project EIR Analysis: MPWMD 2006 Estimate of Long-Term Water Needs Compared with Growth Anticipated in Jurisdictions General	
	Plans	J1-1
J2.	Secondary Effects of Growth	J2-1
K.	Existing Water Conservation and Water Recycling	K-1
L.	Alternative Supply - Demand Scenarios	L-1
М.	Appendices and Attachments to the DEIR/EIS Public Comment Letters	M-1
N.	Resumes	N-1
О.	Agency Coordination and Consultation	O-1

List of Figures		
ES-1	Monterey Peninsula Water Supply Project Overview	ES-9
3-1	CalAm Monterey District Service Area	3-3
3-2	Monterey Peninsula Water Supply Project Overview and Index Map	3-5
3-3a	MPWSP Subsurface Intake System	3-15
3-3b	Illustrative Cross-Section View of Subsurface Slant Wells	3-20
3-4	Proposed Pipelines - Lapis Road and Neponset Road Vicinity	3-23
3-5a	MPWSP Desalination Plant	3-24
3-5b	MPWSP Desalination Plant – Site Plan	3-25
3-6	New Desalinated Water Pipeline	3-33
3-7	New Transmission Main - City of Marina	3-34
3-8	New Transmission Main - Light Fighter Drive to General Jim Moore	
	Boulevard	3-35
3-9	ASR Facilities	3-36
3-10	Highway 68 Interconnection Improvements and Carmel Valley Pump	
	Station	3-39
3-11	Castroville Pipeline	3-40
3-12	Castroville Pipeline - Connection to CCSD Distribution System	3-41
3-13	Castroville Pipeline Optional Alignment	3-43
3-14	Site Plans: ASR-5 Well and ASR-6 Well	3-47
4-1	Cumulative Projects	4.1-29
4.2-1	Geologic Map of Project Area	4.2-5
4.2-2	Generalized Geologic Cross-Section	4.2-7
4.2-3	Local Geologic Cross-Section	4.2-9
4.2-4	Active and Potentially Active Regional Faults	4.2-17
4.2-5	Liquefaction Potential	4.2-27
4.2-6	Landslide Hazard Map	4.2-29
4.2-7	Representative Profile at Test Slant Well	4.2-51
4.2-8	Representative Profile at Proposed Slant Wells	4.2-52
4.3-1	Surface Water Resources in the Project Area	4.3-5
4.3-2	Flood Hazards in the Project Area	4.3-13
4.3-3	Areas Subject to Sea Level Rise in the Project Area	4.3-17
4.3-4	Illustrations of the Trajectory and Behavior of a Brine Dishcarge Plume	4.3-32
4.3-5	Illustrations of the Trajectory of a Dense Brine Discharge Plume	4.3-74
4.3-6	Typical Graphics Output of Jet Trajectory from VP Method: Brine Only	
	Dischrage (Scenario 2)	4.3-79
4.3-7	Brine Mixing Zone (BMZ) and Diffuser Overview	4.3-81
4.3-8	Non-merging Dense Discharge Plumes from Diffuser Ports (near field)	4.3-83
4.3-9	3DLIF Image of Laboratory-generated Generic Horizontal Dense Jet	4.3-86
4.3-10	UM3 Graphical Output for Scenario 2 (Pure Brine at 13.98 mgd)	4.3-86
4.3-11	Summary of Approach to Analysis for Determining Ocean Plan Compliance	4.3-98
4.4-1	Groundwater Basins and Areas in the Western Salinas Valley	
	Groundwater Basin	4.4-4
4.4-2	Conceptual Model of Coastal Aquifers	4.4-9
4.4-3	Project Area Hydrogeologic Cross Section	4.4-11
4.4-4	Thickness of Salinas Valley Aquitard	4.4-12
4.4-5	Salinas Valley Groundwater Basin - Groundwater Elevations in	
-	180-Foot-Aquifer	4.4-17
4.4-6	Salinas Valley Groundwater Basin - Groundwater Elevations in	
	400-Foot-Aquifer	4.4-18
4.4-7	Groundwater Flow – Seaside Basin Shallow Zone, July/August 2015	4.4-20
4.4-8	Groundwater Flow – Seaside Basin Deep Zone, July/August 2015	4.4-21

		Page	
List of Figures (continued)			
4.4-9	Slant Well and Monitoring Well Locations	4.4-25	
4.4-10	Historic Seawater Intrusion in the Salinas Valley Groundwater Basin – 180-Foot Aquifer	4.4-32	
4.4-11	Historic Seawater Intrusion in the Salinas Valley Groundwater Basin – 400-Foot Aquifer	4.4-33	
4.4-12	Groundwater Model Boundaries	4.4-53	
	Proposed Project: Response of 180-Foot Aquifer after 63 Years	1.1 00	
	0% Return Water	4.4-66	
4.4-13b	Extent of Capture Zone and -1 Foot Contour of Cone of Depression 180- Foot Aquifer After 63 Years 0% Return Water	4.4-67	
4.4-13c	Schematic Showing Relationship Between Cone of Depression and Capture Zone	4.4-68	
4.4-14	Proposed Project: 1-Foot Response in Dune Sand Aquifer	4.4-00	
4.4-14	Proposed Project: 1-Foot Response in 180-Foot Aquifer	4.4-72	
4.4-16	Proposed Project: 1-Foot Response in 400-Foot Aquifer	4.4-73	
4.4-17	Proposed Project Impact on Seawater Intrusion Front	4.4-93	
4.5-1	Identified Seafloor Habitats in Study Area	4.5-3	
4.5-2	Hard Substrate Subtidal Habitat in Monterey Bay	4.5-11	
4.5-3	Rockfish Conservation Areas Designated in MBNMS under Federal	ч .5-11	
4.0 0	Regulations	4.5-26	
4.5-4	Essential Fish Habitat Designated in MBNMS under Federal Regulations	4.5-27	
4.5-5	Sanctuary Ecologically Significant Areas Designated in MBNMS	4.5-38	
4.5-6	Marine Protected Areas along the California Coast	4.5-40	
4.6.1a	Vegetation Communities and Potential Wetlands and Waters in the		
	Terrestrial Biological Resources Study Area	4.6-11	
4.6.1b	Vegetation Communities and Potential Wetlands and Waters in the		
	Terrestrial Biological Resources Study Area	4.6-12	
4.6.1c	Vegetation Communities and Potential Wetlands and Waters in the		
	Terrestrial Biological Resources Study Area	4.6-13	
4.6.1d	Vegetation Communities and Potential Wetlands and Waters in the		
	Terrestrial Biological Resources Study Area	4.6-14	
4.6.1e	Vegetation Communities and Potential Wetlands and Waters in the Terrestrial Biological Resources Study Area	4.6-15	
4.6.1f	Vegetation Communities and Potential Wetlands and Waters in the	1.0 10	
	Terrestrial Biological Resources Study Area	4.6-16	
4.6.1g	Vegetation Communities and Potential Wetlands and Waters in the		
0	Terrestrial Biological Resources Study Area	4.6-17	
4.6.1h	Vegetation Communities and Potential Wetlands and Waters in the		
	Terrestrial Biological Resources Study Area	4.6-18	
4.6.1j	Vegetation Communities and Potential Wetlands and Waters in the		
-	Terrestrial Biological Resources Study Area	4.6-19	
4.6.1k	Vegetation Communities and Potential Wetlands and Waters in the		
	Terrestrial Biological Resources Study Area	4.6-20	
4.6.11	Vegetation Communities and Potential Wetlands and Waters in the		
	Terrestrial Biological Resources Study Area	4.6-21	
4.6.1m	Vegetation Communities and Potential Wetlands and Waters in the		
	Terrestrial Biological Resources Study Area	4.6-22	
4.6.1n	Vegetation Communities and Potential Wetlands and Waters in the		
	Terrestrial Biological Resources Study Area	4.6-23	
4.6.10	Vegetation Communities and Potential Wetlands and Waters in the		
	Terrestrial Biological Resources Study Area	4.6-24	

		<u>Page</u>		
List of Figures (continued)				
4.6-2a	Potential Environmentally Sensitive Habitat Areas in the Biological			
	Study Area	4.6-37		
4.6-2b	Potential Environmentally Sensitive Habitat Areas in the Biological			
	Study Area	4.6-38		
4.6-3a	CNDDB Occurrence Records	4.6-42		
4.6-3b	CNDDB Occurrence Records	4.6-43		
4.6-3c	CNDDB Occurrence Records	4.6-44		
4.6-4	Designated Critical Habitat	4.6-69		
4.7-1	Environmental Cases Near Project Components - Northern Portion	4.7-5		
4.7-2	Environmental Cases Near Project Components - Southern Portion	4.7-6		
4.8-1	Coastal Zone	4.8-5		
4.8-2	Recreational Opportunities in the Northern Project Area	4.8-7		
4.8-3	Recreational Opportunities in the Southern Project Area	4.8-8		
4.12-1	Noise Monitoring Locations	4.12-9		
4.12-2	Construction Noise Contours for Well ASR-5	4.12-31		
4.12-3	Construction Noise Contours for Well ASR-5 with 10-foot barrier Construction Noise Contours for Well ASR-6	4.12-32		
4.12-4 4.12-5		4.12-33 4.12-34		
4.12-5	Construction Noise Contours for Well ASR-6 with 15-foot barrier Proposed Access Pit Locations	4.12-34		
4.13-1	Landscape Units and Scenic Roadways	4.13-30		
4.14-1		4.14-7		
	Existing Setting	4.14-11		
	Existing Setting	4.14-12		
4.14-4	Existing Views of MPWSP Desalination Plant Site from Highway 1	4.14-40		
4.15-1	Culturally Sensitive Areas	4.15-7		
4.15-2	Historic Resources in the Source Water Pipeline APE	4.15-25		
4.16-1	Farmland Mapping Designations and Williamson Act Contracts	4.16-4		
4.16-2	Farmland Mapping Designations and Williamson Act Contracts for the			
	Castroville Pipeline	4.16-5		
4.19-1	County to County Commuting Estimates: Monterey County	4.19-10		
4.19-2	County to County Commuting Estimates: San Benito County	4.19-11		
4.19-3	County to County Commuting Estimates: Santa Cruz County	4.19-12		
5.3-1	Alternative Component Options - Marina and Seaside	5.3-7		
5.3-2	Alternative Component Options - Moss Landing	5.3-8		
5.4-1	Alternative 1 - Slant Wells at Potrero Road	5.4-15		
5.4-2	Alternative 2 - Open Water Intake at Moss Landing	5.4-19		
5.4-3	Alternative 3 - Monterey Bay Regional Water Project	5.4-23		
5.4-4	Alternative 4 - Peoples' Moss Landing Water Desalination Project	5.4-41		
5.4-5	Alternative 5a - Intake Slant Wells at CEMEX	5.4-53		
5.4-6	Alternative 5b - Intake Slant Wells at Potrero Road	5.4-61		
5.5-1	Summary of Approach to Analysis for Determining Ocean Plan			
	Compliance for Alternative 5 and GWR Combined Discharge Scenarios	5.5-77		
5.5-2	Potrero Rd Slant Wells: 1-Foot Response in Dune Sand Aquifer under			
	24.1 MGD Pumping	5.5-91		
5.5-3	Potrero Rd Slant Wells: 1-Foot Response in 180-Foot Aquifer under			
	24.1 MGD Pumping	5.5-92		
5.5-4	Potrero Rd Slant Wells: 1-Foot Response in 400-Foot Aquifer under			
5 5 5	24.1 MGD Pumping	5.5-93		
5.5-5	Alternative 5a Site: 1-Foot Response in Dune Sand Aquifer under	5 5 1 02		
	15.5 MGD Pumping	5.5-103		

list of l	Figures (continued)	<u>Page</u>
LISCOLI	rigures (continued)	
5.5-6	Alternative 5a Site: 1-Foot Response in 180-Foot Aquifer under 15.5 MGD Pumping	5.5-104
5.5-7	Alternative 5a Site: 1-Foot Response in 400-Foot Aquifer under	
0	15.5 MGD Pumping	5.5-105
5.5-8	Alternative 5b Slant Wells: 1-Foot Response in Dune Sand Aquifer under 15.5 MGD Pumping	5.5-106
5.5-9	Alternative 5b Slant Wells: 1-Foot Response in 180-Foot Aquifer under 15.5 MGD Pumping	5.5-107
5.5-10	Alternative 5b Slant Wells: 1-Foot Response in 400-Foot Aquifer under	
	15.5 MGD Pumping	5.5-108
	DWR SGMA Basin Map	8.2-34
8.2.8-1	Extent of Capture Zone and -1-Foot Contour of Cone of Depression,	
	Dune Sand Aquifer After 63 years, 0% Return Water	8.2-42
8.2.8-2	Extent of Capture Zone and -1-Foot Contour of Cone of Depression,	0.0.40
0 0 0 0	180-Foot Aquifer After 63 Years, 0% Return Water	8.2-43
8.2.8-3	Schematic Showing Relationship Between, Cone of Depression and	0.0.40
0 0 1 1 1	Capture Zone Groundwater Elevation in MPWSP MW-4	8.2-46 8.2-71
	Extended NMGWM ²⁰¹⁶	8.2-71
	2 Extended NMGWM ²⁰¹⁶ at 27.7 MGD (15% increase)	0.2-03 8.2-84
	Cross-section Showing Calculated Equivalent Freshwater Heads	8.2-04
	CalAm Easement and Access at CEMEX	8.2-125
	ASR-1 Disinfection Byproducts Parameters	8.3-36
	ASR-2 Disinfection Byproducts Parameters	8.3-37
	ASR-3 Disinfection Byproducts Parameters	8.3-38
	SM MW-1 Disinfection Byproducts Parameters	8.3-39
	SMS Deep Disinfection Byproducts Parameters	8.3-40
list of T		

List of Tables

ES-1	Alternatives Impact Summary	ES-21
ES-2	Summary of Impacts and Mitigation Measures – MPWSP Proposed Project	ES-33
2-1	Seaside Groundwater Basin Adjudicated Operating and Natural Safe	
	Yields with CalAm's Pre-adjudication Production	2-10
2-2	Existing Demand 2006–2015 (acre-feet)	2-11
2-3	Other Demand Assumptions	2-13
2-4	CalAm Monterey District Water Supplies with Proposed MPWSP	2-18
2-5	Future Water Demand – Service Area Jurisdictions	2-29
3-1	Facilities Summary for the Proposed Project	3-9
3-2	Length of Permanent Slant Wells Seaward of Mean High Water Line	3-19
3-3	Desalination Chemicals and Annual Usage	3-29
3-4	Construction Staging Areas	3-49
3-5	Construction Assumptions for the Proposed Project	3-53
3-6	Overview of Typical Facility Operations for the Proposed Project	3-58
3-7	MPWSP Desalination Plant Operations – Normal Operations vs.	
	Recovery Post 2-Day Shutdown	3-59
3-8	Anticipated Permits and Approvals	3-63
4.1-1	Overview of Alternatives Evaluated in Detail	4.1-3
4.1-2	Cumulative Projects	4.1-18
4.2-1	Summary of Geologic Units and Project Component Locations	4.2-4

4.2-2 Modified Mercalli Intensity Scale 4.2-15 4.2-3 Active and Potentially Active Faults 4.2-18 4.2-4 Summary of Estimated Peak Ground Accelerations at Proposed Facility Locations 4.2-24 4.2-5 Applicable Regional and Local Plans and Policies Relevant to Geology, Solis, and Seismicity 4.2-37 4.2-7 Summary of Impacts – Geology, Soils, and Seismicity 4.2-53 4.2-8 Comparison of Jet Plume and Ambient Ocean Currents at Monterey 4.2-71 4.3-1 Seasonal Average Temperature, Salinity, and Density Properties at MRWPCA Outfall Diffuser 4.3-11 4.3-2 303(d) List of Impaired Water Bodies in the Project Vicinity 4.3-20 4.3-3 Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity 4.3-20 4.3-4 Water Quality Objectives in the 2016 Ocean Plan 4.3-33 4.3-5 Water Quality Objectives in the 2016 Ocean Plan 4.3-43 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-43 4.3-7 Applicable Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-43 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-60 <td< th=""><th colspan="4">List of Tables (continued)</th></td<>	List of Tables (continued)			
4.2-3 Active and Potentially Active Faults 4.2-18 4.2-4 Summary of General Soil Properties 4.2-24 4.2-5 Summary of General Soil Properties 4.2-24 4.2-6 Applicable Regional and Local Plans and Policies Relevant to Geology, Soils, and Seismicity 4.2-37 4.2-7 Summary of Impacts – Geology, Soils, and Seismicity 4.2-37 4.2-8 Comparison of Jet Plume and Ambient Ocean Currents at Monterey 4.2-71 4.3-1 Seasonal Average Temperature, Salinity, and Density Properties at MRWPCA Outfall Diffuser 4.3-11 4.3-2 303() List of Impaired Water Bodies in the Project Vicinity 4.3-27 4.3-3 Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity 4.3-30 4.3-5 Water Quality Dijectives in the 2016 Ocean Plan 4.3-33 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-43 4.3-7 Applicable Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-60 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-71 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-71 4.3-8 Nonthl	4.2-2	Modified Mercalli Intensity Scale	4.2-15	
4.2-4 Summary of General Soil Properties 4.2-24 4.2-5 Summary of Estimated Peak Ground Accelerations at Proposed Facility 4.2-26 4.2-7 Summary of Impacts – Geology, Soils, and Seismicity 4.2-37 4.2-7 Summary of Impacts – Geology, Soils, and Seismicity 4.2-37 4.2-8 Comparison of Jet Plume and Ambient Ocean Currents at Monterey 4.2-71 4.3-1 Seasonal Average Temperature, Salinity, and Density Properties at MRWPCA Outfall Diffuser 4.3-11 4.3-2 303(d) List of Impaired Water Bodies in the Project Vicinity 4.3-27 4.3-3 Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity 4.3-27 4.3-4 Water Quality Objectives in the 2016 Ocean Plan 4.3-30 4.3-5 Overview of Post-Construction Requirements for Stormwater Management 4.3-43 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-47 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-47 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-10 Proposed Project Discharge Scenarios 4.3-80				
 4.2-5 Summary of Estimated Peak Ground Accelerations at Proposed Facility Locations 4.2-26 4.2-6 Applicable Regional and Local Plans and Policies Relevant to Geology, Solls, and Seismicity 4.2-53 4.2-7 Summary of Impacts – Geology, Soils, and Seismicity 4.2-71 4.2-8 Comparison of Jet Plume and Ambient Ocean Currents at Monterey 4.2-71 4.3-11 Seasonal Average Temperature, Salinity, and Density Properties at MRWPCA Outfall Diffuser 4.3-21 4.3-2 303(d) List of Impaired Water Bodies in the Project Vicinity 4.3-20 4.3-3 Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity 4.3-23 4.3-5 Water Quality Objectives in the 2016 Ocean Plan 4.3-33 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-34 Ayater Quality Objectives in the 2016 Ocean Plan 4.3-30 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-43 Applicable Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-60 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-73 Monthly Average Flow, Salinity, and Density 4.3-80 Monthly Rodel Results for Dense Discharge Scenarios 4.3-90 A.3-11 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-102 A.3-10 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern 4.3-102 <				
Locations 4.2-26 Applicable Regional and Local Plans and Policies Relevant to Geology, Soils, and Seismicity 4.2-37 4.2-7 Summary of Impacts – Geology, Soils, and Seismicity 4.2-53 4.2-8 Comparison of Jet Plume and Ambient Ocean Currents at Monterey 4.2-71 4.3-1 Seasonal Average Temperature, Salinity, and Density Properties at MRWPCA Outfall Diffuser 4.3-11 4.3-2 303(d) List of Impaired Water Bodies in the Project Vicinity 4.3-27 4.3-3 Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity 4.3-27 4.3-4 Water Quality Objectives in the 2016 Ocean Plan 4.3-33 4.3-5 Water Quality in Monterey Bay (Constituent Concentrations Reported Under CCLEAN 2008-2015) 4.3-33 4.3-6 Overview of Post-Construction Requirements for Stormwater Management MRWPCA Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-47 4.3-9 Monthly Average Flows of Secondary. Treated Water Markewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-72 4.3-11 Effuent Water Quality Characteristics				
Soils, and Seismicity4.2-374.2-7Summary of Impacts – Geology, Soils, and Seismicity4.2-374.2-8Comparison of Jet Plume and Ambient Ocean Currents at Monterey4.2-714.3-1Seasonal Average Temperature, Salinity, and Density Properties at MRWPCA Outfall Diffuser4.3-714.3-2303(d) List of Impaired Water Bodies in the Project Vicinity4.3-204.3-3Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity4.3-204.3-4Water Quality Objectives in the 2016 Ocean Plan4.3-304.3-5Water Quality in Monterey Bay (Constituent Concentrations Reported Under CCLEAN 2008-2015)4.3-334.3-6Overview of Post-Construction Requirements for Stormwater Management Pertaining to Surface Water Hydrology and Water Quality4.3-434.3-8Summary of Impacts – Surface Water Hydrology and Water Quality projected 2017) and the Estimated Brine Stream under the MPWSP Proposed Project Discharge Scenarios Modeled 4.3-714.3-714.3-10Proposed Project Discharge Scenarios Mariant Builution Model Results for Dense Discharge Scenarios at the Edge of the ZID for Ocean Plan Constituents of Concern Ather 2004 for Ocean Plan Constituents of Concern 4.3-104.3-104.3-11MPWSP Operational Discharge Scenarios at the Edge of the ZID for Ocean Plan Constituents of Concern Ather 2004 for Ocean Plan Constituents of Concern Ather 2004 for Ocean Plan Constituents of Concern Ather 2007 for Ocean Plan Constituents of Concern Ather 2004 for Cocean Plan Constituents of Concern Ather 2004 for Discharge Scenarios4.3-104.3-10HPWSP Operational Discharge Scenarios Concern <td></td> <td>Locations</td> <td>4.2-26</td>		Locations	4.2-26	
4.2-7 Summary of Impacts - Geology, Soils, and Seismicity 4.2-51 4.2-8 Comparison of Jet Plume and Ambient Ocean Currents at Monterey 4.2-71 4.3-1 Seasonal Average Temperature, Salinity, and Density Properties at MRWPCA Outfall Diffuser 4.3-11 4.3-2 303(d) List of Impaired Water Bodies in the Project Vicinity 4.3-20 4.3-3 Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity 4.3-20 4.3-4 Water Quality Objectives in the 2016 Ocean Plan 4.3-33 4.3-5 Water Quality in Monterey Bay (Constituent Concentrations Reported Under CCLEAN 2008-2015) 4.3-33 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-47 4.3-7 Applicable Regional watewater thydrology and Water Quality 4.3-47 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-47 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998-2012 and project Discharge Scenarios 4.3-77 4.3-11 Effluent Water Guality for Dense Discharge Scenarios 4.3-80 4.3-13 Dilution Results for Dense Discharge Scenarios 4.3-90 4.3-14 Dilution Results for Duosant Discharge Scenarios 4.3-10	4.2-6			
4.2-8 Comparison of Jet Plume and Ambient Ocean Currents at Monterey 4.2-71 3.3 Seasonal Average Temperature, Salinity, and Density Properties at MRWPCA Outfall Diffuser 4.3-11 4.3-2 303(d) List of Impaired Water Bodies in the Project Vicinity 4.3-20 4.3-3 Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity 4.3-20 4.3-4 Water Quality Objectives in the 2016 Ocean Plan 4.3-30 4.3-5 Water Quality Objectives in the 2016 Ocean Plan 4.3-33 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-43 4.3-7 Applicable Regional and Local Land Use Plans, Policies, and Regulations 4.3-47 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-47 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-80 4.3-12 Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-101 4.3-14 Dilution Model Results for Ducean Plan Constituents of Concern 4.3-102				
 4.3-1 Seasonal Average Temperature, Salinity, and Density Properties at MRWPCA Outfall Diffuser 4.3-11 4.3-2 303(d) List of Impaired Water Bodies in the Project Vicinity 4.3-3 Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity 4.3-4 Water Quality Objectives in the 2016 Ocean Plan 4.3-30 4.3-5 Water Quality Dipotetives in the 2016 Ocean Plan 4.3-30 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-43 4.3-7 Applicable Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-43 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-60 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-72 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-80 4.3-14 Dilution Results for Dense Discharge Scenarios 4.3-80 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-10 4.3-11 4.3-11 4.3-11 4.3-11 4.3-12 4.3-13 Flection Volumes 4.3-10 4.3-14 4.3-17 4.3-17 4.3-18 4.3-19 4.3-19 4.3-19 4.3-19 4.3-10 4.3-10 4.3-11 4.3-11 4.3-12 4.3-13 4.3-14 4.3-14 4.3-14 4.3-15				
MRWPCA Outfall Diffuser 4.3-11 4.3-2 303(d) List of Impaired Water Bodies in the Project Vicinity 4.3-20 4.3-3 Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity 4.3-20 4.3-4 Water Quality Objectives in the 2016 Ocean Plan 4.3-30 4.3-5 Water Quality in Monterey Bay (Constituent Concentrations Reported Under CCLEAN 2008-2015) 4.3-33 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-43 4.3-7 Applicable Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-47 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-47 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-72 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-72 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-80 4.3-14 Dilution Results for Buoyant Discharge Scenarios 4.3-101 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concern 4.3-102 4.3-16 MPWSP Operational Discharge Scen			4.2-71	
4.3-3 Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity 4.3-27 4.3-4 Water Quality Objectives in the 2016 Ocean Plan 4.3-30 4.3-5 Water Quality in Monterey Bay (Constituent Concentrations Reported Under CCLEAN 2008-2015) 4.3-33 4.3-6 Overview of Post-Construction Requirements for Stormwater Management A.3-43 4.3-43 4.3-7 Applicable Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-43 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-43 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998-2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-73 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-80 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-90 4.3-14 Dilution Results for Buoyant Discharge Scenarios: 4.3-90 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-102 4.3-16 MPWSP Operational Discharge Scenarios: Estimated Co	4.3-1		4.3-11	
4.3-3 Designated Beneficial Uses of Surface Water Bodies in the Project Vicinity 4.3-27 4.3-4 Water Quality Objectives in the 2016 Ocean Plan 4.3-30 4.3-5 Water Quality in Monterey Bay (Constituent Concentrations Reported Under CCLEAN 2008-2015) 4.3-33 4.3-6 Overview of Post-Construction Requirements for Stormwater Management A.3-43 4.3-43 4.3-7 Applicable Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-43 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-43 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998-2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-73 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-80 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-90 4.3-14 Dilution Results for Buoyant Discharge Scenarios: 4.3-90 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-102 4.3-16 MPWSP Operational Discharge Scenarios: Estimated Co	4.3-2	303(d) List of Impaired Water Bodies in the Project Vicinity	4.3-20	
4.3-4 Water Quality Objectives in the 2016 Ocean Plan 4.3-30 4.3-5 Water Quality in Monterey Bay (Constituent Concentrations Reported Under CCLEAN 2008-2015) 4.3-33 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-43 4.3-43 4.3-7 Applicable Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-60 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-61 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-72 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-70 4.3-12 Operational Discharge Scenarios: 4.3-80 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-90 4.3-14 MPWSP Operational Discharge Scenarios: 4.3-102 4.3-15 MPWSP Operational Discharge Scenarios: 4.3-102 4.3-16 MPWSP Operational Discharge Scenarios: 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Sce				
 4.3-5 Water Quality in Monterey Bay (Constituent Concentrations Reported Under CCLEAN 2008-2015) 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-7 Applicable Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-47 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-60 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-72 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-73 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-80 4.3-14 Dilution Results for Dense Discharge Scenarios 4.3-80 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-102 4.3-103 4.4-24 4.4-24 4.4-24 Groundwater Rustics of Test Slant Well 4.4-24 4.4-24 4.4-24 4.4-24 4.4-24 4.4-26 4.4-27 4.4-28 4.4-29 4.4-20 4.4-20 4.4-20 4.4-20 4.4-21 4.4-22 4.4-24 4.4-24 4.4-24 4.4-24 4.4-24 4.4-24 4.4-24 4.4-24 4.4-24 4.4-25 <l< td=""><td></td><td></td><td></td></l<>				
 4.3-6 Overview of Post-Construction Requirements for Stormwater Management 4.3-7 Applicable Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-43 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-60 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-72 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-73 4.3-12 Operational Discharge Flow, Salinity, and Density 4.3-78 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-80 4.3-14 Dilution Results for Buoyant Discharge Scenarios 4.3-80 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-101 4.3-17 4.3-18 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan 0bjective for Ocean Plan Constituents of Concern 4.3-102 4.3-103 4.4-14 4.4-24 Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins 4.4-24 4.4-24 4.4-27 4.4-26 4.4-29 4.4-29 4.4-24 4.4-27 4.4-24 4.4-25 4.4-26 4.4-27 4.4-26 4.4-27 4.4-28 4.4-29 4.4-29 4.4-29 4.4-20 4.4-24 4.4-25<td></td><td>Water Quality in Monterey Bay (Constituent Concentrations Reported</td><td></td>		Water Quality in Monterey Bay (Constituent Concentrations Reported		
4.3-7 Applicable Regional and Local Land Use Plans, Policies, and Regulations Pertaining to Surface Water Hydrology and Water Quality 4.3-47 4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-60 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-72 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-77 4.3-12 Operational Discharge Flow, Salinity, and Density 4.3-78 4.3-13 Dilution Results for Dense Discharge Scenarios 4.3-80 4.3-14 Dilution Results for Buoyant Discharge Scenarios: 4.3-90 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-101 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-102 4.4-1 Summary of ASR Injection Volumes 4.4-23 4.4-2 Groundwater Rasins 4.4-23 4.4-4 Groundwater Rusins of Mixing Study 4.4-24 4.4-4 Groundwater Resources 4	126	/		
4.3-8 Summary of Impacts – Surface Water Hydrology and Water Quality 4.3-60 4.3-9 Monthly Average Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-71 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-72 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-77 4.3-12 Operational Discharge Flow, Salinity, and Density 4.3-78 4.3-13 Dilution Results for Dense Discharge Scenarios 4.3-80 4.3-14 Dilution Results for Dense Discharge Scenarios 4.3-80 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-101 4.3-16 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.4-23 4.4-2 Summary of ASR Injection Volumes 4.4-23 4.4-3 Groundwater Resuins 4.4-24 4.4-4 Groundwater		Applicable Regional and Local Land Use Plans, Policies, and Regulations		
 4.3-9 Monthly Áverage Flows of Secondary-Treated Wastewater from the MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-72 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-73 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-80 4.3-14 Dilution Results for Buoyant Discharge Scenarios 4.3-80 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-10 4.3-16 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-107 4.4-1 Summarized Characteristics of Water Bearing Geologic Units 4.4-23 4.4-24 4.4-25 Groundwater Basins 4.4-24 4.4-26 Groundwater Quality of Test Slant Well 4.4-27 4.4-26 Groundwater Quality of Test Slant Well 4.4-27 4.4-36 Groundwater Quality Objectives 4.4-40 4.4-70 Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources 4.4-45 4.4-8 4.4-96 Summary of Impacts – Groundwater Resources 4.4-45 4.4-91 4.4-91 4.4-95 4.4-91 4.4-95 4.4-95 4.4-94 				
MRWPCA Regional Wastewater Treatment Plant (1998–2012 and projected 2017) and the Estimated Brine Stream under the MPWSP 4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-72 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-78 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-80 4.3-14 Dilution Results for Buoyant Discharge Scenarios 4.3-80 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-10 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-107 4.4-1 Summarized Characteristics of Water Bearing Geologic Units 4.4-23 4.4-3 Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins 4.4-24 4.4-4 Groundwater Quality of Test Slant Well 4.4-5 Water Chemistry Results of Mixing Study 4.4-6 Groundwater Quality of Jest Slant Well 4.4-7 4.4-8 Correlation of Geologic Units, Aquifers, and Model Layers 4.4-4 4.4-9 Summary of Impacts – Groundwater Resources 4.4-45 4.4-9 Summary of Impacts – Groundwater Resources 4.4-54 4.4-9 Summary of Impacts – Groundwater Resources 4.4-61 4.4-10 Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells 4.4-75 4.4-11 Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water 4.4-98			4.3-60	
projected 2017) and the Estimated Brine Stream under the MPWSP4.3-714.3-10Proposed Project Discharge Scenarios Modeled4.3-724.3-11Effluent Water Quality Characteristics Assumed for All Modeled Scenarios4.3-784.3-12Operational Discharge Flow, Salinity, and Density4.3-784.3-13Dilution Model Results for Dense Discharge Scenarios4.3-804.3-14Dilution Results for Buoyant Discharge Scenarios4.3-804.3-15MPWSP Operational Discharge Scenarios:Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern4.3-1014.3-16MPWSP Operational Discharge Scenarios:Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern4.3-1024.3-17Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios4.3-1074.4-1Summarized Characteristics of Water Bearing Geologic Units4.4-234.4-2Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Quality of Test Slant Well4.4-244.4-4Groundwater Quality of Test Slant Well4.4-244.4-5Water Chemistry Results of Mixing Study4.4-294.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-454.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-75	4.3-9			
4.3-10 Proposed Project Discharge Scenarios Modeled 4.3-72 4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-77 4.3-12 Operational Discharge Flow, Salinity, and Density 4.3-78 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-80 4.3-14 Dilution Results for Buoyant Discharge Scenarios 4.3-90 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-101 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-102 4.3-10 Summarized Characteristics of Water Bearing Geologic Units 4.4-73 4.4-2 Summary of ASR Injection Volumes 4.4-23 4.4-3 Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Resources 4.4-24 4.4-4 Groundwater Quality of Test Slant Well 4.4-27 4.4-7 Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources 4.4-40 4.4-8 Correlation of Geologic Units, Aquifers, and Model Layers 4.4-54 4.4-9 Summary of Impacts – Groundwater Resources 4.4-61 4.4-9 Summary of Impacts – Groundwa				
4.3-11 Effluent Water Quality Characteristics Assumed for All Modeled Scenarios 4.3-77 4.3-12 Operational Discharge Flow, Salinity, and Density 4.3-78 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-80 4.3-14 Dilution Results for Buoyant Discharge Scenarios 4.3-80 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-101 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-107 4.4-1 Summarized Characteristics of Water Bearing Geologic Units 4.4-7 4.4-2 Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Resoins 4.4-24 4.4-4 Groundwater Quality of Test Slant Well 4.4-27 4.4-5 Water Chemistry Results of Mixing Study 4.4-28 4.4-7 Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources 4.4-61 4.4-8 Correlation of Geologic Units, Aquifers, and Model Layers 4.4-54 4.4-9 Summary of Impacts – Groundwater Resources 4.4-61 4.4-10			4.3-71	
4.3-12 Operational Discharge Flow, Salinity, and Density 4.3-78 4.3-13 Dilution Model Results for Dense Discharge Scenarios 4.3-80 4.3-14 Dilution Results for Buoyant Discharge Scenarios 4.3-90 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-101 4.3-16 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-107 4.4-1 Summarized Characteristics of Water Bearing Geologic Units 4.4-73 4.4-2 Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Results of Mixing Study 4.4-24 4.4-4 Groundwater Quality of Test Slant Well 4.4-27 4.4-5 Water Chemistry Results of Mixing Study 4.4-40 4.4-7 Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources 4.4-61 4.4-8 Correlation of Geologic Units, Aquifers, and Model Layers 4.4-61 4.4-9 Summary of Impacts – Groundwater Resources 4.4-61 4.4-10 Known Active Supply Wells Wit			4.3-72	
4.3-13Dilution Model Results for Dense Discharge Scenarios4.3-804.3-14Dilution Results for Buoyant Discharge Scenarios4.3-904.3-15MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern4.3-1014.3-16MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern4.3-1024.3-17Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios4.3-1024.4-1Summarized Characteristics of Water Bearing Geologic Units4.4-734.4-2Summary of ASR Injection Volumes4.4-234.4-3Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Quality of Test Slant Well4.4-244.4-6Groundwater Quality Objectives4.4-404.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-644.4-9Summary of Impacts – Groundwater Resources4.4-644.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98		Effluent Water Quality Characteristics Assumed for All Modeled Scenarios	4.3-77	
4.3-14 Dilution Results for Buoyant Discharge Scenarios 4.3-90 4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-101 4.3-16 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-102 4.4-1 Summarized Characteristics of Water Bearing Geologic Units 4.4-7 4.4-2 Summary of ASR Injection Volumes 4.4-23 4.4-3 Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins 4.4-24 4.4-4 Groundwater Quality of Test Slant Well 4.4-27 4.4-5 Water Chemistry Results of Mixing Study 4.4-29 4.4-6 Groundwater Resources 4.4-40 4.4-7 Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources 4.4-45 4.4-8 Correlation of Geologic Units, Aquifers, and Model Layers 4.4-51 4.4-9 Summary of Impacts – Groundwater Resources 4.4-61 4.4-10 Known Active Supply Wells Within Vicinity of the Proposed MPWSP 4.4-75 </td <td>4.3-12</td> <td>Operational Discharge Flow, Salinity, and Density</td> <td>4.3-78</td>	4.3-12	Operational Discharge Flow, Salinity, and Density	4.3-78	
4.3-15 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern 4.3-101 4.3-16 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-102 4.4-1 Summarized Characteristics of Water Bearing Geologic Units 4.4-7 4.4-2 Summary of ASR Injection Volumes 4.4-23 4.4-3 Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins 4.4-24 4.4-4 Groundwater Quality of Test Slant Well 4.4-27 4.4-5 Water Chemistry Results of Mixing Study 4.4-29 4.4-7 Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources 4.4-45 4.4-8 Correlation of Geologic Units, Aquifers, and Model Layers 4.4-54 4.4-10 Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells 4.4-75 4.4-11 Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water 4.4-98	4.3-13		4.3-80	
the Edge of the ZID for Ocean Plan Constituents of Concern4.3-1014.3-16MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern4.3-1024.3-17Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios4.3-1074.4-1Summarized Characteristics of Water Bearing Geologic Units4.4-74.4-2Summary of ASR Injection Volumes4.4-234.4-3Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Quality of Test Slant Well4.4-244.4-5Water Chemistry Results of Mixing Study4.4-294.4-6Groundwater Quality Objectives4.4-404.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-544.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98	4.3-14	Dilution Results for Buoyant Discharge Scenarios	4.3-90	
 4.3-16 MPWSP Operational Discharge Scenarios: Estimated Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-107 4.4-1 Summarized Characteristics of Water Bearing Geologic Units 4.4-7 4.4-2 Summary of ASR Injection Volumes 4.4-3 Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins 4.4-24 4.4-4 Groundwater Quality of Test Slant Well 4.4-27 4.4-5 Water Chemistry Results of Mixing Study 4.4-29 4.4-6 Groundwater Quality Objectives 4.4-40 4.4-7 Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources 4.4-54 4.4-9 Summary of Impacts – Groundwater Resources 4.4-61 4.4-10 Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells 4.4-75 4.4-11 Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water 4.4-98 	4.3-15	MPWSP Operational Discharge Scenarios: Estimated Concentrations at		
at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern 4.3-102 4.3-17 Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios 4.3-107 4.4-1 Summarized Characteristics of Water Bearing Geologic Units 4.4-7 4.4-2 Summary of ASR Injection Volumes 4.4-23 4.4-3 Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins 4.4-27 4.4-5 Water Chemistry Results of Mixing Study 4.4-29 4.4-6 Groundwater Quality Objectives 4.4-40 4.4-7 Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources 4.4-54 4.4-8 Correlation of Geologic Units, Aquifers, and Model Layers 4.4-54 4.4-9 Summary of Impacts – Groundwater Resources 4.4-61 4.4-10 Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells 4.4-75 4.4-11 Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water 4.4-98		the Edge of the ZID for Ocean Plan Constituents of Concern	4.3-101	
Objective for Ocean Plan Constituents of Concern4.3-1024.3-17Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios4.3-1074.4-1Summarized Characteristics of Water Bearing Geologic Units4.4-74.4-2Summary of ASR Injection Volumes4.4-234.4-3Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins4.4-244.4-4Groundwater Quality of Test Slant Well4.4-274.4-5Water Chemistry Results of Mixing Study4.4-294.4-6Groundwater Quality Objectives4.4-404.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98	4.3-16			
4.3-17Effect of Nozzle Angle on dilution for Select Operational Discharge Scenarios4.3-1074.4-1Summarized Characteristics of Water Bearing Geologic Units4.4-74.4-2Summary of ASR Injection Volumes4.4-234.4-3Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins4.4-244.4-4Groundwater Quality of Test Slant Well4.4-274.4-5Water Chemistry Results of Mixing Study4.4-294.4-6Groundwater Quality Objectives4.4-294.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-454.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98				
Scenarios4.3-1074.4-1Summarized Characteristics of Water Bearing Geologic Units4.4-74.4-2Summary of ASR Injection Volumes4.4-234.4-3Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins4.4-244.4-4Groundwater Quality of Test Slant Well4.4-274.4-5Water Chemistry Results of Mixing Study4.4-294.4-6Groundwater Quality Objectives4.4-404.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-544.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98			4.3-102	
4.4-1Summarized Characteristics of Water Bearing Geologic Units4.4-74.4-2Summary of ASR Injection Volumes4.4-234.4-3Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins4.4-234.4-4Groundwater Quality of Test Slant Well4.4-274.4-5Water Chemistry Results of Mixing Study4.4-294.4-6Groundwater Quality Objectives4.4-404.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-544.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98	4.3-17			
4.4-2Summary of ASR Injection Volumes4.4-234.4-3Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins4.4-234.4-4Groundwater Quality of Test Slant Well4.4-274.4-5Water Chemistry Results of Mixing Study4.4-294.4-6Groundwater Quality Objectives4.4-404.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-454.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98				
4.4-3Groundwater Extraction Summary for the Salinas Valley and Seaside Groundwater Basins4.4-244.4-4Groundwater Quality of Test Slant Well4.4-274.4-5Water Chemistry Results of Mixing Study4.4-294.4-6Groundwater Quality Objectives4.4-404.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-454.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98	4.4-1			
Groundwater Basins4.4-244.4-4Groundwater Quality of Test Slant Well4.4-274.4-5Water Chemistry Results of Mixing Study4.4-294.4-6Groundwater Quality Objectives4.4-404.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-454.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98			4.4-23	
4.4-4Groundwater Quality of Test Slant Well4.4-274.4-5Water Chemistry Results of Mixing Study4.4-294.4-6Groundwater Quality Objectives4.4-404.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-454.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98	4.4-3		4 4-24	
4.4-5Water Chemistry Results of Mixing Study4.4-294.4-6Groundwater Quality Objectives4.4-404.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-404.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98	4 4-4			
4.4-6Groundwater Quality Objectives4.4-404.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-454.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98				
4.4-7Applicable Regional and Local Plans and Policies Relevant to Groundwater Resources4.4-454.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98				
Groundwater Resources4.4-454.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98				
4.4-8Correlation of Geologic Units, Aquifers, and Model Layers4.4-544.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98	7.7 /		4 4-45	
4.4-9Summary of Impacts – Groundwater Resources4.4-614.4-10Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98	4 4-8			
 4.4-10 Known Active Supply Wells Within Vicinity of the Proposed MPWSP Slant Wells 4.4-75 4.4-11 Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water 4.4-98 				
Slant Wells4.4-754.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98				
4.4-11Water Chemistry of Treated Carmel River Water and Sand City Desalinated Water4.4-98			4.4-75	
Desalinated Water 4.4-98	4.4-11			
			4.4-98	
	4.5-1			

		Page		
List of Tables (continued)				
4.5-2	Special-Status Marine Species and Their Potential to Occur within the			
	Study Area	4.5-13		
4.5-3	Fish Species Present in Monterey Bay Managed under Magnuson- Stevens Act	4.5-20		
4.5-4	Species Managed under the Magnuson-Stevens Fisheries Management Plan and California Nearshore Fisheries Management Plan and their Potential to Occur within the Study Area	4.5-21		
4.5-5	Summary of Impacts – Marine Biological Resources	4.5-47		
4.5-5 4.5-6	Potential Effects of Varying Underwater Noise Levels on Fish	4.5-50		
4.5-7	Summary of NOAA Established Permanent Threshold Shift (PTS) and Temporary Threshold Shift (TTS) Sound Levels from Underwater			
1 5 0	Noise Levels for Marine Mammals	4.5-50		
4.5-8 4.5-9	Swimming Speeds of Plankton, Invertebrates, and Larval Fish Results from Studies on the Effects of Elevated Salinity on Marine	4.5-53		
4.5-10	Organisms Toxicity Test Results and Mean Effective Concentrations of	4.5-56		
4.0-10	Salinity Toxicity	4.5-58		
4.5-11	Summary of Domestic and International Brine Limits	4.5-60		
4.5-12	Dilution Model Results for Dense Discharge Scenarios	4.5-61		
4.6-1	Vegetation Community and Habitat Type Crosswalk	4.6-9		
4.6-2	Special-Status Species with the Potential to Occur at Project Facilities	4.6-75		
4.6-3	Construction Staging Areas, Habitat Types, and Special-Status Species with Potential to Occur	4.6-92		
4.6-4	Applicable Regional and Local Land Use Plans and Policies Relevant to Terrestrial Biological Resources	4.6-105		
4.6-5	Summary of Impacts – Terrestrial Biological Resources	4.6-128		
4.6-6	Special-Status Species and Sensitive Natural Communities that Could Be Significantly Impacted During Construction of the Proposed Facilities	4.6-131		
4.6-7	Summary of Terrestrial Biological Resource Mitigation Measure			
	Restoration and Compensation Requirements	4.6-170		
4.6-8	Burrowing Owl Burrow Buffers	4.6-183		
4.6-9 4.6-10	Construction Staging Areas Sensitive Natural Community Impacts Applicable Local Plans, Policies, and Ordinances Related to	4.6-213		
	Tree Removal	4.6-237		
4.7-1	Environmental Cases Identified Within 0.25 Mile of the Project Area	4.7-4		
4.7-2	Schools in the Vicinity of Project Components	4.7-12		
4.7-3	Applicable Regional and Local Plans and Policies Relevant to Hazards and Hazardous Materials	4.7-21		
4.7-4	Summary of Impacts – Hazards and Hazardous Materials	4.7-26		
4.7-5	MPWSP Desalination Plant (9.6 mgd) – Water Treatment Chemicals	4.7-35		
4.8-1	Overview of Designated Land Uses and Recreational Facilities within 0.25 Mile of the Proposed Facilities	4.8-3		
4.8-2	Applicable Regional and Local Land Use Plans and Policies Relevant to Land Use and Recreation	4.8-23		
4.8-3	Summary of Impacts – Land Use and Recreation	4.8-23 4.8-34		
4.8-3 4.9-1	Characteristics of Roads that Could be Directly Affected by Project	4.0-04		
-+.3-1	Construction Activities	4.9-4		
4.9-2	Applicable Regional and Local Land Use Plans and Policies Relevant to			
4.9-3	Traffic and Transportation	4.9-9 4.9-15		
4.3-0	Summary of Impacts – Traffic and Transportation	4.9-10		

List of 7	Tables (continued)	
4.9-4	Estimated Maximum Daily Vehicle Trips During Project Construction	4.9-17
4.10-1	Ambient Air Quality Monitoring Summary (2011–2015)	4.10-6
4.10-2	State and Federal Ambient Air Quality Standards and Attainment Status	
	for North Central Coast Air Basin	4.10-10
4.10-3	Applicable Regional and Local Land Use Plans and Policies Relevant	
	to Air Quality	4.10-15
4.10-4	Summary of Impacts – Air Quality	4.10-21
4.10-5	Estimated Maximum Daily Construction Emissions	4.10-22
4.10-6	Maximum DPM Concentrations, Cancer Risks, and Chronic Health Indices	4.10-28
4.10-7	Proposed Project Operational Emissions	4.10-30
4.11-1	California GHG Emissions	4.11-5
4.11-2	Summary of Impacts – GHG Emissions	4.11-15
4.11-3	Total GHG Emissions from Project Construction	4.11-16
4.11-4	Total GHG Emissions from Project Operations	4.11-17
4.11-5	Total Amortized GHG Emissions	4.11-18
4.12-1	Short-term Noise Measurements	4.12-6
4.12-2	Long-term Noise Measurement – MPWSP Desalination Plant	4.12-7
4.12-3	Applicable Regional and Local Land Use Plans and Policies Relevant	4 4 0 4 4
1 1 2 1	to Noise and Vibration	4.12-11
4.12-4 4.12-5	Vibration Thresholds	4.12-20 4.12-20
4.12-5	Summary of impacts – Noise and Vibration Summary of Noise Levels at Sensitive Receptors During Construction	4.12-20
4.12-0	Construction Noise Levels – Pipelines North of Reservation Road	4.12-22
4.12-7	Maximum Construction Noise Levels – New Transmission Main	4.12-23
4.12-0	Maximum Construction Noise Levels – ASR Pipelines	4.12-35
	Summary of Vibration Levels at Sensitive Receptors During Construction	4.12-47
	Maximum Operational Noise Levels – ASR-5 and ASR-6 Wells	4.12-58
	Maximum Operational Noise Levels –Carmel Valley Pump Station	4.12-59
	Maximum Operational Noise Levels – Booster Stations (Main System–	
	Hidden Hills Interconnection Improvements)	4.12-59
4.12-14	Typical Construction Noise Levels	4.12-64
4.13-1	Local Utility and Public Service Providers, by Jurisdiction	4.13-3
4.13-2	Applicable Regional and Local Plans and Policies Relevant to Public	
	Services and Utilities	4.13-11
4.13-3	Summary of Impacts – Public Services and Utilities	4.13-15
4.13-4	Brine Stream and Treated Wastewater Effluent Flows through the	
	MRWPCA Outfall and Diffuser	4.13-23
4.14-1	Matrix for Ranking Aesthetic Resource Value	4.14-3
4.14-2	Applicable Regional and Local Plans and Policies Relevant to	
	Aesthetic Resources	4.14-23
4.14-3	Summary of Impacts – Aesthetic Resources	4.14-28
4.15-1	Criteria for Determining Paleontological Potential	4.15-16
4.15-2	Applicable Regional and Local Land Use Plans and Policies Relevant to	4 4 5 0 7
1 15 2	Cultural and Paleontological Resources	4.15-37
4.15-3 4.15-4	Damage Threshold to Historic Buildings from Construction Equipment Summary of Impacts – Cultural and Paleontological Resources	4.15-43 4.15-44
4.15-4		4.15-44
4.10-1	Monterey County Agricultural Land Summary and Conversion by FMMP Land Use Category (2012-2014)	4.16-3
4.16-2	Applicable Regional and Local Plans and Policies Relevant to	J. 10-3
1.102	Agricultural Resources	4.16-11
4.16-3	Summary of Impacts – Agricultural Resources	4.16-13

		Page		
List of Tables (continued)				
4.16-4	Project Facilities Proposed on Land Zoned for Agriculture	4.16-19		
4.17-1	Applicable Regional and Local Plans and Policies Relevant to			
	Mineral Resources	4.17-7		
4.17-2	Summary of Impacts – Mineral Resources	4.17-9		
4.18-1	PG&E's 2015 Electric Power Mix Delivered to Customers	4.18-3		
4.18-2	Applicable Regional and Local Plans and Policies Relevant to			
	Energy Conservation	4.18-9		
4.18-3	Summary of Impacts – Energy Conservation	4.18-13		
4.19-1	Population, Housing, and Labor Force in Potentially Affected Jurisdictions	4.19-2		
4.19-2	Summary of Impacts – Population and Housing	4.19-5		
4.20-1	Labor Force and Unemployment for Potentially Affected Jurisdictions			
	(2015 Annual Average)	4.20-3		
4.20-2	Projected Employment Growth for Potentially Affected Jurisdictions	4 00 4		
4 00 0	(2010 – 2035) Minarity Deputations of Detentially Affacts of Oceanization (2010, 2014)	4.20-4		
4.20-3	Minority Populations of Potentially Affected Geographies (2010-2014)	4.20-7		
4.20-4	Income Characteristics for Potentially Affected Geographies (2010-2014)	4.20-8		
4.20-5	Summary of Impacts – Socioeconomics and Environmental Justice Maximum Daily Construction Emissions Scenarios in Study Area	4.20-14		
4.20-6	Communities	4.20-17		
5.2-1	Results of Plan B Component Screening	5.2-3		
5.3-1	Intake Options Screening Results	5.3-9		
5.3-2	Outfall Options Screening Results	5.3-20		
5.3-3	Desalination Plant Site Options Screening Results	5.3-27		
5.3-4	Intake Options Evaluation – Preliminary Comparison of Direct	0.0 21		
0.0	Environmental Impacts	5.3-31		
5.3-5	Outfall Options Evaluation – Preliminary Comparison of Direct			
	Environmental Impacts	5.3-37		
5.3-6	Desalination Plant Site Options Evaluation – Preliminary Comparison			
	of Direct Environmental Impacts	5.3-43		
5.3-7	Summary of Intake Options Comparison Table	5.3-47		
5.3-8	Summary of Outfall Options Comparison Table	5.3-50		
5.3-9	Summary of Desalination Plant Site Options Comparison Table	5.3-52		
5.4-1	Overview of Alternatives Evaluated in Detail	5.4-2		
5.4-2	Comparison of the No Project Alternative to Existing Conditions and the			
	Proposed Project	5.4-6		
5.4-3	Anticipated Carmel River System Water Supply Under the No Project/			
- / /	No Action Alternative Based On Order WR 2016-0016	5.4-9		
5.4-4	Summary of Alternative 3 Components Considered for Analysis	5.4-28		
5.4-5 5.4-6	Outfall Water Quality and Quantity	5.4-45 5.4-46		
5.4-0 5.4-7	Other Residuals Disposal Estimated Sludge Production	5.4-40 5.4-46		
5.4-7 5.4-8	Assumptions for Construction Activities	5.4-40 5.4-47		
5.4-0 5.4-9	Alternative 5a Facilities	5.4-47		
5.5-1	Water Supply Projects Relevant to the Cumulative Scenario for Each	000		
0.01	Alternative	5.5-4		
5.5-2	Alternative 5 Discharge Scenarios Modeled	5.5-62		
5.5-3	Alternative 5 Operational Discharge Flow, Salinity and Density	5.5-63		
5.5-4	Dilution Model Results for Alternative 5 Dense Discharge Scenarios	5.5-65		
5.5-5	Dilution Results for Buoyant Alternative 5 Discharge Scenarios	5.5-66		
5.5-6	MPWSP Cumulative Discharge Scenarios Modeled	5.5-70		
5.5-7	Alternative 5 Combined Operational Discharge Flow, Salinity, and Density	5.5-72		

		Page		
List of Tables (continued)				
5.5-8	Dilution Model Results for Alternative 5 Combined Dense Discharge Scenarios	5.5-73		
5.5-9	Dilution Model Results for Alternative 5 Combined Buoyant Discharge	5.5-75		
5.5-10	Scenarios Alternative 5 Combined Operational Discharge Scenarios: Predicted Concentrations at the Edge of the ZID for Ocean Plan Constituents of Concern	5.5-79		
5.5-11	Alternative 5 Combined Operational Discharge Scenarios: Predicted Concentrations at the Edge of the ZID Expressed as Percentage of Ocean Plan Objective for Ocean Plan Constituents of Concern	5.5-80		
5.5-12	Characteristics of Additional Roads that Could be Directly Affected by	5.5-202		
5.5-13	Project Construction Activities Total GHG Emissions Associated with Alternative 5a	5.5-202		
5.5-14	Labor Force and Unemployment Rate for Moss Landing (2015 Annual Average)	5.5-353		
5.5-15	Minority Population of Moss Landing (2010-2014)	5.5-354		
5.5-16	Income Characteristics for Moss Landing (2010-2014)	5.5-354		
5.5-17	MPWSP Demand Assumptions	5.5-373		
5.5-18	Existing and Anticipated Demand (acre-feet per year)	5.5-374		
5.5-19	Water Supplies and Demands During Seaside Groundwater Basin Replenishment Period, 9.6-mgd Desalination Plant with SVGB Return	5.5-374		
5.5-20	Alternative 1 – Slant Wells at Potrero Road Water supplies and Demands during SGB Replenishment Period: Two Future Demand Scenarios	5.5-377		
5.5-21	Alternative 2 – Open Ocean Intake at Moss Landing Water Supplies and Demands During SGB Replenishment Period: Two Future Demand			
5.5-22	Scenarios (acre-feet per year) Alternative 3 – DeepWater Desal Water Supplies and Demands during	5.5-379		
5.5-23	SGB Replenishment Period: Two Future Demand Scenarios Alternative 4 – People's Project Water supplies and Demands during	5.5-381		
5.5-24	SGB Replenishment Period: Two Future Demand Scenarios Alternative 5 – Reduced Desalination Plant Water Supplies and Demand	5.5-383		
5.6-1	during SGB Replenishment Period: Two Future Demand Scenarios Alternatives Impact Summary	5.5-385 5.6-8		
6.3-1	MPWSP Demand Assumptions	6-13		
6.3-2	Monterey District Commercial Sector Water Consumption Water Yearsa 2003 Through 2015	6-15		
6.3-3	Existing and Anticipated Demand	6-19		
6.3-4	Water Supplies and Demands During Seaside Groundwater Basin Replenishment Period, 9.6-mgd Desalination Plant with SVGB Return	6-19		
6.3-5	Range of Flow Volumes Accommodated by Pipeline Segment	6-21		
6.3-6	Service Area and Monterey County Growth Trends 1990-2010 Population and Housing	6-23		
6.3-7	AMBAG Population, Housing, and Employment Projections	6-25		
6.3-8	Future Water Demand and Available Supplies: Two Return Water Scenarios	6-36		
6.3-9	Significant Impacts Associated with Planned Growth in the Project Area	6-40		
6.3-10	Agencies with the Authority to Implement or Require Implementation of Measures to Avoid or Mitigate Growth-Related Impacts	6-43		
6.4-1	Assessment of Project Conformity With Guidelines for Desalination Plants in Monterey Bay National Marine Sanctuary	6-48		

		Page	
List of Tables (continued)			
8-1	Commenters on the Monterey Peninsula Water Supply Project Draft		
	EIR/EIS	8.1-4	
8.2.8-1	Total Dissolved Solids Concentrations in MPWSP Monitoring Wells		
	Located Within the Slant Well Capture Zone	8.2-48	
8.2.8-2	Representative Screen Intervals and Water Depths for Production		
	Wells Within Vicinity of the Proposed MPWSP Slant Wells	8.2-50	
8.2.12-1 Summary Statistics for the Comparison Between Measured and			
	NMGWM ²⁰¹⁶ Calculated Water Levels When Constant Head Values		
	are Set Equal to Mean Sea Level or Equivalent Freshwater Heads	8.2-85	
8.2.12-2 Summary of Error Statistics Between NMGWM2 ⁰¹⁵ and NMGWM ²⁰¹⁶			
	Using Identical Water Level Data	8.2-90	
8.2.13-1	Typical Monthly System Production Demant – Proposed MPWSP	8.2-110	
8.2.13-2 Average Daily Supply and Demand Assuming 9.6 mgd Desalination			
	Plant, by Month	8.2-112	