

**DRAFT ENVIRONMENTAL IMPACT REPORT/
ENVIRONMENTAL IMPACT STATEMENT**

FOR THE

BAY DELTA CONSERVATION PLAN

PREPARED FOR:

California Department of Water Resources
U.S. Bureau of Reclamation
U.S. Fish and Wildlife Service
National Marine Fisheries Service

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Contents

Tables	lxxiv
Figures	cxci
Acronyms and Abbreviations	ccxiii
Executive Summary	ES-1
ES.1 Introduction	ES-3
ES.1.1 Intended Uses of the BDCP EIR/EIS and Agency Roles and Responsibilities	ES-3
ES.1.1.1 Overview of BDCP Approval Process	ES-5
ES.1.1.2 Use of the EIR/EIS by Other Entities	ES-7
ES.2 Project Objectives/Purpose and Need	ES-7
ES.2.1 Project Objectives	ES-8
ES.2.2 Project Purpose and Need	ES-9
ES.2.2.1 Project Purpose	ES-9
ES.2.2.2 Project Need	ES-10
ES.3 Project Area	ES-12
ES.3.1 Delta Region (Plan Area)	ES-12
ES.3.2 Upstream of the Delta Region	ES-13
ES.3.3 SWP and CVP Export Service Areas	ES-13
ES.4 Proposed BDCP	ES-13
ES.4.1 Habitat Conservation Plans/Natural Community Conservation Plans	ES-13
ES.4.2 Covered Species	ES-14
ES.4.3 Covered Activities	ES-16
ES.4.4 Biological Goals and Objectives	ES-17
ES.4.5 Conservation Measures	ES-18
ES.4.6 Implementation Schedule	ES-20
ES.5 Alternatives Considered in the EIR/EIS	ES-21
ES.5.1 EIR/EIS BDCP Development of Alternatives	ES-22
ES.5.1.1 Alternatives Development Screening Process	ES-22
ES.5.1.2 No Action Alternative	ES-25
ES.5.1.3 BDCP Action Alternatives	ES-26
ES.5.2 Components of the BDCP Action Alternatives	ES-27
ES.5.2.1 Physical Components	ES-27
ES.5.2.2 Operational Components/Scenarios	ES-32
ES.5.2.3 Habitat Components	ES-36
ES.5.2.4 Reduction of Other Stressors	ES-38
ES.5.2.5 Avoidance and Minimization Measures	ES-38

ES.6	Public Involvement	ES-39
ES.6.1	EIR/EIS Scoping Meetings	ES-39
ES.6.2	Public Outreach Activities	ES-39
ES.6.2.1	BDCP Steering Committee and Working Groups	ES-39
ES.6.2.2	Stakeholder Briefings and Presentations	ES-40
ES.6.2.3	Public Meetings	ES-40
ES.6.2.4	Environmental Justice	ES-40
ES.6.2.5	Additional and Ongoing Public Participation Opportunities	ES-40
ES.6.2.6	Public Review of the Draft EIR/EIS	ES-40
ES.7	Areas of Known Controversy and Issues to be Resolved	ES-41
ES.8	Effects of the Alternatives	ES-43
ES.8.1	Resource Areas	ES-43
ES.8.2	CEQA and NEPA Baselines	ES-44
ES.8.3	Impacts, Mitigation Measures, Conclusions	ES-46
ES.8.3.1	Impacts	ES-46
ES.8.3.2	Mitigation Measures	ES-48
ES.8.3.3	Conclusions	ES-49
ES.9	Comparisons of the Alternatives	ES-49
ES.9.1	Water-Based Resources and Impact Mechanisms	ES-49
ES.9.1.1	Comparison of Water Flow Differences for BDCP Alternatives	ES-49
ES.9.1.2	Changes in Minimum Required Delta Outflow	ES-50
ES.9.1.3	Changes in Maximum Allowable Exports	ES-52
ES.9.1.4	New Rules for North Delta Diversions	ES-52
ES.9.1.5	Comparison of Flow Patterns for the BDCP Alternatives	ES-53
ES.9.2	Land-Based Resources and Impact Mechanisms	ES-56
ES.9.3	Air-Based Resources and Impact Mechanisms	ES-57
ES.10	References Cited	ES-59
Chapter 1	Introduction	1-1
1.1	About the BDCP	1-1
1.2	Background	1-3
1.3	Water Supply Development and Management	1-4
1.3.1	State Water Project	1-5
1.3.2	Central Valley Project	1-5
1.4	Historical Context	1-6
1.4.1	Delta Environmental Protection	1-6
1.4.2	CALFED and Delta Vision	1-8
1.4.3	Relationship to the Delta Reform Act and Delta Plan	1-10
1.5	BDCP EIR/EIS Project Area	1-11
1.5.1	Upstream of the Delta Region	1-12

1.5.2 Delta Region (Plan Area)1-12

1.5.3 SWP and CVP Service Areas1-12

1.6 Intended Uses of this EIR/EIS and Agency Roles and Responsibilities1-12

1.6.1 Overview of BDCP Approval Process1-14

1.6.2 Use of this EIR/EIS by Other Entities1-20

1.6.3 Decisions to be Made1-25

1.6.3.1 U.S. Fish and Wildlife Service1-25

1.6.3.2 National Marine Fisheries Service1-25

1.6.3.3 U.S. Bureau of Reclamation1-26

1.7 Public Scoping and Issues of Known Controversy1-27

1.8 CEQA/NEPA Terminology1-29

1.9 Related Actions, Programs, and Planning Efforts1-30

1.10 EIR/EIS Organization1-31

1.11 References Cited1-35

Chapter 2 Project Objectives and Purpose and Need 2-1

2.1 Overview2-1

2.2 Regulatory Background2-2

2.3 Project Objectives2-2

2.4 Purpose Statement2-4

2.5 Project Need2-5

2.5.1 Delta Ecosystem Health and Productivity2-5

2.5.2 Water Supply Reliability2-6

2.5.3 Delta Hydrology and Water Quality2-6

2.6 References Cited2-7

Chapter 3 Description of Alternatives 3-1

3.1 Introduction3-1

3.1.1 Preferred Alternative Under CEQA3-3

3.2 Alternatives Development Process3-4

3.2.1 Development of Alternatives3-6

3.2.1.1 Delta Water Conveyance Alternatives Identified in the BDCP Steering Committee Process3-6

3.2.1.2 Water Conveyance Alternatives Identified in EIR/EIS Scoping Comments3-7

3.2.1.3 First (Initial) Screening Analysis of Water Conveyance Alternatives3-7

3.2.1.4 Identification of Operations Alternatives3-8

3.2.1.5 Second Screening Analysis3-10

3.2.2 Alternatives Considered and Dismissed from Further Evaluation3-11

3.2.3 Development of DWR “Proposed Project” in 20123-12

3.3 Proposed Bay Delta Conservation Plan3-13

- 3.3.1 Covered Activities and Associated Federal Actions3-17
- 3.3.2 Conservation Measures3-18
 - 3.3.2.1 Implementation Schedule3-19
 - 3.3.2.2 Adaptive Management and Monitoring Program.....3-23
- 3.4 Components of the Alternatives: Overview3-23
 - 3.4.1 Overview of Water Conveyance Facility Components3-24
 - 3.4.1.1 Physical Components3-24
 - 3.4.1.2 Operational Components.....3-31
 - 3.4.2 Overview of Conservation Components3-38
 - 3.4.3 Overview of Conservation Components Related to Reducing Other Stressors.....3-39
- 3.5 Alternatives3-40
 - 3.5.1 No Action Alternative3-41
 - 3.5.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–5
(15,000 cfs; Operational Scenario A)3-46
 - 3.5.2.1 Physical and Operational Components3-46
 - 3.5.2.2 Conservation Components.....3-49
 - 3.5.2.3 Measures to Reduce Other Stressors and Avoidance and
Minimization Measures3-50
 - 3.5.2.4 Issuance of Federal Incidental Take Permits.....3-51
 - 3.5.2.5 Issuance of State Incidental Take Permits3-51
 - 3.5.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–5
(15,000 cfs; Operational Scenario A)3-51
 - 3.5.3.1 Physical and Operational Components3-51
 - 3.5.3.2 Conservation Components.....3-54
 - 3.5.3.3 Measures to Reduce Other Stressors and Avoidance and
Minimization Measures3-54
 - 3.5.3.4 Issuance of Federal Incidental Take Permits.....3-54
 - 3.5.3.5 Issuance of State Incidental Take Permits3-55
 - 3.5.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5
(15,000 cfs; Operational Scenario A)3-55
 - 3.5.4.1 Physical and Operational Components3-55
 - 3.5.4.2 Conservation Components.....3-58
 - 3.5.4.3 Measures to Reduce Other Stressors and Avoidance and
Minimization Measures3-58
 - 3.5.4.4 Issuance of Federal Incidental Take Permits.....3-58
 - 3.5.4.5 Issuance of State Incidental Take Permits3-58
 - 3.5.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five Intakes
(15,000 cfs; Operational Scenario B)3-58
 - 3.5.5.1 Physical and Operational Components3-58
 - 3.5.5.2 Conservation Components.....3-59

- 3.5.5.3 Measures to Reduce Other Stressors and Avoidance and Minimization Measures3-59
- 3.5.5.4 Issuance of Federal Incidental Take Permits.....3-59
- 3.5.5.5 Issuance of State Incidental Take Permits3-59
- 3.5.6 Alternative 2B—Dual Conveyance with East Alignment and Five Intakes (15,000 cfs; Operational Scenario B)3-59
 - 3.5.6.1 Physical and Operational Components3-59
 - 3.5.6.2 Conservation Components.....3-60
 - 3.5.6.3 Measures to Reduce Other Stressors.....3-60
 - 3.5.6.4 Issuance of Federal Incidental Take Permits.....3-60
 - 3.5.6.5 Issuance of State Incidental Take Permits3-60
- 3.5.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario B)3-60
 - 3.5.7.1 Physical and Operational Components3-60
 - 3.5.7.2 Conservation Components.....3-61
 - 3.5.7.3 Measures to Reduce Other Stressors.....3-61
 - 3.5.7.4 Issuance of Federal Incidental Take Permits.....3-61
 - 3.5.7.5 Issuance of State Incidental Take Permits3-61
- 3.5.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A)3-61
 - 3.5.8.1 Physical and Operational Components3-61
 - 3.5.8.2 Conservation Components.....3-63
 - 3.5.8.3 Measures to Reduce Other Stressors and Avoidance and Minimization Measures3-63
 - 3.5.8.4 Issuance of Federal Incidental Take Permits.....3-63
 - 3.5.8.5 Issuance of State Incidental Take Permits3-63
- 3.5.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H; CEQA Preferred Alternative)3-64
 - 3.5.9.1 Physical and Operational Components3-64
 - 3.5.9.2 Conservation Components.....3-67
 - 3.5.9.3 Measures to Reduce Other Stressors and Avoidance and Minimization Measures3-68
 - 3.5.9.4 Issuance of Federal Incidental Take Permits.....3-69
 - 3.5.9.5 Issuance of State Incidental Take Permits3-69
- 3.5.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C)3-69
 - 3.5.10.1 Physical and Operational Components3-69
 - 3.5.10.2 Conservation Components.....3-71
 - 3.5.10.3 Measures to Reduce Other Stressors and Avoidance and Minimization Measures3-71

3.5.10.4 Issuance of Federal Incidental Take Permits.....3-71

3.5.10.5 Issuance of State Incidental Take Permits3-71

3.5.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5
(15,000 cfs; Operational Scenario D)3-71

3.5.11.1 Physical and Operational Components3-71

3.5.11.2 Conservation Components.....3-72

3.5.11.3 Measures to Reduce Other Stressors and Avoidance and
Minimization Measures3-72

3.5.11.4 Issuance of Federal Incidental Take Permits.....3-72

3.5.11.5 Issuance of State Incidental Take Permits3-72

3.5.12 Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5
(15,000 cfs; Operational Scenario D)3-73

3.5.12.1 Physical and Operational Components3-73

3.5.12.2 Conservation Components.....3-73

3.5.12.3 Measures to Reduce Other Stressors and Avoidance and
Minimization Measures3-73

3.5.12.4 Issuance of Federal Incidental Take Permits.....3-73

3.5.12.5 Issuance of State Incidental Take Permits3-74

3.5.13 Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–
W5 (15,000 cfs; Operational Scenario D).....3-74

3.5.13.1 Physical and Operational Components3-74

3.5.13.2 Conservation Components.....3-74

3.5.13.3 Measures to Reduce Other Stressors.....3-74

3.5.13.4 Issuance of Federal Incidental Take Permits.....3-74

3.5.13.5 Issuance of State Incidental Take Permits3-75

3.5.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and
Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E)3-75

3.5.14.1 Physical and Operational Components3-75

3.5.14.2 Conservation Components.....3-77

3.5.14.3 Measures to Reduce Other Stressors and Avoidance and
Minimization Measures3-77

3.5.14.4 Issuance of Federal Incidental Take Permits.....3-77

3.5.14.5 Issuance of State Incidental Take Permits3-77

3.5.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and
Increased Delta Outflow (9,000 cfs; Operational Scenario F).....3-78

3.5.15.1 Physical and Operational Components3-78

3.5.15.2 Conservation Components.....3-78

3.5.15.3 Measures to Reduce Other Stressors and Avoidance and
Minimization Measures3-78

3.5.15.4 Issuance of Federal Incidental Take Permits.....3-78

3.5.15.5	Issuance of State Incidental Take Permits	3-79
3.5.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....	3-79
3.5.16.1	Physical and Operational Components	3-79
3.5.16.2	Conservation Components.....	3-82
3.5.16.3	Measures to Reduce Other Stressors and Avoidance and Minimization Measures	3-82
3.5.16.4	Issuance of Federal Incidental Take Permits.....	3-82
3.5.16.5	Issuance of State Incidental Take Permits	3-83
3.6	Components of the Alternatives: Details	3-83
3.6.1	Water Conveyance Facility Components (CM1)	3-83
3.6.1.1	North Delta Intakes	3-85
3.6.1.2	Conveyance Facilities	3-93
3.6.1.3	Operable Barriers	3-101
3.6.1.4	Forebays.....	3-104
3.6.1.5	Connections to Banks and Jones Pumping Plants.....	3-107
3.6.1.6	Power Supply and Grid Connections.....	3-107
3.6.1.7	Through Delta/Separate Corridors Levee Construction and Modification	3-113
3.6.1.8	Temporary Access and Work Areas for Intake, Canal, and Pipeline/Tunnel Construction	3-114
3.6.1.9	SWP and CVP South Delta Export Facilities.....	3-116
3.6.2	Conservation Components	3-121
3.6.2.1	Yolo Bypass Fisheries Enhancement (CM2)	3-122
3.6.2.2	Natural Communities Protection and Restoration (CM3).....	3-129
3.6.2.3	Tidal Natural Communities Restoration (CM4).....	3-130
3.6.2.4	Seasonally Inundated Floodplain Restoration (CM5).....	3-137
3.6.2.5	Channel Margin Enhancement (CM6).....	3-139
3.6.2.6	Riparian Natural Community Restoration (CM7).....	3-141
3.6.2.7	Grassland Natural Community Restoration (CM8)	3-143
3.6.2.8	Vernal Pool and Alkali Seasonal Wetland Complex Restoration (CM9).....	3-144
3.6.2.9	Nontidal Marsh Restoration (CM10).....	3-147
3.6.2.10	Natural Communities Enhancement and Management (CM11)	3-149
3.6.3	Conservation Measures to Reduce Other Stressors	3-152
3.6.3.1	Methylmercury Management (CM12)	3-152
3.6.3.2	Invasive Aquatic Vegetation Control (CM13).....	3-154
3.6.3.3	Stockton Deep Water Ship Channel Dissolved Oxygen Levels (CM14)	3-155
3.6.3.4	Localized Reduction of Predatory Fishes (Predator Control) (CM15)	3-157
3.6.3.5	Nonphysical Fish Barriers (CM16)	3-159

3.6.3.6	Illegal Harvest Reduction (CM17).....	3-160
3.6.3.7	Conservation Hatcheries (CM18)	3-161
3.6.3.8	Urban Stormwater Treatment (CM19)	3-162
3.6.3.9	Recreational Users Invasive Species Program (CM20).....	3-163
3.6.3.10	Nonproject Diversions (CM21).....	3-165
3.6.3.11	Avoidance and Minimization Measures (CM22)	3-167
3.6.4	Water Conveyance Operational Components	3-174
3.6.4.1	Operations of Covered Activities and Associated Federal Actions	3-175
3.6.4.2	North Delta and South Delta Water Conveyance Operational Criteria	3-181
3.7	Environmental Commitments	3-209
3.8	SWP Long-Term Water Supply Contract Amendment.....	3-209
3.9	References Cited.....	3-211
Chapter 4	Approach to the Environmental Analysis	4-1
4.1	Framework for the Environmental Analysis	4-1
4.1.1	Timeframes for Evaluation	4-1
4.1.2	Project-Level and Program-Level Analyses.....	4-2
4.1.3	Analysis of the BDCP Alternatives.....	4-3
4.2	Resource Chapter Organization.....	4-3
4.2.1	Environmental Setting/Affected Environment	4-4
4.2.1.1	CEQA and NEPA Baselines.....	4-4
4.2.1.2	Definition of Study Area.....	4-7
4.2.1.3	Presentation of Existing Conditions	4-7
4.2.2	Regulatory Setting	4-7
4.2.3	Methods for Analysis	4-7
4.2.4	Consideration of Seismic Risks and Climate Change on Action Alternatives.....	4-8
4.2.5	Environmental Consequences	4-10
4.2.5.1	Resource-Specific Study Areas	4-11
4.2.5.2	Cumulative Effects Analysis	4-11
4.2.5.3	Mitigation Approaches.....	4-12
4.3	Overview of Tools, Analytical Methods, and Applications	4-13
4.4	References Cited.....	4-19
Chapter 5	Water Supply	5-1
5.1	Environmental Setting/Affected Environment.....	5-1
5.1.1	Overview of California Water Resources.....	5-1
5.1.1.1	Historical Precipitation Patterns	5-2
5.1.1.2	Developed Water Supplies.....	5-2
5.1.1.3	Overview of California Water Demand	5-4
5.1.2	SWP and CVP Facilities and Operations.....	5-5

- 5.1.2.1 CVP Facilities5-6
- 5.1.2.2 SWP Facilities5-15
- 5.1.2.3 SWP/CVP Coordinated Facilities and Operations5-20
- 5.1.2.4 San Luis Complex.....5-22
- 5.1.2.5 SWP and CVP Water Supplies and Deliveries.....5-24
- 5.1.2.6 Regional and Local Diversions from the Delta5-25
- 5.1.2.7 Delta Water Transfers5-28
- 5.2 Regulatory Setting5-31
 - 5.2.1 Federal Plans, Policies, and Regulations5-31
 - 5.2.1.1 Federal Regulations Related to SWP and CVP Authorization and Operations.....5-31
 - 5.2.1.2 National Marine Fisheries Service and U.S. Fish and Wildlife Service Biological Opinions for Continued Long-Term Operation of the CVP/SWP5-34
 - 5.2.1.3 U.S. Army Corps of Engineers Public Notice 5820A (13 October 1981).....5-36
 - 5.2.2 State Plans, Policies, and Regulations.....5-36
 - 5.2.2.1 State Regulations Related to SWP Authorization and Operations.....5-36
 - 5.2.2.2 California State Water Resources Control Board5-37
 - 5.2.3 Regional and Local Plans, Policies, and Regulations5-43
- 5.3 Environmental Consequences5-43
 - 5.3.1 Methods for Analysis5-43
 - 5.3.1.1 Quantitative Analysis of SWP and CVP Water Supply Impacts5-44
 - 5.3.1.2 Project- and Program-Level Components5-55
 - 5.3.2 Determination of Effects5-55
 - 5.3.3 Effects and Mitigation Approaches5-57
 - 5.3.3.1 No-Action Alternative5-57
 - 5.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario A).....5-69
 - 5.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario A).....5-78
 - 5.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario A).....5-79
 - 5.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five Intakes (15,000 cfs; Operational Scenario B)5-80
 - 5.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five Intakes (15,000 cfs; Operational Scenario B)5-88
 - 5.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario B).....5-89
 - 5.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A).....5-90

5.3.3.9	Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)	5-98
5.3.3.10	Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....	5-109
5.3.3.11	Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	5-116
5.3.3.12	Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	5-125
5.3.3.13	Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D).....	5-126
5.3.3.14	Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....	5-127
5.3.3.15	Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F)	5-136
5.3.3.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....	5-144
5.3.4	Cumulative Analysis	5-152
5.3.4.1	Cumulative Analysis of Projects Not Assumed to be Operational in BDCP Alternatives	5-153
5.4	References	5-157
Chapter 6	Surface Water	6-1
6.1	Environmental Setting/Affected Environment	6-1
6.1.1	Potential Environmental Effects Area.....	6-1
6.1.2	Central Valley Hydrology	6-2
6.1.2.1	Sacramento River Basin	6-2
6.1.2.2	San Joaquin River Basin.....	6-3
6.1.2.3	Delta Hydraulics	6-6
6.1.2.4	Suisun Marsh.....	6-9
6.1.2.5	Tulare Lake Basin.....	6-9
6.1.3	Central Valley Flood Management	6-10
6.1.3.1	Background of Central Valley Flood Management	6-10
6.1.3.2	Flood Management Facilities in the Central Valley and the Delta	6-12
6.1.3.3	Operation of Water Supply and Flood Management Flow Regulation Facilities in the Central Valley	6-14
6.1.4	Delta Levee Failure Risks	6-16
6.1.4.1	Subsidence	6-17
6.1.4.2	Other Levee Failure Risks	6-17
6.1.5	Delta Flood Risks.....	6-18

6.1.5.1	FEMA Analyses	6-18
6.1.5.2	FEMA Flood Areas	6-20
6.1.5.3	DWR State Plan of Flood Control	6-22
6.2	Regulatory Setting	6-23
6.2.1	Federal Plans, Policies, and Regulations	6-23
6.2.1.1	1850 Swamp and Overflowed Lands Act	6-24
6.2.1.2	Federal Emergency Management Agency	6-24
6.2.1.3	U.S. Army Corps of Engineers.....	6-29
6.2.1.4	Bureau of Reclamation.....	6-31
6.2.1.5	Other Federal Agencies.....	6-31
6.2.1.6	CALFED Bay-Delta Program Levee System Integrity Program.....	6-32
6.2.2	State Plans, Policies, and Regulations.....	6-32
6.2.2.1	Suisun Marsh Preservation Agreement	6-32
6.2.2.2	Department of Water Resources	6-33
6.2.2.3	Assembly Bill 1200	6-34
6.2.2.4	Central Valley Flood Protection Board	6-35
6.2.2.5	Delta Protection Act of 1992.....	6-36
6.2.2.6	State Realty Disclosure Law	6-36
6.2.3	Regional and Local Plans, Policies, and Regulations	6-37
6.3	Environmental Consequences	6-37
6.3.1	Methods for Analysis	6-37
6.3.1.1	Quantitative Analysis of Surface Water Resources.....	6-38
6.3.1.2	Analysis of Flood Management.....	6-42
6.3.1.3	Analysis of Surface Water Conditions due to Construction and Operation of Conveyance Facilities in the Delta	6-43
6.3.1.4	Project- and Program-Level Components	6-44
6.3.2	Determination of Effects	6-44
6.3.3	Effects and Mitigation Approaches	6-46
6.3.3.1	No Action Alternative.....	6-46
6.3.3.2	Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario A).....	6-52
6.3.3.3	Alternative 1B—Dual Conveyance with East Alignment and Intakes 1– 5 (15,000 cfs; Operational Scenario A).....	6-64
6.3.3.4	Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario A).....	6-68
6.3.3.5	Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five Intakes (15,000 cfs; Operational Scenario B)	6-72
6.3.3.6	Alternative 2B—Dual Conveyance with East Alignment and Five Intakes (15,000 cfs; Operational Scenario B)	6-80

6.3.3.7	Alternative 2C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario B).....	6-83
6.3.3.8	Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A).....	6-87
6.3.3.9	Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)	6-95
6.3.3.10	Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....	6-104
6.3.3.11	Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	6-112
6.3.3.12	Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	6-119
6.3.3.13	Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D).....	6-123
6.3.3.14	Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....	6-126
6.3.3.15	Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F)	6-135
6.3.3.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....	6-143
6.3.4	Cumulative Analysis	6-153
6.4	References.....	6-160
6.4.1	Printed References	6-160
Chapter 7	Groundwater.....	7-1
7.1	Environmental Setting/Affected Environment.....	7-1
7.1.1	Potential Environmental Effects Area.....	7-1
7.1.1.1	Central Valley Regional Groundwater Setting	7-2
7.1.1.2	Delta and Suisun Marsh Groundwater Setting	7-4
7.1.1.3	Delta Watershed Groundwater Setting	7-12
7.1.1.4	Groundwater Setting in the Export Service Areas outside the Delta Watershed.....	7-21
7.2	Regulatory Setting	7-26
7.2.1	Federal Plans, Policies, and Regulations.....	7-26
7.2.2	State Plans, Policies, and Regulations.....	7-26
7.2.2.1	Porter-Cologne Water Quality Control Act (California Water Code, Division 7 and 2009 Amendments)	7-27
7.2.2.2	Area of Origin Statute (California Water Code 1220)	7-27
7.2.2.3	Groundwater Management Act (Assembly Bill 3030)	7-27
7.2.2.4	Basin Adjudications.....	7-29

7.2.2.5 California Statewide Groundwater Elevation Monitoring Program (CASGEM) (SBX7-6)7-29

7.2.3 Regional and Local Plans, Policies, and Regulations7-30

7.3 Environmental Consequences7-31

7.3.1 Methods for Analysis7-32

7.3.1.1 Analysis of Groundwater Conditions in Areas that Use SWP/CVP Water Supplies7-32

7.3.1.2 Analysis of Groundwater Conditions Associated with Construction and Operations of Facilities in the Delta7-35

7.3.1.3 Analysis of Conservation Measures 2–22 in the Delta7-37

7.3.2 Determination of Effects7-38

7.3.3 Effects and Mitigation Approaches7-39

7.3.3.1 No Action Alternative7-39

7.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario A)7-46

7.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario A)7-55

7.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario A)7-62

7.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five Intakes (15,000 cfs; Operational Scenario B)7-68

7.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five Intakes (15,000 cfs; Operational Scenario B)7-72

7.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario B)7-74

7.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A)7-76

7.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)7-79

7.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C)7-87

7.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D)7-90

7.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D)7-93

7.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D)7-94

7.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E)7-96

7.3.3.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F)7-98

7.3.3.16 Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....7-101

7.3.4 Cumulative Analysis7-106

7.4 References7-115

7.4.1 Printed Communications7-115

Chapter 8 Water Quality..... 8-1

8.1 Readers’ Guide8-1

8.1.1 Overview8-1

8.1.2 Environmental Setting/Affected Environment8-1

8.1.3 Regulatory Setting8-2

8.1.4 Environmental Consequences8-2

8.1.5 Organization of the Effects and Mitigation Approaches Discussion (Section 8.3.3).....8-2

8.1.6 NEPA and CEQA Impact Conclusions8-5

8.2 Environmental Setting/Affected Environment8-5

8.2.1 Affected Environment.....8-6

8.2.1.1 Organization of the Section8-6

8.2.1.2 Overview of the Sacramento River and San Joaquin River Watersheds8-7

8.2.1.3 Water Management and the State Water Project and Central Valley Project Systems8-10

8.2.1.4 Primary Factors Affecting Water Quality8-13

8.2.1.5 Beneficial Uses8-14

8.2.1.6 Water Quality Objectives and Criteria8-17

8.2.1.7 Water Quality Impairments8-22

8.2.1.8 Water Quality Constituents of Concern8-25

8.2.2 Selection of Monitoring Locations for Characterization of Water Quality8-27

8.2.2.1 Water Quality Monitoring Programs and Sources of Data8-27

8.2.2.2 Surface Water Quality Monitoring Locations.....8-27

8.2.2.3 Delta Source Waters8-32

8.2.3 Existing Surface Water Quality8-34

8.2.3.1 Ammonia8-35

8.2.3.2 Boron.....8-39

8.2.3.3 Bromide.....8-41

8.2.3.4 Chloride8-43

8.2.3.5 Dioxins, Furans, and Polychlorinated Biphenyls8-44

8.2.3.6 Dissolved Oxygen8-48

8.2.3.7 Salinity and Electrical Conductivity8-52

8.2.3.8 Emerging Pollutants: Endocrine-Disrupting Compounds,
Pharmaceutical and Personal Care Products, and Nitrosamines8-55

8.2.3.9 Mercury8-59

8.2.3.10 Nitrate/Nitrite and Phosphorus8-69

8.2.3.11 Organic Carbon8-75

8.2.3.12 Pathogens8-80

8.2.3.13 Pesticides and Herbicides8-83

8.2.3.14 Polycyclic Aromatic Hydrocarbons8-88

8.2.3.15 Selenium8-91

8.2.3.16 Other Trace Metals8-100

8.2.3.17 Turbidity and Total Suspended Solids8-109

8.3 Regulatory Setting8-112

8.3.1 Federal Plans, Policies, and Regulations8-112

8.3.1.1 Clean Water Act8-112

8.3.1.2 Rivers and Harbors Act Section 108-114

8.3.1.3 Federal Antidegradation Policy8-114

8.3.1.4 National Toxics Rule8-115

8.3.1.5 Safe Drinking Water Act8-115

8.3.1.6 Surface Water Treatment Rule8-116

8.3.1.7 Stage 1 and Stage 2 Disinfectants and Disinfection Byproducts Rule
and Long-Term 1 and Long-Term 2 Enhanced Surface Water
Treatment Rule8-116

8.3.2 State Plans, Policies, and Regulations8-117

8.3.2.1 Porter-Cologne Water Quality Control Act of 19698-117

8.3.2.2 State Water Resources Control Board Water Rights Decisions, Water
Quality Control Plans, and Water Quality Objectives8-117

8.3.2.3 Water Quality Control Plan for the San Francisco Bay/Sacramento–
San Joaquin Delta Estuary8-118

8.3.2.4 Water Quality Control Plan (Basin Plan) for the Sacramento and San
Joaquin River Basins8-118

8.3.2.5 San Francisco Bay Basin Water Quality Control Plan (Basin Plan)8-118

8.3.2.6 State Water Board Resolution No. 68-16—Statement of Policy with
Respect to Maintaining High Quality Waters in California (State
Antidegradation Policy)8-119

8.3.2.7 State Water Resources Control Board Sources of Drinking Water
Policy (Resolution No. 88-63)8-119

8.3.2.8 Policy for Implementation and Enforcement of the Nonpoint-Source
Pollution Control Program (Water Code Section 13369[a][2][B])8-120

8.3.2.9 California Toxics Rule8-120

- 8.3.2.10 Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California8-121
- 8.3.2.11 Department of Public Health Safe Drinking Water Act Implementation8-121
- 8.3.2.12 State Water Resources Control Board Decision 1641.....8-121
- 8.3.2.13 Central Valley Water Board Drinking Water Policy.....8-123
- 8.3.3 Nonregional and Local Plans, Policies, and Regulations8-123
 - 8.3.3.1 General Plan Goals and Policies8-123
 - 8.3.3.2 Local Regulations8-125
 - 8.3.3.3 Policy Consistency8-126
- 8.4 Environmental Consequences8-126
 - 8.4.1 Methods for Analysis8-127
 - 8.4.1.1 Models Used and Their Linkages.....8-130
 - 8.4.1.2 Upstream of the Delta Region.....8-131
 - 8.4.1.3 Plan Area8-132
 - 8.4.1.4 SWP/CVP Export Service Areas8-137
 - 8.4.1.5 Mercury and Selenium Bioaccumulation Assessment8-138
 - 8.4.1.6 Summary of Methods Used to Assess Water Quality Changes Related to Construction Activities (CM1–CM22), Conveyance Operations and Maintenance (CM1), and Habitat Restoration and Other Stressor Related Conservation Measures (CM2–CM22).....8-139
 - 8.4.1.7 Constituent-Specific Considerations Used in the Assessment.....8-141
 - 8.4.2 Determination of Effects8-173
 - 8.4.2.1 Screening Analysis and Results8-173
 - 8.4.2.2 Comparisons.....8-174
 - 8.4.2.3 Effects Determinations.....8-175
 - 8.4.3 Effects and Mitigation Approaches8-178
 - 8.4.3.1 No Action Alternative.....8-178
 - 8.4.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario A).....8-225
 - 8.4.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario A).....8-298
 - 8.4.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario A).....8-300
 - 8.4.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five Intakes (15,000 cfs; Operational Scenario B)8-302
 - 8.4.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five Intakes8-353
 - 8.4.3.7 Alternative 2C—Dual Conveyance with West Canal and Intakes W1-W5 (15,000 cfs; Operational Scenario B)8-355

8.4.3.8	Alternative 3—Dual Conveyance with Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A).....	8-356
8.4.3.9	Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)	8-407
8.4.3.10	Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake (3,000 cfs; Operational Scenario C).....	8-490
8.4.3.11	Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	8-541
8.4.3.12	Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	8-593
8.4.3.13	Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D).....	8-595
8.4.3.14	Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....	8-597
8.4.3.15	Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5 and Increased Delta Outflow (9,000 cfs; Operational Scenario F)	8-649
8.4.3.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....	8-700
8.5	References.....	8-771
8.5.1	Printed References	8-771
8.5.2	Personal Communications.....	8-791
Chapter 9	Geology and Seismicity.....	9-1
9.1	Affected Environment/Environmental Setting.....	9-1
9.1.1	Potential Environmental Effects Area.....	9-2
9.1.1.1	Regional Geology	9-2
9.1.1.2	Local Geology	9-3
9.1.1.3	Regional and Local Seismicity	9-9
9.1.1.4	Geologic and Seismic Hazards.....	9-16
9.2	Regulatory Setting	9-26
9.2.1	Federal Plans, Policies, and Regulations.....	9-26
9.2.1.1	U.S. Geological Survey Quaternary Faults.....	9-26
9.2.1.2	U.S. Geological Survey National Seismic Hazard Maps.....	9-26
9.2.1.3	U.S. Geological Survey Landslide Hazard Program	9-26
9.2.1.4	U.S. Army Corps of Engineers EC 1165-2-211	9-26
9.2.2	State Plans, Policies, and Regulations.....	9-27
9.2.2.1	Delta Plan	9-27
9.2.2.2	California Division of Safety of Dams	9-27
9.2.2.3	Liquefaction and Landslide Hazard Maps (Seismic Hazards Mapping Act).....	9-27

9.2.2.4 Alquist-Priolo Earthquake Fault Zones.....9-28

9.2.2.5 Assembly Bill 1200 (Chapter 573, Statutes of 2005).....9-28

9.2.2.6 Regulatory Design Codes and Standards for Project Structures.....9-29

9.3 Environmental Consequences9-41

9.3.1 Methods for Analysis9-42

9.3.1.1 Process and Methods of Review for Geologic and Seismic Hazards.....9-43

9.3.1.2 Evaluation of Construction Activities9-44

9.3.1.3 Evaluation of Operations9-47

9.3.2 Determination of Effects9-47

9.3.2.1 Compatibility with Plans and Policies9-48

9.3.3 Effects and Mitigation Approaches9-49

9.3.3.1 No Action Alternative.....9-49

9.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario A).....9-52

9.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario A).....9-85

9.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario A).....9-118

9.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five Intakes (15,000 cfs; Operational Scenario B)9-151

9.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five Intakes (15,000 cfs; Operational Scenario B)9-158

9.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario B).....9-165

9.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A).....9-171

9.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)9-178

9.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....9-209

9.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D).....9-215

9.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D)9-222

9.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D).....9-228

9.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....9-235

9.3.3.15	Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F)	9-243
9.3.3.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....	9-249
9.3.3.17	Cumulative Analysis	9-260
9.4	References Cited.....	9-263
Chapter 10	Soils	10-1
10.1	Environmental Setting/Affected Environment.....	10-1
10.1.1	Potential Environmental Effects Area.....	10-2
10.1.1.1	Soil Associations	10-2
10.1.1.2	Soil Physical and Chemical Properties.....	10-6
10.1.1.3	Soil Suitability and Use Limitation Ratings	10-8
10.1.1.4	Risk of Corrosion to Uncoated Steel	10-9
10.1.1.5	Risk of Corrosion to Concrete	10-10
10.1.2	Land Subsidence	10-10
10.1.2.1	History	10-10
10.1.2.2	Causes of Subsidence	10-11
10.1.2.3	Rates of Subsidence and Current Conditions.....	10-12
10.1.2.4	Consequences of Land Subsidence	10-13
10.2	Regulatory Setting	10-14
10.2.1	Federal Plans, Policies, and Regulations.....	10-14
10.2.1.1	Clean Water Act Section 402, National Pollutant Discharge Elimination System Program: Storm Water Permitting	10-15
10.2.2	State Plans, Policies, and Regulations.....	10-15
10.2.2.1	Porter-Cologne Water Pollution Control Act	10-15
10.2.2.2	National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities	10-15
10.2.2.3	Municipal Separate Storm Sewer Systems Permits	10-15
10.2.2.4	Nonpoint Source Implementation and Enforcement Policy	10-16
10.2.2.5	McAteer-Petris Act.....	10-16
10.2.2.6	Suisun Marsh Preservation Act of 1977 and Suisun Marsh Protection Plan (1976)	10-16
10.2.2.7	California Building Code	10-16
10.2.3	Regional and Local Plans, Policies, and Regulations.....	10-17
10.2.3.1	General Plans, Ordinances, and Codes	10-17
10.3	Environmental Consequences	10-19
10.3.1	Methods for Analysis	10-20
10.3.1.1	Impact Mechanisms	10-22

10.3.1.2 Construction Activity Effects10-22

10.3.1.3 Facility Effects10-23

10.3.1.4 Operational Component Effects10-23

10.3.2 Determination of Effects10-23

10.3.2.1 Compatibility with Plans and Policies10-25

10.3.3 Effects and Mitigation Approaches10-25

10.3.3.1 No Action Alternative.....10-25

10.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
1–5 (15,000 cfs; Operational Scenario A).....10-29

10.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
5 (15,000 cfs; Operational Scenario A).....10-44

10.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A).....10-55

10.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and 5 Intakes
(15,000 cfs; Operational Scenario B).....10-65

10.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)10-71

10.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario B).....10-76

10.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1
and 2 (6,000 cfs; Operational Scenario A).....10-81

10.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and
Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)10-87

10.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1
(3,000 cfs; Operational Scenario C).....10-103

10.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and
Intakes 1–5 (15,000 cfs; Operational Scenario D)10-108

10.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and
Intakes 1–5 (15,000 cfs; Operational Scenario D)10-113

10.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and
Intakes W1–W5 (15,000 cfs; Operational Scenario D).....10-119

10.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational
Scenario E).....10-124

10.3.3.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5 and Increased Delta Outflow (9,000 cfs; Operational Scenario F)10-129

10.3.3.16 Alternative 9—Through Delta/Separate Corridors (15,000 cfs;
Operational Scenario G).....10-135

10.3.4 Cumulative Analysis10-140

10.4 References Cited.....10-145

Chapter 11 Fish and Aquatic Resources 11-1

11.0 Readers’ Guide and Summary of Effects 11-1

11.0.1 Readers’ Guide..... 11-1

11.0.1.1 Species Evaluated in Chapter 11 11-1

11.0.1.2 Relationship of Chapter 11 to the BDCP Effects Analysis 11-2

11.0.1.3 NEPA and CEQA Conclusions..... 11-2

11.0.1.4 Chapter Organization 11-3

11.0.1.5 Important Information about the Organization of the Effects and Mitigation Approaches Discussion, Section 11.3.4 11-4

11.0.2 Summary of Effects..... 11-9

11.0.2.1 Alternative 1A—Summary of Effects 11-9

11.0.2.2 Alternative 1B—Summary of Effects..... 11-25

11.0.2.3 Alternative 1C—Summary of Effects..... 11-28

11.0.2.4 Alternative 2A—Summary of Effects 11-31

11.0.2.5 Alternative 2B—Summary of Effects..... 11-38

11.0.2.6 Alternative 2C—Summary of Effects..... 11-41

11.0.2.7 Alternative 3—Summary of Effects..... 11-44

11.0.2.8 Alternative 4—Summary of Effects..... 11-50

11.0.2.9 Alternative 5—Summary of Effects..... 11-56

11.0.2.10 Alternative 6A—Summary of Effects 11-63

11.0.2.11 Alternative 6B—Summary of Effects..... 11-69

11.0.2.12 Alternative 6C—Summary of Effects..... 11-71

11.0.2.13 Alternative 7—Summary of Effects..... 11-74

11.0.2.14 Alternative 8—Summary of Effects..... 11-81

11.0.2.15 Alternative 9—Summary of Effects..... 11-87

11.1 Environmental Setting/Affected Environment 11-94

11.1.1 Areas of Potential Environmental Effects 11-94

11.1.1.1 Plan Area 11-94

11.1.1.2 Upstream of the Delta..... 11-98

11.1.1.3 SWP/CVP Export Service Areas 11-110

11.1.1.4 San Pablo and San Francisco Bays..... 11-110

11.1.2 Natural Communities..... 11-111

11.1.2.1 Covered Aquatic Natural Communities..... 11-111

11.1.2.2 Noncovered Aquatic Natural Communities 11-117

11.1.3 Species Evaluated in the EIR/EIS..... 11-119

11.1.3.1 Covered Fish Species..... 11-119

11.1.3.2 Noncovered Species..... 11-120

11.1.4 Ecological Processes and Functions..... 11-121

11.1.4.1 Hydrology 11-121

11.1.4.2 Carbon and Nutrient Cycling11-122

11.1.4.3 Biodiversity.....11-123

11.1.4.4 Aquatic Communities.....11-124

11.1.5 Stressors11-125

11.1.5.1 Water Development and Conveyance11-125

11.1.5.2 Hydrograph and Hydrodynamic Alterations11-132

11.1.5.3 Migration Barriers.....11-136

11.1.5.4 Harvest and Hatchery Management11-154

11.1.5.5 Pelagic Organism Decline.....11-158

11.2 Regulatory Setting11-160

11.2.1 Federal Plans, Policies, and Regulations.....11-160

11.2.1.1 Federal Endangered Species Act.....11-160

11.2.1.2 Long-Term Central Valley 2008 and 2009 USFWS and NMFS Biological
Opinions11-161

11.2.1.3 Magnuson-Stevens Fishery Conservation and Management Act11-163

11.2.1.4 Recovery Plan for Sacramento-San Joaquin Delta Native Fish Species11-164

11.2.1.5 Recovery Planning for Salmon and Steelhead in California11-164

11.2.1.6 Recovery Planning for Green Sturgeon.....11-165

11.2.1.7 Fish and Wildlife Coordination Act (16 USC Section 651 et seq.)11-166

11.2.1.8 Clean Water Act11-166

11.2.1.9 Rivers and Harbors Act of 1899.....11-167

11.2.1.10 Executive Order 11990 – Protection of Wetlands11-167

11.2.1.11 Central Valley Project Improvement Act.....11-167

11.2.1.12 Anadromous Fish Restoration Program.....11-168

11.2.1.13 National Invasive Species Act of 1996.....11-168

11.2.2 State Plans, Policies, and Regulations.....11-168

11.2.2.1 California Endangered Species Act.....11-168

11.2.2.2 Fully Protected Species under the California Fish and Game Code11-169

11.2.2.3 California Fish and Game Code Section 1602 – Lake and Streambed
Alteration Program11-169

11.2.2.4 The Salmon, Steelhead Trout, and Anadromous Fisheries Program Act11-169

11.2.2.5 Marine Invasive Species Act.....11-170

11.2.2.6 Natural Community Conservation Planning Act11-170

11.2.2.7 California Aquatic Invasive Species Management Plan11-170

11.2.2.8 Central Valley Flood Protection Board.....11-171

11.2.3 Regional and Local Plans, Policies, and Regulations.....11-171

11.2.3.1 CALFED Bay-Delta Program11-171

11.2.3.2 CALFED Levee System Integrity Program11-172

11.2.3.3 Environmental Water Account.....11-172

11.2.3.4	CALFED Ecosystem Restoration Program Conservation Strategy	11-172
11.2.3.5	CALFED Integrated Storage Investigation	11-173
11.2.3.6	Interagency Ecological Program Pelagic Organism Decline Studies and the CALFED State of the Bay-Delta Science Report.....	11-173
11.2.3.7	The Delta Plan	11-174
11.2.3.8	Long-Term Management Strategy for Dredged Materials in the Delta	11-174
11.2.3.9	Assembly Bill 1200	11-175
11.2.3.10	Water Quality Control Plan for the San Francisco Bay/Sacramento- San Joaquin Delta Estuary	11-175
11.2.3.11	Strategic Workplan for Activities in the Bay-Delta.....	11-175
11.2.3.12	Delta Vision Strategic Plan	11-176
11.2.3.13	Local Habitat Conservation Plans and Natural Community Conservation Plans in the Delta	11-176
11.2.3.14	Suisun Marsh Charter and Habitat Management, Preservation, and Restoration Plan.....	11-177
11.2.3.15	Regional Real-Time Decision Making and Information Sharing.....	11-177
11.3	Environmental Consequences	11-181
11.3.1	Impact Mechanisms.....	11-182
11.3.1.1	Potential Impacts Resulting from Construction and Maintenance of Water Conveyance Facilities	11-185
	Intakes	11-186
	Pipelines and Tunnels	11-190
	Barge Unloading Facilities.....	11-191
	Bank and Channel Reinforcement/Protection.....	11-192
	Underwater Noise.....	11-192
	Effects on Water Quality.....	11-196
11.3.1.2	Potential Impacts Resulting from Water Operations.....	11-198
11.3.1.3	Potential Impacts Resulting from Restoration Measures	11-198
	CM2 Yolo Bypass Fisheries Enhancements.....	11-198
	CM4 Tidal Natural Communities Restoration	11-199
	CM5 Seasonally Inundated Floodplain Restoration.....	11-199
	CM6 Channel Margin Habitat Enhancement.....	11-200
	CM7 Riparian Natural Community Restoration.....	11-200
	CM10 Nontidal Marsh Restoration	11-200
11.3.1.4	Potential Impacts Resulting from Other Conservation Measures	11-200
11.3.2	Methods for Analysis	11-201
11.3.2.1	Entrainment Analysis	11-201
11.3.2.2	Flow, Passage, Salinity, and Turbidity Analysis	11-202
11.3.2.3	Biological Stressors Analysis.....	11-204
	Invasive Aquatic Vegetation	11-204

Fish Predation11-205

11.3.2.4 Contaminants Analysis11-206

11.3.2.5 Habitat Restoration Analysis11-207

 CM4 Tidal Habitat Restoration11-207

 CM5 Seasonally Inundated Floodplain11-209

 CM6 Channel Margin Enhancement.....11-209

 CM7 Riparian Habitat Restoration.....11-210

11.3.2.6 Reservoir Coldwater Fish Habitat Analysis.....11-210

11.3.2.7 Methods Used to Consider Mitigation.....11-211

11.3.2.8 Critical Habitat and Essential Fish Habitat11-212

11.3.3 Determination of Effects11-212

11.3.4 Effects and Mitigation Approaches11-215

11.3.4.1 No Action Alternative.....11-217

 Covered Fish Species11-220

 Non-Covered Fish Species of Primary Concern11-234

11.3.4.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
 1–5 (15,000 cfs; Operational Scenario A).....11-238

 Delta Smelt11-239

 Longfin Smelt11-287

 Chinook Salmon11-309

 Winter-Run Chinook Salmon11-310

 Spring-Run Chinook Salmon11-349

 Fall-/Late Fall–Run Chinook Salmon11-380

 Steelhead11-430

 Sacramento Splittail.....11-476

 Green Sturgeon.....11-503

 White Sturgeon.....11-533

 Pacific Lamprey.....11-561

 River Lamprey11-592

 Non-Covered Aquatic Species of Primary Management Concern.....11-618

 Upstream Reservoirs11-674

11.3.4.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
 5 (15,000 cfs; Operational Scenario A).....11-683

 Delta Smelt11-683

 Longfin Smelt11-686

 Winter-Run Chinook Salmon11-689

 Spring-Run Chinook Salmon11-693

 Fall-/Late Fall–Run Chinook Salmon11-696

 Steelhead11-699

Sacramento Splittail.....11-701

Green Sturgeon.....11-703

White Sturgeon.....11-706

Pacific Lamprey.....11-709

River Lamprey.....11-711

Non-Covered Aquatic Species of Primary Management Concern.....11-714

Upstream Reservoirs11-717

11.3.4.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A).....11-718

Delta Smelt11-718

Longfin Smelt11-721

Winter-Run Chinook Salmon11-723

Spring-Run Chinook Salmon11-727

Fall-/Late Fall–Run Chinook Salmon11-731

Steelhead11-734

Sacramento Splittail.....11-736

Green Sturgeon.....11-738

White Sturgeon.....11-741

Pacific Lamprey.....11-743

River Lamprey.....11-746

Non-Covered Aquatic Species of Primary Management Concern.....11-748

Upstream Reservoirs11-751

11.3.4.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
Intakes (15,000 cfs; Operational Scenario B)11-752

Delta Smelt11-752

Longfin Smelt11-760

Winter-Run Chinook Salmon11-767

Spring-Run Chinook Salmon11-787

Fall-/Late Fall–Run Chinook Salmon11-814

Steelhead11-855

Sacramento Splittail.....11-893

Green Sturgeon.....11-907

White Sturgeon.....11-922

Pacific Lamprey.....11-937

River Lamprey.....11-954

Non-Covered Aquatic Species of Primary Management Concern.....11-970

Upstream Reservoirs11-1015

11.3.4.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)11-1017

Delta Smelt11-1017

Longfin Smelt11-1020

Winter-Run Chinook Salmon11-1022

Spring-Run Chinook Salmon11-1026

Fall-/Late Fall–Run Chinook Salmon11-1029

Steelhead11-1032

Sacramento Splittail.....11-1035

Green Sturgeon.....11-1037

White Sturgeon.....11-1040

Pacific Lamprey11-1042

River Lamprey11-1045

Non-Covered Aquatic Species of Primary Management Concern11-1047

Upstream Reservoirs11-1049

11.3.4.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario B).....11-1051

Delta Smelt11-1051

Longfin Smelt11-1053

Winter-Run Chinook Salmon11-1056

Spring-Run Chinook Salmon11-1059

Fall-/Late Fall–Run Chinook Salmon11-1062

Steelhead11-1066

Sacramento Splittail.....11-1068

Green Sturgeon.....11-1071

White Sturgeon.....11-1073

Pacific Lamprey11-1076

River Lamprey11-1078

Non-Covered Aquatic Species of Primary Management Concern11-1080

Upstream Reservoirs11-1083

11.3.4.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1
and 2 (6,000 cfs; Operational Scenario A).....11-1084

Delta Smelt11-1084

Longfin Smelt11-1092

Winter-Run Chinook Salmon11-1100

Spring-Run Chinook Salmon11-1115

Fall-/Late Fall–Run Chinook Salmon11-1133

Steelhead11-1164

Sacramento Splittail.....11-1190

Green Sturgeon.....11-1200

White Sturgeon.....11-1210

Pacific Lamprey11-1220

River Lamprey11-1237

Non-Covered Aquatic Species of Primary Management Concern11-1252

Upstream Reservoirs11-1288

11.3.4.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)11-1289

Delta Smelt11-1290

Longfin Smelt11-1301

Winter-Run Chinook Salmon11-1312

Spring-Run Chinook Salmon11-1339

Fall-/Late Fall–Run Chinook Salmon11-1388

Steelhead11-1474

Sacramento Splittail.....11-1553

Green Sturgeon.....11-1571

White Sturgeon.....11-1596

Pacific Lamprey11-1619

River Lamprey11-1642

Non-Covered Aquatic Species of Primary Management Concern11-1662

Upstream Reservoirs11-1729

11.3.4.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....11-1730

Delta Smelt11-1730

Longfin Smelt11-1738

Winter-Run Chinook Salmon11-1746

Spring-Run Chinook Salmon11-1759

Fall-/Late Fall–Run Chinook Salmon11-1777

Steelhead11-1808

Sacramento Splittail.....11-1835

Green Sturgeon.....11-1846

White Sturgeon.....11-1856

Pacific Lamprey11-1866

River Lamprey11-1883

Non-Covered Aquatic Species of Primary Management Concern11-1899

Upstream Reservoirs11-1942

11.3.4.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D)11-1943

Delta Smelt11-1943

Longfin Smelt11-1948

Winter-Run Chinook Salmon11-1954

Spring-Run Chinook Salmon11-1967

Fall-/Late Fall–Run Chinook Salmon11-1986

Steelhead11-2019

Sacramento Splittail.....11-2046

Green Sturgeon.....11-2056

White Sturgeon.....11-2066

Pacific Lamprey.....11-2075

River Lamprey11-2094

Non-Covered Aquatic Species of Primary Management Concern11-2109

Upstream Reservoirs11-2149

11.3.4.12 Alternative 6B—Isolated Conveyance with East Alignment and
Intakes 1–5 (15,000 cfs; Operational Scenario D).....11-2150

Delta Smelt11-2150

Longfin Smelt11-2152

Winter-Run Chinook Salmon11-2155

Spring-Run Chinook Salmon11-2158

Fall-/Late Fall–Run Chinook Salmon11-2162

Steelhead11-2166

Sacramento Splittail.....11-2168

Green Sturgeon.....11-2171

White Sturgeon.....11-2173

Pacific Lamprey.....11-2176

River Lamprey11-2178

Non-Covered Aquatic Species of Primary Management Concern11-2180

Upstream Reservoirs11-2183

11.3.4.13 Alternative 6C—Isolated Conveyance with West Alignment and
Intakes W1–W5 (15,000 cfs; Operational Scenario D).....11-2184

Delta Smelt11-2184

Longfin Smelt11-2186

Winter-Run Chinook Salmon11-2189

Spring-Run Chinook Salmon11-2192

Fall-/Late Fall–Run Chinook Salmon11-2195

Steelhead11-2199

Sacramento Splittail.....11-2201

Green Sturgeon.....11-2203

White Sturgeon.....11-2205

Pacific Lamprey.....11-2208

River Lamprey11-2210

Non-Covered Aquatic Species of Primary Management Concern11-2212

Upstream Reservoirs11-2215

11.3.4.14 Alternative 7—Dual Conveyance with Tunnel, Intakes 2, 3, and 5, and
Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....11-2216

Delta Smelt11-2216

Longfin Smelt11-2223

Winter-Run Chinook Salmon11-2230

Spring-Run Chinook Salmon11-2247

Fall-/Late Fall–Run Chinook Salmon11-2274

Steelhead11-2316

Sacramento Splittail.....11-2352

Green Sturgeon.....11-2365

White Sturgeon.....11-2379

Pacific Lamprey11-2394

River Lamprey11-2413

Non-Covered Aquatic Species of Primary Management Concern11-2430

Upstream Reservoirs11-2481

11.3.4.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5 and Increased Delta Outflow (9,000 cfs; Operational Scenario F) ...11-2482

Delta Smelt11-2482

Longfin Smelt11-2489

Winter-Run Chinook Salmon11-2494

Spring-Run Chinook Salmon11-2514

Fall-/Late Fall–Run Chinook Salmon11-2540

Steelhead11-2580

Sacramento Splittail.....11-2617

Green Sturgeon.....11-2631

White Sturgeon.....11-2645

Pacific Lamprey11-2660

River Lamprey11-2680

Non-Covered Aquatic Species of Primary Management Concern11-2700

Upstream Reservoirs11-2750

11.3.4.16 Alternative 9—Through Delta/Separate Corridors (15,000 cfs;
Operational Scenario G).....11-2752

Delta Smelt11-2756

Longfin Smelt11-2764

Winter-Run Chinook Salmon11-2771

Spring-Run Chinook Salmon11-2789

Fall-/Late Fall–Run Chinook Salmon11-2812

Steelhead11-2849

Sacramento Splittail.....11-2882

Green Sturgeon.....11-2896

White Sturgeon.....11-2910

Pacific Lamprey.....11-2925

River Lamprey.....11-2943

Non-Covered Aquatic Species of Primary Management Concern.....11-2958

Upstream Reservoirs.....11-3004

11.3.5 Cumulative Effects on Fish and Aquatic Resources.....11-3005

11.3.5.1 Assessment Methodology.....11-3005

11.3.5.2 Covered Fish Species.....11-3011

11.3.5.3 Non-Covered Fish Species of Primary Concern.....11-3023

11.4 References Cited.....11-3027

11.4.1 Printed References.....11-3027

11.4.2 Personal Communications.....11-3055

Chapter 12 Terrestrial Biological Resources..... 12-1

12.0 Readers’ Guide and Summary.....12-1

12.0.1 Overview.....12-1

12.0.2 Environmental Setting/Affected Environment.....12-1

12.0.2.1 Natural Communities.....12-1

12.0.2.2 Special-Status Species.....12-2

12.0.3 Environmental Consequences.....12-2

12.0.4 Organization of Resources.....12-3

12.0.5 Organization of Impacts.....12-3

12.0.6 Summary of Effects.....12-3

12.0.6.1 Differences Among the Alternatives.....12-4

12.0.6.2 Comparison of the Effects of the Alternatives.....12-5

12.1 Environmental Setting/Affected Environment.....12-32

12.1.1 Historical Trends in Biodiversity of the Plan Area.....12-32

12.1.2 Land Cover Types.....12-33

12.1.2.1 Natural Community Mapping Methods.....12-34

12.1.2.2 Special-Status and Other Natural Communities.....12-35

12.1.3 Special-Status Species.....12-51

12.1.3.1 Critical Habitat.....12-65

12.1.3.2 Special-Status Wildlife Species.....12-65

12.1.3.3 Special-Status Plant Species.....12-92

12.1.4 Invasive and Noxious Plant Species.....12-108

12.1.4.1 Definitions.....12-108

12.1.4.2 General Effects on Native Species and Natural Communities.....12-108

12.1.4.3 Invasive Plant Species in Natural Communities.....12-109

12.2 Regulatory Setting12-115

12.2.1 Federal Plans, Policies, Regulations, and Executive Orders.....12-115

12.2.1.1 Sections 404 and 401 of the Clean Water Act12-115

12.2.1.2 Endangered Species Act.....12-116

12.2.1.3 Fish and Wildlife Coordination Act.....12-116

12.2.1.4 CALFED Bay-Delta Program12-117

12.2.1.5 Migratory Bird Treaty Act.....12-117

12.2.1.6 Rivers and Harbors Act.....12-118

12.2.1.7 Comprehensive Conservation Plans for National Wildlife Refuges12-118

12.2.1.8 North American Waterfowl Management Plan and Central Valley
Joint Venture.....12-118

12.2.1.9 Federal Noxious Weed Act and Code of Federal Regulations (Title 7,
Part 360).....12-118

12.2.1.10 Executive Order 11990: Protection of Wetlands12-119

12.2.1.11 Executive Order 13112: Invasive Species.....12-119

12.2.1.12 Executive Order 13186: Responsibilities of Federal Agencies to
Protect Migratory Birds.....12-119

12.2.1.13 Executive Order 13443: Facilitation of Hunting Heritage and Wildlife
Conservation12-119

12.2.2 State Plans, Policies, and Regulations.....12-120

12.2.2.1 California Endangered Species Act.....12-120

12.2.2.2 Fully Protected Species12-120

12.2.2.3 California Native Plant Protection Act12-120

12.2.2.4 Section 1600 of the California Fish and Game Code.....12-121

12.2.2.5 Sections of the California Fish and Game Code Pertaining to Invasive
Species12-121

12.2.2.6 Natural Communities Conservation Planning Act.....12-121

12.2.2.7 Porter-Cologne Water Quality Control Act12-121

12.2.2.8 California Food and Agriculture Code12-122

12.2.2.9 Harbors and Navigation Code12-122

12.2.2.10 Delta Protection Act of 1992.....12-122

12.2.2.11 Delta Vision Strategic Plan12-123

12.2.2.12 Delta Stewardship Council12-123

12.2.2.13 California Aquatic Invasive Species Management Plan12-124

12.2.2.14 California Wetlands Conservation Policy12-124

12.2.2.15 Suisun Marsh Preservation Act and Suisun Marsh Protection Plan.....12-125

12.2.2.16 Suisun Marsh Preservation Agreement12-125

12.2.2.17 Central Valley Flood Protection Plan12-126

12.2.2.18 Yolo Bypass Wildlife Area Land Management Plan.....12-126

12.2.3 Regional and Local Plans, Policies, and Regulations12-126

- 12.2.3.1 City and County General Plans12-126
- 12.2.3.2 Habitat Conservation Plans12-129
- 12.3 Environmental Consequences12-129
 - 12.3.1 Determination of Effects12-130
 - 12.3.1.1 Development of Significance Criteria.....12-130
 - 12.3.1.2 Significance Criteria for Terrestrial Biological Resources.....12-132
 - 12.3.2 Methods for Analysis12-133
 - 12.3.2.1 Analysis Approach12-134
 - 12.3.2.2 Methods Used to Assess Natural Community Effects.....12-138
 - 12.3.2.3 Methods Used to Assess Species Effects12-139
 - 12.3.2.4 Methods Used to Assess Wetlands and Other Waters of the United States.....12-145
 - 12.3.2.5 Methods Used to Consider Mitigation.....12-149
 - 12.3.3 Effects and Mitigation Approaches12-152
 - 12.3.3.1 No Action Alternative.....12-152
 - Effects on Terrestrial Natural Communities12-156
 - Effects on Special-Status and Common Wildlife and Plants12-158
 - Effects of Global Climate Change on Terrestrial Biological Resources12-158
 - 12.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1, 2, 3, 4 and 5 (15,000 cfs; Operational Scenario A)12-161
 - Natural Communities.....12-161
 - Wildlife Species.....12-247
 - Plant Species12-696
 - General Terrestrial Biology Effects12-726
 - 12.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario A).....12-757
 - Natural Communities.....12-757
 - Wildlife Species.....12-843
 - Plant Species12-1299
 - General Terrestrial Biology Effects12-1330
 - 12.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario A).....12-1361
 - Natural Communities.....12-1361
 - Wildlife Species.....12-1448
 - Plant Species12-1900
 - General Terrestrial Biology12-1931
 - 12.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five Intakes (15,000 cfs; Operational Scenario B)12-1962
 - 12.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five Intakes (15,000 cfs; Operational Scenario B)12-1968

12.3.3.7	Alternative 2C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario B).....	12-1975
12.3.3.8	Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A).....	12-1982
12.3.3.9	Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)	12-1989
	Natural Communities.....	12-1989
	Wildlife Species.....	12-2076
	Plant Species.....	12-2525
	General Terrestrial Biology	12-2555
12.3.3.10	Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....	12-2587
12.3.3.11	Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D)	12-2594
12.3.3.12	Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D)	12-2599
12.3.3.13	Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D).....	12-2604
12.3.3.14	Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....	12-2610
12.3.3.15	Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5 and Increased Delta Outflow (9,000 cfs; Operational Scenario F) ...	12-2617
12.3.3.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....	12-2625
	Natural Communities.....	12-2625
	Wildlife Species.....	12-2714
	Plant Species	12-3164
	General Terrestrial Biology Effects	12-3194
12.3.3.17	Cumulative Effects on Terrestrial Biological Resources	12-3225
12.3.3.18	Effects on Other Conservation Plans.....	12-3244
12.4	References.....	12-3273
12.4.1	Printed References	12-3273
12.4.2	Personal Communications.....	12-3298
Chapter 13	Land Use	13-1
13.1	Environmental Setting/Affected Environment.....	13-1
13.1.1	Potential Environmental Effects Area.....	13-1
13.1.1.1	Existing Land Uses in the Study Area	13-1
13.2	Regulatory Setting	13-4
13.2.1	Federal Plans, Policies, and Regulations.....	13-5

- 13.2.1.1 Stone Lakes National Wildlife Refuge Comprehensive Conservation Plan.....13-5
- 13.2.1.2 Uniform Relocation Assistance and Real Property Acquisition Policies Act13-5
- 13.2.1.3 Federal Farmland Protection Policy Act.....13-6
- 13.2.2 State Plans, Policies, and Regulations.....13-6
 - 13.2.2.1 1992 Delta Protection Act13-6
 - 13.2.2.2 The Delta Plan13-12
 - 13.2.2.3 California Department of Parks and Recreation13-13
 - 13.2.2.4 California Department of Fish and Wildlife.....13-15
 - 13.2.2.5 California Land Conservation Act of 1965.....13-16
 - 13.2.2.6 California Relocation Assistance Act13-17
- 13.2.3 Regional and Local Plans, Policies, and Regulations.....13-17
 - 13.2.3.1 San Francisco Bay Plan13-17
 - 13.2.3.2 Suisun Marsh Protection Act.....13-18
 - 13.2.3.3 Local Airport Land Use Compatibility Plans13-18
 - 13.2.3.4 County General Plans13-26
 - 13.2.3.5 City General Plans13-41
- 13.3 Environmental Consequences13-45
 - 13.3.1 Methods for Analysis13-45
 - 13.3.2 Determination of Effects13-47
 - 13.3.3 Effects and Mitigation Approaches13-50
 - 13.3.3.1 No Action Alternative.....13-50
 - 13.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario A).....13-54
 - 13.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario A).....13-71
 - 13.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario A).....13-80
 - 13.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five Intakes (15,000 cfs; Operational Scenario B)13-89
 - 13.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five Intakes (15,000 cfs; Operational Scenario B)13-94
 - 13.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario B).....13-99
 - 13.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A).....13-102
 - 13.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)13-106

13.3.3.10	Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....	13-123
13.3.3.11	Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	13-127
13.3.3.12	Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	13-131
13.3.3.13	Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D).....	13-134
13.3.3.14	Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....	13-138
13.3.3.15	Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F).....	13-143
13.3.3.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....	13-146
13.3.4	Cumulative Analysis.....	13-154
13.4	References Cited.....	13-162
13.4.1	Printed References.....	13-162
Chapter 14	Agricultural Resources.....	14-1
14.1	Environmental Setting/Affected Environment.....	14-1
14.1.1	Potential Environmental Effects Area.....	14-2
14.1.1.1	Statutory Delta.....	14-2
14.1.1.2	Restoration Opportunity Areas (ROAs).....	14-2
14.1.1.3	Study Area Climate and Soils.....	14-4
14.1.1.4	Study Area Crop Types and Distribution.....	14-6
14.1.1.5	Important Farmland and Land Subject to Williamson Act Contracts or in Farmland Security Zones.....	14-10
14.1.1.6	General Crop Production Practices and Characteristics.....	14-11
14.2	Regulatory Setting.....	14-17
14.2.1	Federal Plans, Policies, and Regulations.....	14-18
14.2.1.1	Farmland Protection Policy Act.....	14-18
14.2.1.2	Other NRCS Programs.....	14-18
14.2.1.3	U.S. Environmental Protection Agency Pesticide Regulatory Program.....	14-19
14.2.1.4	Agriculture Marketing Service.....	14-19
14.2.2	State Plans, Policies, and Regulations.....	14-19
14.2.2.1	California Department of Pesticide Regulation.....	14-19
14.2.2.2	Farmland Mapping and Monitoring Program.....	14-19
14.2.2.3	Delta Protection Act of 1992.....	14-20
14.2.2.4	Delta Reform Act and Delta Plan.....	14-20

- 14.2.2.5 California Land Conservation Act of 1965 (Williamson Act)14-21
- 14.2.2.6 State Water Resources Control Board and Central Valley Regional
Water Quality Control Board14-23
- 14.2.2.7 California Natural Resources Agency14-23
- 14.2.2.8 California Department of Food and Agriculture14-23
- 14.2.3 Regional and Local Plans, Policies, and Regulations14-24
 - 14.2.3.1 General Plans14-24
 - 14.2.3.2 County Right-to-Farm Ordinances14-24
- 14.3 Environmental Consequences14-24
 - 14.3.1 Methods for Analysis14-25
 - 14.3.1.1 Project- and Program-Level Components14-25
 - 14.3.1.2 Timing of Effects.....14-27
 - 14.3.2 Determination of Effects14-27
 - 14.3.3 Effects and Mitigation Approaches14-28
 - 14.3.3.1 No Action Alternative.....14-28
 - 14.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
1–5 (15,000 cfs; Operational Scenario A).....14-33
 - 14.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
5 (15,000 cfs; Operational Scenario A).....14-58
 - 14.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A).....14-68
 - 14.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
Intakes (15,000 cfs; Operational Scenario B)14-78
 - 14.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)14-86
 - 14.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario B).....14-94
 - 14.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1
and 2 (6,000 cfs; Operational Scenario A).....14-101
 - 14.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and
Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)14-109
 - 14.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1
(3,000 cfs; Operational Scenario C).....14-133
 - 14.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and
Intakes 1–5 (15,000 cfs; Operational Scenario D)14-141
 - 14.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and
Intakes 1–5 (15,000 cfs; Operational Scenario D)14-149
 - 14.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and
Intakes W1–W5 (15,000 cfs; Operational Scenario D).....14-156

14.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....14-163

14.3.3.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5 and Increased Delta Outflow (9,000 cfs; Operational Scenario F)14-171

14.3.3.16 Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....14-179

14.3.4 Cumulative Analysis14-187

14.3.4.1 Cumulative Effects of the No Action Alternative14-190

14.3.4.2 Cumulative Effects of the Action Alternatives14-191

14.4 References.....14-196

14.4.1 Printed References14-196

Chapter 15 Recreation..... 15-1

15.1 Environmental Setting/Affected Environment15-1

15.1.1 Potential Environmental Effects Area.....15-1

15.1.1.1 Description of Existing Conditions in the Study Area.....15-1

15.1.1.2 Description of Existing Conditions in the Upstream of the Delta Region15-24

15.2 Regulatory Setting15-31

15.2.1 Federal Plans, Policies, and Regulations.....15-31

15.2.1.1 New Melones Lake Area Final Resource Management Plan.....15-31

15.2.1.2 Stone Lakes National Wildlife Refuge Comprehensive Conservation Plan.....15-32

15.2.1.3 Management Guide for the Shasta and Trinity Units of the Whiskeytown-Shasta-Trinity National Recreation Area.....15-33

15.2.1.4 General Management Plan for the Whiskeytown Unit of the Whiskeytown-Shasta-Trinity National Recreation Area.....15-33

15.2.1.5 Boat Navigation Jurisdiction, Rules, and Regulations15-34

15.2.2 State Plans, Policies, and Regulations.....15-34

15.2.2.1 Delta Protection Act and Delta Protection Commission Land and Resource Management Plan15-34

15.2.2.2 Delta Protection Commission, Great California Delta Trail System15-36

15.2.2.3 California Department of Parks and Recreation Plans.....15-36

15.2.2.4 California Department of Fish and Wildlife Plans15-40

15.2.2.5 California Department of Boating and Waterways Regulations and Programs15-41

15.2.2.6 California State Lands Commission Regulations15-42

15.2.3 Regional and Local Plans, Policies, and Regulations.....15-42

15.2.3.1 City and County General Plans.....15-42

15.3 Environmental Consequences15-58

15.3.1 Methods for Analysis15-59

 15.3.1.1 Assessment Methods15-59

15.3.2 Determination of Effects15-62

15.3.3 Effects and Mitigation Approaches15-63

 15.3.3.1 No Action Alternative.....15-64

 15.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
1–5 (15,000 cfs; Operational Scenario A).....15-68

 15.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
5 (15,000 cfs; Operational Scenario A).....15-111

 15.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A).....15-142

 15.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
Intakes (15,000 cfs; Operational Scenario B)15-171

 15.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)15-191

 15.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario B).....15-212

 15.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1
and 2 (6,000 cfs; Operational Scenario A).....15-232

 15.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and
Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)15-253

 15.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1
(3,000 cfs; Operational Scenario C).....15-296

 15.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and
Intakes 1–5 (15,000 cfs; Operational Scenario D).....15-317

 15.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and
Intakes 1–5 (15,000 cfs; Operational Scenario D)15-337

 15.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and
Intakes W1–W5 (15,000 cfs; Operational Scenario D).....15-357

 15.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational
Scenario E).....15-377

 15.3.3.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario
F)15-397

 15.3.3.16 Alternative 9—Through Delta/Separate Corridors (15,000 cfs;
Operational Scenario G)15-418

15.3.4 Cumulative Analysis15-455

 15.3.4.1 Assessment Methodology15-455

 15.3.4.2 Action Alternatives.....15-459

15.4 References15-464

15.4.1 Printed Communications15-464

15.4.2 Personal Communications15-478

Chapter 16 Socioeconomics 16-1

16.1 Environmental Setting/Affected Environment16-1

16.1.1 Potential Socioeconomics Effects Area16-1

16.1.1.1 Statutory Delta16-2

16.1.1.2 Population of the Delta16-8

16.1.1.3 Housing in the Delta16-11

16.1.1.4 Employment, Labor Force, and Industry in the Delta16-14

16.1.1.5 Government and Finance in the Delta16-17

16.1.1.6 Economic Character of Recreation in the Delta16-20

16.1.1.7 Economics of Agriculture in the Delta16-23

16.2 Regulatory Setting16-29

16.2.1 Federal Plans, Policies, and Regulations16-29

16.2.1.1 Constitution of the United States: Fifth Amendment Takings Clause16-30

16.2.1.2 Uniform Relocation Assistance and Real Property Acquisition Policies Act of 197016-30

16.2.1.3 Housing and Community Development Act of 197416-30

16.2.1.4 U.S. Department of Agriculture16-31

16.2.2 State Plans, Policies, and Regulations16-31

16.2.2.1 California Constitution: Article 1 Declaration of Rights, Section 1916-31

16.2.2.2 Williamson Act16-32

16.2.2.3 Economic Sustainability Plan for the Sacramento-San Joaquin Delta (Draft)16-32

16.2.2.4 Transitions for the Delta Economy (Public Policy Institute of California)16-33

16.2.2.5 DWR Economic Analysis Guidebook16-33

16.2.2.6 Proposed Final Delta Plan16-34

16.2.3 Regional and Local Plans, Policies, and Regulations16-34

16.2.3.1 Contra Costa County General Plan16-34

16.2.3.2 Sacramento County General Plan16-35

16.2.3.3 San Joaquin County General Plan16-36

16.2.3.4 Solano County General Plan16-37

16.2.3.5 Yolo County General Plan16-37

16.3 Environmental Consequences16-38

16.3.1 Methods for Analysis16-39

16.3.1.1 Delta Community Effects16-39

16.3.1.2 Delta Regional Employment and Income16-42

16.3.1.3 Fiscal Effects on Local Delta Governments16-45

16.3.1.4 Delta Agricultural Economics16-46

16.3.1.5 Delta Recreational Economics.....16-47

16.3.1.6 Commercial Fishing Effects16-47

16.3.2 Determination of Effects16-48

16.3.2.1 Compatibility with Plans and Policies16-49

16.3.3 Effects and Mitigation Approaches16-50

16.3.3.1 No Action Alternative.....16-50

16.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
1–5 (15,000 cfs; Operational Scenario A).....16-54

16.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
5 (15,000 cfs; Operational Scenario A).....16-78

16.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A).....16-95

16.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
Intakes (15,000 cfs; Operational Scenario B)16-113

16.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)16-124

16.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)16-134

16.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1
and 2 (6,000 cfs; Operational Scenario A).....16-144

16.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and
Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)16-160

16.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1
(3,000 cfs; Operational Scenario C).....16-185

16.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and
Intakes 1–5 (15,000 cfs; Operational Scenario D)16-200

16.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and
Intakes 1–5 (15,000 cfs; Operational Scenario D)16-211

16.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and
Intakes W1–W5 (15,000 cfs; Operational Scenario D).....16-221

16.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational
Scenario E).....16-231

16.3.3.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5 and Increased Delta Outflow (9,000 cfs; Operational Scenario F)16-248

16.3.3.16 Alternative 9—Through Delta/Separate Corridors (15,000 cfs;
Operational Scenario G).....16-259

16.3.4 Cumulative Analysis16-276

16.3.4.1 Assessment Methodology16-276

16.3.4.2 Cumulative Effects of the No Action Alternative16-278

16.3.4.3 Cumulative Effects of the Action Alternatives16-281

16.4 References16-297

16.4.1 Printed References16-297

Chapter 17 Aesthetics and Visual Resources 17-1

17.1 Environmental Setting/Affected Environment17-1

17.1.1 Concepts and Terminology17-1

17.1.1.1 Visual Character17-2

17.1.1.2 Visual Quality17-3

17.1.1.3 Visual Exposure and Sensitivity17-3

17.1.2 Visual Character of the Study Area17-4

17.1.2.1 Delta Overview17-4

17.1.2.2 Delta Landscape Types17-6

17.1.3 Visual Character of the Areas Upstream of the Delta17-13

17.1.3.1 Trinity Lake17-14

17.1.3.2 Shasta Lake17-14

17.1.3.3 Whiskeytown Reservoir17-14

17.1.3.4 Lake Oroville17-15

17.1.3.5 Folsom Lake17-15

17.1.3.6 New Melones Lake17-15

17.1.3.7 San Luis Reservoir17-15

17.1.3.8 Millerton Lake17-16

17.1.4 Characterization of Viewers17-16

17.1.4.1 Recreationists17-16

17.1.4.2 Roadway Travelers17-16

17.1.4.3 Railway17-17

17.1.4.4 Residential17-18

17.1.4.5 Businesses17-18

17.2 Regulatory Setting17-19

17.2.1 Federal Plans, Policies, and Regulations17-19

17.2.1.1 Sierra Resource Management Plan17-19

17.2.2 State Plans, Policies, and Regulations17-19

17.2.2.1 Johnston-Baker-Andal-Boatwright Delta Protection Act of 199217-19

17.2.2.2 Delta Protection Commission Land Use and Resource Management
Plan for the Primary Zone of the Delta17-20

17.2.2.3 The Delta Plan17-20

17.2.2.4 San Francisco Bay Conservation and Development Commission
Suisun Marsh Protection Plan17-22

17.2.2.5 California Scenic Highway Program17-23

17.2.2.6 State Public Land Management Plans17-24

17.2.3 Regional and Local Plans, Policies, and Regulations17-25

17.2.3.1 East Bay Regional Park District Master Plan17-25

17.2.3.2 County and City General Plans17-27

17.3 Environmental Consequences17-35

17.3.1 Methods for Analysis17-35

17.3.1.1 Site Inventory and Selection of Key Observation Points.....17-36

17.3.1.2 Preparation of Visual Simulations17-38

17.3.1.3 Analysis of the Alternatives’ Impact on Visual Resources.....17-39

17.3.2 Determination of Effects17-42

17.3.3 Effects and Mitigation Approaches17-44

17.3.3.1 No Action Alternative17-45

17.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
1–5 (15,000 cfs; Operational Scenario A).....17-47

17.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
5 (15,000 cfs; Operational Scenario A).....17-88

17.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A).....17-108

17.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
Intakes (15,000 CFS; Operational Scenario B).....17-126

17.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)17-138

17.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario B).....17-149

17.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1
and 2 (6,000 cfs; Operational Scenario A).....17-159

17.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and
Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)17-170

17.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1
(3,000 cfs; Operational Scenario C).....17-212

17.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and
Intakes 1–5 (15,000 cfs; Operational Scenario D)17-223

17.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and
Intakes 1–5 (15,000 cfs; Operational Scenario D)17-233

17.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and
Intakes W1–W5 (15,000 cfs; Operational D).....17-244

17.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational
Scenario E).....17-254

17.3.3.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario
F)17-265

17.3.3.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....	17-276
17.3.3.17	Cumulative Analysis	17-295
17.4	References	17-315
17.4.1	Printed References	17-315
17.4.2	Personal Communications	17-319
Chapter 18	Cultural Resources.....	18-1
18.1	Environmental Setting/Affected Environment.....	18-1
18.1.1	Methods for Resource Identification.....	18-1
18.1.1.1	Archival and Map Research.....	18-2
18.1.1.2	Records Searches	18-3
18.1.1.3	Field Surveys	18-3
18.1.1.4	Native American Correspondence	18-5
18.1.1.5	Geomorphology	18-5
18.1.2	Prehistoric Archaeological Setting.....	18-5
18.1.2.1	Paleo-Indian	18-6
18.1.2.2	Lower Archaic.....	18-7
18.1.2.3	Middle Archaic	18-7
18.1.2.4	Upper Archaic.....	18-7
18.1.2.5	Emergent.....	18-7
18.1.3	Prehistoric Archaeological Property Types.....	18-7
18.1.3.1	Midden/Mound Sites	18-8
18.1.3.2	Multiple-Occupation Sites.....	18-8
18.1.3.3	Human Burials	18-9
18.1.3.4	Lithic Scatters	18-9
18.1.3.5	Bedrock Milling Features	18-9
18.1.3.6	Baked Clay Deposits	18-9
18.1.3.7	Isolated Artifacts	18-9
18.1.4	Ethnographic Setting	18-10
18.1.4.1	Nisenan	18-10
18.1.4.2	Plains Miwok	18-10
18.1.4.3	Northern Valley Yokuts	18-11
18.1.4.4	Southern Patwin.....	18-12
18.1.5	Traditional Cultural Properties and Native American Property Types (Including Sacred Sites).....	18-13
18.1.5.1	Plant-Gathering Areas.....	18-13
18.1.5.2	Fishing Locations	18-14
18.1.5.3	Ceremonial and Sacred Sites.....	18-14
18.1.5.4	Historic-Era Traditional Cultural Properties	18-14

- 18.1.6 Historic-Era Setting 18-14
 - 18.1.6.1 The Spanish Era to the Gold Rush 18-14
 - 18.1.6.2 Land Reclamation..... 18-15
 - 18.1.6.3 Agriculture..... 18-16
 - 18.1.6.4 Transportation Development..... 18-16
 - 18.1.6.5 Community Development 18-17
 - 18.1.6.6 Water Management..... 18-19
 - 18.1.6.7 Recreation 18-20
- 18.1.7 Historic-Era Built Environment Property Types 18-20
 - 18.1.7.1 Residential Buildings 18-20
 - 18.1.7.2 Commercial Buildings..... 18-21
 - 18.1.7.3 Agricultural Properties 18-22
 - 18.1.7.4 Historic Districts 18-22
 - 18.1.7.5 Reclamation and Flood Management Structures 18-22
 - 18.1.7.6 Transportation 18-23
 - 18.1.7.7 Utility Infrastructure 18-24
 - 18.1.7.8 Rural Historic Landscapes 18-24
- 18.1.8 Historic Archaeological Property Types 18-24
 - 18.1.8.1 Building Foundations 18-25
 - 18.1.8.2 Refuse Scatters/Dumps..... 18-25
 - 18.1.8.3 Transportation-Related Features 18-25
 - 18.1.8.4 Water Conveyance Systems..... 18-25
 - 18.1.8.5 Historic Isolates 18-25
 - 18.1.8.6 Maritime/Riverine Property Types 18-25
- 18.1.9 Identified Resources and Action Alternatives 18-26
- 18.2 Regulatory Setting 18-27
 - 18.2.1 Federal Plans, Policies, and Regulations 18-27
 - 18.2.1.1 National Environmental Policy Act..... 18-27
 - 18.2.1.2 Section 106 of the National Historic Preservation Act of 1966..... 18-27
 - 18.2.1.3 Compliance with Section 106 of the National Historic Preservation Act for the BDCP..... 18-29
 - 18.2.1.4 Native American Graves Protection and Repatriation Act..... 18-29
 - 18.2.1.5 The Archaeological Resources Protection Act 18-30
 - 18.2.2 State Plans, Policies, and Regulations..... 18-30
 - 18.2.2.1 California Environmental Quality Act – Statute and Guidelines 18-30
 - 18.2.2.2 California Public Resources Code, Duties of State Agencies 18-35
 - 18.2.2.3 Discoveries of Human Remains under California Environmental Quality Act Public Law..... 18-36
 - 18.2.2.4 California Native American Graves Protection and Repatriation Act 18-36

18.2.2.5 Confidentiality Considerations.....18-36

18.2.3 Regional and Local Plans, Policies, and Regulations.....18-38

18.2.3.1 City and County General Plans.....18-38

18.2.3.2 Alameda County.....18-38

18.2.3.3 Contra Costa County.....18-38

18.2.3.4 City of Lathrop.....18-39

18.2.3.5 City of Oakley.....18-39

18.2.3.6 Sacramento County.....18-39

18.2.3.7 City of Sacramento.....18-40

18.2.3.8 San Joaquin County.....18-41

18.2.3.9 Solano County.....18-41

18.2.3.10 City of Stockton.....18-41

18.2.3.11 City of Rio Vista.....18-42

18.2.3.12 Yolo County.....18-42

18.3 Environmental Consequences.....18-43

18.3.1 Determination of Effects.....18-43

18.3.2 Direct and Indirect Effects and Impact Mechanisms.....18-44

18.3.3 Geographic Scope of Effects.....18-45

18.3.4 Issues Not Carried Forward for Detailed Analysis.....18-45

18.3.5 Effects and Mitigation Approaches.....18-46

18.3.5.1 No Action Alternative.....18-46

18.3.5.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
1–5 (15,000 cfs; Operational Scenario A).....18-49

18.3.5.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
5 (15,000 cfs; Operational Scenario A).....18-73

18.3.5.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A).....18-82

18.3.5.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
Intakes (15,000 cfs; Operational Scenario B).....18-92

18.3.5.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B).....18-99

18.3.5.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario B).....18-107

18.3.5.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1
and 2 (6,000 cfs; Operational Scenario A).....18-115

18.3.5.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and
Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H).....18-122

18.3.5.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1
(3,000 cfs; Operational Scenario C).....18-146

18.3.5.11	Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D)	18-154
18.3.5.12	Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D)	18-161
18.3.5.13	Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D)	18-169
18.3.5.14	Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E)	18-178
18.3.5.15	Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F)	18-185
18.3.5.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G)	18-193
18.3.5.17	Cumulative Analysis	18-203
18.4	References	18-208
18.4.1	Printed Communications	18-208
18.4.2	Personal Communications	18-214
Chapter 19	Transportation	19-1
19.1	Environmental Setting/Affected Environment	19-1
19.1.1	Potential Environmental Effects Area	19-1
19.1.2	Roadway Facilities	19-1
19.1.2.1	Existing Levels of Service	19-7
19.1.2.2	Existing Pavement Conditions	19-13
19.1.2.3	Bicycle Routes	19-22
19.1.3	Marine Facilities	19-22
19.1.3.1	M5/580 Marine Highway Corridor	19-22
19.1.3.2	Port of Stockton	19-22
19.1.3.3	Port of West Sacramento	19-23
19.1.3.4	Ferry Services	19-23
19.1.3.5	Draw Bridges	19-23
19.1.4	Rail Facilities	19-25
19.1.4.1	Freight Service	19-25
19.1.4.2	Passenger Service	19-26
19.1.5	Air Transportation Facilities	19-27
19.1.5.1	Byron Airport	19-28
19.1.5.2	Franklin Field	19-28
19.1.5.3	Lodi Airport	19-28
19.1.5.4	Nut Tree Airport	19-28
19.1.5.5	Rio Vista Municipal Airport	19-29

19.1.5.6 Sacramento Executive Airport19-29

19.1.5.7 Sacramento International Airport.....19-29

19.1.5.8 Stockton Municipal Airport19-30

19.1.5.9 Tracy Municipal Airport19-30

19.1.5.10 Travis Air Force Base19-30

19.1.5.11 University Airport.....19-31

19.1.6 Transit Facilities19-31

19.2 Regulatory Setting19-31

19.2.1 Federal Plans, Policies, and Regulations19-31

19.2.1.1 Federal Highway Administration.....19-31

19.2.1.2 Federal Aviation Administration19-32

19.2.1.3 Rivers and Harbors Act of 1899.....19-32

19.2.1.4 United States Coast Guard19-32

19.2.2 State and Regional Plans, Policies, and Regulations.....19-32

19.2.2.1 Public Resources Code19-32

19.2.2.2 Delta Protection Commission’s Land Use and Resource Management
Plan.....19-32

19.2.2.3 Metropolitan Planning Organizations19-33

19.3 Environmental Consequences19-33

19.3.1 Methods for Analysis19-34

19.3.2 Determination of Effects19-36

19.3.3 Effects and Mitigation Approaches19-39

19.3.3.1 No Action Alternative.....19-39

19.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–
5 (15,000 cfs; Operational Scenario A).....19-41

19.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
5 (15,000 cfs; Operational Scenario A).....19-80

19.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A).....19-105

19.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
Intakes (15,000 cfs; Operational Scenario B)19-130

19.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)19-138

19.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario B).....19-146

19.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1
and 2 (6,000 cfs; Operational Scenario A).....19-154

19.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and
Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)19-163

19.3.3.10	Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....	19-192
19.3.3.11	Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	19-200
19.3.3.12	Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	19-208
19.3.3.13	Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D).....	19-216
19.3.3.14	Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....	19-224
19.3.3.15	Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F).....	19-233
19.3.3.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....	19-241
19.3.3.17	Cumulative Analysis.....	19-262
19.4	References.....	19-266
19.4.1	Printed References.....	19-266
Chapter 20	Public Services and Utilities.....	20-1
20.1	Environmental Setting/Affected Environment.....	20-1
20.1.1	Potential Environmental Effects Area.....	20-2
20.1.1.1	Public Services.....	20-2
20.1.1.2	Utilities.....	20-5
20.2	Regulatory Setting.....	20-8
20.2.1	Federal Plans, Policies, and Regulations.....	20-8
20.2.1.1	Public Services.....	20-8
20.2.1.2	Utilities.....	20-9
20.2.2	State Plans, Policies, and Regulations.....	20-9
20.2.2.1	Public Services.....	20-9
20.2.2.2	Utilities.....	20-10
20.2.3	Regional and Local Plans, Policies, and Regulations.....	20-13
20.2.3.1	County General Plans.....	20-14
20.2.3.2	City General Plans.....	20-24
20.3	Environmental Consequences.....	20-29
20.3.1	Methods for Analysis.....	20-29
20.3.1.1	Public Services.....	20-30
20.3.1.2	Utilities.....	20-31
20.3.2	Determination of Effects.....	20-33
20.3.2.1	Compatibility with Plans and Policies.....	20-34

20.3.3 Effects and Mitigation Approaches20-35

20.3.3.1 No Action Alternative.....20-35

20.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
1–5 (15,000 cfs; Operational Scenario A).....20-39

20.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
5 (15,000 cfs; Operational Scenario A).....20-58

20.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A).....20-73

20.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
Intakes (15,000 cfs; Operational Scenario B)20-87

20.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)20-94

20.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario B).....20-102

20.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1
and 2 (6,000 cfs; Operational Scenario A).....20-108

20.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and
Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)20-115

20.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1
(3,000 cfs; Operational Scenario C).....20-132

20.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and
Intakes 1-5 (15,000 cfs; Operational Scenario D).....20-139

20.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and
Intakes 1–5 (15,000 cfs; Operational Scenario D)20-145

20.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and
Intakes W1–W5 (15,000 cfs; Operational Scenario D).....20-152

20.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational
Scenario E).....20-159

20.3.3.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario
F)20-166

20.3.3.16 Alternative 9—Through Delta/Separate Corridors (15,000 cfs;
Operational Scenario G).....20-173

20.3.3.17 Cumulative Analysis20-182

20.4 References Cited.....20-188

20.4.1 Printed References20-188

Chapter 21 Energy 21-1

21.1 Environmental Setting/Affected Environment.....21-1

21.1.1 CVP Hydropower Generation and Pumping Facilities21-2

21.1.1.1 Trinity River and Sacramento River Facilities.....21-4

21.1.1.2 American River Facilities21-5

21.1.1.3 Stanislaus River Facilities21-5

21.1.1.4 CVP Delta-Mendota Canal Facilities21-5

21.1.2 SWP Hydropower Generation and Pumping Facilities21-6

21.1.2.1 Feather River Facilities21-9

21.1.2.2 SWP Delta Facilities21-9

21.1.2.3 San Luis Reservoir and Canal Facilities21-10

21.1.2.4 California Aqueduct Facilities21-10

21.1.3 CVP and SWP Energy Generation and Pumping Use21-11

21.1.3.1 CVP and SWP Energy Generation21-12

21.1.3.2 CVP and SWP Energy Use for Water Pumping21-20

21.1.4 Energy Transmission for the BDCP Pumping Plants21-21

21.2 Regulatory Setting21-22

21.2.1 Federal Plans, Policies, and Regulations21-22

21.2.1.1 Federal Energy Regulatory Commission21-22

21.2.1.2 Western Area Power Administration21-23

21.2.1.3 Other21-23

21.2.2 State Plans, Policies, and Regulations21-24

21.2.2.1 California Public Utilities Commission21-24

21.2.2.2 California Independent System Operator21-24

21.2.2.3 California Energy Commission21-24

21.2.2.4 CEQA Guidelines21-24

21.3 Environmental Consequences21-25

21.3.1 Methods for Analysis21-25

21.3.1.1 Construction21-26

21.3.1.2 Operation21-26

21.3.2 Determination of Effects21-30

21.3.2.1 Potential for New Energy Resources21-32

21.3.3 Effects and Mitigation Approaches21-32

21.3.3.1 No Action Alternative21-35

21.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
1–5 (15,000 cfs; Operational Scenario A)21-39

21.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
5 (15,000 cfs; Operational Scenario A)21-41

21.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A)21-42

21.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
Intakes (15,000 cfs; Operational Scenario B)21-43

21.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)21-44

21.3.3.7	Alternative 2C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario B).....	21-46
21.3.3.8	Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A).....	21-47
21.3.3.9	Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)	21-48
21.3.3.10	Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....	21-49
21.3.3.11	Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1-5 (15,000 cfs; Operational Scenario D).....	21-51
21.3.3.12	Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D)	21-52
21.3.3.13	Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D).....	21-53
21.3.3.14	Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....	21-54
21.3.3.15	Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F)	21-56
21.3.3.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....	21-57
21.3.3.17	Cumulative Analysis	21-58
21.4	References.....	21-62
21.4.1	Printed References	21-62
Chapter 22	Air Quality and Greenhouse Gases	22-1
22.1	Affected Environment/Environmental Setting.....	22-1
22.1.1	Regional Climate and Meteorology	22-1
22.1.1.1	Sacramento Valley Air Basin	22-2
22.1.1.2	San Joaquin Valley Air Basin.....	22-2
22.1.1.3	San Francisco Bay Area Air Basin	22-3
22.1.2	Background Information on Criteria Air Pollutants	22-3
22.1.2.1	Ozone	22-4
22.1.2.2	Nitrogen Oxides	22-4
22.1.2.3	Carbon Monoxide.....	22-5
22.1.2.4	Particulate Matter.....	22-5
22.1.2.5	Sulfur Oxides	22-6
22.1.2.6	Toxic Air Contaminants	22-6
22.1.3	Background Information on Climate Change and Greenhouse Gas Emissions	22-6
22.1.3.1	Climate Change	22-6

22.1.3.2 Principal Greenhouse Gas Emissions Generated by the Alternatives.....22-7

22.1.3.3 Greenhouse Gas Emissions Inventories22-9

22.1.4 Existing Air Quality Conditions.....22-9

22.1.4.1 Attainment Status22-10

22.1.5 Sensitive Receptors.....22-10

22.2 Regulatory Setting22-13

22.2.1 Federal Plans, Policies, and Regulations22-13

22.2.1.1 Criteria Pollutants22-13

22.2.1.2 Greenhouse Gases22-17

22.2.2 State Plans, Policies, and Regulations.....22-18

22.2.2.1 Criteria Pollutants22-18

22.2.2.2 Toxic Air Containments22-19

22.2.2.3 Greenhouse Gases22-20

22.2.2.4 Environmental Justice Compliance and Enforcement Working Group.....22-24

22.2.3 Regional and Local Plans, Policies, and Regulations22-25

22.2.3.1 Criteria Pollutants22-25

22.2.3.2 Greenhouse Gases22-29

22.3 Environmental Consequences22-30

22.3.1 Methods for Analysis22-30

22.3.1.1 Construction of the Water Conveyance Facility.....22-31

22.3.1.2 Operation and Maintenance of the Water Conveyance Facility.....22-34

22.3.1.3 Toxic Air Contaminants22-35

22.3.1.4 Particulate Matter Dispersion Modeling (SMAQMD)22-37

22.3.1.5 Programmatic Assessment of the Conservation Measures 2–2222-37

22.3.2 Determination of Effects22-38

22.3.2.1 Federal Thresholds.....22-40

22.3.2.2 Local Air District Thresholds.....22-41

22.3.2.3 Greenhouse Gas Thresholds22-41

22.3.3 Effects and Mitigation Approaches22-45

22.3.3.1 No Action Alternative.....22-45

22.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
1–5 (15,000 cfs; Operational Scenario A).....22-47

22.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
5 (15,000 cfs; Operational Scenario A).....22-89

22.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A).....22-114

22.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
Intakes (15,000 cfs; Operational Scenario B)22-138

22.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)22-158

22.3.3.7	Alternative 2C—Dual Conveyance with West Alignment Intakes W1–W5 (15,000 cfs; Operational Scenario B)	22-180
22.3.3.8	Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A).....	22-200
22.3.3.9	Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)	22-224
22.3.3.10	Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....	22-268
22.3.3.11	Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	22-291
22.3.3.12	Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	22-307
22.3.3.13	Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D).....	22-322
22.3.3.14	Alternative 7—Dual Conveyance with Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....	22-338
22.3.3.15	Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F)	22-359
22.3.3.16	Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....	22-375
22.3.3.17	Cumulative Analysis	22-396
22.4	References Cited.....	22-403
22.4.1	Printed References	22-403
22.4.2	Personal Communications	22-406
Chapter 23	Noise	23-1
23.1	Environmental Setting/Affected Environment.....	23-1
23.1.1	Definitions of Noise	23-1
23.1.2	Groundborne Vibration	23-4
23.1.3	Potential Environmental Effects Area.....	23-6
23.1.3.1	Sutter County	23-7
23.1.3.2	Sacramento County.....	23-7
23.1.3.3	Yolo County	23-8
23.1.3.4	Solano County	23-9
23.1.3.5	San Joaquin County.....	23-9
23.1.3.6	Contra Costa County	23-10
23.1.3.7	Alameda County.....	23-11
23.2	Regulatory Setting	23-11
23.2.1	Federal Plans, Policies, and Regulations.....	23-11
23.2.2	State Plans, Policies, and Regulations.....	23-12

- 23.2.2.1 Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects23-13
- 23.2.2.2 Caltrans Vibration Criteria.....23-13
- 23.2.3 Regional and Local Plans, Policies, and Regulations23-13
 - 23.2.3.1 Sutter County23-13
 - 23.2.3.2 Sacramento County.....23-14
 - 23.2.3.3 Yolo County23-15
 - 23.2.3.4 Solano County23-15
 - 23.2.3.5 San Joaquin County23-16
 - 23.2.3.6 Contra Costa County23-16
 - 23.2.3.7 Alameda County23-17
- 23.3 Environmental Consequences23-18
 - 23.3.1 Methods for Analysis23-18
 - 23.3.1.1 Construction Noise and Vibration.....23-18
 - 23.3.1.2 Traffic Noise Modeling23-19
 - 23.3.1.3 Groundborne Vibration from Tunneling Operations23-19
 - 23.3.1.4 Existing Baseline Conditions in the Study Area.....23-19
 - 23.3.2 Determination of Effects23-23
 - 23.3.2.1 Construction and Restoration Activity23-23
 - 23.3.2.2 Groundborne Vibration and Noise during Construction.....23-24
 - 23.3.2.3 Conveyance Facility Operations23-25
 - 23.3.3 Effects and Mitigation Approaches23-25
 - 23.3.3.1 No Action Alternative.....23-26
 - 23.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario A).....23-30
 - 23.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario A).....23-52
 - 23.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario A).....23-64
 - 23.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five Intakes (15,000 cfs; Operational Scenario B)23-77
 - 23.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five Intakes (15,000 cfs; Operational Scenario B)23-86
 - 23.3.3.7 Alternative 2C—Dual Conveyance with West Alignment Intakes W1–W5 (15,000 cfs; Operational Scenario B)23-95
 - 23.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A).....23-101
 - 23.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)23-109

23.3.3.10	Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....	23-130
23.3.3.11	Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	23-138
23.3.3.12	Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D).....	23-144
23.3.3.13	Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D).....	23-149
23.3.3.14	Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....	23-155
23.3.3.15	Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F).....	23-163
23.3.3.16	Alternative 9—Through Delta Separate Corridors (15,000 cfs; Operational Scenario G).....	23-169
23.3.3.17	Cumulative Analysis.....	23-177
23.4	References.....	23-182
23.4.1	Printed Communication.....	23-182
23.4.2	Personal Communication.....	23-185
Chapter 24	Hazards and Hazardous Materials.....	24-1
24.1	Environmental Setting/Affected Environment.....	24-1
24.1.1	Potential Environmental Effects Area.....	24-1
24.1.2	Potential Hazardous Materials in the Study Area.....	24-2
24.1.2.1	Naturally Occurring Hazards.....	24-2
24.1.2.2	Hazards from Agricultural Practices.....	24-2
24.1.2.3	Hazards from Oil and Gas Production and Processing.....	24-5
24.1.2.4	Hazards from Historical Mercury Mining.....	24-6
24.1.2.5	Urban, Residential, and Recreational Land Use.....	24-6
24.1.2.6	Hazardous Materials Transportation.....	24-7
24.1.2.7	Wildfire Hazards.....	24-11
24.1.3	Airports within 2 miles of the Water Conveyance Option Footprints or Restoration Opportunity Areas.....	24-12
24.1.3.1	Public Airports.....	24-12
24.1.3.2	Private Airports.....	24-12
24.2	Regulatory Setting.....	24-13
24.2.1	Federal Plans, Policies, and Regulations.....	24-13
24.2.1.1	Comprehensive Environmental Response, Compensation and Liability Act, as Amended.....	24-13
24.2.1.2	Resource Conservation and Recovery Act, as Amended.....	24-13

- 24.2.1.3 Superfund Amendments and Reauthorization Act24-13
- 24.2.1.4 Toxic Substances Control Act24-14
- 24.2.1.5 National Emissions Standards for Hazardous Air Pollutants24-14
- 24.2.1.6 Federal Insecticide, Fungicide and Rodenticide Act.....24-14
- 24.2.1.7 Hazardous Materials Transportation Act24-15
- 24.2.1.8 The Clean Water Act24-15
- 24.2.1.9 Safe Drinking Water Act24-15
- 24.2.1.10 Oil Pollution Act of 199024-16
- 24.2.1.11 Federal Railroad Administration24-16
- 24.2.1.12 Occupational Safety and Health Act24-16
- 24.2.1.13 Safe, Efficient Use and Preservation of Navigable Airspace24-16
- 24.2.2 State Plans, Policies, and Regulations.....24-18
 - 24.2.2.1 California Hazardous Substance Account Act24-18
 - 24.2.2.2 California Hazardous Waste Control Law.....24-19
 - 24.2.2.3 Hazardous Waste Program24-19
 - 24.2.2.4 Hazardous Materials Release Response Plans and Inventory.....24-19
 - 24.2.2.5 California Underground Storage Tank Program.....24-19
 - 24.2.2.6 Aboveground Petroleum Storage Act (APSA) of 200724-19
 - 24.2.2.7 California Solid Waste24-19
 - 24.2.2.8 Control of Pesticides24-20
 - 24.2.2.9 Water Code24-20
 - 24.2.2.10 State Water Board Resolution No. 92-49.....24-21
 - 24.2.2.11 California Law for Conservation of Petroleum.....24-21
 - 24.2.2.12 California Department of Conservation, Division of Oil, Gas, and Geothermal Resources Construction-Site Plan Review Program.....24-21
 - 24.2.2.13 California Occupational Safety and Health Act24-21
 - 24.2.2.14 Safe Drinking Water and Toxics Enforcement Act24-23
 - 24.2.2.15 Accidental Release Prevention Law24-24
 - 24.2.2.16 Fire Hazard Severity Zones.....24-24
- 24.2.3 Local Plans, Policies, and Regulations.....24-24
 - 24.2.3.1 Certified Unified Program Agencies24-24
 - 24.2.3.2 County General Plans24-25
- 24.3 Environmental Consequences24-29
 - 24.3.1 Methods for Analysis24-30
 - 24.3.1.1 Phase I Initial Site Assessment24-30
 - 24.3.1.2 Conceptual Engineering Reports.....24-31
 - 24.3.1.3 Construction Effects24-31
 - 24.3.1.4 Operation/Maintenance Activities Impacts24-33
 - 24.3.1.5 Cumulative Impacts Related to Hazards and Hazardous Materials24-34

24.3.2 Determination of Effects24-34

24.3.3 Effects and Mitigation Approaches24-37

 24.3.3.1 No Action Alternative.....24-37

 24.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
 1–5 (15,000 cfs; Operational Scenario A).....24-42

 24.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
 5 (15,000 cfs; Operational Scenario A).....24-73

 24.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
 W1–W5 (15,000 cfs; Operational Scenario A).....24-86

 24.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
 Intakes (15,000 cfs; Operational Scenario B)24-98

 24.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five
 Intakes (15,000 cfs; Operational Scenario B)24-108

 24.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes
 W1–W5 (15,000 cfs; Operational Scenario B).....24-119

 24.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1
 and 2 (6,000 cfs; Operational Scenario A).....24-128

 24.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and
 Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)24-137

 24.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1
 (3,000 cfs; Operational Scenario C).....24-166

 24.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and
 Intakes 1-5 (15,000 cfs; Operational Scenario D).....24-175

 24.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and
 Intakes 1–5 (15,000 cfs; Operational Scenario D)24-183

 24.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and
 Intakes W1–W5 (15,000 cfs; Operational Scenario D).....24-193

 24.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
 and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational
 Scenario E).....24-201

 24.3.3.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
 and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario
 F)24-210

 24.3.3.16 Alternative 9—Through Delta/Separate Corridors (15,000 cfs;
 Operational Scenario G)24-218

 24.3.3.17 Cumulative Analysis24-230

24.4 References Cited.....24-238

 24.4.1 Printed References24-238

 24.4.2 Personal Communications24-241

Chapter 25 Public Health 25-1

25.1 Environmental Setting/Affected Environment25-1

25.1.1 Potential Environmental Effects Area.....25-2

25.1.1.1 Drinking Water25-2

25.1.1.2 Bioaccumulating Constituents25-4

25.1.1.3 Pathogens.....25-12

25.1.1.4 Vectors25-15

25.1.1.5 Electromagnetic Fields25-22

25.2 Regulatory Setting25-23

25.2.1 Federal and State Agencies Responsible for Regulating Water Quality25-24

25.2.1.1 Bureau of Reclamation.....25-24

25.2.1.2 Other Federal Agencies.....25-24

25.2.2 Federal Plans, Policies, and Regulations.....25-24

25.2.2.1 Clean Water Act25-24

25.2.2.2 Clean Water Act Section 303(d)25-25

25.2.2.3 National Toxics Rule25-25

25.2.2.4 Safe Drinking Water Act.....25-25

25.2.2.5 Surface Water Treatment Rule25-25

25.2.3 State Plans, Policies, and Regulations.....25-26

25.2.3.1 California Toxics Rule25-26

25.2.3.2 California Safe Drinking Water Act.....25-26

25.2.3.3 Assembly Bill 120025-26

25.2.4 Regional Agencies and Programs Responsible for Regulating Drinking Water25-26

25.2.4.1 Regional Water Quality Control Board Water Rights Decisions, Water Quality Control Plans, and Water Quality Objectives25-26

25.2.4.2 Water Quality Control Plan for the Sacramento River and San Joaquin River Basins25-27

25.2.4.3 Water Quality Control Plan for the San Francisco Bay Basin25-27

25.2.4.4 Central Valley Regional Water Quality Control Board Drinking Water Policy25-28

25.2.4.5 California Drinking Water Standards Incorporated by Reference in Basin Plans25-28

25.2.4.6 Safe, Clean, Reliable, Water Supply Act25-28

25.2.5 Regional Agencies and Programs Responsible for Vector Control25-28

25.2.5.1 Alameda County Vector Control Services District.....25-28

25.2.5.2 Contra Costa Mosquito and Vector Control District25-29

25.2.5.3 Sacramento-Yolo Mosquito and Vector Control District25-29

25.2.5.4 San Joaquin County Mosquito and Vector Control District25-29

25.2.5.5 Solano County Mosquito Abatement District25-29

25.2.5.6 Sutter-Yuba Mosquito Abatement District25-29

25.2.5.7 The Central Valley Joint Venture’s Technical Guide to *Best Management Practices for Mosquito Control in Managed Wetlands*25-30

25.2.5.8 County General Plan Policies Related to Vector Control25-31

25.2.6 State and Regional Agencies and Programs Responsible for Regulating Electromagnetic Fields.....25-31

25.2.6.1 California Public Utilities Commission EMF Design Guidelines for Electrical Facilities25-31

25.2.6.2 Local Utility Policies Regulating Electromagnetic Fields25-33

25.2.6.3 County General Plan Policies Related to Electromagnetic Fields.....25-33

25.3 Environmental Consequences25-34

25.3.1 Methods for Analysis25-34

25.3.1.1 Vectors25-35

25.3.1.2 Pathogens and Water Quality25-35

25.3.1.3 Constituents of Concern and Water Quality25-36

25.3.1.4 Bioaccumulation25-36

25.3.1.5 Electromagnetic Fields25-38

25.3.2 Determination of Effects25-39

25.3.3 Effects and Mitigation Approaches25-44

25.3.3.1 No Action Alternative.....25-44

25.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario A).....25-49

25.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario A).....25-64

25.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario A).....25-72

25.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five Intakes (15,000 cfs; Operational Scenario B)25-79

25.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five Intakes (15,000 cfs; Operational Scenario B)25-87

25.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario B).....25-95

25.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A).....25-102

25.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)25-109

25.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....25-126

25.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D)25-133

25.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D)25-142

25.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D)25-150

25.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E)25-158

25.3.3.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F)25-167

25.3.3.16 Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G)25-175

25.4 Cumulative Analysis25-183

25.4.1.1 Assessment Methodology25-183

25.5 References Cited25-195

Chapter 26 Mineral Resources 26-1

26.1 Environmental Setting/Affected Environment26-1

26.1.1 Potential Environmental Effects Area26-1

26.1.2 Existing Mineral Resources in the Study Area26-2

26.1.2.1 Aggregate Resources26-3

26.1.2.2 Oil and Gas Resources26-4

26.2 Regulatory Setting26-8

26.2.1 Federal Plans, Policies, and Regulations26-8

26.2.1.1 Buy America Act26-8

26.2.1.2 Surface Mining Control and Reclamation Act of 197726-8

26.2.1.3 Cosumnes River Preserve Management Plan26-9

26.2.2 State Plans, Policies, and Regulations26-9

26.2.2.1 Surface Mining and Reclamation Act of 197526-9

26.2.2.2 California Department of Conservation, Division of Oil, Gas, and Geothermal Resources Construction-site Plan Review Program26-10

26.2.3 Regional and Local Plans, Policies, and Regulations26-10

26.2.3.1 Delta Protection Commission26-10

26.2.3.2 Suisun Marsh Protection Plan26-11

26.2.3.3 Alameda County Code and East County Area Plan26-12

26.2.3.4 Contra Costa County General Plan26-12

26.2.3.5 Contra Costa County Ordinance Code26-13

26.2.3.6 City of Rio Vista Zoning Ordinance26-13

26.2.3.7 Sacramento County General Plan26-13

26.2.3.8 Zoning Code of Sacramento County26-16

26.2.3.9 San Joaquin County General Plan26-16

26.2.3.10 Solano County General Plan.....26-16

26.2.3.11 Solano County Code26-17

26.2.3.12 Yolo County General Plan.....26-17

26.2.3.13 Yolo County Code.....26-18

26.3 Environmental Consequences26-18

26.3.1 Methods for Analysis26-18

26.3.1.1 Construction and Footprint Effects26-18

26.3.1.2 Operational Effects26-19

26.3.1.3 Restoration Effects.....26-19

26.3.2 Determination of Effects26-19

26.3.3 Effects and Mitigation Approaches26-22

26.3.3.1 No Action Alternative.....26-22

26.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes
1–5 (15,000 cfs; Operational Scenario A).....26-25

26.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–
5 (15,000 cfs; Operational Scenario A).....26-38

26.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario A).....26-45

26.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five
Intakes (15,000 cfs; Operational Scenario B)26-51

26.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five
Intakes (15,000 cfs; Operational Scenario B)26-57

26.3.3.7 Alternative 2C—Dual Conveyance with West Alignment and Intakes
W1–W5 (15,000 cfs; Operational Scenario B).....26-63

26.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1
and 2 (6,000 cfs; Operational Scenario A).....26-69

26.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and
Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)26-75

26.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1
(3,000 cfs; Operational Scenario C).....26-84

26.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and
Intakes 1–5 (15,000 cfs; Operational Scenario D)26-90

26.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and
Intakes 1–5 (15,000 cfs; Operational Scenario D)26-95

26.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and
Intakes W1–W5 (15,000 cfs; Operational Scenario D).....26-101

26.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational
Scenario E).....26-106

26.3.3.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3,
and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F26-112

26.3.3.16 Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....26-118

26.3.3.17 Cumulative Analysis26-124

26.4 References Cited.....26-130

26.4.1 Printed References26-130

Chapter 27 Paleontological Resources 27-1

27.1 Environmental Setting/Affected Environment.....27-1

27.1.1 Potential Environmental Effects Area.....27-1

27.1.1.1 Physiographic Setting.....27-1

27.1.1.2 Geologic and Stratigraphic Setting.....27-2

27.1.1.3 Paleontological Sensitivity of Potentially Affected Units27-5

27.2 Regulatory Setting27-12

27.2.1 Federal Plans, Policies, and Regulations.....27-12

27.2.1.1 Antiquities Act of 1906.....27-12

27.2.1.2 Omnibus Public Land Management Act of 2009.....27-13

27.2.1.3 Federal Land Policy and Management Act (1976)27-13

27.2.1.4 Code of Federal Regulations, Title 4327-13

27.2.1.5 Secretarial of the Interior Order 310427-13

27.2.2 State Plans, Policies, and Regulations.....27-14

27.2.3 Regional and Local Plans, Policies, and Regulations.....27-14

27.2.3.1 Alameda County.....27-14

27.2.3.2 Sacramento County.....27-14

27.2.3.3 San Joaquin County.....27-15

27.2.3.4 Solano County27-15

27.2.3.5 Yolo County27-15

27.3 Environmental Consequences27-16

27.3.1 Methods for Analysis27-16

27.3.2 Determination of Effects27-17

27.3.2.1 Compatibility with Plans and Policies27-18

27.3.3 Effects and Mitigation Approaches27-19

27.3.3.1 No Action Alternative.....27-19

27.3.3.2 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario A).....27-23

27.3.3.3 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario A).....27-36

27.3.3.4 Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario A).....27-41

27.3.3.5 Alternative 2A—Dual Conveyance with Pipeline/Tunnel and Five Intakes (15,000 cfs; Operational Scenario B)27-46

27.3.3.6 Alternative 2B—Dual Conveyance with East Alignment and Five Intakes (15,000 cfs; Operational Scenario B)27-49

27.3.3.7 Alternative 2C—Dual Conveyance with West Alignment Intakes W1–W5 (15,000 cfs; Operational Scenario B)27-52

27.3.3.8 Alternative 3—Dual Conveyance with Pipeline/Tunnel and Intakes 1 and 2 (6,000 cfs; Operational Scenario A).....27-55

27.3.3.9 Alternative 4—Dual Conveyance with Modified Pipeline/Tunnel and Intakes 2, 3, and 5 (9,000 cfs; Operational Scenario H)27-58

27.3.3.10 Alternative 5—Dual Conveyance with Pipeline/Tunnel and Intake 1 (3,000 cfs; Operational Scenario C).....27-71

27.3.3.11 Alternative 6A—Isolated Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario D)27-74

27.3.3.12 Alternative 6B—Isolated Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario D)27-76

27.3.3.13 Alternative 6C—Isolated Conveyance with West Alignment and Intakes W1–W5 (15,000 cfs; Operational Scenario D).....27-79

27.3.3.14 Alternative 7—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Enhanced Aquatic Conservation (9,000 cfs; Operational Scenario E).....27-82

27.3.3.15 Alternative 8—Dual Conveyance with Pipeline/Tunnel, Intakes 2, 3, and 5, and Increased Delta Outflow (9,000 cfs; Operational Scenario F)27-85

27.3.3.16 Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....27-88

27.3.4 Cumulative Analysis27-92

27.4 References Cited.....27-97

27.4.1 Printed References27-97

Chapter 28 Environmental Justice 28-1

28.1 Introduction.....28-1

28.2 Environmental Setting/Affected Environment.....28-2

28.2.1 Identification of Environmental Justice Populations in the Study Area28-2

28.2.1.1 Meaningfully Greater Populations28-3

28.2.1.2 Minority Populations.....28-3

28.2.1.3 Hispanic Residents28-4

28.2.1.4 Characteristics of Relevant Minority Populations.....28-5

28.2.1.5 Cultural Practices and Social Activities.....28-5

28.2.1.6 Culturally Relevant Places, Neighborhoods, Businesses, and Farmlands.....28-5

28.2.1.7 Subsistence and Recreational Activities.....28-6

28.2.2 Low-Income Populations28-8

28.2.2.1 Patterns of Employment for Low-income Populations28-9

28.3 Public Outreach28-10

28.4 Regulatory Setting28-11

 28.4.1 Federal Plans, Policies, and Regulations28-11

 28.4.1.1 Executive Order 12898.....28-11

 28.4.1.2 Council on Environmental Quality Guidance (1997).....28-11

 28.4.1.3 Environmental Compliance Memorandum No. ECM 95-3.....28-11

 28.4.1.4 U.S. Department of the Interior28-11

 28.4.1.5 National Oceanic and Atmospheric Administration, National Marine Fisheries Service28-13

 28.4.2 State Plans, Policies, and Regulations.....28-13

 28.4.2.1 California Senate Bill 115 (Solis).....28-13

 28.4.2.2 California Government Code Section 65040.12.....28-13

 28.4.2.3 Public Resources Code Sections 71110–71116.....28-14

 28.4.2.4 California Resources Agency28-14

 28.4.2.5 Environmental Justice Compliance and Enforcement Working Group.....28-15

28.5 Environmental Consequences28-15

 28.5.1 Methods for Analysis28-15

 28.5.1.1 Definitions28-16

 28.5.1.2 Overview of Methods.....28-17

 28.5.2 Determination of Effects28-18

 28.5.3 Effects and Mitigation Approaches28-19

 28.5.3.1 Issues Not Analyzed in Detail28-19

 28.5.4 No Action Alternative28-25

 28.5.4.1 SWP/CVP Operations28-26

 28.5.4.2 Ongoing Plans, Policies, and Programs28-26

 28.5.5 Alternative 1A—Dual Conveyance with Pipeline/Tunnel and Intakes 1–5 (15,000 cfs; Operational Scenario A)28-29

 28.5.5.1 Land Use.....28-30

 28.5.5.2 Socioeconomics.....28-31

 28.5.5.3 Aesthetics and Visual Resources28-32

 28.5.5.4 Cultural Resources28-34

 28.5.5.5 Public Services and Utilities28-36

 28.5.5.6 Air Quality and Greenhouse Gas Emissions28-38

 28.5.5.7 Noise28-39

 28.5.5.8 Public Health28-40

 28.5.5.9 Summary of Environmental Justice Effects under Alternative 1A28-41

 28.5.6 Alternative 1B—Dual Conveyance with East Alignment and Intakes 1–5 (15,000 cfs; Operational Scenario A)28-41

 28.5.6.1 Land Use.....28-41

28.5.6.2 Socioeconomics.....28-42

28.5.6.3 Aesthetics and Visual Resources28-43

28.5.6.4 Cultural Resources28-46

28.5.6.5 Public Services and Utilities28-48

28.5.6.6 Air Quality and Greenhouse Gas Emissions28-49

28.5.6.7 Noise28-50

28.5.6.8 Public Health28-51

28.5.6.9 Summary of Environmental Justice Effects under Alternative 1B28-52

28.5.7 Alternative 1C—Dual Conveyance with West Alignment and Intakes W1–W5
(15,000 cfs; Operational Scenario A)28-52

28.5.7.1 Land Use.....28-53

28.5.7.2 Socioeconomics.....28-54

28.5.7.3 Aesthetics and Visual Resources28-54

28.5.7.4 Cultural Resources28-57

28.5.7.5 Public Services and Utilities28-59

28.5.7.6 Air Quality and Greenhouse Gas Emissions28-60

28.5.7.7 Noise28-61

28.5.7.8 Public Health28-63

28.5.7.9 Summary of Environmental Justice Effects Under Alternative 1C.....28-63

28.5.8 Alternative 4—Dual Conveyance With Modified Pipeline/Tunnel And Intakes
2, 3, And 5 (9,000 Cfs; Operational Scenario H)28-64

28.5.8.1 Land Use.....28-64

28.5.8.2 Socioeconomics.....28-65

28.5.8.3 Aesthetics and Visual Resources28-66

28.5.8.4 Cultural Resources28-69

28.5.8.5 Public Services and Utilities28-71

28.5.8.6 Air Quality and Greenhouse Gas Emissions28-72

28.5.8.7 Noise28-73

28.5.8.8 Public Health28-74

28.5.8.9 Summary of Environmental Justice Effects under Alternative 4.....28-75

28.5.9 Other Pipeline/Tunnel Alignment Alternatives Compared with Alternative 1A28-75

28.5.9.1 Land Use.....28-75

28.5.9.2 Socioeconomics.....28-76

28.5.9.3 Aesthetics and Visual Resources28-77

28.5.9.4 Cultural Resources28-78

28.5.9.5 Public Services and Utilities28-79

28.5.9.6 Air Quality and Greenhouse Gas Emissions28-80

28.5.9.7 Noise28-80

28.5.9.8 Public Health28-80

28.5.9.9 Summary of Environmental Justice Effects under Other Pipeline/Tunnel Alignment Alternatives28-81

28.5.10 Other East Alignment Alternatives Compared with Alternative 1B28-81

28.5.10.1 Land Use.....28-82

28.5.10.2 Socioeconomics.....28-82

28.5.10.3 Aesthetics and Visual Resources28-83

28.5.10.4 Cultural Resources28-83

28.5.10.5 Public Services and Utilities28-83

28.5.10.6 Air Quality and Greenhouse Gas Emissions28-84

28.5.10.7 Noise28-85

28.5.10.8 Public Health28-85

28.5.10.9 Summary of Environmental Justice Effects under Other East Alignment Alternatives28-85

28.5.11 Other West Alignment Alternatives Compared with Alternative 1C.....28-86

28.5.11.1 Land Use.....28-86

28.5.11.2 Socioeconomics.....28-87

28.5.11.3 Aesthetics and Visual Resources28-87

28.5.11.4 Cultural Resources28-87

28.5.11.5 Public Services and Utilities28-88

28.5.11.6 Air Quality and Greenhouse Gas Emissions28-88

28.5.11.7 Noise28-89

28.5.11.8 Public Health28-89

28.5.12 Alternative 9—Through Delta/Separate Corridors (15,000 cfs; Operational Scenario G).....28-90

28.5.12.1 Land Use.....28-90

28.5.12.2 Socioeconomics.....28-90

28.5.12.3 Aesthetics and Visual Resources28-91

28.5.12.4 Cultural Resources28-94

28.5.12.5 Public Services and Utilities28-95

28.5.12.6 Air Quality and Greenhouse Gas Emissions28-96

28.5.12.7 Noise28-98

28.5.12.8 Public Health28-99

28.5.12.9 Summary of Environmental Justice Effects under Alternative 9.....28-100

28.5.13 Cumulative Analysis28-100

28.5.13.1 Assessment Methodology.....28-100

28.5.13.2 Contribution of the BDCP to the Cumulative Context28-102

28.6 References.....28-104

28.6.1 Printed References28-104

Chapter 29 Climate Change 29-1

29.1 Introduction 29-1

29.2 Purpose 29-1

29.3 Organization 29-4

29.4 Climate Change Background 29-4

29.5 Environmental Setting/Affected Environment 29-5

29.5.1.1 Global Climate Change Effects 29-6

29.5.1.2 Climate Change Effects on California 29-8

29.5.1.3 Climate Change Effects on the Plan Area 29-11

29.6 Resiliency and Adaptation Analysis 29-14

29.6.1 Resiliency and Adaptability to Sea Level Rise and Hydrology Changes 29-15

29.6.1.1 Water Supply Reliability and Aquatic Species in the Delta 29-15

29.6.1.2 Terrestrial Habitat and Species 29-18

29.6.1.3 Delta Levee Stability and Reliability 29-19

29.6.2 Resiliency and Adaptability to Increased Temperature 29-20

29.6.2.1 Water Demand 29-20

29.6.2.2 Water Temperatures 29-21

29.7 Compatibility with Applicable Plans and Policies 29-21

29.7.1 Applicable Plans and Policies 29-22

29.7.1.1 Federal 29-22

29.7.1.2 State 29-24

29.7.2 Compatibility Evaluation 29-28

29.8 References 29-29

29.8.1 Printed References 29-29

Chapter 30 Growth Inducement and Other Indirect Effects 30-1

30.1 Environmental Setting/Affected Environment 30-1

30.1.1 Relationship between Land Use Planning and Water Supply 30-1

30.1.1.1 Regional Planning 30-2

30.1.1.2 Local Planning 30-4

30.1.1.3 Water Supply Management and Planning 30-6

30.1.2 Statewide Urban Land Use and Water Use Profile 30-10

30.1.2.1 Urban Land Use 30-10

30.1.2.2 Water Use 30-11

30.1.3 Urban Land Use and Water Use by Hydrologic Region 30-12

30.1.3.1 San Francisco Bay Hydrologic Region 30-16

30.1.3.2 Sacramento River Hydrologic Region 30-18

30.1.3.3 San Joaquin River Hydrologic Region 30-23

30.1.3.4 Central Coast Hydrologic Region 30-24

30.1.3.5 South Coast Hydrologic Region 30-28

30.1.3.6 Tulare Lake Hydrologic Region30-30

30.1.3.7 South Lahontan Hydrologic Region30-32

30.1.3.8 Colorado River Hydrologic Region30-34

30.2 Regulatory Setting30-36

30.3 Environmental Consequences30-37

30.3.1 Methods for Analysis30-37

30.3.1.1 Direct Growth Inducement Potential30-37

30.3.1.2 Indirect Growth Inducement Potential30-37

30.3.1.3 Key Assumptions30-39

30.3.2 Effects and Mitigation Approaches30-42

30.3.2.1 Direct Growth Inducement30-42

30.3.2.2 Indirect Growth Inducement Associated with Facility Construction
and Operation30-44

30.3.2.3 Indirect Growth Inducement Potential: Summary of Modeling Results30-45

30.3.2.4 Potential for Increases in Water Deliveries to Agricultural Contractors
to Remove Obstacles to Growth30-69

30.3.2.5 Potential for Increases in Water Deliveries to Urban Contractors to
Remove Obstacles to Growth30-70

30.3.3 Secondary Effects of Induced Growth30-100

30.3.3.1 No Action Alternative30-100

30.3.3.2 Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, and 930-100

30.3.4 Indirect Effects of Reduced SWP and CVP Deliveries in Export Service Areas30-108

30.3.4.1 Agricultural Contractor Export Service Areas30-108

30.3.4.2 M&I Contractor Export Service Areas30-111

30.3.5 Authority to Mitigate Effects of Growth30-113

30.3.5.1 Implementation of Environmental Protection Measures by Land Use
Planning Agencies30-116

30.3.5.2 Implementation of Environmental Protection Measures by Resource
Management Agencies30-117

30.3.6 Environmental Impacts Relating to Water Transfers30-117

30.3.6.1 Surface Water30-118

30.3.6.2 Groundwater30-119

30.3.6.3 Water Quality30-119

30.3.6.4 Fish and Aquatic Resources30-120

30.3.6.5 Terrestrial Biological Resources30-120

30.3.6.6 Agricultural Resources30-121

30.3.6.7 Recreation30-121

30.3.6.8 Employment and Income30-122

30.3.7 Conclusions30-125

30.4 References30-126

30.4.1 Printed References30-126

30.4.2 Personal Communications30-129

Chapter 31 Other CEQA/NEPA Required Sections 31-1

31.1 Irreversible and Irrecoverable Commitments of Resources/Significant Irreversible Environmental Changes31-1

31.2 Relationship between Short-Term Uses of the Environment and Maintenance and Enhancement of Long-Term Productivity.....31-3

31.3 CEQA Environmentally Superior Alternative31-4

31.4 Summary of Significant and Unavoidable Adverse Impacts31-8

31.5 Environmental and Other Commitments and Mitigation Measures with the Potential for Environmental Effects under CEQA and NEPA31-15

31.5.1 Environmental and Other Commitments31-15

31.5.1.1 Perform Geotechnical Studies31-15

31.5.1.2 Transmission Line Pole Placement31-17

31.5.1.3 Prepare and Implement Mosquito Management Plans.....31-19

31.5.1.4 Disposal and Reuse of Spoils, Reusable Tunnel Material (RTM), and Dredged Material31-20

31.5.1.5 Partner with Delta Municipal, Industrial, and Agricultural Water Purveyors in Developing Methods to Reduce Potential Water Quality Effects.....31-23

31.5.1.6 Enhance Recreation Access in the Vicinity of the Proposed Intakes31-25

31.5.2 Mitigation Measures.....31-26

31.5.2.1 Mitigation Measure SOILS-2b: Salvage, Stockpile, and Replace Topsoil and Prepare a Topsoil Storage and Handling Plan31-27

31.5.2.2 Mitigation Measure BIO-91: Compensate for Loss of High-Value Western Burrowing Owl Habitat.....31-28

31.5.2.3 Mitigation Measure BIO-130: Compensate for Loss of Nesting Habitat for Grasshopper Sparrow31-29

31.5.2.4 Mitigation Measure BIO-138: Compensate for Loss of High-Value Loggerhead Shrike Habitat31-29

31.5.2.5 Mitigation Measure BIO-179a: Conduct Food Studies and Monitoring for Wintering Waterfowl in Suisun Marsh31-30

31.5.2.6 Mitigation Measure BIO-179b: Conduct Food Studies and Monitoring to Demonstrate Food Quality of Palustrine Tidal Wetlands in the Yolo and Delta Basins31-32

31.5.2.7 Mitigation Measure AG-1: Develop an Agricultural Lands Stewardship Plan (ALSP) to Preserve Agricultural Productivity and Mitigate for Loss of Important Farmland and Land Subject to Williamson Act Contracts or in Farmland Security Zones.....31-33

31.5.2.8 Mitigation Measure GW-5: Agricultural Lands Seepage Minimization.....31-35

31.5.2.9 Mitigation Measure GW-7: Provide an Alternate Source of Water31-36

31.5.2.10 Mitigation Measure REC-2: Provide Alternative Bank Fishing Access Sites31-38

31.5.2.11 Mitigation Measure REC-6: Provide a Temporary Alternative Boat Launch to Ensure Access to San Luis Reservoir.....31-40

31.5.2.12 Mitigation Measure AES-1a: Locate New Transmission Lines and Access Routes to Minimize the Removal of Trees and Shrubs and Pruning Needed to Accommodate New Transmission Lines and Underground Transmission Lines Where Feasible.....31-41

31.5.2.13 Mitigation Measure AES-1c: Develop and Implement a Spoil/Borrow and Reusable Tunnel Material Area Management Plan31-43

31.5.2.14 Mitigation Measure AES-1d: Restore Barge Unloading Facility Sites Once Decommissioned31-44

31.5.2.15 Mitigation Measure AES-1e: Apply Aesthetic Design Treatments to All Structures to the Extent Feasible31-46

31.5.2.16 Mitigation Measure AES-1f: Locate Concrete Batch Plants and Fuel Stations Away from Sensitive Visual Resources and Receptors and Restore Sites upon Removal of Facilities31-46

31.5.2.17 Mitigation Measure AES-1g: Implement Best Management Practices to Implement Project Landscaping Plan31-48

31.5.2.18 Mitigation Measure AES-4c: Install Visual Barriers along Access Routes, Where Necessary, to Prevent Light Spill from Truck Headlights toward Residences31-49

31.5.2.19 Mitigation Measure AES-6a: Underground New or Relocated Utility Lines Where Feasible31-50

31.5.2.20 Mitigation Measure CUL-6: Conduct a Survey of Inaccessible Properties to Assess Eligibility, Determine if These Properties Will Be Adversely Impacted by the Project, and Develop Treatment to Resolve or Mitigate Adverse Impacts31-51

31.5.2.21 Mitigation Measure TRANS-2c: Improve Physical Condition of Affected Roadway Segments as Stipulated in Mitigation Agreements or Encroachment Permits31-52

31.5.2.22 Mitigation Measure UT-6b: Relocate Utility Infrastructure in a Way That Avoids or Minimizes Any Effect on Operational Reliability31-54

31.5.2.23 Mitigation Measure UT-6c: Relocate Utility Infrastructure in a Way That Avoids or Minimizes Any Effect on Worker and Public Health and Safety31-55

31.5.2.24 Mitigation Measure AQ-15: Develop and Implement a GHG Mitigation Program to Reduce Construction Related GHG Emissions to Net Zero (0).....31-58

31.5.3 Mitigation Measures That Require Payment of Fees31-59

Chapter 32 Public Involvement, Consultation, and Coordination 32-1

32.1 Public Involvement 32-1

 32.1.1 EIR/EIS Scoping Meetings and Comments 32-1

 32.1.1.1 2008 Scoping Meetings 32-2

 32.1.1.2 2009 Scoping Meetings 32-3

 32.1.1.3 Summary of Scoping Comments Received 32-3

 32.1.2 Public Outreach Activities 32-5

 32.1.2.1 BDCP Steering Committee and Working Groups 32-5

 32.1.2.2 Stakeholder Briefings and Presentations 32-6

 32.1.2.3 Public Meetings 32-6

 32.1.2.4 Environmental Justice 32-7

 32.1.2.5 Additional and Ongoing Public Participation Opportunities 32-8

32.2 Compliance with Agency Consultation Requirements 32-8

 32.2.1 Federal Requirements 32-9

 32.2.1.1 Clean Water Act 32-9

 32.2.1.2 Federal Endangered Species Act 32-9

 32.2.1.3 Fish and Wildlife Coordination Act 32-10

 32.2.1.4 Magnuson-Stevens Fishery Conservation and Management Act 32-10

 32.2.1.5 Rivers and Harbors Act 32-10

 32.2.1.6 National Historic Preservation Act 32-11

 32.2.1.7 Native American Consultation 32-11

 32.2.1.8 Executive Order on Environmental Justice (E.O. 12898) 32-11

 32.2.2 State Requirements 32-12

 32.2.2.1 Natural Community Conservation Planning Act 32-12

 32.2.2.2 California Endangered Species Act 32-12

 32.2.2.3 Porter-Cologne Water Quality Control Act 32-13

32.3 Agency Involvement and Coordination 32-13

 32.3.1 Agency Involvement in the EIR/EIS 32-13

 32.3.2 Agency Involvement in the BDCP 32-14

32.4 Public Review of the Draft EIR/EIS 32-15

Chapter 33 List of Preparers 33-1

33.1 Preparers by Affiliation 33-1

 33.1.1 Agencies 33-1

 California Department of Water Resources 33-1

 California Department of Fish and Wildlife 33-4

 U.S. Bureau of Reclamation 33-5

 U.S. Fish and Wildlife Service 33-7

 National Marine Fisheries Service 33-8

 33.1.2 Consultant Teams (2011–Public Draft) 33-9

	ICF International	33-9
	CH2M Hill	33-15
	Black & Veatch.....	33-17
	RBI Consulting, Inc.	33-17
	ESA.....	33-18
	SAIC.....	33-19
	Fehr & Peers	33-20
	Apple One	33-20
	egret, inc.....	33-20
	Estep Environmental Consulting	33-21
	Loren Bottorff	33-21
	Cardno Entrix	33-21
33.1.3	Consultant Teams (before 2011)	33-22
	AECOM.....	33-22
33.2	Preparers by Chapter.....	33-24
Chapter 34	References Cited	34-1
	Executive Summary.....	34-1
34.1	Chapter 1. Introduction	34-1
34.2	Chapter 2. Project Objectives and Purpose and Need	34-2
34.3	Chapter 3. Description of Alternatives	34-3
34.3.1	Personal Communications	34-5
34.4	Chapter 4. Approach to the Environmental Analysis	34-5
34.5	Chapter 5. Water Supply	34-5
34.6	Chapter 6. Surface Water	34-7
34.6.1	Printed References	34-7
34.7	Chapter 7. Groundwater.....	34-11
34.8	Chapter 8. Water Quality.....	34-17
34.8.1	Printed References	34-17
34.8.2	Personal Communications	34-36
34.9	Chapter 9. Geology and Seismicity	34-37
34.10	Chapter 10. Soils.....	34-42
34.11	Chapter 11. Fish and Aquatic Resources	34-45
34.11.1	Printed References	34-45
34.11.2	Personal Communications	34-71
34.12	Chapter 12. Terrestrial Biological Resources.....	34-72
34.12.1	Printed References	34-72
34.12.2	Personal Communications	34-105
34.13	Chapter 13. Land Use	34-106
34.13.1	Printed References	34-106

34.14 Chapter 14. Agricultural Resources34-109
 34.14.1 Printed References34-109
 34.15 Chapter 15. Recreation.....34-113
 34.15.1 Printed References34-113
 34.15.2 Personal Communications34-126
 34.16 Chapter 16. Socioeconomics34-127
 34.16.1 Printed References34-127
 34.17 Chapter 17. Aesthetics and Visual Resources.....34-131
 34.17.1 Printed References34-131
 34.17.2 Personal Communications34-135
 34.18 Chapter 18. Cultural Resources34-135
 34.18.1 Printed References34-135
 34.18.2 Personal Communications34-141
 34.19 Chapter 19. Transportation34-141
 34.19.1 Printed References34-141
 34.20 Chapter 20. Public Services and Utilities34-145
 34.21 Chapter 21. Energy34-146
 34.21.1 Printed References34-146
 34.22 Chapter 22. Air Quality and Greenhouse Gases34-148
 34.22.1 Printed References34-148
 34.22.2 Personal Communications34-151
 34.23 Chapter 23. Noise34-152
 34.23.1 Printed References34-152
 34.23.2 Personal Communication.....34-154
 34.24 Chapter 24. Hazards and Hazardous Materials34-154
 34.24.1 Printed References34-154
 34.24.2 Personal Communications34-157
 34.25 Chapter 25. Public Health34-157
 34.26 Chapter 26. Mineral Resources34-163
 34.26.1 Printed References34-163
 34.27 Chapter 27. Paleontological Resources34-166
 34.27.1 Printed References34-166
 34.28 Chapter 28. Environmental Justice34-168
 34.28.1 Printed References34-168
 34.29 Chapter 29. Climate Change34-170
 34.29.1 Printed References34-170
 34.30 Chapter 30. Growth Inducement.....34-173
 34.30.1 Printed References34-173
 34.30.2 Personal Communications34-177

34.31 Chapter 31. Other CEQA/NEPA Required Sections.....34-177

34.32 Chapter 32. Public Involvement, Consultation, and Coordination34-177

Chapter 35 Glossary 35-1

IndexIndex-1

Appendices

1A Primer on California Water Delivery Systems and the Delta

1B Water Storage

1C Water Demand Management

1D Final Scoping Report

1E Water Transfers in California Types, Recent History, and General Regulatory Setting

3A Identification of Water Conveyance Alternatives, Conservation Measure 1

3B Environmental Commitments

3C Construction Assumptions for Water Conveyance Facilities

3D Defining Existing Conditions, No Action Alternative, No Project Alternative, and Cumulative Impact Conditions

3E Potential Seismic and Climate Change Risks to SWP/CVP Water Supplies

3F Intake Location Analysis

3G Background on the Process of Developing the BDCP Conservation Measures

3H Intermediate Forebay Location Analysis

3I BDCP Compliance with the Delta Reform Act

4A Summary of Survey Data Collection Efforts by Department of Water Resources to Obtain Information Regarding Baseline Conditions in Areas That Could Be Affected by BDCP

5A BDCP EIR/EIS Modeling Technical Appendix

5B Responses to Reduced South of Delta Water Supplies

5C Historical Background of Cross-Delta Water Transfers and Potential Source Regions

5D Water Transfer Analysis Methodology and Results

7A Groundwater Modeling

8A Water Quality Criteria and Objectives

8B Summary of Data Availability Used in Environmental Setting

8C Screening Analysis

8D	Source Water Fingerprinting Results
8E	Bromide
8F	Boron
8G	Chloride
8H	Electrical Conductivity
8I	Mercury
8J	Nitrate
8K	Organic Carbon
8L	Pesticides
8M	Selenium
8N	Trace Metals
10A	Soil Associations
10B	Natural Resources Conservation Service Soil Suitability Ratings
10C	Soil Chemical and Physical Properties and Land Use Suitability
11A	Covered Fish Species Descriptions
11B	Noncovered Fish and Aquatic Species Descriptions
11C	CALSIM II Model Results Utilized in the Fish Analysis
11D	Sacramento River Water Quality Model and Reclamation Temperature Model Results Utilized in the Fish Analysis
12A	Special-Status Species Known to Occur or with the Potential to Occur in the Study Area
12B	Common and Scientific Names of Terrestrial Species
12C	DHCCP Data Summary Report
12D	Conservation Strategy for Water Conveyance Construction Effects on Terrestrial Species
12E	Detailed Accounting of Direct Effects of Alternatives on Natural Communities
14A	Individual Crop Effects as a Result of BDCP Water Conveyance Facility Construction
14B	Agricultural Stewardship Strategies
15A	Privately Owned Recreation Facilities by County
15B	Overview of Delta Recreation
15C	Additional Recreation Figures
16A	Regional Economic Impacts of Water Conveyance Facility Construction

16B	Community Characterization Photographs
17A	Candidate KOP Sensitivity Rating Scales
17B	Photo Simulation Data Sources and Assumptions
17C	Scenic Quality Rating Summaries
17D	Permanent Impacts after Construction is Complete
17E	Permanent Features
18A	Cultural Resources Supporting Information
18B	Identified Cultural Resources Potentially Affected by BDCP Alternatives
19A	Traffic Study
20A	Details of Public Services and Utilities Supporting the Plan Area
22A	Air Quality Analysis Assumptions
22B	Air Quality Assumptions
22C	Health Risk Assessment
22D	DWR Climate Action Plan
22E	Conformity Letters
24A	Draft Phase 1 Initial Site Assessment
26A	Natural Gas Wells
28A	Census Data
29A	Effects of Sea-Level Rise on Delta Tidal Flows and Salinity
29B	Climate Change Effects on Hydrology in the Study Area Used for CALSIM Modeling Analysis
29C	Climate Change and the Effects of Reservoir Operations on Water Temperatures in the Study Area
30A	Population Density in Hydrologic Regions
30B	Water Contractor Profiles
30C	Summary of Significant Impacts
31A	BDCP Later CM Activity Environmental Checklist
32A	Public Involvement Informational Materials

Tables

ES-1	Lead, Cooperating, Responsible and Trustee Agencies.....	ES-6
ES-2	BDCP Covered Species.....	ES-14
ES-3	Proposed BDCP Conservation Measures.....	ES-19
ES-4	Screening Criteria for Water Conveyance Alternative Alignment Concepts.....	ES-23
ES-5	Action Alternatives Evaluated in the BDCP EIR/EIS.....	ES-28
ES-6	Water Conveyance Facilities Components of Each Alternative.....	ES-31
ES-7	Comparison of Operational Rules under BDCP Operational Scenarios and Alternatives.....	ES-34
ES-8	Comparison of Conservation Component Acreages and Variations among the Action Alternatives.....	ES-37
ES-9	Summary of BDCP EIR/EIS Impacts and Mitigation Measures.....	follows ES-61
ES-10	Comparison of Operational Rules under BDCP Operational Scenarios and Alternatives.....	ES-51
ES-11	Changes in Average Delta Outflow, Total Exports, and South Delta Pumping for the BDCP Alternatives for the Late Long-Term (2060).....	ES-55
1-1	BDCP Covered Species.....	1-16
1-2	Summary of Agencies and Review, Approval, or Other Responsibilities, in Addition to Those under CEQA and NEPA.....	1-21
1-3	Correlated CEQA and NEPA Terminology.....	1-30
3-1	Action Alternatives Evaluated in the BDCP EIR/EIS.....	3-14
3-2	BDCP Covered Activities.....	3-17
3-3	Summary of Proposed BDCP Conservation Measures of All Action Alternatives.....	3-19
3-4	Implementation Schedule for Natural Community Protection and Restoration Conservation Measures.....	3-22
3-5	Water Conveyance Facilities Components of Each Alternative.....	3-25
3-6	Comparison of Operational Rules under BDCP Operational Scenarios and Alternatives.....	3-36
3-7	Summary of Physical Characteristics under Alternatives 1A, 2A, and 6A.....	3-48
3-8	Summary of Physical Characteristics under Alternatives 1B, 2B, and 6B.....	3-53
3-9	Summary of Physical Characteristics under Alternatives 1C, 2C, and 6C.....	3-56

3-10 Summary of Physical Characteristics under Alternative 3.....3-62

3-11 Summary of Physical Characteristics under Alternative 4.....3-66

3-12 Summary of Physical Characteristics under Alternative 5.....3-70

3-13 Summary of Physical Characteristics under Alternatives 7 and 83-76

3-14 Summary of Physical Characteristics under Alternative 9.....3-81

3-15 Summary of the Avoidance and Minimization Measures3-168

3-16 North Delta Bypass Flow Criteria: Post-Pulse Water Operations3-184

3-17 Allowable Post-Pulse North Delta Diversions in Different Months for a Range of
Sacramento River Flows at Freeport3-186

3-18 Old and Middle River Flow Criteria – Scenario B.....3-190

3-19 San Joaquin Inflow Relationship to Old and Middle River Flow Criteria3-191

3-20 Head of Old River Operable Barrier Operations Criteria if San Joaquin River Flows
at Vernalis are Equal to or Less Than 10,000 cfs3-191

3-21 Old and Middle River Flow Criteria – Scenario H3-204

3-22 San Joaquin Inflow Relationship to Old and Middle River Flow Criteria3-205

3-23 Head of Old River Operable Barrier Operations Criteria if San Joaquin River Flows
at Vernalis are Equal To or Less Than 10,000 cfs.....3-205

3-24 March-May Average Outflow Criteria for “High Outflow” Outcome of Spring
Outflow Decision Tree3-207

3-25 Potential Outcomes for Delta Outflow under Scenario H Operations (Alternative 4)3-209

4-1 Overview of BDCP EIR/EIS Modeling Tools.....4-14

5-1 Distribution of State Precipitation and Water Demand5-5

5-2 Cross-Delta Transfer History, 1995–2012.....5-51

5-3 Effects on SWP/CVP Water Supply Availability from the Plans, Policies, and
Programs for the No Action Alternative as compared to Existing Conditions.....5-58

5-4 Water Supply Summary Table follows 5-160

5-5 Water Supply Summary Table–Differences from Existing Conditions..... follows 5-160

5-6 Water Supply Summary Table–Differences from No Action Alternative (LLT)..... follows 5-160

5-7 Water Supply Summary Table follows 5-160

5-8 Water Supply Summary Table–Differences from Existing Conditions..... follows 5-160

5-9 Water Supply Summary Table–Differences from No Action Alternative (LLT)..... follows 5-160

5-10 Effects on Water Supply from the Programs, Projects, and Policies considered for Cumulative Analysis..... 5-153

6-1 Summary of Sacramento and San Joaquin River and Tributary Dams 6-15

6-2 Surface Water Summary Table follows 6-164

6-3 Surface Water Summary Table–Differences from Existing Conditions follows 6-164

6-4 Surface Water Summary Table–Differences from No Action Alternative (LLT) follows 6-164

6-5 Surface Water Summary Table–Number of Years where Storage is within 10 TAF of the Flood Curve follows 6-164

6-6 Surface Water Summary Table–Number of Years where Storage is within 10 TAF of the Flood Curve–Differences from Existing Conditions..... follows 6-164

6-7 Surface Water Summary Table–Number of Years where Storage is within 10 TAF of the Flood Curve–Differences from No Action Alternative (LLT)..... follows 6-164

6-8 Effects on Surface Water Resources from the Plans, Policies, and Programs for the No Action Alternative as compared to the Existing Conditions 6-50

6-9 Effects on Water Supply from the Programs, Projects, and Policies Considered for Cumulative Analysis..... 6-154

7-1 Freshwater Aquifers of the Southern Sacramento Valley Groundwater Basin 7-6

7-2 Freshwater Aquifers of the Northern San Joaquin Valley Groundwater Basin 7-7

7-3 Delta and Suisun Marsh Groundwater Basin and Subbasin Wells Summary 7-9

7-4 Delta Region Groundwater Management Plans..... 7-28

7-5 Adjudicated Groundwater Basins in Southern California 7-29

7-6 Effects on Groundwater Resources from the Plans, Policies, and Programs for the No Action Alternative as Compared to Existing Conditions 7-43

7-7 Long-Term State Water Project and Central Valley Project Deliveries to Hydrologic Regions Located South of the Delta 7-53

7-8 Effects on Groundwater Resources from the Plans, Policies, and Programs Considered for Cumulative Analysis 7-107

8-1 Designated Beneficial Uses for Water Bodies in the Study Area..... 8-15

8-2 Clean Water Act Section 303(d) Listed Pollutants and Sources in the Delta..... 8-23

8-3 Summary of Completed and Ongoing Total Maximum Daily Loads in the Bay-Delta and Sacramento and San Joaquin River Portions of the Study Area 8-24

8-4 Clean Water Act Section 303(d) Listed Water Bodies in Regions of the Study Area Served by SWP South-of-Delta Exports 8-25

8-5	Receptors Affected by Water Quality—Characterized by the Designated Beneficial Uses of the Study Area	8-29
8-6	Locations Selected to Represent Existing Water Quality in the Delta.....	8-31
8-7	Ammonia Concentrations at Selected North- and South-of-Delta Stations, Water Years 2001–2006	8-38
8-8	Boron Concentrations at Selected North- and South-of-Delta Stations, Water Years 2001–2006	8-41
8-9	Chloride Concentrations at Selected North of Delta and South-of-Delta Stations, Water Years 2001–2006	8-43
8-10	Sum of All Polychlorinated Biphenyls at the Mouths of the Sacramento and San Joaquin Rivers, Water Years 2001–2006	8-47
8-11	Temporal Distribution of Low Dissolved Oxygen Impairment.....	8-49
8-12	Dissolved Oxygen Concentrations at Selected North- and South--of-Delta Stations, Water Years 2001–2006	8-51
8-13	Electrical Conductivity Concentrations at Selected North- and South-of-Delta Stations, Water Years 2001–2006	8-54
8-14	Mercury and Methylmercury Surface Water Concentrations at Tributary Inputs and the Delta’s Major Outputs.....	8-63
8-15	Mercury and Methylmercury Sediment Concentrations for Tributary Inputs, the Delta, and Suisun Bay	8-65
8-16	Mercury Concentrations in Largemouth Bass Fillets for Tributary Inputs	8-67
8-17	Nitrate/Nitrite Concentrations at Selected North- and South-of-Delta Stations, Water Years 2001–2006	8-73
8-18	Ortho-Phosphorus Concentrations at Selected North- and South-of-Delta Stations, Water Years 2001–2006	8-73
8-19	Total Phosphorus Concentrations at Selected North- and South-of-Delta Stations, Water Years 2001–2006	8-74
8-20	Total Organic Carbon Concentrations at Delta Intakes and Major Tributaries	8-77
8-21	Dissolved Organic Carbon Concentrations at Selected North- and South-of-Delta Stations, Water Years 2001–2006	8-78
8-22	Total Organic Carbon Concentrations at Selected North- and South-of-Delta Stations, Water Years 2001–2006	8-79
8-23	Diazinon Concentrations, by Water Body Category	8-85
8-24	Chlorpyrifos Concentrations, by Water Body Category	8-85

8-25 Pesticide Concentrations at the Banks and Barker Slough Pumping Plants, Water Years 2001–20068-86

8-26 Pesticide Concentrations at the Mouths of the Sacramento and San Joaquin Rivers, Water Years 2001–20068-87

8-27 Sum of All Polycyclic Aromatic Hydrocarbons at the Mouths of the Sacramento and San Joaquin Rivers, Water Years 2001–20068-90

8-28 Selenium Concentrations in Surface Water in the Study Area8-94

8-29 Selenium Concentrations in Surface Water Reported by CALFED Bay-Delta Program8-95

8-30 Selenium Concentrations in Delta and Suisun Bay Sediment.....8-97

8-31 Selenium Concentrations in Biota in or near the Delta8-98

8-32 Selenium Concentrations in Largemouth Bass8-98

8-33 Median Metal Concentrations for Selected Sites, May 1988–September 19938-105

8-34 Metals Concentrations at the Harvey O. Banks and Barker Slough Pumping Plants, Water Years 2001–20068-105

8-35 Metals Concentrations at the Mouths of the Sacramento and San Joaquin Rivers, Water Years 2001–20068-106

8-36 Metals Concentrations at Selected North- and South-of-Delta Stations, Water Years 2001–20068-107

8-37 Turbidity Concentrations at Selected North- and South-of-Delta Stations, Water Years 2001–20068-111

8-38 Summary of Methodologies Used for Water Quality Impact Analyses8-140

8-39 Applicable Federal Criteria, State Objectives, and Other Relevant Effects Thresholds for Ammonia8-143

8-40 Assumptions on Status of Sacramento Regional Wastewater Treatment Plant Nitrification Upgrades Under Assessment Scenarios8-143

8-41 Applicable Federal Criteria, State Objectives, and other Relevant Effects Thresholds for Boron8-144

8-42 Historical Boron Concentrations in the Five Delta Source Waters8-145

8-43 Source Water Concentrations for Dissolved Bromide8-148

8-44 Applicable Federal Criteria, State Objectives, and Other Relevant Effects Thresholds for Chloride8-150

8-45 Historical Chloride (Dissolved) Concentrations in the Five Delta Source Waters8-151

8-46 Applicable State Objectives and Other Relevant Effects Thresholds for Electrical Conductivity.....8-154

8-47 Applicable Federal Criteria, State Objectives, and Other Relevant Effects Thresholds for Mercury and Methylmercury in Water8-158

8-48 Historical Mercury Concentrations in the Five Delta Source Waters for the Period 1999–2008.....8-159

8-49 Historical Methylmercury Concentrations in the Five Delta Source Waters for the Period 2000–20088-160

8-50 Applicable Federal Criteria, State Objectives, and other Relevant Effects Thresholds for nitrate.....8-161

8-51 Nitrate Concentrations in the Source Waters to the Delta8-161

8-52 Monthly Average Dissolved Organic Carbon Utilized in DSM2 Modeling for Sacramento and San Joaquin River Source Waters.....8-163

8-53 Summary of Dissolved Ortho-Phosphate Concentrations in Delta Source Waters.....8-166

8-54 Applicable Federal Criteria, State Standards/Objectives, and Other Relevant Effects Thresholds for Selenium.....8-167

8-55 Selected Benchmarks for Assessment of Selenium in Whole-body Fish, Bird Eggs, and Fish Fillets8-167

8-56 Historical Selenium Concentrations in the Six Delta Source Waters for the Period 1996–2010.....8-168

8-57 Measured and Modeled Selenium Concentrations in Whole-body Fish at or Near Source Water Locations to the Delta.....8-169

8-58 Water Quality Criteria and Objectives for Trace Metals8-170

8-59 Hardness-based dissolved freshwater aquatic life criteria by primary source water8-171

8-60 BLM-based criteria for dissolved copper.....8-172

8-61 Water Quality Constituents for which Detailed Assessments are Performed8-174

8-62 Water Quality Assessment Scenarios.....8-175

8-63 Scenario Comparisons Performed for Impact Assessment Purposes.....8-175

8-64 Estimated Ammonia-N Concentrations in the Sacramento River Downstream of the Sacramento Regional Wastewater Treatment Plant for the No Action Alternative and Alternative 1A.....8-227

8-65 Estimated Ammonia-N Concentrations in the Sacramento River Downstream of the Sacramento Regional Wastewater Treatment Plant for the No Action Alternative and Alternative 2A.....8-304

8-66 Estimated Ammonia-N Concentrations in the Sacramento River Downstream of the Sacramento Regional Wastewater Treatment Plant for the No Action Alternative and Alternative 38-359

8-67 Estimated Ammonia-N Concentrations in the Sacramento River Downstream of the Sacramento Regional Wastewater Treatment Plant for the No Action Alternative and Alternative 4 Operational Scenarios H1, H2, H3, and H4.8-410

8-68 Estimated Ammonia-N Concentrations in the Sacramento River Downstream of the Sacramento Regional Wastewater Treatment Plant for the No Action Alternative and Alternative 58-492

8-69 Estimated Ammonia-N Concentrations in the Sacramento River Downstream of the Sacramento Regional Wastewater Treatment Plant for the No Action Alternative and Alternative 6A8-543

8-70 Estimated Ammonia-N Concentrations in the Sacramento River Downstream of the Sacramento Regional Wastewater Treatment Plant for the No Action Alternative and Alternative 78-599

8-71 Estimated Ammonia-N Concentrations in the Sacramento River Downstream of the Sacramento Regional Wastewater Treatment Plant for the No Action Alternative and Alternative 88-651

8-72 Estimated Ammonia-N Concentrations in the Sacramento River Downstream of the Sacramento Regional Wastewater Treatment Plant for the No Action Alternative and Alternative 98-702

8-73 Effects on Water Quality from the Programs, Projects, and Policies Considered for Cumulative Analysis.....8-755

9-1 Mapped Peaty Mud9-4

9-2 Mapped Alluvium9-5

9-3 Mapped Levee and Channel Deposits9-7

9-4 Mapped Dune Sand Deposits9-8

9-5 Mapped Older Alluvium9-9

9-6 Largest Earthquakes Having Affected the San Francisco Bay Region9-11

9-7 Characteristics of Major Seismic Sources in San Francisco Bay Region9-13

9-8 Characteristics of Thrust Faults in the Delta and Suisun Marsh.....9-14

9-9 Estimated Fault Rupture Offsets for Concord and Pittsburgh Hills Faults.....9-17

9-10 Controlling Seismic Sources in 20059-19

9-11 Calculated Mean Peak Ground Motions at Selected Sites for Various Return Periods9-20

9-12 Comparison of Ground Motions Calculated in the Seismic Study to Estimated 2008 USGS Mapped Values9-21

9-13 Effects on Geology and Seismicity from the Plans, Policies, and Programs for the No Action Alternative9-51

9-14 Expected Earthquake Ground Motions at Locations of Selected Major Facilities during Construction (2020)—Alternative 1A.....9-52

9-15 Surficial Geology Underlying Alternative 1A/Pipeline/Tunnel Alignment by Segments9-57

9-16 Geology Underlying Borrow/Spoils and Reusable Tunnel Material Storage Areas— Alternative 1A.....9-59

9-17 Expected Earthquake Ground Motions at Locations of Selected Major Facilities in the Early Long-Term (2025)—Alternative 1A9-66

9-18 Expected Earthquake Ground Motions at Locations of Selected Major Facilities during Construction (2020)—Alternative 1B.....9-85

9-19 Geology of Alternative 1B/East Alignment by Segments9-90

9-20 Geology of Alternative 1B Borrow/Spoils and Resuable Tunnel Material Areas by Segments9-92

9-21 Expected Earthquake Ground Motions at Locations of Selected Major Facilities in the Early Long-Term (2025)—Alternative 1B9-100

9-22 Expected Earthquake Ground Motions at Locations of Selected Major Facilities during Construction (2020)—Alternative 1C.....9-118

9-23 Geology of Alternative 1C/West Alignment by Segments.....9-123

9-24 Geology of Alternative 1C Borrow/Spoils and Reusable Tunnel Material Areas by Segments9-125

9-25 Expected Earthquake Ground Motions at Locations of Selected Major Facilities in the Early Long-Term (2025)—Alternative 1C9-133

9-26 Surficial Geology Underlying Alternative 4/ Modified Pipeline/Tunnel Alignment by Segments9-182

9-27 Geology Underlying Borrow and Reusable Tunnel Material Storage Areas— Alternative 49-184

9-28 Expected Earthquake Ground Motions at Locations of Selected Major Facilities during Construction (2020)—Alternative 99-250

9-29 Geology of Key Facilities—Alternative 99-252

9-30 Expected Earthquake Ground Motions at Locations of Selected Major Facilities in the Early Long-Term (2025)—Alternative 9.....9-255

9-31	Cumulative Effects on Geology and Seismicity from Plans, Policies, and Programs	9-260
10-1	Shrink-Swell Soil Classes Based on Linear Extensibility Percentage	10-6
10-2	Guidance for Estimating Corrosion Risk to Uncoated Steel	10-9
10-3	Soil Classification for Risk of Corrosion to Concrete.....	10-10
10-4	Effects on Soils from the Plans, Policies, and Programs for the No Action Alternative	10-27
10-5	Approximate Topsoil Lost as a Result of Excavation, Overcovering, and Inundation Associated with the Proposed Water Conveyance Facility	10-32
10-6	Topsoil Lost as a Result of Excavation, Overcovering, and Inundation Associated with the Proposed Water Conveyance Facility.....	10-46
10-7	Topsoil Lost as a Result of Excavation, Overcovering, and Inundation Associated with the Proposed Water Conveyance Facility.....	10-57
10-8	Topsoil Lost as a Result of Excavation, Overcovering, and Inundation Associated with the Proposed Water Conveyance Facility.....	10-90
10-9	Programs and Projects Considered in the Soils Cumulative Analysis.....	10-140
11-1A-SUM1	Number and Sizes of In-Water Structures and Area of Habitat Affected by Construction Activities by Alternatives	11-11
11-1A-SUM2	Results of Flow-Related Effects on Fish	11-17
11-2A-SUM1	Results of Flow-Related Effects on Fish	11-36
11-3-SUM1	Results of Flow-Related Effects on Fish	11-48
11-4-SUM1	Results of Flow-Related Effects on Fish	11-55
11-5-SUM1	Results of Flow-Related Effects on Fish	11-60
11-6A-SUM1	Results of Flow-Related Effects on Fish	11-67
11-7-SUM1	Results of Flow-Related Effects on Fish	11-78
11-8-SUM1	Results of Flow-Related Effects on Fish	11-85
11-9-SUM1	Results of Flow-Related Effects on Fish	11-91
11-1	Native and Introduced Fish Species Observed in the Yolo Bypass from 1997 to 2010.....	11-96
11-2	SWP/CVP Export Service Area Delivery Reservoirs	11-110
11-3	Main Construction Elements of BDCP Conservation Measures with Potential to Affect Aquatic Environments.....	11-183
11-4	Life Stages of Covered Species Present in the North, East and South Delta Subregions during the In-Water Construction Window (June 1–October 31)	11-186
11-5	Dimensions of Potential North Delta Intakes and Associated Construction Footprints	11-187

11-6	Effects Associated with Construction of Intakes	11-188
11-7	Summary of Pipeline Maintenance Considerations	11-190
11-8	Length, Width, and Area of Waterbodies Potentially Exposed to Impact Pile Driving Noise above the 183-dB SEL _{cumulative} Level Based on Preliminary Estimates	11-195
11-9	Species Present during Cofferdam Installation	11-196
11-10	Potential for Construction Activities to Affect Water Quality	11-197
11-11	Attributes Evaluated Using the Habitat Suitability Index	11-208
11-12	Effects on Covered Fish Species from the Plans, Policies, and Programs for the No Action Alternative	11-218
11-1A-1	Differences in Proportional Entrainment of Delta Smelt at SWP/CVP South Delta Facilities	11-261
11-1A-2	Average Percentage (and Difference) of Particles Representing Larval Delta Smelt Entrained by the North Bay Aqueduct under Alternative 1A and Baseline Scenarios	11-263
11-1A-3	Delta Smelt Fall Abiotic Index, Averaged by Water Year Type, with and without Restoration (100% Occupancy Assumed) under Alternative 1A	11-266
11-1A-4	Modeled Prod-Acres under Current Conditions and by the NAA with BDCP Tidal Habitat Restoration	11-280
11-1A-5	Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the South Delta Facilities under Alternative 1A and Baseline Scenarios.....	11-293
11-1A-6	Longfin Smelt Entrainment Index at the SWP and CVP Salvage Facilities and Differences (Absolute and Percentage) between Model Scenarios.....	11-294
11-1A-7	Average Percentage (and Difference) of Particles Representing Larval Longfin Smelt Entrained by the North Bay Aqueduct under Alternative 1A and Baseline Scenarios.....	11-295
11-1A-8	Estimated Differences between Scenarios for Longfin Smelt Relative Abundance in the Fall Midwater Trawl or Bay Otter Trawl.....	11-297
11-1A-9	Juvenile Winter-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 1A.....	11-319
11-1A-10	Difference and Percent Difference in May Water Storage Volume (thousand acre- feet) in Shasta Reservoir for Alternative 1A Model Scenarios	11-320
11-1A-11	Maximum Water Temperature Criteria for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis.....	11-321
11-1A-12	Number of Days per Month Required to Trigger Each Level of Concern for Water Temperature Exceedances in the Sacramento River for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis	11-322

11-1A-13	Differences between Baseline and Alternative 1A Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September.....	11-322
11-1A-14	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Bend Bridge, May through September	11-323
11-1A-15	Difference and Percent Difference in Percent Mortality of Winter-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-324
11-1A-16	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Winter-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-324
11-1A-17	Chinook Salmon Predation Loss at the Proposed North Delta Intake Facilities (Five Intakes)	11-332
11-1A-18	Through-Delta Survival of Emigrating Juvenile Winter-Run Chinook Salmon under Alternative 1A.....	11-334
11-1A-19	Monthly Average Percentage of Water at Collinsville Originating in the Sacramento River during the December through February Adult Winter-Run Chinook Salmon Migration Period.....	11-335
11-1A-20	Juvenile Spring-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 1A.....	11-354
11-1A-21	Difference and Percent Difference in September Water Storage Volume in Shasta Reservoir for Alternative 1A Model Scenarios	11-355
11-1A-22	Differences between Baseline and Alternative 1A Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Red Bluff, October through April.....	11-356
11-1A-23	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Red Bluff, October through April	11-357
11-1A-24	Difference and Percent Difference in Percent Mortality of Spring-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-358
11-1A-25	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Spring-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-358
11-1A-26	Difference and Percent Difference in Greatest Monthly Reduction in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through January Spawning and Egg Incubation Period	11-359
11-1A-27	Difference and Percent Difference in September Water Storage Volume in Oroville Reservoir for Model Scenarios	11-359

11-1A-28	Differences between Baseline and Alternative 1A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, September through January	11-360
11-1A-29	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, September through January	11-361
11-1A-30	Difference and Percent Difference in May Water Storage Volume in Oroville Reservoir for Model Scenarios	11-367
11-1A-31	Differences between Baseline and Alternative 1A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 63°F Threshold, May through August	11-367
11-1A-32	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Feather River above Thermalito Afterbay, May through August	11-368
11-1A-33	Through-Delta Survival (%) of Emigrating Juvenile Spring-Run Chinook Salmon under Alternative 1A	11-373
11-1A-34	Monthly Average Percentage (%) of Water at Collinsville Originating in the Sacramento River during the March through June Adult Spring-Run Chinook Salmon Migration Period	11-373
11-1A-35	Juvenile Fall-Run and Late Fall-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 1A	11-388
11-1A-36	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-390
11-1A-37	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-390
11-1A-38	Difference and Percent Difference in Percent Mortality of Late Fall–Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-391
11-1A-39	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Late Fall–Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-392
11-1A-40	Difference and Percent Difference in Greatest Monthly Reduction in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through February Spawning and Egg Incubation Period	11-392

11-1A-41	Differences between Baseline and Alternative 1A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 56°F Threshold, October through April	11-394
11-1A-42	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River at Gridley, October through April.....	11-395
11-1A-43	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Feather River (Egg Mortality Model).....	11-396
11-1A-44	Differences between Baseline and Alternative 1A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 56°F Threshold, November through April.....	11-397
11-1A-45	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the American River at the Watt Avenue Bridge, November through April.....	11-398
11-1A-46	Difference and Percent Difference in Greatest Monthly Reduction in Instream Flow in the American River at Nimbus Dam during the October through January Spawning and Egg Incubation Period	11-399
11-1A-47	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the American River (Egg Mortality Model).....	11-399
11-1A-48	Through-Delta Survival (%) of Emigrating Juvenile Fall-Run Chinook Salmon under Alternative 1A.....	11-416
11-1A-49	Percentage (%) of Water at Collinsville Originating in the Sacramento River during the Adult Fall-Run and Late Fall-Run Chinook Salmon Migration Period for Alternative 1A.....	11-418
11-1A-50	Through-Delta Survival (%) of Emigrating Juvenile Late Fall-Run Chinook Salmon under Alternative 1A	11-419
11-1A-51	Juvenile Steelhead Annual Entrainment at the SWP and CVP Salvage Facilities— Differences between Model Scenarios for Alternative 1	11-437
11-1A-52	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Steelhead Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-439
11-1A-53	Comparisons of Greatest Monthly Reduction in Instream Flow under Model Scenarios in Clear Creek during the January–April Steelhead Spawning and Egg Incubation Period	11-439
11-1A-54	Differences between Baseline and Alternative 1A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, January through April.....	11-440
11-1A-55	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature	

	Exceedances above 56°F in the Feather River above Thermalito Afterbay, January through April.....	11-441
11-1A-56	Minimum Monthly Instream Flow for Alternative 1A Model Scenarios in Clear Creek during the Year-Round Juvenile Steelhead Rearing Period.....	11-447
11-1A-57	Differences between Baseline and Alternative 1A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 65°F Threshold, May through October	11-449
11-1A-58	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 65°F in the American River at the Watt Avenue Bridge, May through October	11-450
11-1A-59	Differences in Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types, February through June, from 15 2-D and Daily CALSIM II Modeling Runs	11-487
11-1A-60	Increase in Splittail Weighted Habitat Area in Yolo Bypass from Existing Biological Conditions to Alternative 1A by Water Year Type from 15 2-D and Daily CALSIM II Modeling Runs.....	11-488
11-1A-61	Difference in Percent of Days or Months during February to June in Which Temperature Would Be below 45°F or above 75°F in the Sacramento River at Hamilton City and Feather River at the Confluence with the Sacramento River	11-490
11-1A-62	Differences between Baseline and Alternative 1A Scenarios in the Number of Years in Which Water Temperature Exceedances above 63°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September	11-513
11-1A-63	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Sacramento River at Bend Bridge, May through September	11-514
11-1A-64	Differences between Baseline and Alternative 1A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 64°F Threshold, May through September	11-515
11-1A-65	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 64°F in the Feather River at Gridley, May through September.....	11-516
11-1A-66	Differences between Baseline and Alternative 1A Scenarios in the Number of Years in Which Water Temperature Exceedances above the 61°F and 68°F Thresholds Are within Each Level of Concern, Sacramento River at Hamilton City, March through June	11-542
11-1A-67	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 61°F in the Sacramento River at Hamilton City, March through June.....	11-543

11-1A-68	Differences between Baseline and Alternative 1A Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 68°F in the Sacramento River at Hamilton City, March through June.....	11-544
11-1A-69	Difference and Percent Difference in Number of Months between February and May in Which Flow Rates Exceed 17,700 and 5,300 Cubic Feet per Second in the Sacramento River at Wilkins Slough and 31,000 cfs at Verona.....	11-549
11-1A-70	Difference and Percent Difference in Percentage of Months in Which Average Delta Outflow is Predicted to Exceed 15,000, 20,000, and 25,000 Cubic Feet per Second in April and May of Wet and Above-Normal Water Years.....	11-550
11-1A-71	Differences between Model Scenarios in Dewatering Risk of Pacific Lamprey Redd Cohorts	11-572
11-1A-72	Differences between Model Scenarios in Pacific Lamprey Egg Cohort Temperature Exposure	11-573
11-1A-73	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick.....	11-576
11-1A-74	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff.....	11-576
11-1A-75	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston	11-577
11-1A-76	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-577
11-1A-77	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-Over-Month Flow Reductions, American River at Nimbus Dam.....	11-578
11-1A-78	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-578
11-1A-79	Differences between Model Scenarios in Pacific Lamprey Ammocoete Cohorts Exposed to Temperatures Greater than 71.6°F in at Least One Day or Month	11-579
11-1A-80	Differences between Model Scenarios in Dewatering Risk of River Lamprey Redd Cohorts	11-600
11-1A-81	Differences between Model Scenarios in River Lamprey Egg Cohort Temperature Exposure	11-602
11-1A-82	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick.....	11-604

11-1A-83	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff.....	11-605
11-1A-84	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston	11-605
11-1A-85	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-606
11-1A-86	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam.....	11-606
11-1A-87	Relative Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-607
11-1A-88	Differences between Model Scenarios in River Lamprey Ammocoete Cohorts Exposed to Temperatures in the Feather River Greater than 71.6°F and 77°F in at Least One Month	11-608
11-1A-89	Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures Are outside the 59°F to 68°F Water Temperature Range for Striped Bass Spawning, Embryo Incubation, and Initial Rearing.....	11-622
11-1A-90	Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures Are outside the 60°F to 70°F Water Temperature Range for American Shad Adult Migration and Spawning	11-626
11-1A-91	Difference and Percent Difference in the Percentage of Months in Which April–August Water Temperatures Fall below the 68°F Water Temperature Threshold for Threadfin Shad Spawning	11-631
11-1A-92	Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures Are outside the 59°F to 75°F Water Temperature Range for Largemouth Bass Spawning	11-636
11-1A-93	Difference and Percent Difference in the Percentage of Months in Which Year-Round Water Temperatures Exceed 72°F and 75°F Water Temperature Thresholds for Sacramento Tule Perch Occurrence.....	11-640
11-1A-94	Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures Fall below the 60.8°F Water Temperature Threshold Range for the Initiation of Sacramento-San Joaquin Roach Spawning	11-646
11-1A-95	Difference and Percent Difference in the Percentage of Months during April–May in Which Water Temperatures Are outside the 59°F to 64°F Water Temperature Range for Hardhead Spawning	11-650

11-1A-96	Difference and Percent Difference in the Percentage of Months during April–November in Which Water Temperatures Exceed the 88°F Water Temperature Threshold for Juvenile Largemouth Bass Rearing.....	11-654
11-1A-97	Difference and Percent Difference in the Percentage of Months in Which Year-Round Water Temperatures Exceed the 86°F Water Temperature Threshold for Adult Largemouth Bass Survival	11-656
11-1A-98	Difference and Percent Difference in the Percentage of Months in Which Year-Round Water Temperatures Exceed the 86°F Water Temperature Range for Sacramento-San Joaquin Roach Survival.....	11-662
11-1A-99	Difference and Percent Difference in the Percentage of Months in Which Year-Round Water Temperatures Are outside the 65°F to 82.4°F Water Temperature Range for Juvenile and Adult Hardhead Occurrence.....	11-666
11-1A-100	Shasta Reservoir Geometry	11-675
11-1A-101	Evaluation of Coldwater Habitat Impacts for Shasta Reservoir Using Three Different Carryover Storage Thresholds (Years with Carryover Storage Less than Threshold, out of 82 Years)	11-681
11-1A-102	Evaluation of Coldwater Habitat Effects (Years with Carryover Storage Less than Threshold) for CALSIM-Simulated Baselines and Alternatives for 1922–2003	11-682
11-2A-1	Differences in Proportional Entrainment of Delta Smelt at SWP/CVP South Delta Facilities	11-754
11-2A-2	Average Percentage (and Difference) of Particles Representing Larval Delta Smelt Entrained by the North Bay Aqueduct under Alternative 2A and Baseline Scenarios	11-755
11-2A-3	Differences in Delta Smelt Fall Abiotic Index between Alternative 2A and Existing Biological Conditions Scenarios, with Habitat Restoration, Averaged by Prior Water Year Type	11-757
11-2A-4	Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the South Delta Facilities under Alternative 2A and Baseline Scenarios.....	11-761
11-2A-5	Longfin Smelt Entrainment Index (March–June) at the SWP and CVP Salvage Facilities and Differences (Absolute and Percentage) between Model Scenarios	11-762
11-2A-6	Average Percentage (and Difference) of Particles Representing Larval Longfin Smelt Entrained by the North Bay Aqueduct under Alternative 2A and Baseline Scenarios.....	11-763
11-2A-7	Estimated Differences between Scenarios for Longfin Smelt Relative Abundance in the Fall Midwater Trawl or Bay Otter Trawl.....	11-764
11-2A-8	Juvenile Winter-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 2A	11-768
11-2A-9	Difference and Percent Difference in May Water Storage Volume in Shasta Reservoir for Model Scenarios	11-769

11-2A-10	Maximum Water Temperature Criteria for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis.....	11-770
11-2A-11	Number of Days per Month Required to Trigger Each Level of Concern for Water Temperature Exceedances in the Sacramento River for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis	11-770
11-2A-12	Differences between Baseline and Alternative 2A Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September.....	11-771
11-2A-13	Differences between Baseline and Alternative 2A Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Bend Bridge, May through September	11-772
11-2A-14	Difference and Percent Difference in Percent Mortality of Winter-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model).....	11-773
11-2A-15	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Winter-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-773
11-2A-16	Through-Delta Survival of Emigrating Juvenile Winter-Run Chinook Salmon under Alternative 2A.....	11-780
11-2A-17	Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Migration Period for Alternative 2A	11-781
11-2A-18	Juvenile Spring-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 2A.....	11-788
11-2A-19	Difference and Percent Difference in September Water Storage Volume in Shasta Reservoir for Model Scenarios	11-789
11-2A-20	Differences between Baseline and Alternative 2A Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Red Bluff, October through April.....	11-790
11-2A-21	Differences between Baseline and Alternative 2A Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Red Bluff, October through April	11-791
11-2A-22	Difference and Percent Difference in Percent Mortality of Spring-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model).....	11-792
11-2A-23	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Spring-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-792
11-2A-24	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through January Spawning and Egg Incubation Period	11-793

11-2A-25	Difference and Percent Difference in September Water Storage Volume in Oroville Reservoir for Model Scenarios	11-794
11-2A-26	Differences between Baseline and Alternative 2A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, September through January	11-795
11-2A-27	Differences between Baseline and Alternative 2A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, September through January	11-796
11-2A-28	Difference and Percent Difference in May Water Storage Volume in Oroville Reservoir for Model Scenarios	11-801
11-2A-29	Differences between Baseline and Alternative 2A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 63°F Threshold, May through August	11-802
11-2A-30	Differences between Baseline and Alternative 2A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Feather River above Thermalito Afterbay, May through August	11-803
11-2A-31	Through-Delta Survival of Emigrating Juvenile Spring-Run Chinook Salmon under Alternative 2A	11-808
11-2A-32	Juvenile Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 2A	11-815
11-2A-33	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-818
11-2A-34	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-818
11-2A-35	Difference and Percent Difference in Percent Mortality of Late Fall–Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-819
11-2A-36	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Late Fall–Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-820
11-2A-37	Difference and Percent Difference in Greatest Monthly Reduction in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through February Spawning and Egg Incubation Period	11-820
11-2A-38	Differences between Baseline and Alternative 2A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 56°F Threshold, October through April	11-822

11-2A-39 Differences between Baseline and Alternative 2A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River at Gridley, October through April 11-823

11-2A-40 Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Feather River (Egg Mortality Model)..... 11-824

11-2A-41 Differences between Baseline and Alternative 2A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 56°F Threshold, November through April..... 11-825

11-2A-42 Differences between Baseline and Alternative 2A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the American River at the Watt Avenue Bridge, November through April 11-826

11-2A-43 Difference and Percent Difference in Greatest Monthly Reduction in Instream Flow in the American River at Nimbus Dam during the October through January Spawning and Egg Incubation Period 11-827

11-2A-44 Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the American River (Egg Mortality Model)..... 11-827

11-2A-45 Through-Delta Survival of Emigrating Juvenile Fall-Run Chinook Salmon under Alternative 2A..... 11-844

11-2A-46 Through-Delta Survival of Emigrating Juvenile Late Fall–Run Chinook Salmon under Alternative 2A 11-845

11-2A-47 Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Migration Period for Alternative 2A 11-846

11-2A-48 Juvenile Steelhead Annual Entrainment at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 2A 11-856

11-2A-49 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Steelhead Habitat Metrics in the Upper Sacramento River (from SacEFT) 11-858

11-2A-50 Comparisons of Greatest Monthly Reduction in Instream Flow under Alternative 2A Model Scenarios in Clear Creek during the January–April Steelhead Spawning and Egg Incubation Period..... 11-858

11-2A-51 Differences between Baseline and Alternative 2A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, January through April..... 11-859

11-2A-52 Differences between Baseline and Alternative 2A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, January through April..... 11-860

11-2A-53 Difference and Percent Difference in Minimum Monthly Mean Flow in Clear Creek during the Year-Round Juvenile Steelhead Rearing Period 11-866

11-2A-54 Differences between Baseline and Alternative 2A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 65°F Threshold, May through October 11-869

11-2A-55 Differences between Baseline and Alternative 2A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 65°F in the American River at the Watt Avenue Bridge, May through October 11-870

11-2A-56 Summary of Finger Printing Analysis of the Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Steelhead Migration Period for Alternative 2A 11-881

11-2A-57 Juvenile Sacramento Splittail Entrainment Index (Yolo Bypass Days of Inundation Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 2A 11-895

11-2A-58 Juvenile Sacramento Splittail Entrainment Index (per Capita Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 2A 11-895

11-2A-59 Adult Sacramento Splittail Entrainment Index (Salvage Density Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 2A 11-895

11-2A-60 Differences in Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types, February through June, from 15 2-D and Daily CALSIM II Modeling Runs 11-898

11-2A-61 Increase in Splittail Weighted Habitat Area in Yolo Bypass from Existing Biological Conditions to Alternative 2A by Water Year Type from 15 2-D and Daily CALSIM II Modeling Runs 11-898

11-2A-62 Difference in Percent of Days or Months during February to June in Which Temperature Would Be below 45°F or above 75°F in the Sacramento River at Hamilton City and Feather River at the Confluence with the Sacramento River 11-901

11-2A-63 Juvenile Green Sturgeon Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 2A 11-909

11-2A-64 Differences between Baseline and Alternative 2A Scenarios in the Number of Years in Which Water Temperature Exceedances above 63°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September 11-910

11-2A-65 Differences between Baseline and Alternative 2A Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Sacramento River at Bend Bridge, May through September 11-911

11-2A-66 Differences between Baseline and Alternative 2A Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 64°F Threshold, May through September 11-912

11-2A-67 Differences between Baseline and Alternative 2A Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 64°F in the Feather River at Gridley, May through September 11-913

11-2A-68 Juvenile White Sturgeon Entrainment Index at the SWP and CVP Salvage Facilities for Sacramento Valley Water Year-Types and Differences between Model Scenarios..... 11-924

11-2A-69 Differences between Baselines and Alternative 2A in the Number of Years in Which Water Temperature Exceedances above the 61°F and 68°F Thresholds Are within Each Level of Concern, Sacramento River at Hamilton City, March through June..... 11-925

11-2A-70 Differences between Baseline and Alternative 2A Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 61°F in the Sacramento River at Hamilton City, March through June..... 11-926

11-2A-71 Differences between Baseline and Alternative 2A Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 68°F in the Sacramento River at Hamilton City, March through June..... 11-927

11-2A-72 Difference and Percent Difference in Number of Months between February and May in Which Flow Rates Exceed 17,700 and 5,300 cfs in the Sacramento River at Wilkins Slough and 31,000 cfs at Verona 11-932

11-2A-73 Difference and Percent Difference in Percentage of Months in Which Average Delta Outflow is Predicted to Exceed 15,000, 20,000, and 25,000 Cubic Feet per Second in April and May of Wet and Above-Normal Water Years..... 11-933

11-2A-74 Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 2A..... 11-938

11-2A-75 Differences between Model Scenarios in Dewatering Risk of Pacific Lamprey Redd Cohorts 11-940

11-2A-76 Differences between Model Scenarios in Pacific Lamprey Egg Cohort Temperature Exposure 11-941

11-2A-77 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick..... 11-943

11-2A-78 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff..... 11-944

11-2A-79 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston 11-944

11-2A-80 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay 11-945

11-2A-81	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam.....	11-945
11-2A-82	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-946
11-2A-83	Differences between Model Scenarios in Pacific Lamprey Ammocoete Cohorts Exposed to Temperatures in the Feather River Greater than 71.6°F in at Least One Day or Month.....	11-947
11-2A-84	Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 2A.....	11-955
11-2A-85	Differences between Model Scenarios in Dewatering Risk of River Lamprey Redd Cohorts	11-956
11-2A-86	Differences between Model Scenarios in River Lamprey Egg Cohort Temperature Exposure	11-958
11-2A-87	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick.....	11-960
11-2A-88	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff.....	11-961
11-2A-89	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston	11-961
11-2A-90	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-962
11-2A-91	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam.....	11-962
11-2A-92	Relative Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-963
11-2A-93	Differences between Model Scenarios in River Lamprey Ammocoete Cohorts Exposed to Temperatures in the Feather River Greater than 71.6°F and 77°F in at Least One Month	11-964
11-2A-94	Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 68°F Water Temperature Range for Striped Bass Spawning, Embryo Incubation, and Initial Rearing	11-977

11-2A-95 Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 60°F to 70°F Water Temperature Range for American Shad Adult Migration and Spawning..... 11-980

11-2A-96 Difference and Percent Difference in the Percentage of Months during April–August in Which Water Temperatures in the Feather River below Thermalito Afterbay Fall below the 68°F Water Temperature Threshold for Threadfin Shad Spawning 11-982

11-2A-97 Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 75°F Water Temperature Range for Largemouth Bass Spawning 11-985

11-2A-98 Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Fall below the 60.8°F Water Temperature Threshold Range for the Initiation of Sacramento-San Joaquin Roach Spawning 11-988

11-2A-99 Difference and Percent Difference in the Percentage of Months during April–May in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 64°F Water Temperature Range for Hardhead Spawning 11-991

11-2A-100 Difference and Percent Difference in the Percentage of Months during April–November in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 88°F Water Temperature Threshold for Juvenile Largemouth Bass Rearing..... 11-994

11-2A-101 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Threshold for Adult Largemouth Bass Survival 11-995

11-2A-102 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed 72°F and 75°F Water Temperature Thresholds for Sacramento Tule Perch Occurrence 11-1000

11-2A-103 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Range for Sacramento-San Joaquin Roach Survival 11-1004

11-2A-104 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 65°F to 82.4°F Water Temperature Range for Juvenile and Adult Hardhead Occurrence..... 11-1007

11-3-1 Differences in Proportional Entrainment Index of Delta Smelt at SWP/CVP South Delta Facilities..... 11-1086

11-3-2	Average Percentage (and Difference) of Particles Representing Larval Delta Smelt Entrained by the North Bay Aqueduct under Alternative 3 and Baseline Scenarios	11-1087
11-3-3	Differences in Delta Smelt Fall Abiotic Index between Alternative 3 and Existing Biological Conditions Scenarios, with Habitat Restoration, Averaged by Prior Water Year Type	11-1090
11-3-4	Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the South Delta Facilities under Alternative 3 and Baseline Scenarios.....	11-1093
11-3-5	Longfin Smelt Entrainment Index at the SWP and CVP Salvage Facilities—Differences (Absolute and Percentage) between Model Scenarios for Alternative 3 ...	11-1094
11-3-6	Average Percentage (and Difference) of Particles Representing Larval Longfin Smelt Entrained by the North Bay Aqueduct under Alternative 3 and Baseline Scenarios.....	11-1094
11-3-7	Estimated Differences between Scenarios for Longfin Smelt Relative Abundance in the Fall Midwater Trawl or Bay Otter Trawl	11-1097
11-3-8	Juvenile Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 3	11-1102
11-3-9	Difference and Percent Difference in May Water Storage Volume in Shasta Reservoir for Model Scenarios	11-1103
11-3-10	Difference and Percent Difference in Percent Mortality of Winter-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-1104
11-3-11	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Winter-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-1104
11-3-12	Chinook Salmon Predation Loss at the Proposed North Delta Diversion Intakes for Alternative 3 (Two Intakes)	11-1110
11-3-13	Through-Delta Survival of Emigrating Juvenile Winter-Run Chinook Salmon under Alternative 3	11-1110
11-3-14	Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Migration Period for Alternative 3	11-1111
11-3-15	Juvenile Spring-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 3	11-1117
11-3-16	Difference and Percent Difference in September Water Storage Volume in Shasta Reservoir for Model Scenarios	11-1118
11-3-17	Difference and Percent Difference in Percent Mortality of Spring-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-1118
11-3-18	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Spring-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-1119

11-3-19	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through January Spawning and Egg Incubation Period	11-1119
11-3-20	Difference and Percent Difference in September Water Storage Volume in Oroville Reservoir for Model Scenarios	11-1120
11-3-21	Difference and Percent Difference in May Water Storage Volume in Oroville Reservoir for Model Scenarios	11-1125
11-3-22	Through-Delta Survival of Emigrating Juvenile Spring-Run Chinook Salmon under Alternative 3	11-1128
11-3-23	Juvenile Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 3	11-1135
11-3-24	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-1136
11-3-25	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-1137
11-3-26	Difference and Percent Difference in Percent Mortality of Late fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-1137
11-3-27	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Late Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-1138
11-3-28	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through February Spawning and Egg Incubation Period	11-1139
11-3-29	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Feather River (Egg Mortality Model)	11-1140
11-3-30	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in the American River at Nimbus Dam during the October through January Spawning and Egg Incubation Period	11-1140
11-3-31	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the American River (Egg Mortality Model)	11-1141
11-3-32	Through-Delta Survival of Emigrating Juvenile Fall-Run Chinook Salmon under Alternative 3	11-1155
11-3-33	Through-Delta Survival of Emigrating Juvenile Late Fall-Run Chinook Salmon under Alternative 3	11-1157
11-3-34	Juvenile Steelhead Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 3	11-1166
11-3-35	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Steelhead Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-1167

11-3-36	Comparisons of Greatest Monthly Reduction (Percent Change) in Instream Flow under Model Scenarios in Clear Creek during the January–April Steelhead Spawning and Egg Incubation Period	11-1168
11-3-37	Minimum Monthly Instream Flow for Model Scenarios in Clear Creek during the Year-Round Juvenile Steelhead Rearing Period	11-1173
11-3-38	Juvenile Sacramento Splittail Entrainment Index (Yolo Bypass Days of Inundation Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 3	11-1192
11-3-39	Juvenile Sacramento Splittail Entrainment Index (Per Capita Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 3	11-1192
11-3-40	Adult Sacramento Splittail Entrainment Index (Salvage Density Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 3	11-1192
11-3-41	Differences in Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types, February through June, from 15 2-D and Daily CALSIM II Modeling Runs.....	11-1195
11-3-42	Increase in Splittail Weighted Habitat Area in Yolo Bypass from Existing Biological Conditions to Alternative 3 by Water Year Type from 15 2-D and Daily CALSIM II Modeling Runs.....	11-1195
11-3-43	Juvenile Green Sturgeon Entrainment Index at the SWP and CVP Salvage Facilities—Differences (Absolute and Percentage) between Model Scenarios for Alternative 3	11-1202
11-3-44	Juvenile White Sturgeon Entrainment Index at the SWP and CVP Salvage Facilities for Sacramento Valley Water Year-Types and Differences (Absolute and Percentage) between Model Scenarios for Alternative 3	11-1211
11-3-45	Difference and Percent Difference in Number of Months in Which Flow Rates Exceed 17,700 and 5,300 cfs in the Sacramento River at Wilkins Slough and 31,000 cfs at Verona.....	11-1216
11-3-46	Difference and Percent Difference in Percentage of Months in Which Average Delta Outflow is Predicted to Exceed 15,000, 20,000, and 25,000 Cubic Feet per Second in April and May of Wet and Above-Normal Water Years.....	11-1217
11-3-47	Pacific Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 3.....	11-1222
11-3-48	Differences between Model Scenarios in Dewatering Risk of Pacific Lamprey Redd Cohorts	11-1223
11-3-49	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick.....	11-1226

11-3-50	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff.....	11-1227
11-3-51	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston	11-1227
11-3-52	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-1228
11-3-53	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam.....	11-1228
11-3-54	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-1229
11-3-55	Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities - for Alternative 3	11-1239
11-3-56	Differences between Model Scenarios in Dewatering Risk of River Lamprey Redd Cohorts	11-1240
11-3-57	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick.....	11-1242
11-3-58	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff.....	11-1243
11-3-59	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston	11-1243
11-3-60	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-1244
11-3-61	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam.....	11-1244
11-3-62	Relative Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-1245
11-4-1	Proportional Entrainment Index of Delta Smelt at SWP/CVP South Delta Facilities for Alternative 4 (Scenario H3)	11-1293

11-4-2	Average Percentage (and Difference) of Particles Representing Larval Delta Smelt Entrained by the North Bay Aqueduct under Alternative 4 (Scenario H3) and Baseline Scenarios	11-1294
11-4-3	Differences in Delta Smelt Fall Abiotic Index between Alternative 4 (Scenarios H3, H1, and H4) and Existing Biological Conditions Scenarios, with and without Habitat Restoration, Averaged by Prior Water Year Type.....	11-1298
11-4-4	Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the South Delta Facilities under Alternative 4 (Scenario H3) and Baseline Scenarios	11-1302
11-4-5	Longfin Smelt Entrainment Index at the SWP and CVP Salvage Facilities—Differences (Absolute and Percentage) between Model Scenarios for Alternative 4 (Scenario H3)	11-1303
11-4-6	Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the North Bay Aqueduct under Alternative 4 (Scenario H3) and Baseline Scenarios	11-1304
11-4-7	Differences in Mean Monthly Delta Outflow between NAA and Alternative 4 Scenarios H1, H2, H3, and H4, by Water Year Type, for Winter-Spring (December–June)	11-1306
11-4-8	Estimated Differences Between Alternative 4 (Scenario H3) and Baseline for Longfin Smelt Relative Abundance in the Fall Midwater Trawl or Bay Otter Trawl Based on the X2-Relative Abundance Regression of Kimmerer et al. (2009).....	11-1308
11-4-9	Differences in Mean Monthly Delta Outflow between Existing Conditions and Alternative 4 Scenarios H1, H2, H3, and H4, by Water Year Type, for Winter–Spring (December–June)	11-1309
11-4-10	Juvenile Winter-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 4 (Scenario H3)	11-1314
11-4-11	Winter-Run Chinook Salmon Predation Loss at the Proposed North Delta Diversion Intakes (Three Intakes for Alternative 4).....	11-1315
11-4-12	Difference and Percent Difference in May Water Storage Volume in Shasta Reservoir for Alternative 4 (Scenario H3).....	11-1316
11-4-13	Maximum Water Temperature Criteria for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis.....	11-1316
11-4-14	Number of Days per Month Required to Trigger Each Level of Concern for Water Temperature Exceedances in the Sacramento River for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis	11-1317
11-4-15	Differences between Baseline and H3 Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September	11-1317

11-4-16	Differences between Baseline and H3 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Bend Bridge, May through September	11-1318
11-4-17	Difference and Percent Difference in Percent Mortality of Winter-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-1319
11-4-18	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Winter-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-1319
11-4-19	Difference and Percent Difference in May Water Storage Volume in Shasta Reservoir for H1, H3, and H4 Scenarios.....	11-1320
11-4-20	Differences between Baseline Scenarios and H1 and H4 Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September	11-1320
11-4-21	Differences between Baseline Scenarios and H1 and H4 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Bend Bridge, May through September	11-1321
11-4-22	Winter-Run Chinook Salmon Predation Loss at the Proposed North Delta Diversion Intakes (Three Intakes for Alternative 4).....	11-1331
11-4-23	Through-Delta Survival of Emigrating Juvenile Winter-Run Chinook Salmon under Alternative 4 (Scenarios H3, H1, and H4)	11-1331
11-4-24	Percentage of Water at Collinsville that Originated in the Sacramento River during the Adult Winter-Run Chinook Salmon Migration Period for Alternative 4 (Scenario H3)	11-1332
11-4-25	Juvenile Spring-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 4 (Scenario H3).....	11-1340
11-4-26	Juvenile Spring-Run Chinook Salmon Predation Loss at the Proposed North Delta Diversion Intakes for Alternative 4 (Three Intakes).....	11-1341
11-4-27	Difference and Percent Difference in September Water Storage Volume in Shasta Reservoir for Alternative 4 (Scenario H3).....	11-1342
11-4-28	Differences between Baseline and H3 Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Red Bluff, October through April	11-1343
11-4-29	Differences between Baseline and H3 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Red Bluff, October through April	11-1344
11-4-30	Difference and Percent Difference in Percent Mortality of Spring-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model).....	11-1345

11-4-31	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Spring-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-1345
11-4-32	Difference and Percent Difference in Greatest Monthly Reduction in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through January Spawning and Egg Incubation Period.....	11-1346
11-4-33	Difference and Percent Difference in September Water Storage Volume in Oroville Reservoir for Alternative 4 (Scenario H3).....	11-1347
11-4-34	Differences between Baseline and H3 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, September through January.....	11-1348
11-4-35	Differences between Baseline and H3 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, September through January	11-1349
11-4-36	Difference and Percent Difference in September Water Storage Volume in Shasta Reservoir for H1, H3, and H4 Scenarios.....	11-1350
11-4-37	Differences between Baseline and H3 Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Red Bluff, October through April	11-1350
11-4-38	Differences between Baseline and H3 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Red Bluff, October through April	11-1351
11-4-39	Difference and Percent Difference in September Water Storage Volume in Oroville Reservoir for H1, H3, and H4 Scenarios.....	11-1352
11-4-40	Differences between Baselines and H1 and H4 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, September through January	11-1353
11-4-41	Differences between Baseline Scenarios and H1 and H4 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, September through April	11-1354
11-4-42	Difference and Percent Difference in May Water Storage Volume in Oroville Reservoir for Alternative 4 (Model Scenario H3)	11-1363
11-4-43	Differences between Baseline and H3 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 63°F Threshold, May through August.....	11-1364

11-4-44	Differences between Baseline and H3 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Feather River above Thermalito Afterbay, May through August	11-1365
11-4-45	Difference and Percent Difference in May Water Storage Volume in Oroville Reservoir for H1, H3, and H4 Scenarios.....	11-1366
11-4-46	Differences between Baselines and H1 and H4 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 63°F Threshold, May through August.....	11-1367
11-4-47	Differences between Baseline and H1 and H4 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Feather River above Thermalito Afterbay, May through August.....	11-1368
11-4-48	Differences (Percentage Differences) in the Percentage of Years Exceeding NMFS Suggested Minimum Flows in the Feather River High-Flow Channel (at Thermalito) ...	11-1376
11-4-49	Differences (Percentage Differences) in the Percentage of Years Exceeding NMFS Suggested Minimum Flows in the Feather River High-Flow Channel (at Thermalito) between the H3 Model Scenario and H1 and H4 Model Scenarios	11-1378
11-4-50	Juvenile Spring-Run Chinook Salmon Predation Loss at the proposed North Delta Diversion intakes for Alternative 4 (Three Intakes).....	11-1380
11-4-51	Through-Delta Survival of Emigrating Juvenile Spring-Run Chinook Salmon under Alternative 4 (Scenarios H3, H1 and H4)	11-1381
11-4-52	Percentage of Water at Collinsville that Originated in the Sacramento during the Adult Spring-Run Chinook Salmon Migration Period for Alternative 4 (Scenario H3) ...	11-1381
11-4-53	Juvenile Fall-Run and Late Fall-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 4 (Scenario H3).....	11-1390
11-4-54	Fall-Run and Late Fall-Run Chinook Salmon Juvenile Predation Loss at the Proposed North Delta Diversion Intakes for Alternative 4 (Three Intakes).....	11-1391
11-4-55	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model).....	11-1393
11-4-56	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-1393
11-4-57	Difference and Percent Difference in Percent Mortality of Late Fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model).....	11-1394
11-4-58	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Late Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-1394

11-4-59 Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through February Spawning and Egg Incubation Period 11-1395

11-4-60 Differences between Baseline and H3 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 56°F Threshold, October through April..... 11-1396

11-4-61 Differences between Baseline and H3 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River at Gridley, October through April 11-1397

11-4-62 Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Feather River (Egg Mortality Model)..... 11-1398

11-4-63 Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in the American River at Nimbus Dam during the October through January Spawning and Egg Incubation Period 11-1398

11-4-64 Differences between Baseline and H3 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 56°F Threshold, November through April..... 11-1399

11-4-65 Differences between Baseline and H3 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the American River at the Watt Avenue Bridge, November through April 11-1400

11-4-66 Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the American River (Egg Mortality Model)..... 11-1401

11-4-67 Differences between Baseline Scenarios and H1 and H4 Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Red Bluff, October through April 11-1402

11-4-68 Differences between Baseline Scenarios and H1 and H4 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Red Bluff, October through April 11-1403

11-4-69 Differences between Baselines and H1 and H4 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 56°F Threshold, October through April 11-1406

11-4-70 Differences between Baselines and H1 and H4 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River at Gridley, October through April 11-1407

11-4-71 Differences between Baseline Scenarios and H1 and H4 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 56°F Threshold, November through April..... 11-1409

11-4-72 Differences between Baseline Scenarios and H1 and H4 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances

above 56°F in the American River at the Watt Avenue Bridge, November through April 11-1410

11-4-73 Fall-Run and Late Fall-Run Chinook Salmon Juvenile Predation Loss at the proposed North Delta Diversion intakes for Alternative 4 (Three Intakes)..... 11-1454

11-4-74 Through-Delta Survival of Emigrating Juvenile Fall-Run Chinook Salmon under Alternative 4 (Scenarios H3, H1 and H4) 11-1456

11-4-75 Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Fall-Run and Late Fall-Run Chinook Salmon Migration Period for Alternative 4 (Scenario H3)..... 11-1457

11-4-76 Through-Delta Survival of Emigrating Juvenile Late Fall-Run Chinook Salmon under Alternative 4 (Scenarios H3, H1, and H4) 11-1458

11-4-77 Juvenile Steelhead Annual Entrainment at the SWP and CVP Salvage Facilities— Differences between Model Scenarios for Alternative 4 (Scenario H3)..... 11-1476

11-4-78 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Steelhead Habitat Metrics in the Upper Sacramento River (from SacEFT) 11-1478

11-4-79 Comparisons of Greatest Monthly Reduction (Percent Change) in Instream Flow under Model Scenarios in Clear Creek during the January–April Steelhead Spawning and Egg Incubation Period 11-1478

11-4-80 Differences between Baseline and H3 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, January through April..... 11-1480

11-4-81 Differences between Baseline and H3 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, January through April 11-1481

11-4-82 Differences between Baselines and H1 and H4 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, January through April..... 11-1484

11-4-83 Differences between Baselines and H1 and H4 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River at above Thermalito Afterbay, January through April 11-1485

11-4-84 Minimum Monthly Instream Flow for Model Scenarios in Clear Creek during the Year-Round Juvenile Steelhead Rearing Period 11-1498

11-4-85 Differences between Baseline and H3 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 65°F Threshold, May through October 11-1501

11-4-86 Differences between Baseline and H3 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 65°F in the American River at the Watt Avenue Bridge, May through October..... 11-1502

11-4-87 Differences between Baseline Scenarios and H1 and H4 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 65°F Threshold, May through October 11-1505

11-4-88 Differences between Baseline Scenarios and H1 and H4 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 65°F in the American River at the Watt Avenue Bridge, May through October 11-1506

11-4-89 Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Steelhead Migration Period for Alternative 4 11-1532

11-4-90 Juvenile Sacramento Splittail Entrainment Index (Yolo Bypass days of inundation method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 4 (Scenario H3)..... 11-1555

11-4-91 Juvenile Sacramento Splittail Entrainment Index (Per Capita Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 4 (Scenario H3)..... 11-1555

11-4-92 Adult Sacramento Splittail Entrainment Index (salvage density method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 4 (Scenario H3)..... 11-1555

11-4-93 Differences in Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types, February through June, from 15 2-D and Daily CALSIM II Modeling Runs 11-1558

11-4-94 Increase in Splittail Weighted Habitat Area in Yolo Bypass from Existing Biological Conditions to Alternative 4 by Water Year Type from 15 2-D and Daily CALSIM II Modeling Runs 11-1559

11-4-95 Differences (and Percent Change) in Daily Average (December–June) Lower Sutter Bypass Inundation (acres) 11-1559

11-4-96 Difference (Percent Difference) in Percent of Days or Months during February to June in Which Temperature Would Be below 45°F or above 75°F in the Sacramento River at Hamilton City and Feather River at the Confluence with the Sacramento River 11-1561

11-4-97 Difference (Percent Difference) in Percent of Days or Months during February to June in Which Temperature Would Be below 45°F or above 75°F in the Sacramento River at Hamilton City and Feather River at the Confluence with the Sacramento River 11-1563

11-4-98 Juvenile Green Sturgeon Entrainment Index at the SWP and CVP Salvage Facilities—Differences (Absolute and Percentage) between Model Scenarios for Alternative 4 (Scenario H3)..... 11-1572

11-4-99 Differences between Baseline and H3 Scenarios in the Number of Years in Which Water Temperature Exceedances above 63°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September 11-1573

11-4-100 Differences between Baseline and H3 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Sacramento River at Bend Bridge, May through September 11-1574

11-4-101 Differences between Baselines and H3 in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 64°F Threshold, May through September 11-1575

11-4-102 Differences between Baselines and H3 in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 64°F in the Feather River at Gridley, May through September..... 11-1576

11-4-103 Differences between Baseline Scenarios and H1 and H4 Scenarios in the Number of Years in Which Water Temperature Exceedances above 63°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September 11-1577

11-4-104 Differences between Baseline Scenarios and H1 and H4 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Sacramento River at Bend Bridge, May through September 11-1578

11-4-105 Differences between Baselines and H1 and H4 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 64°F Threshold, May through September 11-1579

11-4-106 Differences between Baselines and H1 and H4 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 64°F in the Feather River at Gridley, May through September 11-1580

11-4-107 Differences between Baselines and H3 Scenarios in the Number of Years in Which Water Temperature Exceedances above the 61°F and 68°F Thresholds Are Within Each Level of Concern, Sacramento River at Hamilton City, March through June..... 11-1599

11-4-108 Differences between Baseline and H3 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 61°F in the Sacramento River at Hamilton City, March through June 11-1600

11-4-109 Differences between Baseline and H3 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 68°F in the Sacramento River at Hamilton City, March through June 11-1601

11-4-110 Differences between Baselines and H1 and H4 Scenarios in the Number of Years in Which Water Temperature Exceedances above the 61°F and 68°F Thresholds Are within Each Level of Concern, Sacramento River at Hamilton City, March through June..... 11-1602

11-4-111 Differences between Baselines and H1 and H4 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 61°F in the Sacramento River at Hamilton City, March through June..... 11-1603

11-4-112 Differences between Baselines and H1 and H4 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 68°F in the Sacramento River at Hamilton City, March through June..... 11-1604

11-4-113	Difference and Percent Difference in Number of Months in Which Flow Rates Exceed 17,700 and 5,300 cfs in the Sacramento River at Wilkins Slough and 31,000 cfs at Verona	11-1613
11-4-114	Difference and Percent Difference in Percentage of Months in Which Average Delta Outflow is Predicted to Exceed 15,000, 20,000, and 25,000 Cubic Feet per Second in April and May of Wet and Above-Normal Water Years.....	11-1614
11-4-115	Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 4 (Scenario H3).....	11-1621
11-4-116	Differences between Model Scenarios in Dewatering Risk of Pacific Lamprey Redd Cohorts	11-1622
11-4-117	Differences (Percent Differences) between Model Scenarios in Pacific Lamprey Egg Cohort Temperature Exposure	11-1623
11-4-118	Differences between Model Scenarios in Dewatering Risk of Pacific Lamprey Redd Cohorts in the Feather River at Thermalito Afterbay.....	11-1623
11-4-119	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick.....	11-1627
11-4-120	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff.....	11-1627
11-4-121	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston	11-1628
11-4-122	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-1628
11-4-123	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam	11-1629
11-4-124	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-1629
11-4-125	Differences (Percent Differences) between Model Scenarios in Pacific Lamprey Ammocoete Cohorts Exposed to Temperatures Greater than 71.6°F in at Least One Day or Month	11-1630
11-4-126	Percent Difference between Baselines and H1 and H4 Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-1631
11-4-127	Differences between Model Scenarios in Dewatering Risk of River Lamprey Redd Cohorts	11-1644

11-4-128 Differences (Percent Differences) between Model Scenarios in River Lamprey Egg Cohort Temperature Exposure 11-1646

11-4-129 Differences between Model Scenarios in Dewatering Risk of River Lamprey Redd Cohorts 11-1647

11-4-130 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick..... 11-1650

11-4-131 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff..... 11-1650

11-4-132 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston 11-1651

11-4-133 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay 11-1651

11-4-134 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam..... 11-1652

11-4-135 Relative Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River 11-1652

11-4-136 Differences (Percent Differences) between Model Scenarios in River Lamprey Ammocoete Cohorts Exposed to Temperatures in the Feather River Greater than 71.6°F and 77°F in at Least One Month..... 11-1653

11-4-137 Percent Difference between Baselines and H1 and H4 Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay 11-1654

11-4-138 Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 68°F Water Temperature Range for Striped Bass Spawning, Embryo Incubation, and Initial Rearing 11-1668

11-4-139 Difference and Percent Difference between the H3 Model Scenario and H1 and H4 Model Scenarios in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 68°F Water Temperature Range for Striped Bass Spawning, Embryo Incubation, and Initial Rearing..... 11-1668

11-4-140 Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 60°F to 70°F Water Temperature Range for American Shad Adult Migration and Spawning..... 11-1672

11-4-141 Difference and Percent Difference between the H3 Model Scenario and H1 and H4 Model Scenarios in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 60°F to 70°F Water Temperature Range for American Shad Adult Migration and Spawning11-1673

11-4-142 Difference and Percent Difference in the Percentage of Months during April–August in Which Water Temperatures in the Feather River below Thermalito Afterbay fall below the 68°F Water Temperature Threshold for Threadfin Shad Spawning11-1677

11-4-143 Difference and Percent Difference between the H3 Model Scenario and H1 and H4 Model Scenarios in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay fall below the 68°F Water Temperature Threshold for Threadfin Shad Spawning11-1677

11-4-144 Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Would Be outside the 59°F to 75°F Water Temperature Range for Largemouth Bass Spawning.....11-1681

11-4-145 Difference and Percent Difference between the H3 Model Scenario and H1 and H4 Model Scenarios in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Would Be outside the 59°F to 75°F Water Temperature Range for Largemouth Bass Spawning11-1682

11-4-146 Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Fall below the 60.8°F Water Temperature Threshold for the Initiation of Sacramento-San Joaquin Roach Spawning.....11-1686

11-4-147 Difference and Percent Difference between the H3 Model Scenario and H1 and H4 Model Scenarios in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Would Fall below the 60.8°F Water Temperature Threshold for Sacramento-San Joaquin Roach Spawning11-1686

11-4-148 Difference and Percent Difference in the Percentage of Months during April–May in Which Water Temperatures in the Feather River below Thermalito Afterbay Would Be outside the 59°F to 64°F Water Temperature Range for Hardhead Spawning11-1690

11-4-149 Difference and Percent Difference between the H3 Model Scenario and H1 and H4 Model Scenarios in the Percentage of Months during April–May in Which Water Temperatures in the Feather River below Thermalito Afterbay Would Fall outside the 59°F to 64°F Water Temperature Range for Hardhead Spawning11-1691

11-4-150 Difference and Percent Difference in the Percentage of Months during April–November in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 88°F Water Temperature Threshold for Juvenile Largemouth Bass Rearing.....11-1695

11-4-151 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Threshold for Adult Largemouth Bass Survival 11-1697

11-4-152 Difference and Percent Difference between the H3 Model Scenario and H1 and H4 Model Scenarios in the Percentage of Months during April–November in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 88°F Water Temperature Threshold for Juvenile Largemouth Bass Rearing 11-1698

11-4-153 Difference and Percent Difference between the H3 Model Scenario and H1 and H4 Model Scenarios in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Threshold for Adult Largemouth Bass Survival 11-1699

11-4-154 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed 72°F and 75°F Water Temperature Thresholds for Sacramento Tule Perch Occurrence 11-1707

11-4-155 Difference and Percent Difference between the H3 Model Scenario and H1 and H4 Model Scenarios in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed 72°F and 75°F Water Temperature Thresholds for Sacramento Tule Perch Occurrence..... 11-1708

11-4-156 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Threshold for Sacramento-San Joaquin Roach Survival..... 11-1713

11-4-157 Difference and Percent Difference between the H3 Model Scenario and H1 and H4 Model Scenarios in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Threshold for Sacramento-San Joaquin Roach Survival 11-1714

11-4-158 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 65°F to 82.4°F Water Temperature Range for Juvenile and Adult Hardhead Occurrence..... 11-1719

11-4-159 Difference and Percent Difference between the H3 Model Scenario and H1 and H4 Model Scenarios in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 65°F to 82.4°F Water Temperature Range for Juvenile and Adult Hardhead Occurrence 11-1720

11-5-1 Proportional Entrainment Index of Delta Smelt at SWP/CVP South Delta Facilities 11-1732

11-5-2 Average Percentage (and Difference) of Particles Representing Larval Delta Smelt Entrained by the North Bay Aqueduct under Alternative 5 and Baseline Scenarios 11-1733

11-5-3 Differences in Delta Smelt Fall Abiotic Index between Alternative 5 and Baseline Scenarios, with and without Habitat Restoration, Averaged by Prior Water Year Type 11-1735

11-5-4 Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the South Delta Facilities under Alternative 5 and Baseline Scenarios..... 11-1739

11-5-5 Longfin Smelt Entrainment Index at the SWP and CVP Salvage Facilities—Differences (Absolute and Percentage) between Model Scenarios for Alternative 5 ... 11-1740

11-5-6 Average Percentage (and Difference) of Particles Representing Larval Longfin Smelt Entrained by the North Bay Aqueduct under Alternative 5 and Baseline Scenarios..... 11-1740

11-5-7 Average Difference (Number of Particle Tracking Runs) in Simulated Entrainment of Larval Longfin Smelt at the North Bay Aqueduct under Alternative 5 and Baseline Scenarios 11-1741

11-5-8 Estimated Differences between Scenarios for Longfin Smelt Relative Abundance in the Fall Midwater Trawl or Bay Otter Trawl 11-1742

11-5-9 Juvenile Winter-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 5 11-1747

11-5-10 Difference and Percent Difference in May Water Storage Volume in Shasta Reservoir for Model Scenarios 11-1748

11-5-11 Difference and Percent Difference in Percent Mortality of Winter-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model) 11-1748

11-5-12 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Winter-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)..... 11-1749

11-5-13 Chinook Salmon Predation Loss at the Proposed North Delta Diversion Intake (One Intake)..... 11-1754

11-5-14 Through-Delta Survival of Emigrating Juvenile Winter-Run Chinook Salmon under Alternative 5 11-1754

11-5-15 Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Migration Period for Alternative 5..... 11-1755

11-5-16 Juvenile Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 5..... 11-1761

11-5-17 Difference and Percent Difference in September Water Storage Volume in Shasta Reservoir for Model Scenarios 11-1762

11-5-18 Difference and Percent Difference in Percent Mortality of Spring-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model) 11-1762

11-5-19 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Spring-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)..... 11-1763

11-5-20	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through January Spawning and Egg Incubation Period	11-1764
11-5-21	Difference and Percent Difference in September Water Storage Volume in Oroville Reservoir for Model Scenarios	11-1764
11-5-22	Difference and Percent Difference in May Water Storage Volume in Oroville Reservoir for Model Scenarios	11-1769
11-5-23	Through-Delta Survival of Emigrating Juvenile Spring-Run Chinook Salmon under Baseline and Alternative 5 Scenarios, by Year Type	11-1773
11-5-24	Juvenile Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 5	11-1779
11-5-25	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-1780
11-5-26	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-1781
11-5-27	Difference and Percent Difference in Percent Mortality of Late Fall–Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-1781
11-5-28	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Late Fall–Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-1782
11-5-29	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through February Spawning and Egg Incubation Period	11-1782
11-5-30	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Feather River (Egg Mortality Model)	11-1783
11-5-31	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in the American River at Nimbus Dam during the October through January Spawning and Egg Incubation Period	11-1784
11-5-32	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the American River (Egg Mortality Model)	11-1784
11-5-33	Through-Delta Survival of Emigrating Juvenile Fall-Run Chinook Salmon under Baseline and Alternative 5 Scenarios	11-1799
11-5-34	Through-Delta Survival of Emigrating Juvenile Late Fall–Run Chinook Salmon under Baseline and Alternative 5 Scenarios	11-1800
11-5-35	Juvenile Steelhead Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 5	11-1809
11-5-36	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Steelhead Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-1810

11-5-37	Comparisons of Greatest Monthly Reduction (Percent Change) in Instream Flow under Model Scenarios in Clear Creek during the January–April Steelhead Spawning and Egg Incubation Period	11-1811
11-5-38	Minimum Monthly Instream Flow for Model Scenarios in Clear Creek during the Year-Round Juvenile Steelhead Rearing Period	11-1817
11-5-39	Juvenile Sacramento Splittail Entrainment Index (Yolo Bypass Days of Inundation Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 5	11-1836
11-5-40	Juvenile Sacramento Splittail Entrainment Index (per Capita Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 5	11-1837
11-5-41	Adult Sacramento Splittail Entrainment Index (Salvage Density Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 5	11-1837
11-5-42	Differences in Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types, February through June, from 15 2-D and Daily CALSIM II Modeling Runs	11-1839
11-5-43	Change in Splittail Weighted Habitat Area (Acres and Percent) in Yolo Bypass under Alternative 5 by Water Year Type from 15 2-D and Daily CALSIM II Modeling Runs	11-1840
11-5-44	Juvenile Green Sturgeon Entrainment Index at the SWP and CVP Salvage Facilities—Differences (Absolute and Percentage) between Model Scenarios for Alternative 5	11-1848
11-5-45	Juvenile White Sturgeon Entrainment Index at the SWP and CVP Salvage Facilities for Sacramento Valley Water Year-Types and Differences (Absolute and Percentage) between Model Scenarios for Alternative 5	11-1857
11-5-46	Difference and Percent Difference in Number of Months in Which Flow Rates Exceed 17,700 and 5,300 Cubic Feet per Second in the Sacramento River at Wilkins Slough, and 31,000 cfs at Verona	11-1861
11-5-47	Difference and Percent Difference in the Percentage of Months in Which Average Delta Outflow is Predicted to Exceed 15,000, 20,000, and 25,000 Cubic Feet per Second in April and in May of Wet and Above-Normal Water Years	11-1862
11-5-48	Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 5	11-1868
11-5-49	Differences between Model Scenarios in Dewatering Risk of Pacific Lamprey Redd Cohorts	11-1869
11-5-50	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick	11-1872

11-5-51	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff.....	11-1872
11-5-52	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston	11-1873
11-5-53	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-1873
11-5-54	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam.....	11-1874
11-5-55	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-1874
11-5-56	Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 5	11-1885
11-5-57	Differences between Model Scenarios in Dewatering Risk of River Lamprey Redd Cohorts	11-1886
11-5-58	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick.....	11-1888
11-5-59	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff.....	11-1889
11-5-60	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston	11-1889
11-5-61	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-1890
11-5-62	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam.....	11-1891
11-5-63	Relative Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-1891
11-5-64	Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 68°F Water Temperature Range for Striped Bass Spawning, Embryo Incubation, and Initial Rearing	11-1904

11-5-65	Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 60°F to 70°F Water Temperature Range for American Shad Adult Migration and Spawning.....	11-1907
11-5-66	Difference and Percent Difference in the Percentage of Months during April–August in Which Water Temperatures in the Feather River below Thermalito Afterbay Fall below the 68°F Water Temperature Threshold for Threadfin Shad Spawning	11-1910
11-5-67	Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 75°F Water Temperature Range for Largemouth Bass Spawning	11-1913
11-5-68	Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Fall below the 60.8°F Water Temperature Threshold Range for the Initiation of Sacramento-San Joaquin Roach Spawning	11-1915
11-5-69	Difference and Percent Difference in the Percentage of Months during April–May in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 64°F Water Temperature Range for Hardhead Spawning	11-1918
11-5-70	Difference and Percent Difference in the Percentage of Months during April–November in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 88°F Water Temperature Threshold for Juvenile Largemouth Bass Rearing.....	11-1921
11-5-71	Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Threshold for Adult Largemouth Bass Survival	11-1923
11-5-72	Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed 72°F and 75°F Water Temperature Thresholds for Sacramento Tule Perch Occurrence	11-1928
11-5-73	Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Range for Sacramento-San Joaquin Roach Survival	11-1932
11-5-74	Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 65°F to 82.4°F Water Temperature Range for Juvenile and Adult Hardhead Occurrence.....	11-1935
11-6A-1	Average Percentage (and Difference) of Particles Representing Larval Delta Smelt Entrained by the North Bay Aqueduct under Alternative 6A and Baseline Scenarios ...	11-1945

11-6A-2	Differences in Delta Smelt Fall Abiotic Index between Alternative 6A and Existing Conditions Scenarios, with Habitat Restoration, Averaged by Prior Water Year Type	11-1946
11-6A-3	Average Percentage (and Difference) of Particles Representing Larval Longfin Smelt Entrained by the North Bay Aqueduct under Alternative 6A and Baseline Scenarios.....	11-1950
11-6A-4	Estimated Differences between Scenarios for Longfin Smelt Relative Abundance in the Fall Midwater Trawl or Bay Otter Trawl	11-1951
11-6A-5	Difference and Percent Difference in May Water Storage Volume in Shasta Reservoir for Model Scenarios	11-1956
11-6A-6	Difference and Percent Difference in Percent Mortality of Winter-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-1956
11-6A-7	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Winter-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-1957
11-6A-8	Through-Delta Survival of Emigrating Juvenile Winter-Run Chinook Salmon under Alternative 6A.....	11-1962
11-6A-9	Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Migration Period for Alternative 6A	11-1962
11-6A-10	Difference and Percent Difference in September Water Storage Volume in Shasta Reservoir for Model Scenarios	11-1969
11-6A-11	Difference and Percent Difference in Percent Mortality of Spring-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-1970
11-6A-12	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Spring-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-1970
11-6A-13	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through January Spawning and Egg Incubation Period	11-1971
11-6A-14	Difference and Percent Difference in September Water Storage Volume in Oroville Reservoir for Model Scenarios	11-1971
11-6A-15	Difference and Percent Difference in May Water Storage Volume in Oroville Reservoir for Model Scenarios	11-1975
11-6A-16	Through-Delta Survival of Emigrating Juvenile Spring-Run Chinook Salmon under Alternative 6A.....	11-1979
11-6A-17	Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Migration Period for Alternative 6A	11-1980
11-6A-18	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-1988

11-6A-19 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)..... 11-1989

11-6A-20 Difference and Percent Difference in Percent Mortality of Late Fall–Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model) 11-1989

11-6A-21 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Late Fall–Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)..... 11-1990

11-6A-22 Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through February Spawning and Egg Incubation Period 11-1990

11-6A-23 Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Feather River (Egg Mortality Model)..... 11-1991

11-6A-24 Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in the American River at Nimbus Dam during the October through January Spawning and Egg Incubation Period 11-1992

11-6A-25 Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the American River (Egg Mortality Model)..... 11-1992

11-6A-26 Through-Delta Survival of Emigrating Juvenile Fall-Run Chinook Salmon under Alternative 6A..... 11-2007

11-6A-27 Through-Delta Survival of Emigrating Juvenile Late Fall–Run Chinook Salmon under Alternative 6A 11-2008

11-6A-28 Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Migration Period for Alternative 6A 11-2017

11-6A-29 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Steelhead Habitat Metrics in the Upper Sacramento River (from SacEFT) 11-2021

11-6A-30 Comparisons of Greatest Monthly Reduction (Percent Change) in Instream Flow under Model Scenarios in Clear Creek during the January–April Steelhead Spawning and Egg Incubation Period 11-2021

11-6A-31 Minimum Monthly Instream Flow for Model Scenarios in Clear Creek during the Year-Round Juvenile Steelhead Rearing Period 11-2028

11-6A-32 Differences in Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types, February through June, from 15 2-D and Daily CALSIM II Modeling Runs..... 11-2049

11-6A-33 Increase in Splittail Weighted Habitat Area in Yolo Bypass from Existing Conditions to Alternative 6A by Water Year Type from 15 2-D and Daily CALSIM II Modeling Runs 11-2050

11-6A-34 Juvenile Green Sturgeon Entrainment Index at the SWP and CVP Salvage Facilities—Differences (Absolute and Percentage) between Model Scenarios for Alternative 6A..... 11-2057

11-6A-35 Juvenile White Sturgeon Entrainment Index at the SWP and CVP Salvage Facilities for Sacramento Valley Water Year-Types and Differences (Absolute and Percentage) between Model Scenarios for Alternative 6A 11-2067

11-6A-36 Difference and Percent Difference in Number of Months in Which Flow Rates Exceed 17,700 and 5,300 cfs in the Sacramento River at Wilkins Slough and 31,000 cfs at Verona 11-2071

11-6A-37 Difference and Percent Difference in Percentage of Months in Which Average Delta Outflow is Predicted to Exceed 15,000, 20,000, and 25,000 Cubic Feet per Second in April and May of Wet and Above-Normal Water Years 11-2072

11-6A-38 Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities—for Alternative 6A 11-2076

11-6A-39 Differences between Model Scenarios in Dewatering Risk of Pacific Lamprey Redd Cohorts 11-2078

11-6A-40 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick 11-2080

11-6A-41 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff 11-2081

11-6A-42 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston 11-2081

11-6A-43 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay 11-2082

11-6A-44 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam 11-2083

11-6A-45 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River 11-2083

11-6A-46 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Stanislaus River at the Confluence with the San Joaquin River 11-2084

11-6A-47 Differences between Model Scenarios in Dewatering Risk of River Lamprey Redd Cohorts 11-2096

11-6A-48 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick 11-2098

11-6A-49	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff.....	11-2099
11-6A-50	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston	11-2099
11-6A-51	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-2100
11-6A-52	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam.....	11-2100
11-6A-53	Relative Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-2101
11-6A-54	Relative Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Stanislaus River at the Confluence with the San Joaquin River.....	11-2101
11-7-1	Proportional Entrainment Index of Delta Smelt at SWP/CVP South Delta Facilities for Alternative 7.....	11-2218
11-7-2	Average Percentage (and Difference) of Particles Representing Larval Delta Smelt Entrained by the North Bay Aqueduct under Alternative 7 and Baseline Scenarios	11-2219
11-7-3	Differences in Delta Smelt Fall Abiotic Index between Alternative 7 and Existing Biological Conditions Scenarios, with Habitat Restoration, Averaged by Prior Water Year Type.....	11-2221
11-7-4	Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the South Delta Facilities under Alternative 7 and Baseline Scenarios.....	11-2224
11-7-5	Longfin Smelt Entrainment Index (March–June) at the SWP and CVP Salvage Facilities and Differences (Absolute and Percentage) between Model Scenarios	11-2225
11-7-6	Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the North Bay Aqueduct under Alternative 7 and Baseline Scenarios	11-2225
11-7-7	Estimated Differences Between Scenarios for Longfin Smelt Relative Abundance in the Fall Midwater Trawl or Bay Otter Trawl.....	11-2227
11-7-8	Juvenile Winter-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 7	11-2232
11-7-9	Difference and Percent Difference in May Water Storage Volume in Shasta Reservoir for Model Scenarios	11-2233
11-7-10	Maximum Water Temperature Criteria for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis.....	11-2233

11-7-11 Number of Days per Month Required to Trigger Each Level of Concern for Water Temperature Exceedances in the Sacramento River for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis 11-2234

11-7-12 Differences between Baseline and Alternative 7 Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September 11-2234

11-7-13 Differences between Baseline and Alternative 7 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Bend Bridge, May through September 11-2235

11-7-14 Difference and Percent Difference in Percent Mortality of Winter-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model) 11-2236

11-7-15 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Winter-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT) 11-2236

11-7-16 Through-Delta Survival of Emigrating Juvenile Winter-Run Chinook Salmon under Alternative 7 11-2242

11-7-17 Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Salmon Migration Period for Alternative 7 11-2243

11-7-18 Juvenile Spring-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 7 11-2249

11-7-19 Difference and Percent Difference in September Water Storage Volume in Shasta Reservoir for Model Scenarios 11-2250

11-7-20 Differences between Baseline and Alternative 7 Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Red Bluff, October through April 11-2250

11-7-21 Differences between Baseline and Alternative 7 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Red Bluff, October through April 11-2251

11-7-22 Difference and Percent Difference in Percent Mortality of Spring-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model) 11-2252

11-7-23 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Spring-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT) 11-2252

11-7-24 Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through January Spawning and Egg Incubation Period 11-2253

11-7-25 Difference and Percent Difference in September Water Storage Volume in Oroville Reservoir for Model Scenarios 11-2254

11-7-26	Differences between Baseline and Alternative 7 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, September through January	11-2255
11-7-27	Differences between Baseline and Alternative 7 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, September through January	11-2256
11-7-28	Difference and Percent Difference in May Water Storage Volume in Oroville Reservoir for Model Scenarios	11-2261
11-7-29	Differences between Baseline and Alternative 7 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 63°F Threshold, May through August	11-2262
11-7-30	Differences between Baseline and Alternative 7 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Feather River above Thermalito Afterbay, May through August	11-2263
11-7-31	Through-Delta Survival of Emigrating Juvenile Spring-Run Chinook Salmon under Alternative 7	11-2268
11-7-32	Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Salmon Migration Period for Alternative 7	11-2271
11-7-33	Juvenile Fall-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 7	11-2276
11-7-34	Juvenile Late Fall–Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 7	11-2276
11-7-35	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-2278
11-7-36	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-2279
11-7-37	Difference and Percent Difference in Percent Mortality of Late Fall–Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-2280
11-7-38	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Late Fall–Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-2280
11-7-39	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through February Spawning and Egg Incubation Period	11-2281

11-7-40	Differences between Baseline and Alternative 7 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 56°F Threshold, October through April	11-2282
11-7-41	Differences between Baseline and Alternative 7 Scenarios in Total Degree-Months (°F-Months) by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River at Gridley, October through April	11-2283
11-7-42	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Feather River (Egg Mortality Model).....	11-2284
11-7-43	Differences between Baseline and Alternative 7 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 56°F Threshold, November through April.....	11-2285
11-7-44	Differences between Baseline and Alternative 7 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the American River at the Watt Avenue Bridge, November through April	11-2286
11-7-45	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in the American River at Nimbus Dam during the October through January Spawning and Egg Incubation Period	11-2287
11-7-46	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the American River (Egg Mortality Model).....	11-2287
11-7-47	Through-Delta Survival of Emigrating Juvenile Fall-Run Chinook Salmon under Alternative 7	11-2306
11-7-48	Through-Delta Survival of Emigrating Juvenile Late Fall–Run Chinook Salmon under Alternative 7.....	11-2307
11-7-49	Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Salmon Migration Period for Alternative 7	11-2314
11-7-50	Juvenile Steelhead Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative.....	11-2318
11-7-51	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Steelhead Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-2319
11-7-52	Comparisons of Greatest Monthly Reduction (Percent Change) in Instream Flow under Model Scenarios in Clear Creek during the January–April Steelhead Spawning and Egg Incubation Period	11-2320
11-7-53	Differences between Baseline and Alternative 7 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, January through April.....	11-2321
11-7-54	Differences between Baseline and Alternative 7 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, January through April	11-2322

11-7-55 Minimum Monthly Instream Flow for Model Scenarios in Clear Creek during the Year-Round Juvenile Steelhead Rearing Period11-2328

11-7-56 Differences between Baseline and Alternative 7 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 65°F Threshold, May through October 11-2330

11-7-57 Differences between Baseline and Alternative 7 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 65°F in the Feather River at the Watt Avenue Bridge, May through October11-2331

11-7-58 Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Steelhead Migration Period for Alternative 7 11-2341

11-7-59 Juvenile Sacramento Splittail Entrainment Index (Yolo Bypass Inundation Method) at the SWP and CVP Salvage Facilities Differences between Model Scenarios for Alternative 7 11-2354

11-7-60 Juvenile Sacramento Splittail Entrainment Index (per Capita Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 7 11-2354

11-7-61 Adult Sacramento Splittail Entrainment Index (Salvage Density Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 7 11-2354

11-7-62 Difference (Percent Difference) in Percent of Days or Months during February to June in Which Temperature Would Be below 45°F or above 75°F in the Sacramento River at Hamilton City and Feather River at the Confluence with the Sacramento River 11-2358

11-7-63 Differences in Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types, February through June, from 15 2-D and Daily CALSIM II Modeling Runs 11-2360

11-7-64 Increase in Splittail Weighted Habitat Area in Yolo Bypass from Existing Biological Conditions to Alternative 7 by Water Year Type from 15 2-D and Daily CALSIM II Modeling Runs..... 11-2361

11-7-65 Juvenile Green Sturgeon Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 7..... 11-2366

11-7-66 Differences between Baseline and Alternative 7 Scenarios in the Number of Years in Which Water Temperature Exceedances above 63°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September 11-2367

11-7-67 Differences between Baseline and Alternative 7 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Sacramento River at Bend Bridge, May through September 11-2368

11-7-68 Differences between Baseline and Alternative 7 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 64°F Threshold, May through September 11-2369

11-7-69 Differences between Baseline and Alternative 7 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 64°F in the Feather River at Gridley, May through September 11-2370

11-7-70 Juvenile White Sturgeon Entrainment Index at the SWP and CVP Salvage Facilities for Sacramento Valley Water Year-Types and Differences (Absolute and Percentage) between Model Scenarios..... 11-2381

11-7-71 Differences between Baselines and Alternative 7 in the Number of Years in Which Water Temperature Exceedances above the 61°F and 68°F Thresholds Are within Each Level of Concern, Sacramento River at Hamilton City, March through June..... 11-2382

11-7-72 Differences between Baseline and Alternative 7 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 61°F in the Sacramento River at Hamilton City, March through June..... 11-2383

11-7-73 Differences between Baseline and Alternative 7 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 68°F in the Sacramento River at Hamilton City, March through June..... 11-2384

11-7-74 Difference and Percent Difference in Number of Months in Which Flow Rates Exceed 17,700 and 5,300 cfs in the Sacramento River at Wilkins Slough and 31,000 cfs at Verona 11-2389

11-7-75 Difference and Percent Difference in Percentage of Months in Which Average Delta Outflow is Predicted to Exceed 15,000, 20,000, and 25,000 Cubic Feet per Second in April and May of Wet and Above-Normal Water Years..... 11-2390

11-7-76 Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 7 11-2396

11-7-77 Differences between Model Scenarios in Dewatering Risk of Pacific Lamprey Redd Cohorts 11-2397

11-7-78 Differences (Percent Differences) between Model Scenarios in Pacific Lamprey Egg Cohort Temperature Exposure 11-2398

11-7-79 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick..... 11-2400

11-7-80 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff..... 11-2400

11-7-81 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston 11-2401

11-7-82 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay 11-2401

11-7-83 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam..... 11-2402

11-7-84 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River 11-2402

11-7-85 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Stanislaus River at the Confluence with the Sacramento River 11-2403

11-7-86 Differences (Percent Differences) between Model Scenarios in Pacific Lamprey Ammocoete Cohorts Exposed to Temperatures Greater than 71.6°F in at Least One Day or Month 11-2404

11-7-87 Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 7 11-2414

11-7-88 Differences between Model Scenarios in Dewatering Risk of River Lamprey Redd Cohorts 11-2415

11-7-89 Differences (Percent Differences) between Model Scenarios in River Lamprey Egg Cohort Temperature Exposure 11-2417

11-7-90 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick..... 11-2419

11-7-91 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff..... 11-2420

11-7-92 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston 11-2420

11-7-93 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay 11-2421

11-7-94 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam..... 11-2421

11-7-95 Relative Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River 11-2422

11-7-96 Relative Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Stanislaus River at the Confluence with the Sacramento River 11-2422

11-7-97 Differences (Percent Differences) between Model Scenarios in River Lamprey Ammocoete Cohorts Exposed to Temperatures in the Feather River Greater than 71.6°F and 77°F in at Least One Month..... 11-2423

11-7-98 Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 68°F Water Temperature Range for Striped Bass Spawning, Embryo Incubation, and Initial Rearing 11-2437

11-7-99 Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 60°F to 70°F Water Temperature Range for American Shad Adult Migration and Spawning..... 11-2440

11-7-100 Difference and Percent Difference in the Percentage of Months during April–August in Which Water Temperatures in the Feather River below Thermalito Afterbay Fall below the 68°F Water Temperature Threshold for Threadfin Shad Spawning 11-2443

11-7-101 Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 75°F Water Temperature Range for Largemouth Bass Spawning 11-2447

11-7-102 Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Fall below the 60.8°F Water Temperature Threshold Range for the Initiation of Sacramento-San Joaquin Roach Spawning 11-2450

11-7-103 Difference and Percent Difference in the Percentage of Months during April–May in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 64°F Water Temperature Range for Hardhead Spawning 11-2453

11-7-104 Difference and Percent Difference in the Percentage of Months during April–November in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 88°F Water Temperature Threshold for Juvenile Largemouth Bass Rearing..... 11-2457

11-7-105 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Threshold for Adult Largemouth Bass Survival 11-2458

11-7-106 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed 72°F and 75°F Water Temperature Thresholds for Sacramento Tule Perch Occurrence 11-2464

11-7-107 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Range for Sacramento-San Joaquin Roach Survival 11-2468

11-7-108	Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 65°F to 82.4°F Water Temperature Range for Juvenile and Adult Hardhead Occurrence.....	11-2472
11-8-1	Proportional Entrainment Index of Delta Smelt at SWP/CVP South Delta Facilities for Alternative 8.....	11-2484
11-8-2	Average Percentage (and Difference) of Particles Representing Larval Delta Smelt Entrained by the North Bay Aqueduct under Alternative 8 and Baseline Scenarios	11-2485
11-8-3	Differences in Delta Smelt Fall Abiotic Index between Alternative 8 and Existing Biological Conditions Scenarios, with Habitat Restoration, Averaged by Prior Water Year Type.....	11-2487
11-8-4	Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the South Delta Facilities under Alternative 8 and Baseline Scenarios.....	11-2490
11-8-5	Longfin Smelt Entrainment Index at the SWP and CVP Salvage Facilities—Differences (Absolute and Percentage) between Model Scenarios for Alternative 8 ...	11-2490
11-8-6	Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the North Bay Aqueduct under Alternative 8 and Baseline Scenarios	11-2491
11-8-7	Estimated Differences Between Scenarios for Longfin Smelt Relative Abundance in the Fall Midwater Trawl or Bay Otter Trawl.....	11-2492
11-8-8	Juvenile Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 8.....	11-2496
11-8-9	Difference and Percent Difference in May Water Storage Volume in Shasta Reservoir for Model Scenarios	11-2498
11-8-10	Maximum Water Temperature Criteria for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis.....	11-2498
11-8-11	Number of Days per Month Required to Trigger Each Level of Concern for Water Temperature Exceedances in the Sacramento River for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis	11-2499
11-8-12	Differences between Baseline and Alternative 8 Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September	11-2499
11-8-13	Differences between Baseline and Alternative 8 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Bend Bridge, May through September	11-2500
11-8-14	Difference and Percent Difference in Percent Mortality of Winter-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model).....	11-2501
11-8-15	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Winter-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-2501

11-8-16	Through-Delta Survival of Emigrating Juvenile Winter-Run Chinook Salmon under Alternative 8	11-2508
11-8-17	Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Migration Period for Alternative 8.....	11-2511
11-8-18	Juvenile Spring-Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 8	11-2515
11-8-19	Difference and Percent Difference in September Water Storage Volume in Shasta Reservoir for Model Scenarios	11-2517
11-8-20	Differences between Baseline and Alternative 8 Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Red Bluff, October through April.....	11-2517
11-8-21	Differences between Baseline and Alternative 8 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Red Bluff, October through April.....	11-2518
11-8-22	Difference and Percent Difference in Percent Mortality of Spring-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model).....	11-2519
11-8-23	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Spring-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-2519
11-8-24	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through January Spawning and Egg Incubation Period	11-2520
11-8-25	Difference and Percent Difference in September Water Storage Volume in Oroville Reservoir for Model Scenarios	11-2520
11-8-26	Differences between Baseline and Alternative 8 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, September through January.....	11-2521
11-8-27	Differences between Baseline and Alternative 8 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, September through January.....	11-2522
11-8-28	Difference and Percent Difference in May Water Storage Volume in Oroville Reservoir for Model Scenarios	11-2527
11-8-29	Differences between Baseline and Alternative 8 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 63°F Threshold, May through August.....	11-2527
11-8-30	Differences between Baseline and Alternative 8 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Feather River above Thermalito Afterbay, May through August.....	11-2528

11-8-31 Through-Delta Survival of Emigrating Juvenile Spring-Run Chinook Salmon under Alternative 8 11-2533

11-8-32 Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Migration Period for Alternative 8..... 11-2534

11-8-33 Juvenile Fall-Run and Late Fall–Run Chinook Salmon Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 8 11-2542

11-8-34 Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model) 11-2544

11-8-35 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)..... 11-2544

11-8-36 Difference and Percent Difference in Percent Mortality of Late Fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model) 11-2545

11-8-37 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Late Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT)..... 11-2546

11-8-38 Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through February Spawning and Egg Incubation Period 11-2546

11-8-39 Differences between Baseline and Alternative 8 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 56°F Threshold, October through April 11-2548

11-8-40 Differences between Baseline and Alternative 8 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River at Gridley, October through April 11-2549

11-8-41 Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Feather River (Egg Mortality Model)..... 11-2550

11-8-42 Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in the American River at Nimbus Dam during the October through January Spawning and Egg Incubation Period 11-2550

11-8-43 Differences between Baseline and Alternative 8 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 56°F Threshold, November through April..... 11-2551

11-8-44 Differences between Baseline and Alternative 8 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the American River at the Watt Avenue Bridge, November through April 11-2552

11-8-45 Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the American River (Egg Mortality Model) 11-2553

11-8-46	Through-Delta Survival of Emigrating Juvenile Fall-Run Chinook Salmon under Alternative 8	11-2570
11-8-47	Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Migration Period for Alternative 8.....	11-2572
11-8-48	Juvenile Steelhead Annual Entrainment Index at the SWP and CVP Salvage Facilities—Differences between Model Scenarios for Alternative 8.....	11-2582
11-8-49	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Steelhead Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-2583
11-8-50	Comparisons of Greatest Monthly Reduction (Percent Change) in Instream Flow under Model Scenarios in Clear Creek during the January–April Steelhead Spawning and Egg Incubation Period	11-2584
11-8-51	May Water Storage Volume in Oroville Reservoir for Model Scenarios	11-2584
11-8-52	September Water Storage Volume in Oroville Reservoir for Model Scenarios	11-2585
11-8-53	Differences between Baseline and Alternative 8 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, January through April.....	11-2585
11-8-54	Differences between Baseline and Alternative 8 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, January through April	11-2586
11-8-55	Minimum Monthly Instream Flow for Model Scenarios in Clear Creek during the Year-Round Juvenile Steelhead Rearing Period	11-2593
11-8-56	Differences between Baseline and Alternative 8 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 65°F Threshold, May through October	11-2595
11-8-57	Differences between Baseline and Alternative 8 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 65°F in the American River at the Watt Avenue Bridge, May through October	11-2596
11-8-58	Juvenile Sacramento Splittail Entrainment Index (Yolo Bypass Days of Inundation Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 8	11-2618
11-8-59	Juvenile Sacramento Splittail Entrainment Index (per Capita Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 8	11-2618
11-8-60	Adult Sacramento Splittail Entrainment Index (Salvage Density Method) at the SWP and CVP Salvage Facilities and Differences between Model Scenarios for Alternative 8	11-2619

11-8-61	Differences in Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types, February through June, from 15 2-D and Daily CALSIM II Modeling Runs.....	11-2621
11-8-62	Increase in Splittail Weighted Habitat Area in Yolo Bypass from Existing Biological Conditions to Alternative 8 by Water Year Type from 15 2-D and Daily CALSIM II Modeling Runs.....	11-2622
11-8-63	Difference (Percent Difference) in Percent of Days or Months during February to June in Which Temperature Would Be below 45°F or above 75°F in the Sacramento River at Hamilton City and Feather River at the Confluence with the Sacramento River	11-2624
11-8-64	Juvenile Green Sturgeon Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 8.....	11-2632
11-8-65	Differences between Baseline and Alternative 8 Scenarios in the Number of Years in Which Water Temperature Exceedances above 63°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September	11-2633
11-8-66	Differences between Baseline and Alternative 8 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Sacramento River at Bend Bridge, May through September	11-2634
11-8-67	Differences between Baseline and Alternative 8 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 64°F Threshold, May through September	11-2635
11-8-68	Differences between Baseline and Alternative 8 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 64°F in the Feather River at Gridley, May through September	11-2636
11-8-69	Juvenile White Sturgeon Entrainment Index at the SWP and CVP Salvage Facilities for Sacramento Valley Water Year-Types and Differences (Absolute and Percentage) between Model Scenarios.....	11-2647
11-8-70	Differences between Baselines and Alternative 8 Scenarios in the Number of Years in Which Water Temperature Exceedances above the 61°F and 68°F Thresholds Are within Each Level of Concern, Sacramento River at Hamilton City, March through June.....	11-2648
11-8-71	Differences between Baseline and Alternative 8 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 61°F in the Sacramento River at Hamilton City, March through June.....	11-2649
11-8-72	Differences between Baseline and Alternative 8 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 68°F in the Sacramento River at Hamilton City, March through June.....	11-2650
11-8-73	Difference and Percent Difference in Number of Months between February and May in Which Flow Rates Exceed 17,700 and 5,300 cfs in the Sacramento River at Wilkins Slough and 31,000 cfs at Verona	11-2655

11-8-74 Difference and Percent Difference in Percentage of Months in Which Average Delta Outflow is Predicted to Exceed 15,000, 20,000, and 25,000 Cubic Feet per Second in April and May of Wet and Above-Normal Water Years..... 11-2656

11-8-75 Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 8 11-2662

11-8-76 Differences between Model Scenarios in Dewatering Risk of Pacific Lamprey Redd Cohorts 11-2663

11-8-77 Differences (Percent Differences) between Model Scenarios in Pacific Lamprey Egg Cohort Temperature Exposure 11-2664

11-8-78 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick..... 11-2667

11-8-79 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff..... 11-2667

11-8-80 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston 11-2668

11-8-81 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay 11-2668

11-8-82 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam..... 11-2669

11-8-83 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River 11-2669

11-8-84 Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Stanislaus River at the Confluence with the San Joaquin River..... 11-2670

11-8-85 Differences (Percent Differences) between Model Scenarios in Pacific Lamprey Ammocoete Cohorts Exposed to Temperatures Greater than 71.6°F in at Least One Day or Month 11-2671

11-8-86 Lamprey Annual Entrainment Index at the SWP and CVP Salvage Facilities for Alternative 8 11-2682

11-8-87 Differences between Model Scenarios in Dewatering Risk of River Lamprey Redd Cohorts 11-2683

11-8-88 Differences (Percent Differences) between Model Scenarios in River Lamprey Egg Cohort Temperature Exposure 11-2684

11-8-89 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick..... 11-2687

11-8-90 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff..... 11-2688

11-8-91 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston 11-2688

11-8-92 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay 11-2689

11-8-93 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam 11-2690

11-8-94 Relative Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River 11-2690

11-8-95 Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Stanislaus River at the Confluence with the San Joaquin River..... 11-2691

11-8-96 Differences (Percent Differences) between Model Scenarios in River Lamprey Ammocoete Cohorts Exposed to Temperatures in the Feather River Greater than 71.6°F and 77°F in at Least One Month..... 11-2692

11-8-97 Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 68°F Water Temperature Range for Striped Bass Spawning, Embryo Incubation, and Initial Rearing 11-2706

11-8-98 Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 60°F to 70°F Water Temperature Range for American Shad Adult Migration and Spawning..... 11-2709

11-8-99 Difference and Percent Difference in the Percentage of Months during April–August in Which Water Temperatures in the Feather River below Thermalito Afterbay Fall below the 68°F Water Temperature Threshold for Threadfin Shad Spawning 11-2712

11-8-100 Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 75°F Water Temperature Range for Largemouth Bass Spawning 11-2715

11-8-101	Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Fall below the 60.8°F Water Temperature Threshold Range for the Initiation of Sacramento-San Joaquin Roach Spawning	11-2718
11-8-102	Difference and Percent Difference in the Percentage of Months during April–May in Which Water Temperatures in the Feather River below Thermalito Afterbay Are Outside the 59°F to 64°F Water Temperature Range for Hardhead Spawning.....	11-2721
11-8-103	Difference and Percent Difference in the Percentage of Months during April–November in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 88°F Water Temperature Threshold for Juvenile Largemouth Bass Rearing.....	11-2725
11-8-104	Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Threshold for Adult Largemouth Bass Survival	11-2727
11-8-105	Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed 72°F and 75°F Water Temperature Thresholds for Sacramento Tule Perch Occurrence	11-2733
11-8-106	Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay at Exceed the 86°F Water Temperature Range for Sacramento-San Joaquin Roach Survival	11-2738
11-8-107	Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 65°F to 82.4°F Water Temperature Range for Juvenile and Adult Hardhead Occurrence.....	11-2742
11-9-1	In-Water and Near-Water Construction Activities under Alternative 9.....	11-2753
11-9-2	Average Percentage (and Difference) of Particles Representing Larval Delta Smelt Entrained by the North Bay Aqueduct under Alternative 9 and Baseline Scenarios	11-2760
11-9-3	Differences in Delta Smelt Fall Abiotic Index between Alternative 9 and Existing Biological Conditions Scenarios, with Habitat Restoration, Averaged by Prior Water Year Type	11-2762
11-9-4	Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the South Delta Facilities under Alternative 9 and Baseline Scenarios.....	11-2766
11-9-5	Percentage of Particles (and Difference) Representing Longfin Smelt Larvae Entrained by the North Bay Aqueduct under Alternative 9 and Baseline Scenarios	11-2767
11-9-6	Estimated Differences between Scenarios for Longfin Smelt Relative Abundance in the Fall Midwater Trawl or Bay Otter Trawl.....	11-2768
11-9-7	Difference and Percent Difference in May Water Storage Volume in Shasta Reservoir for Model Scenarios	11-2776

11-9-8	Maximum Water Temperature Criteria for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis.....	11-2777
11-9-9	Number of Days per Month Required to Trigger Each Level of Concern for Water Temperature Exceedances in the Sacramento River for Covered Salmonids and Sturgeon Provided by NMFS and Used in the BDCP Effects Analysis	11-2777
11-9-10	Differences between Baseline and Alternative 9 Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September	11-2777
11-9-11	Differences between Baseline and Alternative 9 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Bend Bridge, May through September	11-2778
11-9-12	Difference and Percent Difference in Percent Mortality of Winter-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model)	11-2779
11-9-13	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Winter-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-2779
11-9-14	Through-Delta Survival of Emigrating Juvenile Winter-Run Chinook Salmon under Alternative 9	11-2784
11-9-15	Percentage of Water at Collinsville that Originated in the Sacramento River and San Joaquin River during the Adult Chinook Migration Period for Alternative 9.....	11-2785
11-9-16	Difference and Percent Difference in September Water Storage Volume in Shasta Reservoir for Model Scenarios	11-2791
11-9-17	Differences between Baseline and Alternative 9 Scenarios in the Number of Years in Which Water Temperature Exceedances above 56°F Are within Each Level of Concern, Sacramento River at Red Bluff, October through April.....	11-2792
11-9-18	Differences between Baseline and Alternative 9 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Sacramento River at Red Bluff, October through April	11-2793
11-9-19	Difference and Percent Difference in Percent Mortality of Spring-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model).....	11-2794
11-9-20	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Spring-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT).....	11-2794
11-9-21	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through January Spawning and Egg Incubation Period	11-2795
11-9-22	Difference and Percent Difference in September Water Storage Volume in Oroville Reservoir for Model Scenarios	11-2795
11-9-23	Differences between Baseline and Alternative 9 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in	

the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, September through January 11-2796

11-9-24 Differences between Baseline and Alternative 9 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, September through January 11-2797

11-9-25 Difference and Percent Difference in May Water Storage Volume in Oroville Reservoir for Model Scenarios 11-2801

11-9-26 Differences between Baseline and Alternative 9 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 63°F Threshold, May through August 11-2802

11-9-27 Differences between Baseline and Alternative 9 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Feather River above Thermalito Afterbay, May through August 11-2803

11-9-28 Through-Delta Survival of Emigrating Juvenile Spring-Run Chinook Salmon under Alternative 9 11-2808

11-9-29 Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model) 11-2815

11-9-30 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Fall-Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT) 11-2815

11-9-31 Difference and Percent Difference in Percent Mortality of Late Fall–Run Chinook Salmon Eggs in the Sacramento River (Egg Mortality Model) 11-2816

11-9-32 Difference and Percent Difference in Percentage of Years with “Good” Conditions for Late Fall–Run Chinook Salmon Habitat Metrics in the Upper Sacramento River (from SacEFT) 11-2816

11-9-33 Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in Clear Creek below Whiskeytown Reservoir during the September through February Spawning and Egg Incubation Period 11-2817

11-9-34 Differences between Baseline and Alternative 9 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 56°F Threshold, October through April 11-2818

11-9-35 Differences between Baseline and Alternative 9 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River at Gridley, October through April 11-2819

11-9-36 Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the Feather River (Egg Mortality Model) 11-2820

11-9-37 Differences between Baseline and Alternative 9 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 56°F Threshold, November through April 11-2821

11-9-38	Differences between Baseline and Alternative 9 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the American River at the Watt Avenue Bridge, November through April	11-2822
11-9-39	Difference and Percent Difference in Greatest Monthly Reduction (Percent Change) in Instream Flow in the American River at Nimbus Dam during the October through January Spawning and Egg Incubation Period	11-2823
11-9-40	Difference and Percent Difference in Percent Mortality of Fall-Run Chinook Salmon Eggs in the American River (Egg Mortality Model)	11-2823
11-9-41	Through-Delta Survival of Emigrating Juvenile Fall-Run Chinook Salmon under Alternative 9	11-2840
11-9-42	Through-Delta Survival of Emigrating Juvenile Late Fall-Run Chinook Salmon under Alternative 9	11-2841
11-9-43	Difference and Percent Difference in Percentage of Years with “Good” Conditions for Steelhead Habitat Metrics in the Upper Sacramento River (from SacEFT)	11-2852
11-9-44	Comparisons of Greatest Monthly Reduction (Percent Change) in Instream Flow under Model Scenarios in Clear Creek during the January–April Steelhead Spawning and Egg Incubation Period	11-2852
11-9-45	May Water Storage Volume in Oroville Reservoir for Model Scenarios	11-2853
11-9-46	September Water Storage Volume in Oroville Reservoir for Model Scenarios	11-2853
11-9-47	Differences between Baseline and Alternative 9 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River above Thermalito Afterbay Exceed the 56°F Threshold, January through April	11-2854
11-9-48	Differences between Baseline and Alternative 9 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 56°F in the Feather River above Thermalito Afterbay, January through April	11-2855
11-9-49	Minimum Monthly Instream Flow for Model Scenarios in Clear Creek during the Year-Round Juvenile Steelhead Rearing Period	11-2861
11-9-50	Differences between Baseline and Alternative 9 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the American River at the Watt Avenue Bridge Exceed the 65°F Threshold, May through October	11-2863
11-9-51	Differences between Baseline and Alternative 9 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 65°F in the American River at the Watt Avenue Bridge, May through October	11-2864
11-9-52	Differences in Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types, February through June, from 15 2-D and Daily CALSIM II Modeling Runs	11-2886

11-9-53 Increase in Splittail Weighted Habitat Area in Yolo Bypass from Existing Biological Conditions to Alternative 9 by Water Year Type from 15 2-D and Daily CALSIM II Modeling Runs..... 11-2887

11-9-54 Difference (Percent Difference) in Percent of Days or Months during February to June in Which Temperature Would Be below 45°F or above 75°F in the Sacramento River at Hamilton City and Feather River at the Confluence with the Sacramento River 11-2889

11-9-55 Differences between Baseline and Alternative 9 Scenarios in the Number of Years in Which Water Temperature Exceedances above 63°F Are within Each Level of Concern, Sacramento River at Bend Bridge, May through September 11-2898

11-9-56 Differences between Baseline and Alternative 9 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 63°F in the Sacramento River at Bend Bridge, May through September 11-2899

11-9-57 Differences between Baseline and Alternative 9 Scenarios in Percent of Months during the 82-Year CALSIM Modeling Period during Which Water Temperatures in the Feather River at Gridley Exceed the 64°F Threshold, May through September 11-2900

11-9-58 Differences between Baseline and Alternative 9 Scenarios in Total Degree-Months by Month and Water Year Type for Water Temperature Exceedances above 64°F in the Feather River at Gridley, May through September 11-2901

11-9-59 Differences between Baselines and Alternative 9 Scenarios in the Number of Years in Which Water Temperature Exceedances above the 61°F and 68°F Thresholds Are within Each Level of Concern, Sacramento River at Hamilton City, March through June..... 11-2913

11-9-60 Differences between Baseline and Alternative 9 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 61°F in the Sacramento River at Hamilton City, March through June..... 11-2914

11-9-61 Differences between Baseline and Alternative 9 Scenarios in Total Degree-Days by Month and Water Year Type for Water Temperature Exceedances above 68°F in the Sacramento River at Hamilton City, March through June..... 11-2915

11-9-62 Difference and Percent Difference in Number of Months in Which Flow Rates Exceed 17,700 and 5,300 cfs in the Sacramento River at Wilkins Slough and 31,000 cfs at Verona..... 11-2920

11-9-63 Difference and Percent Difference in Percentage of Months in Which Average Delta Outflow is Predicted to Exceed 15,000, 20,000, and 25,000 Cubic Feet per Second in April and May of Wet and Above-Normal Water Years..... 11-2921

11-9-64 Differences between Model Scenarios in Dewatering Risk of Pacific Lamprey Redd Cohorts 11-2927

11-9-65 Differences (Percent Differences) between Model Scenarios in Pacific Lamprey Egg Cohort Temperature Exposure 11-2928

11-9-66	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick.....	11-2930
11-9-67	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff.....	11-2931
11-9-68	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston	11-2931
11-9-69	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-2932
11-9-70	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam	11-2932
11-9-71	Percent Difference between Model Scenarios in the Number of Pacific Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-2933
11-9-72	Differences (Percent Differences) between Model Scenarios in Pacific Lamprey Ammocoete Cohorts Exposed to Temperatures in the Feather River Greater than 71.6°F in at Least One Day or Month	11-2934
11-9-73	Differences between Model Scenarios in Dewatering Risk of River Lamprey Redd Cohorts	11-2945
11-9-74	Differences (Percent Differences) between Model Scenarios in River Lamprey Egg Cohort Temperature Exposure	11-2946
11-9-75	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Keswick.....	11-2949
11-9-76	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Sacramento River at Red Bluff.....	11-2949
11-9-77	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Trinity River at Lewiston	11-2950
11-9-78	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, Feather River at Thermalito Afterbay	11-2950
11-9-79	Percent Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at Nimbus Dam	11-2951

11-9-80	Relative Difference between Model Scenarios in the Number of River Lamprey Ammocoete Cohorts Exposed to Month-over-Month Flow Reductions, American River at the Confluence with the Sacramento River	11-2951
11-9-81	Differences (Percent Differences) between Model Scenarios in River Lamprey Ammocoete Cohorts Exposed to Temperatures in the Feather River Greater than 71.6°F and 77°F in at Least One Month.....	11-2952
11-9-82	Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 68°F Water Temperature Range for Striped Bass Spawning, Embryo Incubation, and Initial Rearing	11-2964
11-9-83	Difference and Percent Difference in the Percentage of Months during April–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 60°F to 70°F Water Temperature Range for American Shad Adult Migration and Spawning.....	11-2967
11-9-84	Difference and Percent Difference in the Percentage of Months during April–August in Which Water Temperatures in the Feather River below Thermalito Afterbay Fall below the 68°F Water Temperature Threshold for Threadfin Shad Spawning	11-2970
11-9-85	Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 75°F Water Temperature Range for Largemouth Bass Spawning	11-2973
11-9-86	Difference and Percent Difference in the Percentage of Months during March–June in Which Water Temperatures in the Feather River below Thermalito Afterbay Fall below the 60.8°F Water Temperature Threshold Range for the Initiation of Sacramento-San Joaquin Roach Spawning	11-2976
11-9-87	Difference and Percent Difference in the Percentage of Months during April–May in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 59°F to 64°F Water Temperature Range for Hardhead Spawning	11-2978
11-9-88	Difference and Percent Difference in the Percentage of Months during April–November in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 88°F Water Temperature Threshold for Juvenile Largemouth Bass Rearing.....	11-2982
11-9-89	Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed the 86°F Water Temperature Threshold for Adult Largemouth Bass Survival	11-2983
11-9-90	Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Exceed 72°F and 75°F Water Temperature Thresholds for Sacramento Tule Perch Occurrence	11-2989

11-9-91 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay at Exceed the 86°F Water Temperature Range for Sacramento-San Joaquin Roach Survival 11-2993

11-9-92 Difference and Percent Difference in the Percentage of Months Year-Round in Which Water Temperatures in the Feather River below Thermalito Afterbay Are outside the 65°F to 82.4°F Water Temperature Range for Juvenile and Adult Hardhead Occurrence..... 11-2996

11-13 Effects on Covered Fish Species from the Plans, Policies, and Programs Included in the Cumulative Effects Analysis..... 11-3007

11-14 Effects on Fish from the Programs, Projects, and Policies Considered for Cumulative Analysis..... 11-3016

12-ES-1 Direct Effects of Alternatives on Natural Communities and Cultivated Lands in the Terrestrial Biological Resources Study Area 12-7

12-ES-2 Natural Communities Protection and Restoration Included in the BDCP 12-9

12-ES-3 Fill of Wetlands and Other Waters of the United States from Construction of Water Conveyance Facilities (CM1)..... 12-10

12-ES-4 Direct Effects of Alternatives on Invertebrate Habitat in the Terrestrial Biological Resources Study Area 12-13

12-ES-5 Direct Effects of Alternatives on Amphibian and Reptile Habitat in the Terrestrial Biological Resources Study Area..... 12-16

12-ES-6 Direct Effects of Alternatives on Bird Habitat in the Terrestrial Biological Resources Study Area 12-19

12-ES-7 Direct Effects of Alternatives on Mammal Habitat in the Terrestrial Biological Resources Study Area 12-22

12-ES-8 Direct Effects of Alternatives on Vernal Pool Plant Species in the Terrestrial Biological Resources Study Area..... 12-25

12-ES-9 Direct Effects of Alternatives on Alkali Seasonal Wetland Plant Species in the Terrestrial Biological Study Area 12-26

12-ES-10 Direct Effects of Alternatives on Grassland Plant Species in the Terrestrial Biological Study Area 12-27

12-ES-11 Direct Effects of Alternatives on Valley/Foothill Riparian Plant Species in the Terrestrial Biological Study Area 12-28

12-ES-12 Direct Effects of Alternatives on Tidal Wetland Plant Species in the Terrestrial Biological Study Area 12-29

12-ES-13 Direct Effects of Alternatives on Inland Dune Plant Species in the Terrestrial Biological Study Area 12-30

12-ES-14 Direct Effects of Alternatives on Nontidal Wetland Plant Species in the Terrestrial Biological Study Area 12-31

12-1 Area of Natural Community Types in the Terrestrial Biology Study Area 12-37

12-2 Covered Special-Status Species Supported by the Natural Communities, Cultivated Lands and Developed Lands of the Study Area 12-54

12-3 Noncovered Special-Status Species Supported by the Natural Communities, Cultivated Lands and Developed Lands of the Study Area 12-58

12-4 Designated Critical Habitat within the Study Area for Wildlife and Plant Species 12-65

12-5 Bat Species Identified from Acoustic Monitoring at 20 Locations in 10 Habitat Types..... 12-89

12-6 Mapped Land Cover Types that are Potentially Jurisdictional Wetlands and Other Waters 12-148

12-7 Programs, Projects, and Policies Included In No Action Alternative for the Terrestrial Biological Resources Analysis..... 12-153

12-1A-1 Changes in Tidal Perennial Aquatic Natural Community Associated with Alternative 1A..... 12-162

12-1A-2 Changes in Tidal Brackish Emergent Wetland Natural Community Associated with Alternative 1A..... 12-171

12-1A-3 Changes in Tidal Freshwater Emergent Wetland Natural Community Associated with Alternative 1A..... 12-176

12-1A-4 Changes in Valley/Foothill Riparian Natural Community Associated with Alternative 1A..... 12-185

12-1A-5 Changes in Nontidal Perennial Aquatic Natural Community Associated with Alternative 1A..... 12-194

12-1A-6 Changes in Nontidal Freshwater Perennial Emergent Wetland Natural Community Associated with Alternative 1A 12-202

12-1A-7 Changes in Alkali Seasonal Wetland Complex Natural Community Associated with Alternative 1A..... 12-210

12-1A-8 Changes in Vernal Pool Complex Natural Community Associated with Alternative 1A..... 12-217

12-1A-9 Changes in Managed Wetland Associated with Alternative 1A 12-225

12-1A-10 Changes in Other Natural Seasonal Wetland Associated with Alternative 1A..... 12-234

12-1A-11 Changes in Grassland Natural Community Associated with Alternative 1A..... 12-238

12-1A-12 Changes in Vernal Pool Crustacean Modeled Habitat Associated with Alternative 1A..... 12-249

12-1A-13 Estimated Effects on Wetted Vernal Pool Crustacean Habitat under Alternative 1A..... 12-252

12-1A-14 Changes in Valley Elderberry Longhorn Beetle Modeled Habitat Associated with Alternative 1A..... 12-258

12-1A-15 Changes in Other Nonlisted Vernal Pool Invertebrate Habitat Associated with Alternative 1A..... 12-267

12-1A-16 Estimated Effects on Wetted Nonlisted Vernal Pool Invertebrate Habitat under Alternative 1A..... 12-269

12-1A-17 Changes in Sacramento and Antioch Dunes Anthicid Beetle Habitat Associated with Alternative 1A..... 12-276

12-1A-18 Changes in Delta Green Ground Beetle Habitat Associated with Alternative 1A 12-279

12-1A-19 Changes in Callippe Silverspot Butterfly Habitat Associated with Alternative 1A 12-283

12-1A-20 Changes in California Red-Legged Frog Modeled Habitat Associated with Alternative 1A..... 12-286

12-1A-21 Changes in California Tiger Salamander Modeled Habitat Associated with Alternative 1A..... 12-294

12-1A-22 Changes in Giant Garter Snake Modeled Habitat Associated with Alternative 1A 12-304

12-1A-23 Changes in Western Pond Turtle Modeled Habitat Associated with Alternative 1A 12-318

12-1A-24 Changes in Special-Status Reptile Habitat Associated with Alternative 1A 12-329

12-1A-25 Changes in California Black Rail Modeled Habitat Associated with Alternative 1A 12-335

12-1A-26 Changes in California Clapper Rail Modeled Habitat Associated with Alternative 1A 12-348

12-1A-27 Changes in California Least Tern Modeled Habitat Associated with Alternative 1A..... 12-358

12-1A-28 Changes in Greater Sandhill Crane Modeled Habitat Associated with Alternative 1A..... 12-369

12-1A-29 Total Amount of Permanently Affected Greater Sandhill Crane Foraging Habitat 12-372

12-1A-30 Greater Sandhill Crane Habitat Affected By General Construction and Pile Driving Noise Under Alternative 1A..... 12-382

12-1A-31 Changes in Lesser Sandhill Crane Modeled Habitat Associated with Alternative 1A..... 12-387

12-1A-32 Total Amount of Lesser Sandhill Crane Foraging Habitat Affected by Habitat Value 12-390

12-1A-33 Changes in Least Bell’s Vireo and Yellow Warbler Modeled Habitat Associated with Alternative 1A..... 12-405

12-1A-34	Changes in Suisun Song Sparrow Saltmarsh Common Yellowthroat Modeled Habitat Associated with Alternative 1A.....	12-417
12-1A-35	Changes in Swainson’s Hawk Modeled Habitat Associated with Alternative 1A.....	12-428
12-1A-36	Acres of Impacted Swainson’s Hawk Foraging Habitat by Value Classes	12-429
12-1A-37	Changes in Tricolored Blackbird Modeled Habitat Associated with Alternative 1A.....	12-443
12-1A-38	Tricolored Blackbird Foraging Habitat Value Classes	12-449
12-1A-39	Changes in Western Burrowing Owl Modeled Habitat Associated with Alternative 1A.....	12-460
12-1A-40	Changes in Western Yellow-Billed Cuckoo Modeled Habitat Associated with Alternative 1A.....	12-472
12-1A-41	Changes in White-Tailed Kite Modeled Habitat Associated with Alternative 1A.....	12-483
12-1A-42	Changes in Yellow-Breasted Chat Modeled Habitat Associated with Alternative 1A	12-499
12-1A-43	Changes in Cooper’s Hawk and Osprey Modeled Habitat Associated with Alternative 1A.....	12-510
12-1A-44	Changes in Golden Eagle and Ferruginous Hawk Habitat Associated with Alternative 1A.....	12-521
12-1A-45	Changes in Cormorant, Heron and Egret Modeled Habitat Associated with Alternative 1A.....	12-531
12-1A-46	Changes in Short-Eared Owl and Northern Harrier Modeled Habitat Associated with Alternative 1A.....	12-544
12-1A-47	Changes in Mountain Plover Modeled Habitat Associated with Alternative 1A.....	12-557
12-1A-48	Changes in Black Tern Habitat Associated with Alternative 1A	12-566
12-1A-49	Changes in California Horned Lark and Grasshopper Sparrow Modeled Habitat Associated with Alternative 1A	12-574
12-1A-50	Changes in Least Bittern and White-Faced Ibis Modeled Habitat Associated with Alternative 1A.....	12-584
12-1A-51	Changes in Loggerhead Shrike Modeled Habitat Associated with Alternative 1A.....	12-594
12-1A-52	Changes in Modesto Song Sparrow Modeled Habitat Associated with Alternative 1A.....	12-606
12-1A-53	Changes in Bank Swallow Habitat Associated with Alternative 1A	12-616
12-1A-54	Changes in Yellow-Headed Blackbird Modeled Habitat Associated with Alternative 1A.....	12-620
12-1A-55	Changes in Riparian Brush Rabbit Modeled Habitat Associated with Alternative 1A.....	12-634

12-1A-56	Changes in Riparian Woodrat Modeled Habitat Associated with Alternative 1A	12-644
12-1A-57	Changes in Salt Marsh Harvest Mouse Modeled Habitat Associated with Alternative 1A.....	12-653
12-1A-58	Changes in Suisun Shrew Modeled Habitat Associated with Alternative 1A	12-662
12-1A-59	Changes in San Joaquin Kit Fox Modeled Habitat Associated with Alternative 1A.....	12-669
12-1A-60	Changes in San Joaquin Pocket Mouse Habitat Associated with Alternative 1A	12-677
12-1A-61	Changes in Special-Status Bat Roosting and Foraging Habitat Associated with Alternative 1A.....	12-685
12-1A-62	Summary of Impacts on Vernal Pool Plants under Alternative 1A.....	12-697
12-1A-63	Summary of Impacts on Seasonal Alkali Wetland Plants under Alternative 1A.....	12-702
12-1A-64	Summary of Impacts on Grassland Plants under Alternative 1A.....	12-707
12-1A-65	Summary of Impacts on Valley/Foothill Riparian Plants under Alternative 1A.....	12-712
12-1A-66	Summary of Impacts on Tidal Wetland Plants under Alternative 1A.....	12-717
12-1A-67	Summary of Impacts on Inland Dune Plants under Alternative 1A.....	12-723
12-1A-68	Summary of Impacts on Nontidal Wetland Plants under Alternative 1A.....	12-724
12-1A-69	Potential Wetlands and Other Waters of the United States Filled by Construction of Alternative 1A Water Conveyance Facilities	12-727
12-1A-70	Summary of Temporary Disturbance in Natural Communities under Alternative 1A.....	12-749
12-1B-1	Changes in Tidal Perennial Aquatic Natural Community Associated with Alternative 1B.....	12-758
12-1B-2	Changes in Tidal Brackish Emergent Wetland Natural Community Associated with Alternative 1B.....	12-767
12-1B-3	Changes in Tidal Freshwater Emergent Wetland Natural Community Associated with Alternative 1B.....	12-772
12-1B-4	Changes in Valley/Foothill Riparian Natural Community Associated with Alternative 1B.....	12-781
12-1B-5	Changes in Nontidal Perennial Aquatic Natural Community Associated with Alternative 1B.....	12-790
12-1B-6	Changes in Nontidal Freshwater Perennial Emergent Wetland Natural Community Associated with Alternative 1B.....	12-798
12-1B-7	Changes in Alkali Seasonal Wetland Complex Natural Community Associated with Alternative 1B.....	12-806

12-1B-8 Changes in Vernal Pool Complex Natural Community Associated with Alternative 1B..... 12-813

12-1B-9 Changes in Managed Wetland Associated with Alternative 1B 12-821

12-1B-10 Changes in Other Natural Seasonal Wetland Associated with Alternative 1B 12-830

12-1B-11 Changes in Grassland Natural Community Associated with Alternative 1B..... 12-834

12-1B-12 Changes in Vernal Pool Crustacean Modeled Habitat Associated with Alternative 1B..... 12-844

12-1B-13 Estimated Effects on Wetted Vernal Pool Crustacean Habitat under Alternative 1B 12-847

12-1B-14 Changes in Valley Elderberry Longhorn Beetle Modeled Habitat Associated with Alternative 1B 12-853

12-1B-15 Changes in Nonlisted Vernal Pool Invertebrate Habitat Associated with Alternative 1B..... 12-863

12-1B-16 Estimated Effects on Wetted Vernal Pool Crustacean Habitat under Alternative 1B 12-865

12-1B-17 Changes in Sacramento Anthicid Beetle and Antioch Dunes Anthicid Beetle Habitat Associated with Alternative 1B..... 12-872

12-1B-18 Changes in Delta Green Ground Beetle Habitat Associated with Alternative 1B..... 12-875

12-1B-19 Changes in Callippe Silverspot Butterfly Habitat Associated with Alternative 1B..... 12-879

12-1B-20 Changes in California Red-Legged Frog Modeled Habitat Associated with Alternative 1B 12-882

12-1B-21 Changes in California Tiger Salamander Modeled Habitat Associated with Alternative 1B 12-890

12-1B-22 Changes in Giant Garter Snake Modeled Habitat Associated with Alternative 1B 12-900

12-1B-23 Changes in Western Pond Turtle Modeled Habitat Associated with Alternative 1B 12-916

12-1B-24 Changes in Special-Status Reptile Habitat Associated with Alternative 1B..... 12-927

12-1B-25 Changes in California Black Rail Modeled Habitat Associated with Alternative 1B 12-933

12-1B-26 Changes to California Clapper Rail Modeled Habitat Associated with Alternative 1B..... 12-946

12-1B-27 Changes in California Least Tern Modeled Habitat Associated with Alternative 1B..... 12-956

12-1B-28 Changes in Greater Sandhill Crane Modeled Habitat Associated with Alternative 1B 12-967

12-1B-29 Total Amount of Affected Greater Sandhill Crane Foraging Habitat 12-970

12-1B-30 Greater Sandhill Crane Habitat Affected By General Construction and Pile Driving Noise Under Alternative 1B 12-981

12-1B-31	Changes in Lesser Sandhill Crane Modeled Habitat Associated with Alternative 1B.....	12-986
12-1B-32	Total Amount of Affected Lesser Sandhill Crane Foraging Habitat	12-989
12-1B-33	Changes in Least Bell’s Vireo and Yellow Warbler Modeled Habitat Associated with Alternative 1B.....	12-1005
12-1B-34	Changes in Suisun Song Sparrow Saltmarsh Common Yellowthroat Modeled Habitat Associated with Alternative 1B.....	12-1017
12-1B-35	Changes in Swainson’s Hawk Modeled Habitat Associated with Alternative 1B	12-1028
12-1B-36	Acres of Impacted Swainson’s Hawk Foraging Habitat by Value Classes	12-1029
12-1B-37	Changes to Tricolored Modeled Habitat Associated with Alternative 1B	12-1044
12-1B-38	Tricolored Blackbird Foraging Habitat Value Classes	12-1050
12-1B-39	Changes in Western Burrowing Owl Modeled Habitat Associated with Alternative 1B.....	12-1061
12-1B-40	Changes in Western Yellow-Billed Cuckoo Modeled Habitat Associated with Alternative 1B.....	12-1073
12-1B-41	Changes in White-Tailed Kite Modeled Habitat Associated with Alternative 1B.....	12-1084
12-1B-42	Changes in Yellow-Breasted Chat Modeled Habitat Associated with Alternative 1B	12-1101
12-1B-43	Changes in Cooper’s Hawk and Osprey Modeled Habitat Associated with Alternative 1B	12-1112
12-1B-44	Changes in Golden Eagle and Ferruginous Hawk Habitat Associated with Alternative 1B	12-1123
12-1B-45	Changes in Cormorant, Heron and Egret Modeled Habitat Associated with Alternative 1B	12-1133
12-1B-46	Changes in Short-Eared Owl and Northern Harrier Modeled Habitat Associated with Alternative 1B.....	12-1146
12-1B-47	Changes in Mountain Plover Modeled Habitat Associated with Alternative 1B.....	12-1160
12-1B-48	Changes in Black Tern Modeled Habitat Associated with Alternative 1B	12-1169
12-1B-49	Changes in California Horned Lark and Grasshopper Sparrow Modeled Habitat Associated with Alternative 1B.....	12-1177
12-1B-50	Changes in Least Bittern and White-Faced Ibis Modeled Habitat Associated with Alternative 1B	12-1187
12-1B-51	Changes in Loggerhead Shrike Modeled Habitat Associated with Alternative 1B	12-1197
12-1B-52	Changes in Modesto Song Sparrow Modeled Habitat Associated with Alternative 1B.....	12-1209

12-1B-53	Changes in Bank Swallow Modeled Habitat Associated with Alternative 1B.....	12-1219
12-1B-54	Changes in Yellow-Headed Blackbird Modeled Habitat Associated with Alternative 1B.....	12-1224
12-1B-55	Changes in Riparian Brush Rabbit Modeled Habitat Associated with Alternative 1B	12-1237
12-1B-56	Changes in Riparian Woodrat Modeled Habitat Associated with Alternative 1B	12-1247
12-1B-57	Changes in Salt Marsh Harvest Mouse Modeled Habitat Associated with Alternative 1B	12-1256
12-1B-58	Changes in Suisun Shrew Modeled Habitat Associated with Alternative 1B	12-1266
12-1B-59	Changes in San Joaquin Kit Fox Modeled Habitat Associated with Alternative 1B	12-1273
12-1B-60	Changes in San Joaquin Pocket Mouse Habitat Associated with Alternative 1B	12-1281
12-1B-61	Changes in Special-Status Bat Roosting and Foraging Habitat Associated with Alternative 1B	12-1288
12-1B-62	Summary of Impacts on Vernal Pool Plants under Alternative 1B	12-1301
12-1B-63	Summary of Impacts on Alkali Seasonal Wetland Plants under Alternative 1B	12-1306
12-1B-64	Summary of Impacts on Grassland Plants under Alternative 1B.....	12-1312
12-1B-65	Summary of Impacts on Valley/Foothill Riparian Plants under Alternative 1B	12-1316
12-1B-66	Summary of Impacts on Tidal Wetland Plants under Alternative 1B	12-1320
12-1B-67	Summary of Impacts on Inland Dune Plants under Alternative 1B	12-1327
12-1B-68	Summary of Impacts on Nontidal Wetland Plants under Alternative 1B	12-1328
12-1B-69	Loss of Potential Wetlands and Other Waters of the United States from Construction of Alternative 1B Water Conveyance Facilities.....	12-1331
12-1B-70	Summary of Temporary Disturbance in Natural Communities under Alternative 1B....	12-1353
12-1C-1	Changes in Tidal Perennial Aquatic Natural Community Associated with Alternative 1C.....	12-1362
12-1C-2	Changes in Tidal Brackish Emergent Wetland Natural Community Associated with Alternative 1C.....	12-1371
12-1C-3	Changes in Tidal Freshwater Emergent Wetland Natural Community Associated with Alternative 1C.....	12-1376
12-1C-4	Changes in Valley/Foothill Riparian Natural Community Associated with Alternative 1C.....	12-1385
12-1C-5	Changes in Nontidal Perennial Aquatic Natural Community Associated with Alternative 1C.....	12-1394

12-1C-6	Changes in Nontidal Freshwater Perennial Emergent Wetland Natural Community Associated with Alternative 1C.....	12-1402
12-1C-7	Changes in Alkali Seasonal Wetland Complex Natural Community Associated with Alternative 1C.....	12-1410
12-1C-8	Changes in Vernal Pool Complex Natural Community Associated with Alternative 1C.....	12-1418
12-1C-9	Changes in Managed Wetland Associated with Alternative 1C	12-1425
12-1C-10	Changes in Other Natural Seasonal Wetland Associated with Alternative 1C.....	12-1434
12-1C-11	Changes in Grassland Natural Community Associated with Alternative 1C.....	12-1439
12-1C-12	Changes in Vernal Pool Crustacean Modeled Habitat Associated with Alternative 1C.....	12-1450
12-1C-13	Estimated Effects on Wetted Vernal Pool Crustacean Habitat under Alternative 1C....	12-1453
12-1C-14	Changes in Valley Elderberry Longhorn Beetle Modeled Habitat Associated with Alternative 1C.....	12-1460
12-1C-15	Changes in Nonlisted Vernal Pool Invertebrate Habitat Associated with Alternative 1C.....	12-1469
12-1C-16	Estimated Effects on Wetted Vernal Pools Associated with Alternative 1C	12-1472
12-1C-17	Changes in Sacramento and Antioch Dunes Anthicid Beetle Habitat Associated with Alternative 1C.....	12-1479
12-1C-18	Changes in Delta Green Ground Beetle Habitat Associated with Alternative 1C.....	12-1482
12-1C-19	Changes in Callippe Silverspot Butterfly Habitat Associated with Alternative 1C.....	12-1486
12-1C-20	Changes in California Red-Legged Frog Modeled Habitat Associated with Alternative 1C.....	12-1489
12-1C-21	Changes in California Tiger Salamander Modeled Habitat Associated with Alternative 1C.....	12-1498
12-1C-22	Changes in Giant Garter Snake Modeled Habitat Associated with Alternative 1C	12-1508
12-1C-23	Changes in Western Pond Turtle Modeled Habitat Associated with Alternative 1C	12-1522
12-1C-24	Changes in Special-Status Reptile Habitat Associated with Alternative 1C.....	12-1533
12-1C-25	Changes in California Black Rail Modeled Habitat Associated with Alternative 1C	12-1539
12-1C-26	Changes to California Clapper Rail Modeled Habitat Associated with Alternative 1C.....	12-1552
12-1C-27	Changes in California Least Tern Modeled Habitat Associated with Alternative 1C.....	12-1562

12-1C-28	Changes in Greater Sandhill Crane Modeled Habitat Associated with Alternative 1C.....	12-1574
12-1C-29	Total Amount of Affected Greater Sandhill Crane Foraging Habitat.....	12-1576
12-1C-30	Greater Sandhill Crane Habitat Affected By General Construction and Pile Driving Noise Under Alternative 1C.....	12-1586
12-1C-31	Changes in Lesser Sandhill Crane Modeled Habitat Associated with Alternative 1C.....	12-1591
12-1C-32	Total Amount of Affected Lesser Sandhill Crane Foraging Habitat.....	12-1593
12-1C-33	Changes in Least Bell’s Vireo and Yellow Warbler Modeled Habitat Associated with Alternative 1C.....	12-1608
12-1C-34	Changes in Suisun Song Sparrow Saltmarsh Common Yellowthroat Modeled Habitat Associated with Alternative 1C.....	12-1620
12-1C-35	Changes in Swainson’s Hawk Modeled Habitat Associated with Alternative 1C.....	12-1631
12-1C-36	Acres of Impacted Swainson’s Hawk Foraging Habitat by Value Classes.....	12-1632
12-1C-37	Changes in Tricolored Modeled Habitat Associated with Alternative 1C.....	12-1646
12-1C-38	Tricolored Blackbird Foraging Habitat Value Classes.....	12-1652
12-1C-39	Changes in Western Burrowing Owl Modeled Habitat Associated with Alternative 1C.....	12-1664
12-1C-40	Changes in Western Yellow-Billed Cuckoo Modeled Habitat Associated with Alternative 1C.....	12-1677
12-1C-41	Changes in White-Tailed Kite Modeled Habitat Associated with Alternative 1C.....	12-1688
12-1C-42	Changes in Yellow-Breasted Chat Modeled Habitat Associated with Alternative 1C.....	12-1704
12-1C-43	Changes in Cooper’s Hawk and Osprey Modeled Habitat Associated with Alternative 1C.....	12-1715
12-1C-44	Changes in Golden Eagle and Ferruginous Hawk Habitat Associated with Alternative 1C.....	12-1726
12-1C-45	Changes in Cormorant, Heron and Egret Modeled Habitat Associated with Alternative 1C.....	12-1736
12-1C-46	Changes in Short-Eared Owl and Northern Harrier Modeled Habitat Associated with Alternative 1C.....	12-1748
12-1C-47	Changes in Mountain Plover Modeled Habitat Associated with Alternative 1C.....	12-1762
12-1C-48	Changes in Black Tern Modeled Habitat Associated with Alternative 1C.....	12-1771
12-1C-49	Changes in California Horned Lark and Grasshopper Sparrow Modeled Habitat Associated with Alternative 1C.....	12-1779

12-1C-50	Changes in Least Bittern and White-Faced Ibis Modeled Habitat Associated with Alternative 1C.....	12-1790
12-1C-51	Changes in Loggerhead Shrike Modeled Habitat Associated with Alternative 1C.....	12-1799
12-1C-52	Changes in Modesto Song Sparrow Modeled Habitat Associated with Alternative 1C.....	12-1811
12-1C-53	Changes in Bank Swallow Modeled Habitat Associated with Alternative 1C.....	12-1821
12-1C-54	Changes in Yellow-Headed Blackbird Modeled Habitat Associated with Alternative 1C.....	12-1825
12-1C-55	Changes in Riparian Brush Rabbit Modeled Habitat Associated with Alternative 1C....	12-1838
12-1C-56	Changes in Riparian Woodrat Modeled Habitat Associated with Alternative 1C.....	12-1848
12-1C-57	Changes in Salt Marsh Harvest Mouse Modeled Habitat Associated with Alternative 1C.....	12-1857
12-1C-58	Changes in Suisun Shrew Modeled Habitat Associated with Alternative 1C.....	12-1867
12-1C-59	Changes in San Joaquin Kit Fox Modeled Habitat Associated with Alternative 1C.....	12-1874
12-1C-60	Changes in San Joaquin Pocket Mouse Habitat Associated with Alternative 1C.....	12-1881
12-1C-61	Changes in Special-Status Bat Roosting and Foraging Habitat Associated with Alternative 1C.....	12-1889
12-1C-62	Summary of Impacts on Vernal Pool Plants under Alternative 1C.....	12-1901
12-1C-63	Summary of Impacts on Seasonal Alkali Wetland Plants under Alternative 1C.....	12-1908
12-1C-64	Summary of Impacts on Grassland Plants under Alternative 1C.....	12-1913
12-1C-65	Summary of Impacts on Valley/Foothill Riparian Plants under Alternative 1C.....	12-1917
12-1C-66	Summary of Impacts on Tidal Wetland Plants under Alternative 1C.....	12-1922
12-1C-67	Summary of Impacts on Inland Dune Plants under Alternative 1C.....	12-1928
12-1C-68	Summary of Impacts on Nontidal Wetland Plants under Alternative 1C.....	12-1929
12-1C-69	Loss of Potential Wetlands and Other Waters of the United States from Construction of Alternative 1C Water Conveyance Facilities.....	12-1932
12-1C-70	Summary of Temporary Disturbance in Natural Communities under Alternative 1C....	12-1954
12-2A-1	Alternative 2A Near-Term Effects of Water Conveyance Facilities (CM1) on Natural Communities.....	12-1964
12-2A-2	Alternative 2A Late Long-term Effects of Restoration Activities (CM2, CM4, CM5) that Affect Most Natural Communities.....	12-1965
12-2A-3	Alternative 2A Late Long-Term Effects of Restoration Activities (CM7, CM8, CM10, CM18) that Affect Only Grassland and Cultivated Lands.....	12-1966

12-2B-1	Alternative 2B Near-Term Effects of Water Conveyance Facilities (CM1) on Natural Communities.....	12-1969
12-2B-2	Alternative 2B Late Long-Term Effects of Restoration Activities (CM2, CM4, CM5) that Affect Most Natural Communities	12-1972
12-2B-3	Alternative 2B Late Long-Term Effects of Restoration Activities (CM7, CM8, CM10, CM18) that Affect Only Grassland and Cultivated Lands	12-1973
12-2C-1	Alternative 2C Near-Term Effects of Water Conveyance Facilities (CM1) on Natural Communities.....	12-1977
12-2C-2	Alternative 2C Late Long-Term Effects of Restoration Activities (CM2, CM4, CM5) that Affect Most Natural Communities	12-1979
12-2C-3	Alternative 2C Late Long-Term Effects of Restoration Activities (CM7, CM8, CM10, CM18) that Affect Only Grassland and Cultivated Lands	12-1980
12-3-1	Alternative 3 Near-Term Effects of Water Conveyance Facilities (CM1) on Natural Communities.....	12-1983
12-3-2	Alternative 3 Late Long-Term Effects of Restoration Activities (CM2, CM4, CM5) that Affect Most Natural Communities	12-1985
12-3-3	Alternative 3 Late Long-Term Effects of Restoration Activities (CM7, CM8, CM10, CM18) that Affect Only Grassland and Cultivated Land	12-1986
12-4-1	Changes in Tidal Perennial Aquatic Natural Community Associated with Alternative 4	12-1990
12-4-2	Changes in Tidal Brackish Emergent Wetland Natural Community Associated with Alternative 4	12-1999
12-4-3	Changes in Tidal Freshwater Emergent Wetland Natural Community Associated with Alternative 4	12-2004
12-4-4	Changes in Valley/Foothill Riparian Natural Community Associated with Alternative 4	12-2013
12-4-5	Changes in Nontidal Perennial Aquatic Natural Community Associated with Alternative 4	12-2022
12-4-6	Changes in Nontidal Freshwater Perennial Emergent Wetland Natural Community Associated with Alternative 4.....	12-2030
12-4-7	Changes in Alkali Seasonal Wetland Complex Natural Community Associated with Alternative 4	12-2038
12-4-8	Changes in Vernal Pool Complex Natural Community Associated with Alternative 4 ...	12-2045
12-4-9	Changes in Managed Wetland Associated with Alternative 4	12-2053
12-4-10	Changes in Other Natural Seasonal Wetland Associated with Alternative 4	12-2062

12-4-11	Changes in Grassland Natural Community Associated with Alternative 4	12-2066
12-4-12	Changes in Vernal Pool Crustacean Modeled Habitat Associated with Alternative 4....	12-2077
12-4-13	Estimated Effects on Wetted Vernal Pool Crustacean Habitat under Alternative 4	12-2080
12-4-14	Changes in Valley Elderberry Longhorn Beetle Modeled Habitat Associated with Alternative 4	12-2087
12-4-15	Changes in Nonlisted Vernal Pool Invertebrate Habitat Associated with Alternative 4	12-2096
12-4-16	Estimated Effects on Wetted Nonlisted Vernal Pool Species Habitat under Alternative 4	12-2098
12-4-17	Changes in Sacramento and Antioch Dunes Anthicid Beetles' Habitat Associated with Alternative 4	12-2105
12-4-18	Changes in Delta Green Ground Beetle Habitat Associated with Alternative 4.....	12-2109
12-4-19	Changes in Callippe Silverspot Butterfly Habitat Associated with Alternative 4.....	12-2112
12-4-20	Changes in California Red-Legged Frog Modeled Habitat Associated with Alternative 4	12-2115
12-4-21	Changes in California Tiger Salamander Modeled Habitat Associated with Alternative 4	12-2123
12-4-22	Changes in Giant Garter Snake Modeled Habitat Associated with Alternative 4	12-2133
12-4-23	Changes in Western Pond Turtle Modeled Habitat Associated with Alternative 4	12-2147
12-4-24	Changes in Special-Status Reptile Habitat Associated with Alternative 4.....	12-2158
12-4-25	Changes in California Black Rail Modeled Habitat Associated with Alternative 4.....	12-2164
12-4-26	Changes in California Clapper Rail Modeled Habitat Associated with Alternative 4.....	12-2177
12-4-27	Changes in California Least Tern Modeled Habitat Associated with Alternative 4	12-2187
12-4-28	Changes in Greater Sandhill Crane Modeled Habitat Associated with Alternative 4.....	12-2198
12-4-29	Value of Greater Sandhill Crane Foraging Habitat affected by Alternative 4.....	12-2200
12-4-30	Greater Sandhill Crane Habitat Affected By General Construction and Pile Driving Noise Under Alternative 4	12-2210
12-4-31	Changes in Lesser Sandhill Crane Modeled Habitat Associated with Alternative 4	12-2216
12-4-32	Value of Lesser Sandhill Crane Foraging Habitat Affected By Alternative 4.....	12-2218
12-4-33	Changes in Least Bell's Vireo and Yellow Warbler Modeled Habitat Associated with Alternative 4	12-2234

12-4-34	Changes in Suisun Song Sparrow Saltmarsh Common Yellowthroat Modeled Habitat Associated with Alternative 4	12-2246
12-4-35	Changes in Swainson’s Hawk Modeled Habitat Associated with Alternative 4	12-2257
12-4-36	Acres of Impacted Foraging Habitat by Value Classes for Swainson’s Hawk	12-2258
12-4-37	Changes to Tricolored Modeled Habitat Associated with Alternative 4	12-2272
12-4-38	Tricolored Blackbird Foraging Habitat Value Classes	12-2277
12-4-39	Changes in Western Burrowing Owl Modeled Habitat Associated with Alternative 4	12-2289
12-4-40	Changes in Western Yellow-Billed Cuckoo Modeled Habitat Associated with Alternative 4	12-2301
12-4-41	Changes in White-Tailed Kite Modeled Habitat Associated with Alternative 4	12-2312
12-4-42	Changes in Yellow-Breasted Chat Modeled Habitat Associated with Alternative 4	12-2329
12-4-43	Changes in Cooper’s Hawk and Osprey Modeled Habitat Associated with Alternative 4	12-2340
12-4-44	Changes in Golden Eagle and Ferruginous Hawk Habitat Associated with Alternative 4	12-2351
12-4-45	Changes in Cormorant, Heron and Egret Modeled Habitat Associated with Alternative 4	12-2361
12-4-46	Changes in Short-Eared Owl and Northern Harrier Modeled Habitat Associated with Alternative 4	12-2373
12-4-47	Changes in Mountain Plover Modeled Habitat Associated with Alternative 4	12-2387
12-4-48	Changes in Black Tern Modeled Habitat Associated with Alternative 4	12-2396
12-4-49	Changes in California Horned Lark and Grasshopper Sparrow Modeled Habitat Associated with Alternative 4	12-2404
12-4-50	Changes in Least Bittern and White-Faced Ibis Modeled Habitat Associated with Alternative 4	12-2414
12-4-51	Changes in Loggerhead Shrike Modeled Habitat Associated with Alternative 4	12-2424
12-4-52	Changes in Modesto Song Sparrow Modeled Habitat Associated with Alternative 4 ...	12-2436
12-4-53	Changes in Bank Swallow Modeled Habitat Associated with Alternative 4	12-2446
12-4-54	Changes in Yellow-Headed Blackbird Modeled Habitat Associated with Alternative 4	12-2450
12-4-55	Changes in Riparian Brush Rabbit Modeled Habitat Associated with Alternative 4	12-2464
12-4-56	Changes in Riparian Woodrat Modeled Habitat Associated with Alternative 4	12-2474

12-4-57	Changes in Salt Marsh Harvest Mouse Modeled Habitat Associated with Alternative 4	12-2482
12-4-58	Changes in Suisun Shrew Modeled Habitat Associated with Alternative 4.....	12-2492
12-4-59	Changes in San Joaquin Kit Fox Modeled Habitat Associated with Alternative 4	12-2499
12-4-60	Changes in San Joaquin Pocket Mouse Habitat Associated with Alternative 4.....	12-2506
12-4-61	Changes in Special-Status Bat Roosting and Foraging Habitat Associated with Alternative 4	12-2514
12-4-62	Summary of Impacts on Vernal Pool Plants under Alternative 4	12-2526
12-4-63	Summary of Impacts on Seasonal Alkali Wetland Plants under Alternative 4	12-2531
12-4-64	Summary of Impacts on Grassland Plants under Alternative 4	12-2537
12-4-65	Summary of Impacts on Valley/Foothill Riparian Plants under Alternative 4	12-2541
12-4-66	Summary of Impacts on Tidal Wetland Plants under Alternative 4	12-2546
12-4-67	Summary of Impacts on Inland Dune Plants under Alternative 4	12-2552
12-4-68	Summary of Impacts on Nontidal Wetland Plants under Alternative 4	12-2553
12-4-69	Potential Wetlands and Other Waters of the United States Filled by Construction of Alternative 4 Water Conveyance Facilities.....	12-2557
12-4-70	Summary of Temporary Disturbance in Natural Communities under Alternative 4.....	12-2579
12-5-1	Alternative 5 Near-Term Effects of Water Conveyance Facilities (CM1) on Natural Communities.....	12-2589
12-5-2	Alternative 5 Late Long-Term Effects of Restoration Activities (CM2, CM4, CM5) that Affect Most Natural Communities	12-2590
12-5-3	Alternative 5 Late Long-Term Effects of Restoration Activities (CM7, CM8, CM10, CM18) that Affect Only Grassland and Cultivated Lands	12-2591
12-6A-1	Alternative 6A Near-Term Effects of Water Conveyance Facilities (CM1) on Natural Communities.....	12-2595
12-6A-2	Alternative 6A Late Long-Term Effects of Restoration Activities (CM2, CM4, CM5) that Affect Most Natural Communities	12-2596
12-6A-3	Alternative 6A Late Long-Term Effects of Restoration Activities (CM7, CM8, CM10, CM18) that Affect Only Grassland and Cultivated Lands	12-2597
12-6B-1	Alternative 6B Near-Term Effects of Water Conveyance Facilities (CM1) on Natural Communities.....	12-2600
12-6B-2	Alternative 6B Late Long-Term Effects of Restoration Activities (CM2, CM4, CM5) that Affect Most Natural Communities	12-2601

12-6B-3	Alternative 6B Late Long-Term Effects of Restoration Activities (CM7, CM8, CM10, CM18) that Affect Only Grassland and Cultivated Lands	12-2602
12-6C-1	Alternative 6C Near-Term Effects of Water Conveyance Facilities (CM1) on Natural Communities.....	12-2606
12-6C-2	Alternative 6C Late Long-Term Effects of Restoration Activities (CM2, CM4, CM5) that Affect Most Natural Communities	12-2607
12-6C-3	Alternative 6C Late Long-Term Restoration Activities (CM7, CM8, CM10, CM18) that Affect Only Grassland and Cultivated Lands	12-2608
12-7-1	Alternative 7 Near-Term Effects of Water Conveyance Facilities (CM1) on Natural Communities.....	12-2612
12-7-2	Alternative 7 Late Long-Term Effects of Restoration Activities (CM2, CM4, CM5) that Affect Most Natural Communities	12-2614
12-7-3	Alternative 7 Late Long-Term Effects of Restoration Activities (CM7, CM8, CM10, CM18) that Affect Only Grassland and Cultivated Lands	12-2615
12-8-1	Alternative 8 Near-Term Effects of Water Conveyance Facilities (CM1) on Natural Communities.....	12-2619
12-8-2	Alternative 8 Late Long-Term Effects of Restoration Activities (CM2, CM4, CM5) that Affect Most Natural Communities	12-2621
12-8-3	Alternative 8 Late Long-Term Effects of Restoration Activities (CM7, CM8, CM10, CM18) that Affect Only Grassland and Cultivated Lands	12-2622
12-9-1	Changes in Tidal Perennial Aquatic Natural Community Associated with Alternative 9	12-2626
12-9-2	Changes in Tidal Brackish Emergent Wetland Natural Community Associated with Alternative 9	12-2636
12-9-3	Changes in Tidal Freshwater Emergent Wetland Natural Community Associated with Alternative 9	12-2641
12-9-4	Changes in Valley/Foothill Riparian Natural Community Associated with Alternative 9	12-2650
12-9-5	Changes in Nontidal Perennial Aquatic Natural Community Associated with Alternative 9	12-2660
12-9-6	Changes in Nontidal Freshwater Perennial Emergent Wetland Natural Community Associated with Alternative 9.....	12-2668
12-9-7	Changes in Alkali Seasonal Wetland Complex Natural Community Associated with Alternative 9	12-2677
12-9-8	Changes in Vernal Pool Complex Natural Community Associated with Alternative 9 ...	12-2684

12-9-9	Changes in Managed Wetland Associated with Alternative 9	12-2691
12-9-10	Changes in Other Natural Seasonal Wetland Associated with Alternative 9	12-2700
12-9-11	Changes in Grassland Natural Community Associated with Alternative 9	12-2704
12-9-12	Changes in Vernal Pool Crustacean Modeled Habitat Associated with Alternative 9....	12-2716
12-9-13	Estimated Effects on Wetted Vernal Pool Crustacean Habitat under Alternative 9	12-2719
12-9-14	Changes in Valley Elderberry Longhorn Beetle Modeled Habitat Associated with Alternative 9	12-2725
12-9-15	Changes in Nonlisted Vernal Pool Invertebrate Habitat Associated with Alternative 9	12-2734
12-9-16	Estimated Effects on Wetted Nonlisted Vernal Pool Invertebrate Habitat under Alternative 9	12-2736
12-9-17	Changes in Sacramento and Antioch Dunes Anthicid Beetles' Habitat Associated with Alternative 9	12-2743
12-9-18	Changes in Delta Green Ground Beetle Habitat Associated with Alternative 9	12-2746
12-9-19	Changes in Callippe Silverspot Butterfly Habitat Associated with Alternative 9	12-2750
12-9-20	Changes in California Red-Legged Frog Modeled Habitat Associated with Alternative 9	12-2753
12-9-21	Changes in California Tiger Salamander Modeled Habitat Associated with Alternative 9	12-2761
12-9-22	Changes in Giant Garter Snake Modeled Habitat Associated with Alternative 9	12-2771
12-9-23	Changes in Western Pond Turtle Modeled Habitat Associated with Alternative 9	12-2785
12-9-24	Changes in Special-Status Reptile Habitat Associated with Alternative 9	12-2796
12-9-25	Changes in California Black Rail Modeled Habitat Associated with Alternative 9	12-2802
12-9-26	Changes to California Clapper Rail Modeled Habitat Associated with Alternative 9	12-2815
12-9-27	Changes in California Least Tern Modeled Habitat Associated with Alternative 9	12-2825
12-9-28	Changes in Greater Sandhill Crane Modeled Habitat Associated with Alternative 9	12-2836
12-9-29	Total Amount of Greater Sandhill Crane Foraging Habitat Affected under Alternative 9	12-2838
12-9-30	Greater Sandhill Crane Habitat Affected By General Construction and Pile Driving Noise Under Alternative 9	12-2848
12-9-31	Changes in Lesser Sandhill Crane Modeled Habitat Associated with Alternative 9	12-2854

12-9-32 Total Amount of Lesser Sandhill Crane Foraging Habitat Affected under Alternative 9 12-2856

12-9-33 Changes in Least Bell’s Vireo and Yellow Warbler Modeled Habitat Associated with Alternative 9 12-2871

12-9-34 Changes in Suisun Song Sparrow Saltmarsh Common Yellowthroat Modeled Habitat Associated with Alternative 9 12-2883

12-9-35 Changes in Swainson’s Hawk Modeled Habitat Associated with Alternative 9 12-2894

12-9-36 Acres of Impacted Swainson’s Hawk Foraging Habitat by Value Classes 12-2895

12-9-37 Changes in Tricolored Blackbird Modeled Habitat Associated with Alternative 9 12-2910

12-9-38 Tricolored Blackbird Foraging Habitat Value Classes 12-2916

12-9-39 Changes in Western Burrowing Owl Modeled Habitat Associated with Alternative 9 12-2927

12-9-40 Changes in Western Yellow-Billed Cuckoo Modeled Habitat Associated with Alternative 9 12-2939

12-9-41 Changes in White-Tailed Kite Modeled Habitat Associated with Alternative 9 12-2950

12-9-42 Changes in Yellow-Breasted Chat Modeled Habitat Associated with Alternative 9 12-2967

12-9-43 Changes in Cooper’s Hawk and Osprey Modeled Habitat Associated with Alternative 9 12-2978

12-9-44 Changes in Golden Eagle and Ferruginous Hawk Habitat Associated with Alternative 9 12-2989

12-9-45 Changes in Cormorant, Heron and Egret Modeled Habitat Associated with Alternative 9 12-2999

12-9-46 Changes in Short-Eared Owl and Northern Harrier Modeled Habitat Associated with Alternative 9 12-3011

12-9-47 Changes in Mountain Plover Modeled Habitat Associated with Alternative 9 12-3025

12-9-48 Changes in Black Tern Modeled Habitat Associated with Alternative 9 12-3034

12-9-49 Changes in California Horned Lark and Grasshopper Sparrow Modeled Habitat Associated with Alternative 9 12-3042

12-9-50 Changes in Least Bittern and White-Faced Ibis Modeled Habitat Associated with Alternative 9 12-3052

12-9-51 Changes in Loggerhead Shrike Modeled Habitat Associated with Alternative 9 12-3062

12-9-52 Changes in Modesto Song Sparrow Modeled Habitat Associated with Alternative 9 ... 12-3074

12-9-53 Changes in Bank Swallow Modeled Habitat Associated with Alternative 9 12-3084

12-9-54 Changes in Yellow-Headed Blackbird Modeled Habitat Associated with Alternative 9 12-3088

12-9-55 Changes in Riparian Brush Rabbit Modeled Habitat Associated with Alternative 9 12-3102

12-9-56 Changes in Riparian Woodrat Modeled Habitat Associated with Alternative 9 12-3112

12-9-57 Changes in Salt Marsh Harvest Mouse Modeled Habitat Associated with Alternative 9 12-3121

12-9-58 Changes in Suisun Shrew Modeled Habitat Associated with Alternative 9..... 12-3131

12-9-59 Changes in San Joaquin Kit Fox Modeled Habitat Associated with Alternative 9 12-3138

12-9-60 Changes in San Joaquin Pocket Mouse Habitat Associated with Alternative 9..... 12-3145

12-9-61 Changes in Special-Status Bat Roosting and Foraging Habitat Associated with Alternative 9 12-3153

12-9-62 Summary of Impacts on Vernal Pool Plants under Alternative 9 12-3166

12-9-63 Summary of Impacts on Seasonal Alkali Wetland Plants under Alternative 9 12-3170

12-9-64 Summary of Impacts on Grassland Plants under Alternative 9 12-3175

12-9-65 Summary of Impacts on Valley/Foothill Riparian Plants under Alternative 9 12-3179

12-9-66 Summary of Impacts on Tidal Wetland Plants under Alternative 9 12-3183

12-9-67 Summary of Impacts on Inland Dune Plants under Alternative 9 12-3191

12-9-68 Summary of Impacts on Nontidal Wetland Plants under Alternative 9 12-3192

12-9-69 Potential Wetlands and Other Waters of the United States Filled by Construction of Alternative 9 Water Conveyance Facilities..... 12-3195

12-9-70 Summary of Temporary Disturbance in Natural Communities under Alternative 9..... 12-3217

12-8 Programs, Projects, and Policies Included In the Cumulative Impact Analysis for Terrestrial Biological Resources..... 12-3229

12-9 Summary of Conservation Plans that Overlap with BDCP..... 12-3245

12-10 Conservation Status of Approved Plans 12-3245

12-11 Impacts from BDCP Alternatives Relative to Total Area of Overlapping Conservation Plans 12-3246

12-12 Crosswalk of BDCP Natural Communities with those of Overlapping Conservation Plans 12-3250

12-13 Estimated Overlap in Acquisition Activities by Major Natural Community Type for ECCCHCP/NCCP..... 12-3251

12-14 Estimated Overlap in Acquisition Activities by Major Natural Community Type for San Joaquin County MSHCP and Open Space Plan..... 12-3252

12-15 Acres of Estimated Overlap in Acquisition Activities by Major Natural Community Type for Solano County MSHCP..... 12-3252

12-16 Acres of Estimated Overlap in Acquisition Activities by Major Natural Community Type for South Sacramento HCP 12-3252

12-17 Overlap by Major Natural Community Type for Yolo Natural Heritage Program 12-3253

12-18 Amount of Cultivated Land Preservation by BDCP in Each Overlap Area (Pipeline/Tunnel Alignment; Alternatives 1A, 2A, 6A) 12-3255

12-19 Amount of Cultivated Land Preservation by BDCP in Each Overlap Area (East Alignment; Alternatives 1B, 2B, and 6B) 12-3255

12-20 Amount of Cultivated Land Preservation by BDCP in Each Overlap Area (West Alignment; Alternatives 1C, 2C and 6C)..... 12-3256

12-21 Amount of Cultivated Land Preservation by BDCP in Each Overlap Area (Through Separate Corridors Alignment; Alternative 9) 12-3256

12-22 Estimated Overlap in Restoration Activities by Major Natural Community Type for ECCCHCP/NCCP..... 12-3257

12-23 Estimated Overlap in Restoration Activities by Major Natural Community Type for San Joaquin County MSHCP and Open Space Plan..... 12-3257

12-24 Estimated Overlap in Restoration Activities by Major Natural Community Type for Solano County MSHCP..... 12-3257

12-25 Estimated Overlap in Restoration Activities by Major Natural Community Type for South Sacramento HCP..... 12-3258

12-26 SJCM SHCP Preserve Acreages by SJCM SHCP Zone with Overlap of BDCP 12-3260

12-27 SJCM SHCP Mitigation Owed from Existing Impacts by Habitat Type as of 2010 12-3261

12-28 Potential Occurrence of Other BDCP Conservation Measures in Overlapping Conservation Plans 12-3272

13-1 BDCP EIR/EIS Compliance with the Delta Reform Act 13-49

13-2 Effects on Land Use from the Plans, Policies, and Programs for the No Action Alternative 13-51

13-3 Water Conveyance Incompatibilities with Land Use Designations under Alternative 1A..... 13-56

13-4 Estimated Water Conveyance Conflicts with Existing Structures..... 13-60

13-5 Predominant Land Use Designations in the Conservation Zones (CZs)..... 13-63

13-6 Water Conveyance Incompatibilities with Land Use Designations under Alternative 1B 13-72

13-7 Water Conveyance Incompatibilities with Land Use Designations under Alternative 1C..... 13-81

13-8 Water Conveyance Incompatibilities with Land Use Designations under Alternative 2A..... 13-90

13-9 Water Conveyance Incompatibilities with Land Use Designations under Alternative 2B..... 13-95

13-10 Water Conveyance Incompatibilities with Land Use Designations under Alternative 3..... 13-103

13-11 Water Conveyance Incompatibilities with Land Use Designations under Alternative 4 (MPTO)..... 13-108

13-12 Estimated Water Conveyance Conflicts with Existing Structures..... 13-112

13-13 Predominant Land Use Designations in the Conservation Zones (CZs)..... 13-115

13-14 Water Conveyance Incompatibilities with Land Use Designations under Alternative 5..... 13-124

13-15 Water Conveyance Incompatibilities with Land Use Designations under Alternative 7..... 13-139

13-16 Water Conveyance Incompatibilities with Land Use Designations under Alternative 9..... 13-147

13-17 Effects on Land Use from a Selection of Plans, Policies, and Programs Considered for Cumulative Analysis..... 13-155

14-1 Farmland Mapping and Monitoring Program Categories in Restoration Opportunity Areas..... 14-3

14-2 Crop Acreages in the Plan Area..... 14-7

14-3 Crop Yield by Type..... 14-10

14-4 Applied Irrigation Requirements of Crops Grown in the Study Area by Acre..... 14-13

14-5 Crop Type Root Depths..... 14-15

14-6 Crop Tolerance and Yield Potential of Selected Crops as Influenced by Irrigation Water Salinity or Soil Salinity..... 14-17

14-7 Effects on Agricultural Resources from Selected Plans, Policies, and Programs for the No Action Alternative based on Geography and Relevance to Resource Area..... 14-30

14-8 Estimated Conversion of Important Farmland as a Result of Construction of Water Conveyance Facilities, by Alternative Alternative(s)..... 14-35

14-9 Estimated Conversion of Williamson Act and Farmland Security Zone Farmland as a Result of Construction of Water Conveyance Facilities..... 14-38

14-10	Typical Crop Production Practices in Yolo Bypass	14-56
14-11	Typical Crop Production Practices in Yolo Bypass	14-131
14-12	Effects on Agriculture from the Plans, Policies, and Programs Considered for Cumulative Analysis.....	14-188
15-1	Boat Owners’ Participation in Water- and Land-Based Recreation Activities in the Delta	15-3
15-2	Summary of Public and Private Delta Recreational Facilities by County.....	15-7
15-3	Estimates of Boating, Fishing, and Day Use in the Delta	15-20
15-4	Hunting Participation in the Delta at Select Public Hunting Locations.....	15-21
15-5	Annual Community-Based Delta Recreation Events	15-22
15-6	Summary of Actual Visitation to the Delta	15-23
15-7	Delta Boating-Related Recreation Participation Projections.....	15-24
15-8	Annual Attendance at Reservoirs in the Upstream of the Delta Region	15-31
15-9	Recreation Opportunity Thresholds for North-of-Delta and South-of-Delta Recreation Resources	15-60
15-10a	Summary of SWP and CVP Reservoir Recreation Opportunities (years below end- of-September recreation threshold) for BDCP Alternatives.....	15-66
15-10b	Summary of SWP and CVP Reservoir Recreation Opportunities (years below end- of-September recreation threshold) for Existing Conditions and the No Action Alternative	15-67
15-11	Recreation Sites Potentially Affected by Construction of Alternative 1A	15-69
15-12a	Summary of Years with Reduced SWP and CVP Reservoir Recreation Opportunities (End-of September Elevations below Recreation Thresholds) for BDCP Alternatives	15-88
15-12b	Summary of Years with Reduced SWP and CVP Reservoir Recreation Opportunities (End-of September Elevations below Recreation Thresholds) for BDCP Alternatives	15-89
15-13	Recreation Sites Potentially Affected by Construction of Alternative 1B	15-111
15-14	Recreation Sites Potentially Affected during Construction of Alternative 1C.....	15-142
15-15	Recreation Sites Potentially Affected by Construction of Alternative 4.....	15-253
15-16	Recreation Sites Potentially Affected during Construction of Alternative 9	15-418
15-17	Waterways Affected by Construction and Maintenance of Alternative 9 Conveyance Facilities.....	15-449
15-18	Waterways where Recreation would be Affected by Operation and Maintenance of Alternative 9 Conveyance Facilities (Early Long-Term)	15-454

15-19 Recreation Effects of Plans, Policies, and Programs Considered for Cumulative Analysis 15-456

16-1 Delta Counties and California Population, 2000–2050 16-8

16-2 Delta Communities Population, 2000 and 2010..... 16-10

16-3 Delta Counties and California Age Distribution, 2010 16-11

16-4 Housing Units in Delta Counties, Delta Communities, and California, 2000 and 2010 16-12

16-5 Housing Type Trends, by County and Incorporated Communities, 2000–2010..... 16-13

16-6 Housing Vacancy Rates, by County and Incorporated Communities, 2000–2010 16-14

16-7 Delta Counties and California Employment Trends, 2000–2012..... 16-15

16-8 Delta Counties Annual Employment and Shares by Industry, 2006–2011 16-16

16-9 Delta Counties and California Income and Poverty Levels, 2006-2010..... 16-17

16-10 Revenues and Expenditures by Delta Counties during Fiscal Years 2010-2011 16-18

16-11 Employment Conditions for Delta Region Recreation-Related Industries (2007)..... 16-22

16-12 Projected Direct Economic Contributions from Recreation in the Delta 16-23

16-13 Crop Yields, Prices, and Value per Acre in the Delta Counties, 2005–2007 16-25

16-14 Total Value of Production for Crops in the Delta 16-26

16-15 Typical Establishment Costs for Example Perennial Crops in the Delta 16-27

16-16 Land Rent, Labor Hours, and Custom Services for Example Crops in the Delta 16-28

16-17 Average Farm Sizes and Revenues in Delta Counties, 2002 and 2007 16-29

16-18 Crop Acreage and Value of Agricultural Production in the Delta Region under the No Action Alternative 16-52

16-19 Regional Economic Effects on Employment and Labor Income during Construction (Alternative 1A)Regional Economic Impact..... 16-55

16-20 Regional Economic Effects on Agricultural Employment and Labor Income during Construction (Alternative 1A)..... 16-55

16-21 Crop Acres and Value of Agricultural Production in the Delta during Construction (Alternative 1A) 16-62

16-22 Regional Economic Effects on Employment and Labor Income in the Delta Region during Operations and Maintenance (Alternative 1A) 16-64

16-23 Regional Economic Effects on Agricultural Employment and Labor Income during Operations and Maintenance (Alternative 1A) 16-64

16-24 Crop Acres and Value of Agricultural Production in the Delta during Operations and Maintenance (Alternative 1A) 16-69

16-25 Regional Economic Effects on Employment and Labor Income during Construction (Alternative 1B)..... 16-79

16-26 Regional Economic Effects on Agricultural Employment and Labor Income during Construction (Alternative 1B)..... 16-80

16-27 Crop Acres and Value of Agricultural Production in the Delta during Construction (Alternative 1B)..... 16-85

16-28 Regional Economic Effects on Employment and Labor Income during Operations and Maintenance (Alternative 1B) 16-86

16-29 Regional Economic Effects on Agricultural Employment and Labor Income during Operations and Maintenance (Alternative 1B) 16-87

16-30 Crop Acres and Value of Agricultural Production in the Delta during Operations and Maintenance (Alternative 1B) 16-91

16-31 Regional Economic Effects on Employment and Labor Income during Construction (Alternative 1C)..... 16-96

16-32 Regional Economic Effects on Agricultural Employment and Labor Income, during Construction (Alternative 1C)..... 16-97

16-33 Crop Acres and Value of Agricultural Production in the Delta during Construction (Alternative 1C)..... 16-102

16-34 Regional Economic Effects on Employment and Labor Income during Operations and Maintenance (Alternative 1C) 16-104

16-35 Regional Economic Effects on Agricultural Employment and Labor Income during Operations and Maintenance (Alternative 1C) 16-104

16-36 Crop Acres and Value of Agricultural Production in the Delta during Operations and Maintenance (Alternative 1C) 16-109

16-37 Regional Economic Effects on Employment and Labor Income during Construction (Alternative 3)..... 16-145

16-38 Regional Economic Effects on Agricultural Employment and Labor Income during Construction (Alternative 3) 16-146

16-39 Crop Acres and Value of Agricultural Production in the Delta during Construction (Alternative 3)..... 16-151

16-40 Crop Acres and Value of Agricultural Production in the Delta during Operations and Maintenance (Alternative 3) 16-155

16-41 Regional Economic Effects on Employment and Labor Income during Construction (Alternative 4)..... 16-161

16-42 Regional Economic Effects on Agricultural Employment and Labor Income during Construction (Alternative 4) 16-161

16-43 Crop Acres and Value of Agricultural Production in the Delta during Construction (Alternative 4)..... 16-168

16-44 Regional Economic Effects on Employment and Labor Income in the Delta Region during Operations and Maintenance (Alternative 4) 16-170

16-45 Regional Economic Effects on Agricultural Employment and Labor Income during Operations and Maintenance (Alternative 4)..... 16-170

16-46 Crop Acres and Value of Agricultural Production in the Delta during Operations and Maintenance (Alternative 4) 16-175

16-47 Regional Economic Effects on Employment and Labor Income during Construction (Alternative 5)..... 16-185

16-48 Regional Economic Effects on Agricultural Employment and Labor Income during Construction (Alternative 5) 16-186

16-49 Crop Acres and Value of Agricultural Production in the Delta during Construction (Alternative 5)..... 16-191

16-50 Crop Acres and Value of Agricultural Production in the Delta Region during Operations and Maintenance (Alternative 5)..... 16-195

16-51 Regional Economic Effects on Employment and Labor Income during Construction (Alternative 7)..... 16-232

16-52 Regional Economic Effects on Agricultural Employment and Labor Income during Construction (Alternative 7) 16-233

16-53 Crop Acres and Value of Agricultural Production in the Delta during Construction (Alternative 7)..... 16-237

16-54 Crop Acres and Value of Agricultural Production in the Delta during Operations and Maintenance (Alternative 7) 16-242

16-55 Regional Economic Effects on Employment and Labor Income during Construction (Alternative 9)..... 16-259

16-56 Regional Economic Effects on Agricultural Employment and Labor Income during Construction (Alternative 9) 16-260

16-57 Crop Acres and Value of Agricultural Production in the Delta during Construction (Alternative 9)..... 16-265

16-58 Regional Economic Effects on Employment and Labor Income during Operations and Maintenance (Alternative 9) 16-266

16-59 Regional Economic Effects on Agricultural Employment and Labor Income during Operations and Maintenance (Alternative 9)..... 16-267

16-60 Crop Acres and Value of Agricultural Production in the Delta Region during Operations and Maintenance (Alternative 9).....16-271

16-61 Effects on Socioeconomics from Programs, Projects, and Policies Included in Cumulative Impact Assessment for the BDCP EIR/EIS.....16-277

17-1 Project’s Overall Effect on Viewers 17-42

17-2 Cumulative Projects considered in the Aesthetics and Visual Resources Analysis17-296

18-1 Programs and Projects Occurring under the No Action Alternative 18-47

18-2 Cumulative Context for Effects on Cultural Resources.....18-205

19-1 Roadway Study Segments 19-2

19-2 Hourly Level of Service Thresholds for Roadway Type..... 19-7

19-3 Existing Levels of Service in the Study Area 19-8

19-4 Pavement Condition Index Rating Scale 19-13

19-5 Existing Pavement Conditions in the Study Area 19-15

19-6 Roadway and Rail Draw Bridges in the Study Area 19-24

19-7 Roadway Study Segment LOS and Pavement Thresholds 19-37

19-8 Level of Service for Pipeline/Tunnel Alternatives (1A, 2A, 3, 5, 6A, 7, and 8)..... 19-42

19-9 Roadway Traffic Operations Mitigation Summary 19-55

19-10 Pavement Conditions for Pipeline/Tunnel Alternatives (1A, 2A, 3, 5, 6A, 7, and 8) 19-62

19-11 Emergency Routes in the Study Area, by County 19-69

19-12 Construction Impacts on Rail Traffic for Pipeline/Tunnel Alternatives (1A, 2A, 3A, 5, 6A, 7, and 8)..... 19-71

19-13 Construction Impacts on Bus Routes for Pipeline/Tunnel Alternatives (1A, 2A, 3,5, 6A, 7, and 8)..... 19-72

19-14 Routine O&M Assumptions for Alternatives 1A–C, 2B–C, and 6A–C 19-75

19-15 Yearly Maintenance Assumptions for Alternatives 1A–C, 2B–C, 3, 4, 5, 6A–C, 7, and 8 19-75

19-16 O&M Employment..... 19-75

19-17 Level of Service for East Alignment Alternatives (1B, 2B, and 6B) 19-81

19-18 Pavement Condition for East Alignment Alternatives (1B, 2B, and 6B) 19-92

19-19 Construction Impacts on Rail Traffic for East Alignment Alternatives (1B, 2B, and 6B)..... 19-100

19-20 Construction Impacts on Bus Routes for East Alignment Alternatives (1B, 2B, and 6B)..... 19-100

19-21 Level of Service for West Alignment Alternatives (1C, 2C, and 6C)..... 19-106

19-22 Pavement Conditions for West Alignment Alternatives (1C, 2C, and 6C) 19-117

19-23 Construction Impacts on Rail Traffic for West Alignment Alternatives (1C, 2C, and 6C)..... 19-125

19-24 Construction Impacts on Bus Routes for West Alignment Alternatives (1C, 2C, and 6C)..... 19-126

19-25 Level of Service for Modified Pipeline/Tunnel Alternative 4..... 19-164

19-26 Pavement Conditions for Modified Pipeline/Tunnel Alternative 4 19-176

19-27 Level of Service for Through Delta/Separate Corridors – Alternative 9 19-242

19-28 Pavement Conditions for Through Delta/Separate Corridors – Alternative 9 19-252

19-29 Construction Impacts on Rail Traffic for Through Delta/Separate Corridors – Alternative 9 19-258

19-30 Construction Impacts on Bus Routes for Through Delta/Separate Corridors – Alternative 9 19-259

19-31 Effects on Transportation from a Selection of Plans, Policies, and Programs Considered for Cumulative Analysis 19-263

20-1 Effects on Public Services and Utilities from the Plans, Policies, and Programs for the No Action Alternative 20-36

20-2 Estimated Workforce during Peak Construction and Operation and Maintenance 20-39

20-3 Estimated Potable Water Supply for Construction by Alternative 20-45

20-4 Divertible Materials 20-49

20-5 Number and Type of Pipelines and Electrical Transmission Lines Crossing Action Alternative Alignments 20-51

20-6 Public Services and Utilities Effects of Plans, Policies, and Programs Considered for Cumulative Analysis..... 20-183

21-1 CVP Hydropower Generation Capacity of Facilities..... 21-3

21-2 CVP Pumping Capacity of Facilities..... 21-3

21-3 SWP Pump Load, SWP Hydro Generation (including Castaic), and SWP Water Deliveries 21-7

21-4 Hyatt-Thermalito Generation 21-7

21-5 SWP Hydropower Generation Capacity of Facilities..... 21-8

21-6 SWP Pumping Capacity of Facilities..... 21-8

21-7a CALSIM-II–Simulated Monthly Cumulative Distributions of Trinity Storage for Existing Conditions 21-13

21-7b Monthly Cumulative Distributions of Estimated Trinity Reservoir Head for Existing Conditions..... 21-14

21-7c CALSIM-II simulated Monthly Cumulative Distributions of Trinity Powerplant Flow for Existing Conditions..... 21-15

21-7d Monthly Cumulative Distributions of Estimated Trinity Powerplant Energy Generation for Existing Conditions..... 21-15

21-7e Monthly Cumulative Distributions of Estimated Trinity Powerplant Energy Generation for the No Action Alternative 21-16

21-8a Monthly Cumulative Distributions of Estimated Carr Powerplant Energy Generation for Existing Conditions..... 21-17

21-8b Monthly Cumulative Distributions of Estimated Spring Creek Powerplant Energy Generation for Existing Conditions..... 21-17

21-8c Monthly Cumulative Distributions of Estimated Shasta Powerplant Energy Generation for Existing Conditions..... 21-18

21-8d Monthly Cumulative Distributions of Estimated Keswick Powerplant Energy Generation for Existing Conditions..... 21-18

21-8e Monthly Cumulative Distributions of Estimated Folsom Powerplant Energy Generation for Existing Conditions..... 21-19

21-8f Monthly Cumulative Distributions of Estimated Nimbus Powerplant Energy Generation for Existing Conditions..... 21-19

21-8g Monthly Cumulative Distributions of Estimated New Melones Powerplant Energy Generation for Existing Conditions..... 21-20

21-8h Monthly Cumulative Distributions of Estimated Hyatt and Thermalito (combined) Power Plant Energy Generation for Existing Conditions 21-20

21-9 Temporary Annual Electrical Use Estimates for Construction..... 21-26

21-10 Energy Losses for Flow of 500 cfs to 7,500 cfs in a 35-mile Tunnel, Estimated with the Darcy-Weisbach Pipe Formula 21-28

21-11 Summary of Annual Average Pumping and Net Energy Use for BDCP Alternatives 21-33

21-12a Monthly and Annual Cumulative Distributions of Estimated Upstream CVP Energy Generation for the No Action Alternative 21-36

21-12b Monthly and Annual Cumulative Distributions of CALSIM-II-Simulated CVP Delta Pumping for the No Action Alternative 21-36

21-12c	Monthly and Annual Cumulative Distributions of Estimated CVP Net Energy Use for Delta Export Pumping and Delivery for the No Action Alternative	21-37
21-12d	Monthly and Annual Cumulative Distributions of Estimated Upstream SWP Energy Generation for the No Action Alternative	21-37
21-12e	Monthly and Annual Cumulative Distributions of CALSIM-II-Simulated SWP Delta Export Pumping for the No Action Alternative.....	21-38
21-12f	Monthly and Annual Cumulative Distributions of Estimated SWP Net Energy Use for Delta Export Pumping and Delivery for the No Action Alternative	21-38
21-13	Summary of Foreseeable Projects and Programs that May Affect Energy Resources	21-59
22-1	Lifetimes and Global Warming Potentials of Several Greenhouse Gases	22-8
22-2	Global, National, State, and Local GHG Emissions Inventories	22-9
22-3	Ambient Air Quality Monitoring Data for the SVAB, SJVAB, SFBAAB (2008–2010).....	22-11
22-4	Federal and State Attainment Status of the Study Area within the SVAB, SJVAB, and SFBAAB	22-13
22-5	National and California Ambient Air Quality Standards	22-14
22-6	Federal <i>de minimis</i> Threshold Levels for Criteria Pollutants in Nonattainment Areas.....	22-16
22-7	Federal <i>de minimis</i> Threshold Levels for Criteria Pollutants in Maintenance Areas.....	22-17
22-8	Federal <i>de minimis</i> Thresholds by Air Basin	22-40
22-9	Thresholds of Significance	22-42
22-10	Total Criteria Pollutant and GHG Emissions from Electricity Consumption during Operation of the No Action Alternative	22-46
22-11	Total Criteria Pollutant Emissions from Electricity Consumption during Construction and Operation of Alternative 1A.....	22-48
22-12	Criteria Pollutant Emissions from Construction of Alternative 1A	22-49
22-13	Criteria Pollutant Emissions from Operation of Alternative 1A	22-50
22-14	Criteria Pollutant Emissions from Construction and Operation of Alternative 1A in the SFNA, SJVAB, and SFBAAB	22-67
22-15	Alternative 1A Health Threats in the Yolo-Solano Air Quality Management District.....	22-70
22-16	Alternative 1A Health Threats in the Sacramento Metropolitan Air Quality Management District.....	22-70
22-17	Alternative 1A Health Threats in the San Joaquin Valley Air Pollution Control District	22-72

22-18	Alternative 1A Health Threats in the Bay Area Air Quality Management District.....	22-73
22-19	GHG Emissions from Construction of Alternative 1A	22-74
22-20	GHG Emissions from Construction of Alternative 1A by Air District	22-74
22-21	GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 1A.....	22-81
22-22	Total CO ₂ e Emissions from Operation and Maintenance of Alternative 1A by Air District	22-81
22-23	Changes in Expected Renewable Energy Purchases 2011–2050 (Alternative 1A)	22-83
22-24	Summary of Conservation Measures and Potential Criteria Pollutant Emissions.....	22-87
22-25	Total Criteria Pollutant Emissions from Electricity Consumption during Construction and Operation of Alternative 1B.....	22-90
22-26	Criteria Pollutant Emissions from Construction of Alternative 1B	22-91
22-27	Criteria Pollutant Emissions from Operation of Alternative 1B	22-92
22-28	Criteria Pollutant Emissions from Construction and Operation of Alternative 1B in the SFNA, SJVAB, and SFBAAB	22-98
22-29	Alternative 1B Health Threats in the Yolo-Solano Air Quality Management District	22-102
22-30	Alternative 1B Health Threats in the Sacramento Metropolitan Air Quality Management District.....	22-102
22-31	Alternative 1B Health Threats in the San Joaquin Valley Air Pollution Control District	22-103
22-32	Alternative 1B Health Threats in the Bay Area Air Quality Management District.....	22-105
22-33	GHG Emissions from Construction of Alternative 1B	22-106
22-34	Total GHG Emissions from Construction of Alternative 1B by Air District	22-107
22-35	GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 1B	22-108
22-36	Total CO ₂ e Emissions from Operation and Maintenance of Alternative 1B by Air District	22-109
22-37	Changes in Expected Renewable Energy Purchases 2011–2050 (Alternative 1B)	22-110
22-38	Total Criteria Pollutant Emissions from Electricity Consumption during Construction and Operation of Alternative 1C.....	22-114
22-39	Criteria Pollutant Emissions from Construction of Alternative 1C	22-116
22-40	Criteria Pollutant Emissions from Operation of Alternative 1C.....	22-117

22-41	Criteria Pollutant Emissions from Construction and Operation of Alternative 1C in the SFNA and SFBAAB.....	22-123
22-42	Alternative 1C Health Threats in the Yolo-Solano Air Quality Management District	22-126
22-43	Alternative 1C Health Threats in the Sacramento Metropolitan Air Quality Management District.....	22-127
22-44	Alternative 1C Health Threats in the San Joaquin Valley Air Pollution Control District	22-128
22-45	Alternative 1C Health Threats in the Bay Area Air Quality Management District.....	22-129
22-46	GHG Emissions from Construction of Alternative 1C	22-131
22-47	Total GHG Emissions from Construction of Alternative 1C by Air District	22-132
22-48	GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 1C.....	22-133
22-49	Total CO ₂ e Emissions from Operation and Maintenance of Alternative 1C by Air District	22-133
22-50	Changes in Expected Renewable Energy Purchases 2011–2050 (Alternative 1C)	22-135
22-51	Criteria Pollutant Emissions from Electricity Consumption during Operation of Alternative 2A.....	22-139
22-52	Criteria Pollutant Emissions from Construction of Alternative 2A within the SJVAPCD.....	22-140
22-53	Criteria Pollutant Emissions from Construction and Operation of Alternative 2A in the SJVAB.....	22-145
22-54	GHG Emissions from Construction of Alternative 2A	22-151
22-55	GHG Emissions from Construction of Alternative 2A by Air District	22-152
22-56	GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 2A.....	22-153
22-57	Changes in Expected Renewable Energy Purchases 2011–2050 (Alternative 2A)	22-155
22-58	Criteria Pollutant Emissions from Electricity Consumption during Operation of Alternative 2B	22-159
22-59	Criteria Pollutant Emissions from Construction of Alternative 2B within the SJVAPCD.....	22-159
22-60	Criteria Pollutant Emissions from Construction and Operation of Alternative 2B in the SJVAB.....	22-165
22-61	Alternative 2B Health Threats in the Yolo-Solano Air Quality Management District	22-168

22-62 Alternative 2B Health Threats in the Sacramento Metropolitan Air Quality Management District..... 22-169

22-63 Alternative 2B Health Threats in the San Joaquin Valley Air Pollution Control District 22-170

22-64 Alternative 2B Health Threats in the Bay Area Air Quality Management District..... 22-171

22-65 GHG Emissions from Construction of Alternative 2B 22-173

22-66 GHG Emissions from Construction of Alternative 2B by Air District 22-174

22-67 GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 2B 22-175

22-68 Changes in Expected Renewable Energy Purchases 2011–2050 (Alternative 2B) 22-176

22-69 Criteria Pollutant Emissions from Electricity Consumption during Operation of Alternative 2C 22-181

22-70 Criteria Pollutant Emissions from Construction of Alternative 2C within the SJVAPCD..... 22-181

22-71 Criteria Pollutant Emissions from Construction and Operation of Alternative 2C in the SJVAB..... 22-187

22-72 GHG Emissions from Construction of Alternative 2C 22-193

22-73 GHG Emissions from Construction of Alternative 2C by Air District 22-194

22-74 GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 2C 22-195

22-75 Changes in Expected Renewable Energy Purchases 2011–2050 (Alternative 2C) 22-197

22-76 Total Criteria Pollutant Emissions from Electricity Consumption during Construction and Operation of Alternative 3 22-201

22-77 Criteria Pollutant Emissions from Construction of Alternative 3 22-202

22-78 Criteria Pollutant Emissions from Operation of Alternative 3..... 22-203

22-79 Criteria Pollutant Emissions from Construction and Operation of Alternative 3 in the SFNA, SJVAB, and SFBAAB 22-210

22-80 GHG Emissions from Construction of Alternative 3 22-217

22-81 Total CO₂e Emissions from Construction of Alternative 3 by Air District 22-218

22-82 GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 3 22-219

22-83 Total CO₂e Emissions from Operation and Maintenance of Alternative 3 by Air District 22-219

22-84	Changes in Expected Renewable Energy Purchases 2011–2050 (Alternative 3).....	22-221
22-85	Total Criteria Pollutant Emissions from Electricity Consumption during Construction and Operation of Alternative 4	22-225
22-86	Criteria Pollutant Emissions from Construction of Alternative 4	22-226
22-87	Criteria Pollutant Emissions from Operation of Alternative 4 (Scenarios H1 through H4)	22-227
22-88	Alternative 4 PM10 Concentration Results in SMAQMD	22-228
22-89	Criteria Pollutant Emissions from Construction and Operation of Alternative 4 in the SFNA, SJVAB, and SFBAAB	22-245
22-90	Alternative 4 Health Threats in the Yolo-Solano Air Quality Management District	22-249
22-91	Alternative 4 Health Threats in the Sacramento Metropolitan Air Quality Management District.....	22-250
22-92	Alternative 4 Health Threats in the San Joaquin Valley Air Pollution Control District	22-251
22-93	Alternative 4 Health Threats in the Bay Area Air Quality Management District	22-253
22-94	GHG Emissions from Construction of Alternative 4	22-254
22-95	GHG Emissions from Construction of Alternative 4 by Air District.....	22-255
22-96	GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 4 (Scenarios H1 through H4).....	22-261
22-97	Total CO ₂ e Emissions from Operation and Maintenance of Alternative 4 (Scenarios H1 through H4) by Air District	22-262
22-98	Changes in Expected Renewable Energy Purchases 2011–2050 (Alternative 4).....	22-263
22-99	Total Criteria Pollutant Emissions from Electricity Consumption during Construction and Operation of Alternative 5	22-269
22-100	Criteria Pollutant Emissions from Construction of Alternative 5	22-270
22-101	Criteria Pollutant Emissions from Operation of Alternative 5.....	22-271
22-102	Criteria Pollutant Emissions from Construction and Operation of Alternative 5 in the SFNA, SJVAPCD, and SFBAAB.....	22-277
22-103	GHG Emissions from Construction of Alternative 5	22-284
22-104	GHG Emissions from Construction of Alternative 5 by Air District.....	22-285
22-105	GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 5	22-286
22-106	Total CO ₂ e Emissions from Operation and Maintenance of Alternative 5 by Air District	22-287

22-107 Criteria Pollutant Emissions from Electricity Consumption during Operation of Alternative 6A..... 22-292

22-108 GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 6A..... 22-303

22-109 Criteria Pollutant Emissions from Electricity Consumption during Operation of Alternative 6B..... 22-307

22-110 GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 6B..... 22-319

22-111 Criteria Pollutant Emissions from Electricity Consumption during Operation of Alternative 6C..... 22-323

22-112 GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 6C..... 22-335

22-113 Total Criteria Pollutant Emissions from Electricity Consumption during Construction and Operation of Alternative 7..... 22-339

22-114 Criteria Pollutant Emissions from Construction of Alternative 7..... 22-340

22-115 Criteria Pollutant Emissions from Construction and Operation of Alternative 7 in the SFNA, SJVAB, and SFBAAB..... 22-347

22-116 GHG Emissions from Construction of Alternative 7..... 22-354

22-117 GHG Emissions from Construction of Alternative 7 by Air District..... 22-355

22-118 GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 7..... 22-356

22-119 Criteria Pollutant Emissions from Electricity Consumption during Operation of Alternative 8..... 22-360

22-120 GHG Emissions from Operation, Maintenance, and Increased Pumping, Alternative 8..... 22-372

22-121 Criteria Pollutant Emissions from Electricity Consumption during Construction and Operation of Alternative 9..... 22-376

22-122 Criteria Pollutant Emissions from Construction of Alternative 9..... 22-377

22-123 Criteria Pollutant Emissions from Operation of Alternative 9..... 22-378

22-124 Criteria Pollutant Emissions from Construction and Operation of Alternative 9 in the SFNA, SJVAB, and SFBAAB..... 22-384

22-125 Alternative 9 Health Threats in the Sacramento Metropolitan Air Quality Management District..... 22-388

22-126 Alternative 9 Health Threats in the San Joaquin Valley Air Pollution Control District..... 22-389

22-127 Alternative 9 Health Threats in the Bay Area Air Quality Management District..... 22-390

22-128 GHG Emissions from Construction of Alternative 9 22-391

22-129 GHG Emissions from Construction of Alternative 9 by Air District..... 22-392

22-130 GHG Emissions from Operation, Maintenance, and Increased Pumping,
Alternative 9 22-393

22-131 Project-Level Determinations for Construction of the Water Conveyance Facilities
Associated with BDCP (Impacts AQ-1 through AQ-4 and Impact AQ-9) 22-398

23-1 Typical Sound Levels Measured in the Environment and Industry 23-2

23-2 Human Response to Continuous Vibration from Traffic 23-5

23-3 Maximum Vibration Levels for Preventing Damage..... 23-5

23-4 Human Response to Groundborne Noise..... 23-6

23-5 Typical Ambient Sound Levels as a Function of Population Density 23-7

23-6 Existing Highway Traffic Noise Levels in Yolo County..... 23-9

23-7 Summary of Federal Guidelines/Regulations for Residential Exterior Noise 23-12

23-8 Sutter County Noise Standards for Non-Transportation Sources 23-14

23-9 Sacramento County Noise Level Performance Standards..... 23-14

23-10 City of Rio Vista Existing Noise Level Performance Standards 23-16

23-11 Alameda County Existing Noise Level Standards..... 23-17

23-12 Commonly Used Construction Equipment Noise Emission Levels 23-18

23-13 Vibration Source Levels for Pile Drivers..... 23-19

23-14 Existing Loudest-Hour Traffic Noise Levels..... 23-20

23-15 Noise Effects from the Plans, Policies, and Programs for the No Action Alternative..... 23-27

23-16 Predicted Noise Levels from Construction Activities..... 23-31

23-17 Predicted Noise Levels from Construction—Pile Driving and Construction
Equipment for Intake Structures 23-32

23-18 Land Use Affected by Equipment Noise from Construction of Intakes,
Alternative 1A..... 23-33

23-19 Land Use Affected by Equipment Noise from Construction of Conveyance and
Associated Facilities, Alternative 1A..... 23-34

23-20 Predicted Future Traffic Noise Levels on Commuter Roads and Haul Routes,
Pipeline/Tunnel Alignment 23-35

23-21 Predicted Noise Levels from Construction of Transmission Lines..... 23-38

23-22 Predicted Noise Levels from Earth-moving at offsite borrow/spoil areas 23-40

23-23 Predicted Vibration Levels from Construction Activities—Impact Pile Driving at Intake Structures 23-43

23-24 Land Use Affected by Vibrations from Pile Driving During Construction of Intakes, Alternative 1A..... 23-43

23-25 Pump Specifications—Alternative 1A..... 23-46

23-26 Predicted Noise Levels from Intake and Intermediate Pumping Plant Operations—Alternative 1A..... 23-46

23-27 Land Use Affected by Noise from Operation of Pumping Plants, Alternative 1A 23-47

23-28 Land Use Affected by Equipment Noise from Construction of Intakes, Alternative 1B..... 23-52

23-29 Land Use Affected by Equipment Noise from Construction of Conveyance and Associated Facilities, Alternative 1B..... 23-54

23-30 Predicted Future Traffic Noise Levels on Commuter Roads and Haul Routes, East Alignment 23-55

23-31 Land Use Affected by Vibrations from Pile Driving During Construction of Intakes, Alternative 1B..... 23-60

23-32 Pump Specifications—Alternative 1B..... 23-61

23-33 Predicted Noise Levels from Intake and Intermediate Plant Pump Operations—Alternative 1B 23-62

23-34 Land use affected by noise from operation of pumping plants, Alternative 1B 23-63

23-35 Land Use Affected by Equipment Noise from Construction of Intakes, Alternative 1C..... 23-65

23-36 Land Use Affected by Equipment Noise from Construction of Conveyance and Associated Facilities, Alternative 1C..... 23-67

23-37 Predicted Future Traffic Noise Levels on Commuter Roads and Haul Routes, West Alignment 23-68

23-38 Land Use Affected by Vibrations from Pile Driving During Construction of Intakes, Alternative 1C..... 23-73

23-39 Pump Specifications—Alternative 1C..... 23-74

23-40 Predicted Noise Levels from Pump Operation, Intakes, Alternative 1C..... 23-75

23-41 Land Use Affected by Noise from Operation of Pumping Plants, Alternative 1C..... 23-76

23-42 Land Use Affected By Equipment Noise from Construction of Intakes, Alternative 2A..... 23-78

23-43 Land Use Affected by Equipment Noise from Construction of Conveyance and Associated Facilities, Alternative 2A..... 23-79

23-44 Land Use Affected by Vibrations from Pile Driving During Construction of Intakes, Alternative 2A..... 23-82

23-45 Pump Specifications—Alternative 2A..... 23-84

23-46 Predicted Noise Levels from Pump Operation, Intakes, Alternative 2A..... 23-84

23-47 Land use affected by noise from operation of pumping plants, Alternative 2A 23-85

23-48 Land Use Affected By Equipment Noise from Construction of Intakes, Alternative 2B 23-87

23-49 Land Use Affected by Equipment Noise from Construction of Conveyance and Associated Facilities, Alternative 2B..... 23-88

23-50 Land Use Affected by Vibrations from Pile Driving During Construction of Intakes, Alternative 2B 23-91

23-51 Pump Specifications—Alternative 2B..... 23-92

23-52 Predicted Noise Levels from Pump Operation, Intakes, Alternative 2B..... 23-93

23-53 Land Use Affected by Noise from Operation of Pumping Plants, Alternative 2B..... 23-94

23-54 Land Use Affected by Equipment Noise from Construction of Intakes, Alternative 3 23-102

23-55 Land Use Affected by Vibrations from Pile Driving during Construction of Intakes, Alternative 3 23-105

23-56 Pump Specifications—Alternative 3 23-106

23-57 Predicted Noise Levels from Pump Operation, Intakes, Alternative 3 23-107

23-58 Land Use Affected by Noise from Operation of Pumping Plants, Alternative 3..... 23-108

23-59 Predicted Noise Levels from Construction Activities..... 23-110

23-60 Predicted Noise Levels from Construction—Pile Driving and Construction Equipment for Intake Structures 23-111

23-61 Land Use Affected by Equipment Noise from Construction of Intakes, Alternative 4 23-112

23-62 Land Use Affected by Equipment Noise from Construction of Conveyance and Associated Facilities, Alternative 4 23-113

23-63 Predicted Future Traffic Noise Levels on Commuter Roads and Haul Routes, Alternative 4 23-114

23-64 Predicted Noise Levels from Construction of Transmission Lines 23-117

23-65	Predicted Noise Levels from Earth-moving at offsite borrow/spoil areas	23-119
23-66	Predicted Vibration Levels from Construction Activities—Impact Pile Driving at Intake Structures	23-122
23-67	Land Use Affected By Vibrations From Pile Driving During Construction of Intakes, Alternative 4	23-122
23-68	Pump Specifications—Alternative 4	23-125
23-69	Predicted Noise Levels from Pump Operation, Intakes, Alternative 4	23-125
23-70	Land Use Affected by Noise from Operation of Pumping Plants, Alternative 4	23-126
23-71	Land Use Affected by Equipment Noise from Construction of Intakes, Alternative 5	23-131
23-72	Land Use Affected by Vibrations from Pile Driving During Construction of Intakes, Alternative 5	23-134
23-73	Pump Specifications—Alternative 5	23-135
23-74	Predicted Noise Levels from Pump Operation, Intakes, Alternative 5	23-136
23-75	Land Use Affected by Noise from Operation of Pumping Plants, Alternative 5	23-137
23-76	Land Use Affected by Equipment Noise from Construction of Intakes, Alternative 7	23-156
23-77	Land Use Affected by Vibrations from Pile Driving During Construction of Intakes, Alternative 7	23-159
23-78	Pump Specifications—Alternative 7	23-160
23-79	Predicted Noise Levels from Pump Operation, Intakes, Alternative 7	23-161
23-80	Land Use Affected by Noise from Operation of Pumping Plants, Alternative 7	23-162
23-81	Land Use Affected by Equipment Noise from Construction, Alternative 9	23-169
23-82	Predicted Future Traffic Noise Levels on Commuter Roads and Haul Routes, Through Delta/Separate Corridors	23-170
23-83	Pump Specifications—Alternative 9	23-175
23-84	Predicted Noise Levels from Pump Operation, Intakes, Alternative 9	23-175
23-85	Land Use Affected by Noise from Operation of Pumping Plants, Alternative 9	23-176
23-86	Noise Effects from the Plans, Policies, and Programs Considered for Cumulative Analysis	23-177
24-1	Pesticides and Crop Associations in 1974 and 2008.....	24-3
24-2	Hazards and Hazardous Materials Effects from the Plans, Policies, and Programs under the No Action Alternative	24-38

24-3	Number and Type of Pipelines and Electrical Transmission Lines Crossing All Alignments.....	24-50
24-4	Number and Type of Designated Hazardous Materials Routes and Railroads Crossing All Water Conveyance Facilities Alignments	24-52
24-5	Sites of Concern within 0.5 Mile of Conveyance Alignments	24-57
24-6	Distance between Airports within the Study Area and the Water Conveyance Facilities Alignments	24-61
24-7	Effects related to Hazards and Hazardous Materials from the Plans, Policies, and Programs Considered for Cumulative Analysis.....	24-230
25-1	Constituents of Concern for Drinking Water Quality	25-4
25-2	Advisories for Consumption of Fish and Invertebrate Species/Guilds for Each Waterway	25-9
25-3	Pathogens	25-13
25-4	Seasonal Presence of Mosquito	25-18
25-5	Mosquitoes Known to Occur in the Delta and the Diseases They Commonly Carry	25-19
25-6	Confirmed West Nile Virus Cases in California 2008–2010	25-21
25-7	West Nile Virus Activity by County in Study Area, 2008–2010.....	25-21
25-8	Potential Range of New Permanent and Temporary Transmission Lines	25-40
25-9	Effects on Public Health from the Plans, Policies, and Programs for the No Action Alternative	25-46
25-10	Effects on Public Health from the Plans, Policies, and Programs Considered for Cumulative Analysis.....	25-184
26-1	Comparison of 50-Year Demand to Permitted Aggregate Resources for Aggregate Study Areas as of January 1, 2011	26-3
26-2	Oil and Gas Wells within the Study Area, by County	26-5
26-3	Effects on Minerals from the Plans, Policies, and Programs for the No Action Alternative	26-23
26-4	Producing Natural Gas Wells Affected by the BDCP Action Alternatives	26-26
26-5	Natural Gas Fields Affected by Alternative.....	26-28
26-6	Natural Gas Wells in ROAs.....	26-31
26-7	Natural Gas Field Areas Underlying ROAs	26-33
26-8	Active Mines in ROAs.....	26-37
26-9	Plans, Policies, and Programs Considered in the Minerals Cumulative Analysis.....	26-124

27-1	Paleontological Sensitivity Ratings	27-6
27-2	Summary of Paleontological Resource Sensitivity for Geologic Units in the Plan Area	27-7
27-3	Paleontological Localities Attributed to the Modesto Formation and Undifferentiated Quaternary Sediments.....	27-8
27-4	Paleontological Localities Attributed to the Older Alluvium of the Riverbank, Montezuma, Tulare, and Tehama Formations	27-9
27-5	Paleontological Localities Attributed to Tertiary Marine Sediments of the Neroly, Markley, Domengine, and Meganos Formations	27-10
27-6	Paleontological Localities from Cretaceous Marine Sediments of the Great Valley Sequence	27-11
27-7	Units Considered for Borrow Material and Their Paleontological Sensitivity	27-12
27-8	Society of Vertebrate Paleontology’s Recommended Treatment for Paleontological Resources.....	27-17
27-9	Effects on Paleontological Resources from the Plans, Policies, and Programs for the No Action Alternative	27-20
27-10	Summary of Conveyance Construction Activities and Geologic Units Sensitive for Paleontological Resources That Could Be Disturbed under Alternative 1A	27-24
27-11	Amount of Excavated Material by Feature.....	27-25
27-12	Summary of Conveyance Construction Activities and Geologic Units Sensitive for Paleontological Resources that Could be Disturbed under Alternative 1B.....	27-36
27-13	Summary of BDCP Construction Activities and Geologic Units Sensitive for Paleontological Resources that Could be Disturbed under Alternative 1C.....	27-41
27-14	Summary of Conveyance Construction Activities and Geologic Units Sensitive for Paleontological Resources That Could Be Disturbed under Alternative 4	27-59
27-15	Summary of BDCP Construction Activities and Geologic Units Sensitive for Paleontological Resources that Could be Disturbed under Alternative 9	27-88
27-16	Programs and Projects Considered in Paleontological Resources Cumulative Analysis	27-93
28-1	Plans, Policies, and Programs for the No Action Alternative that May Affect Minority and Low-income Populations	28-27
28-2	Comparison of Pipeline/Tunnel Alignment Alternatives and Effects on Employment	28-77
28-3	Intake Locations by BDCP Alternative	28-78

28-4 Environmental Justice Effects of Plans, Policies, and Programs Considered for Cumulative Analysis.....28-100

29-1 Linkages between Resource Areas Addressed in this EIR/EIS and Climate Change29-3

29-2 Sea Level Rise Projections and Ranges for San Francisco, California 2030, 2050, and 210029-10

29-3 Temperature, Precipitation, and Runoff Statistics for the Plan Area29-12

29-4 Delta Exports and CVP/SWP Deliveries29-17

29-5 Long-Term Average Exports29-21

30-1 Councils of Government in Hydrologic Regions Potentially Affected by the Proposed Project30-3

30-2 Statewide Distribution of Dedicated Water Supply to Applied Water Uses30-11

30-3 General Characteristics of Affected Hydrologic Regions30-13

30-4 State Water Project and Central Valley Project Contractors Serving Urban Uses30-14

30-5 Current and Projected Populations of Counties within the San Francisco Bay Hydrologic Region.....30-17

30-6 Current and Projected Populations of Counties within the Sacramento River Hydrologic Region.....30-21

30-7 Current and Projected Populations of Counties within the San Joaquin River Hydrologic Region.....30-25

30-8 Current and Projected Populations of Counties within the Central Coast Hydrologic Region.....30-27

30-9 Current and Projected Populations of Counties within the South Coast Hydrologic Region.....30-29

30-10 Current and Projected Populations of Counties within the Tulare Lake Hydrologic Region.....30-31

30-11 Current and Projected Populations of Counties Within the South Lahontan Hydrologic Region.....30-33

30-12 Current and Projected Populations of Counties Within the Colorado River Hydrologic Region.....30-35

30-13 Existing Conditions and No Action Alternative: Summary of Annual SWP and CVP Deliveries30-46

30-14 Alternatives 1 to 9: Summary of Annual SWP Deliveries30-49

30-15 Alternatives 1 to 9: Summary of Annual CVP M&I Deliveries30-51

30-16 Projected Increases in M&I Deliveries for the State Water Project by Hydrologic Region..... 30-53

30-17 Projected Increases in M&I Deliveries for the Central Valley Project by Hydrologic Region..... 30-56

30-18 Urban Per Capita Water Use by Hydrologic Region: 2005 Baseline and 2020 Target..... 30-72

30-19 Potential Population Increases Due to Estimated Average Annual Deliveries Associated with BDCP Alternatives 30-75

30-20 Potential Increase in Population Supported by Maximum Net Increase in SWP and CVP Deliveries, Compared to Existing Conditions 30-76

30-21 Potential Increase in Population Supported by the Maximum Net Increase in SWP and CVP Deliveries, Compared to the No Action Alternative..... 30-77

30-22 Projected Population Growth in Affected Hydrologic Regions 30-78

30-23 Population Growth Potentially Supported by BDCP Deliveries (Alternatives 1A, 1B, and 1C) Compared with Projected Population Growth..... 30-79

30-24 Population Growth Potentially Supported by BDCP Deliveries (Alternatives 2A, 2B, and 2C) Compared with Projected Population Growth..... 30-80

30-25 Population Growth Potentially Supported by BDCP Deliveries (Alternative 3) Compared with Projected Population Growth 30-81

30-26 Population Growth Potentially Supported by BDCP Deliveries (Alternative 4) Compared with Projected Population Growth 30-83

30-27 Population Growth Potentially Supported by BDCP Deliveries (Alternative 5) Compared with Projected Population Growth 30-85

30-28 Population Growth Potentially Supported by BDCP Deliveries (Alternative 9) Compared with Projected Population Growth 30-86

30-29 Comparison of Average Annual Growth Rates Indicated by COG Population Forecasts and Alternatives 1A, 1B, 1C Population Potential: South Coast Region..... 30-88

30-30 Comparison of Average Annual Growth Rates Indicated by COG Population Forecasts and Alternatives 1A, 1B, 1C Population Potential: San Francisco Bay Region..... 30-90

30-31 Comparison of Average Annual Growth Rates Indicated by COG Population Forecasts and Alternatives 1A, 1B, 1C Population Potential: South Lahontan Region..... 30-93

30-32 Comparison of Average Annual Growth Rates indicated by COG Population Forecasts and Alternatives 1A, 1B, 1C Population Potential: Colorado River Region 30-95

30-33 Projected Changes in Annual M&I Deliveries to SWP and CVP Contractors (No Action Alternative)..... 30-98

30-34 General Plan EIRs Reviewed for Secondary Effects of Growth..... 30-101

30-35 Nonattainment Status of Counties Within Hydrologic Regions Expected to
Experience Growth from BDCP..... 30-103

30-36 Agencies with the Authority to Implement or Require Implementation of
Measures to Avoid or Mitigate Growth-Related Impacts 30-114

31-1 Summary of Significant and Unavoidable Adverse Impacts 31-9

32-1 Locations and Dates of 2008 Scoping Meetings 32-2

32-2 Locations and Dates of 2009 Scoping Meetings 32-3

32-3 Summary of Comments Received During 2008 and 2009 Scoping Processes..... 32-4

Figures follow the chapter in which they are referenced

ES-1	Project Area
ES-2	Delta Region (Plan Area)
1-1	The Sacramento–San Joaquin Delta
1-2	Major Components of the SWP and CVP
1-3	SWP and CVP Service Areas
1-4	Project Area
1-5	Upstream of the Delta Region—Sacramento River and Trinity System (CVP Facilities)
1-6	Upstream of the Delta Region—Feather River System (SWP Facilities)
1-7	Upstream of the Delta Region—American River System (CVP Facilities)
1-8	Upstream of the Delta Region—San Joaquin and Stanislaus River System (CVP Facilities)
1-9	Delta Region (Plan Area)
3-1	Conservation Zones and Restoration Opportunity Areas
3-2	Pipeline/Tunnel Alignment Overview (Alternatives 1A, 2A, 3, 5, 6A, 7, and 8)
3-3	Alternatives 1A and 2A Conveyance Schematic
3-4	East Alignment Overview (Alternatives 1B, 2B, and 6B)
3-5	Alternatives 1B and 2B Conveyance Schematic
3-6	West Alignment Overview (Alternatives 1C, 2C, and 6C)
3-7	Alternatives 1C and 2C Conveyance Schematic
3-8	Alternative 3 Conveyance Schematic
3-9	Modified Pipeline/Tunnel Alignment Overview (Alternative 4)
3-10	Alternative 4 Conveyance Schematic
3-11	Alternatives 7 and 8 Conveyance Schematic
3-12	Alternative 5 Conveyance Schematic
3-13	Alternative 6A Conveyance Schematic
3-14	Alternative 6B Conveyance Schematic
3-15	Alternative 6C Conveyance Schematic

3-16	Through Delta/Separate Corridors Overview (Alternative 9)
3-17	Alternative 9 Fish Movement Corridor Schematic
3-18	Alternative 9 Water Supply Corridor Schematic
3-19	Conceptual Rendering of On-Bank Intake Facility
3-20	Conceptual Intake and Pumping Plant Site
3-21	Tunnel 2 Configuration
3-22	Canal—Typical Cross Section
3-23	Conceptual Rendering of Culvert Siphon
3-24	Conceptual Rendering of Canal Segment
3-25	Proposed Locations of Electrical Transmission Lines
4-1	Use of Modeling Tools and Results in Analysis of BDCP Alternatives
5-1	Distribution of Precipitation across the State
5-2	Delta Exports 1956–2009
5-3	Sacramento–San Joaquin River Average Delta Monthly Outflow
5-4	Sacramento–San Joaquin River Delta Wet Year Average Monthly Outflow
5-5	Sacramento–San Joaquin River Delta Dry Year Average Monthly Outflow
5-6	Trinity Lake End of September Storage
5-7	Shasta Lake End of May Storage
5-8	Shasta Lake End of September Storage
5-9	Lake Oroville End of May Storage
5-10	Lake Oroville End of September Storage
5-11	Folsom Lake End of May Storage
5-12	Folsom Lake End of September Storage
5-13	SWP San Luis Reservoir End of May Storage
5-14	SWP San Luis Reservoir End of September Storage
5-15	CVP San Luis Reservoir End of May Storage
5-16	CVP San Luis Reservoir End of September Storage
5-17	North and South Delta Exports—Long-Term Average
5-18	North and South Delta Exports—Wet Year Average

5-19	North and South Delta Exports—Dry and Critical Year Average
5-20	Total Delta Exports
5-21	Total Delta Exports—Long-Term Average Monthly
5-22	Total Delta Exports—Wet Year Average Monthly
5-23	Total Delta Exports—Dry Year Average Monthly
5-24	SWP and CVP North Delta Exports—Average Monthly
5-25	SWP and CVP North Delta Exports—Wet Year Average Monthly
5-26	SWP and CVP North Delta Exports—Dry Year Average Monthly
5-27	SWP and CVP South Delta Exports—Average Monthly
5-28	SWP and CVP South Delta Exports—Wet Year Average Monthly
5-29	SWP and CVP South Delta Exports—Dry Year Average Monthly
5-30	Annual CVP North of Delta Agricultural Water Service Contract Deliveries
5-31	Annual CVP South of Delta Agricultural Water Service Contract Deliveries
5-32	Annual CVP North of Delta Municipal and Industrial Water Service Contract Deliveries
5-33	Annual CVP South of Delta Municipal and Industrial Water Service Contract Deliveries
5-34	Total Annual SWP South of Delta Deliveries Including Table A and Articles 21 and 56 Waters
5-35	Annual SWP Table A Deliveries with Article 56 Waters
5-36	Annual SWP Article 21 Deliveries
6-1	Hydrologic Regions and County Boundaries
6-2	Sacramento River and San Joaquin Hydrologic Regions
6-3	Delta Stream Gage Locations and Mean Annual Flows
6-4	Major Hydraulic Control Structures in the Delta
6-5	SPFC and Non-SPFC Levees
6-6	Reported Delta Levee Problem Areas
6-7	Effective Federal Emergency Management Agency Flood Zones
6-8	Sacramento River at Bend Bridge, Average Wet Years
6-9	Sacramento River Flow at Bend Bridge, Long-Term Average
6-10	Sacramento River Flow at Freeport, Average Wet Years
6-11	Sacramento River Flow at Freeport, Long-Term Average

6-12	San Joaquin River Flow at Vernalis, Average Wet Years
6-13	San Joaquin River Flow at Vernalis, Long-Term Average
6-14	Sacramento River Flow downstream of North Delta Intakes, Average Wet Years
6-15	Sacramento River Flow downstream of North Delta Intakes, Long-Term Average
6-16	Trinity River Flow below Lewiston Dam, Average Wet Years
6-17	Trinity River Flow below Lewiston Dam, Long-Term Average
6-18	American River Flow below Nimbus Dam, Average Wet Years
6-19	American River Flow below Nimbus Dam, Long-Term Average
6-20	Feather River Flow at Thermalito Dam, Average Wet Years
6-21	Feather River Flow at Thermalito Dam, Long-Term Average
6-22	Flow Spills into Yolo Bypass at Fremont Weir, Average Wet Years
6-23	Old and Middle River Flows, Long-Term Average
7-1	California Groundwater Basins
7-2	Groundwater Subbasins Underlying the Delta
7-3	Groundwater Subbasins Underlying the Central Valley
7-4	Groundwater Model Domains in the Central Valley
7-5	Groundwater Model Domains in the Delta Region
7-6	Typical Forecasted Peak Groundwater Level Changes in the San Joaquin and Tulare Export Service Areas for the No Action Alternative as Compared to Existing Conditions
7-7	Forecasted Groundwater Level Lowering from Construction Dewatering for Alternative 1A
7-8	Forecasted Groundwater Level Changes in the Delta during a Typical Peak Groundwater Level Change Condition for Alternative 1A Compared to the No Action Alternative
7-9	Forecasted Groundwater Level Changes in the Delta during a Typical Peak Groundwater Level Change Condition for Alternative 1A Compared to Existing Conditions
7-10	Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 1A Compared to the No Action Alternative
7-11	Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 1A Compared to Existing Conditions
7-12a	Forecasted Groundwater Level Lowering from Middle-Stage Construction Dewatering—Alternative 1B

- 7-12b Forecasted Groundwater Level Lowering from Late-Stage Construction Dewatering—Alternative 1B
- 7-13 Forecasted Groundwater Level Changes in the Delta during a Typical Peak Groundwater Level Change Condition for Alternative 1B Compared to the No Action Alternative—Unlined Canal
- 7-14 Forecasted Groundwater Level Changes in the Delta during a Typical Peak Groundwater Level Change Condition for Alternative 1B Compared to the No Action Alternative—Lined Canal
- 7-15 Forecasted Groundwater Level Changes in the Delta during a Typical Peak Groundwater Level Change Condition for Alternative 1B Compared to Existing Conditions—Unlined Canal
- 7-16 Forecasted Groundwater Level Changes in the Delta during a Typical Peak Groundwater Level Change Condition for Alternative 1B Compared to Existing Conditions—Lined Canal
- 7-17 Forecasted Groundwater Level Lowering from Construction Dewatering—Alternative 1C
- 7-18 Forecasted Groundwater Level Changes in the Delta during a Typical Peak Groundwater Level Change Condition for Alternative 1C Compared to the No Action Alternative—Unlined Canal
- 7-19 Forecasted Groundwater Level Changes in the Delta during a Typical Peak Groundwater Level Change Condition for Alternative 1C Compared to the No Action Alternative—Lined Canal
- 7-20 Forecasted Groundwater Level Changes in the Delta during a Typical Peak Groundwater Level Change Condition for Alternative 1C Compared to Existing Conditions—Unlined Canal
- 7-21 Forecasted Groundwater Level Changes in the Delta during a Typical Peak Groundwater Level Change Condition for Alternative 1C Compared to Existing Conditions—Lined Canal
- 7-22 Forecasted Groundwater Level Lowering from Construction Dewatering for Alternative 2A
- 7-23 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 2A Compared to the No Action Alternative
- 7-24 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 2A Compared to Existing Conditions
- 7-25 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 3 Compared to the No Action Alternative
- 7-26 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 3 Compared to Existing Conditions
- 7-27 Forecasted Groundwater Level Lowering from Construction Dewatering for Alternative 4

- 7-28 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 4 Compared to the No Action Alternative
- 7-29 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 4 Compared to Existing Conditions
- 7-30 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 5 Compared to the No Action Alternative
- 7-31 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 5 Compared to Existing Conditions
- 7-32 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 6A Compared to the No Action Alternative
- 7-33 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 6A Compared to Existing Conditions
- 7-34 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 8 Compared to the No Action Alternative
- 7-35 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 8 Compared to Existing Conditions
- 7-36 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 9 Compared to the No Action Alternative
- 7-37 Forecasted Groundwater Level Changes in the San Joaquin and Tulare Export Service Area during a Typical Peak Groundwater Level Change Condition in August for Alternative 9 Compared to Existing Conditions
- 8-1 Land Cover Types in the Sacramento River and San Joaquin Hydrologic Regions
- 8-2 Sacramento Valley Water Year Hydrologic Classifications for 1977–2008
- 8-3 San Joaquin Valley Hydrologic Classifications for 1977–2008
- 8-4 Maximum Salinity Intrusion into the Delta, 1921–1943
- 8-5 Maximum Salinity Intrusion into the Delta, 1944–1990
- 8-6 Land Cover Types with Major Point and Nonpoint Constituent Sources in the Plan Area

8-7	Surface Water Quality Monitoring Locations in the Project Area
8-8	Spatial Summary of Ammonia Data at Delta Stations (2001–2006)
8-9a	Temporal Summary of Ammonia Data at Delta Stations
8-9b	Temporal Summary of Ammonia Data at Delta Stations
8-10	Temporal Summary of Ammonia Data at North of Delta and South of Delta Stations
8-11	Lower San Joaquin River Subareas
8-12	Spatial Summary of Boron Data at Delta Stations (2001–2006)
8-13	Temporal Summary of Boron Data at Delta Stations
8-14	Temporal Summary of Boron Data at North of Delta and South of Delta Stations
8-15	Spatial Summary of Bromide Data at Delta Stations (2001–2006)
8-16	Temporal Summary of Bromide Data at Delta Stations
8-17	Spatial Summary of Chloride Data at Delta Stations (2001–2006)
8-18a	Temporal Summary of Chloride Data at Delta Stations
8-18b	Temporal Summary of Chloride Data at Delta Stations
8-19	Temporal Summary of Chloride Data at North of Delta and South of Delta Stations
8-20	United States Dioxin Emissions in 2006
8-21	Spatial Summary of Dissolved Oxygen Data at Delta Stations (2001–2006)
8-22	Temporal Summary of Dissolved Oxygen Data at Delta Stations
8-23	Temporal Summary of Dissolved Oxygen Data at North of Delta and South of Delta Stations
8-24	Spatial Summary of Salinity Data at Delta Stations (2001–2006)
8-25a	Temporal Summary of Electrical Conductivity Data at Delta Stations
8-25b	Temporal Summary of Electrical Conductivity Data at Delta Stations
8-26	Temporal Summary of Electrical Conductivity Data at North of Delta and South of Delta Stations
8-27	Conceptual Model of Mercury and Methylmercury Transport, Fate, and Cycling in the Delta Ecosystem
8-28	Mercury Concentrations in Largemouth Bass Fillets (1999–2000)
8-29	Spatial Summary of Nitrate/Nitrite Data at Delta Stations (2001–2006)
8-30a	Temporal Summary of Nitrate/Nitrite Data at Delta Stations
8-30b	Temporal Summary of Nitrate/Nitrite Data at Delta Stations

- 8-31 Temporal Summary of Nitrate/Nitrite Data at North of Delta and South of Delta Stations
- 8-32 Spatial Summary of Ortho-Phosphorus Data at Delta Stations (2001–2006)
- 8-33a Temporal Summary of Ortho-Phosphorus Data at Delta Stations
- 8-33b Temporal Summary of Ortho-Phosphorus Data at Delta Stations
- 8-34 Temporal Summary of Ortho-Phosphorus Data at North of Delta and South of Delta Stations
- 8-35 Spatial Summary of Total Phosphorus Data at Delta Stations (2001–2006)
- 8-36 Temporal Summary of Total Phosphorus Data at Delta Stations
- 8-37 Temporal Summary of Total Phosphorus Data at North of Delta and South of Delta Stations
- 8-38 Spatial Summary of Dissolved Organic Carbon Data at Delta Stations (2001–2006)
- 8-39 Temporal Summary of Dissolved Organic Carbon Data at Delta Stations
- 8-40 Temporal Summary of Dissolved Organic Carbon Data at North of Delta and South of Delta Stations
- 8-41 Spatial Summary of Total Organic Carbon Data at Delta Stations (2001–2006)
- 8-42 Temporal Summary of Total Organic Carbon Data at Delta Stations
- 8-43 Temporal Summary of Total Organic Carbon Data at North of Delta and South of Delta Stations
- 8-44 Spatial Summary of Dissolved Selenium Data (1999–2008)
- 8-45 Total Selenium Concentrations along Main Stem of San Joaquin River at Vernalis, 1994–2007
- 8-46 Average Annual Delta Sediment Budget Based on Water Years 1999–2002
- 8-47 Spatial Summary of Turbidity Data at Delta Stations (2001–2006)
- 8-48a Temporal Summary of Turbidity Data at Delta Stations
- 8-48b Temporal Summary of Turbidity Data at Delta Stations
- 8-49 Temporal Summary of Turbidity Data at North of Delta and South of Delta Stations
- 8-50 Linkages between the Hydrologic and Water Quality Models
- 8-51 Surface Water Quality Assessment Locations in the Delta
- 8-52 Monthly Ammonia Concentrations from the Three Major Delta Source Waters
- 8-53a Percent Change in Available Assimilative Capacity for Mercury (Based on 25 ng/L Ecological Risk Benchmark) with Respect to Existing Conditions for All Years
- 8-53b Percent Change in Available Assimilative Capacity for Mercury (Based on 25 ng/L Ecological Risk Benchmark) with Respect to Existing Conditions for All Years

- 8-54a Percent Change in Available Assimilative Capacity for Mercury (Based on 25 ng/L Ecological Risk Benchmark) with Respect to No Action Alternative for All Years
- 8-54b Percent Change in Available Assimilative Capacity for Mercury (Based on 25 ng/L Ecological Risk Benchmark) with Respect to No Action Alternative for All Years
- 8-55a Level of Concern Exceedance Quotients for Methyl Mercury Concentrations in 350 mm Largemouth Bass Fillets for All Years
- 8-55b Level of Concern Exceedance Quotients for Methyl Mercury Concentrations in 350 mm Largemouth Bass Fillets for All Years
- 8-56 Monthly Dissolved Phosphorus Concentrations from the Three Major Delta Source Waters
- 8-57 Linear Regression between Water Year Average Phosphorus-P Concentration and Water Year Average Flow in the San Joaquin River at Vernalis (1975–2005)
- 8-58 Linear Regression between Water Year Average Phosphorus-P Concentration at the Sacramento River at Greene's Landing or Sacramento River at Hood and Water Year Average Flow in the Sacramento River at Freeport (1975–2004)
- 8-59a Percent Change in Available Assimilative Capacity for Selenium (Based on 2 µg/L Ecological Risk Benchmark) with Respect to Existing Conditions for All Years
- 8-59b Percent Change in Available Assimilative Capacity for Selenium (Based on 2 µg/L Ecological Risk Benchmark) with Respect to Existing Conditions for All Years
- 8-60a Percent Change in Available Assimilative Capacity for Selenium (Based on 2 µg/L Ecological Risk Benchmark) with Respect to No Action Alternative for All Years
- 8-60b Percent Change in Available Assimilative Capacity for Selenium (Based on 2 µg/L Ecological Risk Benchmark) with Respect to No Action Alternative for All Years
- 8-61a Level of Concern Exceedance Quotients for Selenium Concentrations in Whole-Body Fish for Drought Years
- 8-61b Level of Concern Exceedance Quotients for Selenium Concentrations in Whole-Body Fish for Drought Years
- 8-62a Level of Concern Exceedance Quotients for Selenium Concentrations in Bird Eggs (Invertebrate Diet) for Drought Years
- 8-62b Level of Concern Exceedance Quotients for Selenium Concentrations in Bird Eggs (Invertebrate Diet) for Drought Years
- 8-63a Level of Concern Exceedance Quotients for Selenium Concentrations in Bird Eggs (Fish Diet) for Drought Years
- 8-63b Level of Concern Exceedance Quotients for Selenium Concentrations in Bird Eggs (Fish Diet) for Drought Years
- 8-64a Tissue Advisory Level Exceedance Quotients for Selenium Concentrations in Fish Fillets for Drought Years

8-64b	Tissue Advisory Level Exceedance Quotients for Selenium Concentrations in Fish Fillets for Drought Years
9-1	Geomorphic Provinces of California
9-2	Geologic Time Scale
9-3	Geology of the Plan Area
9-4	Geologic Borehole Logs in Vicinity of Proposed Tunnel Locations
9-5	Active Faults and Historical Seismicity of the Bay and Delta Region, 1800–2010
9-6	Liquefaction Hazard and Levee Liquefaction Damage Potential in the Plan Area
10-1	Soil Associations in the Plan Area
10-2	Soil Organic Matter Content in Near-Surface Soils
10-3	Thickness of Organic Soils
10-4	Soil Shrink-Swell Potential
10-5	Water Erosion Hazard
10-6	Wind Erosion Hazard
10-7	Risk of Soil Corrosion to Uncoated Steel
10-8	Risk of Soil Corrosion to Concrete
10-9	Subsidence in the Delta
11-1	Combined Number of Fish Salvaged Annually at CVP and SWP South Delta Export Facilities, 1991–2010
11-2	Sheet Pile Impact Driving
11-3	24-inch Steel Pipe Pile in Dewatered Cofferdam Impact Driving
11-4	24-inch Steel Pipe Pile Impact Driving
11-1A-1	Average Annual Estimated Proportion of the Larval/Juvenile Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 1A, Based on the Proportional Entrainment Regression
11-1A-2	Average Annual Estimated Proportion of the Adult Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 1A, Based on the Proportional Entrainment Regression
11-1A-3	Delta Smelt Fall Abiotic Index, Averaged by Water Year Type, with and without Restoration (100% occupancy assumed) under Alternative 1A
11-1A-4	Clear Creek Flow Recommendations from Denton (1986) Instream Flow Incremental Methodology Study

- 11-1A-5 Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types under Alternative 1A, February through June, from 15 2-D and Daily CALSIM II Modeling Runs
- 11-1A-6 a) Shasta Reservoir Storage Volumes as a Function of Elevation;
b) Shasta Reservoir Surface Area as a Function of Elevation
- 11-1A-7 Measured Monthly Water Temperature Profiles in Shasta Reservoir during 1995
- 11-1A-8 Simulated Shasta Reservoir August Storage and Coldwater Habitat Volumes (<50 °F and <58 °F) for the No Action Baseline for Water Years 1922–2003 [Source: CALSIM and SRWQM results]
- 11-1A-9 Simulated Relationship between Shasta Storage and Coldwater Habitat Volume and Coldwater Habitat Volume for 1922–2003
- 11-1A-10 Comparison of CALSIM-Simulated Trinity Reservoir Carryover Storage Sequence for the Nine BDCP Alternatives and No Action Baseline for the Late Long-Term for 1922–2003
- 11-1A-11 Comparison of CALSIM-Simulated Shasta Reservoir Carryover Storage Sequence for the Nine BDCP Alternatives and No Action Baseline for the Late Long-Term for 1922–2003
- 11-1A-12 Comparison of CALSIM-Simulated Oroville Reservoir Carryover Storage Sequence for the Nine BDCP Alternatives and No Action Baseline for the Late Long-Term for 1922–2003
- 11-1A-13 Comparison of CALSIM-Simulated Folsom Reservoir Carryover Storage Sequence for the Nine BDCP Alternatives and No Action Baseline for the Late Long-Term for 1922–2003
- 11-1A-14 Comparison of CALSIM-Simulated New Melones Reservoir Carryover Storage Sequence for the Nine BDCP Alternatives and No Action Baseline for the Late Long-Term for 1922–2003
- 11-1A-15 Comparison of CALSIM-Simulated San Luis Reservoir Carryover Storage Sequence for the Nine BDCP Alternatives and No Action Baseline for the Late Long-Term for 1922–2003
- 11-2A-1 Average Annual Estimated Proportion of the Larval/Juvenile Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 2A, Based on the Proportional Entrainment Regression
- 11-2A-2 Average Annual Estimated Proportion of the Adult Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 2A, Based on the Proportional Entrainment Regression
- 11-2A-3 Delta Smelt Fall Abiotic Index, Averaged by Water Year Type, with and without Restoration (100% occupancy assumed) under Alternative 2A
- 11-2A-4 Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types under Alternative 2A, February through June, from 15 2-D and Daily CALSIM II Modeling Runs
- 11-3-1 Average Annual Estimated Proportion of the Larval/Juvenile Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 3, Based on the Proportional Entrainment Regression

- 11-3-2 Average Annual Estimated Proportion of the Adult Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 3, Based on the Proportional Entrainment Regression
- 11-3-3 Delta Smelt Fall Abiotic Index, Averaged by Water Year Type, with and without Restoration (100% occupancy assumed) under Alternative 3
- 11-3-4 Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types under Alternative 3, February through June, from 15 2-D and Daily CALSIM II Modeling Runs
- 11-4-1 Average Annual Estimated Proportion of the Larval/Juvenile Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 4 (Scenarios H3, H1, and H4), Based on the Proportional Entrainment Regression
- 11-4-2 Average Annual Estimated Proportion of the Adult Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 4 (Scenarios H3, H1, and H4), Based on the Proportional Entrainment Regression
- 11-4-3 Delta Smelt Fall Abiotic Index, Averaged by Water Year Type, with and without Restoration (100% occupancy assumed) under Alternative 4 (Scenarios H1, H3, and H4)
- 11-5-1 Average Annual Estimated Proportion of the Larval/Juvenile Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 5, Based on the Proportional Entrainment Regression
- 11-5-2 Average Annual Estimated Proportion of the Adult Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 5, Based on the Proportional Entrainment Regression
- 11-5-3 Delta Smelt Fall Abiotic Index, Averaged by Water Year Type, with and without Restoration (100% occupancy assumed) under Alternative 5
- 11-6A-1 Delta Smelt Fall Abiotic Index, Averaged by Water Year Type, with and without Restoration (100% occupancy assumed) under Alternative 6A
- 11-6A-2 Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types under Alternative 6A, February through June, from 15 2-D and Daily CALSIM II Modeling Runs
- 11-7-1 Average Annual Estimated Proportion of the Larval/Juvenile Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 7, Based on the Proportional Entrainment Regression
- 11-7-2 Average Annual Estimated Proportion of the Adult Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 7, Based on the Proportional Entrainment Regression
- 11-7-3 Delta Smelt Fall Abiotic Index, Averaged by Water Year Type, with and without Restoration (100% occupancy assumed) under Alternative 7

- 11-7-4 Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types under Alternative 7, February through June, from 15 2-D and Daily CALSIM II Modeling Runs
- 11-8-1 Average Annual Estimated Proportion of the Larval/Juvenile Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 8, Based on the Proportional Entrainment Regression
- 11-8-2 Average Annual Estimated Proportion of the Adult Delta Smelt Population Lost to Entrainment at the SWP/CVP South Delta Facilities for Alternative 8, Based on the Proportional Entrainment Regression
- 11-8-3 Delta Smelt Fall Abiotic Index, Averaged by Water Year Type, with and without Restoration (100% occupancy assumed) under Alternative 8
- 11-8-4 Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types under Alternative 8, February through June, from 15 2-D and Daily CALSIM II Modeling Runs
- 11-9-1 Delta Smelt Fall Abiotic Index, Averaged by Water Year Type, with and without Restoration (100% occupancy assumed) under Alternative 9
- 11-9-2 Frequencies of Inundation Events (for 82-Year Simulations) of Different Durations on the Yolo Bypass under Different Scenarios and Water Year Types under Alternative 9, February through June, from 15 2-D and Daily CALSIM II Modeling Runs
- 12-1 Distribution of Natural Communities in the Study Area
- 12-2 Essential Habitat Connectivity
- 12-3 BDCP Plan Area in Relation to Other Conservation Plan Boundaries
- 12-4 BDCP Features in Relation to Overlapping Regional Conservation Plans
- 12-5 Vernal Pool Crustacean Distribution and Habitat in Study Area Vicinity
- 12-6 Valley Elderberry Longhorn Beetle Distribution and Habitat in Study Area Vicinity
- 12-7 Other Vernal Pool Invertebrates Distribution and Habitat in Study Area Vicinity
- 12-8 Sacramento Anthicid Beetle Distribution and Habitat in Study Area Vicinity
- 12-9 Antioch Dunes Anthicid Beetle Distribution and Habitat in Study Area Vicinity
- 12-10 Inland Dune Scrub Invertebrate Species Distribution and Habitat in Study Area Vicinity
- 12-11 Delta Green Ground Beetle Distribution and Habitat in Study Area Vicinity
- 12-12 Callippe Silverspot Butterfly Distribution and Habitat in Study Area Vicinity
- 12-13 California Red-Legged Frog Distribution and Habitat in Study Area Vicinity
- 12-14 California Tiger Salamander Distribution and Habitat in Study Area Vicinity
- 12-15a Giant Garter Snake Distribution and Habitat in Study Area Vicinity

- 12-15b Alternative 1B Effects on Giant Garter Snake Movements and Connectivity
- 12-16 Western Pond Turtle Distribution and Habitat in Study Area Vicinity
- 12-17 California Horned Lizard, San Joaquin Whipsnake, and Silvery Legless Lizard Distribution and Habitat in Study Area Vicinity
- 12-18 California Black Rail Distribution and Habitat in Study Area Vicinity
- 12-19 California Clapper Rail Distribution and Habitat in Study Area Vicinity
- 12-20 California Least Tern Distribution and Habitat in Study Area Vicinity
- 12-21 Greater Sandhill Crane Distribution and Habitat in Study Area Vicinity
- 12-22 Lesser Sandhill Crane Distribution and Habitat in Study Area Vicinity
- 12-23 Least Bell's Vireo Distribution and Habitat in Study Area Vicinity
- 12-24 Yellow Warbler Distribution and Habitat in Study Area Vicinity
- 12-25 Suisun Song Sparrow Distribution and Habitat in Study Area Vicinity
- 12-26 Saltmarsh Common Yellowthroat Distribution and Habitat in Study Area Vicinity
- 12-27 Swainson's Hawk Distribution and Habitat in Study Area Vicinity
- 12-28 Tricolored Blackbird Distribution and Habitat in Study Area Vicinity
- 12-29 Western Burrowing Owl Distribution and Habitat in Study Area Vicinity
- 12-30 Western Yellow-Billed Cuckoo Distribution and Habitat in Study Area Vicinity
- 12-31 White-Tailed Kite Distribution and Habitat in Study Area Vicinity
- 12-32 Yellow-Breasted Chat Distribution and Habitat in Study Area Vicinity
- 12-33 Cooper's Hawk and Osprey Distribution and Habitat in Study Area Vicinity
- 12-34 Ferruginous Hawk and Golden Eagle Distribution and Habitat in Study Area Vicinity
- 12-35 Rookeries Distribution and Habitat in Study Area Vicinity
- 12-36 Northern Harrier and Short-Eared Owl Distribution and Habitat in Study Area Vicinity
- 12-37 Redhead Distribution and Habitat in Study Area Vicinity
- 12-38 Mountain Plover Distribution and Habitat in Study Area Vicinity
- 12-39 Black Tern Distribution and Habitat in Study Area Vicinity
- 12-40 Grasshopper Sparrow and California Horned Lark Distribution and Habitat in Study Area Vicinity
- 12-41 Least Bittern and White-Faced Ibis Distribution and Habitat in Study Area Vicinity
- 12-42 Loggerhead Shrike Distribution and Habitat in Study Area Vicinity

12-43	Song Sparrow "Modesto" Population Distribution and Habitat in Study Area Vicinity
12-44	Bank Swallow Distribution and Habitat in Study Area Vicinity
12-45	Yellow-Headed Blackbird Distribution and Habitat in Study Area Vicinity
12-46	Riparian Brush Rabbit Distribution and Habitat in Study Area Vicinity
12-47	Riparian Woodrat Distribution and Habitat in Study Area Vicinity
12-48	Salt Marsh Harvest Mouse Distribution and Habitat in Study Area Vicinity
12-49	San Joaquin Kit Fox Distribution and Habitat in Study Area Vicinity
12-50	Suisun Shrew Distribution and Habitat in Study Area Vicinity
12-51	Special-Status Bat Species Occurrences in Study Area Vicinity
12-52	San Joaquin Pocket Mouse Distribution and Habitat in Study Area Vicinity
12-53	American Badger Distribution and Habitat in Study Area Vicinity
12-54	Vernal Pool Complex Botany Species Distribution and Habitat in Study Area Vicinity
12-55	Alkali Seasonal Wetland Botany Species Distribution and Habitat in Study Area Vicinity
12-56	Grassland Botany Species Distribution and Habitat in Study Area Vicinity
12-57	Valley/Foothill Riparian Botany Species Distribution and Habitat in Study Area Vicinity
12-58	Tidal Wetland Botany Species Distribution and Habitat in Study Area Vicinity
12-59	Inland Dune Scrub Botany Species Distribution and Habitat in Study Area Vicinity
12-60	Nontidal Wetland Botany Species Distribution and Habitat in Study Area Vicinity
13-1	Statutory Delta and Plan Area
13-2	Generalized Land Use Designations within the Plan Area
14-1	Overview of Agricultural Type
14-2	Lands under Williamson Act Contracts
14-3	Important Farmland Overview
15-1	Recreation Facilities in the Plan Area
15-2	Recreation Facilities in the Upstream of the Delta Region
16-1	Steps in Analyzing Changes in Employment and Income as a Result of Constructing and Operating CM1
17-1	Key Observation Points and Proposed Photosimulations
17-2	Key Observation Point 1
17-3	Key Observation Point 3

17-4	Key Observation Point 4
17-5	Key Observation Point 12
17-6	Key Observation Point 16
17-7	Key Observation Point 18
17-8	Key Observation Point 19
17-9	Key Observation Point 20
17-10	Key Observation Point 26
17-11	Key Observation Point 30
17-12	Key Observation Point 38
17-13	Key Observation Point 41
17-14	Key Observation Point 42
17-15	Key Observation Point 49
17-16	Key Observation Point 54
17-17	Key Observation Point 55
17-18	Key Observation Point 56
17-19	Key Observation Point 62
17-20	Key Observation Point 65
17-21	Key Observation Point 68
17-22	Key Observation Point 69
17-23	Key Observation Point 72
17-24	Key Observation Point 73
17-25	Key Observation Point 74
17-26	Key Observation Point 76
17-27	Key Observation Point 84
17-28	Key Observation Point 86
17-29	Key Observation Point 86
17-30	Key Observation Point 89
17-31	Key Observation Point 98
17-32	Key Observation Point 98

17-33	Key Observation Point 101
17-34	Key Observation Point 103
17-35	Key Observation Point 106
17-36	Key Observation Point 107
17-37	Key Observation Point 115
17-38	Key Observation Point 119
17-39	Key Observation Point 120
17-40	Key Observation Point 124
17-41	Key Observation Point 136
17-42	Key Observation Point 140
17-43	Key Observation Point 141
17-44	Key Observation Point 152
17-45	Key Observation Point 154
17-46	Key Observation Point 158
17-47	Key Observation Point 162
17-48	Key Observation Point 165
17-49	Key Observation Point 168
17-50	Key Observation Point 173
17-51	Key Observation Point 174
17-52	Key Observation Point 176
17-53	Key Observation Point 177
17-54	Key Observation Point 179
17-55	Key Observation Point 180
17-56	Key Observation Point 181
17-57	Key Observation Point 183
17-58	Key Observation Point 184
17-59	Key Observation Point 189
17-60	Key Observation Point 192
17-61	Key Observation Point 197

17-62	Key Observation Point 198
17-63	Key Observation Point 208
17-64	Key Observation Point 209
17-65	Key Observation Point 212
17-66	Key Observation Point 217
17-67	Key Observation Point 221
17-68	Key Observation Point 222
17-69	Key Observation Point 228
17-70	Key Observation Point 235
17-71	Key Observation Point 236
17-72	Key Observation Point 241
17-73	Key Observation Point 254
17-74	Key Observation Point 255
17-75	Key Observation Point 258
17-76a	Existing and Simulated Views of Intake 3 East from SR 160 in January 2012 (Alternatives 1A, 1B, 2A, 2B, 6A, 6B, 7, and 8)
17-76b	Existing and Simulated Views of Intake 3 East from SR 160 in July 2013 (Alternatives 1A, 1B, 2A, 2B, 6A, 6B, 7, and 8)
17-77	Existing and Simulated Views of Intake 2 West from SR 160 (Alternatives 1C, 2C, and 6C)
17-78	Existing and Simulated Views of Intake 4 East from SR 160 (Alternatives 1A, 1B, 2A, 2B, 6A, and 6B)
17-79	Existing and Simulated Views of Intermediate Forebay from SR 160 (Alternatives 1A, 2A, 3, 5, 6A, 7, and 8)
17-80	Existing and Simulated Views of Launch/Retrieval Shaft Site near Isleton Road (Alternatives 1A, 2A, 3, 5, 6A, 7, and 8)
17-81	Existing and Simulated Views of the East Canal from I-5 at Lambert Road (Alternatives 1B, 2B, and 6B)
17-82	Existing and Simulated Views of the East Canal from SR 12 (Alternatives 1B, 2B, and 6B)
17-83	Existing and Simulated Views of the East Canal from SR 4 (Alternatives 1B, 2B, and 6B)
17-84	Existing and Simulated Views of the West Canal from SR 4 (Alternatives 1C, 2C, and 6C)
17-85	Existing and Simulated Views of Intake 2 East from South River Road (Alternative 4)

17-86a	Existing and Simulated Views of Intake 3 East from SR 160 in January 2012 (Alternative 4)
17-86b	Existing and Simulated Views of Intake 3 East from SR 160 in July 2013 (Alternative 4)
17-87	Existing and Simulated Views of Intermediate Forebay from Twin Cities Road (Alternative 4)
17-88	Existing and Simulated Views of the Delta Cross Canal Intake at Walnut Grove (Alternative 9)
17-89	Existing and Simulated Views of the Operable Barrier Site on Threemile Slough at Brannan Island State Recreation Area (Alternative 9)
17-90	Existing and Simulated Views of the Channel Modification at Hammer Island (Alternative 9)
19-1	Transportation Facilities in the Plan Area Vicinity
19-2a	Roadway Segments
19-2b	Roadway Segments
19-2c	Roadway Segments
19-3a	Level of Service Effects on Roadway Study Segments
19-3b	Level of Service Effects on Roadway Study Segments
19-4a	Pavement Condition Effects on Roadway Study Segments
19-4b	Pavement Condition Effects on Roadway Study Segments
20-1	Law Enforcement Facilities and Hospitals
20-2	Fire Protection Entities and Facilities
20-3	School Districts
20-4	Solid Waste Facilities
20-5	Conflict with the Hood Fire Station Associated with the Pipeline/Tunnel Alignment (Alternatives 1A, 2A, 6A, 7, and 8)
20-6	Conflict with the Hood Fire Station Associated with the East Alignment (Alternatives 1B, 2B, and 6B)
21-1	2010 SWP Power Resources
21-2	SWP Forecast 2020 Power Resources
21-3	CALSIM-II—Simulated Monthly North Delta Pumping Flow for Alternative 1A—Water Years 1922–2003
21-4	Relationship between Monthly North Delta Pumping Flow and Monthly Pumping Energy for Alternative 1A—Water Years 1922–2003
22-1	Air Basins in the Plan Area
22-2	The Greenhouse Gas Effect

22-3	DWR Total Emissions with Alternative 1A, 1990–2050
22-4	DWR Total Emissions with Alternative 1A and REPP, 1990–2050
22-5	DWR Total Emissions with Alternative 1B, 1990–2050
22-6	DWR Total Emissions with Alternative 1B and REPP, 1990–2050
22-7	DWR Total Emissions with Alternative 1C, 1990–2050
22-8	DWR Total Emissions with Alternative 1C and REPP, 1990–2050
22-9	DWR Total Emissions with Alternative 2A, 1990–2050
22-10	DWR Total Emissions with Alternative 2A and REPP, 1990–2050
22-11	DWR Total Emissions with Alternative 2B, 1990–2050
22-12	DWR Total Emissions with Alternative 2B and REPP, 1990–2050
22-13	DWR Total Emissions with Alternative 2C, 1990–2050
22-14	DWR Total Emissions with Alternative 2C and REPP, 1990–2050
22-15	DWR Total Emissions with Alternative 3, 1990–2050
22-16	DWR Total Emissions with Alternative 3 and REPP, 1990–2050
22-17	DWR Total Emissions with Alternative 4, 1990–2050
22-18	DWR Total Emissions with Alternative 4 and REPP, 1990–2050
22-19	DWR Total Emissions with Alternative 5, 1990–2050
23-1	FRA and FTA Allowable Increase in Cumulative Noise Level
23-2	Guidelines for Evaluating Compatibility of Land Uses
24-1	Oil and Gas Processing Facilities
24-2	Designated Hazardous Material Routes and Railroads
24-3	Oil and Gas Pipelines
24-4	Sites of Concern
24-5	Oil and Gas Wells
24-6	Electrical Transmission Lines
24-7	Construction Fueling Stations
24-8	Sensitive Receptors
24-9	Airports and Private Airstrips
24-10	Fire Hazard Severity Zones

25-1	Sediment Removal Process at Intakes
25-2	Population Density and Transmission Lines
25-3	Population Density and Aquatic and Wetland Communities
26-1	Active Mines in the Plan Area
26-2	Oil and Gas Fields in the Plan Area Vicinity
27-1	North American Land Mammal Ages
27-2	Surface Exposure of Geologic Units with Potential to Contain Fossils
27-3	Depth to Top of Pleistocene Deposits
28-1	Minority Populations in the Plan Area
28-2	Low-Income Populations in the Plan Area
29-1	Potential Changes in Inundation at Mean Sea Level with High Tide as a Consequence of 55-Inch Sea Level Rise
29-2	Modeling Approach for Effects of Sea Level Rise in the Delta
30-1	Water Supply and Use Among the Hydrologic Regions
30-2	Changes in Construction Employment in Solano, Yolo, Sacramento, and San Joaquin Counties (1990–2010)
30-3	Summary of Changes in SWP (M&I and Agriculture) Deliveries by Alternative
30-4	Summary of Changes in CVP Municipal and Industrial Deliveries by Alternative
30-5	Projected Percentage Change in SWP Deliveries (M&I and Agriculture) by Hydrologic Region Compared to the No Action Alternative
30-6	Projected Percentage Change in CVP M&I Deliveries by Hydrologic Region Compared to the No Action Alternative
30-7	Statewide Population Compared to Applied Water Use (1998–2005)

Acronyms and Abbreviations

°F	degrees Fahrenheit
µg	micrograms
µg/g	micrograms per gram
µg/L	micrograms per liter
µg/m ³	micrograms per cubic meter
µmhos/cm	micromhos/cm
µmol/L	micromoles per liter
µS/cm	microSiemens per centimeter
1978 Delta Plan	State Water Board adopted the Sacramento–San Joaquin Delta Basin and San Francisco Bay Basin plans, which included water quality standards. These plans formed the basis for the WQCP for the Delta and Suisun Marsh adopted in 1978
1983 CDFG Agreement	Agreement Concerning the Operation of the Oroville Division of the State Water Project for Management of Fish and Wildlife
1993 NMFS BiOp	NMFS Sacramento River Winter-run Chinook Salmon Biological Opinion
1995 Bay-Delta Plan	San Francisco Bay/Sacramento–San Joaquin Delta Water Quality Control Plan
103	Lodi Airport
2009 Plan	Northern Sacramento Valley Planning Area 2009 Triennial Air Quality Attainment Plan
AAs	Administering Agencies
AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
AB 1717	Suisun Marsh Preservation Act of 1977
AB 1807	Tanner Air Toxics Act
AB 2588	Air Toxics Hot Spots Information and Assessment Act of 1987
AB 32	Assembly Bill 32, the California Global Warming Solutions Act of 2006
AB 433	Marine Invasive Species Act of 2003
ABAG	Association of Bay Area Government
ACE	Altamont Commuter Express
ACEC	Area of Critical Environmental Concern
ACHP	Advisory Council on Historic Preservation
Act	Delta Protection Act of 1992
ACWD	Alameda County Water District
af	acre-feet
AF/yr	acre-feet per year
AFB	Air Force Base
Ag Vision	California Agricultural Vision
AGR	Agricultural Supply
AIP	Alternative Intake Project

ALSP	Agricultural Lands Stewardship Plan
ALUC	Airport Land Use Commission
AMBAG	Association of Monterey Bay Area Governments
AMMs	avoidance and minimization measures
AMS	Agriculture Marketing Service
AOA	Air Operations Area
AP	Alquist-Priolo
AQMD	Air Quality Management District
AQMP	Air Quality Mitigation Plan
AQUA	Aquaculture
AR	atmospheric river
ARB	California Air Resources Board
ARPA	Archaeological Resources Protection Act
ASL	anticipated service life
AST	aboveground storage tanks
ASTM	American Society for Testing and Materials
ATS	Active Treatment Systems
AVEK	Antelope Valley – East Kern Water Agency
BA	Balancing Authorities
BAAQMD	Bay Area Air Quality Management District
BAARI	Bay Area Aquatic Resource Inventory
BANC	Balancing Authority of Northern California
Banks pumping plant	Harvey O. Banks Pumping Plant
BART	Bay Area Rapid Transit District
Basin Plan	Central Valley Regional Water Quality Control Board’s Water Quality Control Plan for the Sacramento and San Joaquin River Basins
Bay	San Francisco Bay
Bay Area	San Francisco Bay Area
Bay Plan	San Francisco Bay Plan
Bay-Delta	San Francisco Bay/Sacramento–San Joaquin Delta
Bay-Delta Plan, Bay-Delta WQCP	San Francisco Bay/Sacramento–San Joaquin Delta Estuary Water Quality Control Plan
BCC	birds of conservation concern
BCDC	Bay Conservation and Development Commission
BDAT	Bay-Delta and Tributaries Project
BDCP	Bay Delta Conservation Plan
BECT	BDCP Environmental Coordination Team
BETP	built environment treatment plan
bgs	below ground surface
BIA	Bureau of Indian Affairs
BIOL	Preservation of Biological Habitats of Special Significance
BiOp	Biological Opinion
BLM	biotic ligand model

BLM	Bureau of Land Management
Blueprint Report	The Great California Delta Trail Blueprint Report for Contra Costa and Solano Counties
BMP	best management practices
BMX	bicycle motocross
BNSF	Burlington Northern Santa Fe
BNSF Railway	Burlington Northern Santa Fe Railway
BP	before present
BPBG	baseline plus background growth
BPBGP	Baseline Plus Background Growth Plus Project
BPS	best performance standards
C&D	Construction and Demolition
C83	Byron Airport
CA	California Aqueduct
CAA	Clean Air Act
CAAA	Clean Air Act amendments
CAAQS	California ambient air quality standards
CAISMP	California Aquatic Invasive Species Management Plan
CAISO	California Independent System Operator
CalARP	California Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
CALFED	CALFED Bay-Delta Program
CALFED ROD	CALFED Bay-Delta Program, Programmatic Record of Decision
CAL FIRE	California Department of Forestry and Fire Protection
Cal-OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CALVEG	U.S. Forest Service's California Vegetation
CAP	Climate Action Plan
CARB	California Air Resources Board
Carl Moyer Program	Carl Moyer Memorial Air Quality Standards Attainment Program
CASGEM	California Statewide Groundwater Elevation Monitoring
CAT	Climate Action Team
CBC	California Building Code
CCAA	California Clean Air Act
CCAs	Community Choice Aggregations
CCF	Clifton Court Forebay
CCP	Comprehensive Conservation Plan
CCR	California Code of Regulations
CCT	Central California Traction Company
CCWD	Contra Costa Water District
CDBW	California Department of Boating and Waterways

CDE	California Department of Education
CDEC	California Data Exchange Center
CDFA	California Department of Food and Agriculture
CDFG	Department of Fish and Game
CDFW	California Department of Fish and Wildlife, formerly the California Department of Fish and Game (before January 1, 2013)
CDO	Cease and Desist Order, Water Rights Order No. 2006-0006
CDPR	California Department of Pesticide Regulation
CDPs	Census-designated places
CDWA	Central Delta Water Agency
CEC	California Energy Commission
CEHC	California Essential Habitat Connectivity
Central Valley Water Board	Central Valley Regional Water Quality Control Board
CEQ	Council of Environmental Quality
CEQA	California Environmental Quality Act
CER	Conceptual Engineering Reports
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CF	conversion factor
CFL	compact florescent lamps
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGP	Construction General Permit
CGS	California Geological Survey, formerly California Department of Mines and Geology
CH	County Highway
CH ₄	methane
CHRIS	California Historical Resources Information System
CHS	concrete hydraulic structures
CHSRA	California High Speed Rail Authority
CHTR	Collection Handling, transport, and release
CIDH	cast-in-drilled-hole
CIP	Capital Improvement Program
CIP-	cast-in-place-
CIR	Cortina Indian Rancheria
CIWMB	California Integrated Waste Management Board
cKOPs	candidate key observation points
Clean Air Act	Federal Clean Air Act
CLUP	Comprehensive Land Use Plan
CM	Conservation Measure
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNG	compressed natural gas
CNPS	California Native Plant Society

CNRA	California Natural Resource Agency
CO	carbon monoxide
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
COA	Coordinated Operations Agreement
CO-CAT	Coastal and Ocean Working Group of the California Climate Action Team
COG	Council of Governments
COLD	Cold Freshwater Habitat
COMM	Commercial and Sport Fishing
CPA	conservation planning area
CPT	Cone Penetration Test
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CRSB	Coast Ranges—Sierran Block
CSD	Community Service District
CSMP	Construction Site Monitoring Program
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CUWA	California Urban Water Agencies
CVFMP	Central Valley Flood Management Program
CVFPB	Central Valley Flood Protection Board
CVFPP	Central Valley Flood Protection Plan
CVHM-D	Central Valley Hydrologic Model-Delta
CVJV	Central Valley Joint Venture
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CVWD	Coachella Valley Water District
CWA	Clean Water Act
CWEMF	California Water and Environmental Modeling Forum
CWHR	California Wildlife Habitat Relationships
CWT	coded wire tag
CZ	Conservation Zone
D/DBP	Disinfection Byproducts
D-1485	State Water Resources Control Board water rights decision
D-1641	1995 Bay-Delta WQCP, and the adoption of State Water Resources Control Board Decision 1641
D-893	SWRCB Decision 893
DAT	Data Assessment Team
dB	decibel
dBA	A-weighted decibel
DBCP	dibromochloropropane
DBEEP	Delta-Bay Enhanced Enforcement Program

DBPs	disinfection by-products
DBW	California Department of Boating and Waterways
DCC	Delta Cross Channel
DDT	dichlorodiphenyltrichloroethane
Delta	Sacramento–San Joaquin Delta
Delta Protection Act	Johnston-Baker-Andal-Boatwright Delta Protection Act of 1992
Delta Reform Act	Sacramento–San Joaquin Delta Reform Act of 2009
DES	Diethylstilbestrol
DHCCP	Delta Habitat Conservation and Conveyance Program
DMC	Delta Mendota Canal
DMD	Dredge Material Disposal
DNL	Daytime-Nighttime Noise Level
DO	dissolved oxygen
DOC	dissolved organic carbon
DOC	California Department of Conservation
DOE	U.S. Department of Energy
DOF	California Department of Finance
DOGGR	California Department of Conservation Division of Oil, Gas, and Geothermal Resources
DOI	U.S. Department of the Interior
DOT	Department of Transportation
DPC	Delta Protection Commission
DPFs	diesel particulate filters
DPH	California Department of Public Health
DPM	diesel particulate matter
DPR	California Department of Parks and Recreation
DPR property	Delta Meadows River Park
DPS	distinct population segment
DRERIP	Delta Regional Ecosystem Restoration Implementation Plan
DRMS	Delta Risk Management Strategy
dS	deciSiemens
dS/m	deciSiemens per meter
DSC	Delta Stewardship Council
DSM2	Delta Simulation Model 2
DSOD	Division of Safety of Dams
DSRAM	Delta Smelt Risk Assessment Matrix
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
DWSC	Stockton Deep Water Ship Channel
DWSE	design water surface elevations
E/I	export/import
EACCS	East Alameda County Conservation Strategy
EBC	existing biological conditions

EBMUD	East Bay Municipal Utility District
EBRPD	East Bay Regional Park District
EC	electrical conductivity
ECAP	East County Area Plan
ECAs	Essential Connectivity Areas
ECCCCHCP/NCCP	East Contra Costa County Habitat Conservation Plan / Natural Community Conservation Plan
ECe	Soil Salinity
E-Clay	Corcoran Clay
ECw	Water Salinity
EDC	endocrine disrupting compounds
EDD	California Employment Development Department
EFH	essential fish habitat
EIR	environmental impact report
EIS	environmental impact statement
ELPH	Equivalent Level of Public Health Protection
ELT	Early Long Term
EM	Engineer Manual
EMF	electromagnetic field
EMT	emergency medical technicians
ENSO	El Niño Southern Oscillation
Environmental Checklist	California Environmental Quality Act Guidelines
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EPB	earth pressure balance
EPCRA	Emergency Planning and Community Right-to-Know Act
ERIP	Emissions Reduction Incentive Program
ERP	Environmental Restoration Program
ERP DRERIP	Ecosystem Restoration Program Delta Regional Ecosystem Restoration Implementation Plan
ERPP	Ecosystem Restoration Program Plan
ESA	Environmental Site Assessment
ESO	evaluation starting operation
ESP	Economic Sustainability Plan
ESP	energy service provider
EST	estuarine habitat
EST	eastside tributaries
EWA	Environmental Water Account
Exchange Contractors	San Joaquin River water rights holders
Export Service Areas	State Water Project and Central Valley Water Project Export Service Areas
F72	Franklin Field
FAA	Federal Aviation Administration
FAV	floating aquatic vegetation

FCCL	Fish Conservation and Culture Laboratory
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FFTT	Fish Facilities Technical Team
FHWA	Federal Highway Administration
FIFRA	federal Insecticide, Fungicide, and Rodenticide Act
FIRMs	Flood Insurance Rate Maps
FMMP	Farmland Mapping and Monitoring Program
FMP	Farm Process
FMS	Flow Management Standard
FMWT	fall midwater trawl
FPA	Federal Power Act
FPCP	Fire Prevention and Control Plan
FPD	fire protection districts
fpm	feet per minute
FPPA	Federal Farmland Protection Policy Act
FR	Federal Register
FRA	Federal Railroad Administration
FRSH	Freshwater Replenishment
FRWA	Freeport Regional Water Authority
FRWP	Freeport Regional Water Project
ft	foot, feet
ft/sec	feet per second
FTA	Federal Transit Administration
FWCA	Fish and Wildlife Coordination Act
FY	Fiscal Year
g	acceleration due to gravity, 32.2 ft./sec ²
GAC	granular activated carbon
GAMA	Groundwater Ambient Monitoring and Assessment Program
General Permit	General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, State Water Board Order No. 2009-0009-DWQ
GHB	General Head Boundaries
GHG	greenhouse gas
GIS	geographic information system
GPS	global positioning system
GW	gigawatt
GWMP	groundwater management plan
GWP	global warming potential
GWR	groundwater recharge
GWR	gross vehicle weight rating
gypsum	calcium sulfate

HAAs	haloacetic acids
HABS	Historic American Building Surveys
HAER	Historic American Engineering Records
HALS	Historic American Landscape Surveys
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HCP/NCCP	Habitat Conservation Plan/Natural Community Conservation Plan
HDLEVIP	Heavy-Duty Low-Emission Vehicle Incentive Programs
HFC	hydrofluorocarbons
Hg/kg	mercury per kilogram
HI	Hazard Index
HMMP	hazardous materials management plan
HMTA	Hazardous Materials Transportation Act
HOS	High outflow scenario
HOTT	Habitat and Operations Technical Team
HOV	high occupancy vehicle
hp	horsepower
HQ	hazard quotients
HRA	Health Risk Assessment
HRPTT	Habitat Restoration Program Technical Team
HSI	habitat suitability index
HSR	Historic Structures Reports
HUs	Habitat Units
I-	Interstate-
IAV	invasive aquatic vegetation
ID	inside diameter
IEP	Interagency Ecological Program
IEPR	Integrated Energy Policy Report
IES	Illuminating Engineering Society
IIPP	Injury and Illness Prevention Program
IMPLAN	Impact Analysis for Planning
in/sec PPV	inches per second PPV
IND	Industrial Service Supply
Intertie	California Aqueduct/Delta-Mendota Canal Intertie
IOS	Interactive Object-Oriented Simulation Model
IOU	investor-owned utilities
IPCC	Intergovernmental Panel on Climate Change
IPM	integrated pest management
IPO	Interim Plan of Operation
IRI	International Roughness Index
IRWD	Irvine Ranch Water District
IRWM	integrated regional water management

ISA	Initial Site Assessment
ISB	Independent Science Board
ISD	Ironhouse Sanitary District
ITPs	incidental take permits
IWMA	Integrated Waste Management Act
IWMP	integrated waste management plan
IWOFF	Integrated Water Operations and Fisheries Forum
Jones Pumping Plant	C. W. "Bill" Jones Pumping Plant
JPA	Joint Powers Authority
JPOD	Joint Point of Diversion
ka	thousand years
KCWA	Kern County Water Agency
KEDU	University Airport
km	kilometers
KOP	key observation point
kV	kilovolt
KVCB	Nut Tree Airport
kW	kilowatt
Kw	soil erodibility factor
kWh	kilowatt hour
kwWh/af	kilowatt hours per acre-foot
LADWP	Los Angeles Department of Water and Power
LAFCO	Local Agency Formation Commission
LCFS	low carbon fuel standard
LED	Light Emitting Diode
LEDPA	Least Environmentally Damaging Practicable Alternative
LEL	lower explosive limit
LEP	linear extensibility percentage
LESA	Land Evaluation and Site Assessment
LFC	Low-flow channel
LID	low impact development
LiDAR	Light Detection and Ranging
LLT	late long-term
LMP	Land Management Plan
LNG	liquefied natural gas
LOS	level of service
LOS	Low outflow scenario
LPG	liquefied petroleum gas
LRA	Local Regulatory Authority
LRFD	load and resistance factor
LRMP	Land and Resource Management Plan

LSE	Load Serving Entity
LT	long-term
LUCP	Land Use Compatibility Plan
LURMP	Land Use and Resources Management Plan
LWRM	Limited Warm Freshwater Habitat
M	Moment Magnitude
M-	Marine Highway
M&I	municipal and industrial
MAF	million acre-feet
MBTA	Migratory Bird Treaty Act
MCE	Maximum Considered Earthquake
Mcf	1,000 cubic feet
MCL	maximum contaminant level
MCLG	maximum contaminant level goal
MCY	million cubic yards
MDE	maximum design earthquake
MEI	maximum exposed individual
Mercury Basin Plan Amendments	Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Methylmercury and Total Mercury in the Sacramento–San Joaquin Delta Estuary
mg Hg/kg	milligrams mercury per kilogram
mg/L	milligrams per liter
mg/m ³	milligrams per cubic meter
MGD	million gallons per day
MHHW	mean higher high water
MIAD	Mormon Island Auxiliary Dam
MID	Modesto Irrigation District
MIGR	Migration of Aquatic Organisms
Mirant	Mirant Delta LLC
M _L	Richter Magnitude
MLD	most likely descendant
MLLW	mean lower low water
mm	millimeter
MMI	Modified Mercalli Intensity
MMPA	Marine Mammal Protection Act
MOA	Memorandum of Agreement
MPN/100 ml	most probable number per 100 milliliters
MPO	Metropolitan planning organization
MRZ	Mineral Resource Zone
MS	Municipal Separate
mS/cm	milliSiemens/cm
MS4	Municipal Separate Storm Sewer System
MSA	Magnuson-Stevens Fishery Conservation and Management Act

MSCS	Multi-Species Conservation Strategy
MSDS	manufacturer of material safety data sheets
MSHA	Mine Safety and Health Administration
msl	mean sea level
MSP	Memorial State Park
MSW	municipal solid waste
MTC	Metropolitan Transportation Commission
MUN	Municipal and Domestic Supply
MVA	megavolt ampere
MW	megawatt
MWDSC	Metropolitan Water District of Southern California
MWh	megawatt hours
MWQI	Municipal Water Quality Investigations
N	nitrogen
N ₂ O	nitrous oxide
NAA	No Action Alternative
NAAQS	national ambient air quality standards
NAC	noise abatement criteria
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NAIP	National Agriculture Imagery Program
NALs	Numeric Action Levels
NAS	National Academy of Sciences
NAV	Navigation
NAVD 88	North American Vertical Datum of 1988
NAWMP	North American Waterfowl Management Plan
NAWS	National Agriculture Worker Survey
NBA	North Bay Aqueduct
NCCP	Natural Community Conservation Plan
NCCPA	Natural Community Conservation Planning Act
NDEA	N-Nitrosodiethylamine
NDMA	N-Nitrosodimethylamine
NDPA	N-Nitrosodi-n-propylamine
NDWA	North Delta Water Agency
NELs	Numeric Effluent Limitations
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
ng/g	nanograms per gram
ng/L	nanograms per liter
NGA	Next Generation Attenuation
NGVD29	National Geodetic Vertical Datum of 1929

NH ₃	un-ionized ammonia
NH ₄ ⁺	ammonium ion
NHPA	National Historic Preservation Act
NHS	National Highway System
nm	nanometers
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO ₂	nitrogen dioxide
NO ₃ ⁻	nitrate-N
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOD	North of Delta
NOD	Notice of Decision
NOI	Notice of Intent
NOP	Notice of Preparation
North Bay	North San Francisco Bay
NO _x	nitrogen oxides
NPBs	nonphysical barriers
NPDES	National Pollutant Discharge Elimination System
NPDES Municipal Permit	Sacramento Areawide National Pollutant Discharge Elimination System Municipal Stormwater Permit
NPPA	Native Plant Protection Act of 1977
NPS	nonpoint source
NRA	National Recreation Area
NRC	National Research Council
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSJCGBA	Northeastern San Joaquin County Groundwater Banking Authority
NT	near-term
NTR	National Toxics Rule
NTU	nephelometric turbidity units
NWR	National Wildlife Refuge
O88	Rio Vista Municipal Airport
OAL	Office of Administrative Law
OBAN	Oncorhynchus Bayesian Analysis
OBE	operating basis earthquake
OCAP	Operations Criteria and Plan
OCI	Overall Condition Index
OE/AAA	Obstruction Evaluation/Airport Airspace Analysis
OEHHA	Office of Environmental Health Hazard Assessment
OFF	Operations and Fishery Forum
OHV	off-highway vehicle
OMR	Old and Middle River

OMR flow	upstream flows on the Old and Middle Rivers
ONC	Office of Noise Control
operations	Detailed criteria that will govern the operations of the SWP and CVP conveyance system across a range of hydrological conditions
OPLMA	Omnibus Public Land Management Act of 2009 (H.R. 146)
OPR	Office of Planning and Research
OPR Advisory	A technical advisory entitled CEQA and Climate Change: Addressing Climate Change through CEQA
OPSO	Office of Pipeline Safety Operations
ortho-P	ortho-phosphorus
OSHA	Occupational Safety and Health Administration
OSHPD	Office of Statewide Health Planning and Development
P	phosphorus
PA	programmatic agreement
PAHs	polycyclic aromatic hydrocarbons
PAL	Provisionally Accredited Levee
Pb	lead
PBDEs	polybrominated diphenyl ethers
PCB	polychlorinated biphenyls
PCC	Portland cement concrete
PCE	perchloroethylene
PCI	Pavement Condition Index
PCS	Pavement Condition Survey
PCTL	Precast concrete tunnel lining
PCWA	Placer County Water Agency
PERP	Portable Equipment Registration Program
PFC	perfluorinated carbons
PG&E	Pacific Gas and Electric Company
pg/L	picograms per liter
PGA	peak ground acceleration
phosphate	soluble reactive phosphorous
Plan	Bay Delta Conservation Plan
Plan Area	BDCP Plan Area
PM	particulate matter
PM10	PM 10 microns in diameter or less
PM2.5	PM 2.5 microns in diameter or less
POC	particulate organic carbon
POD	pelagic organism decline
Porter-Cologne Act	Porter-Cologne Water Pollution Control Act
POTWs	publicly owned treatment works
POW	Hydropower Generation
ppb	parts per billion
PPCP	pharmaceutical and personal care products

PPIC	Public Policy Institute of California
ppm	parts per million
ppt	parts per trillion
ppt	parts per thousand
PPV	peak particle velocity
PQI	Pavement Quality Index
PRC	Public Resources Code
PRDs	Permit Registration Documents
Predator Control	localized reduction of predatory fishes
Primary Zone Study	Sacramento San Joaquin Delta Primary Zone Study
PRMMP	Paleontological Resources Monitoring and Mitigation Plan
PRO	Industrial Process Supply
Protection Plan	Suisun Marsh Protection Plan
Protocol	Caltrans Traffic Noise Analysis Protocol
PRS	paleontological resources specialist
PSHA	probabilistic seismic hazard analysis
PSR	project study report
PTM	particle tracking model
Public Law 108-361	Water Supply, Reliability, and Environmental Improvement Act of 2004
Public Law 84-99	Emergency Flood Control Fund Act
QA/QC	quality assurance/quality control
Qo	older alluvium
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
Qy	younger alluvium
RA	Resource Adequacy
RARE	Rare, Threatened, or Endangered Species
RBDD	Red Bluff Diversion Dam
RCRA	Resource Conservation and Recovery Act
REC-1	Water Contact Recreation
REC-2	Non-Contact Water Recreation
Reclamation	Bureau of Reclamation
Reclamation Board	California Reclamation Board
Reform Act	Sacramento–San Joaquin Delta Reform Act
Regional Water Board	Regional Water Quality Control Board
REL	reference exposure level
Reporting Rule	Greenhouse Gas Reporting Rule
REPP	Renewable Energy Procurement Plan
Resource Management Plan	Land Use and Resource Management Plan
RHA	Rivers and Harbors Act of 1899
Rio Vista ALUCP	Rio Vista Airport Land Use Compatibility Plan
RM	River Mile

RMP	Resource Management Plan
RMP	Risk Management Plan
RMP	Regional Monitoring Program
RMPP	Risk Management and Prevention Program
RMS	root mean square
ROA	Restoration Opportunity Area
ROD	Record of Decision
ROD 2000	CALFED Bay Delta Program Record of Decision
ROG	Reactive organic gases
ROW	right-of way
RPA	reasonable and prudent alternative
RPS	Renewable Portfolio Standard
RSPA	Research and Special Programs Administration
RTM	reusable tunnel material
RUSLE	Revised Universal Soil Loss Equation
RV	recreational vehicle
RWCF	Regional Wastewater Control Facility
RWQCB	Regional Water Quality Control Board
S_a	second spectral acceleration
SAC	Sacramento Executive Airport
SAC	Sacramento River
SACOG	Sacramento Area Council of Governments
Sacramento International CLUP	Sacramento International Airport Comprehensive Land Use Plan
SAFCA	Sacramento Area Flood Control Agency
SAL	Inland Saline Water Habitat
San Francisco Bay Water Board	San Francisco Bay Regional Water Quality Control Board
San Joaquin ALUCP	San Joaquin County Airport Land Use Compatibility Plan
SANDAG	San Diego Area Governments
SAP	sampling and analysis plan
SARA	Superfund Amendments and Reauthorization Act
SAV	submerged aquatic vegetation
SB	Senate Bill
SB 1981	Nejedly-Bagley-Z'berg Suisun Marsh Preservation Act of 1974
SBA	South Bay Aqueduct
SBX7-6	California Statewide Groundwater Elevation Monitoring Program
SCAG	Southern California Association of Governments
SCC	State Coastal Conservancy
SCK	Stockton Municipal Airport
SCM	supplementary cementitious materials
SCT	South County Transit
SCVWD	Santa Clara Valley Water District

SCWA	Solano County Water Agency
SD	Structure Design
SDC	Seismic Design Criteria
SDIP	South Delta Improvements Program
SDWA	Safe Drinking Water Act
SDWA	South Delta Water Agency
SDWSC	Stockton Deep Water Ship Channel
SECAT	Sacramento Emergency Clean Air Transportation
SEL	sound exposure level
Semitropic WSD	Semitropic Water Storage District
SF ₆	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFB CDC	San Francisco Bay Conservation and Development Commission
SFD	Stockton Fire Department
SFEI	San Francisco Estuary Institute
SFHA	Special Flood Hazard Areas
SFNA	Sacramento Federal Nonattainment Area
SHELL	Shellfish Harvesting
SHPO	State Historic Preservation Officer
SIC	Standard Industrial Classification
SIL	Significant Impact Level
SIP	Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California
SIP	state implementation plan
SJCMSHCP	San Joaquin County Multi-Species Habitat Conservation Plan and Open Space Plan
SJCOG	San Joaquin Council of Governments
SJR	San Joaquin River
SJRA	San Joaquin River Agreement
SJRRP	San Joaquin River Restoration Program
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SKT	Spring Kodiak Trawl
SL	standard length
SLC	State Lands Commission
SLDMWA	San Luis & Delta Mendota Water Authority
SLR	sea level rise
SM	Suisan Marsh Habitat Management, Preservation, and Restoration Plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act
SMARTS	Stormwater Multiple Application and Report Tracking System
SMF	Sacramento International Airport
SMGB	State Mining and Geology Board
SMMP	Selenium Monitoring and Management Plan

SMP	Suisun Marsh Plan
SMPA	Suisun Marsh Preservation Agreement
SMSCG	Suisun Marsh Salinity Control Gates
SMUD	Sacramento Municipal Utility District
SO ₂	sulfur dioxide
SOD	South of Delta
Solano County MSHCP	Solano County Multispecies Habitat Conservation Plan
Solis	California Senate Bill 115
South Bay	South San Francisco Bay
SPCCP	Spill Prevention, Containment, and Countermeasure Plan
Special Projects	Delta Levees Special Flood Control Projects
SPFC	State Plan of Flood Control
SPT	Standard Penetration Test
SPT blow-counts	Standard Penetration Test sampler penetration blow-counts
SPWN	Spawning, Reproduction, and/or Early Development
SR	State Route
SRA	shaded riverine aquatic
SRCD	Suisun Resource Conservation District
SRDWSC	Sacramento River Deep Water Ship Channel
SRP	soluble reactive phosphorous
SRWQM	Sacramento River Water Quality Model
SRWTP	Sacramento Regional Wastewater Treatment Plant
SSHCP	South Sacramento Habitat Conservation Plan
SSJCPL	Stockton-San Joaquin County Public Library
SSQP	Sacramento Stormwater Quality Partnership
SSURGO	Soil Survey Geographic
State CEQA Guidelines	State California Environmental Quality Act guidelines
State Plan of Flood Control	2012 Central Valley Flood Protection Plan
State Water Board	State Water Resources Control Board
Steering Committee	BDCP Steering Committee
Strategic Plan	Delta Vision Strategic Plan
SUU	U.S. Air Force owns and operates this private use airfield
SUVA	specific ultraviolet absorbance at a wavelength of 254 nm
SVAB	Sacramento Valley Air Basin
SVP	Society of Vertebrate Paleontology
SWANCC ruling	Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (121 S.Ct. 675,2001)
SWG	Smelt Working Group
SWIS	Solid Waste Information System
SWMPs	Storm Water Management Plans
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board

TACs	toxic air contaminants
TAF	thousand acre feet
Task Force	Delta Vision Blue Ribbon Task Force
TBM	tunnel boring machine
TBP	Temporary Barriers Project
TCD	temperature control device
TCDD	tetrachlorodibenzo-p-dioxin
TCE	trichloroethylene
TCM	traffic control measure
TCP	traditional cultural property
TCY	City of Tracy general aviation airport
TDR	transfer of development rights
TDS	total dissolved solids
TFCA	Transportation Fund for Clean Air
TFCF	Tracy Fish Collection Facility
the Marsh	Suisun Marsh
The Marshall Plan	State of California initiated several projects that coordinated water supply, flood control, and navigation benefits was proposed in 1920 by Colonel Marshall of the U.S. Geological Survey
THMs	trihalomethanes
TIP	Transportation Improvement Program
TMDL	Total Maximum Daily Load
TMP	traffic management plan
TN	total nitrogen
TNM	Traffic Noise Model Lookup program
TOC	total organic carbon
TP	total phosphorus
tpd	tons per day
Tracy Fish Facility	Tracy Fish Collection Facility
Trail	Great California Delta Trail System
Trail Blueprint	Delta Protection Commission adopted the Great California Delta Trail Blueprint Report for Contra Costa and Solano Counties
Travis LUCP	Travis Air Force Base Land Use Compatibility Plan
TSCA	Toxic Substances Control Act of 1976
TSS	total suspended solids
U.S.	United States
UBC	Uniform Building Code
UC	University of California
UC Davis	Davis, Woodland, and University of California, Davis
UCMP	University of California Museum of Paleontology
UMPS II	Uniform Minimum Protocols and Standards for Watercraft Interception Programs for Dreissenid Mussels in the Western United States
UPRR	Union Pacific Railroad

US	U.S. Highway
USACE	U.S. Army Corps of Engineers
USB	Urban Services Boundary
USC	United States Code
USDA	U.S. Department of Agriculture
USDA Forest Service	U.S. Department of Agriculture Forest Service
USFWS	U.S. Fish and Wildlife Service
USFWS BiOp	2008 Long-Term Operation Biological Opinion
USGS	U.S. Geological Survey
UST	underground storage tanks
UV	ultraviolet
UWMP	Urban Water Management Plan
VAMP	Vernalis Adaptive Management Plan
VdB	vibration decibels
VERA	Voluntary Emission Reduction Agreement
VFD	Variable frequency drive
VOC	volatile organic compounds
VRM	Visual Resource Management
WARM	Warm Freshwater Habitat
Water Contracts	Long-term Water Contracts
WBS	Water Budget Subarea
WDL	Water Data Library
WDR	waste discharge requirement
WEG	wind erodibility group
WER	water-effect ratio
Western	Western Area Power Administration
WGCEP	Working Group on California Earthquake Probabilities
WGNCEP	Working Group on Northern California Earthquake Potential
WILD	Wildlife Habitat
Williamson Act	California Land Conservation Act
WMO	World Meteorological Organization
WQCP	Water Quality Control Plan
WRD	Water Replenishment District of Southern California
WRDA	Water Resources Development Act of 2007
WREM	Water Resources Engineering Memorandum
WTP	Water Treatment Plant
WUA	Weighted Usable Area
YBFEP	Yolo Bypass Fishery Enhancement Plan
YNHP	Yolo Natural Heritage Program
YOY	young of year
YSAQMD	Yolo Solano Air Quality Management District

