SOUTHERN CALIFORNIA EDISON®
Energy for What's Ahead℠

Wayne P. Allen
Principal Manager
Regulatory Support Services

Electronically Filed

August 5, 2024

Debbie-Anne Reese, Acting Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Subject: Lundy Hydroelectric Project, FERC Project No. 1390-069; Proposed Study Plans

Dear Acting Secretary Reese:

Southern California Edison Company (SCE or Licensee) is the owner and operator of the Lundy Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC or Commission) Project No. 1390. Pursuant to Section 5.11(a) of the Commission's regulations, 18 C.F.R. 5.11(a), SCE hereby files this Proposed Study Plan (PSP) for relicensing the Project.

On February 23, 2024, SCE filed a Notice of Intent (NOI) and Pre-Application Document (PAD) for its continued operation and maintenance of the Project, and on April 17, 2024, FERC issued Scoping Document 1 (SD1) to begin the environmental review process under the National Environmental Policy Act (NEPA). SD1 provided interested parties with FERC's preliminary list of issues and alternatives to be addressed in an Environmental Assessment (EA) or Environmental Impact Statement (EIS) that FERC will issue in support of its relicensing decision. FERC's SD1 solicited comments on the PAD and recommendations on additional Study Requests by June 24, 2024.

Comments were submitted to FERC in response to SCE's PAD and FERC's SD1, including new studies requested by Stakeholders. On July 29, 2024, FERC issued Scoping Document 2 (SD2) which amended SD1 based on comments received. SCE has addressed those specific study requests in this PSP, either as a modification to a Proposed Study listed in the PAD, as a new Study Plan, or by specifically noting why a study request was not adopted.

In response to SD2 and Stakeholder study requests, SCE is proposing 12 studies to be conducted to inform FERC's analysis of environmental effects, as well as federal and state resource decisions in the relicensing effort:

2244 Walnut Grove Avenue
Rosemead, CA 91770
626.302.9741
wayne.allen@sce.com

- WQ-1 Lundy Lake and Mill Creek Water Quality Monitoring
- WQ-2 Lundy Lake and Mill Creek Water Temperature Monitoring
- AQ-1 Fish Community Survey
- AQ-2 Fish Stranding Study
- TERR-1 General Botanical Resources Survey
- TERR-2 General Wildlife Survey
- REC-1 Recreation Use and Needs Assessment
- REC-2 Recreation Facilities Condition Assessment
- CUL-1 Cultural Resources – Archaeology
- CUL-2 Cultural Resources – Built Environment
- TRI-1 Tribal Resource
- LAND-1 Project Lands and Roads Study

Each of the proposed studies is described in detail in Attachment 1 of the enclosed PSP.

As required by 18 CFR § 5.11(e), SCE will hold a Proposed Study Plan Meeting required by the Integrated Licensing Process (ILP) within 30 days following the deadline for filing the PSP. The meeting will be conducted virtually on **September 3, 2024, via Microsoft Teams.** The meeting will cover the following topics: (1) clarify SCE's PSP; (2) discuss information gathering or study requests; and (3) attempt to resolve any outstanding issues with respect to SCE's PSP. Meeting log-in information, detailed meeting agenda, and other applicable meeting materials will be uploaded to the Project's relicensing website at www.sce.com/lundy prior to the meeting.

In accordance with FERC's Process Plan and Schedule included in SD2, Stakeholders have until November 4, 2024, to file comments on the PSP, after which SCE will file a Revised Study Plan (RSP) by December 4, 2024. Following SCE's filing of the RSP, Stakeholders have until December 19, 2024, to file comments on the PSP. FERC's Study Plan Determination is expected by January 3, 2025.

This PSP and all relevant relicensing documents for the Project are available on SCE's Lundy Project relicensing website (www.sce.com/lundy). In addition, the PSP is available on FERC's eLibrary.

SCE looks forward to working with FERC and other interested parties on the Lundy Project relicensing. Should there be any questions or concerns regarding this filing, please contact Matthew Woodhall, SCE Senior Project Manager, by phone at (626) 302-9596 or via email at matthew.woodhall@sce.com.

Sincerely,

Southern California Edison Company

DocuSigned by:
Wayne Allen
106CF18A73D445F...

Wayne Allen
Principal Manager
Regulatory Support Services

Attachments:

Attachment A – Proposed Study Plan

cc: Distribution List

Distribution List

FERC Service List

Kelly Henderson, Attorney
Southern California Edison Company
PO Box 800
Rosemead, CA 91770-0800
kelly.henderson@sce.com

Wayne P Allen, Principal Manager
Southern California Edison Company
PO Box 100
Rosemead, CA 93605-0100
wayne.allen@sce.com

Nicolas von Gersdorff, Chief Dam Safety Engineer
Southern California Edison Company
2244 Walnut Grove Ave
Rosemead, CA 91770
nicolas.von@sce.com

Brittany Arnold
Southern California Edison Company
1 Pebbly Beach Rd
Avalon, CA 90704
brittany.arnold@sce.com

Mary Schickling, Senior Specialist
Southern California Edison Company
1 Pebbly Beach Rd
Avalon, CA 90704
mary.schickling@sce.com

Mono Lake Committee
Morrison & Foerster LLP
F. Bruce Dodge
319 Goodhill Rd
Kentfield, CA 94904
fbdodge@gmail.com

FERC Case Administration
Southern California Edison Company
2244 Walnut Grove Ave.
Rosemead, CA 91770
ferccaseadmin@sce.com

Martin Ostendorf, Compliance Manager
Southern California Edison Company
P.O. Box 100
54170 Mtn. Spruce Road
Big Creek, CA 93605
martin.ostendorf@sce.com

Cornelio Artienda, Senior Advisor
Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, CA 91770
cornelio.artienda@sce.com

Mary M Richardson, Senior Advisor, Regulatory Affairs
Southern California Edison Company
2244 Walnut Grove Ave
Rosemead, CA 91770
mary.m.richardson@sce.com

Christy Fanous, Managing Director
Southern California Edison Company
P.O. Box NA
Rosemead, CA 91770
christine.fanous@sce.com

Kathleen Maloney Bellomo
People for Mono Basin Preservation
P.O. Box 217
532 E. Mono Lake Drive
Lee Vining, CA 93541
hydroesq@schat.net

Mono Lake Committee
Geoffrey McQuilkin
P.O. Box 29
Lee Vining, CA 93541-0029
geoff@monolake.org

Richard Roos-Collins
Water and Power Law Group PC
California Trout
2140 Shattuck Ave, Suite 801
Berkeley, CA 94704-1229
rrcollins@waterpowerlaw.com

Federal Government/Representatives

Executive Director
Advisory Council on Historic Preservation
401 F Street NW, Suite 308
Washington, DC 20001-2637

Bureau of Indian Affairs
1849 C Street NW MS 2624 MIB
Washington, DC 20240

National Park Service
Barbra_Rice@nps.gov
333 Bush Street,
San Francisco, CA 94104
barbara_rice@nps.gov

Sherri Lisius, Field Manager
U.S. Bureau of Land Management,
Bishop Field Office
351 Pacu Lane, Suite 200
Bishop, CA 93514
BLM_CA_Web_BI@blm.gov

Greg Haverstock
U.S. Bureau of Land Management
Bishop Field Office
351 Pacu Lane, Suite 200
Bishop, CA 93514
ghaverst@blm.gov

Monique Sanchez, Hydropower Coordinator
U.S. Department of Agriculture - Forest Service
1980 Old Mission Drive
Solvang, CA 93463
monique.sanchez@usda.gov

Jon Knight
Botany Technician
U.S. Department of Agriculture - Forest Service
351 Pacu Lane
Bishop, CA 93513
jonathan.knight@usda.gov

Regional Director
Bureau of Indian Affairs
2800 Cottage Way
Sacramento, CA 95825
Regional Engineer
Federal Energy Regulatory Commission
901 Market Street, Suite 350
San Francisco, CA 94103
frank.blackett@ferc.gov

Jeff Satrosta, Supervisor Natural Resource Specialist
U.S. Bureau of Land Management,
Bishop Field Office
351 Pacu Lane, Suite 200
Bishop, CA 93514
jstarost@blm.gov

Larry Primosch
U.S. Bureau of Land Management,
Bishop Field Office
351 Pacu Lane, Suite 200
Bishop, CA 93514
lprimosc@blm.gov

Michael Wiese, Hydrologist
U.S. Department of Agriculture - Forest Service
michael.wiese@usda.gov

Nathan Sill, Resources Staff Officer
U.S. Department of Agriculture - Forest Service,
Inyo National Forest
nathan.sill@usda.gov

Andrew Lyons-Gould, Wildlife Biologist
U.S. Department of Agriculture - Forest Service,
Inyo National Forest
Andrew.Lyons-gould@usds.gov

U.S. Department of Agriculture - Forest Service
Stephanie Heller, Mono Lake District Ranger
stephanie.heller@usda.gov

U.S. Department of Agriculture - Forest Service,
Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 93514
Jacqueline Beidl
jacqueline.beidl@usda.gov

U.S. Department of Agriculture - Forest Service,
Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 93514
Dan Yarborough
daniel.yarborough@usda.gov

U.S. Department of Agriculture - Forest Service,
Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 93514
Todd Ellsworth
todd.ellsworth@usda.gov

U.S. Department of Agriculture - Forest Service,
Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 93514
LeeAnn Murphy
leeann.murphy@usda.gov

U.S. Department of Agriculture - Forest Service
Wilfred Nabahe, Tribal Relations Program Manager, Inyo National Forest
Wilfred.Nabahe@usda.gov

U.S. Department of Agriculture - Forest Service,
Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 93514
Ashley Blythe Haverstock
ashley.blythehaverstock@usda.gov

U.S. Department of Agriculture - Forest Service,
Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 93514
Sheila Irons
sheila.irons@usda.gov

U.S. Department of Agriculture - Forest Service,
Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 93514

Jameisha Washington, Mono Lake Recreation Officer
Jameisha.Washington@usda.gov

U.S. Department of Agriculture - Forest Service,
Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 93514
Adam Barnett, Public Services Staff Officer
adam.barnett@usda.gov

U.S. Department of Agriculture - Forest Service,
Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 93514
Dawn Alvarez
dawn.alvarez@usda.gov

U.S. Department of Agriculture - Forest Service,
Pacific Southwest Region
1323 Club Drive
Vallejo, CA 94592
Tristan Leong
tristan.leong@usda.gov

U.S. Fish and Wildlife Service
Reno Fish and Wildlife Office
1340 Financial Blvd.
Reno, NV 89502
Justin Barrett
justin_barrett@fws.gov

U.S. Department of Agriculture - Forest Service,
Inyo National Forest
351 Pacu Lane, Suite 200
Bishop, CA 93514
Kary Schlick
kary.schlick@usda.gov

U.S. Fish and Wildlife Service
Reno Fish and Wildlife Office
1340 Financial Blvd.
Reno, NV 89502
Rachael Youmans
rachael_youmans@fws.gov

U.S. Fish and Wildlife Service
Reno Fish and Wildlife Office
1340 Financial Blvd.
Reno, NV 89502
Anne Mankowski
anne_mankowski@fws.gov

U.S. Fish and Wildlife Service
Chad Mellison
chad_mellison@fws.gov

State Government/Representatives

California Dept. of Fish and Wildlife, Bishop Field Office
787 North Main Street, Suite 220
Bishop, CA 93514
Nick Buckmaster
nick.buckmaster@wildlife.ca.gov

California Dept. of Fish and Wildlife, Bishop Field Office
787 North Main Street, Suite 220,
Bishop, CA 93514
Patricia Moyer, Supervisor
patricia.moyer@wildlife.ca.gov

California Dept. of Fish and Wildlife, Bishop Field Office
787 North Main Street, Suite 220,
Bishop, CA 93514
Rose Banks
rose.banks@wildlife.ca.gov

California Dept. of Fish and Wildlife
James Erdman
james.erdman@wildlife.ca.gov

California Dept. of Fish and Wildlife
Beth Lawson
beth.lawson@wildlife.ca.gov

California Regional Water Quality Control Board
Bryan Muro
bryan.muro@waterboards.ca.gov

Jennifer Watts, Environmental Scientist
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
Jennifer.watts@waterboards.ca.gov

California Dept. of Fish and Wildlife
Inland Deserts Region
78078 Country Club Drive, Suite 109
Bermuda Dunes, CA 92203
Scott Wilson
scott.wilson@wildlife.ca.gov

California Dept. of Fish and Wildlife
Graham Meese, Senior Environmental Scientist
for FERC and Water Rights
graham.meese@wildlife.ca.gov

California Dept. of Fish and Wildlife
Heather Brashear, Region 6 South Water Rights
Regional Coordinator
heather.brashear@Wildlife.ca.gov

California Regional Water Quality Control Board
Adam Cohen
adam.cohen@waterboards.ca.gov

California Dept. of Fish and Wildlife
Michael Tovar
michael.tovar@wildlife.ca.gov

California Regional Water Quality Control Board
Rajaa Hassan
rajaa.hassan@waterboards.ca.gov

Local Government/Public Agency

Inyo-Mono Regional Water Management
Program
Holly Alpert, Ph.D., Program Manager
holly@inyo-monowater.org

Los Angeles Department of Water and Power
Saeed Jorat
saeed.jorat@ladwp.com

Los Angeles Department of Water and Power
300 Mandich Street, Bishop, CA 93514
Eric Tillemans
eric.tillemans@ladwp.com

Mono Basin Historical Society
129 Mattly Ave.
Lee Vining, CA 93541
John Warneke, Curator
curator@monobasinhistory.org

Mono County Fish and Wildlife Commission
Gaye Mueller, Chair
easternsierraartist@gmail.com

Los Angeles Department of Water and Power
Adam Perez
Adam.Perez@ladwp.com

Mono County Fish and Wildlife Commission
Jim King, Vice Chair
jkrclr@gmail.com

Lori Gillem, Watershed Resources Supervisor
Los Angeles Department of Water and Power
300 Mandich Street, Bishop, CA 93514
Lori.gillem@ladwp.com

Mono County Planning Commission
P.O. Box 347
Mammoth Lakes, CA 93546
Wendy Sugimura
wsugimura@mono.ca.gov

Mono County Planning Commission
437 Old Mammoth Road
Mammoth Lakes, CA 93546
comdev@mono.ca.gov

Access Fund
408 Home Street
Bishop, CA 93514
Katie Goodwin, CA Regional Director
katie@accessfund.org

Friends of the Inyo
621 W. Line St., Suite 201
Bishop, CA 93514
Wendy Schneider, Executive Director
wendy@friendsoftheinyo.org

American Whitewater
P.O. Box 455
5981 New River Road
Coloma, CA 95613
info@americanwhitewater.com

Sierra Club
Mark Bagley
2101 Webster St, Suite 1300
Oakland, CA 94612
markbagley02@gmail.com

Trout Unlimited
P.O. Box 7399
Mammoth Lakes, CA 93546
J. Strickland
jstrickland@tu.org

Mammoth Museum/Southern Mono Historical Society
5489 Sherwin Creek Road
Mammoth Lakes, CA 93546
info@mammothmuseum.org

California Native Plant Society
Bristlecone Chapter
P.O. Box 364
Bishop, CA 93515
Katie Quinlan
kquinlan16@gmail.com;
president@bristleconecnps.org

Friends of the River
1418 20th St., Suite 100
Sacramento, CA 95811
Jann Dorman, Executive Director
janndorman@friendsoftheriver.org

Friends of Mono Lake Reserve
P.O. Box 278
Bridgeport, CA 93517
fomlr@bodiefoundation.org
Sierra Nevada Conservancy, Mammoth Lakes
P.O. Box 9245
126 Old Mammoth Road, Suite 107
Mammoth Lakes, CA 93546
Matt Driscoll
matt.driscoll@sierranevada.ca.gov

Sierra Club, Toiyabe Chapter
2101 Webster St., Suite 1300
Oakland, CA 94612
chair@toiyabe.sierraclub.org

Ruby Allen
Rainbow Packers
P.O. Box 392
Bishop, CA 93151
rainbowpackers@aol.com

Haley Wragg, President
Lundy Lake Resort
P.O. Box 789
Lee Vining, CA 93541
lundylakeresort@gmail.com

Karyn Spears
Public Works Assistant
Mono County
74 N School Street
Bridgeport, CA 93517
kspears@mono.ca.gov

Native American Tribes

American Indian Council of Mariposa County
(aka Southern Sierra Miwuk Nation)
P.O. Box 186
Mariposa, CA 95338
Sandra Chapman, Chairperson
ssmiwuknation@gmail.com

American Indian Council of Mariposa County
(aka Southern Sierra Miwuk Nation)
P.O. Box 186
Mariposa, CA 95338
Tara Fouch-Moore, Council Secretary
secretary@southernsierramiwuknation.org

American Indian Council of Mariposa County
(aka Southern Sierra Miwuk Nation)
P.O. Box 186
Mariposa, CA 95338
Acacia Coats, Director-at-Large
director@southernsierramiwuknation.org

American Indian Council of Mariposa County
(aka Southern Sierra Miwuk Nation)
P.O. Box 186
Mariposa, CA 95338
mariposamiwuk@sti.net

Chairperson or Tribal Administrator
Antelope Valley Indian Community, Coville
Paiute Tribe
P.O. Box 47
Coleville, CA 96107

Clay River, Managing Director, Miwumati Family Healing Center
American Indian Council of Mariposa County (aka Southern Sierra Miwuk Nation)
P.O. Box 186
Mariposa, CA 95338
claymiwumati@gmail.com

American Indian Council of Mariposa County (aka Southern Sierra Miwuk Nation)
P.O. Box 186
Mariposa, CA 95338
Nancy Dondero, Administrative Receptionist
ndondero21@gmail.com

American Indian Council of Mariposa County (aka Southern Sierra Miwuk Nation)
P.O. Box 186
Mariposa, CA 95338
Waylon Coats, Vice Chairperson
vicechair@southernsierramiwuknation.org

American Indian Council of Mariposa County (aka Southern Sierra Miwuk Nation)
P.O. Box 186
Mariposa, CA 95338
Jazzmyn Gegere (Brochini), Cultural Resource Preservation Department Manager
preservation@southernsierramiwuknation.org
Antelope Valley Indian Community, Coville Paiute Tribe
1023 Mountain Park Drive
Carson City, NV 89706
Georgia Grace “Gracie” Dick-Cluette
numugrace@gmail.com

Big Pine Paiute Tribe of Owens Valley
P.O. Box 700
Big Pine, CA 93513
Cheyenne Stone, Chairperson
cheyenne.stone@bigpinepaiute.org

Big Pine Paiute Tribe of Owens Valley
P.O. Box 700
Big Pine, CA 93513
Sally Manning, Environmental Director
s.manning@bigpinepaiute.org

Bishop Paiute Tribe
50 Tu Su Lane
Bishop, CA 93514
Meryl Picard, Chairperson
meryl.picard@bishoppaiute.org

Raymond Andrews, Tribal Elder Mono Lake Kutzadika/Bishop Paiute Tribe
Mono Lake kutzadikaa Cultural Presrevation Association
P.O. Box 591
Bishop, CA 93515
kutzanuumu@yahoo.com

Bridgeport Indian Colony
P.O. Box 37
Bridgeport, CA 93517
Debbie Lundy-Painter, Cultural Coordinator
culture@bridgeportindiancolony.com

Fort Independence Indian Community of Paiute Indians
Sean Scruggs, Tribal Historic Preservation Officer
falconkeeper22@gmail.com

Lone Pine Paiute-Shoshone Tribe
P.O. Box 747
Lone Pine, CA 93545
Katherine Bancroft, Tribal Historic Preservation Officer
patsiata@yahoo.com

Big Pine Paiute Tribe of Owens Valley
P.O. Box 700
Big Pine, CA 93513
Jacqueline “Danelle” Gutierrez,
Tribal Historic Preservation Officer
d.gutierrez@bigpinepaiute.org

Bishop Paiute Tribe
50 Tu Su Lane
Bishop, CA 93514
Darren Delgado, Tribal Historic Preservation Officer
darren.delgado@bishoppaiute.org

Bridgeport Indian Colony
P.O. Box 37
Bridgeport, CA 93517
Jeanette, Tribal Administrator
admin@bridgeportindiancolony.com

Bridgeport Indian Colony
P.O. Box 37
Bridgeport, CA 93517
Herbert Glazier, Chairperson
chair@bridgeportindiancolony.com

Fort Independence Indian Community of Paiute Indians
P.O. Box 67
Independence, CA 93526
Carl Dahlberg, Chairperson
carl@fortindependence.com

Lone Pine Paiute-Shoshone Tribe
P.O. Box 747
Lone Pine, CA 93545
Mary Wuester, Chairperson
chair@lppsr.org

Mono Lake Kutzadikaa Tribe
P.O. Box 177
Big Pine, CA 93513
Charlotte Lange, Chairperson
char54lange@gmail.com

Mono Lake Kutzadikaa Indian Community Cultural Preservation Association
P.O. Box 237
Lee Vining, CA 93541
Jocelyn Sheltraw, President
jsheltraw@monolaketribe.us

North Fork Rancheria of Mono Indians of California
P.O. Box 929
North Fork, CA 93643
Christina McDonald, Secretary
cmcdonald@nfr-nsn.gov

North Fork Mono Tribe of California
13396 Tollhouse Road
Clovis, CA 93619
Ron Goode, Chairman
rwgoode911@hotmail.com

Timbisha Shoshone Tribe
621 West Line St., Suite 109
Bishop, CA 93514
Margaret Cortez, Chairperson
one_mug@yahoo.com

Timbisha Shoshone Tribe
621 West Line St., Suite 109
Bishop, CA 93514
Thomas Romero, Environmental Department
environmental@timbisha.com

Mono Lake Kutzadikaa Indian Community Cultural Preservation Association
P.O. Box 237
Lee Vining, CA 93541
Dean Tonenna, Vice President
dtonenna@gmail.com

North Fork Rancheria of Mono Indians of California
P.O. Box 929
North Fork, CA 93643
Fred Beihn, Chairperson
fbeihn@nfr-nsn.gov

North Fork Rancheria of Mono Indians of California
P.O. Box 929
North Fork, CA 93643
Elaine Bethel-Fink, Tribal Member
efink@nfr-nsn.gov

Timbisha Shoshone Tribe
621 West Line St., Suite 109
Bishop, CA 93514
Sookaaki (Charlie) Charley, Tribal Administrator
administrator@timbisha.com

Timbisha Shoshone Tribe
621 West Line St., Suite 109
Bishop, CA 93514
Mandi Campbell, Tribal Historic Preservation Officer
THPO@timbisha.com

Tuolumne Band of Me-Wuk Indians
P.O. Box 669
Tuolumne, CA 95379
Jon Otterson, Tribal Administrator
jon@mewuk.com

Tuolumne Band of Me-Wuk Indians
P.O. Box 669
Tuolumne, CA 95379
Reba Fuller, Government Affairs Specialist
rfuller@mewuk.com

Tuolumne Band of Me-Wuk Indians
P.O. Box 669
Tuolumne, CA 95379
Andrea Reich, Chairperson
andrea@mewuk.com

Walker River Paiute Tribe
P.O. Box 220
Schurz, NV 89427
Sarah Twiss, Tribal Administrator
stwiss@wrpt.org

Washoe Tribe of Nevada and California
Serrell Smokey, Chairperson
919 U.S. Hwy 395 N
Gardnerville, NV 89410
serrell.smokey@washoetribe.us

Yerington Paiute Tribe of the Yerington Colony and Campbell Ranch
Elwood Emm, Chairman
171 Campbell Lane
Yerington, NV 89447

Yosemite-Mono Lake Paiute Indian Community
Lucy Parker
P.O. Box 157
Lee Vining, CA 93541
lucy_basket4@yahoo.com

Utu Utu Gwaitu Paiute Tribe of the Benton Paiute Reservation
25669 Highway 6 PMBI
Benton, CA 93512
Shane Saulque, Chairman
s.saulque@bentontribe.org

Walker River Paiute Tribe
P.O. Box 220
Schurz, NV 89427
Linzey Scott, Tribal Historic Preservation Officer
lscott@wrpt.org

Washoe Tribe of Nevada and California
Patrick Burtt, Tribal Historic Preservation Officer
919 U.S. Hwy 395 N
Gardnerville, NV 89410
THPO@WashoeTribe.us

Yosemite-Mono Lake Paiute Indian Community
David Andrews
711 19th St.
Sparks, NV 89431
nayanake@comcast.net
Yosemite-Mono Lake Paiute Indian Community
Melvin Brewster, Representative
6245 Longford Drive, Apt 1
Citrus Heights, CA 95621
nativearchdoc@yahoo.com

Other Organizations & Businesses

Kleinschmidt Associates
Finlay Anderson, Principal Consultant
1500 NE Irving St Ste 550
Portland, OR 97232
finlay.anderson@kleinschmidtgroup.com

Kleinschmidt Associates
Angela Whelpley
141 Main Street
Pittsfield, ME 04967
angela.whelpley@kleinschmidtgroup.com

Vince White
Southern California Edison Company
2244 Walnut Grove Ave
Rosemead, CA 91770
Vince.white@sce.com

Matthew Woodhall, Project Lead
Southern California Edison Company
2244 Walnut Grove Ave
Rosemead, CA 91770
matthew.woodhall@sce.com

Audry Williams, Senior Advisor, Archaeology Program
Southern California Edison Company
2244 Walnut Grove Ave
Rosemead, CA 91770
Audry.williams@sce.com

Stillwater Sciences
Heather Neff, Senior Aquatic Ecologist
279 Cousteau Place #400
Davis, CA 95618
heather@stillwatersci.com

TEAM Engineering & Management, Inc.
459 W. Line St., Suite A
Bishop, CA 93514
Naomi Jensen, President/CEO
naomi@teamenvironmental.com

E Read Associates, Inc.
Edith Read, President
368 South Grand St.
Orange, CA 92866
marshmistress@msn.com

Lundy Distribution List August 2024

Farwestern
Jay King, President
2727 Del Rio Place, Suite A
Davis, CA 95618
jay@farwestern.com

Daniel Keverline
Southern California Edison Company
2244 Walnut Grove Ave
Rosemead, CA 91770
Daniel.keverline@sce.com

Mono Lake Committee
Robert Di Paolo
P.O. Box 29
Lee Vining, CA 93541-0029
robbie@monolake.org

Mono Lake Committee
Bartshe Miller
P.O. Box 29
Lee Vining, CA 93541-0029
bartshe@monolake.org

Psomas
Brad Blood, Senior Biologist
5 Hutton Centre Drive, Suite 300
Santa Ana, CA 92707
bblood@psomas.com

Psomas
Allison Rudalevige, Senior Biologist
5 Hutton Centre Drive, Suite 300
Santa Ana, CA 92707
allison.rudalevige@psomas.com

Attachment A

Proposed Study Plan

PROPOSED STUDY PLAN

LUNDY HYDROELECTRIC PROJECT
FERC PROJECT NO. 1390

SOUTHERN CALIFORNIA EDISON®

Energy for What's Ahead℠

August 2024

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ATTACHMENTS

TERMS, ACRONYMS, AND ABBREVIATIONS

B

BLM	Bureau of Land Management

C

CDFW	California Department of Fish and Wildlife
CFR	Code of Federal Regulations
cfs	cubic feet per second

F

FERC	Federal Energy Regulatory Commission

I

ILP	Integrated Licensing Process
Inyo NF	Inyo National Forest
ISR	Initial Study Report

L

Lundy Project	Lundy Hydroelectric Project No. 1390

M

MLC	Mono Lake Committee
MW	megawatt

N

NEPA	National Environmental Policy Act
NOI	Notice of Intent

P

PAA	Project Affected Area
PAD	Pre-Application Document
Project	Lundy Hydroelectric Project No. 1390

PSP	Proposed Study Plan

R

RSP	Revised Study Plan

S

SCE	Southern California Edison Company
SD1	Scoping Document 1
State Water Board or SWRCB	State Water Resources Control Board

U

USDA	United States Department of Agriculture
USFS	United States Forest Service
USR	Updated Study Report

1.0 INTRODUCTION AND PROJECT BACKGROUND

The following provides Southern California Edison Company's (SCE) Proposed Study Plan (PSP) for the relicensing of the Lundy Hydroelectric Project (Lundy Project or Project), Federal Energy Regulatory Commission (FERC) Project No. 1390, required by the Code of Federal Regulations (CFR), Title 18, Chapter 1, Subchapter B, Part 5, § 5.11. To relicense the Project, SCE is using FERC's Integrated Licensing Process (ILP) as specified in 18 CFR § 5.1 through 5.31.

SCE is the Licensee, owner, and operator of the Project. SCE currently operates the Project under a 30-year license that was issued by FERC on March 3, 1999 (86 FERC ¶ 61,230), which was subsequently amended in 1997 (81 FERC ¶ 61,162), 2004 (107 FERC ¶ 62,136), and 2019 (166 FERC ¶ 62,049). Because the current license will expire on February 28, 2029, SCE is seeking a license renewal for continued operations and maintenance of the Project.

SCE is in the preliminary stages of relicensing its FERC-issued license for the Project, pursuant to which it proposes to continue Project operations without any significant modifications.

On February 23, 2024, SCE filed a Notice of Intent (NOI) and Pre-Application Document (PAD) to initiate the ILP to obtain a new license for the Project. On April 17, 2024, FERC issued a Notice of Commencement of the Proceeding and Scoping Document 1 (SD1) with the intention to advise all interested parties of the proposed scope of FERC's National Environmental Policy Act (NEPA) document and solicited comments and suggestions on the preliminary list of issues and alternatives to be addressed in the NEPA document. FERC also requested interested parties to identify any studies that would help provide a framework for collecting pertinent information on the resource areas under consideration for FERC's NEPA document with a deadline of June 24, 2024, to file comments.

FERC held an in-person site visit, along with daytime and evening scoping meetings on May 14 and 15, 2024. Transcripts of the meetings can be found on FERC's eLibrary at eLibrary | File List (ferc.gov). SCE presented a drone video of the Project Area and encouraged stakeholders to visit the Project's website at www.sce.com/lundy.

This document provides an overview of SCE's resource specific PSPs along with an overview of comments and study requests received from agencies and stakeholders (Section 2.0); provides information regarding the required PSP meeting (Section 3.0); and describes the execution of resource specific PSPs, including a description of the initial and updated study reports (Section 4.0).

2.0 STUDY PLAN OVERVIEW

2.1. SCE PROPOSED STUDY PLANS

The studies proposed by SCE in this PSP are intended to collect information and data to inform the assessment of Project-related resource effects (if any) for inclusion in the Draft

and Final License Applications, FERC's NEPA document (either an Environmental Assessment or Environmental Impact Statement), and eventual license conditions. SCE proposes the 12 Study Plans listed in Table 2.1-1, including the 11 Study Plans that SCE outlined in the PAD and one new Study Plan. Copies of the Study Plans are provided in Attachment 1.

Table 2.1-1. SCE Proposed Study Plans (*indicates studies added as a result of stakeholder comments or SD1)

Study Plan Title
WQ-1 Lundy Lake and Mill Creek Water Quality Monitoring
WQ-2 Lundy Lake and Mill Creek Water Temperature Monitoring
AQ-1 Fish Community Survey
AQ-2 Fish Stranding Study
TERR-1 General Botanical Resources Survey
TERR-2 General Wildlife Survey
REC-1 Recreation Use and Needs Assessment
REC-2 Recreation Facilities Condition Assessment
CUL-1 Cultural Resource - Archaeology
CUL-2 Cultural Resource - Built Environment
TRI-1 Tribal Resource
LAND-1 Project Lands and Roads Study*

2.2. STAKEHOLDER COMMENTS AND NEW STUDY PLAN REQUESTS

A total of four comment letters were filed by stakeholders in response to FERC's SD1 (Attachment 2). In SCE's review of stakeholder comments, several stakeholders included study requests that that did not comply with FERC's seven Study Request Criteria[1]. However, in an effort to be complete, SCE attempted to document and evaluate all study requests submitted, including those that may not have fully complied with FERC's Study Request Criteria.

SCE identified eight new study requests (Table 2.2-1) and notes which of these are included in this PSP and which were not adopted; similar study proposals are combined as one proposed study. Rationale for studies not adopted are also described. Additionally, several comments pertaining to proposed studies were offered, and are presented in Table 2.2-2.

[1] A Guide to Understanding and Applying the Integrated Licensing Process Study Criteria https://www.ferc.gov/sites/default/files/2020-07/guide-study-criteria.pdf

Table 2.2-1. Stakeholder New Study Plan Requests

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
1	USFS	**New Study: MCRD Water Quality and Quantity Quantification** The Forest believes it to be in the interest of all stakeholders for SCE to complete and include as part of this Project's relicensing process information that quantifies potential leakage or loss of water within the MCRD. This information could take the form of an amended Water Quality study (WQ-1 & 2) as proposed by SCE to include this information, or as a stand-alone … it should be noted that SCE has already committed to developing MCRD loss information as part of the existing Settlement Agreement, however we believe that this information needs to be included as part of this relicensing process to assist in the development of potential operations or solutions that would address any impacts from continued operation of the Project. Use of the MCRD will result in potential leakage or water losses to downstream affected water rights holders. Efforts to repair, operate, or otherwise manage MCRD into the future will require the quantification of acceptable water losses across this project feature. This study is consistent with the Long-Term MCRD Performance and Use Standards expectations in the Amended Settlement Agreement Reference: Page 2, Paragraph 2, see also "Part IV: New Study Requests" on pages 3-5	**Response:** SCE did not include this study as part of the PSP. **Rationale:** SCE views the performance metrics of the MCRD as an issue that is entirely within the purview of the Settlement Parties, insofar as it describes how adjudicated water would be returned/delivered to water rights holders and is outside the jurisdiction of the FERC. As such, SCE is not proposing to make the hydraulic assessment of the MCRD a relicensing study. SCE recognizes the importance of the *First Amendment to the Lundy Hydroelectric Project Settlement Agreement* (2022) (Amended Settlement Agreement), which it reached with the Settlement Parties [U.S. Department of Agriculture (Forest Service), Forest Service, U.S. Department of the Interior, Bureau of Land Management, California Department of Fish and Wildlife, Mono Lake Committee, California Trout, and American Rivers]. The Amended Settlement Agreement represents a significant milestone for managing flows through the Project for purposes of meeting downstream state-adjudicated water rights—an issue that had been unresolved for many years following FERC's relicensing of the Project in the late 1990s, *see S. Cal. Edison Co.*, 86 FERC ¶ 61,230 (1999), and which remained unresolved when FERC only partially accepted the original Lundy Hydroelectric Project Settlement Agreement (2005) (Original Settlement Agreement). *See S. Cal. Edison Co.*, 121 FERC ¶ 61,154 (2007). The Amended Settlement Agreement, reached in 2022, is a vitally important tool for managing water rights that run through the Project, and Edison believes its implementation over the past few years has been both informative and successful.

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
			However, SCE is not supportive of the Forest Service's proposed study. While the Mill Creek Return Ditch (MCRD) is a project work under the license, the manner in which flows pass through MCRD, and particularly potential water losses within the MCRD, is a matter of managing state-adjudicated water rights. As the Forest Service notes in its comment, this information is an important issue that is resolved in the Amended Settlement Agreement. But that circumstance only demonstrates that issues related to MCRD flows are not relevant to this relicensing proceeding. Importantly, when SCE filed the Amended Settlement Agreement with FERC, it did so "for information purposes," and not for approval by FERC. *See* Accession No. 20230330-5324. This was intentional, as FERC had previously held that arrangements at the Project related to state-adjudicated water rights are outside its jurisdiction. As FERC explained when rejecting certain elements of the Original Settlement Agreement: *"Proposed Article 411 would have the Commission require the licensee to file a plan for a modified powerhouse tailrace diversion structure and Mill Creek return water conveyance facility. Subject to the construction of the revised water conveyance facility, proposed Article 411 would have the Commission require the licensee to release powerhouse flows into Wilson and Mill Creeks in a manner consistent with the water rights on those creeks and the annual water management plan of proposed Article 417. Proposed Article 417 would require the licensee to prepare the annual plan in consultation with the water rights holders and the other entities mentioned earlier in this order and to file the plan with the Commission by June 1st of each year, but it would not give the Commission authority to approve the plan or require the consent of the consulted entities to the allocation of flows between the creeks.*

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
			"The effect of these provisions, in combination with the settlement's proposed deletion of the Article 414 reservation of Commission authority, would be to remove the Commission entirely from any role over the licensee's distribution of powerhouse flows between Mill and Wilson Creeks. As such, the provisions would interfere with the exercise of our authority to require flow releases for the enhancement or protection of resources on those creeks below the powerhouse, such as by implementing staff's recommended maintenance of a 5-cfs flow in Wilson Creek. Apart from these environmental considerations, however, there should be no reason, from the Commission's standpoint to object to Edison's allocation of flows in accordance with the settlement agreement. Edison would have to respect the water rights priorities of water rights holders under California water law in making any such allocation, as Edison in fact has stated it would do. To the extent that water rights holders or users might dispute these priorities or contend that Edison's water allocation is not following them, this would be a matter for the state of California to address. Enforcing Edison's distribution of water in accordance with established water rights is not within the Commission's jurisdiction. *"This leads to a more fundamental problem with these settlement provisions. Their incorporation as license articles would not merely leave powerhouse flow allocation to the discretion of Edison in consultation with the water rights holders and other entities. Rather, submission of a plan for an upgraded return conveyance, preparation of an annual water management plan, and release of flows in accordance with that plan would be made requirements of the license. We see no basis for adopting as license requirements provisions whose*

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
			purpose is to implement an agreement reached by the licensee and some (but not all) of the water rights holders for the distribution of water. While, under section 27 of the FPA, the Commission may not take actions that interfere with state water rights, it is quite another thing for the Commission to compel a licensee to adhere to privately reached arrangements for supplying water to satisfy those rights. To incorporate these settlement provisions as license articles would make us responsible for enforcing the licensee's compliance with this private scheme of water distribution. No project purpose would be served by such license requirements. *S. Cal. Edison Co.*, 121 FERC ¶ 61,154, at PP 82-84 (2007). For these reasons, the MCRD study requested by the Forest Service bears no nexus to the Project, nor would the results of the requested study inform the development of license conditions, as required by Study Criterion 5, 18 C.F.R. § 5.9(b)(5), as this study touches on state-adjudicated water rights that are outside the Commission's jurisdiction—as it held for this Project in 2007.
2	CDFW	**New Study: WQ-1 Lundy Lake and Mill Creek Water Quality Monitoring / or** **New Invasive Species Study** CDFW recommends that the Licensee evaluate the current and potential establishment and environmental effects of the following aquatic invasive species within the PAA: quagga mussel (*Dreissena rostriformis bugensis*), zebra mussel (*Dreissena polymorpha*), New Zealand mudsnail (NZMS, *Potamopyrgus antipodarum*), Asian clam (*Corbicula fluminea*), bullfrog (*Lithobates catesbeianus*), didymo (*Didymosphenia geminata*), Eurasian watermilfoil (*Myriophyllum spicatum*), hydrilla (*Hydrilla verticillata*), water hyacinth (*Eichhornia crassipes*), Brazilian waterweed (*Egeria*	**Response:** SCE did not include this study as part of the PSP. However, as part of WQ-1, SCE will collect data (e.g., pH, temperature, dissolved oxygen, alkalinity, and calcium) in Project waters which will be used to evaluate the potential for colonization of invasive mussels, mudsnails, and clams. Aquatic studies (AQ-1, AQ-2, WQ-1, WQ-2) include record of any incidental observations and location information of aquatic invasive species (e.g., bivalves, mudsnails, bullfrogs, didymo) during sampling efforts. **Rationale:** The requestor has not provided a Project nexus or rationale for a conducting a comprehensive assessment for bullfrog (*Lithobates catesbeianus*), didymo (*Didymosphenia geminata*), Eurasian watermilfoil *(Myriophyllum spicatum*), hydrilla (*Hydrilla verticillata*), water hyacinth (*Eichhornia*

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		densa), parrot's feather milfoil (*Myriophyllum aquaticum*), Carolina fanwort (*Cabomba caroliniana*), curlyleaf pondweed (*Potamogeton crispus*), and water primrose (*Ludwigia spp.*) Reference: Page 4, Paragraph 7	*crassipes*), Brazilian waterweed (*Egeria densa*), parrot's feather milfoil (*Myriophyllum aquaticum*), Carolina fanwort (*Cabomba caroliniana*), curlyleaf pondweed (*Potamogeton crispus*), and water primrose (*Ludwigia spp*.), no data exists that identifies that these species have been established in the Project Area. There is a low potential for Brazilian waterweed or curlyleaf pondweed to occur in the Project Area with the nearest observations of these species occurring in Long Valley (below Mammoth Lakes) and possibly in ponds near June Lake (identification isn't confirmed), respectively. Eurasian watermilfoil, hydrilla, water hyacinth, parrot's feather milfoil, Carolina fanwort, and water primrose species have no potential to occur in the Project Area. Nevertheless, SCE proposed to record incidental observations of aquatic invasive species during study implementation.
3	MLC	**New Study: Bypass Reach Flows Compliance** The bypass reach of Mill Creek (from Lundy Dam to the Return Ditch) is addressed in the 2005 Settlement Agreement with minimum dam releases, assumptions about gains from Deer Creek and springs, and flow monitoring. PAD Section 5.2.2.12 describes how the minimum flow below the dam is reduced when seepage allows the 4 cubic feet per second (cfs) goal below the dam to be met. Page 437 of the PAD notes "Requirement for 7 cfs minimum instream flow resolved through subsequent Settlement Agreement to address prior appropriation of water rights." The relevant license condition states "The Licensee shall monitor flows on Mill Creek above the return ditch to determine if the combination of minimum flows and accretion provide 7 cfs of flow in Mill Creek. The monitoring has shown that in recent years flow has often not been 7 cfs at the Return Ditch A study plan should be developed to evaluate [if 7 cfs is being delivered at the return ditch]... by reviewing the	**Response:** SCE declines to develop a study plan to evaluate if 7 cfs is being delivered at the Return Ditch. **Rationale:** SCE is in compliance with Article 404 of the license and does not agree that this study is needed, nor has the MLC framed this study request based on the ILP criteria of Section 18 CFR 5.9(d), which is necessary to evaluate the request. The complete "relevant condition" cited in MLC's letter continues: "The licensee will measure the streamflow once each March, June, September, and December for an eight-year period beginning the first March after this article is effective. The licensee need not install a permanent stream gauge to measure these flows. The licensee may use a handheld current meter, portable weir, or such other suitable device to obtain an accurate stream flow measurement" SCE filed the report on September 6, 2018 with the following results:

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		monitoring and other flow data and evaluating changes in accretion and dam seepage since the 2005 Settlement Reference: Page 1, Paragraph 3	**Attachment 1** **Accretion CMM made on Mill Creek above return ditch confluence** March / June / September / December 2008: 4.24 / 6.44 / 20.40 / 6.80 2009: 4.92 / 22.30 / 9.30 / 8.89 2010: 6.89 / 106.00 / 12.40 / 2011: 9.90 / 15.00 / 20.40 / 13.10 2012: 10.30 / 14.70 / 11.50 / 6.95 2013: 5.82 / 9.48 / 10.80 / 7.18 2014: 7.71 / 13.70 / 9.15 / 7.08 2015: 5.81 / 8.04 / 7.02 / 5.65 2016: 7.56 / / / / Average: 7.02 / 24.46 / 12.62 / 7.95 The intent of the SCE's monitoring data, submitted to FERC in 2018, was to demonstrate that our assumptions around seepage and inflow met the goals providing 7cfs at the return ditch, when averaged over the 8-year period; the delivery of 7cfs was never a hard requirement, and the data above as cited by the MLC does not suggest that there is any problem that needs to be addressed. FERC's Study Criterion 5 requires that MLC present evidence that there is an issue with the flows that is contributing to some sort of adverse environmental effect. FERC does not have authority to require the applicant to study an issue which is unsupported by any evidence. City of Centralia v. FERC, 213 F.3d 742, 749 (D.C. Cir. 2000)
4	MLC	**New Study: Spill management** Spill operations should be evaluated and guidelines for operations developed. A study should be done of historic reservoir level management and management change over time to inform future management decisions and provide additional relevant information, including the total amount of dam seepage or below-dam groundwater accretion spill management, high season water management,	**Response:** SCE is not proposing a study to evaluate spill and develop a guide for operations. **Rationale:** SCE's "operational guidelines" for spill are to minimize spill to the extent practical. Operations are guided by the MCAPT tool and the characteristics of the water rights that provide for flexibility in storage and release to avoid spill, including to the extent possible, high water.

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		and impacts to recreational fishing, campground use and downstream sedimentation, erosion, and logjam transport. Reference: Page 2, Paragraph 1	The requestor has not identified a problem that needs to be addressed. The relicensing process is not a forum to explore potential unsubstantiated claims or to study open-ended questions of how to manage resources. The request does not present evidence that spill management at the project is contributing to some sort of adverse environmental effect; therefore, Study Criterion 5 is not met, because FERC does not have the authority to require the applicant to study an issue which is unsupported by any evidence; see City of Centralia v. FERC, 213 F.3d 742, 749 (D.C. Cir. 2000).
5	MLC	**New Study: Road crossing below dam** In 2023, SCE managed Lundy to minimize a spill by operating the Farmer's Gate at higher flows than previously. This combined with unanticipated operational issues and exceptionally high runoff led to high flow releases that washed out the access road below the dam, stranding recreationists and impairing access to public and SCE facilities at the dam. A study should evaluate options for improvement of the road crossing to allow high flows to pass downstream without impairment. Reference: Page 2, Paragraph 2	**Response:** SCE is not intending to evaluate options for improving road crossings. **Rationale:** The access road that MLC is referred to is managed and maintained by Mono County. While MLC's recounting of the 2023 event is accurate, the year in question was following a record snowpack in the Sierras and the aforementioned unanticipated operational issues. Because this is a county responsibility and SCE cannot account for unanticipated operational issues, the proposed study is not warranted.
6	MLC	**New Study: High season water** Currently the MCAPT correctly identifies "high season water" that is stored in the reservoir and can be released into Mill Creek on a flexible schedule. A study plan should be developed to evaluate the ecological benefits of different timing and magnitudes of release of this water. The study would inform operational decisions made to plan for the release of the water. Consideration should be given to hypothetical large wintertime flows and potential negative impacts to the trout fishery recruitment and health.	**Response:** SCE is not proposing a High Season Water Study. **Rationale:** Water rights in excess of 74.6 cfs (i.e., high season water) is held by LADWP and has no nexus to Project operations. SCE intends to continue to operate to maximize power generation consistent with established water rights and as directed by LADWP. See SCE's response to Comment 1 above. Fish population data (e.g., age class distribution and nutritional state metrics) will be collected in Study AQ-1 Fish

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		Reference: Page 2, Paragraph 3	Community Survey and used in the license application to evaluate potential Project effects on fish populations in Project affected reaches of Mill Creek. However, SCE does not see that a study to "evaluate ecological benefits of different timing and magnitude of release of water" is warranted. There is no evidence of an adverse effect from existing (and proposed) operations; therefore, Study Criterion 5 is not met, because FERC does not have the authority to require the applicant to study an issue which is unsupported by any evidence; see City of Centralia v. FERC, 213 F.3d 742, 749 (D.C. Cir. 2000).
7	MLC	**New Study: Return Ditch Study and Gauging** MLC supports the study SCE currently is conducting of the losses in the Return Ditch, consistent with the Settlement Agreement. Study results and potentially additional work would be valuable to the relicensing process. MLC supports the study options recommended by the Inyo National Forest on this topic. SCE should also verify the accuracy of the existing gauges in the system including but not limited to the flume below the dam, the top and bottom of the return ditch, tailrace, release into Wilson and Upper Conway Ditch. The study should inform a decision for which gauges could be QA/QC'd and published by the USGS on a regular basis. Reference: Page 2, Paragraph 4	**Response:** SCE did not include this study as part of the PSP. **Rationale:** See comment 1
8	MLC	**New Aquatic Invertebrate Study** ***Study plans that support operational changes*** The changes in operation that result from the current license and associated Settlement Agreement are expected to be beneficial for Mill Creek and should continue. We are happy to see study plans--such as the aquatic and botanical studies. The PAD mentions aquatic invertebrate data from 2012—this is an area where a study should be added.	**Response:** SCE appreciates the MLC's positive outlook on the benefits from the Settlement Agreement and associated amendments. SCE believes the existing data is sufficient to inform Project effects because operations in this reach have not changed since the existing BMI data was collected. Note, that benthic macroinvertebrate (BMI) data exists in Mill Creek between Lundy Dam and Mill Creek Return Ditch.

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		Reference: Page 3, Paragraph 3	

Note: MLC= Mono Lake Committee

Table 2.2-2. Stakeholder Comments on Proposed Studies

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
1	USFS	**AQ-1 Fish Community Survey / AQ-2 Fish Stranding Study** Regarding the proposed Aquatics AQ-1 & AQ-2 Fish Community Survey, Fish Stranding Studies, we suggest that these study objectives also include for the potential accounting and survey of amphibians found within or affected by the Project. Further, any Fish Stranding Study should, in addition to estimating entrainment potential within project works, should document whether any natural fish barriers exist within the bypassed reach of Mill Creek at varying flow levels. Reference: Page 3, Paragraph 1	**Response (Amphibians):** The Wildlife Resources Study Plan (TERR-2) will include a process for including observations of amphibians in the study area. **Rationale (Amphibians):** There are no listed amphibian species that are known to occur in the Project Area. The USFWS's IPAC lists Yosemite toad (*Anaxyrus canorus*) and Sierra Nevada yellow-legged frog (*Rana sierrae*) within the broadly drawn search polygon. A query of the California Natural Diversity Data base for the Lundy USGS 7.5-minute topographic quadrangle and the surrounding 7.5-minute topographic quadrangles resulted in only adding the Mt. Lyell salamander (*Hydromantes platycephalus*) to the list. However, for the above three species there are no records for Lundy Lake or areas near to or adjacent to the FERC boundary. All the records are for the surrounding high elevation lakes, Yosemite National Park, Frog lakes, and the Saddlebag Lake-Tioga Pass environs. A query of iNaturalist for Lundy Lake and the surrounding FERC boundary down to Hwy 395 returned no observations of amphibians. However, amphibians can be difficult to observe. Study plans for Aquatics (AQ 1 and AQ2) and Wildlife Resources (Terr 2) includes documentation of any incidental observations (e.g., amphibians). All incidental observations will be reported in the study plan technical reports.

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
			Response (Entrainment and Fish Passage Barriers): SCE's license application will include information on entrainment that was developed for the previous license to understand potential impacts to the recreational fishery of Lundy Lakes. This information will be used to dialogue with the CDFW and was evaluated for the prior license. Infrastructure remains the same. With respect to fish passage barriers, SCE amended the Fish Stranding Study (AQ-2) to visually identify potential obstacles or barriers to fish movement. **Rationale (Entrainment and Fish Passage Barriers):** No native fish species are present in Lundy Lake; the predominant population is dependent on stocking to support recreational fishing. Analyzing existing information in the context of current fisheries and recreation objectives for entrainment utilization is appropriate. With respect to a fish barriers assessment, there are no fish species in Mill Creek downstream of Lundy Dam that would depend on habitat connectivity for specific life stages. The level of effort to assess the relationship between hydraulic conditions and fish passage is not warranted, but SCE will visually assess and document potential obstacles or barriers to fish movement as part of AQ-2.
2	USFS	**REC-1 Recreation Use and Needs Assessment** Regarding the proposed Recreation Rec-1 Needs assessment, we suggest the study scope should also investigate public recreation needs beyond those already provided by the FERC-approved Lundy recreation sites. Limiting the analysis to only the recreation opportunities afforded by the existing facilities could significantly underestimate the Project's recreation potential and needs. For example, SCE provides campgrounds downstream of Lundy Reservoir. It is	**Response:** SCE agrees that the scope of the Recreation Use and Needs Study will explore public recreation needs beyond the already provided FERC-approved recreation sites.

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		unclear if the public would be better served or be interested in campgrounds adjacent to the reservoir. Reference: Page 3, Paragraph 2	
3	SWRCB	**WQ-1 Lundy Lake and Mill Creek Water Quality Monitoring** A robust study that follows standard fish tissue mercury protocols and represents the range of fish that could be caught and/or consumed by the public, coupled with concurrent water quality data related to mercury, will ensure the Project is protective of human health and is compliant with water quality standards. The Mill Creek drainage upstream of Lundy Lake has an extensive history of mining, and no data appears to be available regarding relevant water quality in Mill Creek or Lundy Lake. no analysis or data collection have been conducted to understand Project effects on methylation of mercury The Project area has an active fishing community that makes use of Project facilities and fish in and around the Project impoundment. Oxygen depletion in Lundy Lake may lead to methylation of mercury due to anoxic conditions in reservoir sediments. It is unknown to what extent anoxic or hypoxic conditions may occur in Lundy Lake or its bottom sediments, as no oxygen data for the reservoir are available. The Mercury Fish Tissue Sampling Study should be conducted in two consecutive water years and should include data collection described in the goals and objectives section. Based upon previous relicensing processes in California that have conducted similar fish tissue studies, State Water	**Response:** A fish tissue mercury assessment is included in the Lundy Lake and Mill Creek Water Quality Monitoring Study (WQ-1). Additionally, SCE will collect dissolved oxygen reservoir profile data and methylmercury and total mercury concentration sampling in Lundy Lake. SCE plans to conduct a 1-year study to characterize the risks of fish tissue mercury found in Lundy Lake. If results from the first-year warrant follow up, SCE and agencies can propose a study plan modification to include additional data collection.

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		Board staff estimate the cost to be between $10,000 and $15,000 with cost dependent on collaborative development of study specifics and methodologies. Reference : Page 11 (Attachment B Page 2), Paragraph 5	
4	SWRCB	**WQ-1 Lundy Lake and Mill Creek Water Quality Monitoring / AQ-1 Fish Community Survey** As part of proposed studies WQ-1 Lundy Lake and Mill Creek Water Quality Monitoring or AQ-1 Fish Community Survey, and prior to any other study data collection, SCE should conduct a bathymetric survey of the entirety of Lundy Lake and amend measurement locations of all relevant draft study plans as necessary. The PAD does not state when Lundy Lake bathymetry was last surveyed, and as such whether the storage capacity declined since issuance of the current license or prior license. Similarly, no maximum depth for Lundy Lake is provided in the PAD, and the Appendix A Exhibit G Map of the Project does not provide bathymetry for the entire lake; only bathymetry above the depth of the minimum operating level is shown. Maximum depth of the lake, including that below the minimum	**Response**: SCE will use standard methods (e.g., depth finder or fish finder) to locate the deepest part of Lundy Lake for sampling. **Rationale:** SCE agrees that the water quality parameters of concern to the SWRCB are dependent on reservoir depth and will include protocols to ensure sampling is consistent with best practices; however, SCE has not identified a need for bathymetry or updating storage as there is no evidence that sediment accumulation is affecting storage in the reservoir. For the license application, SCE will utilize existing estimates of storage.

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		operating level, as well as the bathymetry throughout the entirety of the lake, is important for determining where water quality samples should be collected, as well as determining which areas may be of greatest concern for hypoxic or anoxic conditions and any resultant methylation of mercury. Reference: Page 8 (Attachment A Page 5), Paragraph 2	
5	CDFW	**General** The PAD and SD1 lack clarity on how the Licensee plans to comply with the terms and conditions of the Lundy Hydroelectric Project Settlement Agreement. CDFW requests that the Licensee directly address how the terms and conditions of the Settlement Agreements and the Settlement Implementation Plan will be met in the PAD. CDFW also requests that FERC directly address how the terms and conditions of the Settlement Agreements as well as the Settlement Implementation Plan will be incorporated into the scope of the Project. Reference: Page 2, Paragraph 2	**Response:** SCE's explanation of the Amended Settlement Agreement appears in Section 4.6 (Project Operations) and Section 5.2 (Water Resources) of the PAD and requires no further clarification. **Rationale:** As explained in Table 2.2-1, Comment 1, the Amended Settlement Agreement involves issues in which FERC has no jurisdiction; therefore, those issues will not be incorporated into the scope of the Project—consistent with the treatment of those issues in this PSP.
6	CDFW	**General** For the purposes of developing and conducting Project relicensing studies and describing the Project affected area (PAA) and environmental effects in the PAD, CDFW recommends that the Licensee and FERC (for scoping) include all the stream reaches that are affected by the Project, including all reaches of Mill Creek between Lundy Lake to Mono Lake, as well as the Mill Creek Return Ditch. Section 5 of the PAD, Description of the Existing Environment, and associated subsections related to Water Resources, Water Quality, and Fish and Aquatic Resources do not include a description of the PAA...CDFW proposes that the PAD also include all reaches of	**Response:** General comments on the PAD and SD1 are not addressed in this PSP. The purpose of the PAD was to inform development of the study plans and requests. However, comments on the PAD that have been provided, including clarification of the PAA and disposition of the return ditch relative to the PAA will be carried forward into future documents, including as appropriate, study plans, reports and the draft and final license application. SCE views the PAA as being limited to the FERC Project boundary, including Mill Creek between Lundy Dam and the confluence of Mill Creek Return Ditch and Mill Creek Return Ditch. **Rationale:** As explained in the PAD, the Project has limited ability to influence areas outside of the FERC Project

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		Mill Creek affected by the Project. CDFW also requests that FERC explicitly include the Mill Creek Return Ditch in their geographic scope for analysis of cumulatively affected aquatic resources. Reference: Page 2, Paragraph 3	boundary, because operations are controlled by water rights requirements. Therefore, studying stream reaches below the Project is unlikely to result in any identifiable operational change that could be made that would not affect SCE's delivery of water to the water rights holders. As the MCRD is already in the Project boundary, including the geographic scope of the cumulative affects analysis is not warranted.
7	CDFW	**General** CDFW requests that the Licensee develop Project maps in a format that is useful for interactive data analysis and interpretation and provide Project shapefiles to resources agencies upon request. Reference: Page 3, Paragraph 3	**Response:** Comment Noted. SCE will provide shapefiles as requested.
8	CDFW	**CUL-1 Cultural Resource – Archaeology / TRI-1 Tribal Resource** The Lahontan RWQCB's Basin Plan that includes the Mono Basin, has a proposed Basin Plan amendment to designate Tribal beneficial uses within the PAA (LRWQCB, 2024). Specifically, Tribal Tradition and Culture (CUL) beneficial use is proposed on Mill Creek and Lundy Lake. Looking forward, CDFW recommends that the Licensee work with the RWQCB to include the appropriate studies to assess whether the Project affected streams and lakes are meeting the associated proposed Tribal Beneficial use criteria. Reference: Page 3, Paragraph 5	**Response**: Portions of this request are addressed by SCE's intent to assess methylation factors in Lundy Lake (See Comment 3 under WQ-1). **Rationale:** The study request includes Mill Creek which is not typical as stream conditions are unlikely to support conditions necessary for methylation of mercury. SCE is not intending to collect methylation data for Mill Creek. The need for this study is not warranted. If the proposed Basin Plan amendment is adopted by the Lahonton RWQCB, SCE will assess the need for additional studies at that time.
9	CDFW	**General**	**Response:** Comment noted. SCE anticipates discussing CDFW's interest in the Fish Stocking Agreement as the

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		Given the impact the Project has on the fishery within the PAA, CDFW would like to engage in discussions with the Licensee regarding a Fish Stocking Agreement to be incorporated into the new FERC license. Reference: Page 4, Paragraph 4	license application is prepared. This will be informed in part by results from the Recreation Use and Needs Assessment (REC-1).
10	CDFW	**General** Studies that involve the handling of fish, wildlife, or plant species listed as rare, threatened, or endangered, or candidates for these listings, may require a permit or other authorization from state and/or federal agencies, including CDFW and the United States Fish and Wildlife Service (USFWS). CDFW encourages the Licensee to pursue any necessary permits or authorizations for proposed Project studies as soon as possible to avoid delays in implementing studies. Reference: Page 5, Paragraph 1	**Response:** Comment Noted.
11	CDFW	**General** CDFW requests that the Licensee continue to provide sufficient notification to relicensing participants of the implementation of Project studies, so all Project relicensing participants have the opportunity to be onsite to observe Project field activities. Reference: Page 5, Paragraph 2	**Response:** Comment Noted.
12	MLC	**TRI-1 Tribal Resource** ***Tribal Beneficial Uses*** Section 5.2.3.2 on page 5–20 should include a paragraph describing Tribal Beneficial Uses (TBU) water quality standards, which are currently in development by the Lahontan Regional Water Quality Control Board (Lahontan), and how the	**Response:** Section 5.2.3.2 of the PAD will not be updated, because the purpose of the document was to inform development of the study plans and requests. However, this clarification will be carried forward into future documents, including as appropriate, the License Application.

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		timing of the FERC relicensing process will allow TBU incorporation into the project's study plans and license conditions. Lahontan anticipates completing its designation process in 2024. Reference: Page 2, Paragraph 5	**Rationale:** Please refer to Comment 8 regarding SCE's proposal to collect data in support of the TBU analysis.
13	MLC	**TRI-1 Tribal Resource** ***Mono Lake Kutzadika[a] Tribe*** MLC understands that FERC is in active communication to engage with federally recognized tribes regarding the Lundy Project. MLC urges FERC to include the Mono Lake Kutzadika[a] Tribe in its engagement. Although the Kutzadika[a] Tribe is not currently federally recognized, MLC understands that FERC does engage with non-federally recognized tribes where circumstances make it appropriate. Federal legislation in the form of H.R.3427 is under consideration by the 118th Congress to provide federal recognition to the Tribe. Further, the Kutzadika[a] Tribe is recognized by the State of California and is geographically based in the Mono Basin where the Lundy Project is located. Reference: Page 2, Paragraph 6	**Response:** Comment Noted – SCE is actively engaged in outreach with the Kutzadika[a] Tribe and is implementing protocols that are consistent with federally recognized tribes.
14	MLC	**REC-1 Recreation Use and Needs Assessment / REC-2 Recreation Facilities Condition Assessment** ***Recreational Uses*** Recreational use has increased significantly at the Lundy facilities including Lundy Lake dam site and boat ramp, campgrounds, and day use sites. These sites often have issues related to high use levels and lack of trash disposal and bathroom facilities. Studies REC-1 and REC-2 should include consideration of methods to alleviate these impacts such as installation of vault toilets and support of	**Response:** These objectives are consistent with the Recreation Use and Needs Study (REC-1) and the Recreation Facilities Condition Assessment (REC-2).

Comment #	Entity	Study Request / Comment	SCE Response and Rationale
		Mono County's "Camp Like a Pro" initiative that is currently absorbing impact management costs at these sites. The REC-2 Recreation Facilities Condition Assessment should also evaluate the relocation of campsites that are frequently flooded. Reference: Page 3, Paragraph 2	

Note: MCRD= Mill Creek Return Ditch, USFS= United States Forest Service, WQ= Water Quality, MLC= Mono Lake Committee, MCAPT= Mill Creek Accounting Planning Tool, LADWP= Los Angeles Department of Water and Power, QA/QC= Quality Assurance/Quality Control, USFWS's IPAC= United States Fish and Wildlife Service's Information for Planning and Consultation, USGS= United States Geodetical Service, SWRCB= State Waterboard Resources Control Board, RWQCB= Regional Water Quality Control Board

2.3. STUDY PLAN COMPONENTS

The individual Study Plans include the following information:

- **Potential Resource Issue(s)** – This section identifies the environmental or cultural resource issues that are specifically addressed in the study plan.
- **Project Nexus and How the Results will be Used** – This section identifies the nexus between project operations and maintenance activities to the environmental or cultural resource issue(s). It also describes how the study results will be used to identify potential license conditions that may be necessary to address the issue(s).
- **Study Goals and Objectives** – This section describes the specific study objectives or goals of the study.
- **Study Area and Study Sites** – This section clearly identifies the limits of the study based on the potential project nexus for each study plan.
- **Existing Information** – This section briefly describes the existing information identified in the PAD, if any, including reference pages or literature relating to the issue, and describes the information gaps the study is intended to fill.
- **Study Approach** – This section provides a description of the study elements and methodologies proposed to meet each study objective.
- **Reporting** – This section includes a brief statement regarding how study results will be shared.
- **Schedule** – This section presents a schedule for the implementation of each study.
- **Level of Effort and Cost** – This section includes a cost estimate (2024 dollars) to provide an understanding of the level of effort anticipated in the study.

2.3.1. CONTENT AND ORGANIZATION OF STUDY PLANS

The following sections describe three additional study plan components that apply to all study plans. These components are not addressed individually within each study plan.

2.3.1.1. Project Description

The Project is located on the eastern slope of the Sierra Nevada along Mill Creek, approximately 7.6 miles northwest of Lee Vining off Lundy Road, in Mono County, California. The 3-megawatt (MW) Project is partially in the Inyo National Forest (INF), managed by the USDA Forest Service and partly on federal land administered by the United States Department of the Interior Bureau of Land Management (BLM), Bishop Field Office. The remaining Project lands are owned by SCE except for a small parcel of land near the powerhouse owned by Mono County.

The Project facilities include Lundy Lake, Lundy Dam, an intake, a flowline, a penstock, a powerhouse, and a water distribution system by which flows are directed to meet the water rights of water rights holders. The flowline and penstock convey water from Lundy Lake to the powerhouse (Figure 2.3-1).

For more details on the Project description, including operation of the Project, please refer to Section 4.0 Project Location, Facilities, and Operations in the PAD.

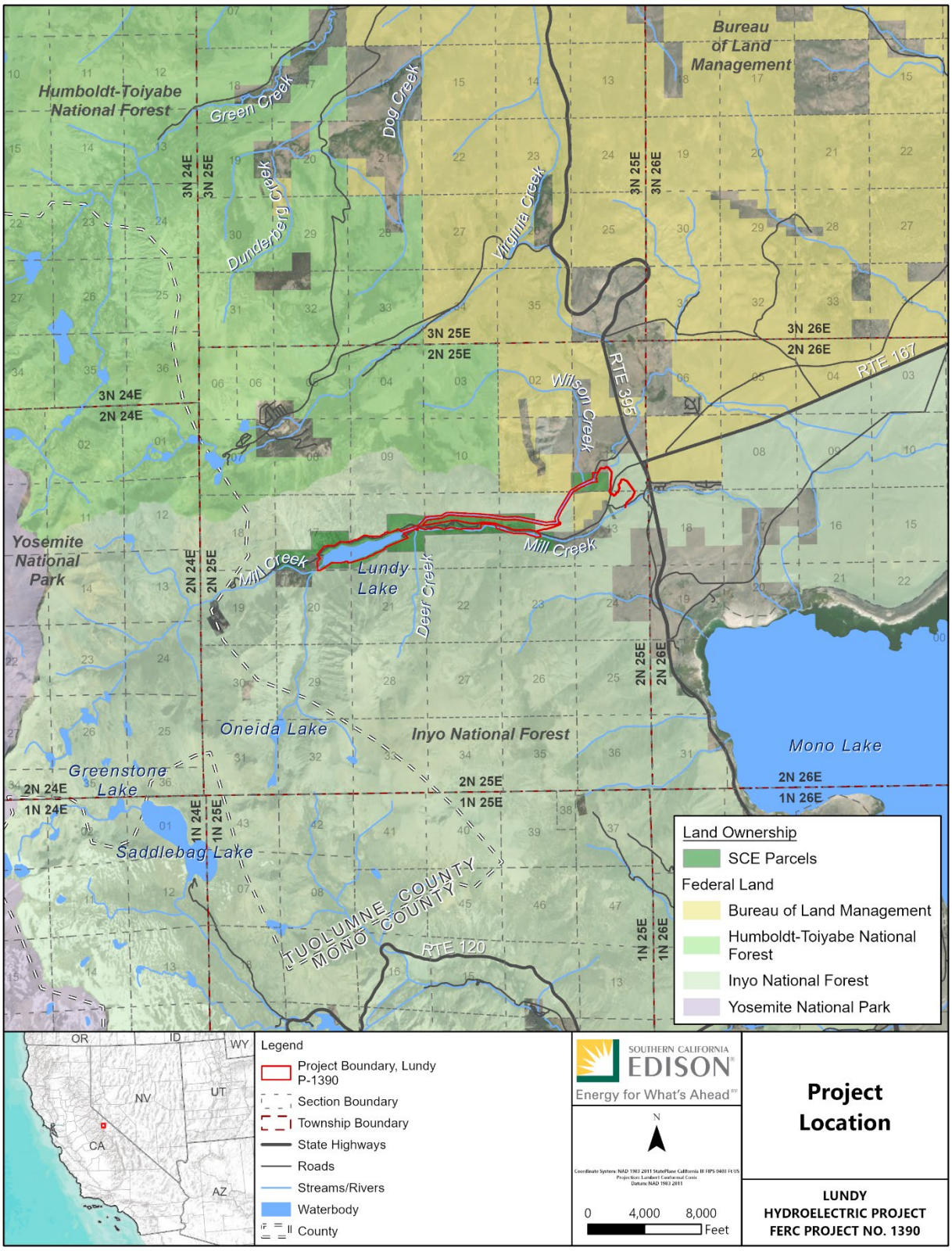

Figure 2.3-1. Lundy Hydroelectric Project Map.

2.3.1.2. Relevant Resource Agency Jurisdiction/Management Goals

Table 2.3-1 identifies relevant resource agency jurisdiction/management goals related to the operation and maintenance of the Lundy Project. This list reflects the general content and range of management goals that may be under consideration for the Lundy Project relicensing. For each goal, a corresponding study plan(s) was identified which would result in the collection of sufficient data to adequately address the resource agency management goals.

Table 2.3-1. Relevant Resource Agency Jurisdiction / Management Goals

Agency	Resource Agency Jurisdiction / Management Goals	Lundy Project Study Plans											
		WQ-1 Lundy Lake and Mill Creek Water Quality Monitoring	WQ-2 Lundy Lake and Mill Creek Water Temperature Monitoring	AQ-1 Fish Community Survey	AQ-2 Fish Stranding Study	TERR-1 General Botanical Resources Survey	TERR-2 General Wildlife Survey	REC-1 Recreation Use and Needs Assessment	REC-2 Recreation Facilities Condition Assessment	CUL-1 Cultural Resource - Archaeology	CUL-2 Cultural Resource - Built Environment	TRI-1 Tribal Resource	LAND-1 Project Lands and Roads Study*
California Department of Fish and Wildlife	In the State of California, fish and wildlife resources are held in trust for the people of the state, and the CDFW has statutory responsibility for managing and protecting all fish, wildlife, and habitat to support these species in the public interest (California Fish and Game Code § 711.7). The CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (California Fish and Game Code § 1802).	X	X	X	X	X	X						
California Office of Historic Preservation	The California Office of Historic Preservation is charged with ensuring that projects and programs conducted or sponsored by federal and state agencies comply with federal and state historic preservation laws and that projects are planned in ways that avoid or minimize adverse effects to heritage resources. Section 106 of the National Historic Preservation Act of 1966, as amended (54 United States Code § 300101 et seq.), requires federal agencies to take into account the effects of their undertakings on historic properties and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. In accordance with section 101(b)(3) of the National Register of Historic Places, the State Historic Preservation Office advises and assists federal agencies in conducting their Section 106 (36 CFR § 800) responsibilities and cooperates with such agencies, local governments, and organizations and individuals to ensure that historic properties are taken into consideration at all levels of planning and development. The regulations implementing Section 106 (36 CFR § 800) define “historic properties” as any pre-contact or historic period district, site, building, structure, or individual object included in or eligible for inclusion in the National Register of Historic Places. This term includes artifacts, records, and remains that are related to and located within historic properties, as well as Traditional Cultural Properties that meet the National Register Criteria.									X	X	X	
State Water Resources Control Board	A certification issued by the State Water Resources Control Board (State Water Board) for the Project must ensure compliance with the water quality standards in the Water Quality Control Plan for the Lahontan Region (Basin Plan). Water quality control plans designate the beneficial uses of water that are to be protected, water quality objectives for the reasonable protection of the beneficial uses and the prevention of nuisance, and a program of implementation to achieve the water quality objectives (California Water Code, §§ 13241, 13050, subds. (h), (j)). The beneficial uses, together with the water quality objectives contained in the water quality control plans and applicable anti-degradation requirements, constitute California’s water quality standards for purposes of the Clean Water Act. In issuing water quality certification for a project, the State Water Board must ensure consistency with the designated beneficial uses of waters affected by the project, the water quality objectives developed to protect those uses, and anti-degradation requirements.	X	X	X	X	X	X						

Agency	Resource Agency Jurisdiction / Management Goals	Lundy Project Study Plans											
		WQ-1 Lundy Lake and Mill Creek Water Quality Monitoring	**WQ-2 Lundy Lake and Mill Creek Water Temperature Monitoring**	**AQ-1 Fish Community Survey**	**AQ-2 Fish Stranding Study**	**TERR-1 General Botanical Resources Survey**	**TERR-2 General Wildlife Survey**	**REC-1 Recreation Use and Needs Assessment**	**REC-2 Recreation Facilities Condition Assessment**	**CUL-1 Cultural Resource - Archaeology**	**CUL-2 Cultural Resource - Built Environment**	**TRI-1 Tribal Resource**	**LAND-1 Project Lands and Roads Study***
U.S. Fish and Wildlife Service	Working with others to conserve, protect, and enhance, fish, wildlife, plants, and their habitats for the continuing benefit of the American people reflects the value the agency places on working in partnership with others. As the principal federal partner responsible for administering the Endangered Species Act, the U.S. Fish and Wildlife Service leads the recovery and conservation of imperiled species through protection of endangered and threatened species and conservation of candidate species and species-at-risk.	X	X	X	X	X	X						
U.S. Forest Service	The U.S. Forest Service (Forest Service) was established in 1905 to sustainably manage national forests and promote conservation across the country. The overriding objective of the Forest Service's forest management program is to ensure that the National Forests are managed in an ecologically sustainable manner. The National Forests were originally envisioned as working forests with multiple objectives: to improve and protect the forest, to secure favorable watershed conditions, and to furnish a continuous supply of timber for the use of citizens of the United States. Forest management objectives have since expanded and evolved to include ecological restoration and protection, research and product development, fire hazard reduction, and the maintenance of healthy forests. Guided by law, regulation, and agency policy, Forest Service forest managers use timber sales, as well as other vegetation management techniques such as prescribed fire, to achieve these objectives. A portion of the Project facilities occupy federal lands within the Inyo National Forest, which is under the jurisdiction of the Forest Service. As such, much of the Project Area is managed in accordance with the goals and policies of the 2019 Land Management Plan for the Inyo National Forest and the 2001 Wilderness Management Plan for the Ansel Adams, John Muir, and Dinkey Lakes Wildernesses	X	X	X	X	X	X	X	X	X	X	X	X

Notes:
CDFW = California Department of Fish and Wildlife
CWA = Clean Water Act
FERC = Federal Energy Regulatory Commission
NHPA = National Historic Preservation Act
USFWS = U.S. Fish and Wildlife Service

2.3.1.3. Consistency with Generally Accepted Practice in the Scientific Community

The study methodologies (including data collection and analysis techniques, field schedules, and study durations) identified in the PSP are consistent with the generally accepted practice in the scientific community. The scope of each PSP, provided in Attachment 1, is consistent with common approaches used for other relicensing proceedings in California and the nation, and where appropriate, reference specific protocols and survey methodologies.

2.3.2. Consideration of Level of Effort and Cost

The overall objective of the PSP is to develop sufficient information to identify potential Project impacts and collaborate on the proposed Project included in the License Application. The study plan approaches were evaluated first to verify that the desired information was focused on potential impacts associated with the Project (i.e., Project Nexus), second to confirm that the information collected would substantially influence decisions on new license conditions (i.e., clear linkage between information obtained and decision process), and third to substantiate that the study approaches and resulting level of efforts were consistent with generally accepted practices in the scientific community. The PSPs provided in Attachment 1 meet these evaluation criteria.

As no alternative study methods have been proposed to address identified questions, there appears to be no need for FERC to determine whether an alternative method may be preferred. Should alternatives be advanced during the comment periods described in 18 CFR § 5.12 and 5.13, SCE will clarify the basis for its selection of methods and practices. Table 2.3-2 presents the estimated level of effort and cost for completion of each study plan.

Table 2.3-2. Total Cost for Implementation of the Proposed Studies

Study Plan Title	Total Estimated Cost ($2024)
Aquatic Resources	
WQ-1 Lundy Lake and Mill Creek Water Quality Monitoring	$221,000
WQ-2 Lundy Lake and Mill Creek Water Temperature Monitoring	$65,000
AQ-1 Fish Community Survey	$143,000
AQ-2 Fish Stranding Study	$196,000
Total	**$625,000**
Terrestrial Resources	
TERR-1 General Botanical Resources Survey	$208,000
TERR-2 General Wildlife Survey	$164,000
Total	**$372,000**
Recreation Sources	
REC-1 Recreation Use and Needs Assessment	$280,000
REC-2 Recreation Facilities Condition Assessment	$68,000
Total	**$348,000**
Cultural Resources	
CUL-1 Cultural Resource - Archaeology	$83,000
CUL-2 Cultural Resource - Built Environment	$84,000
TRI-1 Tribal Resource	$90,000
Total	**$257,000**
Land Resources	
LAND-1 Project Lands and Roads Study	$45,000
Total	**$45,000**
Project Total	**$1,647,000**

3.0 STUDY PLAN MEETING

3.1. PROPOSED STUDY PLAN MEETING DETAILS

SCE will conduct a virtual proposed study plan meeting on September 3, 2024 with stakeholders to: (1) clarify SCE PSPs, (2) discuss information gathering or study requests, and (3) attempt to resolve any outstanding issues with respect to the PSPs. A detailed meeting agenda, and other applicable meeting materials will be uploaded to the Project's relicensing website at www.sce.com/lundy prior to the meeting.

- Date: September 3, 2024
- Time: 8:00am – 12:00pm PST
- Location: Teams Meeting (Invitation to be Distributed Separately)

The overall study plan development schedule is included in Table 3.1-1. The schedule includes timeframes for formal dispute resolution even though SCE anticipates that consensus with stakeholders on the study plans will be reached without the need for formal dispute resolution.

Table 3.1-1. Lundy Hydroelectric Project Relicensing—Study Plan Process Plan and Schedule

FERC 18 CFR §	Relicensing Activity [a]	Responsible Party	Activity Time Frame	Deadline [b,c]
Study Plan Development				
5.11	PSP and Study Requests			
5.11(a)	File PSP	SCE	Within 45 days following the deadline for filing of comments on SD1	August 6, 2024
5.11(e)	Conduct initial study plan meeting	SCE	No later than 30 days after the deadline for filing the PSP	September 5, 2024
5.12	File comments on PSP or submit revised study requests	Participants	Within 90 days after the PSP is filed	November 4, 2024
5.13	**RSP and Study Plan Determination**			
5.13(a)	File RSP	SCE	Within 30 days following the deadline for filing comments on the PSP	December 4, 2024
5.13(b)	File final comments on RSP	Participants	Within 15 days following the filing of the RSP	December 19, 2024
5.13(c)	Issue Study Plan Determination	FERC	15 days following the deadline for filing comments on the RSP	January 3, 2025
Formal Study Dispute Resolution Process				
5.13(d) 5.14(a)	File Notice of Study Dispute	Mandatory Conditioning Agencies	Within 20 days of the Study Plan Determination	January 23, 2025
5.14(d)	Convene Dispute Resolution Panel, if notice of Study Dispute is filed	FERC	Within 20 days of the Notice of Study Dispute	February 12, 2025
5.14(i)	File with FERC and serve upon panel members' comments and information regarding the dispute	SCE	No later than 25 days following the Notice of Study Dispute	February 17, 2025

FERC 18 CFR §	Relicensing Activity [a]	Responsible Party	Activity Time Frame	Deadline [b,c]
5.14(k)	Issue findings and recommendations regarding the Study Dispute to Director of the Office of Energy Projects	Dispute Resolution Panel	No later than 50 days following the Notice of Study Dispute	March 14, 2025
5.14(l)	Issue Written Determination on Study Dispute	FERC	No later than 70 days from the date of filing of the Notice of Study Dispute	April 3, 2025

CFR = Code of Federal Regulations; FERC = Federal Energy Regulatory Commission; NOI = Notice of Intent; PAD = Pre-Application Document; PSP = Proposed Study Plan; RSP = Revised Study Plan; SCE = Southern California Edison; SD1 = Scoping Document 1

Notes:

[a] Shaded milestones represent the steps in the Study Dispute process that are unnecessary if no disputes arise.

[b] Dates indicate the day or time frame within which an activity must occur in accordance with 18 CFR Part 5 based on a February 23, 2024, filing date for the NOI/PAD.

[c] If the deadline falls on a weekend, part-day holiday, or legal public holiday, the deadline is extended to the next business day.

4.0 EXECUTION OF STUDY PLANS

4.1. STUDY PLAN IMPLEMENTATION

SCE will initiate implementation of the 12 studies in the spring/summer of 2025 after FERC issues their Study Plan Determination (anticipated January 3, 2025).

Should any subsequent disputes arise, SCE will plan to initiate implementation of the 12 studies after the issuance of a written determination on the Study Dispute (if needed, anticipated April 3, 2025) (Table 3.1-1). Each study plan contains a detailed schedule for data collection and analysis, development and distribution of draft and final study reports. Table 4.1-1 provides an overview of these activities for each study plan.

Table 4.1-1. Anticipated Study Plan Implementation Schedule

Study Plan		2025				2026				2027			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Reporting (ISR/USR)					▲				▲			
	Application for New License								★	★			
WQ-1 Lundy Lake and Mill Creek Water Quality Monitoring													
Conduct Monitoring													
Analyze Data and Prepare Report													
WQ-2 Lundy Lake and Mill Creek Water Temperature Monitoring													
Conduct Monitoring													
Analyze Data and Prepare Report													
AQ-1 Fish Community Survey													
Conduct Monitoring													
Analyze Data and Prepare Report													
AQ-2 Fish Stranding Study													
Conduct Monitoring													
Analyze Data and Prepare Report													
TERR-1 General Botanical Resources Survey													
Conduct Botanical Resources Study													
Analyze Results and Prepare Report													
TERR-2 General Wildlife Survey													
Conduct Wildlife Surveys													
Analyze Data and Prepare Report													
REC-1 Recreation Use and Needs Assessment													
Conduct Recreation Visitor Intercept Surveys													
Analyze Data and Prepare Report													
REC-2 Recreation Facilities Condition Assessment													
Conduct Facility Condition Assessments													
Analyze Data and Prepare Report													
CUL-1 Cultural Resource - Archaeology													
Initiate Consultation and Conduct Archival Research													
Conduct Cultural Resource Surveys													
Compile Cultural Resource Survey Data and Information													
Continue Evaluation of Cultural Resources, as needed													

Study Plan		2025				2026				2027			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Reporting (ISR/USR)					▲				▲			
	Application for New License								★		★		
Analyze Data and Prepare Cultural Resources Report													
CUL-2 Cultural Resource - Built Environment													
Initiate Consultation and Conduct Archival Research													
Conduct Field Surveys													
Compile and Conduct Built Resources recordation and evaluation													
Prepare draft Report; Circulate drafts and prepare responses													
Draft Finding of Effect (if needed); Prepare built resources section HPMP													
TRI-1 Tribal Resource													
Initiate Consultation and Conduct Archival Research													
Conduct Tribal Site Visits and Evaluate Tribal Resources													
Analyze Data and Prepare Tribal Resources Report													
Continue Evaluation of Tribal Resources, as needed													
Analyze Data and Prepare Report													
LAND-1 Project Lands and Roads Study													
Conduct Desktop Analysis and interviews													
Consult with appropriate agencies and determine need for site assessments, potential field season for site assessments													
Analyze Data and Prepare Report													

Study Implementation and Reporting: May include desktop review of existing information, agency consultation, field surveys, data analysis, and development of a Technical Report, as outlined in the individual Study Plans.

▲ Reporting: Schedule assumes FERC will issue its Study Plan Determination on January 3, 2025, as presented in SD2. SCE will file the Initial Study Report (ISR) within 1 year (January 3, 2026) and the Updated Study Report (USR) within 2 years of FERC's determination (January 3, 2027).

★ Submittal of SCE's Draft License Application (October 1, 2026) and Final License Application (February 28, 2027) in accordance with 18 CFR 5.16(a) and 5.17(a).

4.2. INITIAL STUDY REPORTS AND MEETINGS

SCE will follow the standard FERC study plan progress reporting and meeting sequence as described in 18 CFR §5.15(c) and (f). SCE will file an Initial Study Report within 1 year following FERC's Study Plan Determination (estimated January 3, 2025) and an Updated Study Report (USR) no later than 2 years after FERC's determination. The reports will describe the progress of implementing each study plan, proposed schedule to complete any remaining tasks, and an overview of data collected to date. If a study-specific Technical Report is complete, it will be appended to the filing. The progress reports will note any variances or modifications from the FERC-approved study plan.

A study plan meeting with stakeholders and FERC staff will occur within 15 days of the Initial Study Report (ISR) and Updated Study Report (USR) filing to discuss the study results. SCE will file a meeting summary within 15 days of each meeting.

ATTACHMENT 1

SCE PROPOSED STUDY PLANS

ATTACHMENT 2

COMMENT LETTERS FILED WITH FERC

ATTACHMENT 1

SCE PROPOSED STUDY PLANS

WQ-1 – LUNDY LAKE AND MILL CREEK WATER QUALITY MONITORING

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1.0 POTENTIAL RESOURCE ISSUE

Lundy Hydroelectric Project (Lundy Project or Project) operations have the potential to alter water quality in the Project reservoir (Lundy Lake) and Project-affected stream reaches.

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

Project operations and Project-related recreation activities may alter water quality conditions in Lundy Lake and Mill Creek downstream of Lundy Dam which may affect aquatic species, public recreation, and other designated beneficial uses described in the Water Quality Control Plan for the Lahontan Region (Basin Plan). Data collected through the WQ-1 Lundy Lake and Mill Creek Water Quality Monitoring Study (Study) will be used to assess the effects of continued Project operations on water quality and will inform development of protection, mitigation, and enhancement measures in the Draft License Application (DLA), if needed.

3.0 STUDY GOALS AND OBJECTIVES

The goal of this study is to collect additional information necessary to characterize existing water quality conditions and determine effects of continued Project operations on water quality in Lundy Lake and Mill Creek downstream of Lundy Dam. These data will also be used to assess consistency with water quality objectives in the Basin Plan (LRWQCB, 2019), California statewide numeric mercury objectives (SWRCB, 2017) and Office of Environmental Health Hazard Assessment (OEHHA) screening values (OEHHA, 2022) in the DLA.

4.0 EXTENT OF STUDY AREA AND STUDY SITES

The Study Area will include Lundy Lake, Mill Creek from Lundy Dam to the Mill Creek Return Ditch outlet (Mill Creek Bypass Reach), Mill Creek Return Ditch (MCRD), Mill Creek downstream of the MCRD outlet, and comparison sites along stream reaches upstream of the Project (i.e., Mill Creek and South Fork Mill Creek). The water quality monitoring study is divided into four distinct study components that include (1) reservoir and stream water quality sampling, (2) bacteriological sampling, and (3) fish tissue mercury sampling. Exact locations of the sampling sites will be determined in the field based on sampling suitability (i.e., water that is well-mixed and deep enough for representative sampling) and accessibility. Established station locations will be re-occupied during subsequent monitoring efforts. Areas with unsafe access (e.g., very steep terrain or high streamflow) will be excluded from the Study Area. Proposed sampling locations are described below and shown on Figure 4.3-1.

4.1. RESERVOIR AND STREAM WATER QUALITY SAMPLING

Water quality sampling will occur at seven sites (one reservoir and six stream sites):

- One in Lundy Lake

- Two in Mill Creek Bypass Reach
- One in Mill Creek Return Ditch
- One in Mill Creek downstream of Mill Creek Return Ditch outlet
- Two comparison sites along stream reaches upstream of Lundy Lake (i.e., Mill Creek and South Fork Mill Creek)

4.2. BACTERIAL SAMPLING

Grab sampling for enumeration of indicator bacteria will be conducted at or near four Project recreation facilities (two reservoir sites and two stream sites): Lundy Lake boat launch, Lundy Dam Day Use Area, Lundy Campground, and Lundy day use area (Figure 4.3-1).

4.3. FISH TISSUE MERCURY SAMPLING

Fish from Lundy Lake will be collected during gill net sampling in Study AQ-1 Fish Community Survey.

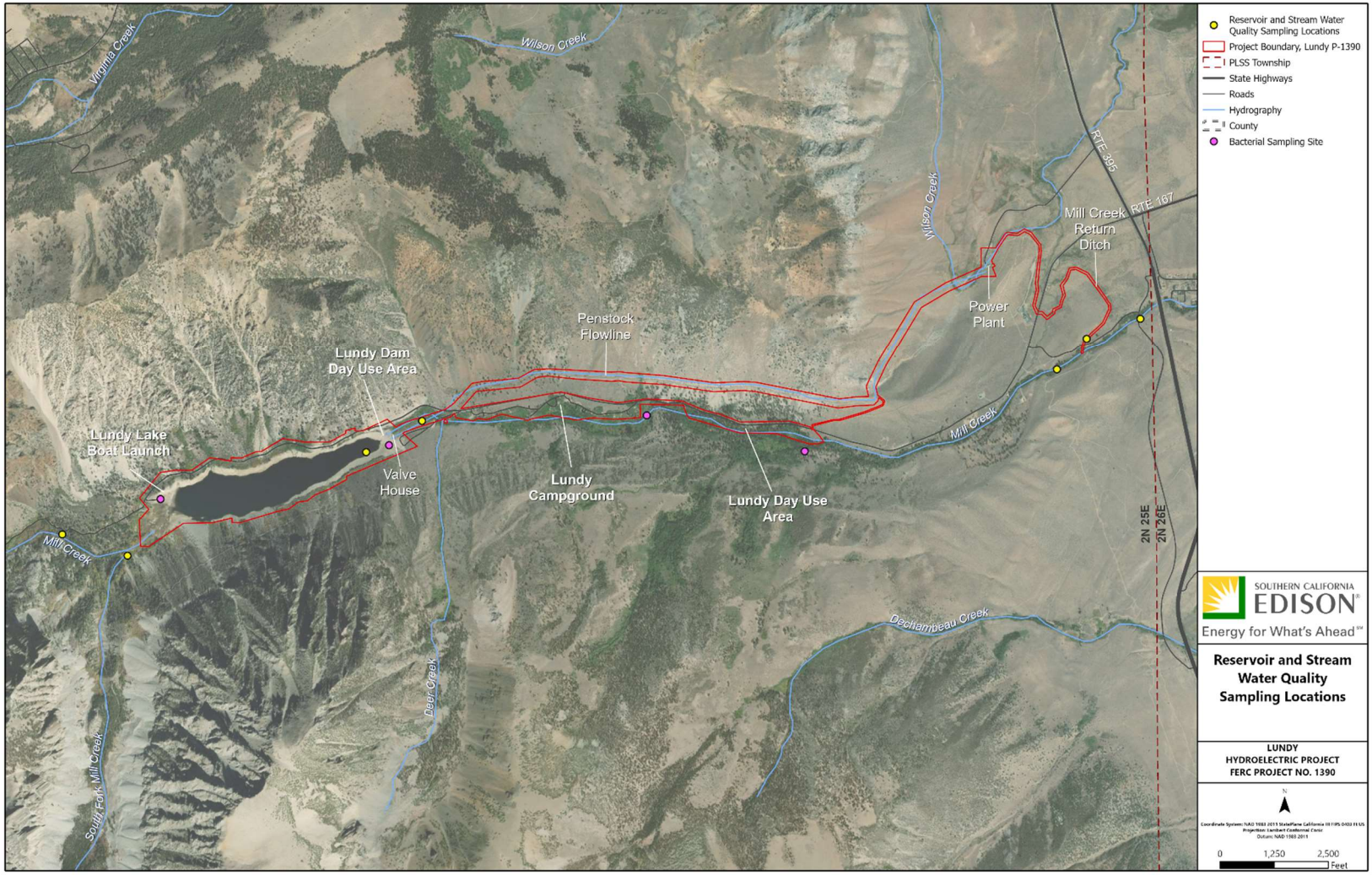

Figure 4.3-1. Water Quality Study Monitoring Sites.

5.0 EXISTING INFORMATION

Existing water quality data presented in Section 5.2, *Water Resources*, of the Pre-Application Document (PAD), filed in February 2024, is primarily limited to data obtained from the following sources:

- Water quality data (including pH, water temperature, specific conductance, nutrients, suspended sediment, chloride, and sulfate) downloaded from the California Environmental Data Exchange Network (CEDEN) that were collected from Mill Creek on two dates in 2012 (CEDEN, 2023).

- Seasonal water quality data (hardness, total Kjeldahl nitrogen, total reactive phosphorus, pH, sulfate, chloride, nitrate, zinc, total dissolved solids, conductivity, and total suspended solids) collected by California Department of Fish and Game (CDFG) from Mill Creek between April and October 1991 (CDFG, 1996).

- Bacterial sampling data (*Escherichia coli* [*E. coli*] and fecal coliform) downloaded from CEDEN that were collected from Mill Creek in 2012 and 2013 (CEDEN, 2023).

At the time of publication of the PAD, no data were available for Lundy Lake and historical water quality data for Mill Creek are limited in frequency and antiquated. Furthermore, the Mill Creek watershed has a history of mining, and no direct sampling for metals or mercury in fish tissue in Lundy Lake or Mill Creek has been conducted. Available data are insufficient to assess whether Project waters meet the Basin Plan water quality objectives for the most relevant parameters and are also insufficient to determine potential Project effects.

6.0 STUDY APPROACH

6.1. RESERVOIR AND STREAM WATER QUALITY SAMPLING

A total of seven sites will be sampled as part of the reservoir and stream water quality component of the Study (Figure 4.3-1). Three seasonal sampling events will be conducted to measure key indicators of water quality during spring, summer, and fall. *In situ* measurements (temperature, dissolved oxygen, pH, specific conductivity, and turbidity) and grab samples will be collected for laboratory analysis at each monitoring station. Additionally, a vertical profile of *in situ* parameters will be collected at the reservoir site during each sampling event.

6.1.1. IN SITU WATER QUALITY

In situ water temperature, dissolved oxygen (concentration and percent saturation[1]), pH, specific conductivity, and turbidity will be measured at one reservoir and six stream sites described in Section 4.1. A multi-parameter water quality meter (YSI EXO or similar) will be used to measure *in situ* data. Quality assurance and quality control (QA/QC) activities will include pre- and post-sampling calibration checks of the water quality meter, following

[1] Raw dissolved oxygen readings will be corrected with temperature and local barometric pressure.

the manufacturer instructions, and will be conducted each day of sampling or as appropriate for each sensor. Reservoir vertical profiles of *in situ* measurements will be collected at 1-meter intervals near the location of maximum reservoir depth. Stream *in situ* measurements will be collected at a location that provides representative, homogeneous water quality conditions. Table 6.1-1 identifies *in situ* parameters, methods, and method detection limits that will be evaluated.

Table 6.1-1. In Situ Water Quality Methods

Parameter	Method	Method Detection Limit
Water temperature	USEPA 170.1	0.1°C
Dissolved oxygen	SM 4500-O	0.1 mg/L
Specific conductance	SM 2510 A	0.1 µmhos
pH	SM 4500-H	0.1 standard unit
Turbidity	SM 2130 B	0.1 NTU

°C = degrees Celsius; µmhos = micromhos; USEPA = U.S. Environmental Protection Agency; mg/L = milligrams per liter; NTU = nephelometric turbidity unit; SM = Standard Methods

6.1.2. Analytical Water Quality

Analytical water quality samples will be collected at the one reservoir and six stream sites described in Section 4.1. Grab samples will be collected simultaneously with *in situ* measurements described in Section 6.1.1. All water samples will be analyzed for general chemistry, nutrients and productivity, and metals listed in Table 6.1-2. Reservoir surface water samples will also include analysis for oil and grease (Table 6.1-2).

Reservoir water samples will be collected at two depths: 1) a subsurface grab sample collected at approximately 0.5-meter depth, and 2) a grab sample collected approximately 0.5 to 1 meter above the bottom sediment with a Van Dorn bottle or equivalent sampling device. Stream grab samples will be collected from just below the water surface from a well-mixed area of the stream. Clean ambient water sampling techniques as prescribed by U.S. Environmental Protection Agency (USEPA) Method 1669 will be used for trace metal collection, including handling and analysis of all metals in water samples (USEPA, 1996). To ensure sampling results are representative of site conditions, QA procedures will include collection of one field blank, one equipment blank, and one field duplicate during each water quality sampling event (spring, summer, and fall).

Each grab sample collected will be placed in a laboratory-supplied container, labeled, preserved, and stored on ice until delivery to a state-certified water quality laboratory. A certified laboratory will analyze the chemistry using the methods and target reporting limits included in Table 6.1-2. A chain-of-custody record will be maintained for each sample container.

Table 6.1-2. Analytical Parameters, Methods, and Reporting Limits for Water Samples

Parameter	Laboratory Method[1]	Target Reporting Limit or PQL[1]
General Chemistry and Minerals		
Calcium	USEPA 200.7	27 µg/L
Chloride	EPA 300.0	0.50 mg/L
Hardness (as calcium carbonate)	USEPA 200.7	1 mg/L
Magnesium	EPA 200.7	1,000 µg/L
Dissolved Organic Carbon	EPA 415.1 D	1.0 mg/L
Total Organic Carbon	SM 5310	1.0 mg/L
Potassium	EPA 200.7	1,000 µg/L
Sodium	EPA 200.7	1,000 µg/L
Sulfate	EPA 300.0	0.50 mg/L
Total alkalinity	USEPA 200.7	5 mg/L
Total dissolved solids	SM 2540 C	10 mg/L
Total suspended solids	SM 2540 D	5 mg/L
Nutrients and Productivity		
Ammonia as N	SM 4500-NH3F2011	0.1 mg/L
Nitrate-nitrite	USEPA 300.0	0.4 mg/L
Orthophosphate	SM 4500-PE	0.15 mg/L
Total Kjeldahl nitrogen as N	SM 4500-NH3F-2011	0.2 mg/L
Total phosphorous	SM 4500-PE	0.05 mg/L
Chlorophyll-*a*	SM 10200H	0.01 mg/L
Metals and Oil and Grease		
CAM 17 Metals (Title 22 Metals)[2]	USEPA 200.8	0.4–40 µg/L
Oil and grease[3]	USEPA 1664A	5.0 mg/L
Bacteria		
Escherichia coli	SM 9221 F	1.8 MPN/100 mL
Fecal Coliform	SM 9221 E	1.8 MPN/100 mL
Total Coliform	SM 9223B	1.8 MPN/100 mL

µg/L= microgram per liter; USEPA = U.S. Environmental Protection Agency; mg/L = milligrams per liter; mL=milliliters, MPN = most probable number; PQL= practical quantification limit; SM = Standard Methods

Notes:

[1] Laboratory methods and reporting limit are preliminary until contracting with analytical laboratory is complete.

[2] CAM 17 metals include total and dissolved metals: arsenic, mercury, antimony, barium, beryllium, cadmium, chromium, cobalt, copper, lead, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc.
[3] Oil and grease will be analyzed is reservoir surface water samples only.

6.2. BACTERIAL SAMPLING

Bacterial sampling will occur at all four recreation sites (two reservoir and two stream) described in Section 4.2 (Figure 4.3-1). After delivery to the analytical laboratory, water samples will be analyzed for *E. coli*, total coliform, and fecal coliform. Surface grab samples will be collected from the nearshore of Lundy Lake immediately adjacent to the recreation facilities and from the bank of Mill Creek downstream of the recreation facilities. Samples will be collected weekly, at a minimum, for 6 consecutive weeks during the summer surrounding a holiday weekend (e.g., Labor Day). All water samples will be analyzed for bacteria parameters listed in Table 6.1-2.

To minimize the potential for inadvertent sample contamination, grab samples will be collected in laboratory-supplied, sterilized bottles. A chain-of-custody record will be maintained for each sample container. Immediately after collection, samples will be placed on ice for transport to a certified analytical laboratory. Analysis will be completed following the methods listed, and target reporting limits provided in Table 6.1-2.

6.3. FISH TISSUE MERCURY SAMPLING

Fish sample collection will occur during reservoir fish surveys as part of Study AQ-1, *Fish Community Survey*. Target species expected to be present in Lundy Lake include brown trout (*Salmo trutta*), rainbow trout (*Oncorhynchus mykiss*), and brook trout (*Salvelinus fontinalis*). Up to nine fish within the legal-size limit and greater than 200-millimeter total length[2] will be collected for each species to conform to OEHHA requirements for development of fish consumption advisories and for comparability to California statewide numeric mercury objectives, (OEHHA, 2022; SWRCB, 2017). Fewer than nine fish for each species may be collected if the number of individuals captured during reservoir fish sampling is less than nine. Physical characteristics will be recorded for each individual fish, including the following: weight, total length, fork length, and presence of any physical abnormalities. Each fish will be individually tagged, wrapped in aluminum foil, placed in a labeled zipper-closure bag, and stored on dry ice at -20 degrees Celsius (°C) for the duration of the effort. After transmittal to an analytical laboratory, samples will be stored in an ultra-cold freezer at -20°C until processing.

Fish tissue samples will be analyzed as individual samples. Tissue samples will be processed by removing skin from an area above the lateral line and then extracting a 9- to 13-gram tissue “plug.” Samples will be weighed for percent moisture analysis and analyzed for total mercury (Table 6.4-1), as a proxy for methylmercury in fish.

[2] Minimum size limit is for trout species expected to be captured for fish tissue mercury analysis.

Table 6.4-1 Analytical Parameters, Methods, and Reporting Limits for Mercury in Fish Tissue Samples

Parameter	Laboratory Method	Target Reporting Limit
Total mercury[3]	EPA 7473	0.030 µg/g ww

µg/g ww = microgram per gram wet weight; EPA = U.S. Environmental Protection Agency
Notes:
[1] Laboratory methods and reporting limit are preliminary until contracting with analytical laboratory is complete.

6.4. INCIDENTAL OBSERVATIONS

Any incidental observations of special-status species or aquatic invasive species (e.g., Didymo [*Didymosphenia geminata*], American bullfrog [*Lithobates catesbeianus*], New Zealand mud snail [*Potamopyrgus antipodarum*], or bivalves) during Project studies will be noted (including location information) and reported as appropriate.

7.0 ANALYSIS AND REPORTING

A report will be prepared that will include results from all samples collected and analyzed. Tables and figures summarizing measured water quality parameters for the various sites will be developed. Any general patterns in measured water quality parameters by season and watershed position (i.e., distance downstream) will be described.

8.0 SCHEDULE

8.1. STUDY SCHEDULE

Sampling within one (1) calendar year is proposed for all study components (Table 8.1-1).

Table 8.1-1. Study Schedule

Date	Activity
Spring 2025	Select study sites
Spring–Fall 2025	Conduct water quality field sampling
Winter 2025/2026	Compile study results and prepare draft report
February 2027	Distribute final report in Final License Application

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study, in 2024 dollars, is approximately $221,000.

10.0 REFERENCES

CDFG (California Department of Fish and Game). 1996. *Mill Creek Stream Evaluation*. Report 96-1, Volume 1, 163 pp. July.

CEDEN (California Environmental Data Exchange Network). 2023. Database. State Water Resources Control Board, Sacramento, CA. Accessed: May 2023. Available online: California Environmental Data Exchange Network (CEDEN) | San Francisco Estuary Institute (sfei.org).

LRWQCB (Lahontan Region Water Quality Control Board). 2019. *Water Quality Control Plan for the Lahontan Region (*Basin Plan); effective March 31, 1995, including amendments effective through September 22, 2021. State of California Regional Water Quality Control Board, Lahontan Region. Accessed: March 2024. Available online: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.html.

OEHHA (Office of Environmental Health Hazard Assessment). 2022. *Protocol for Fish Sampling and Analysis to Support the Development of Fish Advisories in California*. Fish, Ecotoxicology, and Water Section of the Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. August. Available online: https://oehha.ca.gov/media/downloads/fish/report/fishadvisorysamplinganalysisprotocolreport2022.pdf

SWRCB (State Water Resources Control Board). 2017. *Final Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions.* State of California Regional Water Quality Control Board. May 2017. Available online: https://www.waterboards.ca.gov/water_issues/programs/mercury/docs/hg_prov_final.pdf

USEPA (United States Environmental Protection Agency). 1996. *Method 1669 Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels*. July 1996.

WQ-2 – LUNDY LAKE AND MILL CREEK WATER TEMPERATURE MONITORING

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1.0 POTENTIAL RESOURCE ISSUE

Lundy Hydroelectric Project (Lundy Project or Project) operations have the potential to affect temperatures in the Project reservoir (Lundy Lake) and Project-affected stream reaches.

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

Lundy Dam impounds Mill Creek and forms Lundy Lake. A flowline and penstocks carry a maximum of 70 cubic feet per second (cfs) of flow from Lundy Lake to Lundy Powerhouse before water is distributed to water rights holders via the Wilson System or returned to Mill Creek via Mill Creek Return Ditch (MCRD). Project operations related to power generation have the potential to affect water temperatures in Lundy Lake and in Mill Creek downstream of Lundy Dam. Data collected during this WQ-2 Water Temperature Monitoring Study (Study) will be used to fill data gaps, determine whether the Water Quality Control Plan for the Lahontan Region (Basin Plan) water quality objectives are being met, assess Project-related effects on water temperature, and inform the need for protection, mitigation, and enhancement measures in the Draft License Application (DLA).

3.0 STUDY GOALS AND OBJECTIVES

The goal of this Study is to collect stream water temperature data and reservoir profile temperature data[1] to characterize current water temperature conditions in Lundy Lake and Project-affected stream reaches of Mill Creek. These data will also be used to assess consistency with water temperature objectives included in the Basin Plan (LRWQCB, 2019). Mill Creek has a designated beneficial use of Cold Freshwater Habitat (COLD) under the Basin Plan (LRWQCB, 2019), which states that temperature must not be altered.

4.0 EXTENT OF STUDY AREA AND STUDY SITES

4.1. WATER TEMPERATURE MONITORING

Temperature monitoring will occur in the following stream reaches; one site will be sampled in each reach as shown on Figure 4.1-1:

- Mill Creek upstream of Lundy Lake
- Mill Creek downstream of Lundy Lake
- Mill Creek downstream of the confluence with Deer Creek
- Mill Creek downstream of the confluence with MCRD

[1] Project reservoir water temperature data will be collected as part of Study WQ-1, *Lundy Lake and Mill Creek Water Quality Monitoring.*

- Lundy Powerhouse Tailrace
- Mill Creek Return Ditch upstream of the confluence with Mill Creek

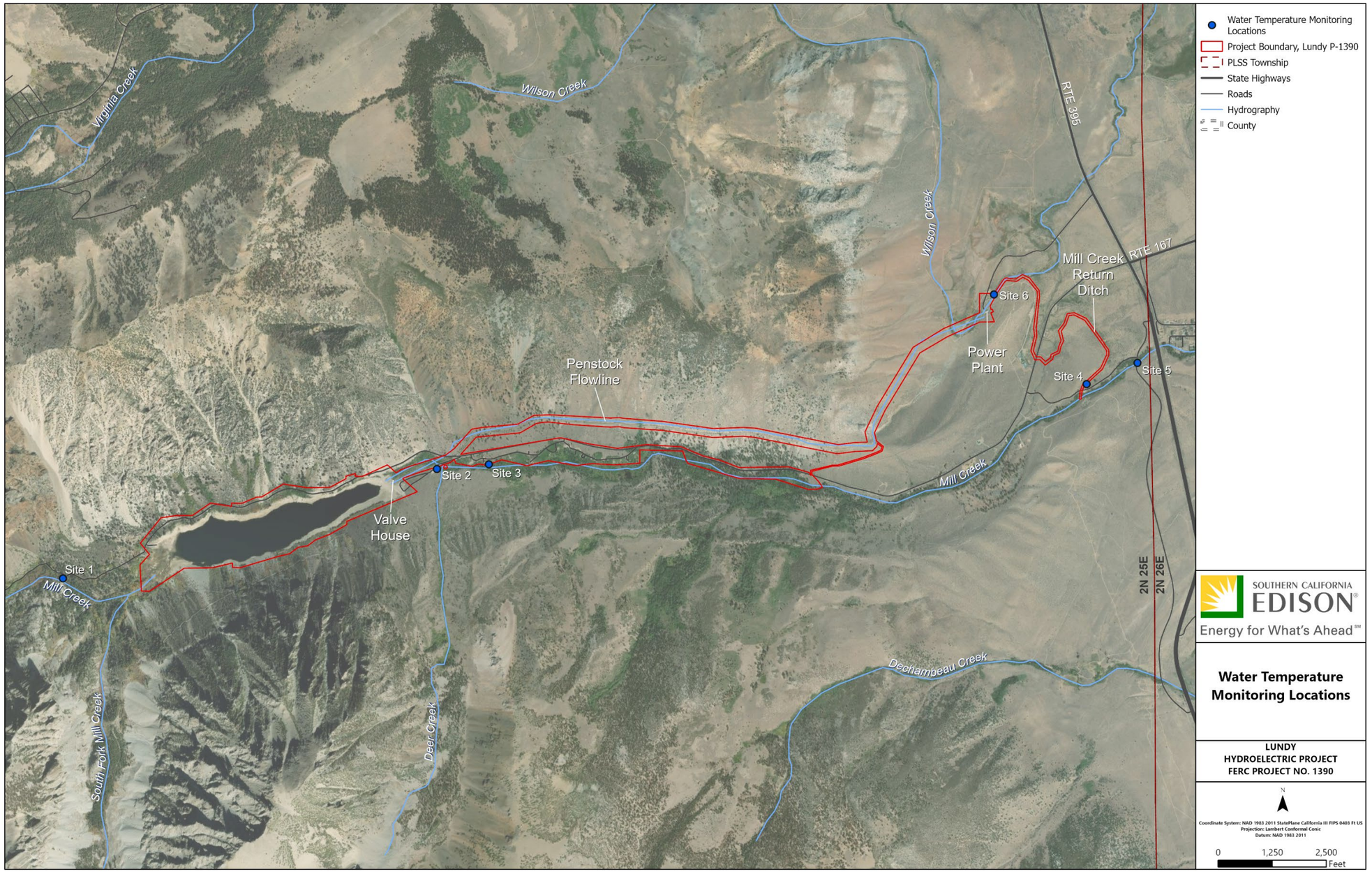

Figure 4.1-1. Water Temperature Study Monitoring Sites.

5.0 EXISTING INFORMATION

Existing water quality data presented in Section 5.2, *Water Resources*, of the Pre-Application Document (PAD), filed in February 2024, is limited to data obtained from the following sources:

- Water temperature data collected by the California Department of Fish and Wildlife (CDFW; previously California Department of Fish and Game [CDFG]) and subsequent water temperature modeling in 1990 and 1991 (CDFG, 1996).

- Individual historical water temperature recordings in Mill Creek on December 11, 1967, and August 22, 1985 (LADWP, 1987).

At the time of the PAD publication, no data were available for Lundy Lake; historical water temperature data is antiquated and insufficient for characterizing current temperature conditions in Lundy Lake or Project-affected stream reaches of Mill Creek. Available data are also insufficient to assess whether Project waters meet Basin Plan water quality objectives.

6.0 STUDY APPROACH

Continuous water temperature data loggers (e.g., Onset HOBO U22-001) will be installed at sites described in Section 4.0, *Extent of Study Area and Study Sites,* using methods adapted from standard protocols (Heck et al., 2018). Duplicate loggers will be installed for added data security in the event of equipment loss, malfunction, or vandalism. If a nearby weather station is not available, one air temperature logger will be deployed in the Study Area for data quality assurance and quality control. Data loggers will be deployed between spring 2025 and spring 2026, unless stream conditions (e.g., high discharge, snow, access) are unsafe for installation or removal. Coordinates of each installed logger will be recorded using a global positioning system unit. The data loggers will collect water temperature at 15-minute intervals and data analysis will summarize daily means, maxima, and minima for each site. Quality control calibrations will be performed on each unit per the manufacturer's recommendations before and after deployment. Data loggers will be placed inside protective housings and installed at a location that provides representative, homogeneous thermal conditions for each site. Data will be downloaded from data loggers at minimum once during the spring, summer, and fall, with more frequent downloads as allowed by weather, access, and safety.

6.1. INCIDENTAL OBSERVATIONS

Any incidental observations of special-status species or aquatic invasive species (e.g., Didymo [*Didymosphenia geminata*], American bullfrog [*Lithobates catesbeianus*], New Zealand mud snail [*Potamopyrgus antipodarum*], or bivalves) during Project studies will be noted (including location information) and reported as appropriate.

7.0 ANALYSIS AND REPORTING

A report will be prepared that will include results from all samples collected and analyzed. Tables and/or figures summarizing measured water temperature for the various sites will be developed. Any general patterns in measured water temperature by season and watershed position (i.e., distance downstream) will be discussed.

8.0 STUDY SCHEDULE

Sampling within one calendar year is proposed for this study (Table 8.1-1).

8.1. STUDY SCHEDULE

Table 8.1-1. Study Schedule

Date	Activity
Spring 2025	Select study sites
Spring 2025–Spring 2026	Conduct water temperature monitoring
Winter 2025/2026	Compile study results and prepare draft report
February 2027	Distribute final report in Final License Application

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study, in 2024 dollars, is approximately $65,000.

10.0 REFERENCES

CDFG (California Department of Fish and Game). 1996. *Mill Creek Stream Evaluation,* Report 96-1, Volume 1, 163 pp. July.

Heck, M. P., L. D. Schultz, D. Hockman-Wert, E. C. Dinger, and J. B. Dunham. 2018. *Monitoring stream temperatures—A guide for non-specialists: U.S. Geological Survey Techniques and Methods*. Book 3, Chapter A25. Available online: https://doi.org/10.3133/tm3A25.

LADWP (Los Angeles Department of Water and Power). 1987. *Aqueduct Division Hydrology Section. Mono Basin Geology and Hydrology*. March 1987.

LRWQCB (Lahontan Regional Water Quality Control Board). 2019. *Water Quality Control Plan for the Lahontan Region*. Plan effective March 31, 1995, including amendments effective through September 22, 2021. State of California Regional Water Quality Control Board, Lahontan Region. Accessed: May 2025. Available online: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.html.

AQ-1 – FISH COMMUNITY SURVEY

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF TABLES

1.0 POTENTIAL RESOURCE ISSUE

Lundy Hydroelectric Project (Lundy Project or Project) operations have the potential to affect recreational fisheries within the Project reservoir (Lundy Lake) and Project-affected stream reaches.

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

Project operations have the potential to affect environmental conditions, including water quality and quantity, within Lundy Lake and Project-affected stream reaches of Mill Creek. Changes in these environmental conditions can affect the abundance, distribution, and age-class structure of the recreational fish populations within Lundy Lake and Project-affected stream reaches of Mill Creek. Information obtained from this AQ-1 Fish Community Survey Study (Study), in combination with existing information, will be used to evaluate potential effects of Project operations on recreational fisheries and development of protection, mitigation, and enhancement measures in the Draft License Application (DLA), if needed.

3.0 STUDY GOALS AND OBJECTIVES

The goal of this Study is to supplement the existing information to characterize abundance, distribution, and structure of recreational fish populations within Lundy Lake and Project-affected stream reaches of Mill Creek. The objective of this Study is to obtain current information on existing recreational fish populations within Lundy Lake and Project-affected stream reaches of Mill Creek.

4.0 EXTENT OF STUDY AREA AND STUDY SITES

The Study Area includes Lundy Lake and Mill Creek from Lundy Dam downstream to Highway 395. Fish population sampling in Lundy Lake will be conducted at three gill netting locations, including both littoral and deep-water habitats, and three shoreline boat electrofishing sites. Three stream sites will be surveyed within the following reaches:

- Two sites in the bypass reach between Lundy Dam and Mill Creek Return Ditch.
- One site between Mill Creek Return Ditch and Highway 395.

5.0 EXISTING INFORMATION

Historically, the Mill Creek watershed and other tributaries to Mono Lake were fishless (FERC, 1992; Moyle, 2002). Currently, non-native introduced trout species, including brown trout (*Salmo trutta*), brook trout (*Salvelinus fontinalis*), and rainbow trout (*Oncorhynchus mykiss*), are found throughout Lundy Lake and Mill Creek downstream of Lundy Dam. The California Department of Fish and Wildlife (CDFW) conducts annual stocking of sterile rainbow trout within Lundy Lake and Mill Creek to support a put-and-take fishery (CDFW, 2024).

Existing data on the abundance and age-class distribution of fish populations within Lundy Lake and Mill Creek downstream of Lundy Dam are presented in Section 5.3, Fish and Aquatic Resources, of the Pre-Application Document (PAD), filed in February 2024. Available fisheries information for Lundy Lake and Project-affected stream reaches is insufficient to determine potential effects of Project operations on recreational fisheries.

6.0 STUDY APPROACH

6.1. STREAM FISH SURVEYS

To assess fish species distribution and relative abundance in stream reaches, multi-pass electrofishing will be conducted using procedures described by Reynolds (1996). Backpack electrofishers (i.e., using a Smith-Root Model LR-24 backpack electrofisher) will be used for surveys provided that environmental conditions allow electrofishing to be performed safely and effectively.

Prior to sampling, a reconnaissance survey will be conducted to select survey sites that are conducive for backpack electrofishing and contain representative habitat types in the sample reaches identified in Section 3. The upstream and downstream extent of each electrofishing site will be marked using a handheld global positioning system (GPS) device.

Sites will be approximately 300-feet long and separated into two segments for improved sampling efficiency. Block nets will be used to prevent migration into and out of the sample segment during sampling and to facilitate an accurate assessment of the sample population. The electrofishing crew will consist of one to two backpack electrofishers and approximately two netters, depending on the size of the wetted stream channel. Water conductivity of each site will be measured with a water quality sonde prior to sampling to help determine the appropriate power output (i.e., voltage) for fish capture. The electrofishing crew will sample at the downstream block net and proceed slowly and deliberately upstream, moving from the center of the channel to the stream margins, and making simultaneous and parallel passes through the sampling area. As fish are captured (netted), they will be placed in buckets outfitted with aerators and periodically transferred to a live-car or live-well and held until the completion of the pass. Upon completion of each pass, the following data will be recorded for each individual captured: species identification, total length (millimeters [mm]), fork length (mm), weight (grams), and, if applicable, notes on the general condition of the fish, abnormalities, or parasites and potential for hatchery origin (using visual markings and fin erosion). Any visual abnormalities in fish condition will be documented during the survey. After processing, fish will be placed in a recovery bucket with aerated fresh river water and will be regularly transferred to a live-car (1/8-inch mesh net) in the creek outside the study site. After completion of all the survey passes, all fish will be released back into the area of capture. At each study site, scale samples will be collected from up to 20 fish of each game species (e.g., rainbow trout, brown trout, brook trout) across a variety of sizes and ages.

Habitat characteristics and water quality parameters will be measured at all sites at the time of sampling, including (but not limited to): stream name, reach, site name, segment,

time of day, environmental conditions (e.g., weather, air temperature), stream length, average stream width, stream habitat characteristics (e.g., cover, substrate, and habitat composition [e.g., riffle, pool, run]), streamflow, water quality (i.e., water temperature, dissolved oxygen, pH, conductivity, and specific conductivity), GPS coordinates, and electrofishing duration. Photographs will be taken to document the specific location of the upstream and downstream block nets and representative condition of the site.

To minimize the potential to spread invasive species (e.g., New Zealand mud snail [*Potamopyrgus antipodarum*], quagga or zebra mussels [*Dreissena* spp.]) appropriate and up to date decontamination protocols will be followed prior to each aquatic-based field effort or when moving between watersheds.

6.2. RESERVOIR FISH SURVEYS

Reservoir fish surveys will be conducted using gill netting and shoreline boat electrofishing (dependent on access) to assess fish species composition, relative abundance, and age-distribution within Lundy Lake. Sampling will occur once during summer or fall. Decontamination procedures described above will be followed.

Fish data collected at each site will include species identification, total length (mm), fork length (mm), weight (grams), and any notes on general condition or visual abnormalities in fish condition will be documented during the survey. Scale samples will be collected from up to 20 fish of each game species (e.g., trout species) across a variety of sizes at a variety of locations. Gear type, GPS coordinates of each sample location, and water chemistry (i.e., water temperature, dissolved oxygen, pH, conductivity, and specific conductivity) will be collected during the survey.

6.2.1. GILL NETTING

Lundy Lake will be sampled using variable-mesh gill nets at three locations across the length of the reservoir. Variable-mesh gill nets consist of multiple panels of various mesh sizes so that a gradient of sizes is represented across the net. One variable-mesh “adult” gill net (1- to 4-inch mesh, 80 to 125-feet long) and one variable-mesh “juvenile” gill net (less than 1-inch mesh, 30-feet long) will be deployed at each of the three locations, including littoral and deep-water habitats. The nets will be placed along the gradient of the reservoir bottom, extending from the shoreline, and sloping toward the deepest part of the reservoir.

The time of deployment, location, minimum and maximum water depths, and net type will be recorded at each gill net location. Water chemistry data (i.e., water temperature, dissolved oxygen, pH, conductivity, and specific conductivity) will be collected (where feasible) approximately 5-feet below the water’s surface at each gill net location prior to deployment.

To reduce the potential for mortality and provide information on fish composition, the gill nets will be set for two 4- to 8-hour net-set periods.[1] These periods will include one day

[1] Gill net set times may be decreased at the discretion of the field crew to prevent excessive fish mortality.

and one night period (over approximately 24 hours) to facilitate good coverage and to separate diel periods. Captured and processed fish will be allowed to recover in a live-car and will be released after the sampling is complete or in an area away from the sampling location.

6.2.2. SHORELINE BOAT ELECTROFISHING

Nighttime boat electrofishing using standard methods (Reynolds, 1996) will be conducted to supplement gill netting once at three suitable (i.e., less than 12-feet deep) sampling locations distributed across the length of Lundy Lake. Electrofishing stations will be approximately 300 feet in length and will target a diversity of nearshore habitats. Sampling locations will be documented using GPS. Electrofisher "time on" will be recorded for each sampling location and a consistent pace and effort will be employed at all sites. Fish and environmental data will be collected using the same methods as described in Section 6.2, *Gill Netting*. Captured and processed fish will be allowed to recover in a live-car and will be released in the reservoir after sampling is complete.

6.3. INCIDENTAL OBSERVATIONS

Any incidental observations of special-status species or aquatic invasive species (e.g., Didymo [*Didymosphenia geminata*], American bullfrog [*Lithobates catesbeianus*], New Zealand mud snail, or bivalves) during Project studies will be noted (including location information) and reported as appropriate.

6.4. ANALYSIS

6.4.1. STREAM FISH SURVEYS

Data collected during the stream fish surveys will be entered into an Excel database for data reduction, tabulation, and summary and (where possible) will be compared with data collected during previously conducted studies.

Species composition and size distribution of fish will be evaluated at all survey sites. Length-frequency histograms will be developed for each trout species captured and used to estimate size and age-class distribution. Breaks and modalities within the length-frequency histograms will be evaluated and compared to the subsample of aged scales and relevant literature on trout growth to estimate the age-class distribution of each species.

Trout densities (number per acre), biomass (pounds per acre), and 95 percent confidence intervals will be computed for each electrofished site using the Zippin estimator within the multiple-pass regression analysis software developed by Van Deventer and Platts (1989).

To assess trout condition, the weight-to-length relationship of individual fish will be assessed as a method of identifying the nutritional state or health of the fish related to size and growth. Fulton's condition factor (k) (Ricker, 1975), a measure of this nutritional state, will be calculated for each fish using the following formula:

$$k = \frac{W \times 10^5}{TL^3}$$

where:

W = wet weight (grams) and *TL* = total length (millimeters)

Mean fish condition will be calculated from individual condition values for each species.

6.4.2. RESERVOIR FIELD SURVEYS

Data will be entered into an Excel spreadsheet for reduction, tabulation, and summary. Capture data will be summarized by species composition for the entire lake and all gear types, as well as by site and gear type. Length-frequency histograms will be developed for each trout species captured and used to estimate size and age-class distribution. Breaks and modalities within the histograms will be evaluated and compared with the subsample of aged scales collected at each study site and relevant literature on trout growth to estimate the age-class distribution of each species. Relative abundance will be determined by calculating catch-per-unit-effort (fish per hour) by gear type and site.

7.0 REPORTING

A report will be prepared that will include a summary of results from data collected and analyzed during this study. Any general patterns in stranding risk will be discussed. The report will be appended to the Final License Application.

8.0 SCHEDULE

8.1. STUDY SCHEDULE

The Study will begin with site selection during 2025 (Table 8.1-1). The final study report will be provided with the Final License Application in February 2027.

Table 8.1-1 Study Schedule

Date	Activity
Spring–Summer 2025	Select study sites
Summer–Fall 2025	Conduct field surveys
Winter 2025/2026	Compile study results and prepare report
February 2027	Distribute final report in Final License Application

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study, in 2024 dollars, is approximately $143,000.

10.0 REFERENCES

CDFW (California Department of Fish and Wildlife). 2024. What is a triploid fish? Prepared by CDFW, Sacramento, California. Available at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=94602&inline.

FERC (Federal Energy Regulatory Commission). 1992. Final Environmental Assessment for Hydropower License. Lundy. FERC Project No. 1390–001. February 1992.

Moyle, P. B. 2002. Inland Fishes of California. University of California Press. Berkeley, CA.

Reynolds, J. B. 1996. Electrofishing. Pages 221–254 in B. R. Murphy and D. W. Willis, editors. Fisheries Techniques. Second Edition. American Fisheries Society, Bethesda, Maryland.

Ricker, W. E. 1975. Computation and Interpretation of Biological Statistics of Fish Populations. Fisheries Research Board of Canada Bulletin 191.

Van Deventer, J. S. and W. S. Platts. 1989. Microcomputer Software System for Generating Population Statistics from Electrofishing Data—User's Guide for MicroFish 3.0. U.S. Department of Agriculture, Forest Service, General Technical Report INT-254.

AQ-2 – FISH STRANDING STUDY

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF TABLES

1.0 POTENTIAL RESOURCE ISSUE

Lundy Hydroelectric Project (Lundy Project or Project) operations have the potential to strand fish in Mill Creek (between Lundy Dam and Mill Creek Return Ditch [MCRD]) in areas with high stranding risk.

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

Flow fluctuations (changes in water surface elevation) resulting from Lundy Project operations have the potential to strand trout inhabiting Mill Creek between Lundy Dam and MCRD. Southern California Edison (SCE) and resource agencies will use the information obtained from this AQ-2 Fish Stranding Study (Study), in combination with existing information, to evaluate potential effects of Project operations on the risk of stranding for local fish communities and develop protection, mitigation, and enhancement measures in the Draft License Application (DLA).

3.0 STUDY GOALS AND OBJECTIVES

The goal of this Study is to identify areas of high stranding risk for fish in Mill Creek between Lundy Dam and MCRD and assess stranding potential resulting from Project operations. The objectives of this Study are to:

- Characterize flow fluctuations resulting from Project operations and evaluate associated risk of fish stranding in Mill Creek between Lundy Dam and MCRD.
- Establish monitoring locations representative of the variety of channel geomorphic conditions present in Mill Creek between Lundy Dam and MCRD and assess how operational changes in flow (i.e., controlled releases and down-ramping events) affect surface water elevation in selected sites.

4.0 EXTENT OF STUDY AREA AND STUDY SITES

The Study Area includes a 3.3-mile section of Mill Creek from Lundy Dam downstream to MCRD confluence (the bypass reach). Monitoring will occur in up to seven sites dispersed between the upstream and downstream ends of the Study Area.

5.0 EXISTING INFORMATION

The risk of stranding is determined by multiple factors, including the life history of the species present, the magnitude and rate of surface water elevation change, and channel bed and bank configuration. The fish community in the Study Area was sampled periodically between 1986 and 1996 (EA, 1986, 1988; Sada & Knapp, 1993; CDFG, 1996). Non-native brown trout (*Salmo trutta*) were the most prevalent species below the dam (CDFG, 1996). Rainbow trout (*Oncorhynchus mykiss)* were also found in Mill Creek below the dam, albeit in much fewer numbers. Sterile rainbow trout accounted for most contemporary stocking efforts (2017–2022; CDFW, unpublished data).

Brown trout are the only self-sustaining trout species occurring in the Study Area. Brown trout spawn in the fall and winter, which aligns with the period of lowest average flows in the Study Area. Embryonic development occurs between approximately December and March (Moyle, 2002), before flows in the Study Area increase substantially, making eggs and alevin[1] potentially susceptible to dewatering. Fry emerge between March and April and are potentially vulnerable to stranding during flow fluctuations as they occupy shallow, low velocity habitats near stream margins and have limited swimming ability (Moyle, 2002; Crew et al., 2017). Juvenile brown trout occur in streams year-round and generally use shallower habitat with lower water velocity than non-spawning adults (CDFG, 1996). Adult rainbow trout, like the hatchery reared individuals that are stocked in the Study Area, typically occupy deep pockets behind rocks and near pool inlets (Moyle, 2002). During high flows, individuals often use in-stream structure for flow refuge, making them susceptible to stranding when flows recede.

Fish stranding may occur because of both natural and anthropogenic processes that cause habitat to dewater and restrict fish movement (Nagrodski et al., 2012). Habitat conditions that pose high stranding risk include areas with a wetted history of more than 10 days, shoreline habitat with slopes less than 6 percent, topographic depressions that create isolated pools, heavily structured littoral zones (e.g., with coarse substrate or vegetation), cold water temperatures, and abrupt surface water elevation changes (Crew et al., 2017).

The Lundy Project is operated in accordance with 1914 adjudicated Mill Creek Water Rights and the 2007 Order Amending License and Dismissing Requests for Rehearing (refer to Section 4.0 of the Pre-Application Document [PAD]). Instream flow releases from Lundy Dam into Mill Creek are managed to maintain a minimum of 4 cubic feet per second (cfs) at U.S. Geological Survey (USGS) Gage No. 10287069 in accordance with the 2007 Settlement Agreement (FERC, 1992; 2007). Historical flows from 1968 to 1991 ranged from 0 to 224 cfs, with an average of 4.5 cfs in the bypass reach (CDFG, 1996) with peak flows generally occurring in the late spring and early summer. SCE controls flow releases from Lundy Dam once spill conditions cease. The maximum controlled release through the dam is approximately 150 cfs. Temporary guidelines for increasing and decreasing controlled releases to the bypass reach are outlined in Appendix 2, Paragraph 7 of the 2022 Settlement Agreement (SCE, 2022).

Existing data on fish stranding risk in the Study Area, including relationships between controlled releases within Mill Creek and water surface elevations, are insufficient to assess controlled releases described in the 2022 Settlement Agreement.

6.0 STUDY APPROACH

The approach for this Study will comprise three steps: 1) site selection, 2) water surface elevation monitoring, and 3) evaluation of stranding risk.

[1] Alevin is a newly spawned salmon or trout still carrying the yolk (Moyle 2002).

6.1. SITE SELECTION

Available information (e.g., historical instream flow-habitat relationships, 10-meter digital elevation model [DEM], hydrology, aerial photography) will be used to evaluate stream channel and habitat characteristics in Mill Creek and inform site selection. Sites will be identified during field reconnaissance based on:

- Diversity of channel types, habitat types, and sensitivity of brown trout habitat to changes in flow;
- Representative spatial distribution throughout the Study Area;
- Representative distribution among focal habitats including potential brown trout spawning sites.

6.2. WATER SURFACE ELEVATION MONITORING

Water surface elevation monitoring will be conducted in two phases during spring or early-summer; the first phase will include transect and stage recorder placement, and the second phase will include data collection during target flow releases. To install transects and co-located stage recorders (HOBO water Level Logger U20L-04) at each site, releases into Mill Creek must be controlled at a safely wadable flow (approximately 5 cfs or less). Down-ramping may be required depending on the water year type and flow conditions in Mill Creek at the time of Study implementation. In wet water year types, Lundy Dam fills with early spring runoff before spilling over the dam crest.

Once stable, safely wadable flows of approximately 5 cfs are achieved, transects will be established by a team of two and will intersect areas at the site that may have high stranding potential. In single, confined channel segments, transects will generally run perpendicular to flow and the channel long profile. In complex channel segments, a transect may comprise multiple straight subsections (or legs) to best characterize stranding conditions at the site. Markers will be installed as needed to ensure sites can be re-occupied. Once equipment is installed, flows will increase consistent with Appendix 2, Section 7 of the 2022 Settlement Agreement to the maximum controlled release (approximately 150 cfs).

During the second phase of monitoring, SCE will release over a 7-day period, 7 target flows that span the range of flows in SCE's control, depending on if flows are safely wadable (Table 6.2-1). Ramping will follow guidelines outlined in Appendix 2, Section 7 of the 2022 Settlement Agreement. A crew of two will measure stream discharge at locations near the upstream and downstream ends of the Study Area during each target flow. Stage recorders will continuously document changes in water surface elevation at each monitoring transect over the range of target release flows. Water surface elevation or water depth may be recorded in areas along transects that become isolated or disconnected from conditions at the stage recorder and incidental observations of fish stranding or other animals (e.g., amphibians) will be noted. Additionally, potential barriers to fish movement in the vicinity of transects will be visually identified and recorded.

Photographs will be taken to document wetted channel conditions at the different target flow releases.

Table 6.2-1. Example Target Flow Release Schedule based on 2022 Settlement Agreement Ramping Guidelines

Day	Flow Release Type	Time Period	Approximate Starting Flow (cfs)[1]	Approximate Ending Flow (cfs)
Day 1	**Target**	08:00-19:00		**150**
	Down-ramp	20:00	150	130
	Down-ramp	21:00	130	110
	Down-ramp	22:00	110	100
Day 2	**Target**	08:00-19:00		**100**
	Down-ramp	20:00	100	80
	Down-ramp	21:00	80	65
Day 3	**Target**	08:00-19:00		**65**
	Down-ramp	20:00	65	45
	Down-ramp	21:00	45	40
Day 4	**Target**	08:00-19:00		**40**
	Down-ramp	20:00	40	25
Day 5	**Target**	08:00-19:00		**25**
	Down-ramp	20:00	25	12
Day 6	**Target**	08:00-19:00		**12**
	Down-ramp	20:00	12	5
Day 7	**Target**	08:00-19:00		**5**

[1] Flows are dependent on whether access can be achieved safely and are within SCE operational constraints.

6.3. INCIDENTAL OBSERVATIONS

Any incidental observations of special-status species or aquatic invasive species (e.g., Didymo [*Didymosphenia geminata*], American bullfrog [*Lithobates catesbeianus*], New Zealand mud snail [*Potamopyrgus antipodarum*], or bivalves) during Project studies will be noted (including location information) and reported as appropriate.

7.0 ANALYSIS AND REPORTING

Data collected during the Study will be evaluated to assess stranding risk. The range of instream flows released from Lundy Dam will be characterized using discharge data from the USGS Gage No. 10287069 and supplemented by stream discharge data recorded near the upstream and downstream ends of the Study Area. Relationships will be developed between target flows and the length or proportion of channel cross sections that become dewatered or disconnected between each target flow. If a site selected to evaluate stranding risk includes suitable spawning habitat, the potential risk to spawning

and incubation habitat will be estimated. Site photos and observational descriptions will be used to characterize stranding risk in the vicinity of each Study Area. A report will be prepared that will include a summary of results from data collected and analyzed during this study. Any general patterns in stranding risk will be discussed. The report will be appended to the Final License Application.

8.0 SCHEDULE

8.1. STUDY SCHEDULE

The Study will begin with field reconnaissance and site selection during 2025 (Table 8.1-1). The final study report will be provided with the Final License Application in February 2027.

Table 8.1-1 Study Schedule

Date	Activity
Spring 2025	Field reconnaissance and study site selection
Spring/Summer 2025	Install monitoring equipment (flow dependent)
Spring/Summer 2025	Conduct field surveys (flow dependent)
Winter 2025/2026	Compile study results and prepare report
February 2027	Distribute final report in Final License Application

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study, in 2024 dollars, is approximately $196,000.

10.0 REFERENCES

CDFG (California Department of Fish and Game). 1996. Mill Creek Stream Evaluation. July 1996. Report 96-1, Volume 1, 163 pp.

Crew, A. V., Keatley, B.E., & Phelps, A.M. 2017. Literature Review: Fish Mortality Risks and International Regulations Associated with Downstream Passage Through Hydroelectric Facilities. Canadian Technical Report of Fisheries and Aquatic Sciences 3207: iv + 47 p.

EA (EA Engineering, Science, and Technology, Inc.). 1986. Instream Flow and Fisheries Studies for the Mill Creek Hydroelectric Project. Southern California Edison Company, Rosemead, California. June.

_____. 1988. East Side Sierra Hydroelectric Relicensing Studies: Fish Populations in the Mill Creek Hydroelectric Project. Southern California Edison Company, Rosemead, California. January.

FERC (Federal Energy Regulatory Commission). 1992. Final Environmental Assessment for Hydropower License. Lundy FERC Project No. 1390-001. California. Federal Energy Regulatory Commission, Office of Hydropower Licensing, Washington, D.C.

_____. 2007. Order Amending License and Dismissing Requests for Rehearing.

Moyle, P. B. 2002. Inland Fishes of California. Berkeley: University of California Press.

Nagrodski, A., Raby, G. D., Hasler, C. T., Taylor, M. K., & Cooke, S. J. 2012. Fish stranding in freshwater systems: Sources, consequences, and mitigation. *Journal of Environmental Management*, *103*, 133–141.

Sada, D. W. and R. A. Knapp. 1993. Fish Population Monitoring During 1991 and 1992 in Bishop, McGee, and Mill Creeks Inyo and Mono Counties, California. Southern California Edison Company, Rosemead, California. April.Sada, D. 2000. Native Fishes. In Sierra East. Edge of the Great Basin, edited by Genny Smith, pp. 246-264. University of California Press, Berkeley.

Southern California Edison, USDA Forest Service, USDOI BLM, CDFG, MLC, California Trout, American Rivers. 2022. *First Amendment to the Lundy Hydroelectric Project Settlement Agreement*. May 2022.

TERR-1 – BOTANICAL RESOURCES

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1.0 POTENTIAL RESOURCE ISSUE

Special-status botanical resources, including sensitive natural communities, federally and/or state-listed species, U.S. Forest Service (USFS) "Species of Conservation Concern", or other special-status plant species, are either known to or have potential to occur in the Lundy Hydroelectric Project (Lundy Project or Project) Area and may be affected by Project operations and maintenance. This includes the following listed species:

- Whitebark pine (*Pinus albicaulis*) (Federally Threatened)
- Mono milk-vetch (*Astragalus monoensis*) (State Rare)

Invasive plant populations are either known to or have potential to occur in the Project Area. Introduction and/or spread of invasive plant populations may occur due to Project operations and maintenance activities.

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

Project operations and maintenance activities could result in direct and/or indirect effects on sensitive natural communities (including riparian areas) and special-status plants, including USFS Species of Conservation Concern. If special-status botanical resources are found to be present within the Study Area (as defined in Section 4.0), the data will be examined to determine the effects of Project operations and maintenance activities in the context of the most recent USFS Management Plan, the federal and State Endangered Species Acts, the Native Plant Protection Act, the National Environmental Policy Act, and the California Environmental Quality Act.

Project operations and maintenance activities could result in the spread or introduction of invasive plant species. The presence of new invasive species or increase in population sizes of existing invasive species could negatively affect native biological resources.

3.0 STUDY GOALS AND OBJECTIVES

The goal of this TERR-1 Botanical Resources Study Plan (Study) is to obtain additional information to supplement the existing information regarding botanical resources in the Study Area by:

- Ground-truthing the existing USFS vegetation map (USFS, 2020a), including identification of any sensitive natural communities;
- Documenting the presence of species listed, or proposed for listing, by the federal and/or State Endangered Species Acts;
- Documenting the presence of other special-status plant species, including US Fish and Wildlife Services (USFWS) Species of Conservation Concern and species with a California Rare Plant Rank of 1 or 2; and

- Documenting non-native, invasive plants identified in the Inyo National Forest (INF) Invasive Plant Inventory Database (NRM – TESP/IS, 2018) and on the California Invasive Plant Council Inventory (Cal-IPC, 2023).

4.0 EXTENT OF STUDY AREA AND STUDY SITES

The Study Area will be used to ground-truth the USFS-mapped vegetation communities and document the presence of special-status plant species and the presence of invasive plant species.

4.1 BOTANICAL RESOURCE STUDY AREA

The Study Area is shown on Figure 4.1-1 and includes the following sites:

- Lundy Lake Boat Launch
- Lundy Dam and Day Use Area
- Lundy Campground
- Day Use Areas downstream of Lundy Campground
- Lundy Lake Road from the boat launch to the downstream end of the Lundy Day Use Areas
- Penstock Flowline
- Lundy Powerhouse
- Mill Creek Return Ditch

The effects of proposed license activities would be localized to the Federal Energy Regulatory Commission (FERC) boundary. The Study Area will encompass areas that may be hydrologically influenced by proposed activities or that may be subject to proposed activities related to Project operations and maintenance.

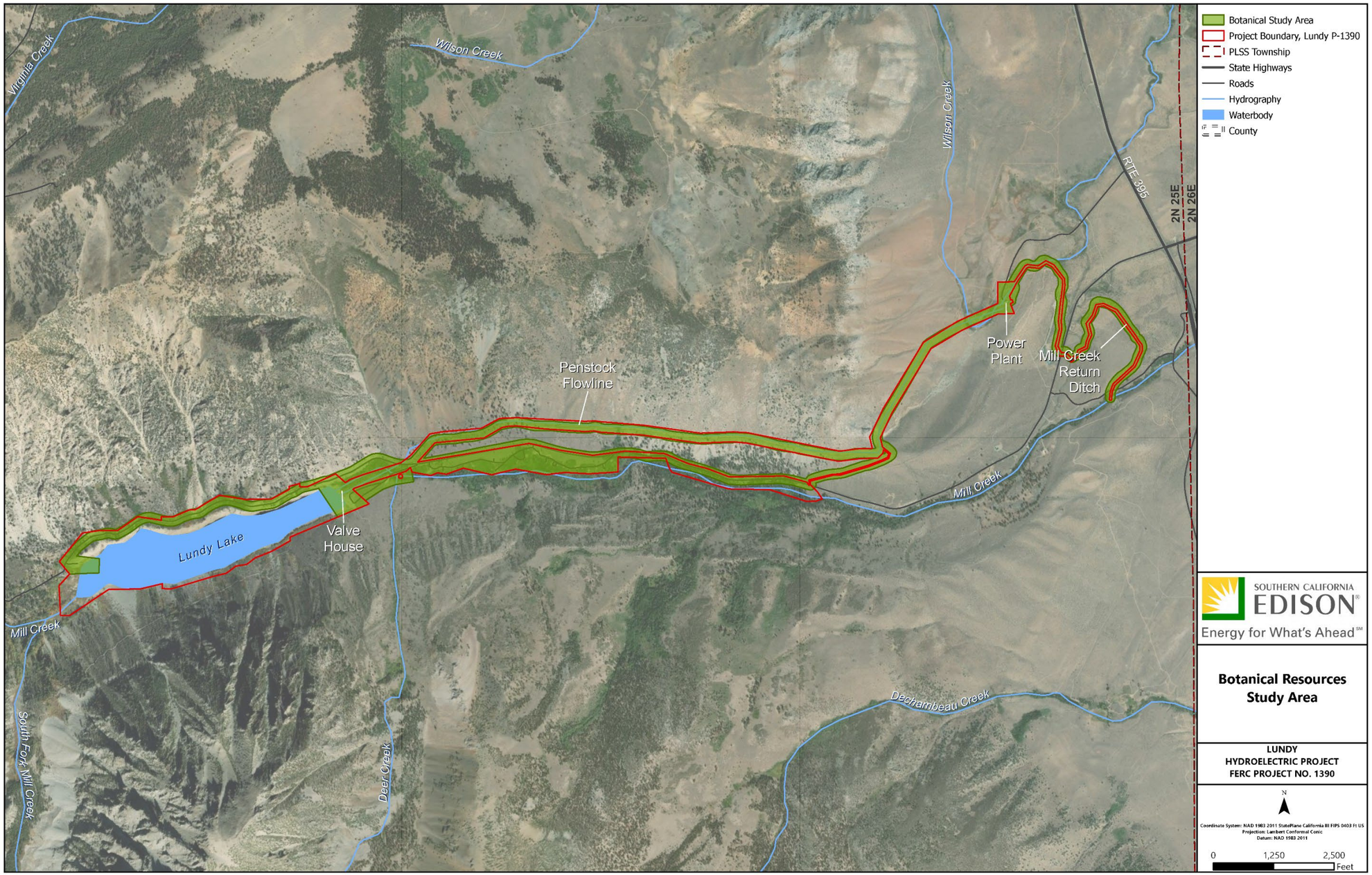

Figure 4.1-1. Botanical Resource Study Area

5.0 EXISITING INFORMATION

Information on vegetation communities and plant species, including riparian conditions monitored as part of the current license, is provided by the previously conducted field surveys and license-required monitoring studies (Read, 2021). Keys and descriptions are from the USFS using the Calveg classification system (USFS, 2009). This is the preferred key by the INF and is used in this document for consistency with the Land Management Plan for the INF (USFS, 2018). In this system, differences between vegetation alliance types (also referred to as communities) are based on canopy cover as determined from aerial photography and satellite imagery.

Special-status plant occurrences within the Project Area have been documented by past studies (Psomas, 2009, 2017), the *Environmental Assessment of Potential Cumulative Impacts Associated with Hydropower Development in the Mono Lake Basin, California* (FERC Nos. 1388, 1389, 1390, 3259, and 3272; FERC, 1990), USFS records of rare plants (NRM – TESP/IS, 2018), whitebark pine range geospatial data (USFS, 2020b), the California Natural Diversity Database (CNDDB; CDFW, 2023b; U.S. Geological Survey Lundy, Dunderberg Peak, Twin Lakes, Big Alkali, Bodie, Negit Island, Lee Vining, Mount Dana, Tioga Pass quadrangles), the *Persistence Analysis for Species of Conservation Concern Inyo National Forest* (INF, 2019), and the *California Native Plant Society's Inventory of Rare, Threatened, and Endangered Plants* (CNPS, 2023; U.S. Geological Survey Lundy, Dunderberg Peak, Twin Lakes, Big Alkali, Bodie, Negit Island, Lee Vining, Mount Dana, Tioga Pass quadrangles), and the Consortium of California Herbaria (CCH, 2023). Since those studies were undertaken, new occurrences have been recorded to the CNDDB and new species have been added to the federal and state special-status species lists; and others have been deemed sensitive by various government and non-governmental organizations.

Information on invasive plant occurrences has been provided by the USFS, including mapped infestations and treatment strategy for all currently known invasive plant species in the INF Invasive Plant Inventory Database (NRM – TESP/IS, 2018).

Past riparian monitoring surveys (Read, 2021) documented vegetation conditions along established belt transects. Data on herbaceous species was collected in 1-meter square quadrats within each transect. Data on tree and shrub parameters was collected within the belts. False color infrared aerial photography was also flown in conjunction with the riparian monitoring study.

6.0 STUDY APPROACH

6.1 LITERATURE REVIEW

A literature review will be performed to determine if any additional special-status botanical resources have been identified as having potential to occur within the Project Area. This literature review will also verify the protective status of any of the previously identified special-status plants and will review any new literature on the ecology and life history of

these resources. The literature review will be used to define potentially suitable habitat for special-status plants.

6.2 FIELD SURVEYS

Field surveys include vegetation mapping, surveys for special-status plant species, and surveys for invasive plant species.

6.2.1 VEGETATION MAPPING

Vegetation mapping will include the following:

- A review of the existing USFS vegetation communities will be conducted to determine if any suitable habitat for special-status botanical resources has been identified within the Project Area. Vegetation alliances/associations will be cross-referenced to defined habitats for special-status plants.

- Vegetation previously mapped by the USFS will be verified or adjusted if conditions on the ground are not consistent with previously identified resources. Mapping will be performed at a scale appropriate to determining Project-level effects and distinguishing vegetated from unvegetated areas. Classification will follow the USFS vegetation names. These will be cross walked to A Manual of California Vegetation (CNPS, 2024, as amended), which is used by the California Department of Fish and Wildlife (CDFW) for determining whether a vegetation alliance/association is considered to be a sensitive natural community (CDFW, 2023a, as amended).

- Information will be collected on each vegetation community, including geographic location; dominant, co-dominant, or characteristic plant species; and understory species.

6.2.2 SPECIAL-STATUS PLANT SURVEYS

Special-status plant surveys will include the following:

- Surveys will follow the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW, 2018). Two years of surveys will be conducted to sample during variations in annual precipitation and air temperature. Surveys will be floristic in nature and performed at appropriate times of the year to maximize the opportunity of observing special-status plants, as determined by the literature review and in consultation with the relevant stakeholders. Two survey visits each year will be conducted to encompass the blooming/fruiting period for multiple special-status plant species.

- Prior to the start of surveys, aerial photographs of each portion of the Study Area will be prepared for field use. The field map will be uploaded onto a tablet or cell phone loaded with a mapping program (e.g., Avenza maps or ArcGIS Field Maps) to facilitate navigation and data collection. The field maps will include known occurrences of

special-status botanical resources and areas of potentially suitable habitat for special-status botanical resources.

- Biologists will perform pedestrian surveys to identify and map existing conditions and document any observed plants. Plant species will be identified in the field or collected for future identification. Botanists will have the appropriate permits for collecting voucher specimens. Plants will be identified to the taxonomic level necessary to determine whether or not they are a special-status species. Plants will be identified using taxonomic keys, descriptions, and illustrations from a variety of sources, including the Jepson eFlora (Jepson Flora Project, 2024, as amended), Wilson et al. (2014), Hurd et al. (1998), Wiese (2013), and Breckling and Breckling (2020). Nomenclature of plant taxa will conform to the Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2024, as amended) for special-status species and the Jepson eFlora (Jepson Flora Project, 2024, as amended) for all other taxa. Field surveys will focus on the following:

  - Observations of special-status plant species (i.e., listed species, USFS Species of Conservation Concern, or species with a California Rare Plant Rank [CRPR] of 1 or 2) identified in the Study Area will be documented either using a hand-held global positioning system (GPS) unit, a tablet/cell phone loaded with the field map, or on a hard-copy map. The extent of the population within the Study Area boundary will be delineated. Discrete individuals/populations will be mapped as point or polygon. Data will be collected for each observed population, including the number and phenology of individuals (estimated for large populations), microsite characteristics such as slope, aspect, soil texture, surrounding habitat, and associated species. Clonal species will be mapped according to square footage. Survey Forms will be submitted to the CDFW for species with a CRPR of 1 or 2.

6.2.3 Invasive Species Surveys

Invasive species surveys will include the following:

- Surveys will be conducted concurrently with special-status plant surveys and will follow the methods described above.

- The USFS identified select invasive species of concern to be mapped within the Study Area. This includes all species on the INF Invasive Plant Inventory Database with a treatment strategy of 1–eradicate or 2–control and select species with a treatment strategy of 3–contain. Select species of local concern are also included. Table 6.2-1 provides a list of these select invasive species of concern.

- Observations of select invasive plant species identified in the Study Area will be documented either using a hand-held GPS unit, a tablet/cell phone loaded with the field map, or on a hard-copy map. The extent of the population within the Study Area boundary will be delineated. Discrete individuals/populations will be mapped as point or polygon and the number of individuals will be counted (estimated for large populations). Widely distributed species dispersed throughout a study site will be

documented as present/absent and the number of individuals will be estimated. Other non-native plant species observed will be documented as present but not mapped.

Table 6.2-1. Invasive Species to be Mapped in the Study Area

Scientific Name	Common Name	USFS Treatment Strategy	Cal-IPC Rank
Ailanthus altissima	tree of heaven	1 – Eradicate	Moderate
Bassia hyssopifolia	five-hook bassia	3 – Contain	Limited
Bromus rubens	red brome	3 – Contain	High
Bromus tectorum	cheat grass	3 – Contain	High
Centaurea diffusa	diffuse knapweed	1 – Eradicate	Moderate
Centaurea solstitialis	yellow star-thistle	1 – Eradicate	High
Centaurea stoebe ssp. *micranthos*	spotted knapweed	1 – Eradicate	High
Cirsium arvense	Canada thistle	1 – Eradicate	Moderate
Cirsium vulgare	bull thistle	3 – Contain	Moderate
Convolvulus arvensis	bindweed	3 – Contain	None
Dipsacus fullonum	wild teasel	2 – Control	Moderate
Elaeagnus angustifolia	Russian olive	2 – Control	Moderate
Halogeton glomeratus	saltlover	2 – Control	Moderate
Holcus lanatus	common velvet grass	3 – Contain	Moderate
Lepidium appelianum	white-top	1 – Eradicate	None
Lepidium chalepense	lens-podded hoary cress	1 – Eradicate	Moderate
Lepidium draba	heart-podded hoary cress	1 – Eradicate	Moderate
Lepidium latifolium	perennial pepperweed	1 – Eradicate	High
Linaria dalmatica ssp. *dalmatica*	dalmatian toadflax	1 – Eradicate	Moderate
Linaria vulgaris	butter-and-eggs	1 – Eradicate	Moderate
Rhaponticum repens	Russian knapweed	1 – Eradicate	Moderate
Robinia pseudoacacia	black locust	3 – Contain	Limited
Rubus armeniacus	Himalayan blackberry	2 – Control	High
Salsola tragus	Russian thistle	3 – Contain	Limited
Saponaria officinalis	bouncingbet	2 – Control	Limited
Spartium junceum	Spanish broom	1 – Eradicate	High
Tamarix ramosissima	saltcedar	2 – Control	High
Tribulus terrestris	puncturevine	2 – Control	Limited

Scientific Name	Common Name	USFS Treatment Strategy	Cal-IPC Rank
Ulmus pumila	Siberian elm	2 – Control	None
Verbascum thapsus	woolly mullein	4 – Limited or None	Limited

Sources: NRM – TESP/IS, 2018; Cal-IPC, 2023.

Cal-IPC = California Invasive Plant Council; USFS = U.S. Forest Service

7.0 REPORTING

Draft results will be prepared documenting:

- Methods used to perform the surveys
- Results of the literature review
- Results of the field surveys, including an updated vegetation map, a plant compendium of observed plant species, maps of special-status and invasive plant species locations, and additional information on plant populations (e.g., population size, habitat characteristics)
- Other incidental observations made during site visits (e.g., special-status wildlife observations)
- California Native Species Field Survey Form(s) completed for any special-status species with a CRPR of 1 or 2 observed during the field surveys. Each observation record will be submitted to the CDFW

8.0 SCHEDULE

8.1 STUDY SCHEDULE

The anticipated Study schedule is provided in Table 8.1-1.

Table 8.1-1. Study Schedule

Date	Activity
Spring 2025	Conduct desktop analysis and literature review
Spring-Summer 2025	Conduct first season of field surveys
Winter 2025	Compile study results and prepare draft report
Spring-Summer 2026	Conduct second season of field surveys
Fall 2026	Compile study results and incorporate into draft report
February 2027	Distribute final report in Final License Application

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study, in 2024 dollars, is approximately $208,000.

10.0 REFERENCES

Breckling, J., and B. Breckling. 2020. *Yosemite Wildflowers: A Field Guide to the Wildflowers of Yosemite National Park*. Connecticut: FalconGuides. The Rowman & Littlefield Publishing Group, Inc.

CDFW (California Department of Fish and Wildlife). 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. March 20.

_____. 2023a. *California Natural Community List*. June 1, 2023. Available online: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.

_____. 2023b. California Natural Diversity Database. CDFW, Natural Heritage Division. Sacramento, CA. Accessed: February 21, 2023. Available online: https://wildlife.ca.gov/data/cnddb.

_____. 2024. *Special Vascular Plants, Bryophytes, and Lichens List.* April, 2024. CDFW, Natural Heritage Division. Sacramento, CA. Available online: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline.

Cal-IPC (California Invasive Plant Council). 2023. Cal-IPC Inventory. Berkeley, CA. Accessed: February 21, 2023. Available online: https://www.cal-ipc.org/plants/inventory/.

CNPS (California Native Plant Society). 2023. Inventory of Rare and Endangered Plants (online edition, v9.5). CNPS Rare Plant Program. Sacramento, CA. Accessed: February 21, 2023. Available online: http://www.rareplants.cnps.org.

_____. 2024, as amended. A Manual of California Vegetation (online edition). Sacramento, CA. Accessed June 13, 2024. Available online: https://www.cnps.org/cnps/vegetation/.

Consortium of California Herbaria (CCH). 2023. Consortium of California Herbaria Data Portal. Accessed February 21, 2023. Available online: https://ucjeps.berkeley.edu/consortium/.

FERC (Federal Energy Regulatory Commission). 1990. Environmental Assessment of Potential Cumulative Impacts Associated with Hydropower Development in the Mono Lake Basin, California (FERC Nos. 1388, 1389, 1390, 3259, and 3272.

Hurd, E.G., N.L. Shaw, J. Mastrogiuseppe, L.C. Smithman, and S. Goodrich. 1998. *Field Guide to Intermountain Sedges*. General Technical Report, RMRS-GTR-10. U.S. Forest Service. Rocky Mountain Research Station.

INF (Inyo National Forest). 2019. *Persistence Analysis for Species of Conservation Concern Inyo National Forest*. Inyo National Forest, Region 5 Regional Office, and Washington Office Enterprise Program.

Jepson Flora Project. 2024. Jepson eFlora. The Jepson Herbarium. University of California, Berkeley. December, Revision 8. Accessed: June 13, 2024. Available online: https://ucjeps.berkeley.edu/eflora/.

NRM – TESP/IS (Natural Resources Manager – Threatened, Endangered, and Sensitive Plants/Invasive Species). 2018. Botany At Risk Species and Invasive Species Inventory Database. April. Obtained from Inyo National Forest Staff on February 16, 2021. USDA Forest Service, Inyo National Forest. Bishop, CA.

Psomas. 2009. *Lundy Hydroelectric Generation Facility, Mono County Return Ditch (Wilson Creek to Mill Creek) Enhancement Plant Community Impact Analysis*. Costa Mesa, CA.

_____. 2017. *Results of a Pre-construction Survey for Nesting Birds and Special Status Plant and Wildlife Species for the Lundy Return Ditch Project, Lundy Lake, Mono County, California* (CWA No. 28).

Read, E. 2021. *Lundy Hydroelectric Project (FERC No. 1390) Summary and Progress in Riparian Monitoring for 2020 Compared to Previous Years*. Prepared for Southern California Edison. Orange, CA.

USFS (U.S. Forest Service). 2009. Vegetation Classification & Mapping. CALVEG Mapping Zones. Accessed February 21, 2023. Available online: https://www.fs.usda.gov/detail/r5/landmanagement/resourcemanagement/?cid=stelprdb5347192

_____. 2018. *Land Management Plan for the Inyo National Forest.* Accessed: May 2024. Available online: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd589652.pdf.

_____. 2020a. Geospatial Data on Vegetation Communities. Obtained from Inyo National Forest Staff on February 16, 2021. Pacific Southwest Region 5. Vallejo, CA.

_____. 2020b (January 29). *Whitebark Pine Range*. USFS, Pacific Southwest Region 5. Vallejo, CA. Available online: https://www.fs.usda.gov/detail/r5/landmanagement/gis/?cid=STELPRDB5327836

Wiese, K. 2013. *Sierra Nevada Wildflowers: A Field Guide to Common Wildflowers and Shrubs of the Sierra Nevada, including Yosemite, Sequoia, and Kings Canyon National Parks.* Second Edition. Connecticut: Globe Pequot Press. FalconGuides. Morris Book Publishing, LLC.

Wilson, B.L., R. Brainerd, D. Lytjen, B. Newhouse, and N. Otting. 2014. *Field Guide to the Sedges of the Pacific Northwest, Second Edition*. Carex Working Group. Oregon: Oregon State University Press.

TERR-2 – GENERAL WILDLIFE RESOURCES SURVEY

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1.0 POTENTIAL RESOURCE ISSUE

Terrestrial Wildlife species that could be affected by the Lundy Hydroelectric Project (Lundy Project or Project) operation and maintenance (O&M) activities include U.S. Forest Service (USFS) At-Risk Species, USFS Species of Conservation Concern (USFS Inyo National Forest [INF], 2019; 2020), and other wildlife species including:

- Bald and Golden Eagles
  - Nesting migratory bird species and U.S. Fish and Wildlife Service (USFWS) Birds of Conservation Concern
- Game species
  - Mule deer *(Odocoileus hemionus*)
  - Upland game birds
  - Other game mammals
- Species listed as Candidate, Endangered, or Threatened by the federal or state Endangered Species Acts
  - Monarch butterfly (*Danaus plexippus*)
  - Foothill yellow-legged frog (*Rana boylii*)
  - Sierra Nevada yellow-legged frog (*Rana sierrae*)
  - Northwestern pond turtle (*Actinemys marmorata*)
  - Wolverine (*Gulo gulo*)
  - Sierra Nevada bighorn sheep (*Ovis canadensis sierrae*)
  - Sierra Nevada red fox (*Vulpes vulpes necator*)
  - Greater sage grouse (*Centrocercus urophasianus*)
  - Pygmy rabbit (*Brachylagus idahoensis*)
  - Western yellow-billed cuckoo (*Coccyzus americanus*)
- Species with overlapping Critical Habitat
  - Sierra Nevada bighorn sheep (*Oris canadensis*)
  - Greater sage grouse (*Centrocercus urophasianus*)

- Other wildlife species
  - North American beaver (*Castor canadensis*) (per verbal request from State Water Resources Control Board during Project site visit)

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

The efforts outlined in this TERR-2 General Wildlife Resources Survey Technical Study (Study) would determine the existing conditions associated with terrestrial biological resources, determine the wildlife species present, and the wildlife species with a high potential to occur within areas subject to the Lundy Project routine O&M activities. If U.S. Forest Service At-Risk Species, Species of Conservation Concern, or other special-status wildlife species are present, the data will be examined to determine the potential effects of the Project on wildlife in the context of the most recent *Land Management Plan for the Inyo National Forest* (USFS, 2019), the federal and state Endangered Species Acts, and the National Environmental Policy Act.

3.0 STUDY GOALS AND OBJECTIVES

The goal of this Study is to develop the information necessary to supplement the existing information to address the above identified issues. Study objectives include:

- Document the occurrence of any common, U.S. Forest Service At-Risk Species, Species of Conservation Concern, and other special-status wildlife species or associated suitable habitat within and adjacent to Project Areas that may be affected by routine O&M activities.
- Document the occurrence of any rare, threatened, and/or endangered wildlife species or associated suitable habitat in the area during general wildlife surveys within and adjacent to Project Areas that may be affected by routine O&M activities.

4.0 EXTENT OF STUDY AREA AND STUDY SITES

4.1. WILDLIFE STUDY AREA

The Study Area is shown on Figure 4.1-1. It is comprised of the following Project Areas, including a 100-foot buffer:

- Lundy Dam and associated infrastructure to intersection of Lundy Dam Road and Lundy Lake Road
- Connector Road between Lundy Lake Road and Lundy Flowline Road
- Lundy Powerhouse and Switchyard
- Lundy Penstock and Flowline Road
- Lundy Return Ditch

- Lundy Lake Road from intersection with Lundy Return Ditch to Resort
- Lundy Pipeline and Penstock alignment
- Lundy Lake and Mill Creek Delta
- Mill Creek between Lundy Return Ditch and State Route 395

Prior to finalizing the Study Area boundaries, a desktop review will be conducted to identify areas that may support potentially suitable habitat for special-status wildlife.

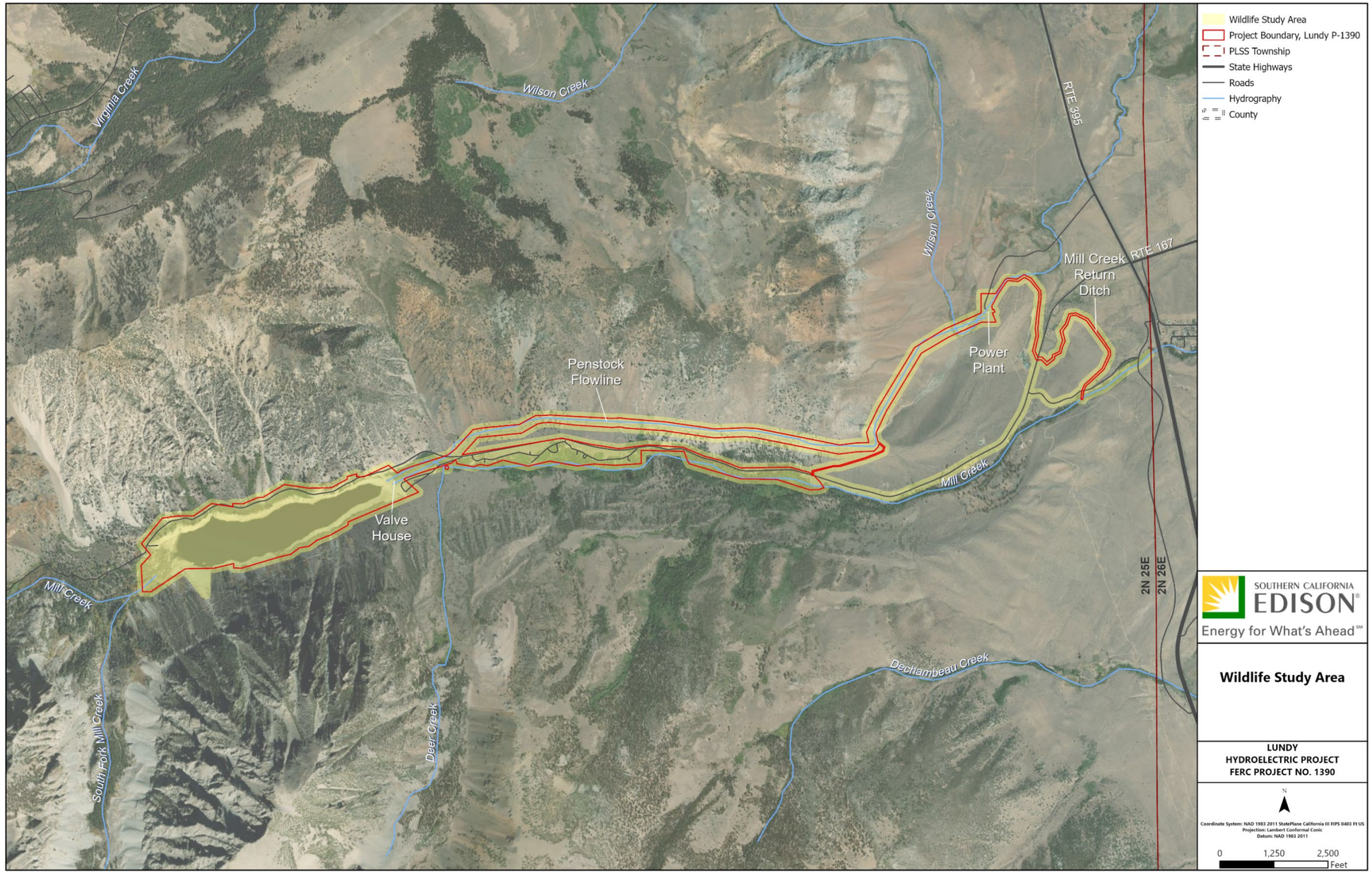

Figure 4.1-1. Wildlife Study Area

5.0 EXISTING INFORMATION

Wildlife occurrences within the vicinity of the Lundy Project have been documented in the California Natural Diversity Database (CDFW, 2023), USFWS Information for Planning and Consultation System (USFWS, 2023), the *Persistence Analysis for Species of Conservation Concern Inyo National Forest* (USFS, 2019), unpublished *At-Risk Aquatic and Terrestrial Species on Inyo National Forest* (INF, 2020), the *Final Environmental Assessment for Lundy Hydropower License* (FERC, 1992, past Project-specific studies in the area (Psomas, 2008a, 2008b, 2008c, 2009a, 2009b, 2010, 2017; .), and a review of the current licensee's resource management plans including the final Avian Mortality Monitoring Plan (SCE, 2009), and the Threatened, Endangered and Sensitive Species Management Plan (Psomas, 1999). Since the previous license application was completed, new species have been added to the federal and state Endangered Species Act lists, and others have been deemed special status by various government agencies.

6.0 STUDY APPROACH

6.1. GENERAL WILDLIFE SURVEYS

6.1.1. FIELD SURVEYS

- Surveys will be performed at appropriate times of the year (e.g., breeding season) to maximize the opportunity to observe special-status wildlife species as determined by the literature review.

- Three field surveys will be performed: one survey during late spring/early summer, one mid-summer and one late summer/early fall. Surveys will be at a minimum three full field days and two nights each.

- Prior to the start of the surveys, aerial images of each facility at a 1-inch to 200-foot scale will be prepared for field use and known wildlife occurrences and areas of potentially suitable habitat for special-status wildlife will be reviewed.

- Biologists will perform pedestrian surveys within the terrestrial wildlife Study Area to document any wildlife observations. Pedestrian surveys will be performed with binoculars to directly observe wildlife.

- Birds and raptors will be identified by direct visual observation and call identification.

- Active searches for reptiles and amphibians will be conducted. Methods will include lifting, overturning, and carefully replacing objects such as rocks, boards, and debris.

- Mammals will be identified by visual recognition or evidence of diagnostic sign, including scat, footprints, chew patterns, scratch-outs, dust bowls, burrows, and trails.

- Nocturnal spotlighting and road surveys will be performed to identify additional wildlife not likely to be observed during day-light hours. For these surveys, the Project roads

will be driven at slow speeds and a spotlight used to search for wildlife. During nocturnal surveys species will be identified to the lowest taxonomic level possible.

- All Project facilities will be inspected for evidence of bat roosting.
- Observations of active or abandoned raptor nests will be recorded using a hand-held global positioning system (GPS) unit and mapped onto the field map.
- All wildlife species observed will be recorded in field notes to species (if possible) and location on field maps.

6.1.2. TRAIL CAMERAS

- Biologists will install up to four trail cameras at locations most likely to capture wildlife that may not be observable during pedestrian surveys. Camera locations will be determined in the field. Permission from landowners will be obtained, as necessary.
- Cameras will be deployed for a minimum of six (6) months. Memory card and battery status' will be checked at least every three (3) months to ensure proper functioning. Camera placement will be reassessed after reviewing the second round of data.

7.0 REPORTING

A report will be prepared documenting the findings of this Study. The report will include locations and descriptions of all special status wildlife species observed and an analysis of the potential of special status species to occur if not observed based on the observed habitat. The report will prepare a compendium of all wildlife observed and wildlife documented by trail cameras in relation to Project facilities. The report will also address the *Land Management Plan for the Inyo National Forest* (USFS, 2019) Desired Conditions, Goals, Standards, and Guidelines for Wildlife. Any special status species observed during the surveys will be reported to the California Natural Diversity Database.

8.0 SCHEDULE

8.1. STUDY SCHEDULE

The Study will begin with field surveys during 2025 (Table 8.1-1). The final study report will be provided with the Final License Application in February 2027.

Table 8.1-1. Study Schedule

Date	Activity
Spring-Fall 2025	Conduct field surveys
Winter 2025/2026	Compile study results and prepare draft report
TBD	Distribute draft report to stakeholders
TBD	Stakeholder review and comments on draft report

Date	Activity
TBD	Resolve comments and prepare final report
February 2027	Distribute final report in Final License Application

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study, in 2024 dollars, is approximately $164,000.

10.0 REFERENCES

CDFW (California Department of Fish and Wildlife). 2023. California Natural Diversity Database (CNDDB) RareFind 5. Commercial Version, Biogeographic Data Branch. Accessed: April 20, 2020. Available online: https://wildlife.ca.gov/data/cnddb.

FERC (Federal Energy Regulatory Commission). 1992. Final Environmental Assessment for Hydropower License. Lundy. FERC Project No. 1390 - 001. February.

INF (Inyo National Forest). 2019. *Persistence Analysis for Species of Conservation Concern, Inyo National Forest*. Inyo National Forest, Region 5 Regional Office, and Washington Office Enterprise System.

_____. 2020. At-Risk Aquatic and Terrestrial Species on Inyo National Forest. January 1, 2020. Unpublished list maintained by the Inyo National Forest. USDA Forest Service.

Psomas. 1999. *Threatened, Endangered, and Sensitive Species Management Plan Lundy Hydroelectric Project (FERC No. 1390)*. Southern California Edison Company.

_____. 2008a. Lundy Dam repeater antenna and solar panel upgrade project, Mono County, California: Results of Rare Plant Survey. Prepared for Southern California Edison Company.

_____. 2008b. Biological Resources Evaluation of the Lundy Dam Pipeline Slip Lining and Intake Structure Re-Construction Project. Prepared for Southern California Edison Company.

_____. 2008c. Biological Resources Evaluation of the Lundy Penstock Standpipe Replacement and Road Maintenance Project. Prepared for Southern California Edison Company.

_____. 2009a. Lundy Hydroelectric Generation Facility, Mono County Return Ditch (Wilson Creek to Mill Creek) Enhancement Plant Community Impact Analysis. Prepared for Southern California Edison Company.

_____. 2009b. SCE Lundy Hydro Project, Comments on Draft Avian Mortality Monitoring Plan. Prepared for Southern California Edison Company.

_____.2010. Raptors in the Lundy Lake Project Area. Prepared for Southern California Edison Company.

_____.2017. Results of a Pre-construction Survey for Nesting Birds and Special Status Plant and Wildlife Species for the Lundy Return Ditch Project, Lundy Lake, Mono County, California. Prepared for Southern California Edison Company.

USFS (U.S. Forest Service). 2019. Land Management Plan for the Inyo National Forest. Fresno, Inyo, Madera, Mono and Tulare Counties, California; Esmeralda and Mineral Counties, Nevada. R5-MB-323a. Pacific Southwest Region. September. Accessed: August 24, 2020. Available online: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd664404.pdf.

USFWS. 2023. Information for Planning and Consultation System (IPaC) Resource List [for the Project Area]. January 24. Available online: https://ecos.fws.gov/ipac/location/index.

REC-1 – RECREATION USE AND NEEDS STUDY PLAN

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

1.0 POTENTIAL RESOURCE ISSUE

Lundy Hydroelectric Project (Lundy Project) operations have the potential to affect recreation use and access within the Lundy Project boundary.

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

Lundy Project operations may affect recreation use and access within the Lundy Project boundary. Data collected through this REC-1 Recreational Use and Needs Study (Study) will be used to assess the effects of continued Lundy Project operations on recreation use and access and will inform development of protection, mitigation, and enhancement measures in the Draft License Application (DLA), if needed.

A portion of the Lundy Project is located within the Inyo National Forest (INF). The INF has Federal Power Act Section 4(e) conditioning authority to prescribe conditions that may mitigate the impact of hydropower projects on INF system lands and thus could require mitigation for recreation induced by the presence of the Project.

3.0 STUDY GOALS AND OBJECTIVES

The goals and objectives of the Recreation Use and Needs Study are to:

Goal 1 – Characterize the existing use of the FERC-approved recreation sites at the Lundy Project.

Goal 1 Objectives:

- Estimate the recreation use at the FERC-approved recreation sites included in the Lundy Project boundary by day type (i.e., weekday, weekend, or peak weekend) and activity.
- Evaluate visitor feedback regarding the perception and experience of visitors at the FERC-approved recreation sites.

Goal 2 – Identify current and future needs related to the FERC-approved recreation sites included at the Lundy Project.

Goal 2 Objectives:

- Evaluate whether the capacity of the existing FERC-approved recreation sites meets current needs.
- Estimate future recreation use of the FERC-approved recreation sites.
- Estimate potential future recreation needs and the ability of the existing FERC-approved recreation sites to meet the future needs over the term of a new license.

4.0 EXTENT OF STUDY AREA AND STUDY SITES

4.1. RECREATION SITES STUDY AREA

Recreation sites that will be included in this study are listed in Table 4.1-1 and shown in Figure 4.1-1.

Table 4.1-1. Existing FERC-approved Recreation Sites within the Lundy Project Boundary

Recreation Site Name
Lundy Lake Boat Launch
Lundy Dam Day Use Area
Lundy Campground
Lundy Day Use Area 1
Lundy Day Use Area 2
Lundy Day Use Area 3
Lundy Day Use Area 4

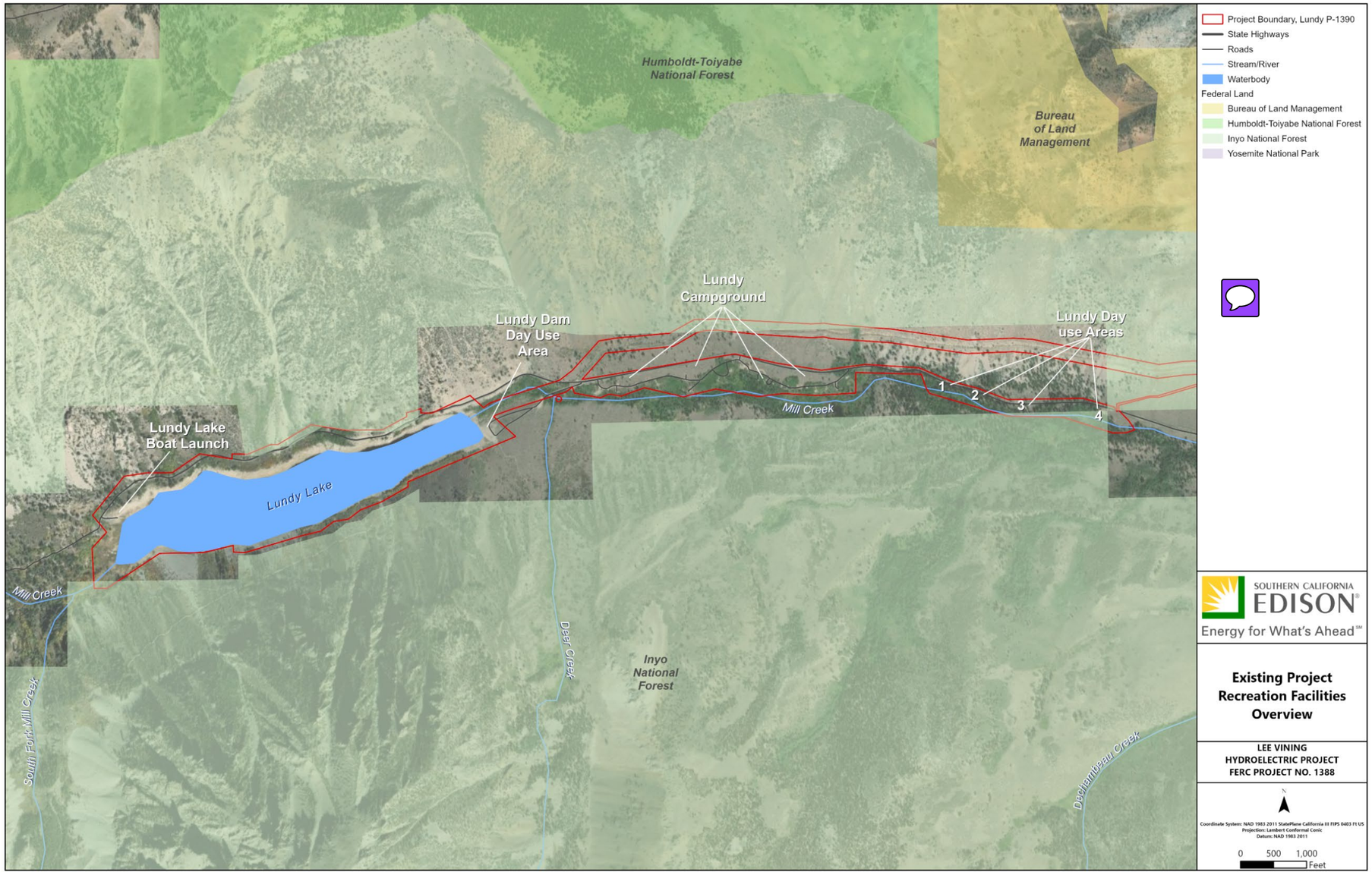

Figure 4.1-1. Existing FERC-approved Recreation Sites within the Lundy Project Boundary

5.0 EXISTING INFORMATION

Existing recreation presented in Section 5.8, Recreation Resources, of the Pre-Application Document (PAD), filed in February 2024, includes information pertaining to existing recreation within the Lundy Project boundary, recreation available near the Lundy Project, and Lundy Project recreation use information from the 2015 FERC Form 80 (SCE, 2015).

At the time of the PAD publication, current recreation uses, and access information was not available. Available data regarding recreation use are insufficient to assess whether Lundy Project recreation sites are meeting the current needs or whether they are sufficient to meet the future needs of the Lundy Project for a new license term.

6.0 STUDY APPROACH

6.1. METHODOLOGY

A variety of data collection techniques will be used to obtain the information necessary to meet the study goals and objectives listed in Section 2.0. Data collection will entail spot counts and recreation use visitor intercept surveys, which will be collected at each site as shown in Table 6.1-1.

Table 6.1-1. Data Collection Methods at Lundy Recreation Sites

Recreation Site Name	Spot Count	Recreation Use Visitor Intercept Surveys
Lundy Lake Boat Launch	X	X
Lundy Dam Day Use Area	X	X
Lundy Lake Campground	X	X
Lundy Day Use Area 1	X	X
Lundy Day Use Area 2	X	X
Lundy Day Use Area 3	X	X
Lundy Day Use Area 4	X	X

Existing data will be used to inform current recreation use as well as projected future recreation needs at the FERC-approved recreation sites. Existing data will include U.S. Census Bureau data, Statewide Comprehensive Outdoor Recreation Plan (SCORP), Mono County existing data collected at Lundy Lake Campground, and other relevant, available data and literature.

Table 6.1-2 summarizes the study objectives, information needed to meet those objectives, and sources of information. Section 6.2 and Section 6.3 provide details on the primary data collection methods.

Table 6.1-2. Recreation Use and Needs Study Plan Objectives and Efforts

Objectives	Information Needed	Source
Goal 1 – Characterize the existing use of the FERC-approved recreation sites at the Lundy Project.		
Objective 1.1: Estimate the recreation use at the FERC-approved recreation sites included in the Lundy Project boundary by day type (i.e., weekday, weekend, or peak weekend) and activity	• Estimate number of vehicles per day • Estimate number of people/vehicles • Estimate length of stay • Proportion of visitors engaged in each available activity	• Spot count data • Recreation Use Visitor Intercept Surveys • Existing data
Objective 1.2: Evaluate visitor feedback regarding the perception and experience of visitors at the FERC-approved recreation sites	• Percent of visitors perceiving crowded facilities • Percent of visitors satisfied with recreational facilities • Average quality rating of facilities and amenities • Average value rating of overall recreation site	• Recreation Use Visitor Intercept Surveys
Goal 2 – Identify current and future needs related to the FERC-approved recreation sites included at the Lundy Project.		
Objective 2.1: Evaluate whether the capacity of the existing FERC-approved recreation sites meets current needs	• User perceptions of crowding and needed improvements compared to existing data • Parking capacity compared to utilization	• Recreation Facilities Condition Assessment (REC-2) • Results of Goal 1 analysis • Existing data
Objective 2.2: Estimate future recreation use of the FERC-approved recreation sites	• Current recreational use assessment • Population projections for the Project Area • Recreational use trends	• Results of Goal 1 analysis • U.S. Census Bureau data • SCORP or other readily available literature • Existing data
Objective 2.3: Estimate potential future recreation needs and the ability of the existing FERC-approved recreation sites to meet the future needs over the term of a new license	• Inventory Assessment • Condition Assessment • Parking capacity at recreation sites vs. projected needs density • Future needs identified by additional sources	• Recreation Facilities Condition Assessment (REC-2) • Results of Goal 1 analysis

6.2. SPOT COUNTS

Spot counts will provide an estimate of the number of recreationists, parked vehicles, and boats/trailers at discrete times at each parking area within each recreation site[1] (Figure 6.2-1 through Figure 6.2-6). Field technicians conducting the spot counts will also record the activities that individuals are participating in, with attention paid to the use of recreation facilities/amenities provided at each site. Results will be documented on Recreation Use Spot Count forms (Appendix A).

Spot counts at the parking areas of the FERC-approved recreation sites will be conducted on two days per month (one weekday and one weekend day) from April 15, 2025 to November 15, 2025, and one day of each holiday weekend for a total of 20 days throughout the study period. For the purposes of this study, the holidays include the three days of the holiday weekend[2] Memorial Day: May 24 to 26, 2025; Juneteenth: June 20 to 22, 2025; Fourth of July: July 4 to 6, 2025; and Labor Day: August 30, 2025 to September 1, 2025.

Sampling dates and times will be randomly selected for the parking areas at the FERC-approved recreation sites. SCE has developed a circuit to allow visits to each parking area associated with all FERC-approved recreation sites, on each sampling day, and the visits will start at a different location and a different time of day, during each circuit, to support random sampling.

[1] Spot counts at Lundy Lake Campground will be modified to count the number of campsites occupied. This data will be used to supplement data provided by Mono County for actual campground use.

[2] For the purposes of this study, the holiday weekend is defined as the Friday, Saturday, Sunday or Saturday, Sunday, Monday closest to the holiday.

Figure 6.2-1. Parking Area Associated with Lundy Lake Boat Launch

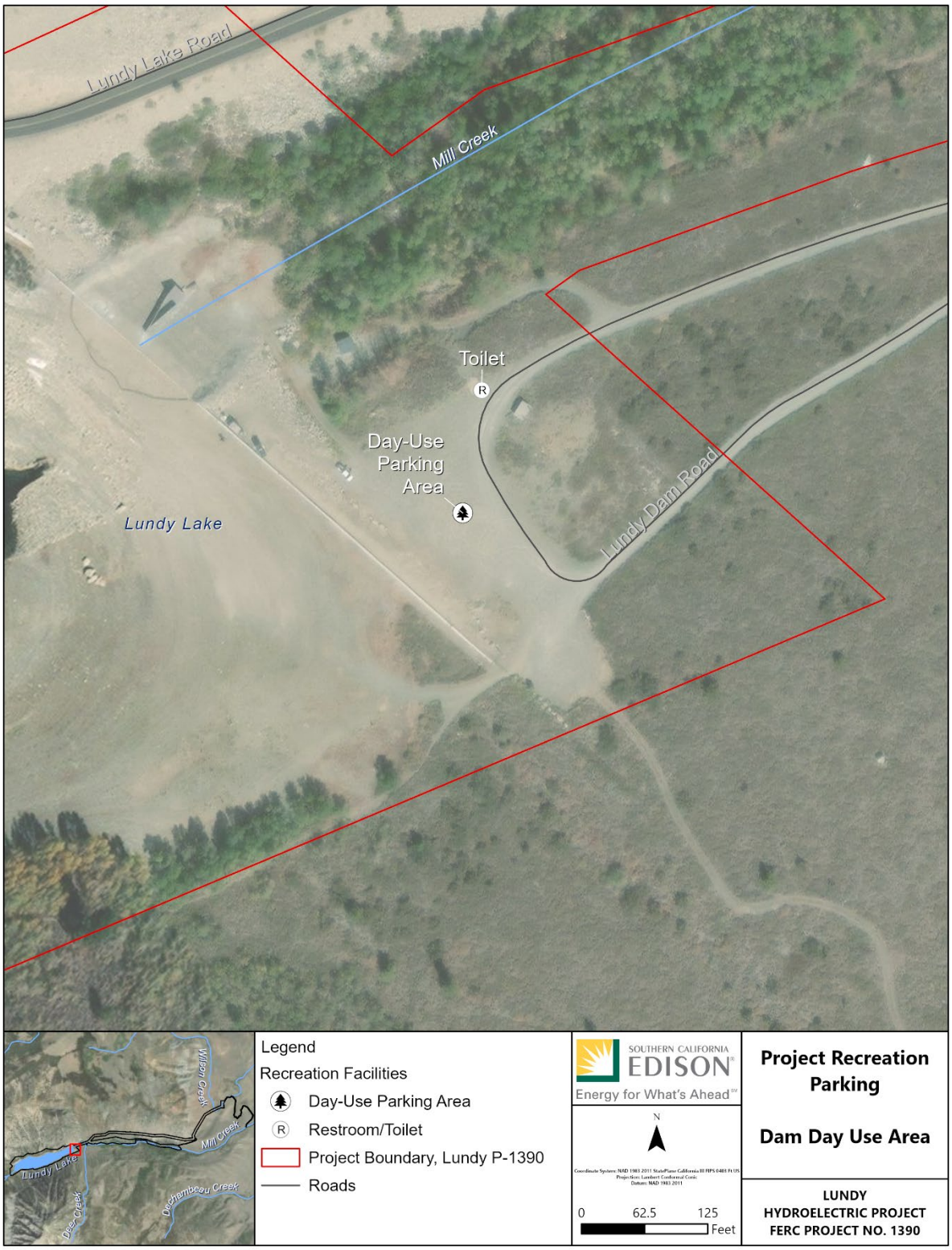

Figure 6.2-2. Parking Area Associated with Lundy Dam Day Use Area

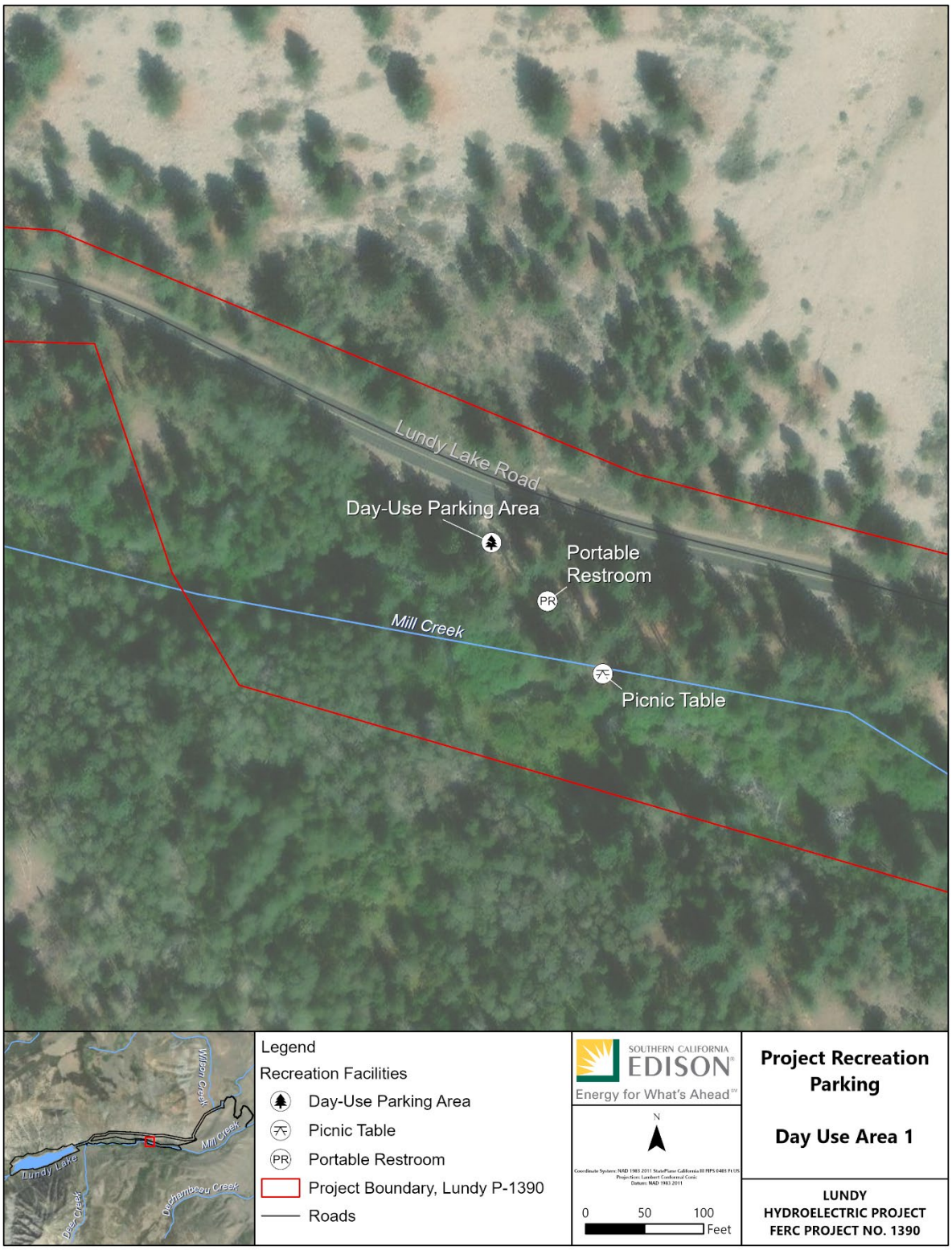

Figure 6.2-3. Parking Area Associated with Lundy Day Use Site 1

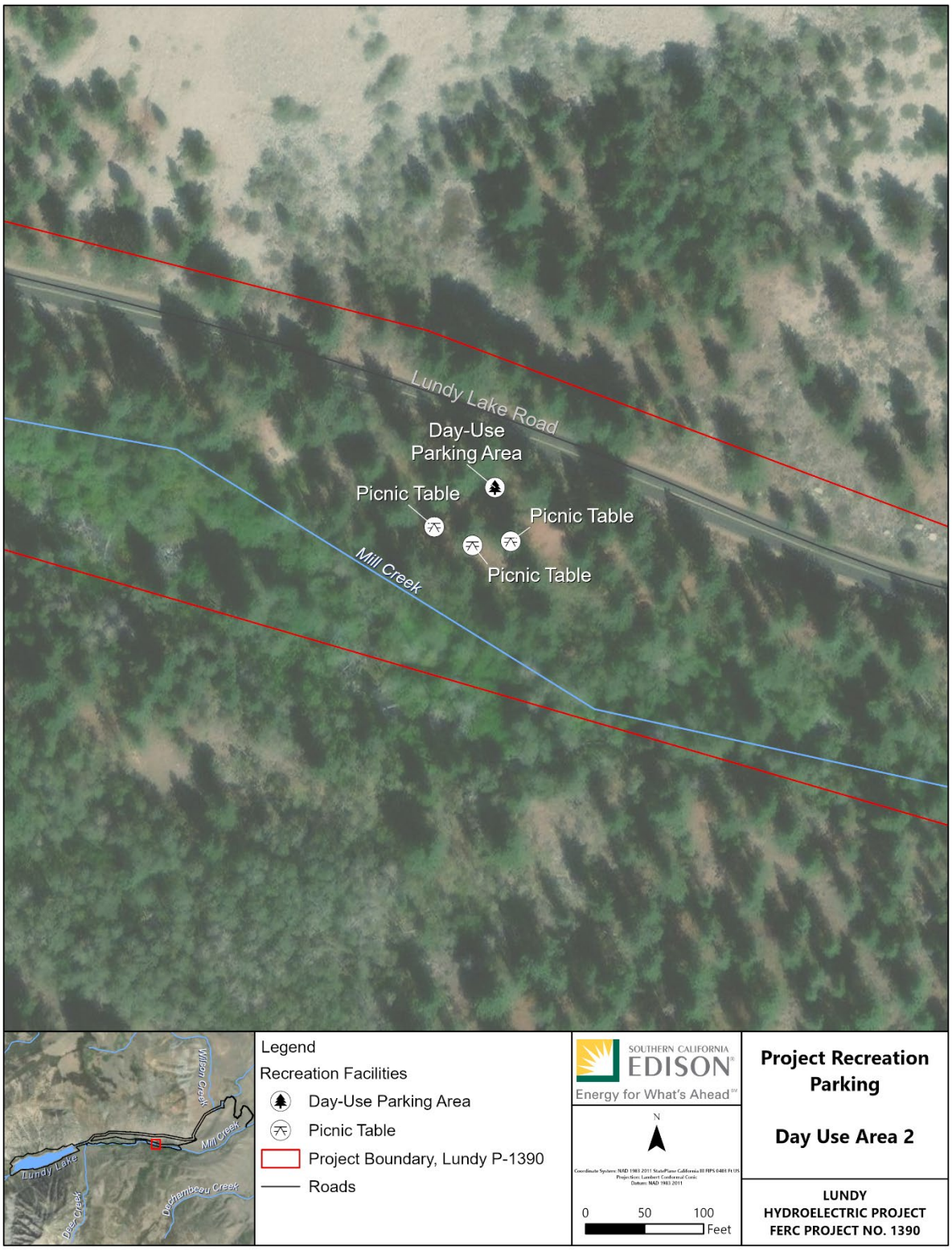

Figure 6.2-4. Parking Area Associated with Lundy Day Use Site 2

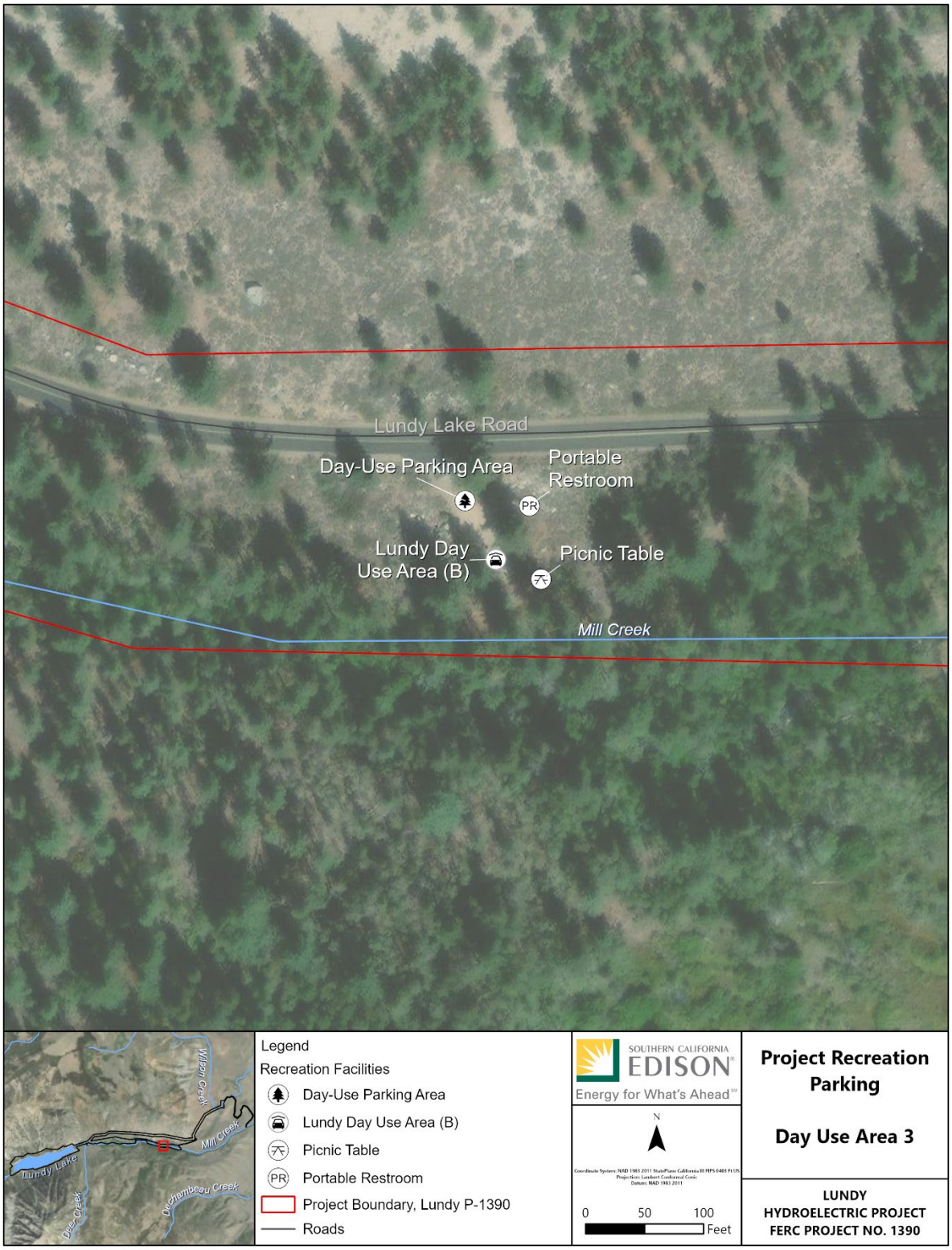

Figure 6.2-5. Parking Area Associated with Lundy Day Use Site 3

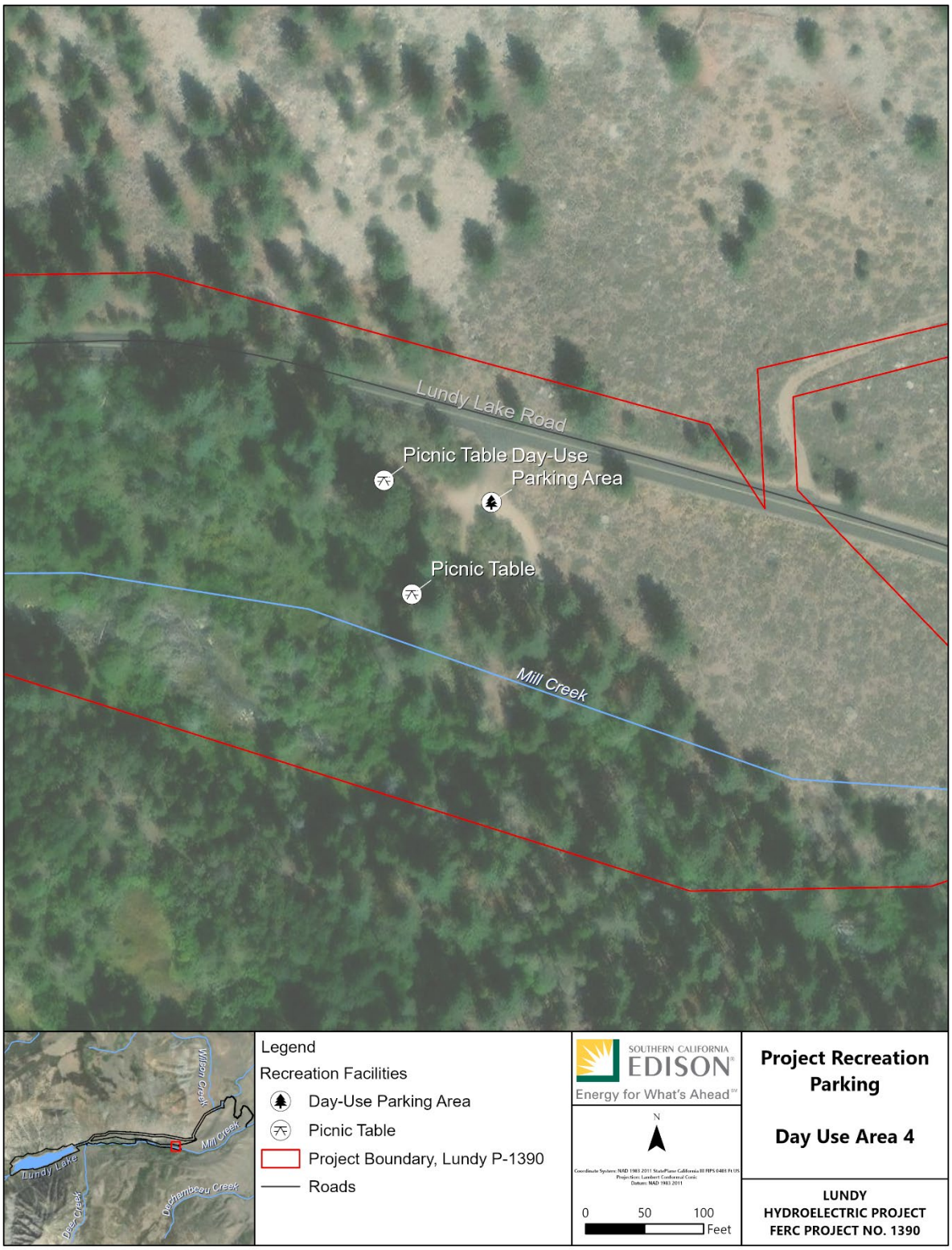

Figure 6.2-6. Parking Area Associated with Lundy Day Use Site 4

6.3. RECREATION USE VISITOR INTERCEPT SURVEYS

SCE proposes to conduct recreation use visitor intercept surveys at the FERC-approved recreation sites. A draft Recreation Use Visitor Intercept Survey form will be provided in the revised study plan (Appendix B). The full set of questions will be designed to collect information on group sizes, recreation activities, length of visit, other recreation sites used, crowdedness, user satisfaction, and site conditions. Field technicians will visit each recreation site on two days per month (one weekday and one weekend day) from April 15, 2025 to November 15, 2025, and one day of each holiday weekend for a total of 20 days throughout the study period. For the purposes of this study, the holidays include the three days of the holiday weekend[3] Memorial Day: May 24 to 26, 2025; Juneteenth: June 20 to 22, 2025; Fourth of July: July 4 to 6, 2025; and Labor Day: August 30, 2025 to September 1, 2025. Recreation use visitor intercept survey days will be conducted on the same days as spot counts, previously described in Section 6.2. Field technicians will be at each FERC-approved recreation site for approximately one-hour conducting the recreation use visitor intercept surveys. Two field technicians will be administering surveys on each survey day.

7.0 ANALYSIS AND REPORTING

The following sections provide a description of the approach for estimating the existing and future recreational use, recreation site capacity and use density percentages, and future recreation needs at the FERC-approved recreation sites. A report will be prepared documenting the analysis results. The report will include a summary of all collected information and discussion of the analysis described in the following text. The report will address all applicable desired conditions, goals, standards, and guidelines of the *Land Management Plan for the Inyo National Forest* (USFS, 2019).

Goal 1 – Characterize the existing use of the FERC-approved recreation sites at the Lundy Project.

Estimates of recreation use by site and activity will be reported in “recreation days” for FERC-approved recreation sites. FERC defines a recreation day as one visit by a person to a development for the purposes of recreation during any 24-hour period. The weekday, weekend, and peak weekend average recreation days will be estimated for the FERC-approved recreation sites by multiplying the estimated number of vehicles per day by the estimated number of people per vehicle. The recreation days by activity will be found by multiplying the total recreation days by the estimated proportion of visitors engaged in each activity. Parking utilization will be estimated by the average number of vehicles per day multiplied by the average visit length (as a fraction of the day).

Data from the Recreation Use Visitor Intercept Survey will be used to summarize the perception of visitors on crowding and adequacy of facilities and amenities, and reservoir

[3] For the purposes of this Study Plan, the holiday weekend is defined as the Friday, Saturday, Sunday or Saturday, Sunday, Monday closest to the holiday.

levels at the FERC-approved recreation sites. Additional facilities and amenities recommended by visitors will also be summarized.

Goal 2 – Identify current and future needs related to the FERC-approved recreation sites included at the Lundy Project.

Current needs will be evaluated by comparing parking utilization (estimated above) to available parking capacity (estimated during the Recreation Facilities Condition Assessment [REC-2]). User perceptions of crowding and needed facilities or amenities will be evaluated in the context of existing data.

Estimated projections of future recreation use at the Lundy Project will be developed using the average annual increase in population growth over the past 10 years, as reported by the U.S. Census Bureau for Mono County. The estimates will be augmented with discussion of trends reported in the SCORP. Estimated projections will be provided in 5-year intervals for the anticipated term of the license up to 50 years into the future (through year 2079).

While it is acknowledged that future changes in the supply of recreation resources, either in their quantity, accessibility, and/or quality may influence future demand and use, the demand analysis undertaken for this study does not attempt to predict what these future changes might consist of or how they might specifically affect levels of use at the FERC-approved recreation sites at the Lundy Project. Therefore, the demand analysis results should be viewed as a general guide of potential future recreation pressure, developed for planning purposes only.

The need for recreation and site development or modification of existing FERC-approved recreation sites will be assessed based on the inventory, condition assessment results, parking capacity, and use density assessment results, and recreation use visitor intercept survey results. The needs assessment will focus on the existing condition and user opinions of the FERC-approved recreation sites, the presence of Americans with Disabilities Act accessible facilities and amenities at the FERC-approved recreation sites, and the ability of sites to meet current and anticipated future recreation demand. Considerations will be given to site opportunities and constraints, as well as support amenities such as signage and maintenance.

8.0 SCHEDULE

8.1. STUDY SCHEDULE

The Recreation Use and Needs Study will begin with field data collection during 2025 (Table 8.1-1). An interim report on study progress will be provided with the Initial Study Report in January 2026. The final study report will be provided with the Updated Study Report in January 2027.

Table 8.1-1. Study Schedule

Date	Activity
April – November 2025	Conduct study
Winter 2025/2026	Compile study results and prepare draft report
January 2026	Interim Study Report on study progress
January 2027	Updated Study Report Final Study Report
February 2027	Distribute final report in Final License Application

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study, in 2024 dollars, is approximately $280,000.

10.0 REFERENCES

SCE (Southern California Edison). 2015. *Licensed Hydropower Development Recreation Report, FERC Form 80.* March 26, 2015.

USFS (United States Forest Service). 2019. *Land Management Plan for the Inyo National Forest. Fresno, Inyo, Madera, Mono and Tulare Counties, California. Esmeralda and Mineral Counties, Nevada. R5-MB-323a. Pacific Southwest Region*. September. Accessed: June 2023. Available online: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd664404.pdf.

APPENDIX A

Spot Count Form

Lundy Project				Site Name:								
Staff Person:			Weather:									
					# of people participating in:							
Date	Time	# of vehicles	# of boats/ trailers	# of people	Boating	Fishing	Walk/ Hike/ Run	Picnic	Camping	Sightseeing/ birding/ photography	Biking	other

APPENDIX B

Recreation Use Visitor Intercept Survey

(to be provided in the RSP)

REC-2 – RECREATION FACILITIES CONDITION ASSESSMENT

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

1.0 POTENTIAL RESOURCE ISSUE

Lundy Hydroelectric Project (Lundy Project) operations have the potential to affect recreation facilities and public access within the Lundy Project boundary.

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

Lundy Project operations may affect recreation facilities and public access within the Lundy Project boundary. Data collected through this Study will be used to assess the effects of continued Lundy Project operations on recreation facilities and public access and will inform development of protection, mitigation, and enhancement measures in the Draft License Application (DLA), if needed.

A portion of the Lundy Project is located within the Inyo National Forest (INF). The INF has Federal Power Act Section 4(e) conditioning authority to prescribe conditions that may mitigate the impact of hydropower projects on INF system lands and thus could require mitigation for recreation induced by the presence of the Project.

3.0 STUDY GOALS AND OBJECTIVES

The goal of the Study is to conduct an inventory of existing FERC-approved Lundy Project recreation sites, including locations, facilities/amenities, general condition, ownership, and management responsibilities. In order to accomplish this goal, the following objectives will be implemented.

- Field verify, map, and document FERC-approved Lundy Project recreation facilities and amenities.
- Document the general condition of FERC-approved recreation facilities and amenities, including the potential for universal accessibility, where feasible.
- Identify who owns, operates, and maintains each of the FERC-approved recreation sites.

4.0 EXTENT OF STUDY AREA AND STUDY SITES

4.1. RECREATION SITE STUDY

Recreation sites that will be included in this study are listed in Table 4.1-1 and shown in Figure 4.1-1.

Table 4.1-1. Existing FERC-approved Recreation Sites within the Lundy Project Boundary

Site Number	Recreation Site Name
1	Lundy Lake Boat Launch
2	Lundy Dam Day Use Area
3	Lundy Campground
4	Lundy Day Use Area 1
5	Lundy Day Use Area 2
6	Lundy Day Use Area 3
7	Lundy Day Use Area 4

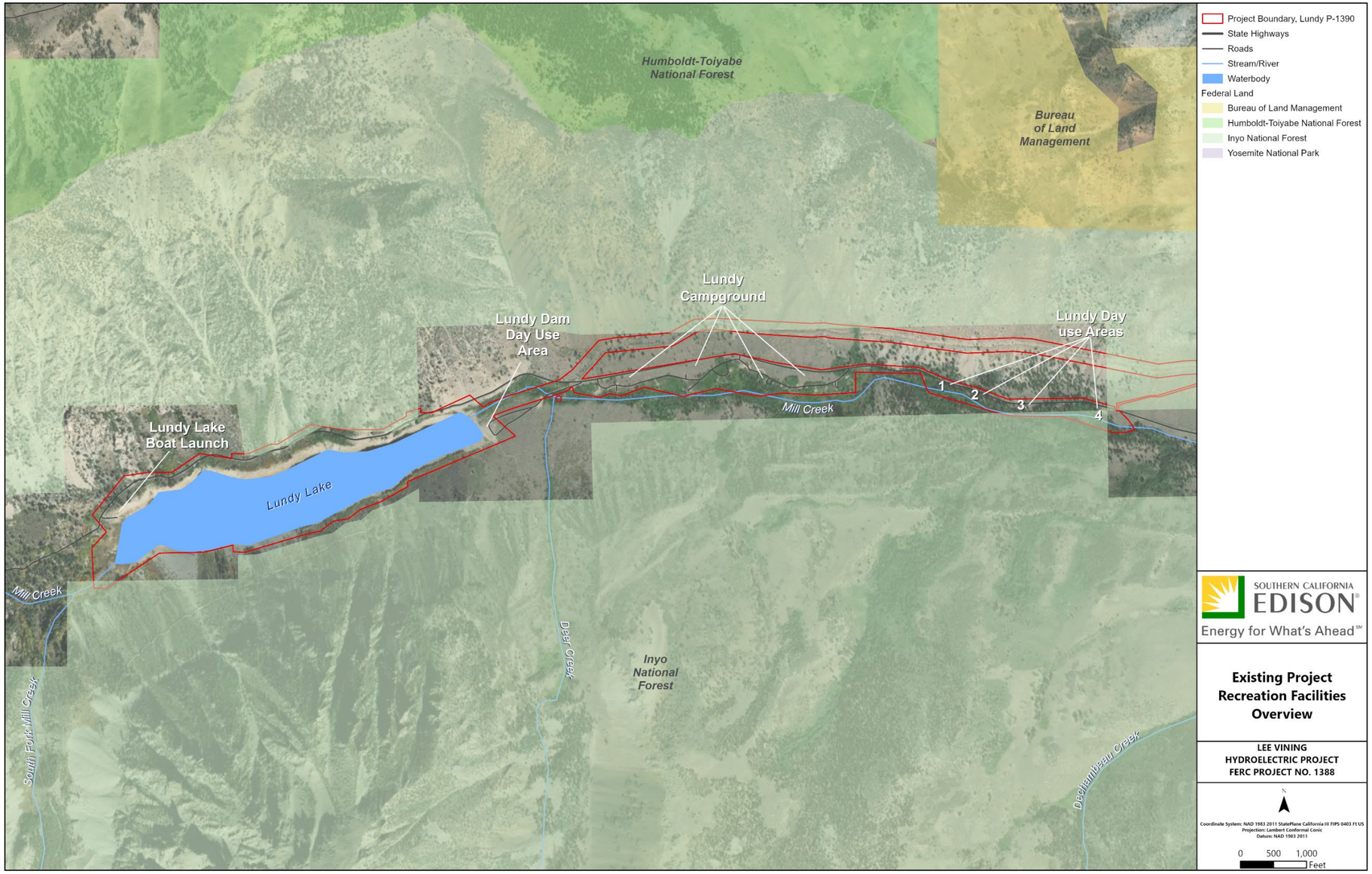

Figure 4.1-1. Existing FERC-approved Recreation Sites within the Lundy Project Boundary

5.0 EXISTING INFORMATION

Information presented in Section 5.8, Recreation Resources, of the Pre-Application Document (PAD), filed in February 2024, includes existing information pertaining to existing recreation sites within the Lundy Project boundary and recreation available near the Lundy Project.

At the time of the PAD publication, current recreation facility and amenity condition information was not available. Available data regarding recreation condition is outdated and are insufficient to assess whether Lundy Project recreation sites are meeting the current needs or whether they are sufficient to meet the future needs of the Lundy Project for a new license term.

6.0 STUDY APPROACH

6.1. METHODOLOGY

SCE will perform a field inventory to document the existing recreation facilities and amenities at the Lundy Project FERC-approved recreation sites (Table 4.1-1). Field technicians will visit each recreation site and collect data on the recreation facilities and amenities using a handheld device. Data collected during the inventory will include the following:

- The location of the facilities in relation to the Lundy Project boundary,
- The type and number of recreation amenities provided at each site and facility,
- The condition of the recreation facility/amenities,
- The entities responsible for the operation and maintenance of each recreation facility,
- Hours/seasons of operation, and
- Site photographs.

Additionally, field investigations at each recreation site will document site areas, if any, that have characteristics of erosion, slumping, or other forms of instability. The Recreation Facilities Condition Assessment form that will be used is provided in Appendix A. The conditions of the facilities/amenities will be assessed as follows:

- **N** = Needs replacement (Facility/amenity is non-functional or has broken or missing components)
- **R** = Needs report (Facility/amenity has structural damage or is in an obvious state of disrepair)
- **M** = Needs maintenance (Facility/amenity needs maintenance, such as cleaning or painting)

- **G** = Good condition (Facility/amenity is functional and well maintained)

7.0 REPORTING

A report will be prepared documenting the findings of this Study. The report will include an inventory and assessment of the Study site facilities and amenities (see Section 4.0), including applicable maps and illustrations. The report will discuss findings in relation to the desired conditions, goals, standards, and guidelines of the Land Management Plan for the Inyo National Forest (USFS, 2019).

8.0 STUDY SCHEDULE

8.1. STUDY SCHEDULE

The Study will be conducted in 2025 (Table 8.1-1). The work described herein is a one-year study proposal, planned for the first year of relicensing studies, in 2025. A draft report will be provided with the Initial Study Report in January 2026. The final study report will be provided with the DLA in October 2026.

Table 8.1-1. Schedule

Date	Activity
Summer 2025	Conduct field assessment
Fall/Winter 2025	Compile study results and prepare draft report
January 2026	File draft study report with initial study report
2026	Resolve comments and prepare final report
October 2026	Distribute final report with Draft License Application

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study, in 2024 dollars, is approximately $68,000.

10.0 REFERENCES

USFS (United States Forest Service). 2019. Land Management Plan for the Inyo National Forest. Fresno, Inyo, Madera, Mono and Tulare Counties, California. Esmeralda and Mineral Counties, Nevada. R5-MB-323a. Pacific Southwest Region. September. Accessed: June 2023 Available online: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd664404.pdf

APPENDIX A

RECREATION FACILITIES CONDITION ASSESSMENT FORM

LUNDY PROJECT
RECREATION SITE INVENTORY FORM

Observed by:_____ Date/Time: _____

Site Name:_____ GPS Coordinates:_____

Facility Type:

☐ Campground ☐ Day Use Area ☐ Picnic Area
☐ Trailhead ☐ Boat Launching Area ☐ Informal Site

Road Access: Condition Description (N-replace, R-repair, M-maintain, G-good)
:_____

☐ Paved access # lanes _____
☐ Unpaved access # lanes _____

Parking Lots: Condition Description (N-replace, R-repair, M-maintain, G-good):
_____

Type	# Paved	# Estimated Gravel	Space Delineation
Universal Access Spaces	_____	_____	☐ Painted ☐ Curbs ☐ Signage
Regular Spaces	_____	_____	☐ Painted ☐ Curbs ☐ Signage
Vehicle & Trailer Spaces	_____	_____	☐ Painted ☐ Curbs ☐ Signage

Operations:

☐ Staffed ☐ Unstaffed ☐ Seasonal (From _____To_____)
☐ Fee: (Site $_____; Parking $_____) ☐ Year Round

Operating Hours_____ Owner/Manager_____
Project Facility: _____ Within FERC Project boundary?_____

Day Use Site Amenities (total # of all amenities per site; provide additional specifications on next page):

#	Type	Condition (N-replace, R-repair, M-maintain, G-good)	Universal Access
_____	Picnic Shelter	_____	_____
_____	Overlook	_____	_____
_____	Picnic Tables	_____	_____
_____	Pedestrian Trail	_____	_____
_____	Boating Prep Area	_____	_____
_____	Trash Receptacles	_____	_____
_____	Grills	_____	_____
_____	Fishing Pier/Platform	_____	_____
_____	Firepit/ring	_____	_____
_____	Fishing Prep Area	_____	_____
_____	Safety Signage	_____	_____
_____	Restrooms	_____	_____
_____	Information Kiosk	_____	_____
_____	Informational Signage	_____	_____
_____	Benches	_____	_____
_____	Dumping Station	_____	_____
_____	Potable Water	_____	_____
_____	Playground	_____	_____

Other (specify)_____
_____

Boat Launch Facilities: Condition Description (N-replace, R-repair, M-maintain, G-good):
_____

☐ Hard surface ☐ Unimproved (informal) ☐ Gravel ☐ Carry In
☐ Universal Access ☐ Boat Prep Area _____ # of Lanes

Courtesy/Fishing Docks: Condition Description (N-replace, R-repair, M-maintain, G-good):
_____

☐ Courtesy Dock ☐ Fishing Dock Dimensions:_____ ☐ Universal Access
☐ Courtesy Dock ☐ Fishing Dock Dimensions:_____ ☐ Universal Access

Trails (within the recreation area): Condition Description (N-replace, R-repair, M-maintain, G-good): _____

Type:_____ Length (ft):_____ Condition: _____ ☐ Universal Access
Type:_____ Length (ft):_____ Condition: _____ ☐ Universal Access
Type:_____ Length (ft):_____ Condition: _____ ☐ Universal Access

Interpretive/Site Information: Condition Description (N-replace, R-repair, M-maintain, G-good): _____

_____ No. of Displays

☐ Boating Safety ☐ Invasive Species ☐ Fishing Regulations ☐ Fish Type

☐ Regional Events ☐ Other (specify)_____

Signage: Condition Description (N-replace, R-repair, M-maintain, G-good):

_____

☐ Part 8 ☐ Directional ☐ Informational ☐ Other

Sanitation Facilities: Condition Description (N-replace, R-repair, M-maintain, G-good):

_____

	# Flush	(# UA*)	# Portable	(# ADA)	Showers	(#UA)
Unisex	_____	(_____)	_____	(_____)	_____	(_____)
Women	_____	(_____)	_____	(_____)	_____	(_____)
Men	_____	(_____)	_____	(_____)	_____	(_____)

**UA = Universal Access*

Campground/Campsite: Condition Description (N-replace, R-repair, M-maintain, G-good):

_____

	Tent-improved	**Tent-Primitive**	**Group Sites**	**Camps/Cabins**	**RV Sites**
# of sites					
On site parking					
Waterfront					
Universal Access					

Observed Vegetation and Erosion Impacts:

_____ Cut trees for fires
_____ Trampled vegetation
_____ Mowed areas
_____ Trees damaged by people
_____ Trees damaged by environment
_____ Areas of noticeable erosion
_____ None

Description of Observations/Evidence of Vegetation Impacts:

_____
_____

Description of Observations/Evidence of Erosion:

_____
_____

Evidence of use at site: _____
(C) Compaction, (E) Erosion, (G) Garbage, (GD) Ground disturbance, (HW) Human waste, (UI) Unauthorized improvements, (V) Vandalism, (VR) Vegetation removal, (O) Other (Specify)

Evidence of Overcrowding: _____
(A) Anecdotal information, (FA) facility/amenity @ capacity, (I) improper parking, (S) Signage, (SD) Site degradation, (U) Unauthorized sites, (W) Waiting lines, (O) Other (Specify)

Notes (including general condition, any restrictions/alerts, such as boating use, invasive species, etc.):

_____
_____
_____
_____
_____

Photo number from _____ to _____

Sketch of Site and Facilities:

CUL-1 – CULTURAL RESOURCES – ARCHAEOLOGY

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1.0 POTENTIAL RESOURCE ISSUE

Southern California Edison (SCE) identified the need to conduct cultural resource studies including archaeological, built environment, and Traditional Cultural Properties, as well as non-American Indian TCPs and TCRs, resource studies. The CUL-1 Cultural Resources, Archaeology Technical Study (Study) will consider archaeological sites and non-American Indian TCPs and TCRs. American Indian TCPs and TCRs will be considered within the TRI-1, Tribal Resource Technical Study Plan. Built Environment Resources will be considered in the CUL-2 Cultural Resources – Built Environment Technical Study Plan.

Several terms used throughout this Study plan warrant definition at the outset.

- ***Area of Potential Effect*** - as defined in the Code of Federal Regulations (CFR), Title 36, Section 800.16(d) (36 CFR § 800.16(d)), as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations to the character of use of historic properties, if any such properties exist."

- ***Historic Property(ies)*** - as defined in the Code of Federal Regulations (CFR), Title 36, Section 800.16(l)(1) (36 CFR § 800.16(l)(1)), are precontact or historic archaeological sites, buildings, structures, objects, or districts included in or eligible for inclusion in the National Register of Historic Places (NRHP). Historic properties are identified through a process of evaluation against specific NRHP criteria in 36 CFR § 60.4.

- ***A District*** **-** is a geographic area containing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan and physical development. Examples of districts include (but are not limited to) precontact archaeological site complexes, hydroelectric projects, residential areas, commercial zones, mining complexes, transportation networks, rural villages, canal systems, irrigation systems, or large ranches (NPS, 1997).

- ***Cultural Resource(s)*** - for the purpose of this document, is used to discuss any precontact or historic-period district, site, building, structure, object, landscape, TCP, or TCR, regardless of its National Register eligibility.

There may be any number of cultural resources in the vicinity of the Lundy Project. Some of these resources may be eligible for the NRHP (i.e., historic properties).

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

The Federal Energy Regulatory Commission's (FERC) decision to issue a new license is considered an "undertaking" pursuant to 36 CFR 800.16(y). The National Historic Preservation Act (NHPA) requires federal agencies to take into account the effect of undertakings on historic properties and allow the Advisory Council on Historic Preservation an opportunity to comment.

Continued Project Operation and Maintenance and other activities, including public recreation activities, may have an adverse effect on historic properties. The effect may be direct (e.g., result of ground-disturbing activities), indirect (e.g., public access to Project areas), or cumulative (e.g., caused by a Project activity or public access in combination with other past, present, and reasonably foreseeable future projects). This study focuses on these potential Project effects to historic properties.

For historic properties, appropriate study areas are defined by Regulations under 36 CFR § 800 as the Area of Potential Effects (APE). The APE for the Project is further defined in Section 4.0, *Extent of Proposed Study Area, and Study Sites*, of this Study Plan. The following will be assessed during the archaeological surveys:

- Are the impacts due to the presence of the Project? Impacts to NRHP-eligible resources or resources with associated Tribal values may include but are not limited to ground disturbance due to driving or excavation; erosion from higher flows; changes to a landscape viewshed.
- Are the impacts direct, indirect, and/or cumulative?
- If impacts are a result of the presence of the Project, how will they be addressed?

Data collected during this study will inform the following:

- Cultural Resource Technical Report (CUL-1) for archaeological resources;
- Cultural Resource Evaluation Report for archaeological resources, if needed;
- Historic Properties Management Plan (HPMP) addressing archaeological, built environment and Tribal resources.

3.0 STUDY GOALS AND OBJECTIVES

The Study goals and objectives include the following:

- Meet FERC compliance requirements under its Regulations (18 CFR Part 5) and Section 106 of the NHPA, as amended, by determining if Project-related activities and public access will have an adverse effect on historic properties.
- Identify all archaeological resources within the APE, determine which are historic properties, and develop the HPMP based on those results.
- Ensure that future Project facilities and operations are consistent with the Desired Conditions described in the *Land Management Plan for the Inyo National Forest* (USFS, 2019).

4.0 EXTENT OF STUDY AREA AND STUDY SITES

4.1. CULTURAL STUDY AREA

The Study will focus upon the FERC Project Boundary, the proposed APE, and a larger proposed Study Area comprising a 0.5-mile radius around the proposed APE (Figure 4.1-1).

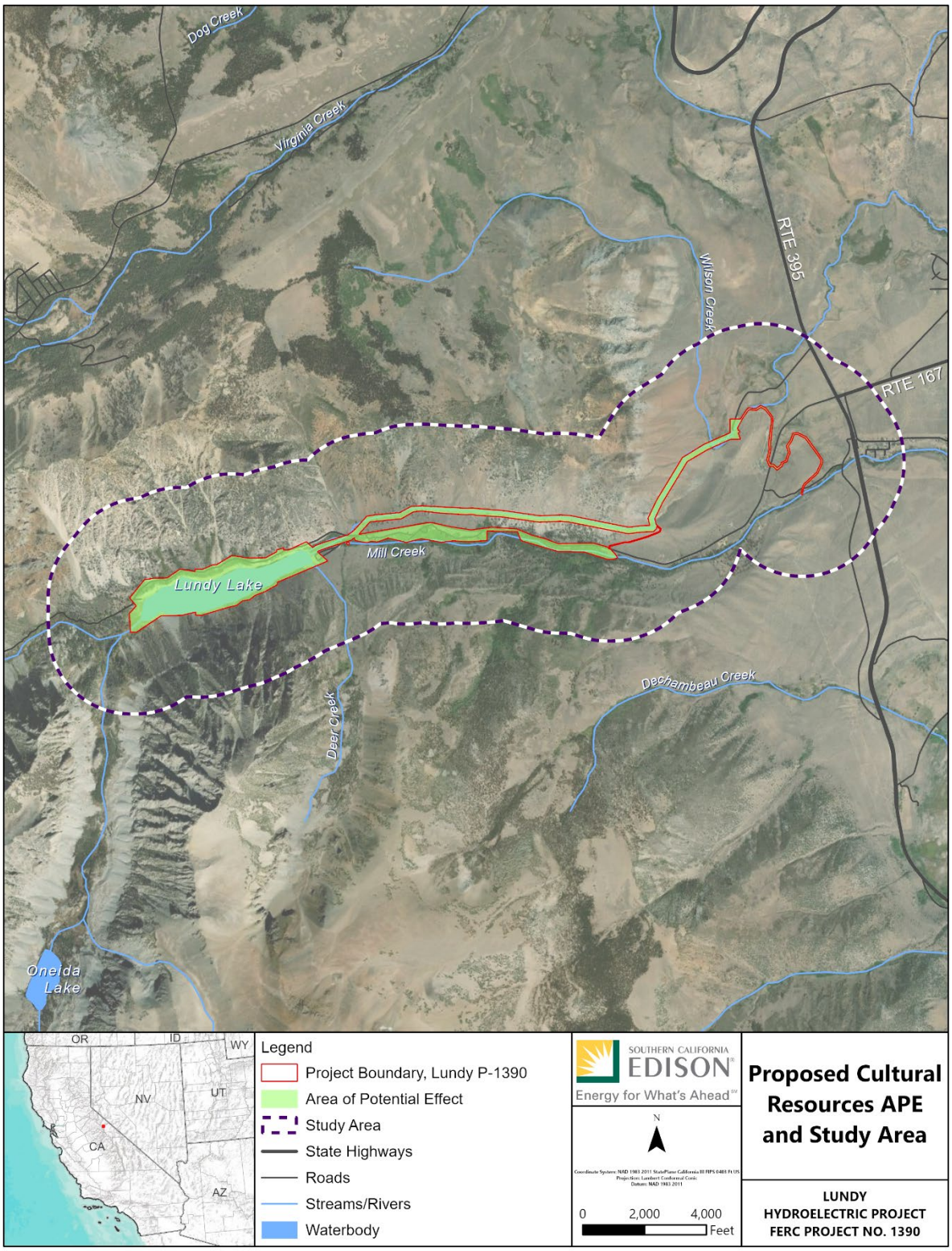

Figure 4.1-1. Proposed Cultural Resources APE and Study Area

5.0 EXISTING INFORMATION

5.1. SUMMARY OF RECORD SEARCHES ARCHIVAL RESEARCH

The cultural resource section of the Pre-Application Document (PAD), filed in February 2024, was developed using information obtained from the SCE archives, Inyo National Forest, and the California Historical Resources Information System (CHRIS) Eastern Information Center (EIC) at the University of California Riverside, and is summarized in the following text.

5.1.1. PREVIOUS CULTURAL RESOURCE STUDIES

Thirty-four previous cultural resource investigations were identified within the proposed Study Area (Table 5.1-1). Of these, 21 were conducted within the proposed APE or overlap the proposed APE and Study Area. Among the investigations are the ones conducted during the last relicensing (White, 1983; 1985, 1990; York, 1990). Most of the remainder are comprised of surveys in support of SCE pole replacements and other maintenance activities. Maps of the previous studies are located in Appendix H (Confidential) of the PAD.

Table 5.1-1. Previous Cultural Resource Studies Located within the Proposed Study Area and APE

IC Number	SCE Document ID	USFS Number	Author(s)	Year	Report Title	In APE or Study Area	Involved Resources
MN-00258	-	-	Crist, Michael K.	1981	A Cultural Resource Reconnaissance of the Paoha Hydroelectric Project, Mono County, California	APE	P-26-002236
-	1160002	--	White, D.R.M	1983	Historic and Archaeological Preservation Plan for Eastern Sierra Hydroelectric Projects in Mono and Inyo Counties, California: Lundy (FERC 1390), Lee Vining Creek (FERC 1388), Rush Creek (FERC 1389), and Bishop Creek (FERC 1394)	APE	-
MN-00802	1160170	R1987050400441	White, David R. M.	1985	Results of the 1984 Field Season, Cultural Resources Survey for the Historic and Archaeological Preservation Plan for Eastern Sierra Hydroelectric Projects in Mono and Inyo Counties: Lundy, Lee Vining, Rush Creek, and Bishop Creek	APE	P-26-002400, P-26-002401, P-26-002402, P-26-002403, P-26-002404, P-26-002405, P-26-002406, P-26-002407, P-26-002411, P-26-003814, P-26-003815, P-26-003817
MN-00402	-	-	Burton, Jeffrey F.	1987	Cultural Resources of Conway Ranch, Mono Basin, California	APE	-
-	1164502	R1989050400507	USFS	1989	Hazardous Tree Removal Project	Study Area	-
MN-00461	-	-	Grantham, Steven, and Terry Jones	1990	Archaeological Survey Report for the Addition of Passing Lanes to Portions of Highway 395 in Mono County, California	Study Area	P-26-000422, P-26-000459, P-26-002467

IC Number	SCE Document ID	USFS Number	Author(s)	Year	Report Title	In APE or Study Area	Involved Resources
MN-00420	1160288	-	York, Andrew	1990	An Evaluation of Twenty-One Archaeological Sites on the Lee Vining Creek, Rush Creek, and Lundy Hydroelectric Projects, Mono and Inyo Counties, California	APE	P-26-002411
-	1160297	-	White, David R. M.	1990	Management Plan for Historic and Archaeological Resources Associated with the Lundy Hydroelectric Project (FERC Project No. 1390), Mono County, California	APE	
MN-00527	1160314	-	White, David R. M.	1992	Results of Archaeological Survey for Groundwater and Riparian Vegetation Studies in Connection with the Lundy and Bishop Creek Hydroelectric Projects, Mono and Inyo Counties, California	APE	-
MN-00754	1161856	CA-170-00-14	Schmidt, James J.	2000	Letter Report: Southern California Edison Company Tufa 16kV Survey	Study Area	-
MN-01475	1160489	-	Taylor, Thomas T.	2000	Archaeological Survey Report Recreation Improvements at Lundy Lake/Mill Creek FERC Project No. 1390, Mono County, California	APE	-
MN-01437	1160498	-	Duke, Curt, and Terri Fulton	2003	Archaeological Survey Report Tufa Circuit, Southern California Edison, Mono County, California	APE	P-26-002454, P-26-004073, P-26-004074, P-26-004077
MN-01313	-	R2004050401050	Faust, Nicholas	2004	Mono City Fuels Reduction - South	Study Area	-
-	-	R2004050401073	USFS	2004	OHV Routes Inventory and Designation Survey	Study Area	-
MN-00872	-	CA-170-07-02	Holt, Michael	2006	Cultural Resources Inventory Report: Mono County Water Diversion Project	Study Area	-

IC Number	SCE Document ID	USFS Number	Author(s)	Year	Report Title	In APE or Study Area	Involved Resources
MN-00910	1161551	-	Jones, Kari L., and Thomas L. Jackson	2007	Cultural Resources Inventory for the Proposed Southern California Edison Lee Vining to Conway Summit Communications Line Project	APE	P-26-002236, P-26-004835, P-26-004836, P-26-004841
MN-01044	1161522	-	Pollock, Katherine H.	2007	Archaeological Assessment Report for the Lundy Hydroelectric Project Flowline Road Improvements and Standpipe Replacement, Inyo National Forest, Mono County, California	APE	-
MN-01020	1161933	R2010050401450	Catacora, Andrea	2008	Letter Report: Negative Cultural Resources Inventory Letter Report for Work Order 4770-0346 and 4703-0401	Study Area	-
-	-	R2011050401662	Chambers Group	2011	Digital 395 Chambers Group Survey	Study Area	P-26-006580
-	1164498	-	Wetherbee, M., A. Elzinga, and E. Nicolay	2017	Cultural Resources Monitoring and Survey Report for Southern California Edison's Emergency Replacement of 28 Distribution Poles Located within the Inyo National Forest, Inyo and Mono County, California	Study Area	-
-	-	-	Rice, Sarah, and Jerome King	2019	Archaeological Survey Report for US Highway 395 Shoulder Widening at Sonora Junction and Conway Ranch, Mono County, California	Study Area	P-26-008664
-	1165355	-	Urbana Preservation & Planning	2019	Historical Resources Analysis Report / Historic Property Survey Report Southern California Edison Company Eastern Sierras Transmission System Mono and Inyo Counties, California	Study Area	-
-	-	-	Blake, Jennifer	2020	Archaeological Survey Report for the Proposed Cemetery Road Capital Maintenance Project, Mono County, California.	Study Area	P-26-008935

IC Number	SCE Document ID	USFS Number	Author(s)	Year	Report Title	In APE or Study Area	Involved Resources
-	1165370	-	Marks, Brian S., and Ronnie Johnson	2020	Cultural Resources Assessment: Tufa 16 kV Pole 2307823E (TD1522884) Preventive Maintenance Project, Mono County, California	Study Area	P-26-004077
-	1165369	-	Marks, Brian S., Katie Bonham, and Ronnie Johnson	2020	Cultural Resources Assessment: Tufa 16 kV Pole 2307824E (801774830) Replacement Project, Mono County, California	Study Area	-
-	1165343	-	Williams, Audry	2020	Historic era Built Environment Survey Report for Southern California Edison Company's Distribution Circuits on the Inyo National Forest, Inyo and Mono Counties, California	APE	-
-	-	-	Williams, Audry	2020	Cultural Resource Survey for Southern California Edison Company's Lundy Facilities Maintenance and Repairs Project, Zone 3	APE	Lundy Return Ditch Historic
-	-	-	Williams, Audry	2020	Cultural Resource Survey for Southern California Edison Company's Lundy Facilities Maintenance and Repairs Project, Zone 4	APE	Lundy Return Ditch Multi-component
-	1165589	-	Wilson, Z.	2020	Archaeological Survey Report for Southern California Edison's Deteriorated Pole Project (Unassigned Work Orders), Bureau of Land Management, Bishop Field Office, Inyo and Mono Counties, California	Study Area	-
-	1165161	-	Wisely, Justin, Erin McKendry, and Ronnie Johnson	2020	Cultural Resources Assessment: Tufa 16 kV Pole 4388210E (TD1487562) Replacement Project, Mono County, California	Study Area	-

IC Number	SCE Document ID	USFS Number	Author(s)	Year	Report Title	In APE or Study Area	Involved Resources
-	1165900	-	Gilbert, R., A. Lopez-Johnson, and M. Wiseman	2021	2021 Q1 HRMP Quarterly Compliance Report, USFS Pacific Southwest Region, Master Permits and Easements for the Operation & Maintenance of Southern California Edison's Electric Facilities on the INF, Inyo and Mono Counties, CA	Study Area	INF_TD1656168_Site_001, INF_TD1656168_Site_002
-	1165902	-	Gilbert, R., M. Wiseman, and A. Lopez-Johnson	2021	2021 Q3 HRMP Quarterly Compliance Report, USFS Pacific Southwest Region, Master Permits and Easements for the Operation & Maintenance of Southern California Edison's Electric Facilities on the INF, Inyo and Mono Counties, CA	Study Area	-
-	1165700	-	Johnson, Ronnie, and Vanessa Ortiz	2021	Cultural Resources Assessment: Tufa 16 kV Four Pole (TD1671284 & TD1767060) Infrastructure Replacement and Grid Resiliency Project, Mono County, California	Study Area	-
-	-	-	Environmental Intelligence	2022	INF Whole Circuit Survey	Study Area	LV-Site-203, LV-Site-207

Source: Records Search Results

Notes: INF=Inyo National Forest; kV=kilovolt; USFS=US Forest Service

5.1.2. Previously Identified Archaeological Sites

Archival research conducted to date indicates that there are seven precontact, three multi-component (precontact and historic-period), and 23 historic-period archaeological sites previously recorded within the proposed Study Area. Of these, one precontact site, one multi-component site, and 11 historic-period archaeological sites are located within the proposed Project APE. The types of sites and their NRHP eligibility are listed in Table 5.1-2. Precontact sites primarily include lithic scatters and bedrock milling stations. Historic-period sites include historic debris, the remains of buildings or structures, ditches, and roads, as well as a cemetery. Eight of the sites within the proposed APE were determined not eligible for listing on the NRHP, one was determined as eligible (P-26-002411/CA-MNO-2411H; White, 1990), and one does not appear to have been evaluated. The locations of these sites are depicted on maps located in Confidential Appendix H of the PAD.

Table 5.1-2. Previously Recorded Archaeological Sites Located within the Proposed Study Area and APE

Primary Number	Trinomial	USFS Number (or other designation)	Site Type	Composition of Site	NRHP Eligibility	In APE or Study Area	Property Owner
-	-	INF_TD1656168_ Site_001	Historic	Refuse scatter	Unknown	Study Area	BLM
-	-	INF_TD1656168_ Site_002	Historic	Refuse scatter	Unknown	Study Area	BLM
-	-	Lundy Return Ditch Historic	Historic	Refuse scatter	Unknown	APE	Private
-	-	Lundy Return Ditch Multi-component	Multi-component	Lithic scatter/Refuse scatter	Unknown	APE	INF
-	-	LV-Site-203	Historic	Refuse scatter	Unknown	Study Area	BLM, INF
-	-	LV-Site-207	Historic	Refuse scatter	Unknown	Study Area	INF
P-26-000422	CA-MNO-422/H	05045101788	Multi-component	Lithic scatter/BRM/Refuse scatter	Unknown	Study Area	INF
P-26-000443	CA-MNO-443	-	Precontact	Lithic scatter	Unknown	Study Area	INF, Private
P-26-000459	CA-MNO-459	05045101366	Precontact	Lithic scatter/BRM	Unknown	Study Area	INF
P-26-002236	CA-MNO-2236H	05045300211	Historic	Foundation/Refuse scatter	Unknown	Study Area	LADWP, BLM, Private
P-26-002400	CA-MNO-2400H	05045100680	Historic	Cairn/Refuse scatter	Not eligible (FERC831003B)	APE	INF
P-26-002401	CA-MNO-2401H	05045100681	Historic	Road	Not eligible (FERC831003B)	APE	INF, Private
P-26-002402	CA-MNO-2402H	05045100682	Historic	Structure	Not eligible (FERC831003B)	APE	INF
P-26-002403	CA-MNO-2403H	05045100683	Historic	Structure	Not eligible (FERC831003B)	APE	Private

Primary Number	Trinomial	USFS Number (or other designation)	Site Type	Composition of Site	NRHP Eligibility	In APE or Study Area	Property Owner
P-26-002404	CA-MNO-2404H	05045100684	Historic	Rock wall/Refuse scatter	Not eligible (FERC831003B)	APE	Private
P-26-002405	CA-MNO-2405H	05045100685	Historic	Structure/Refuse scatter	Not eligible (FERC831003B)	APE	Private
P-26-002406	CA-MNO-2406H	05045100686	Historic	Road	Not eligible (FERC831003B)	APE	Private
P-26-002407	CA-MNO-2407H	05045100688	Historic	Cemetery	Not eligible (FERC831003B)	APE	Private
P-26-002411	CA-MNO-2411H	05045100694	Historic	Structure (Jordan Powerhouse)/Refuse scatter	Eligible (FERC831003B)	APE	BLM, Private
P-26-002454	CA-MNO-2454	05045101413	Precontact	Lithic scatter/BRM	Unknown	Study Area	INF
P-26-002467	CA-MNO-2467	-	Precontact	Lithic scatter	Unknown	Study Area	BLM, Private
P-26-003814	-	05045100687	Precontact	Lithic scatter	Not eligible (FERC831003B)	APE	INF
P-26-003815	CA-MNO-3815	05045100689	Precontact	Lithic scatter	Not eligible (FERC831003B)	Study Area	INF
P-26-003817	-	05045100695	Historic	Painted boulder (Frog Rock)	Not eligible (FERC831003B)	Study Area	INF
P-26-004073	CA-MNO-3670	-	Precontact	Lithic scatter	Unknown	Study Area	BLM, Private
P-26-004074	CA-MNO-3671/H	-	Multi-component	Lithic scatter/Ditch	Unknown	Study Area	INF, Private
P-26-004077	-	-	Historic	Lundy Return Ditch	Unknown	APE	BLM, INF, Private
P-26-004835	CA-MNO-4301H	-	Historic	Refuse scatter	Unknown	Study Area	Private
P-26-004836	-	-	Historic	Ditch	Unknown	Study Area	LADWP, INF, Private

Primary Number	Trinomial	USFS Number (or other designation)	Site Type	Composition of Site	NRHP Eligibility	In APE or Study Area	Property Owner
P-26-004841	-	-	Historic	Refuse scatter	Unknown	Study Area	BLM
P-26-006580	CA-MNO-4932H	-	Historic	Refuse scatter	Recommended not eligible	Study Area	LADWP, BLM
P-26-008664	-	-	Historic	Mill Creek Powerhouse Road	Unknown	Study Area	LADWP
P-26-008935	-	-	Historic	Refuse scatter	Unknown	Study Area	INF

Source: Records Search

Notes: BLM=Bureau of Land Management; INF=Inyo National Forest; LADWP=Los Angeles Department of Water and Power; USFS-US Forest Service

6.0 STUDY APPROACH

6.1. STUDY METHODS

The methods proposed to meet the study goals and objectives are discussed in the following sections.

6.1.1. ARCHIVAL RESEARCH

As needed during implementation of the studies, additional archival research will be conducted at the repositories listed in the following text, as required to obtain additional information specific to the prehistory, ethnography, and history of the Project Area, the hydroelectric Project in whole, and its individual features. This may include contacting SCE employees, as appropriate, to gather feature-specific information. The results of the archival research will serve as the basis for preparing the prehistoric and historic contexts against which archaeological and built-environment resources may be evaluated. Places to be contacted or visited include:

- California Historical Research Information System
- Bureau of Land Management (BLM), Bishop Field Office
- Native American Heritage Commission
- Southern California Edison Records
- US Forest Service (USFS), Inyo National Forest
- Other online repositories as applicable

6.1.2. ARCHAEOLOGICAL INVENTORY

Based on the existing data previously described, FERC is required to make a reasonable and good-faith effort to identify historic properties that may be affected by the Project. As described in 36 CFR § 800.4(b)(1), this may be accomplished through sample field investigations and/or field surveys that are implemented in accordance with the Secretary of the Interior's Standards and Guidelines for Identification (NPS, 1983). FERC is required to consider any other applicable professional standards and Tribal, state, or local laws or procedures to complete the identification of historic properties.

To assist FERC in meeting its compliance obligations, and to develop appropriate management measures for historic properties within the APE, an archaeological inventory will be performed. The purpose of the field survey is to: 1) examine lands which have not been previously surveyed; and 2) to examine lands previously surveyed but where the field strategy is insufficiently described, or does not meet current professional standards, as defined in the S*ecretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (NPS, 1983) and the California Office of Historic Preservation (OHP). While a few previous inventories within the APE have been completed to current

professional standards, the majority do not, thus a complete resurvey of the APE will be performed.

The field survey will be supervised by one or more qualified, professional archaeologists (i.e., individuals who meet the Secretary of the Interior's Professional Qualifications Standards for Archaeology [NPS, 2021]) who will participate in all field work.

Archaeological surveys that occur on Inyo National Forest lands will require valid Organic Act permits. Work on BLM land will require a current Cultural Resources Use Permit issued by the BLM State Office, as well as a Fieldwork Authorization issued by the BLM, Bishop Field Office. SCE or their consultants will obtain all required permits prior to beginning field work and will notify the Inyo National Forest and BLM when field work is scheduled.

During the survey, archaeologists will walk systematic, parallel transects spaced at no more than 20 meters apart, to provide complete coverage of the APE, as vegetation and terrain allow. Areas within the APE that cannot be accessed in a safe manner (e.g., locations with dense vegetation or unsafe slopes) will not be included within the survey or recording of archaeological resources; these areas will be identified in the resulting survey report and an explanation for their exclusion will be provided. If conditions allow, lands typically inundated by Project reservoirs will be examined if they are accessible due to drawdowns during the survey season.

Locations of previously recorded archaeological sites will be verified, and their site records will be updated as necessary to reflect current site conditions, and to bring documentation to current professional standards. Newly discovered archaeological resources, including isolated finds, will be fully documented to current standards. All site recording will follow procedures outlined in *Instructions for Recording Historical Resources* (OHP, 1995), which utilizes California Department of Parks and Recreation 523 forms. Isolated finds will be recorded in a tabular fashion and reported only in an appendix to the survey report. The threshold for recording finds as archaeological sites, as opposed to isolated finds, will follow Inyo National Forest and BLM guidelines and permit stipulations.

Sites will be mapped to scale and photographed. Artifacts, features, and other site constituents will be described, mapped, and photographed as appropriate. All artifacts encountered during the field survey will be left in place; no collection will occur. A global positioning system (GPS) receiver will be used to map the locations of all cultural resources, including isolates; locations will be reported using the Universal Transverse Mercator (UTM) coordinate system. GPS data collection will adhere to Inyo National Forest and BLM specifications for accuracy and site-specific procedures where applicable. All mapping data will be submitted to Inyo National Forest, BLM, and SCE in their respective formats.

All newly recorded sites on Inyo National Forest land will be submitted to Inyo National Forest for assignment of USFS numbers. All newly recorded sites, regardless of land status, will be submitted to the CHRIS for assignment of permanent site numbers.

The completed inventory report will meet BLM and Inyo National Forest standards for format and content, as outlined in permit stipulations.

6.1.2.1. Discovery and Treatment of Human Remains

FEDERALLY MANAGED LANDS

Should human skeletal materials, burials, and/or associated funerary objects be identified during the survey or other Project phases or prior to license issuance on USFS Inyo National Forest or BLM land, all work in the immediate area will cease and the location of the find will be secured at the moment of discovery. Personnel responsible for the discovery will notify the SCE Cultural Resources Specialist who in-turn will notify the appropriate federal land management agency's archaeologist and law enforcement officer. The remains will be treated in accordance with protocols of the appropriate land management agency.

If the human skeletal remains are Native American and are located on federal land, FERC and SCE's Cultural Resources Specialist shall coordinate with the USFS Inyo National Forest to comply with their Native American Graves Protection and Repatriation Act protocols pursuant to 25 USC 3001 et seq.

PRIVATE OR STATE LAND

Should human skeletal materials, burials, and/or associated funerary objects be identified during the survey or other phases of the Project or prior to license issuance, they will be treated in accordance with California Health and Safety Code (CHSC) Section 7050.5(b). At the moment of discovery, all work in the immediate area will cease and the location of the find will be secured. Personnel responsible for the discovery will notify the SCE Cultural Resources Specialist who in-turn, given that the skeletal materials are verified as human, will contact the Mono County Coroner and a qualified archaeologist will be secured to evaluate the find to determine, in consultation with the coroner, if the remains are or are not Native American. The skeletal remains will be treated following CHSC Section 7050.5.

6.1.3. NON-AMERICAN INDIAN TRADITIONAL RESOURCES

As described above, FERC is required to make a reasonable and good-faith effort to identify historic properties that may be affected by the Project. As described in 36 CFR § 800.4(b)(1), this may be accomplished through sample field investigations and/or field surveys that are implemented in accordance with the Secretary of the Interior's Standards and Guidelines for Identification (NPS, 1983). FERC is required to consider any other applicable professional standards and Tribal, state, or local laws or procedures to complete the identification of historic properties. To assist FERC in meeting its compliance obligations, and to develop appropriate management measures for historic properties identified within the APE, a non-American Indian traditional resources inventory will be performed to identify their presence.

The inventory will be coordinated among the archaeological, built environment, and Native American Traditional Resource studies. Supervision will be a joint effort by one or more qualified professionals who meet the Secretary of the Interior's Professional Qualifications Standards (NPS, 2021) and who will participate in research, public outreach, and field work.

If a potential resource is identified during research, public outreach, and/or field work, oral interviews and/or field verification will be conducted as appropriate. Resource locations will be verified and fully documented following NRHP Bulletin No. 38, Guidelines for Evaluating and Documenting Identification of Traditional Cultural Properties (Parker and King, 1998). The locations of all non-American Indian TCRs identified during the survey will be entered into a GPS receiver to document the location, which will be plotted onto the appropriate USGS 7.5-minute topographic quadrangle using the UTM coordinate system. GPS data collection will adhere to the Inyo National Forest specifications for accuracy and site-specific procedures where applicable.

6.1.4. National Register of Historic Places Evaluation

The Study shall evaluate all resources for NRHP eligibility based on surface observation and archival research, as feasible and/or identify if additional studies are required to complete NRHP evaluations.

6.2. Coordination With Other Studies

To the extent feasible, SCE will coordinate archaeological and built-environment resources field studies with other Project-related environmental studies (e.g., Tribal resources and habitat surveys) and conduct them in a manner that does not affect other sensitive natural resources. When conducting archaeological or other investigations, Project sponsors and/or their contractors should not violate other federal or state laws or regulations protecting natural resources including but not limited to the Endangered Species Act and Clean Water Act. Project sponsors should consider that Tribes may utilize natural resources for subsistence or specific ceremonial uses and should avoid affecting those uses or events while conducting studies.

7.0 REPORTING AND HISTORIC PROPERTIES MANAGEMENT PLAN

The results of the Study implementation will be reported in Exhibit E of the License Application, which will include a summary of the information and findings of the technical studies. Figures and other pertinent data supporting the summary in Exhibit E will be appended to the License Application. The archaeological records and other sensitive information will be included in a confidential appendix withheld from public disclosure, in accordance with Section 304 (16 USC 4702-3) of the NHPA.

SCE anticipates FERC will enter into a programmatic agreement with the ACHP, OHP, and any other agencies or entities FERC elects to include. One of the programmatic agreement stipulations will be the completion and implementation of a HPMP to be included with the License Application.

The HPMP will consider direct and indirect effects of continued Project Operation and Maintenance on NRHP-listed or eligible archaeological and built-environment resources and will require avoidance and protection of specified resources, whenever possible. Processes and procedures will be developed for general and site-specific treatment measures, including minimization and mitigation measures to be taken should license implementation create unavoidable adverse effects to historic properties. The HPMP will include an Evaluation Plan and schedule for evaluating unevaluated resources.

8.0 SCHEDULE

8.1. STUDY SCHEDULE

For this Study, Table 8.1-1 outlines the major milestones to be completed throughout the study process.

Table 8.1-1. Implementation Schedule of Studies

Date	Activity
Ongoing	Conduct background research online and at the appropriate repositories
Spring-Fall 2025	Conduct field surveys
Winter 2025/2026	Compile study results and prepare draft report
Spring 2026	Distribute draft report to stakeholders
Summer 2026	Stakeholder review and comments on draft report
Fall 2026	Resolve comments and prepare final report
Fall 2026	Prepare draft HPMP
February 2027	Distribute final reports in Final License Application

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study, in 2024 dollars, is approximately $83,000.

10.0 REFERENCES

NPS (National Park Service). 1983. *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation*. Federal Register, Volume 48, No. 190 (September 29, 1983) p. 44716. Accessed: May 15, 2021. Available online: https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeology-historic-preservation.pdf

_____. 1997. *How To Apply the National Register Criteria for Evaluation*, National Register Bulletin 15. Accessed: May 15, 2021. Available online: https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf

_____. 2021. *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines [As Amended and Annotated].* Accessed: May 15, 2021. Available online: https://www.nps.gov/history/local-law/arch_stnds_9.htm

OHP (Office of Historic Preservation). 1995. Instruction for Recording Historical Resources. Available online: https://ohp.parks.ca.gov/pages/1054/files/manual95.pdf

Parker, Patricia L., and Thomas F. King. 1998. *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, National Register Bulletin 38, U. S. Department of the Interior, National Park Service, Washington, D.C. Available online: https://www.nps.gov/subjects/nationalregister/upload/NRB38-Completeweb.pdf

USFS (United Stated Forest Service). 2019. *Land Management Plan for the Inyo National Forest, Fresno, Inyo, Madera, and Tulare Counties, California, Esmeralda and Mineral Counties, Nevada*. United States Department of Agriculture. Available Online: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd664404.pdf

White, D. R. M. 1983. *Historic and Archaeological Preservation Plan for Eastern Sierra Hydroelectric Projects in Mono and Inyo Counties, California: Lundy (FERC 1390), Lee Vining Creek (FERC 1388), Rush Creek (FERC 1389), and Bishop Creek (FERC 1394)*. On file, Southern California Edison Company, Rosemead, California.

_____. 1985. *Results of the 1984 Field Season, Cultural Resources Survey for the Historic and Archaeological Preservation Plan for Eastern Sierra Hydroelectric Projects in Mono and Inyo Counties: Lundy, Lee Vining, Rush Creek, and Bishop Creek*. On file, Southern California Edison Company, Rosemead, California.

_____. 1990. *Management Plan for Historic and Archaeological Resources Associated with The Lundy Hydroelectric Project (FERC Project No. 1390), Mono County, California*. On file, Southern California Edison Company, Rosemead, California.

York, A. 1990. *An Evaluation of Twenty-One Archaeological Sites on the Lee Vining Creek, Rush Creek, and Lundy Hydroelectric Projects, Mono and Inyo Counties, California*. Dames & Moore. On file, Southern California Edison Company, Rosemead, California.

CUL-2 – CULTURAL RESOURCE - BUILT ENVIRONMENT

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1.0 POTENTIAL RESOURCE ISSUE

Southern California Edison (SCE) identified the need to conduct cultural resource studies archaeological, built environment, and Traditional Cultural Properties, as well as non-American Indian TCPs and TCRs, resource studies. The CUL-2 Cultural Resources, Built Environment Technical Study (Study) will consider built environment resources. American Indian TCPs and TCRs will be considered within the TRI-1, Tribal Resource Technical Study Plan. Archaeological and non-American Indian TCPs and TCRs will be considered in the CUL-1 Cultural Resources – Archaeology Technical Study Plan. Several terms used throughout this Study plan warrant definition at the outset.

- **Area of Potential Effect** - as defined in the Code of Federal Regulations (CFR), Title 36, Section 800.16(d) (36 CFR § 800.16(d)), as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations to the character of use of historic properties, if any such properties exist."

- **Historic Property(ies)** - as defined in the Code of Federal Regulations (CFR), Title 36, Section 800.16(l)(1) (36 CFR § 800.16(l)(1)), are precontact or historic archaeological sites, buildings, structures, objects, or districts included in or eligible for inclusion in the National Register of Historic Places (NRHP). Historic properties are identified through a process of evaluation against specific NRHP criteria in 36 CFR § 60.4.

- **A District** - is a geographic area containing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan and physical development. Examples of districts include (but are not limited to) precontact archaeological site complexes, hydroelectric projects, residential areas, commercial zones, mining complexes, transportation networks, rural villages, canal systems, irrigation systems, or large ranches (NPS, 1997).

- **Cultural Resource(s)** - for the purpose of this document, this term is used to discuss any precontact or historic-period district, site, building, structure, object, landscape, TCP, or TCR, regardless of its National Register eligibility.

- **Built Environment Resource(s)** - for the purpose of this study, this term is the term used to discuss any historic-period district, building, structure, or object, regardless of its National Register eligibility.

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

The Federal Energy Regulatory Commission's (FERC) decision to issue or re-issue a license is considered an "undertaking" pursuant to 36 CFR § 800.16(y). The National Historic Preservation Act (NHPA) requires federal agencies to take into account the effect that their undertakings may have on historic properties and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment.

Continued Project Operation and Maintenance and other activities, including public recreation activities, may have an adverse effect on historic properties. The effect may

be direct (e.g., result of alteration of a historic structure), indirect (e.g., public access to Project areas), or cumulative (e.g., caused by a Project activity or public access in combination with other past, present, and reasonably foreseeable future projects). This study focuses on these potential Project effects to historic properties that are built environment resources.

For historic properties, appropriate study areas are defined by Regulations under 36 CFR § 800.16(d) as the APE. The APE for the Project is further defined in Section 4.0, *Extent of Proposed Study Area, and Study Sites*, of this Study Plan. The following will be assessed during the built environment resource surveys:

- Have built environment resources been adequately surveyed, identified, and evaluated, and if previously studied, has documentation been updated?
- Are there adverse effects to built environment resource historic properties? Adverse effects to historic properties may include, but are not limited to, demolition, relocation, or neglect of a historic property; or alteration of, or introduction of physical, visual, audible, or other changes to a historic property that would diminish the integrity of its significant features. (36 CFR § 800.5)
- Are the adverse effects direct, indirect, and/or cumulative? (36 CFR § 800.5(a)(1))
- If adverse effects are identified that would result from Project implementation, how will they be resolved? (36 CFR § 800.6)

Data collected during this study will be used to prepare the following:

- Cultural Resource Technical Report (CUL-2) for built environment resources.
- Historic Properties Management Plan (HPMP) addressing archaeological, built environment and Tribal resources.

3.0 STUDY GOALS AND OBJECTIVES

The Study goals and objectives include the following:

- Meet FERC compliance requirements under in its Regulations (18 CFR Part 5) and Section 106 of the NHPA, as amended, by determining if Project-related activities and public access will have an adverse effect on historic properties.
- Identify all built environment resources within the APE, evaluate which are historic properties, and report conclusions.
  - Conduct additional background archival research of the built environment resources in the APE.
  - Conduct field survey of built environment resources within or intersecting the APE.

  - Prepare a technical and evaluation report presenting conclusions of inventory and evaluation of built environment resources.

- Ensure that future Project facilities and operations are consistent with the Desired Conditions described in the Land Management Plan for the Inyo National Forest (USFS, 2019.

4.0 EXTENT OF STUDY AREA AND STUDY SITES

4.1. BUILD STUDY AREA

The Study will focus upon the FERC Project Boundary, which will serve as the proposed APE, and a larger proposed Study Area comprising a 0.5-mile radius around the proposed APE (Figure 4.1-1).

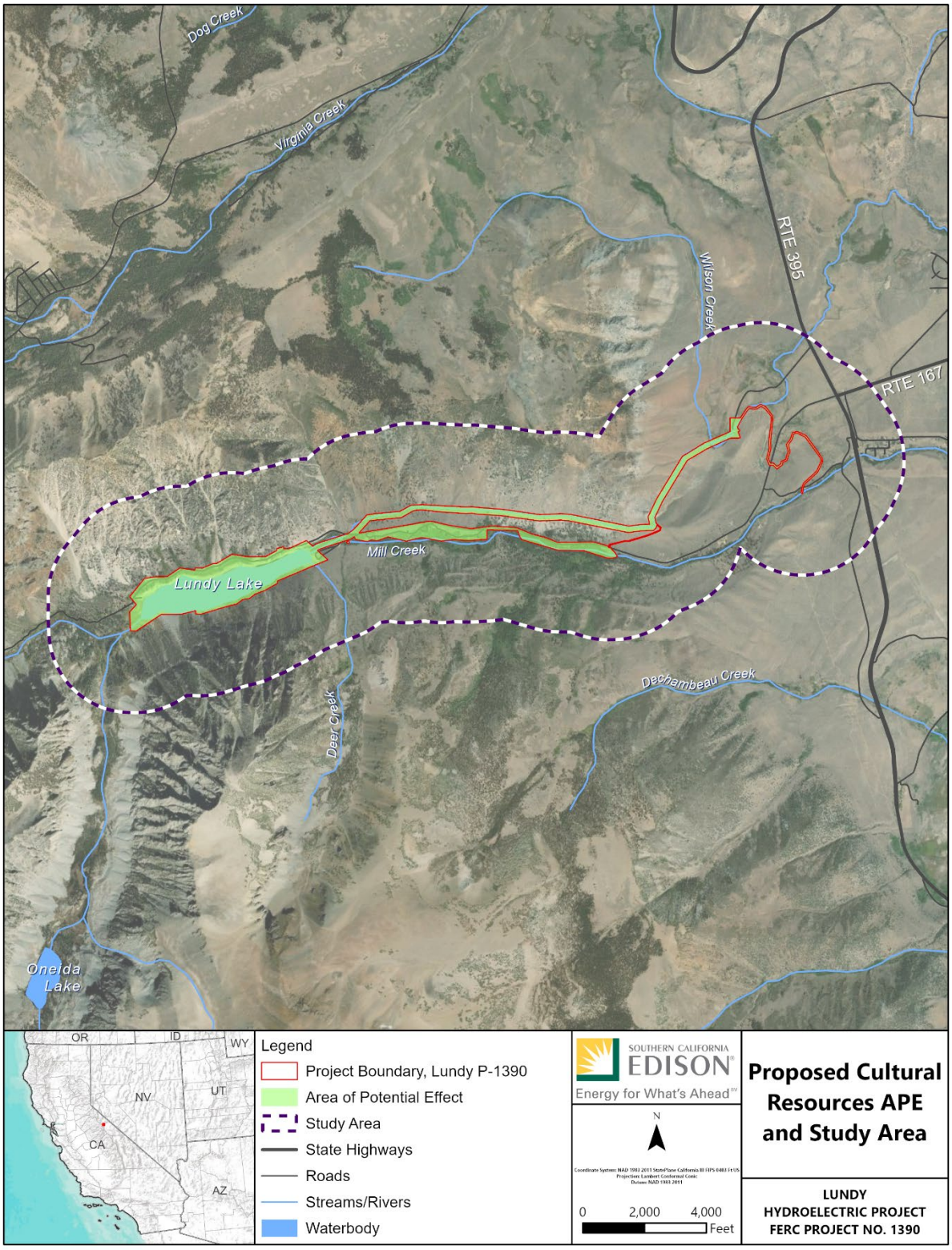

Figure 4.1-1. Proposed Cultural Resources APE and Study Area

5.0 EXISTING INFORMATION

5.1. SUMMARY OF RECORD SEARCHES AND ARCHIVAL RESEARCH

The cultural resources section of the Pre-Application Document (PAD)), filed in February 2024, was developed using information obtained from the SCE archives, Inyo National Forest, and the California Historical Resources Information System (CHRIS) Eastern Information Center (EIC) at the University of California Riverside, and is summarized in the following text.

5.2. PREVIOUS BUILT RESOURCES STUDIES

Thirty-four previous cultural resource investigations were identified within the proposed Study Area. Of these, 21 were conducted within the proposed APE or overlap the proposed APE and Study Area. Among the investigations are the ones conducted during the last relicensing (White, 1983, 1985, 1990; York, 1990). Most of these reports focused on documenting archaeological resources, and therefore are not listed in this study plan. The reader should refer to the CUL-1 TSP for the full list of previous studies. Maps of the previous studies are located in Appendix H (Confidential) of the PAD.

One study, White (1985) evaluated the Lundy Powerhouse and recommended that it not be eligible for listing on the NRHP. The SHPO concurred with this finding on December 9, 1988 (FERC Ref No. FERC861112A, FERC831003B, FERC880816A). It should be noted that the evaluation solely focused on the powerhouse and did not examine or discuss the system as a whole. Three built environment resources associated with the Lundy Project have been documented on California Department of Parks and Recreation 523 forms (Table 5.2-1). No other built environment resources have been documented with the APE and Study Area.

The key Lundy Project facilities include Lundy Dam, Lundy Lake, a flowline consisting of pipeline and penstock, Lundy Powerhouse, and the Mill Creek Return Ditch (MCRD). Lundy Lake is the intake and regulating reservoir for the Lundy Powerhouse. Lundy Lake has historically been drawn down in the winter to provide storage capacity for spring runoff. Water is conveyed from Lundy Lake to the powerhouse via the flowline and penstock. Minimum flows are provided into Mill Creek below Lundy Powerhouse via the MCRD (SCE, 2024).

Table 5.2-1. Previously Recorded Built Environment Resources Located within the Proposed Study Area and APE

Primary Number	USFS Number	Composition of Resource	NRHP Eligibility	In APE or Study Area	Property Owner
-	-	Lundy Hydroelectric System*	Not Eligible (FERC831003B)	APE	BLM, INF, County, Private
P-26-004077	-	Lundy Return Ditch	Unevaluated	APE	BLM, INF, County, Private
P-26-008664	-	Mill Creek Powerhouse Road	Unevaluated	Study Area (of portion recorded)	LADWP (Portion Recorded)
P-14-014235/ P-26-009006	FS 05-04-53-02829	Mill Creek-Control	Determined Not Eligible	APE	BLM, INF, Private

Source: Records Search

*No DPR

6.0 STUDY APPROACH

6.1. STUDY METHODS

The methods proposed to meet the Study goals and objectives are discussed in the following sections.

6.1.1. ARCHIVAL RESEARCH

As needed during preparation of the studies, archival research will be conducted at the repositories listed below if their collections are determined to be relevant. Research will seek additional information specific to the history of the built environment in the Project Area, the hydroelectric Project in whole, and its individual features. This may include contacting SCE employees, as appropriate, to gather resource-specific information. The results of the archival research will serve as the basis for preparing the historic contexts against which the built environment resources will be evaluated.

Historic photographs, maps, or other images located during the archival research will be inserted into and cited in the text, if not limited by copy wright or other use restrictions. Previous NRHP evaluations will be reviewed and brought up to current standards. Repositories to be contacted or visited for research regarding built resources include:

- Bancroft Library, University of California Berkeley
- California Historical Research Information System
- California State Archives, Sacramento

- California State Library, California History Room, Sacramento
- Southern California Edison Records
- US Forest Service (USFS), Inyo National Forest
- Water Resources Collection Archive & Library, University of California Riverside
- University of Nevada, Reno, Special Collections
- Other libraries, archives, and online repositories as applicable

6.1.2. Built Environment Resources Inventory

Based on the existing data previously described, FERC is required to make a reasonable and good-faith effort to identify historic properties that may be affected by the Project. As described in 36 CFR § 800.4(b)(1), this may be accomplished through sample field investigations and/or field surveys that are implemented in accordance with the Secretary of the Interior's Standards and Guidelines for Identification (NPS, 1983). FERC is required to consider any other applicable professional standards and Tribal, state, or local laws or procedures to complete the identification of historic properties.

To assist FERC in meeting its compliance obligations, and to develop appropriate management measures for historic properties within the APE, a built environment resources inventory will be performed. The purpose of the field survey is to conduct field inspection, documentation and subsequent NRHP evaluation of built environment resources. These activities will be undertaken by individuals meeting the Secretary of the Interior's Professional Qualifications Standards (PQS) for History and/or Architectural History (NPS, 2021), or under the direct supervision of PQS staff. All built environment resources will be record or re-record, as appropriate following procedures outlined in *Instructions for Recording Historical Resources* (OHP, 1995), which utilizes DPR 523 forms. Buildings and structures within the APE will be documented in the field, including those that are 45 years old by 2027 (survey age will be determined in consultation with SCE and the Inyo National Forest, as appropriate). In addition to the hydroelectric-related resources, the built environment resources survey will record buildings, structures, or objects associated with other historic-period activities in the APE, such as mining, road construction, agriculture/ranching, or recreation.

Fieldwork will include digital photography of all resources and the production of sketch maps of built resources that show the location of individual resources and the relationship of buildings and structures to each other (e.g., an operational hydroelectric facility or a campground within the APE). When possible, global positioning system (GPS) points will be taken of each resource that will then be plotted onto maps to create a comprehensive inventory of built environment resources within the APE.

GPS data collection will adhere to Inyo National Forest and BLM specifications for accuracy and site-specific procedures where applicable. All mapping data will be submitted to Inyo National Forest, BLM, and SCE in their respective formats.

All newly recorded sites on Inyo National Forest land will be submitted to Inyo National Forest for assignment of USFS numbers. All newly recorded sites, regardless of land status, will be submitted to the CHRIS for assignment of permanent site numbers.

The completed inventory report will meet BLM and Inyo National Forest standards for format and content, as outlined in permit stipulations.

6.2. COORDINATION WITH OTHER STUDIES

To the extent feasible, SCE will coordinate the built environment resources field studies with other Project-related environmental studies (e.g., archaeological, Tribal resources and habitat surveys) and conduct them in a manner that does not affect other sensitive natural resources. When conducting archaeological or other investigations, Project sponsors and/or their contractors should not violate other federal or state laws or regulations protecting natural resources including but not limited to the Endangered Species Act and Clean Water Act. Project sponsors should consider that Tribes may utilize natural resources for subsistence or specific ceremonial uses and should avoid affecting those uses or events while conducting studies.

7.0 REPORTING AND HISTORIC PROPERTIES MANAGEMENT PLAN

The results of the Study implementation will be reported in Exhibit E of the License Application, which will include a summary of the information and findings of the technical studies. Figures and other pertinent data supporting the summary in Exhibit E will be appended to the License Application. The confidential sensitive information will be included in a confidential appendix withheld from public disclosure, in accordance with Section 304 (16 USC 4702-3) of the NHPA.

SCE anticipates FERC will enter into a programmatic agreement with the ACHP, OHP, and any other agencies or entities FERC elects to include. One of the programmatic agreement stipulations will be the completion and implementation of a HPMP to be included with the License Application.

The HPMP will consider direct and indirect effects of continued Project Operation and Maintenance on NRHP-listed or eligible archaeological, built environment resources and Tribal resources, and will require avoidance and protection of specified resources, whenever possible. Processes and procedures will be developed for general and site-specific treatment measures, including minimization and mitigation measures to be taken should license implementation create unavoidable adverse effects to historic properties. The HPMP will include an Evaluation Plan and schedule for evaluating unevaluated resources.

8.0 STUDY PLAN SCHEDULE

8.1. STUDY SCHEDULE

The anticipated Study development and implementation schedule is identified below (Table 8.1-1).

Table 8.1-1. Study Plan Schedule

Date	Activity
Ongoing	Conduct background research online and at the appropriate repositories
Spring-Fall 2025	Conduct field surveys
Winter 2025/2026	Compile study results and prepare draft report
Spring 2026	Distribute draft report to stakeholders
Summer 2026	Stakeholder review and comments on draft report
Fall 2026	Resolve comments and prepare final report
Fall 2026	Prepare draft HPMP
February 2027	Distribute final reports in Final License Application

Note: TBD=to be determined

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study, in 2024 dollars, is approximately $84,000.

10.0 REFERENCES

NPS (National Park Service). 1983. *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation*. Federal Register, Volume 48, No. 190 (September 29, 1983) p. 44716. Accessed: May 15, 2021. Available online: https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeology-historic-preservation.pdf

_____. 1997. *How To Apply the National Register Criteria for Evaluation*, National Register Bulletin 15. Accessed: May 15, 2021. Available online: https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf

_____. 2021. *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines [As Amended and Annotated].* Accessed: May 15, 2021. Available online: https://www.nps.gov/history/local-law/arch_stnds_9.htm

OHP (Office of Historic Preservation). 1995. Instruction for Recording Historical Resources. Available online: https://ohp.parks.ca.gov/pages/1054/files/manual95.pdf

SCE (Southern California Edison). 2004. Southern California Edison Lundy Hydroelectric Project (FERC Project No. 1930) Pre-Application Document.

USFS (United Stated Forest Service). 2019. *Land Management Plan for the Inyo National Forest, Fresno, Inyo, Madera, and Tulare Counties, California, Esmeralda and Mineral Counties, Nevada*. United States Department of Agriculture. Available Online: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd664404.pdf

White, D. 1983. *Historic and Archaeological Preservation Plan for Eastern Sierra Hydroelectric Projects in Mono and Inyo Counties, California: Lundy (FERC 1390), Lee Vining Creek (FERC 1388), Rush Creek (FERC 1389), and Bishop Creek (FERC 1394).* Prepared for Southern California Edison Company, Rosemead, California.

_____. 1985. *Results of the 1984 Field Season, Cultural Resources Survey, for the Historic and Archaeological Preservation Plan for Eastern Sierra Hydroelectric Projects, In Mono and Inyo Counties, California: Lundy (FERC Project 1390), Lee Vining Creek (FERC Project 1388, Rush Creek (FERC Project 1389), and Bishop Creek (FERC Project 1394).* Prepared for Southern California Edison Company, Rosemead, California.

_____. 1990. *Management Plan for Historic and Archaeological Resources Associated with the Lee Vining Creek Hydroelectric Project (FERC Project No. 1388)*, Mono County, California. Prepared for Southern California Edison Company, Rosemead, California.

York, A. 1990. *An Evaluation of Twenty-One Archaeological Sites on the Lee Vining Creek, Rush Creek, and Lundy Hydroelectric Projects, Mono and Inyo Counties, California*. Dames & Moore. On file, Southern California Edison Company, Rosemead, California.

TRI-1 – TRIBAL RESOURCES

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1.0 POTENTIAL RESOURCE ISSUE

Southern California Edison (SCE) identified the need to conduct a Tribal resource ethnographic and ethnohistoric research study. Technical professionals of the relicensing team have further acknowledged that there has been minimal investigation to date of 1) the Lundy Hydroelectric Project (Lundy Project or Project) Area American Indian ethnography, 2) the potential for American Indian Traditional Cultural Properties (TCPs), or 3) the potential for other American Indian resources, some of which may be eligible for listing in the National Register of Historic Places (NRHP). This TRI-1 Tribal Resources Study (Study) is intended to address the need to conduct the aforementioned baseline research. Potential resource areas include TCPs; Tribal economic ventures; resources of traditional, cultural, or religious importance; and environmental considerations of importance to the American Indian community.

Several terms used throughout this Study plan warrant definition at the outset.

- **Area of Potential Effect** - as defined in the Code of Federal Regulations (CFR), Title 36, Section 800.16(d) (36 CFR § 800.16(d)), as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations to the character of use of historic properties, if any such properties exist."

- **Historic Property(ies)** - as defined in the Code of Federal Regulations (CFR), Title 36, Section 800.16(l)(1) (36 CFR § 800.16(l)(1)), are precontact or historic archaeological sites, buildings, structures, objects, or districts included in or eligible for inclusion in the National Register of Historic Places (NRHP). Historic properties are identified through a process of evaluation against specific NRHP criteria in 36 CFR § 60.4.

- **A District** - is a geographic area containing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan and physical development. Examples of districts include (but are not limited to) precontact archaeological site complexes, hydroelectric projects, residential areas, commercial zones, mining complexes, transportation networks, rural villages, canal systems, irrigation systems, or large ranches (NPS, 1997).

- **Cultural Resource(s*)*** - for the purpose of this document, is used to discuss any precontact or historic-period district, site, building, structure, object, landscape, TCP, or TCR, regardless of its National Register eligibility.

- **Tribal places** - are locations associated with the ancestral past and places related to current gathering and/or hunting practices or other resource types.

- **Traditional cultural property/place (TCP)** - is a place or property that is eligible for inclusion in the NRHP based on its associations with the cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institutions of a living community. TCPs are rooted in a traditional community's history and are important in maintaining the continuing cultural identity of the community. Examples provided in National Register

Bulletin No. 381, Guidelines for Evaluating and Documenting Identification of Traditional Cultural Properties/Places (NPS 1998; NPS Draft Update 2023), include:

- A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
- A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; or
- A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents.

The Project Area is the homeland of the Mono Lake Indian Community, also known as the Mono Lake Kutzadika[a] (Kootzaduka'a). As discussed further below, there are many other nearby Tribes that may also have resources of value in the Project Area. There may be Tribal gathering, fishing, or hunting areas in the Project Vicinity, as the local American Indian community continues to access medicine plants, food plants, materials for tools, and many other items as part of their ongoing traditional cultural lifeways. These communities have a connection with certain biological species, such as bighorn sheep, which may not be currently present in the area but nonetheless have value to heritage, stories, and traditional ecological knowledge. Some of these places may be TCPs or other properties eligible for inclusion in the NRHP, based on associations with the cultural practices, traditions, beliefs, lifeways, arts, crafts, or social institutions. Some of the resources may not be TCPs because they are not associated with the ongoing values by a community but may have other ethnographic or Tribal values and may also be eligible for NRHP listing.

There is potential for both American Indian TCPs and other historic properties to be located in the Lundy Project Area. Potentially other Tribal resources may be located in the region that have values other than those traditionally investigated in historic property surveys. The Federal Energy Regulatory Commission (FERC) recognizes these values. The National Historic Preservation Act (NHPA) implementing regulations at 36 CFR (Code of Federal Regulation) 800 confirm Section 101(d)(6)(B) of NHPA by stating that when properties of religious and cultural significance to Indian Tribes may be affected by an undertaking, consultation with the Tribes is required, and that the Indian Tribe shall be a consulting party. To date, neither new research nor interviews have been conducted to identify or discuss such places of religious or cultural significance specific to this Project.

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

FERC's decision to issue a new license is considered a federal undertaking pursuant to 36 CFR 800.16(y). The NHPA requires federal agencies to take into account the effect of its undertakings on historic properties and allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment.

Continued Project operations and maintenance (O&M) and other activities, including public recreation activities, may have an adverse effect on Tribal resources, which may

include historic properties. The effect may be direct (e.g., result of ground-disturbing activities), indirect (e.g., public access to Project areas), or cumulative (e.g., caused by a Project activity or public access in combination with other past, present, and reasonably foreseeable future projects). The Tribal resource study will focus on identifying Tribal resources and if present, what effects are occurring.

FERC's requirements for involving American Indian Tribes outline the need to:

- Describe Indian Tribes, Tribal lands, and Tribal interests that may be affected by the Project.
- Include analysis of existing Project O&M that may impact Tribal cultural or economic interests.
- Identify impacts on Indian Tribes from existing Project O&M that may affect Tribal interests (e.g., Tribal fishing practices or agreements between the Indian Tribe and other entities) not necessarily associated with archaeological resources or other historic properties.

The Study proposes to identify:

- Tribal matters that may exist because of the Project;
- Project effects that may be direct, indirect, and/or cumulative;
- Potential license conditions that may be necessary to address the Tribal matters;
- Existing agreements Tribes may have with other entities, such as the Inyo National Forest (US Forest Service [USFS]) regarding access to Tribal resources, including but not limited to gathering (and gathering protocols), fishing, hunting, camping, ceremony, or other special uses; and
- Resource management goals of the USFS and take them into account when assessing effects.

Data collected during this Study will inform the following:

- Tribal Resource Technical Study Report (TRI-1);
- Tribal Resource Evaluation Report, as needed;
- Historic Properties Management Plan (HPMP), addressing archaeological, built environment and Tribal resources.

3.0 STUDY GOALS AND OBJECTIVES

The principal goal of the Study implementation is to assist FERC in meeting compliance requirements identified in 18 CFR Part 5 along with those requirements subject to NHPA Section 106 (as amended), among other federal laws and regulations, by determining if

licensing of the Project would have an adverse effect upon Tribal resources, which may also include historic properties. FERC desires to know to what extent the existing Project construction and operation may have affected Tribal, cultural, or economic interests; Tribal cultural sites; and connected interests with other technical group studies. In addition to historic properties, which may be a type of Tribal resource, there are other Tribal resources that may be identified through archival research, oral interviews, field inspections, and government-to-government consultation. The Study intends to ensure such places are described from a Tribal perspective and identify options for potential O&M effects.

Research conducted to date suggests that an ethnographic overview/background of the Project Area is minimal, and that for the previous license, there appears to have been no Tribal outreach. Additional goals of the Study implementation are to ensure that Tribal values and resources are identified and acknowledged from a Tribal perspective, and that an adequate baseline ethnohistory is developed. Similarly, ensuring that the land-managing agencies and any other stakeholder agencies have their program needs met with respect to the proposed Project Area of Potential Effect (APE) is a goal of the work. Finally, it is anticipated that management issues will be identified to be described and developed in subsequent planning efforts for the life of the license.

- Identify and document Tribal resources identified within or immediately adjacent to the proposed APE.
- Conduct a thorough American Indian ethnographic/ethnohistoric survey of the proposed APE and Study Area.
- Conduct outreach and contact with Tribal governments and their representatives.

4.0 EXTENT OF STUDY AREA AND STUDY SITES

The Study will focus upon the FERC Project Boundary, currently coincident with the proposed APE, and a larger Study Area proposed to be a 5-mile radius from the APE (Figure 4.1-1). This Study Area is a guide for archival research, development of the historic context and background statements, and general Tribal informant interviews.

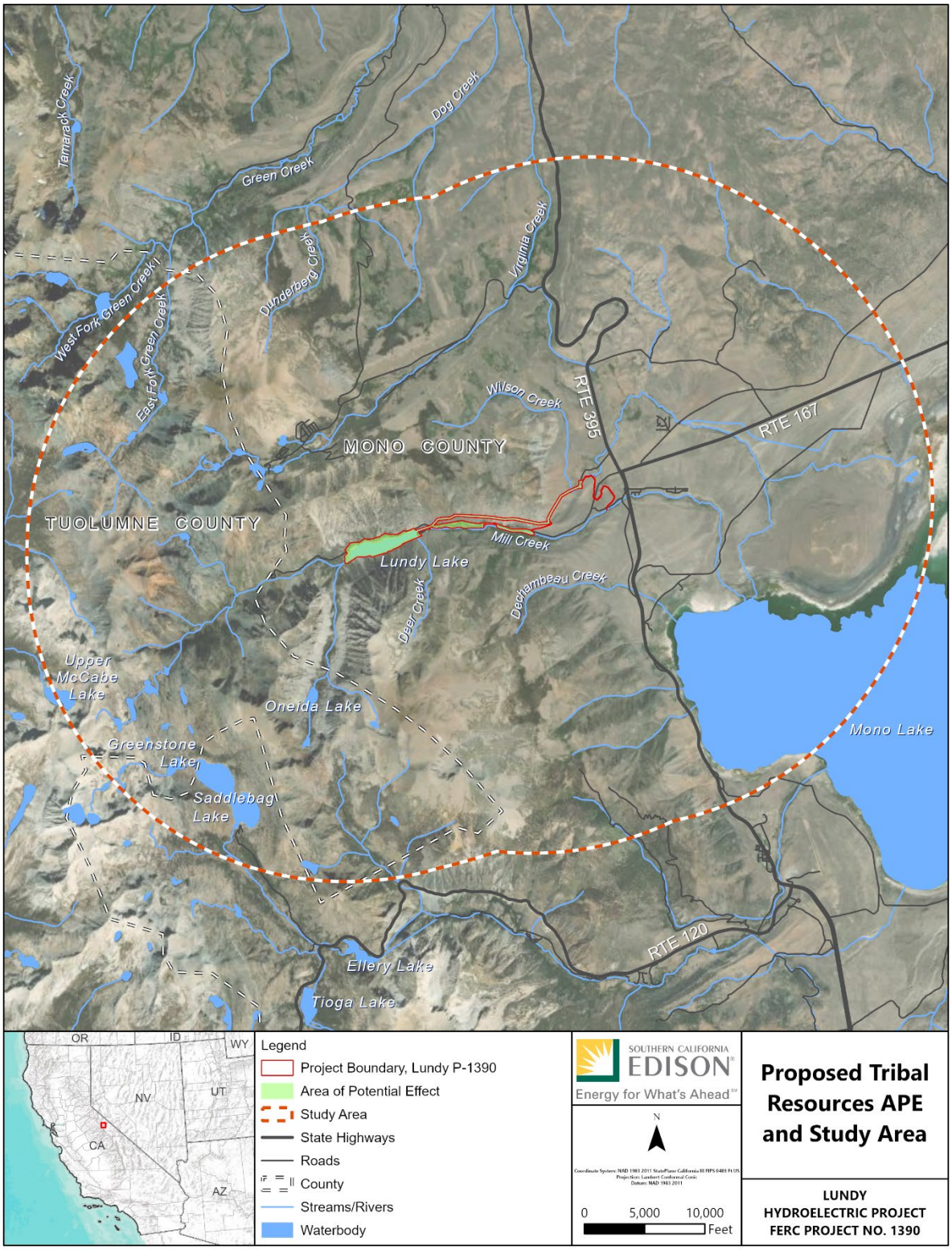

Figure 4.1-1. Proposed Tribal Resources APE and Study Area

5.0 EXISTING INFORMATION

Section 5.12, *Tribal Resources*, of the Pre-Application Document (PAD), filed in February 2024, describes existing information, and is summarized here. Sources of existing information include:

- Existing ethnographic literature, including Davis (1962, 1963, 1965); Davis-King (2007, 2010); Davis-King and Snyder (2010); Fowler (1989); Fowler and Liljeblad (1986); Merriam (n.d., 1898-1938), and Powers (1976)
- Native American Heritage Commission (NAHC) Sacred Lands File and Native American Consultation List (NAHC, 2023a, 2023b)
- Records on Ancestry.com, various
- Records on file at the National Archives and Records Administration (NARA), San Bruno, various
- Southern California Edison reports (White, 1983, 1985)
- Tribal websites, various

The Project is in the homeland of the Mono Lake Kutzadika[a] (Kootzaduka'a), a Northern Paiute group comprised of families with ties to the Lundy Canyon/Mill Creek, Lee Vining Creek, and Rush Creek drainage areas, the Mono Lake Basin, and the Bodie Hills. In addition, the greater Kutzadika[a] (Kootzaduka'a) homeland, extending from what is now Yosemite National Park in the Sierra Nevada Range east to Walker Lake and north and south along the eastern Sierra piedmont, was used during traditional seasonal rounds. Other groups have some affiliation with the Project Vicinity, including the Southern Sierra Miwuk, the Central Sierra Me-Wuk, the Owens Valley Paiute, the Bridgeport Indian Colony, the Walker River Paiute, and possibly the Washoe and other Tribes.

The NAHC Sacred Lands file search conducted for the Project did not provide results, meaning no ethnographic studies conducted in the proposed Lundy APE were identified (NAHC, 2023a). The contact list provided for the Lundy Project was mostly limited to eastern Sierra Nevada Tribes considered potential stakeholders (NAHC, 2023b). Tribes identified include the Mono Lake Kutzadika[a] (Kootzaduka'a) Tribe, the Bridgeport Paiute Indian Colony, the Utu Utu Gwaitu Tribe of the Benton Paiute Reservation, the Bishop Paiute Tribe, the Big Pine Tribe of the Owens Valley, the Washoe Tribe of Nevada and California, the Wadatkuta Band of the Honey Lake Valley, the Wuksache Indian Tribe/Eshom Valley Band, North Fork Rancheria of Mono Indians and the North Fork Mono. Information from the USFS, National Park Service, and/or Bureau of Indian Affairs (BIA) regarding groups with whom they consult may supplement the list of Tribal stakeholders.

FERC communicates with federally recognized and unrecognized Tribal groups. This policy is also followed by SCE, and formal consultation with Tribes with an interest in the

Project Area will commence in 2025. Additional Tribes with a possible interest in the Project Area also include:

- Bridgeport Indian Colony
- Bishop Paiute Tribe
- American Indian Council of Mariposa County/Southern Sierra Miwuk Nation
- Tuolumne Band of Me-Wuk Indians
- North Fork Rancheria of Mono Indians of California
- North Fork Mono Tribe
- Big Pine Paiute Tribe of Owens Valley
- Fort Independence Indian Community of Paiute Indians of the Fort Independence Reservation
- Walker River Paiute Tribe
- Washoe Tribe of Nevada and California

6.0 STUDY APPROACH

6.1. STUDY METHODS

The Study investigation will make a good-faith effort for proper communication with Tribal leaders as laid out in FERC's *Policy Statement on Consultation with Indian Tribes in Commission Proceedings*, issued July 23, 2003 (Docket No. PL03-4-000; Order No. 635). The investigation will follow FERC Regulations at 18 CFR § 2.1c, which added a policy statement on consultation with Tribes in FERC proceedings.

All phases of the Study investigation will be conducted in accordance with the American Indian community consultation standards outlined by the implementing Regulations of Sections 101 and 106 of the NHPA and discussed in the 2012 ACHP publication *Consultation with Indian Tribes in the Section 106 Review Process: A Handbook.*

Potential TCP documentation, consultation, and any necessary fieldwork will be implemented in accordance with Section 106 of the NHPA, as amended, and shall take into consideration National Register Bulletin (NRB) No. 38, *Guidelines for Evaluating and Documenting Identification of Traditional Cultural Properties* (Parker and King, 1990, 1998).

Study documentation will be implemented in accordance with FERC Regulations and with Section 106 of the NHPA, as amended, if such resources are potential historic properties, and shall take into consideration NRB No. 38 (Parker and King, 1998) among other NRBs.

NRHP evaluations will be conducted in adherence with NRB No. 15, *How to Apply the National Register Criteria for Evaluation* (NPS, 1997), and other NRBs as appropriate.

6.1.1. ARCHIVAL RESEARCH

As needed during the implementation of the Study, archival research will be conducted at most of the repositories identified in the following text to obtain additional information specific to the prehistory, ethnography, and history of the Project Area. The results of the archival research will 1) provide primary data to create a background American Indian ethnohistory of the proposed Study Area; and 2) inform the Tribal resources historic context against which such resources may be evaluated for the NRHP.

The Tribal resources expert will conduct background archival research of the Study Area. This will involve visits to many repositories, which may include the following:

- Autry Museum of the American West, Los Angeles
- California State Archive, Sacramento
- California State Library, California History Room, Sacramento
- Emma Lou Davis Archive, Maturango Museum
- Hulse and Essene (Bancroft Library, Berkeley and elsewhere)
- Huntington Library, San Marino
- Inyo USFS, Bishop
- Merriam (C. Hart) and Harrington (J.P.) notes
- Mono Basin Historical Society, Lee Vining
- Mono County Official Records, Bridgeport
- National Archive and Records Administration, San Bruno
- Tuolumne County Carlo M. De Ferrari Archive, Sonora
- University of California Bancroft Library, Berkeley
- University of California Jepson Field Notes, Berkeley
- University of California, C. Hart Merriam Collection, Davis
- University of Nevada Special Collections, Reno
- Yosemite National Park Research Library, El Portal

Background research will be conducted as needed throughout the life of the Project.

6.1.2. Assist Other Resource Specialists

Other resource areas may have a connection to Tribal resources. This includes biological areas, water, trails, and recreation, among other areas. As needed, the Tribal resource expert will work to assist other resource experts in identifying Tribal resources with connections to their technical study. Assistance to the cultural resource team is anticipated to aid field identification and documentation of historic American Indian resources, potential gathering areas, and other places that may have value to Indian Tribes.

6.1.3. Meetings with Tribal Governments

Meetings with Tribal governments or administrators and/or attendance at Tribal Council meetings is proposed to provide Project data to Tribal groups, elicit areas of interest, identify appropriate Tribal informants, and establish protocols for conveying information. To date, twelve American Indian Tribes have been identified as having potential interests in the Project. These are:

- American Indian Council of Mariposa County (also known as Southern Sierra Miwuk Nation)
- Antelope Valley Indian Community, Coleville Paiute Tribe
- Big Pine Paiute Tribe of Owens Valley
- Bishop Paiute Tribe
- Bridgeport Indian Colony
- Mono Lake Indian Community (Mono Lake Kutzadikaa (Kootzaduka'a)Tribe)
- North Fork Mono Tribe
- North Fork Rancheria of Mono Indians
- Tuolumne Band of Me-Wuk Indians
- Utu Utu Gwaitu Tribe of the Benton Reservation
- Walker River Reservation
- Washoe Tribe of Nevada and California

All Tribal groups will be contacted via telephone or email at a minimum to elicit their interest.

6.1.4. INTERVIEWS

Interviews are critical for identification, description of significance, and evaluation of potential effects to Tribal resources. Twenty interviews are proposed with Tribal experts to gain understanding about what is important to them and why. Individuals from each of the participating Tribes will be interviewed. The methods and nature of the interviews are expected to vary from person to person: some may be held in the field Project Area, others held in private homes, and still others held via telephone or teleconference. Interview records are similarly likely to be variable regarding confidentiality protocols and the Tribal expert's willingness to share. Recording methods (e.g., handwritten notes, video, audio tape) will be determined by consulting with the informant.

6.1.5. DOCUMENTATION AND EVALUATION

Three main categories of Tribal resources are anticipated that include 1) Tribal places; 2) TCPs; and 3) Tribal government matters. Each will be documented in a different manner. Tribal places may be potential historic properties, places associated with the ancestral past, places related to current gathering and/or hunting practices or be other resource types. Those that qualify as potential historic properties will be documented on California Department of Parks and Recreation (DPR) 523 forms as appropriate and with Tribal permission, while others will be described in the Study. TCPs will be documented on DPR 523 forms, with Tribal community permission, and Tribal government resources may be documented in the Study or may be larger or different resource types (e.g., documentation of Indian allotments in the Study Area). All resources will be documented and described according to Tribal values and submitted for review to Tribal representatives. NRHP evaluation of Tribal resources suitable for DPR 523 documentation will use site-specific procedures to identify historic context of the resource, boundaries, jurisdiction or land ownership, Tribal significance, integrity from a Tribal perspective, and contributing characteristics. Evaluation of other resource types may occur at the managerial or agency level.

7.0 REPORTING AND HISTORIC PROPERTIES MANAGEMENT PLAN

The results of the Study implementation will be reported in Exhibit E of the License Application, which will include a summary of the information and findings of the technical studies. Figures and other pertinent data supporting the summary in Exhibit E will be appended to the License Application. Tribal resource documentation and other sensitive information may be included in a confidential appendix withheld from public disclosure, in accordance with Section 304 (16 USC 4702-3) of the NHPA. The California Public Records Act similarly exempts site data from disclosure while Public Resources Code Section 21082.3(c) contains provisions specific to confidentiality related to any information submitted by an American Indian Tribe during the environmental review process, including, but not limited to, the location, description, and use of the Tribal cultural resources.

A detailed technical report will be prepared to include 1) regulatory, environmental, and cultural contextual statements; 2) discussion of research methods; 3) discussion of Tribal

resources that are not also cultural resources; 4) description and evaluation of resources that are assessed as potential historic properties; and 5) conclusions to include management considerations. Appendices are anticipated to include ethnobiological tables, chronological contact logs, specific historical reference materials, and more. The Study will identify all potential and actual Project effects from a Tribal perspective, provide Tribal suggestions for mitigation or modification of impacts, and provide a structural basis for FERC to conduct their National Environmental Policy Act analysis for this technical resource area.

SCE anticipates FERC will enter into a programmatic agreement (PA) with the ACHP, California Office of Historic Preservation, and any other agencies or entities FERC elects to include. One of the PA stipulations will be the completion and implementation of a HPMP to be included with the license or License Application.

The HPMP will consider direct and indirect effects of continued Project O&M on NRHP-eligible and unevaluated Tribal resources and will require avoidance and protection of specified resources, whenever possible. Processes and procedures will be developed for general and resource-specific treatment measures, including mitigation measures to be taken should license implementation create unavoidable adverse effects to historic properties.

8.0 STUDY SCHEDULE

8.1. STUDY SCHEDULE

The proposed schedule for this Study is included in Table 8.1-1.

Table 8.1-1. Study Schedule

Date	Activity
Ongoing	Conduct background research online and at the appropriate repositories
Summer 2025-Winter 2026	Conduct Tribal Site Visits and Evaluate Tribal Resources
Winter-Spring 2026	Analyze Data and Prepare draft report
Spring 2026	Distribute draft report to stakeholders
Summer 2026	Stakeholder review and comments on draft report
Fall 2026	Resolve comments and prepare final report
Fall 2026	Prepare draft HPMP

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study in 2024 dollars is approximately $90,000.

10.0 REFERENCES

Davis, Emma Lou. 1962. “Hunter-Gatherers of Mono Lake.” *Masterkey* 36(1): 23-28.

_____. 1963. “The Desert Culture of the Western Great Basin: A Lifeway of Seasonal Transhumance.” *American Antiquity* 29: 202-212.

_____. 1965. “An Ethnography of the Kuzedika Paiute of Mono Lake, Mono County, California.” *University of Utah Anthropological Papers* 75: 1-56.

Davis-King, Shelly. 2007. *The Land Where the Unabiya Hungalelti, Me-Wu, and Tövusidökadö Pozidadikadi Meet: Native American Background Research for the United States Marine Corps Mountain Warfare Training Center Mono County, California*. Draft report submitted to United States Marine Corps Base Camp Pendleton, Camp Pendleton, California.

_____. 2010. *Amid the Sagebrush Plain, Atop the Lofty Peaks: Native American History in Mono County, California*. Submitted to California Department of Transportation, District 9, Bishop, California. NPS (National Park Service). 1997. *How To Apply the National Register Criteria for Evaluation*, National Register Bulletin 15. Accessed: May 15, 2021. Available online: https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf

Davis-King, Shelly, and James B. Snyder. 2010 The Silver Thread: Upper Tuolumne River American Indian Land Use in Yosemite National Park: Ethnographic Context for the Tuolumne Wild and Scenic River Comprehensive Management Plan and Environmental Impact Statement, Tuolumne County, California. Submitted to USDI, National Park Service, Yosemite National Park, California.

Fowler, Catherine S., Compiler and Editor. 1989. *Willard Z. Park's Ethnographic Notes on the Northern Paiute of Western Nevada, 1933-1944*. Volume I. University of Utah Anthropological Papers 114. Salt Lake City.

Fowler, Catherine S., and S. Liljeblad. 1986. Northern Paiute. In Handbook of North American Indians, Volume 11: *Great Basin*, edited by Warren L. d'Azevedo, pp. 435-465. Smithsonian Institution, Washington, D.C.

Merriam, C. Hart. n.d. 1898-1938. *Journals [California] of C. Hart Merriam.* Manuscript Division. Library of Congress, Washington, D.C.

NAHC (Native American Heritage Commission). 2023a. *Response to letter dated April 30, 2023, Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (Chapter 532, Statutes of 2014)*, Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Lundy Hydroelectric Project, Mono County.

_____. 2023b. Native American Heritage Commission Tribal Consultation List: Mono County.

Parker, Patricia L., and Thomas F. King. 1990. *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, National Register Bulletin 38, U. S. Department of the Interior, National Park Service, Washington, D.C.

_____. 1998. *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, National Register Bulletin 38. U. S. Department of the Interior, National Park Service, Washington, D.C.

Powers, Stephen. 1976. *Tribes of California*. Reprinted from the 1877 edition of *Contributions to North American Ethnology, Volume III*. Berkeley and Los Angeles: University of California Press

White, David R. M. 1983. *Historic and Archaeological Preservation Plan for Eastern Sierra Hydroelectric Projects in Mono and Inyo Counties, California: Lundy (FERC 1390), Lee Vining Creek (FERC 1388), Rush Creek (FERC 1389), and Bishop Creek (FERC 1394).* On file, Southern California Edison Company, Rosemead, California.

_____. 1985. *Results of the 1984 Field Season, Cultural Resources Survey for the Historic and Archaeological Preservation Plan for Eastern Sierra Hydroelectric Projects in Mono and Inyo Counties: Lundy, Lee Vining, Rush Creek, and Bishop Creek*. On file, Southern California Edison Company, Rosemead, California.

LAND-1 PROJECT LANDS AND ROADS STUDY PLAN

TECHNICAL STUDY PLAN

Lundy Hydroelectric Project
FERC Project No. 1390

August 2024

TABLE OF CONTENTS

LIST OF TABLES

1.0 POTENTIAL RESOURCE ISSUE

All lands necessary for the operation and maintenance (O&M) of the Lundy Hydroelectric Project must be encumbered in the Federal Energy Regulatory Commission (FERC) Project boundary.

2.0 PROJECT NEXUS AND HOW THE RESULTS WILL BE USED

The Federal Energy Regulatory Commission (FERC) requires that the FERC Project boundary encompasses all lands, roads, and trails necessary for project purposes, including the O&M over the term of the license. FERC further requires (18 CFR § 11.2) that a licensee compensate the United States for the use, occupancy, and enjoyment of its lands or its property. This LAND-1 Project Lands and Roads Study (Study) will collect information on the Project facilities and O&M activities to provide an accurate representation of Project lands that will be proposed in a Final License Application.

3.0 STUDY GOALS AND OBJECTIVES

- Identify whether additional Lundy Project lands may be needed for operation of the Project, including laydown and spoil areas, or whether current Project lands or facilities are no longer needed for Project operation.
- Confirm existing land ownership and federal lands within the existing FERC Project boundary are accurately represented.
- Identify which roads or access trails are used for access to and maintenance of the Project, and identify existing agreements related to maintenance of those roads and access trails.
- Inventory and assess the condition of those identified Project-related roads and access trails, including the potential need for improvements.
- Identify for purposes of describing in the License Application all Project facilities and structures used for hydroelectric generation (e.g., buildings, roads, and spillway).

4.0 EXTENT OF STUDY AREA AND STUDY SITES

The Study Area will include lands within the existing FERC Project boundary, as well as additional lands that may be needed to support Project O&M activities under the proposed action.

5.0 EXISTING INFORMATION

The following existing information and data sources will guide the analysis;

- Approved FERC Project boundary geographic information system (GIS) data
- Approved Project exhibit drawings

- Mono County tax parcel GIS data
- Federal land ownership GIS data
- Aerial imagery
- Lundy Lake Resort, Thomas Wragg, Patricia Wragg, and Haley Wragg License Agreement (LLR, 2023)
- County of Mono, License Agreement (CM, 2024)
- Land Management Plan for the Inyo *National Forest* (USFS, 2019).

6.0 STUDY APPROACH

- Assess the existing FERC Project boundary for accuracy.
  - Analyze the existing FERC Project boundary using GIS software to determine whether mapping errors or omissions are present in the representation of Project lands needed for operation under the current licenses.
- Assess existing Project lands ownership and lease agreements information.
  - Gather accurate land ownership and lease agreement data for existing Project lands to confirm ownership boundaries and representation of federal lands used for Project purposes.
- Consult with SCE O&M staff to determine whether the existing FERC Project boundary adequately encompasses all lands needed for current operations or any proposed changes to facilities or operations.
- Consult with SCE and U.S. Forest Service (USFS) staff to identify roads or access trails that may be used for Project purposes, such as for O&M of Project facilities or access to Project-related recreation opportunities.
- Assess the condition of roads or access trails identified for Project purposes.

7.0 REPORTING

A report will be prepared documenting the findings of this Study. The report will include an inventory of all existing Project lands as well as an assessment of any potential lands or roads needed for future Project operations, including applicable maps and illustrations.

8.0 STUDY SCHEDULE

8.1. STUDY SCHEDULE

For this Study, Table 8.1-1 outlines the major milestones to be completed throughout the study process.

Table 8.1-1. Study Schedule

Date	Activity
Spring 2025	Conduct desktop analysis and interview SCE staff
Fall/Winter 2025	Prepare initial findings for consultation
January 2026	File update on study progress with Initial Study Report
Winter/Spring 2026	Consult with appropriate agencies and determine need for site assessments
Summer 2026	Potential field season for site assessments
Summer/Fall 2026	Compile study results and prepare report
January 2027	File final study report with Updated Study Report

9.0 LEVEL OF EFFORT AND COST

SCE estimates the cost to complete this Study, in 2024 dollars, is approximately $45,000.

10.0 REFERENCES

CM (County of Mono). 2024. County of Mono License Agreement. June 2024

LLR (Lundy Lake Resort). 2023. Lundy Lake Resort, Thomas Wragg, Patricia Wragg, and Haley Wragg License Agreement. September 1, 2023.

USFS (U.S. Forest Service). 2019. *Land Management Plan for the Inyo National Forest*. *Fresno, Inyo, Madera, Mono and Tulare Counties, California; Esmeralda and Mineral Counties, Nevada*. R5-MB-323a. Pacific Southwest Region. September. Accessed: August 24, 2020. Available online: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd664404.pdf.

ATTACHMENT 2

COMMENT LETTERS FILED WITH FERC

INYO National Forest Study Requests & Comments on Scoping Document 1 and Pre-Application Document

Lundy Hydroelectric Project No. 1390

Summary

This letter provides Forest Service comments and study requests for Southern California Edison's (SCE's) Lundy Hydroelectric Project, Federal Energy Regulatory Commission (FERC) No. 1390 (Lundy or Project). Our letter includes: I. Background Information; II. Comments on the FERC's Scoping Document 1 (SD1) issued April 17, 2024; III. Comments on SCE's February 23, 2024 Pre-Application Document (PAD); and IV. Study Requests in accordance with 18 CFR 5.9(b).

Part I: Background

The Lundy Hydroelectric Project, Federal Energy Regulatory Commission No. 1390, is a 3-megawatt (MW) project located on the eastern slope of the Sierra Nevada along Mill Creek, in Mono County California. The Project consists of the 132-acre Lundy Lake, Lundy Dam, intake, flowline, penstock, powerhouse, and a system of canals to deliver water downstream of the project to various water right holders. The Project resides partially within lands administered by the Inyo National Forest, lands owned by SCE, and lands administered by the Bureau of Land Management. In order to generate power, the Project is operated to be in compliance with its existing FERC license and other regulatory requirements, including maintaining water rights in accordance with a November 30, 1914 water rights adjudication for Mill Creek. SCE holds a non-consumptive water right for hydrogeneration on Mill Creek, but operations must comply with the adjudicated water rights for the system. To meet the adjudicated water rights of the system, SCE's operations rely upon operations specified in a 2004 Settlement Agreement (amended in 2022) among the various water right holders.

Part II: Comments on Scoping Document I

- In Section 4.2 Resource Issues, environmental issues to be addressed in the NEPA document, 4.2.3. Aquatic resources describes potential effects as: Effects of continued operation on fish habitat and fish resources *in project impoundment*, bypassed reach, and downstream of the powerhouse. We believe this statement is meant to say "within the project impoundment" rather than *in project impoundment*, and that this bullet should include potential amphibian habitat as well or be more broadly descriptive to include "aquatic resources/habitat" rather than simply fish habitat.
- Section 4.2.6 Recreation Resources, describes potential effects of the project as: Adequacy of existing recreation facilities to meet current and future recreation demand. While none of the project associated recreation demand or facilities are located on National Forest System lands, we offer the following comments and observations regarding recreation at this Project. We are supportive of FERC and SCE's proposal to investigate and characterize recreation demand and needs associated with the Project. Specifically, we note that the developed recreation facilities associated with this project, are not necessarily included in FERC Project boundary. All developed facilities

determined to be Project recreation facilities, including but not necessarily limited to any: boat ramp, day use areas, campgrounds, parking facilities, or restrooms should be incorporated into the FERC Project boundary. Further, recreation opportunities associated with this Project likely include boating, fishing, water contact, hiking, climbing, photography, birding, and camping. However, based upon our observations, it appears likely that existing facilities are inadequate to accommodate or meet existing and future needs. We have come to this conclusion based on the following factors:

- The apparent age and condition of the facilities
- Restroom facilities are approximately a mile apart, not clearly marked or visible, and not readily accessible to those who may be recreating at the Lake; there is one vault toilet below the dam with additional units located at SCE's campgrounds downstream. There is no accessible restroom at the boat-launch, day use area, or for those accessing the Lake from anywhere other than near the dam. The lack of restroom facilities at the boat launch has led to potential impacts with the adjacent landowner and resort, with reported break ins seeking restroom facilities, parking issues, and other conflicts reported by the resort ownership. The nearest Forest Service restrooms are approximately 1-1.5 miles West of the existing boat ramp.
- Boat ramp facilities could likely benefit from configuration improvements to address traffic flow, parking, and use.

Part III: Comments on SCE's Pre-Application Document

- 4.6.2.2. Lundy Powerhouse description states:
  The powerhouse's hydraulic capacity is sized to handle 70cfs of the adjudicated 74.6 cfs water right; however, SCE does not utilize this full capacity except during wet water years. SCE limits power generation to the Wilson System allocation (how much water has been called for by the water rights holders) plus a 25 cfs maximum release through the Mill Creek Return Ditch (MCRD). *This is because of perceived losses in water through the MCRD.* Higher quantities up to the full capacity of the MCRD of 44 cfs may be allowed as necessary. The revised *Stream Gaging Plan will help quantify the efficiency of this system relative to a performance specification, and future flows may be increased with the concurrence of the Mill Creek water rights holders (emphasis added).*
  - The Forest believes it to be in the interest of all stakeholders for SCE to complete and include as part of this Project's relicensing process information that quantifies potential leakage or loss of water within the MCRD. This information could take the form of an amended Water Quality study (WQ-1 & 2) as proposed by SCE to include this information, or as a stand-alone component as described in our Study Request below. Further, it should be noted that SCE has already committed to developing MCRD loss information as part of the existing Settlement Agreement, however we believe that this information needs to be included as part of this relicensing process to assist in the development of potential operations or solutions that would address any impacts from continued operation of the Project.

Section 5.0 Draft Study Plans

General Comments

- The Forest Service is supportive of SCE's proposed suite of 10 studies with further refinements in scope and with the addition of the MCRD Study we request below.

- Regarding the proposed Aquatics AQ-1 & AQ-2 Fish Community Survey, Fish Stranding Studies, we suggest that these study objectives also include for the potential accounting and survey of amphibians found within or affected by the Project. Further, any fish stranding study should, in addition to estimating entrainment potential within project works, should document whether any natural fish barriers exist within the bypassed reach of Mill Creek at varying flow levels.

- Regarding the proposed Recreation Rec-1 Needs assessment, we suggest the study scope should also investigate public recreation needs beyond those already provided by the FERC-approved Lundy recreation sites. Limiting the analysis to only the recreation opportunities afforded by the existing facilities could significantly underestimate the Project's recreation potential and needs. For example, SCE provides campgrounds downstream of Lundy Reservoir. It is unclear if the public would be better served or be interested in campgrounds adjacent to the reservoir.

Part IV: New Study Requests

Study Request: WQ 2.1 MCRD Water Quality and Quantity Quantification

Criteria 1: Goals and Objectives of the study:

The goal of the study is to develop information necessary to quantify the potential losses of water from the continued operation of the MCRD. This information will be collected to ensure that potential solutions can be developed to meet water needs within the basin. The PAD does not contain sufficient information to assess the losses that occur through the use of the MCRD.

This study would augment efforts already proposed by SCE to evaluate water quality impacts through operation of the Project. Further, SCE has already committed to developing this information as part of the existing Settlement Agreement and gauging plan for the Project.

Criteria 2: Relevant Resource Management Plan Goals and Objectives:

Management direction is identified in the Inyo National Forest Land and Resource Management Plan (Forest Plan) that specifies forest-wide standards and guidelines, as well as area-specific guidelines.

The MCRD discharges water for lands that are managed under the Forest Plan. Regarding hydropower and energy development, Forest Plan direction can be found in Chapter 2, Forest wide desired conditions and management direction:

ENERGY:

Energy Uses on National Forest System lands include the extraction and potential development of geothermal and other energy sources, which are managed in a manner that protects natural resources, public health and safety, and is consistent with National Forest System land and resource management plans. Wind and solar development is limited on the Inyo National Forest. Geothermal development is limited, but facilities are located on the Inyo and serve local communities. All authorized uses to occupy and use National Forest System lands are

evaluated and determined to be in the public interest. Determinations include consultation with other interested parties including Federal, State, and county agencies, Tribes, and nongovernmental interests.

Desired Condition (NRG-FW-DC) 01 Energy resources of National Forest System lands provide for the maximum public benefit that is compatible with protecting ecosystem integrity.

Criteria 3: Requestor is a resource agency

Criteria 4: Describe existing information concerning the subject of the study proposal:

Information on water losses through use of the MCRD is not detailed in the information provided by the PAD or SD1. The licensee's proposal does not include a comprehensive record, engineering assessment, or analysis of the perceived losses of water through the MCRD at varying discharge levels from the Project. SCE has developed some of this as part of its obligations under the Settlement Agreement. According to the Settlement Agreement, information gathered as part of monitoring efforts would be utilized to develop long-term solutions to be implemented in 2024.

Long-Term MCRD Performance and Use Standards

i. No later than 90 days prior to the end of the interim program, SCE will propose long-term MCRD performance and use standards to the other Parties, based on data collected and other information gained during implementation of the interim program. *The Parties will meet and confer in good faith to develop long-term MCRD performance and use standards, which the Parties intend to take effect beginning with the third year of implementing this Implementation Plan (i.e., beginning in 2024).* In the event the Parties are unable to reach consensus on long-term MCRD performance and use standards beginning in the third year of implementing this Implementation Plan, the interim plan set forth in Paragraph 5.c will apply until a consensus is reached.

Criteria 5: Explain the nexus between project operations and effects on the resources to be studied:

Use of the MCRD will result in potential leakage or water losses to downstream affected water rights holders. Efforts to repair, operate, or otherwise manage MCRD into the future will require the quantification of acceptable water losses across this project feature.

The information collected for this study will be used to develop potential solutions that will ensure the adequate protection and utilization of National Forest System lands and resources affected by the project.

Criteria 6: Explain how any proposed study methodology is consistent with generally accepted practice:

Survey protocols as proposed by SCE, including gauging efforts, engineering estimates and other related study performance criteria have already been developed as part of the Settlement

Agreement as filed with the Commission. Further FERC has approved changes to the Project gauging plan that require more accurate assessment of project operational compliance.

These efforts are typical of the studies undertaken to analyze the potential effects of canal usage, such as those undertaken for the Desabla Centerville Project (P-803) and others.

Criteria 7: Describe considerations of level of effort and cost:

It is difficult to calculate the cost associated with this assessment. It is unlikely that the formalization of this study will incur or bear any additional costs on the licensee since the licensee has adopted the Settlement Agreement that commits them to this action. Here we are formally requesting this information be included and required as part of the FERC relicensing record so that it is available to all stakeholders for evaluation and consideration prior to development of project alternatives and PM&E measures.

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

June 24, 2024

Ms. Debbie-Anne Reese, Acting Secretary
Federal Energy Regulatory Commission
888 First Street, NE Room 1A
Washington, DC 20426

Subject: COMMENTS ON PRE-APPLICATION DOCUMENT, SCOPING DOCUMENT 1, AND REQUESTS FOR NEW STUDIES FOR RELICENSING OF THE LUNDY HYDROELECTRIC PROJECT (FERC NO. P-1390-69)

Dear Ms. Reese:

The California Department of Fish and Wildlife (CDFW) has received and reviewed the Notice of Intent to File Application for New License (NOI), and Pre-Application Document (PAD), filed by Southern California Edison (SCE), the Licensee, for the relicensing of the Lundy Hydroelectric Project (Project, Federal Energy Regulatory Commission [FERC] No. P-1390). The NOI and PAD were filed by the Licensee with FERC on February 22, 2024, pursuant to FERC's Integrated Licensing Process (ILP).

In addition, CDFW has reviewed the Scoping Document 1 (SD1) issued by FERC on April 17, 2024, attended the May 14, 2024 Project scoping meeting, and attended the May 15, 2024, Project site visit. With this letter, CDFW submits comments on the PAD and SD1.

CDFW ROLE

CDFW is a relevant State fish and wildlife agency for consultation pursuant to the Federal Power Act Section 10(j) (16 U.S.C. Section 803 (j)). The fish and wildlife resources of the State of California are held in trust for the people of the State by and through CDFW pursuant to Fish and Game Code Section 711.7. CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. Information generated through the appropriate studies will be utilized by CDFW in the development of recommendations.

The mission of CDFW is to manage California's diverse fish, wildlife, and plant resources, and the habitats on which they depend, for their ecological values and for their use and enjoyment by the public. It is the goal of CDFW to preserve, protect, and as needed, to restore habitat necessary to support native fish, wildlife, and plant species within the FERC-designated boundaries of the Project, as well as the areas adjacent to the Project in which resources are affected by the ongoing Project operations.

PROJECT DESCRIPTION SUMMARY

The proposed Project is located on and surrounding Mill Creek and Lundy Lake in Mono County, California, and includes the relicensing of the Lundy hydroelectric system. The Lundy Project facilities include Lundy Lake, Lundy Dam, intake, a flowline, a penstock, a powerhouse, and a water distribution system by which flows are directed to meet the water rights of water rights holders. The flowline and penstock convey water from Lundy Lake to the powerhouse. SCE currently operates the Lundy Project under a 30-year license issued by FERC March 3, 1999. The license will expire February 28, 2029.

COMMENTS ON PRE-APPLICATION DOCUMENT AND SCOPING DOCUMENT 1

General Comments on the Reference to the Lundy Hydroelectric Project Settlement Agreements

The PAD and SD1 lack clarity on how the Licensee plans to comply with the terms and conditions of the Lundy Hydroelectric Project Settlement Agreement (SCE et al., 2004), the First Amendment to the Lundy Hydroelectric Project Settlement Agreement (SCE et al., 2022), collectively referred to as the Settlement Agreements, and the Settlement Implementation Plan. The PAD only briefly mentions the Mill Creek Accounting and Planning Tool (MCAPT), a tool developed to help implement the Settlement Agreements, and Mill Creek Water Rights addressed in the Settlement Agreements in section 4.6.2 of the PAD. FERC mentions the Settlement Agreements in a similar manor under the Water Rights section 3.1.2 of the SD1, but neither document describes how the Settlement Agreements will be incorporated into the new FERC license. Given that the first amendment of the Settlement Agreements expires on March 2, 2029, coincident with the expiration of the current FERC license, CDFW requests that the Licensee directly address how the terms and conditions of the Settlement Agreements and the Settlement Implementation Plan will be met in the PAD. CDFW also requests that FERC directly address how the terms and conditions of the Settlement Agreements as well as the Settlement Implementation Plan will be incorporated into the scope of the Project.

General Comments on the Geographic Scope and Project Affected Area

For the purposes of developing and conducting Project relicensing studies and describing the Project affected area (PAA) and environmental effects in the PAD, CDFW recommends that the Licensee and FERC (for scoping) include all the stream reaches that are affected by the Project, including all reaches of Mill Creek between Lundy Lake to Mono Lake, as well as the Mill Creek Return Ditch. Section 5 of the PAD, Description of the Existing Environment, and associated subsections related to Water Resources, Water Quality, and Fish and Aquatic Resources do not include a description of the PAA.

Section 4.1.2 – Geographic Scope of SD1, FERC states:

> *Our geographic scope of analysis for cumulatively affected resources is defined by the physical limits or boundaries of: (1) the proposed action's effect on the resources, and (2) contributing effects from other hydropower and non-hydropower activities within the Mono Lake Subbasin. We have identified the geographic scope for water quantity and quality to include Lundy Lake and Mill Creek to Mono Lake, all within the Mono Lake Subbasin.*

As described above, FERC's definition of the geographic scope of the Project for cumulative effects analysis on aquatic resources includes the section of Mill Creek from Lundy Lake to Mono Lake. CDFW proposes that the PAD also include all reaches of Mill Creek affected by the Project. CDFW also requests that FERC explicitly include the Mill Creek Return Ditch in their geographic scope for analysis of cumulatively affected aquatic resources.

Section 2.3.1 – Document Management

CDFW requests that the Licensee develop Project maps in a format that is useful for interactive data analysis and interpretation and provide Project shapefiles to resources agencies upon request.

5.2.3.2. Water Quality Objectives from the Basin Plan

The California Regional Water Quality Control Boards (RWQCB) have adopted, and the State Water Resources Control Board (SWRCB), has approved water quality control plans (Basin Plans) for each watershed basin in the State. The Basin Plans designate the beneficial uses of waters within each watershed basin, and water quality objectives designed to protect those uses. Section 303 of the Clean Water Act requires each State to develop and adopt water quality standards (33 U.S. Code § 1313). Together, beneficial use and water quality objectives contained in the Basin Plans constitute State water quality standards required by Section 303 of the Clean Water Act.

The Lahontan RWQCB's Basin Plan that includes the Mono Basin, has a proposed Basin Plan amendment to designate Tribal Beneficial uses within the PAA (LRWQCB, 2024). Specifically, Tribal Tradition and Culture (CUL) beneficial use is proposed on Mill Creek and Lundy Lake. Looking forward, CDFW recommends that the Licensee work with the RWQCB to include the appropriate studies to assess whether the Project affected streams and lakes are meeting the associated proposed Tribal Beneficial use criteria.

5.3.3.2 – Fishery Management

CDFW has historically managed Lundy Lake and Mill Creek as a put-and-take fishery. The PAD states on page 5-37:

From 2017 to 2020, Mill Creek was stocked with 100–1,400 rainbow trout annually, and Lundy Lake was stocked with 1,700– 15,785 rainbow trout annually. The average weight of fish stocked from 2017–2020 was 2 pounds, with some fish weighing up to 3 pounds.

The current FERC license does not include any fish stocking requirements. The continued operation of the Project, and associated recreational opportunities, create a greater pressure on the fishery than would otherwise occur. Additionally, section 5.3.6. Entrainment, states:

The intake structure at Lundy Lake is unscreened and has the potential to entrain fish. Entrainment rates at Lundy Lake intake structure were studied during the last relicensing effort and are estimated to be 0.5 fish per month for brown trout and 1.6 fish per month for rainbow trout.

Given the impact the Project has on the fishery within the PAA, CDFW would like to engage in discussions with the Licensee regarding a Fish Stocking Agreement to be incorporated into the new FERC license.

5.6.6 – Wildlife and Invasive Species

Fish and Game Code Section 2302 requires any person, or federal, state, or local agency, district, or other authority that owns or manages a reservoir, as defined in Section 6004.5 of the Water Code (i.e., any reservoir which contains or will contain the water impounded by a dam), where recreational, boating, or fishing activities are permitted, to: 1) assess the vulnerability of the reservoir for the introduction of nonnative dreissenid mussel species (*Dreissena* spp.), and 2) develop and implement a program designed to prevent the introduction of nonnative dreissenid mussels species. Pursuant to Fish and Game Code Section 2302, prevention plans for reservoirs shall include, at a minimum: public education, monitoring, and management of those recreational, boating, or fishing activities that are permitted.

Section 5.6.6 of the PAD states that SCE developed a *Quagga and Zebra Mussel Prevention Plan* which assesses the vulnerability of invasion to SCE lakes. The Plan analyzed all SCE land and determined that SCE's Eastern Sierra lakes, including Lundy Lake are at low risk of invasion because their water chemistry is incompatible with the mineral and water chemistry needs of the mussels to survive and reproduce. CDFW requests a copy of the *Quagga and Zebra Mussel Prevention Plan* for Lundy Lake.

CDFW recommends that the Licensee evaluate the current and potential establishment and environmental effects of the following aquatic invasive species within the PAA: quagga mussel (*Dreissena rostriformis bugensis)*, zebra mussel (*Dreissena polymorpha*), New Zealand mudsnail (NZMS, *Potamopyrgus antipodarum*), Asian clam (*Corbicula fluminea*), bullfrog (*Lithobates catesbeianus*), didymo (*Didymosphenia geminata*), Eurasian watermilfoil (*Myriophyllum spicatum*), hydrilla (*Hydrilla verticillata*), water hyacinth (*Eichhornia crassipes*), Brazilian waterweed (*Egeria densa*), parrot's

feather milfoil (*Myriophyllum aquaticum*), Carolina fanwort (*Cabomba caroliniana*), curly-leaf pondweed (*Potamogeton crispus*), and water primrose (*Ludwigia* spp.).

6.0 Preliminary Issues and Studies List for Each Resource Area

General Comments

Studies that involve the handling of fish, wildlife, or plant species listed as rare, threatened, or endangered, or candidates for these listings, may require a permit or other authorization from State and/or federal agencies, including CDFW and the United States Fish and Wildlife Service (USFWS). CDFW encourages the Licensee to pursue any necessary permits or authorizations for proposed Project studies as soon as possible to avoid delays in implementing studies.

CDFW requests that the Licensee continue to provide sufficient notification to relicensing participants of the implementation of Project studies, so all Project relicensing participants have the opportunity to be onsite to observe Project field activities.

The proposed studies listed in Table 6.1-1 of the PAD, and Section 5.0 of the SD1, include very brief descriptions of the proposed studies making it difficult for CDFW to provide detailed comments on the proposed studies. CDFW does not have any new study proposals and will provide detailed comments on the Proposed Study Plan required under FERC 18 CFR § 5.11(a).

CDFW appreciates the opportunity to provide comments on the Licensee's PAD and FERC's SD1. If you have any questions or would like to discuss the content of this letter, please contact Graham Meese at (760)996-7387 or Graham.Meese@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Trisha Moyer
AB3BB977DEA9442...

Patricia Moyer
Senior Environmental Scientist (Supervisor)

ec:

California Department of Fish and Wildlife

Beth Lawson, Senior Hydraulic Engineer
Beth.Lawson@wildlife.ca.gov

United States Forest Service

Tristan Leong, Region 5 Hydroelectric Coordinator
Tristan.Leong@usda.gov

California State Water Resources Control Board

Adam Cohen, Senior Environmental Scientist (Specialist)
State Water Resources Control Board
Adam.Cohen@Waterboards.ca.gov

Brian Muro, Water Resources Control Engineer
State Water Resources Control Board
Bryan.Muro@Waterboards.ca.gov

Mono Lake Committee

Bartshe Miller, Policy Director
Bartshe@monolake.org

REFRENCES

CDFW, 2015. *California State Wildlife Action Plan.* https://wildlife.ca.gov/SWAP/Final

CDFW, 2022. *Strategic Plan for Trout and Inland Salmon Hatcheries 2022-2023.* https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213739&inline

CDFW, 2022. *Strategic Plan for Trout Management 2022 Update.* https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213738&inline

Lahontan Regional Water Quality Control Board. 2024. *Draft Basin Plan Amendment to Designate Tribal Beneficial Uses in the Mono Basin.* https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/2024/r6monobpa.pdf

Southern California Edison, USDA Forest Service, USDOI BLM, CDFG, MLC, California Trout, American Rivers. 2004. *Lundy Hydroelectric Project Settlement Agreement for submission to the Federal Energy Regulatory Commission*. January 2004.

Southern California Edison, USDA Forest Service, USDOI BLM, CDFG, MLC, California Trout, American Rivers. 2022. *First Amendment to the Lundy Hydroelectric Project Settlement Agreement*. May 2022.

MONO LAKE
COMMITTEE
P.O. Box 29
Hwy 395 and Third Street
Lee Vining, CA 93541
Phone (760) 647-6595
Fax (760) 647-6377

June 24, 2024

Debbie-Anne Reese
Acting Secretary
Federal Energy Regulatory Commission
888 First Street N.E., Room 1A
Washington, D.C. 20426

Submitted electronically: FERC eFiling

Re: Lundy Hydroelectric Project (P-1390-069)

Dear Acting Secretary Reese:

The Mono Lake Committee (MLC) offers the following comments on the Scoping Document 1 as part of the Pre-Application Document submitted by Southern California Edison for relicensing the Lundy Hydroelectric Project (Lundy Project) (FERC No. 1390).

The MLC is a non-profit citizens' group dedicated to protecting and restoring Mono Lake and the Mono Basin ecosystem with a focus on education, science, and cooperative solutions. Supported by 16,000 members, the MLC has been active in the Mono Basin since 1978. MLC is an interested party in the Project, formally intervened in the previous relicensing, and is a party to the 2005 Settlement Agreement and the 2022 Amended Settlement Agreement. MLC appreciates working with SCE and collaborating parties over the years to create and implement these agreements, which are a solid basis for the 2029 relicensing process .

Bypass reach flows

The bypass reach of Mill Creek (from Lundy Dam to the Return Ditch) is addressed in the 2005 Settlement Agreement with minimum dam releases, assumptions about gains from Deer Creek and springs, and flow monitoring. PAD section 5.2.2.12 describes how the minimum flow below the dam is reduced when seepage allows the 4 cubic feet per second (cfs) goal below the dam to be met. Page 437 of the PAD notes "Requirement for 7 cfs minimum instream flow resolved through subsequent settlement agreement to address prior appropriation of water rights." The relevant license condition states "The Licensee shall monitor flows on Mill Creek above the return ditch to determine if the combination of minimum flows and accretion provide 7 cfs of flow in Mill Creek."

The monitoring has shown that in recent years flow has often not been 7 cfs at the Return Ditch. A study plan should be developed to evaluate this by reviewing the monitoring and other flow data and evaluating changes in accretion and dam seepage since the 2005 Settlement.

Spill management

Spill operations should be evaluated and guidelines for operations developed. A study should be done of historic reservoir level management and management change over time to inform future management decisions and provide additional relevant information, including the total amount of dam seepage or below-dam groundwater accretion spill management, high season water management, and impacts to recreational fishing, campground use and downstream sedimentation, erosion, and logjam transport.

Road crossing below dam

In 2023 SCE managed Lundy to minimize a spill by operating the Farmer's Gate at higher flows than previously. This combined with unanticipated operational issues and exceptionally high runoff led to high flow releases that washed out the access road below the dam, stranding recreationists and impairing access to public and SCE facilities at the dam. A study should evaluate options for improvement of the road crossing to allow high flows to pass downstream without impairment.

High season water

Currently the MCAPT correctly identifies "high season water" that is stored in the reservoir and can be released into Mill Creek on a flexible schedule. A study plan should be developed to evaluate the ecological benefits of different timing and magnitudes of release of this water. The study would inform operational decisions made to plan for the release of the water. Consideration should be given to hypothetical large wintertime flows and potential negative impacts to the trout fishery recruitment and health.

Return Ditch study and gauging

MLC supports the study SCE currently is conducting of the losses in the Return Ditch, consistent with the Settlement Agreement. Study results and potentially additional work would be valuable to the relicensing process. MLC supports the study options recommended by the Inyo National Forest on this topic. SCE should also verify the accuracy of the existing gauges in the system including but not limited to the flume below the dam, the top and bottom of the return ditch, tailrace, release into Wilson and Upper Conway Ditch. The study should inform a decision for which gauges could be QA/QC'd and published by the USGS on a regular basis.

Tribal Beneficial Uses

Section 5.2.3.2 on page 5–20 should include a paragraph describing Tribal Beneficial Uses (TBU) water quality standards, which are currently in development by the Lahontan Regional Water Quality Control Board (Lahontan), and how the timing of the FERC relicensing process will allow TBU incorporation into the project's study plans and license conditions. Lahontan anticipates completing its designation process in 2024.

Mono Lake Kutzadika'a Tribe

MLC understands that FERC is in active communication to engage with federally recognized tribes regarding the Lundy Project. MLC urges FERC to include the Mono Lake Kutzadika'a Tribe in its engagement. Although the Kutzadika'a tribe is not currently federally recognized,

MLC understands that FERC does engage with non-federally recognized tribes where circumstances make it appropriate. Federal legislation in the form of H.R.3427 is under consideration by the 118th Congress to provide federal recognition to the Tribe. Further, the Kutzadika'a Tribe is recognized by the State of California and is geographically based in the Mono Basin where the Lundy Project is located.

Recreational uses

Recreational use has increased significantly at the Lundy facilities including Lundy Lake dam site and boat ramp, campgrounds, and day use sites. These sites often have issues related to high use levels and lack of trash disposal and bathroom facilities. Studies REC-1 and REC-2 should include consideration of methods to alleviate these impacts such as installation of vault toilets and support of Mono County's "Camp Like a Pro" initiative that is currently absorbing impact management costs at these sites. The REC-2 Recreation Facilities Condition Assessment should also evaluate the relocation of campsites that are frequently flooded .

Study plans that support operational changes

The changes in operation that result from the current license and associated settlement agreement are expected to be beneficial for Mill Creek and should continue. We are happy to see study plans--such as the aquatic and botanical studies. The PAD mentions aquatic invertebrate data from 2012—this is an area where a study should be added.

Thank you for considering these comments. Please contact Bartshé Miller (*bartshe@monolake.org*) if you have questions or would like additional information.

Sincerely,

Bartshé Miller
Eastern Sierra Policy Director
bartshe@monolake.org
(760) 647-6595

CC: FERC Service List

State Water Resources Control Board

June 24, 2024

Mr. Wayne Allen
Southern California Edison
1515 Walnut Grove Avenue
Rosemead, CA 91770
Wayne.Allen@sce.com

Debbie-Anne Reese, Acting Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426
Via e-filing

Pre-Application Document Comments and Study Requests
Lundy Hydroelectric Project
Federal Energy Regulatory Commission Project No. 1390
Mono County
Mill Creek

Dear Mr. Allen and Acting Secretary Reese:

Southern California Edison Company (SCE) owns and operates the Lundy Hydroelectric Project (Project), also referred to as Federal Energy Regulatory Commission (FERC) Project No. 1390. On February 23, 2024, SCE filed its Pre-Application Document (PAD) with FERC for relicensing of the Project. On April 17, 2024, FERC issued notice of SCE's PAD filing and Scoping Document 1. On May 14 and 15, 2024, State Water Board staff attended a public scoping meeting and site visit hosted by SCE and FERC to discuss the Project relicensing and information contained in the PAD.

State Water Board staff submit the enclosed comments and study request pertaining to the Project. The comments and study request are provided in two attachments: *Attachment A: Comments on Pre-Application Document for Lundy Hydroelectric Project* and *Attachment B: Study Plan Request for Lundy Hydroelectric Project.* State Water Board staff have no comments on FERC's Scoping Document 1 for the Project.

The State Water Board's study plan request discusses the seven criteria specified by the Code of Federal Regulations, title 18, section 5.9(b).

If you have questions regarding this letter please contact Bryan Muro, Project Manager, by email at Bryan.Muro@waterboards.ca.gov or by phone call to: (916) 327-8702. Written correspondence should be directed to:

State Water Resources Control Board
Division of Water Rights – Water Quality Certification Program
Attn: Bryan Muro
P.O. Box 2000
Sacramento, CA 95812-2000

Sincerely,

Bryan Muro

Bryan Muro – Water Resources Control Engineer
Water Quality Certification Program
Division of Water Rights

Attachments: Attachment A: Comments on Pre-Application Document for Lundy Hydroelectric Project

Attachment B: Study Plan Request for Lundy Hydroelectric Project

ec:

Matthew Woodhall
Project Lead
Southern California Edison
Matthew.woodhall@sce.com

Chad Mellison
Fisheries Biologist
United States Fish and Wildlife Service
Chad_Mellison@FWS.gov

Tristan Leong
Hydroelectric Coordinator
United States Forest Service
Tristan.leong@usda.gov

Todd Ellsworth
Hydrologist
US Forest Service
Todd.ellsworth@usda.gov

Graham Meese
Senior Environmental Scientist
California Department of Fish & Wildlife
Graham.Meese@wildlife.ca.gov

Beth Lawson
Senior Hydraulic Engineer
California Department of Fish & Wildlife
Beth.Lawson@wildlife.ca.gov

Bartshe Miller
Mono Lake Committee
Bartshe@monolake.org

Wendy Sugimora
Mono County
Planning Commission
WSugimora@mono.ca.gov

Finlay Anderson
Senior Regulatory Advisor
Kleinschmidt
Finlay.anderson@kleinschmidtgroup.com

ATTACHMENT A

COMMENTS ON PRE-APPLICATION DOCUMENT FOR LUNDY HYDROELECTRIC PROJECT

State Water Resources Control Board (State Water Board) staff are providing the following comments on Southern California Edison's (SCE) Pre-Application Document (PAD) for relicensing the Lundy Hydroelectric Project (Project):

1. Section 401 of the Clean Water Act (33 U.S.C. § 1341) requires any applicant for a federal license or permit for an activity that may result in any discharge to navigable waters, to obtain certification from the State that the activity will comply with the applicable water quality requirements, including the requirements of section 303 of the Clean Water Act (33 U.S.C. § 1313) for water quality standards and implementation plans. Clean Water Act section 401 directs that certifications shall prescribe effluent limitations and other conditions necessary to ensure compliance with the Clean Water Act and with any other appropriate requirements of state law, such as the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.). Conditions of certification shall become a condition of any federal license or permit subject to certification. The Project will result in a discharge to navigable waters and must obtain certification from the State Water Board as part of relicensing for continued operations.

   A certification issued by the State Water Board for the Project must ensure compliance with the water quality standards in the Lahontan Regional Water Quality Control Board's Water Quality Control Plan for the Lahontan Region (Lahontan Basin Plan) and applicable state water quality control plans. Water quality control plans designate the beneficial uses of water that are to be protected, water quality objectives for the reasonable protection of the beneficial uses and the prevention of nuisance, and a program of implementation to achieve the water quality objectives. (Cal. Wat. Code, §§ 13241, 13050, subds. (h), (j).) The beneficial uses, together with the water quality objectives contained in the water quality control plans, and applicable antidegradation requirements, constitute California's water quality standards for purposes of the Clean Water Act. In issuing water quality certification for a project, the State Water Board must ensure consistency with the designated beneficial uses of waters affected by the project, the water quality objectives developed to protect those uses, and antidegradation requirements. (*PUD No. 1 of Jefferson County v. Washington Dept. of Ecology* (1994) 511 U.S. 700, 714-719.)

   The Project facilities are located on Mill Creek. Mill Creek is a tributary to Mono Lake, which is designated as an Outstanding Natural Resource Water. The Lahontan Basin Plan sets forth water quality standards for waterbodies in the region including Project-related waters of Mill Creek and Lundy Lake (LRWQCB, 2019). Beneficial uses for Lundy Lake include municipal and domestic supply, navigation, hydropower generation, water non-contact recreation, water contact recreation, commercial sportfishing, cold freshwater habitat, wildlife habitat, and

spawning, reproduction, and/or early development habitat. Beneficial uses for Mill Creek include municipal and domestic supply, agricultural supply, ground water recharge, freshwater replenishment, hydropower generation, water non-contact recreation, water contact recreation, commercial sportfishing, cold freshwater habitat, wildlife habitat, and spawning, reproduction, and/or early development habitat.

In addition to the beneficial uses listed, the Lahontan Regional Water Quality Control Board has published a draft Staff Report/Supplemental Environmental Document[1] regarding the designation of tribal beneficial uses for waters within the Mono Basin. If the proposed amendments are adopted, one additional beneficial use would be designated for Lundy Lake and Mill Creek: Tribal Tradition and Culture.

The Lahontan Basin Plan also includes narrative and numeric surface water quality objectives that aim to preserve and protect the beneficial uses listed above. These objectives are supplemented by the Final Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions[2]. Additionally, the State of California's Antidegradation Policy (State Water Board Resolution 68-16; see also 40 C.F.R. § 131.12), was developed to protect areas with existing high-water quality. Under the Antidegradation Policy, whenever the existing water quality is better than the water quality established in applicable water quality control plans and policies (both narrative and numerical), such existing quality must be maintained unless appropriate findings are made under the policy.

Information collected through the implementation of study plans in the Federal Energy Regulatory Commission (FERC) relicensing process will be used by FERC to develop license conditions and fulfill its obligations under the National Environmental Policy Act and by other agencies that must take permitting actions during relicensing proceedings. Study plan results will assist the State Water Board in developing the California Environmental Quality Act- (CEQA) compliant documents and water quality certification conditions to ensure compliance with the Clean Water Act and appropriate requirements of state law.

[1] https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/2024/r6tbureport.pdf

[2] https://www.waterboards.ca.gov/water_issues/programs/mercury/docs/hg_prov_final.pdf

2. Section 6.1 *Preliminary Resource Issues with Information Gathering Needs for Proposed Studies* states, "Items identified in Table 6.1-1 should be considered preliminary and are subject to modification pending consultation with stakeholders, and submission of study requests by interested parties, as described in Section 2.0, *Plans, Schedules, and Protocols*." State Water Board staff supports SCE's intended process to work collaboratively with State Water Board staff and other relicensing participants to refine studies. When possible, working collaboratively with all relicensing participants often allows for expedited resolution of issues.

3. As the Project proceeds through relicensing, State Water Board staff will be evaluating the Project's potential impacts on water quality, including public trust resources. For more information on relevant environmental studies and requirements regarding the Mono Lake watershed, please visit the State Water Board's Mono Lake webpage at:

   https://www.waterboards.ca.gov/waterrights/water_issues/programs/mono_lake/.

4. Compliance with CEQA (Pub. Resources Code, § 21000 et seq.) is required as part of the water quality certification process. CEQA requires the lead agency to evaluate a project's potential impacts to environmental resources as well as identify mitigation measures and alternatives to reduce project impacts. CEQA also requires public input on identified impacts and mitigation measures. CEQA documentation must analyze and evaluate the Project's impacts to all relevant resources, including aquatic biological resources, special status species, water quality standards, and water quality control plans. Information from studies and data gathering during FERC relicensing informs CEQA document development.

   CEQA Guidelines define the lead agency as "the public agency which has the principal responsibility for carrying out or approving a project." (Cal. Code Regs., tit. 14, § 15367.) It is State Water Board staff's understanding that the State Water Board will act as the CEQA lead agency for the Project relicensing. State Water Board staff request SCE confirm in writing its understanding on whether the State Water Board will be the CEQA lead agency.

5. Any updates to Figures 1.1-1, 3.3-1, or 4.5-1 etc., which provide an overview map of the Lundy Project and the Lundy Lake Dam facilities, would benefit from a closer view of the project and inclusion of each of the Project facilities as described in Section 4.5 *Existing Project Facilities*, including: the instream acoustic velocity meter release structure; the "rock-drop" valve; the "farmer's gate", and the splitter box.

6. Maps throughout the document (for example, Figures 1.1-1 and 3.2-2) appear to incorrectly place the county line for Tuolumne and Mono counties.

7. Section 5.1.4 *Physiography and Geomorphology* states that the capacity of the Mill Creek Return Ditch (MCRD) is 25 cubic feet per second (cfs). Elsewhere (e.g., Section 4.6.2.2 *Lundy Powerhouse*) the PAD states that the full capacity of the MCRD is 44 cfs. Please clarify which value accurately reflects the actual hydraulic capacity of the MCRD, versus the maximum flow that is currently passed through the MCRD.

8. Data and reports developed as part of the 2023 revised Stream Gaging Plan and Amended Settlement Agreement which are not publicly available from the United States Geological Survey (USGS) - specifically, quantification of losses in the MCRD - should be shared and discussed with the broader relicensing stakeholders, including the State Water Board. Understanding rates of leakage and/or loss of water in the MCRD may be informative for later development of protection, mitigation, and enhancement measures. This data could be shared as part of an expansion of proposed study WQ-1 or WQ-2.

9. Figure 5.1-4 states that its source is both California Department of Fish and Game (CDFG 1996), as well as derived from 2020 Light Detection and Ranging (LiDAR). Please clarify which dataset was used to create the figure and provide a citation for the 2020 LiDAR data.

10. Section 5.1.4.2 *Sediment Supply, Erosion, and Transport* states “Sediment in Mill Creek is mainly supplied by Deer Creek and smaller tributaries that enter the channel.” Please clarify how this was determined and if available please provide any data that supports this determination. Section 5.1.4.1 Hillslope Processes states “Evidence of debris flows (particularly levee deposits) in the headwaters of Deer Creek is visible in aerial photographs.” State Water Board staff request that these photographs be shared with the stakeholders.

11. Section 5.2.2.1 *Lundy Dam and Inflows* states that above Lundy Lake, Mill Creek has a mean annual flow of just under 30 cfs. Please clarify which dataset was used to calculate this value, and its period of record. If this value is computed from Lundy Lake elevation data, State Water Board staff request that this computed dataset be shared with interested parties in a subsequent filing or technical working group. As this section also states that lake level data are recorded once per hour, the computed dataset should include sub-daily data, if applicable.

Section 5.2.2.1 also states that the surface area of Lundy Lake is 132 acres; elsewhere (Section 5.2.2.14 *Morphometric Data for Existing Impoundment*) the maximum surface area is stated as 110 acres. Please clarify which value is correct.

12. The PAD does not state when Lundy Lake bathymetry was last surveyed, and as such whether the storage capacity has declined since issuance of the current license or prior license. Similarly, no maximum depth for Lundy Lake is provided in the PAD, and the Appendix A *Exhibit G Map of the Project* does not provide bathymetry for the entire lake; rather, only bathymetry above the depth of the minimum operating level is shown. Maximum depth of the lake, including that below the minimum operating level, as well as the bathymetry throughout the entirety of the lake, is important for determining where water quality samples should be collected, as well as determining which areas may be of greatest concern for hypoxic or anoxic conditions and any resultant methylation of mercury. State Water Board staff request that as part of proposed studies WQ-1 *Lundy Lake and Mill Creek Water Quality Monitoring* or AQ-1 *Fish Community Survey*, and prior to any other study data collection, SCE should conduct a bathymetric survey of the entirety of Lundy Lake and amend measurement locations of all relevant draft study plans as necessary.

13. In future versions of Table 5.2-2, the period of record should be specified for the gages included. A similar table, but which only shows values from USGS gage 10287069 (Mill Creek Below Lundy Lake), would be informative to understand the flow regime between Lundy Lake and the MCRD.

14. Tables 5.2-5 and 5.2-7 do not include all data relevant to the Project which is available on the California Environmental Data Exchange Network (CEDEN). Additional sites, analytes, and individual datapoints should be included in both tables. This includes data upstream of the Project (i.e., Mill Ck at confluence with Burro Lakes outlet, MIL.30), fish tissue data within Lundy Lake, and sites downstream of Project facilities in Wilson Creek and Mill Creek at Mono City. Additionally, some non-detect coliform samples included in CEDEN are excluded from Table 5.2-7. State Water Board staff can share these data with SCE directly, or indicate the relevant sites in CEDEN.

    State Water Board staff also note that data provided by CEDEN in Table 5.2-7 indicate a prior exceedance of the coliform water quality objective, in July 2013 in Mill Creek ~6.2 miles downstream of Lundy Lake. Proposed study WQ-1 should

include sampling for *E. coli* rather than fecal coliform (per pending update[3] to the Lahontan Water Quality Control Plan) within Lundy Lake, and at multiple locations in Mill Creek, on multiple dates, during peak recreation season.

As indicated in Section 5.2.3.3 *Existing Water Quality Data*, the Mill Creek drainage upstream of Lundy Lake has an extensive history of mining, and no data appears to be available regarding relevant water quality in Mill Creek or Lundy Lake. Limited fish tissue mercury data are available from CEDEN, which indicate potential exceedances of the Sport Fish Water Quality Objective, but are at minimum 17 years old. The United States Geological Survey (USGS) Mineral Resources Online Spatial Data (MRData[4]) database indicates that mines in the Mill Creek watershed were past producers of gold, silver, lead, copper, zinc, arsenic, gallium, and radium. Proposed study WQ-1 should include water sampling in Mill Creek upstream and downstream of Lundy Lake, and within Lundy Lake, for dissolved mercury, silver, lead, copper, and arsenic, at minimum. Additionally, to facilitate calculating toxicity potential with metrics such as the criterion maximum concentration (CMC) and criterion continuous concentration (CCC) as specified by the United States Environmental Protection Agency (USEPA) National Recommended Water Quality Criteria – Aquatic Life Table[5], WQ-1 should also include measurements of pH and hardness simultaneous with dissolved metals sampling. As calculations of the CMC and CCC for copper are more complex and require additional measurements, State Water Board staff suggest either collecting the additionally required data (i.e., dissolved organic carbon and major ions), or proposing alternative methods.

[3] https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/2024/rs2024-0003.pdf

[4] https://mrdata.usgs.gov/

[5] https://www.epa.gov/wqc/national-recommended-water-quality-criteria-aquatic-life-criteria-table

ATTACHMENT B

STUDY PLAN REQUEST FOR
LUNDY HYDROELECTRIC PROJECT

State Water Resources Control Board (State Water Board) staff requests a Methylmercury Fish Tissue Sampling Study be conducted as part of relicensing Southern California Edison's (SCE) Lundy Hydroelectric Project (Project).

1. *Describe the goals and objectives of each study proposal and the information to be obtained* (18 C.F.R. § 5.9(b)(1)):

   The goal of a Methylmercury Fish Tissue Sampling Study would be to determine whether the Project may adversely affect beneficial uses in the Mill Creek watershed by providing conditions that increase the methylation of mercury.

   SCE's Pre-Application Document (PAD) Section 5.2.3.3 *Existing Water Quality Data* states: "Although there is a history of mining in the Mill Creek watershed…no historical information regarding trace metals or other mining-related water quality issues were identified". Extensive mining for a variety of heavy metals occurred upstream of Lundy Lake, but no data have been collected to understand whether Project operations impact the bioavailability and transport of those metals, or more simply, the concentration of those metals in Project waters. Combined with the mercury water quality monitoring requested by the State Water Board (Attachment A, Comment 10), fish tissue sampling would inform to what extent Project operations affect mercury methylation and resultant bioaccumulation. The Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions (Statewide Mercury Provisions[1]) specify mercury fish tissue water quality objectives for waters with designated and proposed beneficial uses that include Lundy Lake and Mill Creek. Data collected as part of this study would inform the development of a water quality certification.

2. *If applicable, explain the relevant resource management goals of the agency with jurisdiction over the resource to be studied* (18 C.F.R. § 5.9(b)(2):

   The State Water Board has broad authority under the Clean Water Act (33 U.S.C. §§ 1251-1387), the California Constitution, and state statutes and regulations to restore and maintain the chemical, physical and biological integrity of the state's waters, and to regulate the diversion and use of water through the water right priority system in accordance with the State Water Board's reasonable use and public trust responsibilities. The Porter-Cologne Water Quality Control Act (Cal. Wat. Code, § 13000 et seq.) establishes a

[1] https://www.waterboards.ca.gov/water_issues/programs/mercury/docs/hg_prov_final.pdf

comprehensive program to protect water quality and the beneficial uses of water and charges the State Water Board and nine regional water quality control boards with protecting water quality in California.

Throughout the Federal Energy Regulatory Commission relicensing process, the State Water Board maintains independent regulatory authority to condition Project operations to protect water quality and beneficial uses consistent with the Clean Water Act, applicable water quality control plans, State Water Board regulations, and any other applicable state laws. With respect to mercury concentrations, the Project has the potential to impact beneficial uses related to the fisheries and recreational uses in the Mill Creek watershed. Requiring mercury fish tissue sampling as part of the relicensing effort for the Project is appropriate as it will ensure current fish tissue mercury data are available and enable State Water Board staff to assess potential impacts to the recreational fishery and associated beneficial uses of the waters of the state within the Project area.

3. *If requester is not a resource agency, explain any relevant public interest considerations in regard to the proposed study* (18 C.F.R. § 5.9(b)(3)

   Not applicable.

4. *Describe existing information concerning the subject of the study proposal, and the need for additional information* (18 C.F.R. § 5.9(b)(4)):

   As indicated in Section 5.2.3.3 *Existing Water Quality Data* of the PAD, the Mill Creek drainage upstream of Lundy Lake has an extensive history of mining, and no data appears to be available regarding relevant water quality in Mill Creek or Lundy Lake. The United States Geological Survey (USGS) Mineral Resources Online Spatial Data (MRData[2]) database indicates that mines in the Mill Creek watershed were past producers of gold, silver, lead, copper, zinc, arsenic, gallium, and radium. To this point, no analyses or data collection have been conducted to understand Project effects on methylation of mercury. A robust study that follows standard fish tissue mercury protocols and represents the range of fish that could be caught and/or consumed by the public, coupled with concurrent water quality data related to mercury, will ensure the Project is protective of human health and is compliant with water quality standards.

[2] https://mrdata.usgs.gov/

The State Water Board is responsible for the protection of water quality. In relation to the Project, the State Water Board is the state agency with federal Clean Water Act section 401 water quality certification authority and through issuance of a certification must verify that Project operations do not violate a water quality standard or other applicable state water quality requirements. Additional fish tissue mercury information may inform future conditions of a water quality certification.

5. *Explain any nexus between project operations and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements* (18 C.F.R. § 5.9(b)(5)):

   Mercury fish tissue sampling is frequently conducted in reservoirs with resident fish and/or sport fishing activities to help inform regulatory decisions regarding potential impacts to beneficial uses associated with the fishery and recreational uses, including fish consumption. The Project area has an active fishing community that makes use of Project facilities and fish in and around the Project impoundment. Oxygen depletion in Lundy Lake may lead to methylation of mercury due to anoxic conditions in reservoir sediments. It is unknown to what extent anoxic or hypoxic conditions may occur in Lundy Lake or its bottom sediments, as no oxygen data for the reservoir are available.

   When coupled with additional mercury water quality monitoring (requested in State Water Board's Attachment A, Comment 10), methylmercury fish tissue data would inform changes in methylmercury concentrations associated with Lundy Lake.

6. *Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate field season(s) and the duration) is consistent with generally accepted practice in the scientific community or, as appropriate, considers relevant tribal values and knowledge* (18 C.F.R. § 5.9(b)(6)):

   Mercury fish tissue sampling is frequently conducted in reservoirs with resident fish and/or sport fishing activities to help inform regulatory decisions regarding potential impacts to beneficial uses associated with the fishery and recreational uses, including fish consumption. As SCE is pursuing a new license to operate the Project for a period of several decades, and no data have been collected since the Project was originally constructed more than a century ago by SCE's predecessor, requiring fish tissue sampling is appropriate data collection to inform Project relicensing.

7. *Describe considerations of level of effort and cost, as applicable, and why any proposed alternative studies would not be sufficient to meet the stated information needs* (18 C.F.R. § 5.9(b)(7)):

   The Mercury Fish Tissue Sampling Study should be conducted in two consecutive water years and should include data collection described in the goals and objectives section. Based upon previous relicensing processes in California that have conducted similar fish tissue studies, State Water Board staff estimate the cost to be between $10,000 and $15,000 with cost dependent on collaborative development of study specifics and methodologies.