
BIG CREEK Nos. 1 AND 2 (FERC PROJECT No. 2175)

VOLUME 1 – INITIAL STATEMENT, EXHIBITS A, B, C, D AND H (PUBLIC INFORMATION)

Book 1

Initial Statement

- Exhibit A: Description of the Project
- Exhibit B: Project Operation and Resource Utilization
- Exhibit C: Construction History
- Exhibit D: Statement of Costs and Financing
- Exhibit H: General Information

VOLUME 2 - EXHIBIT F (CRITICAL ENERGY INFRASTRUCTURE INFORMATION)

Book 2

- Exhibit F: Design Drawings

VOLUME 3 - EXHIBITS A AND G (NON-INTERNET PUBLIC INFORMATION)

Book 3

- Exhibit A: Figure A-1
- Exhibit G: Project Maps

BIG CREEK Nos. 2A, 8 AND EASTWOOD (FERC PROJECT No. 67)

VOLUME 1 – INITIAL STATEMENT, EXHIBITS A, B, C, D AND H (PUBLIC INFORMATION)

Book 1

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VOLUME 2 - EXHIBIT F (CRITICAL ENERGY INFRASTRUCTURE INFORMATION)

Book 2

- Exhibit F: Design Drawings

VOLUME 3 - EXHIBITS A AND G (NON-INTERNET PUBLIC INFORMATION)

Book 3

- Exhibit A: Figure A-1
- Exhibit G: Project Maps

BIG CREEK No. 3 (FERC PROJECT No. 120)

**VOLUME 1 – INITIAL STATEMENT, EXHIBITS A, B, C, D AND H
(PUBLIC INFORMATION)**

Book 1

Initial Statement

- Exhibit A: Description of the Project
- Exhibit B: Project Operation and Resource Utilization
- Exhibit C: Construction History
- Exhibit D: Statement of Costs and Financing
- Exhibit H: General Information

**VOLUME 2 - EXHIBIT F
(CRITICAL ENERGY INFRASTRUCTURE INFORMATION)**

Book 2

- Exhibit F: Design Drawings

**VOLUME 3 - EXHIBITS A AND G
(NON-INTERNET PUBLIC INFORMATION)**

Book 3

- Exhibit A: Figure A-1
- Exhibit G: Project Maps

**MAMMOTH POOL (FERC PROJECT No. 2085)
BIG CREEK Nos. 1 AND 2 (FERC PROJECT No. 2175)
BIG CREEK Nos. 2A, 8 AND EASTWOOD (FERC PROJECT No. 67)
BIG CREEK No. 3 (FERC PROJECT No. 120)**

**VOLUME 4 - AMENDED PRELIMINARY DRAFT ENVIRONMENTAL ASSESSMENT (APDEA)
SECTIONS 1 THROUGH 5
(PUBLIC INFORMATION)**

Book 4

INTRODUCTION

- 1.0 APPLICATION(S)
- 2.0 PURPOSE OF ACTION AND NEED FOR POWER
- 3.0 PROPOSED ACTION AND ALTERNATIVES
- 4.0 CONSULTATION
- 5.0 ENVIRONMENTAL ANALYSIS OF PROPOSED ACTION
 - 5.1 General Description of the Big Creek Basin
 - 5.2 Environmental Setting and Expected Environmental Impacts of the Proposed Action
 - 5.2.1 Water Use
 - 5.2.2 Water Quality
 - 5.2.3 Geomorphology
 - 5.2.4 Aquatic Resources
 - 5.2.5 Terrestrial Resources
 - 5.2.6 Riparian Resources
 - 5.2.7 Aesthetic Resources
 - 5.2.8 Cultural Resources
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 - 5.3 Cumulative Impacts Analysis

**VOLUME 4 - APDEA - SECTIONS 6 THROUGH 13
(PUBLIC INFORMATION)**

Book 5

- 6.0 ENVIRONMENTAL ANALYSIS OF OTHER ALTERNATIVES
- 7.0 DEVELOPMENT ANALYSIS
- 8.0 COMPREHENSIVE DEVELOPMENT AND PREFERRED ALTERNATIVE
- 9.0 RECOMMENDATIONS OF FISH AND WILDLIFE AGENCIES
- 10.0 CONSISTENCY WITH COMPREHENSIVE PLANS
- 11.0 FINDING OF NO SIGNIFICANT IMPACT
- 12.0 LITERATURE CITED
- 13.0 LIST OF PREPARERS

**VOLUME 4 - APDEA - SECTIONS 6 THROUGH 13
(PUBLIC INFORMATION)**

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Attachment B:	HydroBasin Technical Manual
Attachment C:	Limiting Factors
Attachment D:	WUA Tables
Attachment E:	Stranding Report
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**VOLUME 4 - APDEA - SUPPORTING DOCUMENTS (SD) A AND B
(PUBLIC INFORMATION)**

BOOK 6

SD-A Initial Information Package

SD-B Final Technical Study Plan Package

**VOLUME 4 - APDEA - SUPPORTING DOCUMENTS C
(PUBLIC INFORMATION)**

BOOK 7

SD-C 2002 Final Technical Study Report Package

INTRODUCTION

COMBINED AQUATICS

CAWG-1:	Characterize Stream and Reservoir Habitats
CAWG-2:	Geomorphology
CAWG-3:	Flow-Related Physical Habitat in Bypass Reaches

**VOLUME 4 - APDEA - SUPPORTING DOCUMENTS C (CONTINUED)
(PUBLIC INFORMATION)**

BOOK 8

SD-C 2002 Final Technical Study Report Package (continued)

COMBINED AQUATICS (CONTINUED)

CAWG-4:	Chemical Water Quality
CAWG-7:	Characterize Fish Populations

VOLUME 4 - APDEA - SUPPORTING DOCUMENTS C (CONTINUED)
(PUBLIC INFORMATION)

Book 9

SD-C 2002 Final Technical Study Report Package (continued)

COMBINED AQUATICS (CONTINUED)

CAWG-8: Amphibians and Reptiles

CAWG-11: Riparian

LAND MANAGEMENT

LAND-6: Traffic/Circulation Study

LAND-9: Visual Quality Assessment

LAND-11: Volcanic and Seismic Assessment

VOLUME 4 - APDEA - SUPPORTING DOCUMENTS C (CONTINUED)
(PUBLIC INFORMATION)

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SD-C 2002 Final Technical Study Report Package (continued)

RECREATIONAL RESOURCES

REC-3: Whitewater Recreation Assessment Study

REC-8: Angling Opportunities and Experience Assessment

REC-9: Recreation Resources and Facility Inventory Assessment

REC-10/17: Recreation Opportunities and Needs Assessment (Developed)/
Dispersed Recreation Opportunities and Needs Assessment

REC-11: Compliance with ADA Assessment

REC-12: Hunting

REC-21: Winter Recreation

TERRESTRIAL RESOURCES

TERR-1: Vegetation Communities

TERR-2: Invasive/Exotic Plant Species

TERR-3: Special-Status Plant Populations

TERR-4: Native American Plants

TERR-5: Common and Special-Status Wildlife Species

TERR-6: Valley Elderberry Longhorn Beetle

TERR-7: Migratory Waterfowl

TERR-8: Raptors

TERR-9: Bald Eagle and Osprey

TERR-10: Great Gray Owl

TERR-11: Riparian-Nesting Songbirds

TERR-12: Special-Status Bat Species

TERR-13: Mesocarnivores

TERR-14: Mule Deer

TERR-15: Other Game

**VOLUME 4 - APDEA - SUPPORTING DOCUMENTS D
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Book 11

SD-D 2003 Final Technical Study Report Package

INTRODUCTION

COMBINED AQUATICS

- CAWG-1: Characterize Stream and Reservoir Habitats
- CAWG-2: Geomorphology
- CAWG-3: Flow-Related Habitat - Lower Basin Wetted Perimeter
- CAWG-3: Instream Flow Studies - PHABSIM

**VOLUME 4 - APDEA - SUPPORTING DOCUMENTS D (CONTINUED)
(PUBLIC INFORMATION)**

Book 12

SD-D 2003 Final Technical Study Report Package (continued)

COMBINED AQUATICS (CONTINUED)

- CAWG-4: Chemical Water Quality
- CAWG-5: Water Temperature Monitoring

**VOLUME 4 - APDEA - SUPPORTING DOCUMENTS D (CONTINUED)
(PUBLIC INFORMATION)**

Book 13

SD-D 2003 Final Technical Study Report Package (continued)

COMBINED AQUATICS (CONTINUED)

- CAWG-6: Hydrology

**VOLUME 4 - APDEA - SUPPORTING DOCUMENTS D (CONTINUED)
(PUBLIC INFORMATION)**

Book 14

SD-D 2003 Final Technical Study Report Package (continued)

COMBINED AQUATICS (CONTINUED)

- CAWG-8: Amphibians and Reptiles
- CAWG-10: Macroinvertebrates
- CAWG-11: Riparian
- CAWG-13: Anadromous Fish
- CAWG-14: Fish Passage

VOLUME 4 - APDEA - SUPPORTING DOCUMENTS D (CONTINUED)
(PUBLIC INFORMATION)

Book 15

SD-D 2003 Final Technical Study Report Package (continued)

LAND MANAGEMENT

- LAND-1: SCE Land Management Plan Assessment
- LAND-7: Special Use Authorization Assessment
- LAND-8: Facility Use Assessment
- LAND-9: Visual Quality Assessment
- LAND-10: Air Quality Assessment
- LAND-11: Volcanic and Seismic Assessment

VOLUME 4 - APDEA - SUPPORTING DOCUMENTS D (CONTINUED)
(PUBLIC INFORMATION)

Book 16

SD-D 2003 Final Technical Study Report Package (continued)

RECREATIONAL RESOURCES

- REC-1: Flow Information Feasibility Study
- REC-3: Whitewater Recreation Assessment Study
- REC-3: Whitewater Recreation Assessment Study - Boating Opportunities Analysis
- REC-5: Reconnaissance Stream Corridor Recreation Assessment
- REC-6: Fisheries Habitat Evaluation
- REC-7: Fish Hatchery and Stocking Evaluation
- REC-8: Angling Opportunities and Experience Assessment
- REC-10/17: Recreation Opportunities and Needs Assessment (Developed)/
Dispersed Recreation Opportunities and Needs Assessment
- REC-11: Compliance with ADA Assessment
- REC-12: Hunting
- REC-13: Reservoir Access/Facility Assessment
- REC-14: Concessionaire Contracts Evaluation
- REC-15: Reservoir Recreation Water Surface Elevation Study
- REC-16: Emergency Services Evaluation
- REC-18: Use by Disadvantaged, Handicapped, and Minority Persons Assessment Study
- REC-19: Information and Interpretive Opportunities and Needs Assessment Study
- REC-20: Trails (Spring, Summer and Fall, Non-Snow Season)
- REC-21: Winter Recreation
- REC-22: Wilderness Areas

VOLUME 4 - APDEA - SUPPORTING DOCUMENTS D (CONTINUED)
(PUBLIC INFORMATION)

Book 17

SD-D 2003 Final Technical Study Report Package (continued)

TERRESTRIAL RESOURCES

- TERR-1: Vegetation Communities
- TERR-2: Invasive/Exotic Plant Species
- TERR-3: Special-Status Plant Populations
- TERR-5: Common and Special-Status Wildlife Species
- TERR-6: Valley Elderberry Longhorn Beetle
- TERR-8: Raptors
- TERR-9: Bald Eagle and Osprey
- TERR-10: Great Gray Owl
- TERR-12: Special-Status Bat Species
- TERR-14: Mule Deer

VOLUME 4 - APDEA - SUPPORTING DOCUMENTS E
(PUBLIC INFORMATION)

Book 18

SD-E 2004 Final Technical Study Reports

COMBINED AQUATICS

- CAWG-5: Water Temperature Modeling
- CAWG-9: Entrainment

LAND MANAGEMENT

- LAND-4: Fire Prevention and Protection Adequacy Evaluation

RECREATIONAL RESOURCES

- REC-2: Manage Spill Event Feasibility Study
- REC-4: Whitewater Play-Site Feasibility Study

TERRESTRIAL RESOURCES

- TERR-2: Invasive/Exotic Plant Species
- TERR-3: Special-Status Plant Populations
- TERR-5: Common and Special-Status Wildlife Species
- TERR-6: Valley Elderberry Longhorn Beetle
- TERR-12: Special-Status Bat Species

**VOLUME 4 - APDEA - SUPPORTING DOCUMENTS E (CONTINUED), F AND G
(PUBLIC INFORMATION)**

Book 19

SD-E 2005 and 2007 Supplemental Reports

2005 SUPPLEMENTAL REPORTS

Jackass Meadow Inundation Study
Mono Creek Sediment Transport and Floodplain Connectivity Study
North Fork Stevenson Creek Gravel Mobility Study

2007 SUPPLEMENTAL REPORTS

Jackass Meadow Inundation Study Summary
Mono Creek Sediment Studies
Recreation Use Report
LAND-2: Multiple Use Opportunity Assessment
LAND-5: Storage Capacity and Generation Assessment

SD-F Final Biological Assessment/Biological Evaluation (BA/BE)

SD-G Management and Monitoring Plans/License Articles

Management and Monitoring Plans

Aquatic Resources

Fish Monitoring Plan
Flow Monitoring and Reservoir Water Level Measurement Plan
Channel and Riparian Maintenance (CRM) Flows for the South Fork San Joaquin River below Florence Reservoir
Mono Creek Channel Riparian Maintenance Flow Plan
Temperature Monitoring and Management Plan

Terrestrial Resources

Bald Eagle Management Plan
Valley Elderberry Longhorn Beetle Management Plan
Vegetation and Integrated Pest Management Plan

Riparian Resources

Riparian Monitoring Plan

Recreation Resources

Recreation Management Plan

Land Management/Aesthetics

Transportation System Management Plan
Visual Resources Plan
Small Diversions Decommissioning Plan

License Articles

Geomorphology

Large Wood Debris Management

Terrestrial Resources

Bear/Human Interaction
Mule Deer
Special-status Bat Species
Special-status Species

**VOLUME 4 - APDEA - SUPPORTING DOCUMENTS H
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BOOK 20

SD-H Settlement Agreement

SETTLEMENT AGREEMENT

Appendix A:	Big Creek Hydroelectric Projects Settlement Agreement Proposed New License Conditions
Appendix B:	Non-FERC Settlement Agreements
Appendix C:	List of Authorized Representatives of the Parties
Appendix D:	Mono Creek Channel Riparian Maintenance Flow Plan
Appendix E:	Camp 61 Creek Channel Riparian Maintenance Flow Plan
Appendix F:	Channel and Riparian Maintenance (CRM) Flows for the South Fork San Joaquin River below Florence Reservoir
Appendix G:	Small Diversions Decommissioning Plan
Appendix H:	Temperature Monitoring and Management Plan
Appendix I:	Fish Monitoring Plan
Appendix J:	Sediment Management Prescriptions
Appendix K:	Riparian Monitoring Plan
Appendix L:	Flow Monitoring and Reservoir Water Level Measurement Plan
Appendix M:	Visual Resources Plan
Appendix N:	Transportation System Management Plan
Appendix O:	Recreation Management Plan
Appendix P:	Bald Eagle Management Plan
Appendix Q:	Valley Elderberry Longhorn Beetle Management Plan
Appendix R:	Vegetation and Integrated Pest Management Plan

**VOLUME 4 - APDEA FIGURES, SUPPORTING DOCUMENTS A, B AND C - FIGURES/MAPS
(NON-INTERNET PUBLIC INFORMATION)**

BOOK 21

APDEA Figures

SD-A Initial Information Package

SD-B Final Technical Study Plan Package

SD-C 2002 Final Technical Study Report Package

INTRODUCTION

COMBINED AQUATICS

CAWG-1:	Characterize Stream and Reservoir Habitats
CAWG-2:	Geomorphology
CAWG-3:	Flow-Related Physical Habitat in Bypass Reaches
CAWG-4:	Chemical Water Quality
CAWG-7:	Characterize Fish Populations
CAWG-8:	Amphibians and Reptiles
CAWG-11:	Riparian

LAND MANAGEMENT

LAND-6:	Traffic/Circulation Study
LAND-9:	Visual Quality Assessment

**VOLUME 4 - APDEA FIGURES, SUPPORTING DOCUMENTS A, B AND C (CONTINUED) -
FIGURES/MAPS
(NON-INTERNET PUBLIC INFORMATION)**

**Book 21
(CONTINUED)**

SD-C 2002 Final Technical Study Report Package (continued)

RECREATIONAL RESOURCES

- REC-3: Whitewater Recreation Assessment Study
- REC-8: Angling Opportunities and Experience Assessment
- REC-9: Recreation Resources and Facility Inventory Assessment
- REC-10/17: Recreation Opportunities and Needs Assessment (Developed) Dispersed Recreation Opportunities and Needs Assessment
- REC-12: Hunting

**VOLUME 4 - APDEA SUPPORTING DOCUMENTS C - FIGURES/MAPS (CONTINUED)
(NON-INTERNET PUBLIC INFORMATION)**

Book 22

SD-C 2002 Final Technical Study Report Package (continued)

TERRESTRIAL RESOURCES

- TERR-1: Vegetation Communities
- TERR-2: Invasive/Exotic Plants
- TERR-3: Special-Status Plant Populations
- TERR-5: Common and Special-Status Wildlife Species
- TERR-6: Valley Elderberry Longhorn Beetle
- TERR-8: Raptors
- TERR-9: Bald Eagle and Osprey
- TERR-10: Great Gray Owl
- TERR-11: Riparian-Nesting Songbirds
- TERR-12: Special-Status Bat Species
- TERR-13: Mesocarnivores
- TERR-14: Mule Deer
- TERR-15: Other Game

**VOLUME 4 - APDEA SUPPORTING DOCUMENTS D - FIGURES/MAPS
(NON-INTERNET PUBLIC INFORMATION)**

BOOK 23

SD-D 2003 Final Technical Study Report Package

INTRODUCTION

COMBINED AQUATICS

- CAWG-1: Characterize Stream and Reservoir Habitats
- CAWG-2: Geomorphology
- CAWG-3: Flow-Related Habitat - Lower Basin Wetted Perimeter
- CAWG-3: Instream Flow Studies - PHABSIM
- CAWG-4: Chemical Water Quality
- CAWG-5: Water Temperature Monitoring
- CAWG-6: Hydrology
- CAWG-8: Amphibians and Reptiles
- CAWG-10: Macroinvertebrates
- CAWG-11: Riparian
- CAWG-13: Anadromous Fish
- CAWG-14: Fish Passage

LAND MANAGEMENT

- LAND-1: SCE Land Management Plan Assessment
- LAND-7: Special Use Authorization Assessment
- LAND-8: Facility Use Assessment

RECREATIONAL RESOURCES

- REC-1: Flow Information Feasibility Study
- REC-3: Whitewater Recreation Assessment Study
- REC-5: Reconnaissance Stream Corridor Recreation Assessment
- REC-6: Fisheries Habitat Evaluation
- REC-12: Hunting
- REC-13: Reservoir Access/Facility Assessment
- REC-16: Emergency Services Evaluation
- REC-19: Information and Interpretive Opportunities and Needs Assessment
- REC-20: Trails (Spring, Summer and Fall, Non-Snow Season)

TERRESTRIAL RESOURCES

- TERR-1: Vegetation Communities
- TERR-2: Invasive/Exotic Plant Species
- TERR-3: Special-Status Plant Populations
- TERR-5: Common and Special-Status Wildlife Species
- TERR-8: Raptors
- TERR-10: Great Gray Owl
- TERR-12: Special-Status Bat Species

**VOLUME 4 - APDEA SUPPORTING DOCUMENTS E, F AND G - FIGURES/MAPS
(NON-INTERNET PUBLIC INFORMATION)**

BOOK 24

SD-E 2004 Final Technical Study Reports, 2005 and 2007 Supplemental Reports

2004 FINAL TECHNICAL STUDY REPORTS

Combined Aquatics

CAWG-5: Water Temperature Modeling

CAWG-9: Entrainment

Recreational Resources

REC-2: Manage Spill Event Feasibility Study

Terrestrial Resources

TERR-2: Invasive/Exotic Plant Species

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TERR-5: Common and Special-Status Wildlife Species

TERR-6: Valley Elderberry Longhorn Beetle

TERR-12: Special-Status Bat Species

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COMBINED AQUATICS

Mono Creek Sediment Transport and Floodplain Connectivity Study

North Fork Stevenson Creek Gravel Mobility Study

2007 SUPPLEMENTAL REPORTS

2006 Jackass Meadow Inundation Study Summary

Mono Creek Sediment Studies

Recreation Use Report

SD-F Final Biological Assessment/Biological Evaluation (BA/BE)

SD-G Management and Monitoring Plans

MANAGEMENT AND MONITORING PLANS

Aquatic Resources

Temperature Monitoring/Management Plan

Terrestrial Resources

Bald Eagle Management Plan

Valley Elderberry Longhorn Beetle Management Plan

Riparian Resources

Riparian Monitoring Plan

Recreation Resources

Recreation Management Plan

Land Management/Aesthetics

Transportation System Management Plan

Small Diversions Decommissioning Plan

Visual Resources Plan

**VOLUME 4 - APDEA SUPPORTING DOCUMENTS H - FIGURES/MAPS
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BOOK 25

SD-H Settlement Agreement

- Appendix G: Small Diversions Decommissioning Plan
- Appendix H: Temperature Monitoring and Management Plan
- Appendix K: Riparian Monitoring Plan
- Appendix M: Visual Resources Plan
- Appendix N: Transportation System Management Plan
- Appendix O: Recreation Management Plan
- Appendix P: Bald Eagle Management Plan
- Appendix Q: Valley Elderberry Longhorn Beetle Management Plan

**VOLUME 4 - APDEA - SUPPORTING DOCUMENTS E
(CRITICAL ENERGY INFRASTRUCTURE INFORMATION)**

BOOK 26

SD-E 2004 Final Technical Study Report

COMBINED AQUATICS

- CAWG-9: Entrainment (Figures and Appendix A)

**VOLUME 4 - APDEA (CULTURAL RESOURCES) SUPPORTING DOCUMENTS I, D AND E
(PRIVILEGED INFORMATION)**

BOOK 27

SD-I Cultural Resources

HISTORIC PROPERTIES MANAGEMENT PLAN (HPMP)

SD-D 2003 Final Technical Study Report Package

TERRESTRIAL RESOURCES

- TERR-4: Native American Plants

SD-E 2004 Final Technical Study Report

COMBINED AQUATICS

- CAWG-10: Mollusk Report

TERRESTRIAL RESOURCES

- TERR-4: Native American Plants