

**Electronically Filed**

August 2, 2023

VIA E-FILING

Kimberly Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Subject: Gem State Hydroelectric Project (FERC Project No. 2952)
Idaho Falls Hydroelectric Project (FERC Project No. 2842)

Dear Secretary Bose:

Idaho Falls Power (IFP or Licensee), the Licensee of the Idaho Falls Hydroelectric Project (Idaho Falls Project) (FERC No. 2842), and the Gem State Hydroelectric Project (Gem State Project) (FERC No. 2952), herein collectively referred to as the "Projects," electronically files with the Federal Energy Regulatory Commission (Commission or FERC) the Notices of Intent (NOI) and Pre-Application Document (PAD) for the relicensing of the Projects in accordance with the requirements of 18 Code of Federal Regulation (CFR) Part 5. The FERC licenses for Projects expire on July 31, 2029. The Licensee plans to relicense the Projects using the Commission's Integrated Licensing Process (ILP), in accordance with FERC's regulations pursuant to 18 CFR Part 5. Due to the proximity of the Projects to each other, the Licensee proposes to conduct the relicensing processes concurrently, and requests that the Commission do the same. The Licensee is submitting individual NOIs and a single PAD for the Projects.

The 24.6-megawatt (MW) Idaho Falls Project consists of three developments on the Snake River in Bonneville County, Idaho, including: Upper Plant, located at approximately river mile (RM) 815.2; City Plant (RM 810.4); and Lower Plant (RM 808.7). The 22.6 MW Gem State Project consists of one development located at approximately RM 804.2 on the Snake River in Bonneville and Bingham Counties, Idaho. The Idaho Falls Project is located 1.9 miles upstream of the Gem State Project on the Snake River and extends approximately 11.9 miles north through the city of Idaho Falls. The Gem State Project and Idaho Falls Project boundaries are separated by approximately 1.9-miles of free-flowing river between the tailrace of Idaho Falls Project and the headwaters of the Gem State Project.

The PAD consists of two volumes. Volume I contains the public information required by 18 CFR § 5.6. Volume II of the PAD contains drawings of Project works that meet the definition of Critical Energy Infrastructure Information (CEII) pursuant to FERC's June 23, 2003 Order No. 630-A.

Consistent with that order, the Licensee is filing Volume II as CEII under separate cover.

Pursuant to 18 CFR §4.38, §5.5(c), and §5.6(a), the NOIs and Volume I of the PAD are being distributed electronically to the relevant resource agencies, Tribes, non-governmental organizations, and other potential interested parties included on the attached distribution list. The Licensee will also place the NOIs and Volume I of the PAD on the relicensing website at [Relicensing | Idaho Falls Power \(ifpower.org\)](https://www.ifpower.org)

As set forth in the ILP regulations pursuant to 18 CFR § 5.8, FERC will issue Scoping Document 1 (SD1) within 60 days of the filing date of the NOIs and PAD. In addition, FERC will provide public notice and schedule a public scoping meeting and site visit for the Projects within 30 days of issuing SD1. Based on the filing date for the NOIs and PAD, The Licensee anticipates the FERC Scoping Meeting will occur in late October or early November of 2023. FERC will notice the final dates, times, and location of the Scoping Meeting and publish that information in local papers shortly after the filing of the NOIs and PAD.

In accordance with 18 CFR §5.5(e), Section 7 of the Endangered Species Act and the joint agency regulations at 50 CFR part 402, Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act, and the implementing regulations at 50 CFR 600.920, the Licensee hereby requests to be designated as the Commission's non-federal representative for the purposes of consultation under section 7 of the Endangered Species Act. The Licensee requests authorization to initiate consultation under section 106 of the National Historic Preservation Act and to implement regulations at 36 CFR Section 8000.2(c)(4).

IFP looks forward to working with FERC and other interested parties on the Idaho Falls and Gem State relicensings. Should there be any questions or concerns regarding this filing please contact Richard Malloy, Regulatory Compliance Manager, by phone at 208-612-8248 or via e-mail at rmalloy@ifpower.org.

Sincerely,



Bear Prairie
General Manager
Idaho Falls Power

Attachments:

- Distribution List
- Notice of Intent for the Idaho Falls Hydroelectric Project (FERC Project No. 2842)
- Notice of Intent for the Gem State Hydroelectric Project (FERC Project No. 2952)
- Volume I (Public) of the Pre-Application Document for the Gem State Project (FERC Project No. 2952, and Idaho Falls Project (FERC No 2842)
- Volume II (CEII) containing single-line diagrams for the Gem State Project (FERC Project No. 2952, and Idaho Falls Project (FERC No 2842)

Idaho Falls Project (P-2952), Gem State Project (P2842) Hydroelectric Projects Relicensing
Distribution List

Federal Agencies

National Marine Fisheries Service
Boise Regional Office
800 E. Park Blvd, Suite 220 Plaza IV, Suite
220 Boise, ID 83712

U.S. Army Corps of Engineers
Idaho Falls Field Office
900 N Skyline Rd., Suite A Idaho falls ID
83402
CENWW-RD@usace.army.mil

U.S. Bureau of Land Management
Upper Snake Field Office
1405 Hollipark Dr. Idaho Falls, ID 83401
BLM_ID_UpperSnakeOffice@blm.gov

U.S. Environmental Protection Agency
EPA Region 10 1200 Sixth Avenue, Suite
155 Seattle, WA 98101
epa-seattle@epa.gov

U.S. Fish and Wildlife Service
Chris Swanson, State Supervisor
Idaho Fish and Wildlife Office
1387 S. Vinnell Way, Suite 368 Boise, ID
83709
Chris_swanson@fws.gov

U.S. Fish and Wildlife Service
Allyson Turner
Idaho Fish and Wildlife Office
1387 S. Vinnell Way, Suite 368 Boise, ID
83709
Ally_turner@fws.gov

U.S. Forest Service
Palisades Ranger District
3659 E. Ririe Hwy Idaho Falls, ID 83401

U.S. Bureau of Indian Affairs
Northwest Region
911 Northeast 11th Ave Portland, OR 97232

U.S. Bureau of Reclamation
Pacific Northwest Region Snake River Area
Office
230 Collins Rd Boise, ID 83702

U.S. Fish and Wildlife Service
Michael Morse: Branch Chief –
Conservation and Consultation (Hydro)
1387 S. Vinnell Way, Suite 368 Boise, ID
83709
michael_morse@fws.gov

U.S. Geological Survey - Idaho Water
Science Center
230 Collins Rd. Boise ID, 83702
dc_id@usgs.gov

U.S. Bureau of Land Management
Deena Teel
1405 Hollipark Drive Idaho Falls, ID 83401
dteel@blm.gov

U.S. Bureau of Land Management
Rebecca Lazdauskas
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rlazdauskas@blm.gov

U.S. Army Corps of Engineers
Sarah Windham
720 E. Park Boulevard Suite 425 Boise, ID
83712
sarah.v.windham@usace.army.mil

Tribes

Tribal Historic Preservation Office
Patrick Baird, THPO/Archaeologist
Nez Perce Tribe
PO Box 365 Lapwai, ID 83540
keithb@nezperce.org

Burns Paiute Tribe
Calla Hagle, Natural Resources Director
100 Pasigo St. Burns, OR 97720
Calla.Hagle@burnspaiute-nsn.gov

Nez Perce Tribe Water Resource
Development
Aaron Miles, Natural Resources
114 Veterans Dr. Lapwai, ID 83540
waterresources@nezperce.org

Burns Paiute Tribe
Diane L. Teeman, Cultural
100 Pasigo St. Burns, OR 97720
Diane.teeman@burnspaiute-nsn.gov

Fort McDermitt Paiute and Shoshone Tribes
of the Fort McDermitt Indian Reservation,
Nevada and Oregon
Duane Masters, Sr., Environmental Director
P.O. Box 457 McDermitt, NV 89422

Shoshone-Bannock Tribal Fish and Wildlife
Department
Chad Colter, Fish & Wildlife Director
PO Box 306 Pima Dr. Fort Hall, ID 83203
ccolter@sbtribes.com

Shoshone-Paiute Tribes - Fish, Wildlife and
Parks Dept.
Marissa Snapp, Fisheries Biologist
PO Box 219 Owhyhee, NV 89833
snapp.marissa@shopai.org

Burns Paiute Tribe
Calla Hagle
100 Pasigo Street Burns, OR 97220
Calla.hagle@burnspaiute-nsn.gov

Shoshone-Bannock Tribes of the Fort Hall
Reservation
Nathan Small, Chairman
PO Box 306 Fort Hall, ID 83203
publicaffairs@sbtribes.com

Couer d'Alene Tribe
Chief James Allan, Chairman
850 A Street PO Box 408 Plummer, ID
83851
jfletcher@cdatribes-nsn.gov

Nez Perce Tribe of Idaho
Samuel Penney, Chairman
100 Agency Road Lapwai, ID 83540
nptec@nezperce.org

Fort McDermitt Paiute-Shoshone Tribe
Maxine Redstar, Chairman
111 North Reservation Road McDermitt,
NV 89421

Northwestern Band of Shoshone Nation
Dennis Alex, Chairman
2575 Commerce Way Ogden, UT 84401
ggover@nwbsshoshone.com

Fort Belknap Indian Community of the Fort
Belknap Reservation
Jeffery Stiffarm, Chairman
RR1, Box 66 Harlem MT 59526
jeffery.stiffarm@ftbelknap.org

Shoshone-Paiute Tribe of the Duck Valley
Reservation
Brian Thomas, Tribal Chairman
1036 Idaho State Highway 51 Owyhee
County, ID 83604
Thomas.brian@shopai.org

Kootenai Tribe of Idaho
Jennifer Porter, Chairperson
100 Circle Drive Bonners Ferry, ID 83805
jennifer@kootenai.org

Burns-Paiute Tribe
Diane Teeman, Chairperson
100 Pasigo Street Burns, OR 97720
Dteeman.burns.paiute@gmail.com

Eastern Shoshone Tribe of the Wind River
Reservation
John St. Clair, Chairman
PO Box 538 Fort Washakie, WY 82514
jstclair@easternshoshone.org

Confederated Tribes of Warm Springs
Reservation
Jonathan Smith, Chairman
PO Box C Warm Springs, OR 97761-3001
info@warmsprings.com

Fort Hall Business Council
P.O. Box 306 Pima Drive Fort Hall, ID
83203

Fort McDermitt Paiute and Shoshone Tribes
of the Fort McDermitt Indian Reservation,
Nevada and Oregon
Tildon Smart, Tribal Chairman
P.O. Box 457 McDermitt, NV 89421
Tildon.Smart@fmpst.org

State Agencies

Idaho Department of Environmental Quality
Troy Saffle, Surface Water Quality Manager
Idaho Falls Regional Office
1410 N Hilton St Boise, ID 83706
Troy.saffle@deq.idaho.gov

Idaho Department of Lands
Pat Brown, Area Manager
Eastern Supervisory Area
3563 Ririe Highway Idaho Falls, ID 83401

Idaho Parks and Recreation
P.O. Box 83720 Boise, ID 83720
inquiry@idpr.idaho.gov

Idaho State Historic Preservation Office
210 Main Street Boise, ID 83702

Idaho State Historical Society
Tricia Canaday, Deputy
2205 Old Penitentiary Road Boise, ID
83712
tricia.canaday@ishs.idaho.gov

Tribal Historic Preservation Office
Jill Maria Wagner, PHD, THPO
Coeur d'Alene Tribe
PO Box 408/850 A St Plummer ID 83851
jwagner@cdatribe-nsn.gov

Idaho Department of Environmental Quality
Alex Bell, Water Quality Manager
Pocatello Regional Office
444 Hospital Way #300 Pocatello, ID 83201
alex.bell@deq.idaho.gov

Idaho Fish and Game
Eric Anderson
Upper Snake Region
4279 Commerce Circle Idaho Falls, ID
83401
eric.anderson@idfg.idaho.gov

Idaho Public Utilities Commission
P.O. Box 83720 Boise, ID 83714

Idaho State Historical Society
Janet Gallimore, Executive Director, SHPO
2205 Old Penitentiary Road Boise, ID
83712
janet.gallimore@ishs.idaho.gov

Idaho Governor's Office of Species
Conservation (OSC)
Michael Edmondson, Administrator
304 N. 8th St., Suite 149 Boise, ID 83702
mike.edmondson@osc.idaho.gov

Idaho Office of the Attorney General
Attorney General
700 W. Jefferson St., Suite 210 P.O. Box
83720 Boise Idaho, 83720-0010

Idaho Soil and Conservation Commission –
East Side Soil and Water Conservation
District
1120 Lincoln Rd. Suite A Idaho Falls, ID
83401

Idaho Farm Bureau Federation
Braden Jensen, Deputy Director of
Governmental Affairs, Energy, and Natural
Resource Specialist
PO Box 4848 Pocatello, ID 83205-4848
bjensen@idahofb.org

Idaho Office of the Governor
Governor
State Capitol
PO Box 83720 Boise, ID 83720-0083
governor@gov.idaho.gov

Idaho Soil & Water Conservation
Commission
Norman Wright, Chairman
PO Box 83720 Boise, ID 83720-0083
norman.wright@swc.idaho.gov

Idaho Department of Parks and Recreation
Anna Canning
5657 Warm Springs Avenue Boise, ID
83716
anna.canning@idpr.idaho.gov

Idaho Rivers United
Nic Nelson, Executive Director
P.O. Box 633 Boise, ID 83701
nic@idahorivers.org

Idaho Rivers United
Kevin Lewis
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Kevin@idahorivers.org

Idaho Consumer-Owned Utilities
Association
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P.O. Box 1898 Boise, ID 83701
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Idaho Department of Parks and Recreation
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Idaho Department of Parks and Recreation
Garth Taylor, East Region Bureau Chief
4279 Commerce Circle, Suite B Idaho Falls,
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garth.taylor@idpr.idaho.gov

Idaho Governor's Office of Energy and
Mineral Resources
George Lynch, Legal Counsel
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george.lynch@oer.idaho.gov

Idaho Governor's Office of Energy and
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John Chatburn
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John.chatburn@oer.idaho.gov

Local Agencies

Bonneville County Sheriff's Department
605 N Capital Ave Idaho Falls, ID 83402

City of Ammon
Micah Austin, City Administrator
2135 South Ammon Road. Ammon, ID
83406
maustin@cityofammon.us

City of Shelley
101 S. Emerson Avenue Shelley, Idaho
83274

City of Idaho Falls
308 Constitution Way Idaho Falls, ID 83402
IFClerk@idahofallsidaho.gov

County of Bingham
Pamela Eckhardt, Clerk
501 N. Maple Blackfoot, Idaho 83221
peckhardt@co.bingham.id.us

New Sweden Irrigation District
Kail Sheppard, Manager
2350 W 17th St Idaho Falls, ID 83402
kailsheppard@gmail.com

Snake River Valley Irrigation District
Steve Neilson, Manager
816 N 700 E Basalt, ID 83218
srvid1@gmail.com

Shoshone-Paiute Tribes - Fish, Wildlife and
Parks Dept.
Jinwon Seo, Ph.D., Fish, Wildlife & Parks
Director
PO Box 219 Owhyhee, NV 89832
seo.jinwon@shopai.org

Idaho Irrigation District
Richard Lockyer, Manager
496 E 14th Street Idaho Falls, ID 83404
idahowatermap@gmail.com

Progressive Irrigation District
Ray Switter, Manager
2585 N Ammon Road Idaho Falls, ID 83401
office@progressiveirrigationdistrict.com

Bonneville County Commission
Roger Christensen, Chairman
605 N Capital Avenue Idaho Falls, ID 83402

Non-Government Organizations
Bonneville Power Administration

P.O. Box 3621 Portland, OR 97208-3621

Idaho Power Company – Corporate
Headquarters
P.O. Box 70 Boise, ID 83707

American Whitewater
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mark@americanwhitewater.org

Idaho Rivers United
Nic Nelson, Executive Director
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admin@idahorivers.org;
admin@idahorivers.org;
nic@idahorivers.org

Trout Unlimited
Cultural Resource Program
Southeast Idaho Trout Unlimited
257 North Main Pocatello, ID 83204

Greater Yellowstone Coalition
Scott Christensen, Interim Executive
Director
60 E. Little Ave., Suite 101 Driggs, ID
83422
schristensen@greateryellowstone.org
gyc@greateryellowstone.org

Snake River Cutthroats
Chapter President, Arn Berglund
Trout Unlimited Chapter 163
P.O. Box 50914 Idaho Falls, ID 83405
fishvik@aol.com

Greater Yellowstone Coalition
Allison Michalski
PO Box 1072 Driggs, Idaho 83422
amichalski@greateryellowstone.org

Burgess Canal & Irrigating Co.
Mark Boam, President
PO Box 536 Rigby, ID 83442
burgesscanal@yahoo.com

East and West Side Conservation Districts
1120 E Lincoln Road, Suite A Idaho Falls,
ID 83401

American Whitewater
Thomas O'Keefe, Pacific Northwest
Stewardship Director
3537 NE 87th St. Seattle, WA 98115-3639
okeefe@americanwhitewater.org

Pacific Northwest Office
American Whitewater
3537 NE 87th St. Seattle, WA 98115
okeefe@americanwhitewater.org

Idaho State University
Colden V. Baxter, Professor
Stream Ecology Center
921 South 8th Avenue Rm #310, Gale Life
Sciences Building Pocatello, ID 83209
coldenbaxter@isu.edu

Licensee

County of Bonneville
Bonneville County Clerk
605 N. Capital, Idaho Falls, Idaho 83402
pmanning@co.bonneville.id.us

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Idaho Falls Power

Project No. 2842

NOTICE OF INTENT TO FILE APPLICATION FOR
NEW LICENSE

Pursuant to 18 CFR § 5.5, Idaho Falls Power notifies the Federal Energy Regulatory Commission of its intention to file an Application for a New License for the Idaho Falls Hydroelectric Project, Project No. 2842.

The following information is provided consistent with the requirements of 18 CFR. § 5.5 and 16.6(b):

1. The exact name and business address of the applicant(s) is:

Applicant's Name: Idaho Falls Power
Address: 140 S. Capital Avenue
Idaho Falls, ID 83402

Contacts: Richard Malloy, Regulatory Compliance Manager
Idaho Falls Power
140 S. Capitol Avenue
Idaho Falls, ID 83402
208-612-8248

Project Number: Idaho Falls Hydroelectric Project FERC No. 2842;

Expiration Date: January 31, 2029

2. Unequivocal Statement of Intent:

Idaho Falls Power intends to file an application for a new license for the Idaho Falls Hydroelectric Project (Project) located on the Snake River near the city of Idaho Falls in Bonneville County in Idaho utilizing Federal Energy Regulatory Commission's (FERC) Integrated Licensing Process (ILP).

3. Description of Principal Project Works to be Licensed:

Existing Project features to be relicensed include three developments; Upper Plant, City Plant, and Lower Plant. The Upper Plant consists of two concrete and earth-fill dams and spillways and a powerhouse.

The Upper Plant impoundment is 100 acres at a normal pool elevation of 4,734.7 feet NGVD and extends approximately two miles upstream. The impoundment has a storage capacity of 800 acre-feet at elevation 4,734.7 feet NGVD.

The City Plant development consists of a concrete dam, spillway, trash rack, Bascule gate, maintenance building, and a powerhouse. The City Plant impoundment is 50 acres at a normal pool elevation of 4,700 feet NGVD and extends approximately one mile upstream. The impoundment has a storage capacity of 400 acre-feet at elevation 4,700 feet NGVD.

The Lower Plant Development consists of a concrete dam, spillway, eight radial gates, on pelican gate, and two powerhouses. The Lower Plant impoundment is 100 acres at a normal pool elevation of 4,674 feet NGVD and extends approximately two miles upstream. The impoundment has a storage capacity of 800 acre-feet at elevation 4,674 feet NGVD.

A complete outline of all project facility dimensions is available in Section 4.0 of the Pre-Application Document.

- 4. Location of the Project (Dam):** 43.555341, -112.045468 (Upper Plant Dam No. 1)
43.552838, -112.051053 (Upper Plant Dam No. 2)
43.496809, -112.042727 (City Plant)
43.470373, -112.061128 (Lower Plant)

State or Territory: Idaho
County: Bonneville
Township or nearby town: Idaho Falls

- 5. The installed capacity of the project is:** 24.6 megawatts

6. Names and Mailing Addresses of Entities Listed in 18 CFR § 5.5(b)(8):

- (a) The County in which the Project is located, and in which any Federal Facility that is used or to be used by the Project is located:

Bonneville County
605 N Capital Avenue
Idaho Falls, Idaho 83402
(208) 529-1350

There are no federal facilities used by the Idaho Falls Hydroelectric Project.

- (b) Each city or town in which any part of the Project is located, and in which any Federal facility that is used or to be used by the Project is located.

City of Idaho Falls
308 Constitution Way
Idaho Falls, ID 83402
(208) 612-8100

There are no federal facilities used by the Idaho Falls Hydroelectric Project.

- (c) Each city or town that has a population of 5,000 or more people and is located within 15 miles of the existing Project dams:

Other than Idaho Falls, (listed above) there are no cities or towns with populations of 5,000 or more people and which are located within 15 miles of the existing Project dams. There are, however, a number of unincorporated communities and cities with small populations of residents. These include the Cities of Iona and Rigby, and the unincorporated communities of New Sweden, Ammon, Beachs Corner, Payne, Osgood, Bassett, and Grant.

- (d) Each irrigation district, drainage district, or similar special purpose political subdivision in which any part of the Project is located, and in which any Federal facility that is used or to be used by the Project is located.

Idaho Irrigation District Richard Lockyer, Manager 496 E 14 th Street Idaho Falls, ID 83404 (208) 522-2356 idahowatermap@gmail.com	Progressive Irrigation District Ray Switter, Manager 2585 N Ammon Road Idaho Falls, ID 83401 (208) 522-5898 office@progressiveirrigationdistrict.com
New Sweden Irrigation District Kail Sheppard, District Manager 2350 W 17 th Street S Idaho Falls, ID 83402 (208) 523-0175 newswedennirr@gmail.com	Burgess Canal & Irrigating Co. PO Box 536 Rigby, ID 83442 Mark Boam, President burgesscanal@yahoo.com
East and West Side Conservation Districts 1120 E Lincoln Road, Suite A Idaho Falls, ID 83401 (208) 522-6250	

- (e) Each irrigation district, drainage district, or similar special purpose political subdivision that owns, operates, maintains, or uses any Project facility or any Federal facility that is or is proposed to be used by the Project.

No irrigation district, drainage district, or similar special purpose political subdivision owns operates, maintains, or uses any Project facility or any federal facility that is or is proposed to be used by the Project.

- (f) Every other political subdivision in the general area of the Project that there is reason to believe would likely be interested in, or affected by, this notification.

Bonneville County Commission Roger Christensen, Chairman 605 N Capital Avenue Idaho Falls, ID 83402 (208) 529-1350	
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(g) Affected Indian Tribes

Shoshone-Bannock Tribes of the Fort Hall Reservation Nathan Small, Chairman PO Box 306 Fort Hall, ID 83203 208-478-3700 publicaffairs@sbtribes.com	Shoshone-Paiute Tribe of the Duck Valley Reservation Brian Thomas, Tribal Chairman 1036 Idaho State Highway 51 Owyhee County, ID 83604 (208) 759-3100 ext. 1231 Thomas.brian@shopai.org
Couer d'Alene Tribe Chief James Allan, Chairman 850 A Street PO Box 408 Plummer, ID 83851 jfletcher@cdatrbe-nsn.gov	Kootenai Tribe of Idaho Jennifer Porter, Chairperson 100 Circle Drive Bonners Ferry, ID 83805 (208) 267-2960 jennifer@kootenai.org
Nez Perce Tribe of Idaho Samuel Penney, Chairman 100 Agency Road Lapwai, ID 83540 (208) 843-2253 nptec@nezperce.org	Burns-Paiute Tribe Diane Teeman, Chairperson 100 Pasigo Street Burns, OR 97720 (541) 573-8096 Dteeman.burns.paiute@gmail.com
Fort McDermitt Paiute-Shoshone Tribe Maxine Redstar, Chairman 111 North Reservation Road McDermitt, NV 89421 (775) 532-8259	Eastern Shoshone Tribe of the Wind River Reservation John St. Clair, Chairman PO Box 538 Fort Washakie, WY 82514 (307) 332-4932 jstclair@easternshoshone.org
Northwestern Band of Shoshone Nation Dennis Alex, Chairman 2575 Commerce Way Ogden, UT 84401 (435) 734-2286 ggover@nwbshoshone.com	Confederated Tribes of Warm Springs Reservation Jonathan Smith, Chairman PO Box C Warm Springs, OR 97761-3001 (541) 553-1161 info@warmsprings.com

Fort Belknap Indian Community of the Fort Belknap Reservation Jeffery Stiffarm, Chairman RR1, Box 66 Harlem MT 59526 (406) 353-2205 jeffery.stiffarm@ftbelknap.org	
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7. Whether the Application is for a Power or a Non-Power License

The Idaho Falls Hydroelectric Project license application is for a power license.

8. Designation as Non-Federal Representative and Authorization to Initiate Consultation

Pursuant to 18 CFR § 5.5(e), Idaho Falls Power requests that FERC designate it as the non-federal representative for purposes of consultation under Section 7 of the Endangered Species Act and the joint agency regulations thereunder at 50 CFR Part 402, section 305(b) of the Magnuson-Stevens Fishery and Conservation and Management Act and the implementing regulations at 50 CFR 600.920. In addition, Idaho Falls Power requests authorization to initiate consultation under Section 106 of the National Historic Preservation Act and to implement regulations at 36 CFR Section 800.2(c)(4).

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Idaho Falls Power

FERC Project No. 2952

NOTICE OF INTENT TO FILE APPLICATION FOR
NEW LICENSE

Pursuant to 18 C.F.R. § 5.5, Idaho Falls Power notifies the Federal Energy Regulatory Commission of its intention to file an Application for a New License for the Gem State Hydroelectric Project, FERC Project No. 2952.

The following information is provided consistent with the requirements of 18 CFR § 5.5 and 16.6(b):

1. The exact name and business address of the applicant(s) is:

Applicant's Name: Idaho Falls Power
Address: 140 S. Capital Avenue
Idaho Falls, ID 83402

Contacts: Richard Malloy, Regulatory Compliance Manager
Idaho Falls Power
140 S. Capitol Avenue
Idaho Falls, ID 83402
208-612-8248

Project Number: Gem State Hydroelectric Project FERC No. 2952

Expiration Date: January 31, 2029¹

2. Unequivocal Statement of Intent:

Idaho Falls Power (licensee) intends to file an application for a new license for the Gem State Hydroelectric Project (Project) located on the Snake River near the city of Idaho Falls in Bonneville and Bingham counties in Idaho utilizing Federal Energy Regulatory Commission's (FERC) Integrated Licensing Process (ILP).

3. Description of Principal Project Works to be Licensed:

¹ On August 12, 2020 Idaho Falls Power filed an application with FERC to accelerate the license term for the Gem State Hydroelectric, FERC Project No. 2952. Specifically, Idaho Falls Power requested that FERC accelerate the license term from November 30, 2033 to January 31, 2029. On October 12, 2021, FERC approved the new expiration for the Gem State Project to be January 31, 2029 to align with the Idaho Falls Project, FERC Project. No. 2842.

Existing Project features to be relicensed include an earth and rock fill dam, spillway, power canal, tailrace, two earth fill dikes, irrigation control structures, powerhouse, and transmission lines. The Gem State impoundment is 305 acres at a normal pool elevation of 4,655 feet NGVD and extends approximately 3.7 miles upstream. The impoundment has a storage capacity of 5,000 acre-feet at elevation 4,655 feet NGVD.

A complete outline of all project facility dimensions is available in Section 4.0 of the Pre-Application Document.

4. Location of the Project (Dam): 43.555341, -112.045468
State or Territory: Idaho
County: Bonneville; Bingham
Township or nearby town: Idaho Falls

5. The installed capacity of the project is: 22.6 megawatts

6. Names and Mailing Addresses of Entities Listed in 18 C.F.R. § 5.5(b)(8):

(a) The County in which the Project is located, and in which any Federal Facility that is used or to be used by the Project is located:

Bonneville County
605 N Capital Avenue
Idaho Falls, Idaho 83402
(208) 529-1350

Bingham County
501 N Maple
Blackfoot, ID 83221
(208) 785-8040

There are no federal facilities used by the Gem State Hydroelectric Project.

(b) Each city or town in which any part of the Project is located, and in which any Federal facility that is used or to be used by the Project is located.

City of Idaho Falls
308 Constitution Way
Idaho Falls, ID 83402
(208) 612-8100

(c) Each city or town that has a population of 5,000 or more people and is located within 15 miles of the existing Project dams:

Other than Idaho Falls (listed above) there are no cities or towns with populations of 5,000 or more people and which are located within 15 miles of the existing Project dams. There are, however, a number of unincorporated communities and cities with small populations of residents. These include the City of Shelley, and the unincorporated communities of Mitchell, Wodenville, and Cotton.

- (d) Each irrigation district, drainage district, or similar special purpose political subdivision in which any part of the Project is located, and in which any Federal facility that is used or to be used by the Project is located.

Idaho Irrigation District Richard Lockyer, Manager 496 E 14 th Street Idaho Falls, ID 83404 (208) 522-2356 idahowatermap@gmail.com	Progressive Irrigation District Ray Switter, Manager 2585 N Ammon Road Idaho Falls, ID 83401 (208) 522-5898 office@progressiveirrigationdistrict.com
New Sweden Irrigation District Kail Sheppard, District Manager 2350 W 17 th Street S Idaho Falls, ID 83402 (208) 523-0175 newsvedenirr@gmail.com	Burgess Canal & Irrigating Co. PO Box 536 Rigby, ID 83442 Mark Boam, President burgesscanal@yahoo.com
East and West Side Conservation Districts 1120 E Lincoln Road, Suite A Idaho Falls, ID 83401 (208) 522-6250	

- (e) Each irrigation district, drainage district, or similar special purpose political subdivision that owns, operates, maintains, or uses any Project facility or any Federal facility that is or is proposed to be used by the Project.

No irrigation district, drainage district, or similar special purpose political subdivision owns, operates, maintains, or uses any Project facility or any federal facility that is or is proposed to be used by the Project.

- (f) Every other political subdivision in the general area of the Project that there is reason to believe would likely be interested in, or affected by, this notification.

Bonneville County Commission Roger Christensen, Chairman 605 N Capital Avenue Idaho Falls, ID 83402 (208) 529-1350	Bingham County Commission Whitney Manwaring, Chairman 501 N Maple #204 Blackfoot, ID 83221 (208) 782-3013
--	---

(g) Affected Indian Tribes

Shoshone-Bannock Tribes of the Fort Hall Reservation Nathan Small, Chairman PO Box 306 Fort Hall, ID 83203 208-478-3700 publicaffairs@sbtribes.com	Shoshone-Paiute Tribe of the Duck Valley Reservation Brian Thomas, Tribal Chairman 1036 Idaho State Highway 51 Owyhee County, ID 83604 (208) 759-3100 ext. 1231 Thomas.brian@shopai.org
Couer d'Alene Tribe Chief James Allan, Chairman 850 A Street PO Box 408 Plummer, ID 83851 jfletcher@cdatribe-nsn.gov	Kootenai Tribe of Idaho Jennifer Porter, Chairperson 100 Circle Drive Bonners Ferry, ID 83805 (208) 267-2960 jennifer@kootenai.org
Nez Perce Tribe of Idaho Samuel Penney, Chairman 100 Agency Road Lapwai, ID 83540 (208) 843-2253 nptec@nezperce.org	Burns-Paiute Tribe Diane Teeman, Chairperson 100 Pasigo Street Burns, OR 97720 (541) 573-8096 Dteeman.burns.paiute@gmail.com
Fort McDermitt Paiute-Shoshone Tribe Maxine Redstar, Chairman 111 North Reservation Road McDermitt, NV 89421 (775) 532-8259	Eastern Shoshone Tribe of the Wind River Reservation John St. Clair, Chairman PO Box 538 Fort Washakie, WY 82514 (307) 332-4932 jstclair@easternshoshone.org
Northwestern Band of Shoshone Nation Dennis Alex, Chairman 2575 Commerce Way Ogden, UT 84401 (435) 734-2286 ggover@nwbshoshone.com	Confederated Tribes of Warm Springs Reservation Jonathan Smith, Chairman PO Box C Warm Springs, OR 97761-3001 (541) 553-1161 info@warmsprings.com
Fort Belknap Indian Community of the Fort Belknap Reservation Jeffery Stiffarm, Chairman RR1, Box 66 Harlem MT 59526 (406) 353-2205 jeffery.stiffarm@ftbelknap.org	

7. Whether the Application is for a Power or a Non-Power License

The Gem State Hydroelectric Project license application is for a power license.

8. Designation as Non-Federal Representative and Authorization to Initiate Consultation

Pursuant to 18 CFR § 5.5(e), Idaho Falls Power requests that FERC designate it as the non-federal representative for purposes of consultation under Section 7 of the Endangered Species Act and the joint agency regulations thereunder at 50 CFR Part 402, section 305(b) of the Magnuson-Stevens Fishery and Conservation and Management Act and the implementing regulations at 50 CFR 600.920. In addition, Idaho Falls Power requests authorization to initiate consultation under Section 106 of the National Historic Preservation Act and to implement regulations at 36 CFR Section 800.2(c)(4).

PRE-APPLICATION DOCUMENT

FINAL

**IDAHO FALLS AND GEM STATE HYDROELECTRIC PROJECTS
FERC PROJECT NO. 2842 AND 2952**



**IDAHO FALLS POWER
140 S CAPITAL AVE
IDAHO FALLS, ID 83402**



AUGUST 2023

**IDAHO FALLS AND GEM STATE HYDROELECTRIC PROJECTS
(FERC PROJECT NO. 2842 AND 2952)**

PRE-APPLICATION DOCUMENT

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APPENDIX C	HISTORIC ARCHITECTURAL RESOURCES
APPENDIX D	STAKEHOLDER CONSULTATION

LIST OF ACRONYMS**A**

ac-ft	acre-feet
AC	alternating current
ADA	Americans with Disabilities Act
APE	Area of Potential Effects

B

BCC	Birds of Conservation Concern
BGEPA	Bald and Golden Eagle Protection Act
BIA	Bureau of Indian Affairs
BLM	United States Bureau of Land Management
BOR	United States Bureau of Reclamation

C

CEII	Critical Energy Infrastructure Information
CFR	Code of Federal Regulations
cfs	cubic feet per second
CDT	Continental Divide Trail
CMC	criterion continuous concentration
CTWS	Confederated Tribes of Warm Springs

D

DC	direct current
District	Idaho Water District No. 1
DO	dissolved oxygen
DOE	United States Department of Energy
DPS	Distinct Population Segment

E

EA	Environmental Assessment
EDRR	Early Detection Rapid Response
EIS	Environmental Impact Statement
EAP	Equity Action Plan
EPA	United States Environmental Protection Agency
EFH	Essential Fish Habitat
ESA	Endangered Species Act
ESRP	Eastern Snake River Plain

F

FAA	Federal Aviation Association
FERC	Federal Energy Regulatory Commission
FGDC	Federal Geographic Data Committee
FLA	Final License Application

FOIA	Freedom of Information Act
FPA	Federal Power Act
FWPA	Federal Water Power Act
G	
Gem State Project	Gem State Hydroelectric Project
GIS	geographic information system
GLO	General land Office
GPS	global positioning system
H	
HAER	Historic American Engineering Record
hp	horsepower
HUC	Hydrologic Unit Code
Hz	Hertz
I	
Idaho Falls Project	Idaho Falls Hydroelectric Project
IDEQ	Idaho Department of Environmental Quality
IDFG	Idaho Department of Fish and Game
IDPR	Idaho Department of Parks and Recreational
IDWR	Idaho Department of Water Resources
IFP	Idaho Falls Power
IFPR	Idaho Falls Parks and Recreation Department
IHSI	Idaho Historic Sites Inventory
IID	Idaho Irrigation District
ILP	Integrated Licensing Process
IBEW	International Brotherhood of Electrical Workers
IPaC	Information for Planning and Consultation
ISDA	Idaho State Department of Agriculture
ISI	Invasive Species of Idaho
ITD	Idaho Transportation Department;
IWRB	Idaho Water Resource Board
K	
kV	kilovolt
kVA	kilovolt amps
kW	kilowatt
kWh	kilowatt hour
kya.	thousa. years ago
L	
LMEI	labor market engagement index
LMP	Land Management Program

M

MFP	Management Framework Plan
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mL	milliliter
MRDS	Mineral Resources Data System
MRLC	Multi-resolution Land Characteristics Consortium
MVA	mega volt-amp
MW	megawatt
MWh	megawatt-hour

N

NAVD 88	North American Vertical Datum of 1988
NEPA	National Environmental Policy Act
NHP	Natural Heritage Program
NGO	non-governmental organization
NGVD 29	National Geodetic Vertical Datum 1929
NMFS	National Marine Fisheries Service
NNI	No Net Impact
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSID	New Sweden Irrigation District
NTU	nephelometric turbidity unit
NWF	National Wildlife Federation
NWI	National Wetland Inventory
NWS	National Weather Service

P

PAD	Pre-Application Document
PCB	Polychlorinated Biphenyl
pdf	portable document format
PHS	Priority Habitat and Species
Projects	Idaho Falls and Gem State Hydro Projects FERC No. 2842 & 2952
psi	pounds per square inch
psig	pound per square inch gage

R

RM	river mile
----	------------

RMP	Rocky Mountain Power
rpm	revolutions per minute
RTE	Rare, threatened and endangered
S	
SCADA	supervisory control and data acquisition
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SQRU	scenic quality rating unit
SD	Scoping Document
SGCN	Species of Greatest Conservation Need
SHPO	State Historic Preservation Office
SMP	Shoreline Master Program
STV	statistical threshold value
SWAP	State Wildlife Action Plan
T	
TCP	Traditional Cultural Property
TDG	total dissolved gas
TLP	Traditional Licensing Process
TMDL	total maximum daily load
TWG	Technical Working Group
U	
UCUT	Upper Columbia United Tribes
UP&L	Utah Power and Light
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
U.S.	United States
V	
VRI	Visual Resource Inventory
VRM	Visual Resource Management
W	
WHEG	Wildlife Habitat Evaluation Guide
WY	water year
Y	
YBC	Yellow-billed Cuckoo

Geographic Scope

The following terms related to the geographic scope should be used when discussing the relationship between an area and the Project.

Project Boundary	The boundary defined in the Projects' licenses issued by FERC outlining the geographic area needed for project operations and maintenance. Project Boundary includes all structures (e.g., dams, powerhouses, or other structure used for generation of electricity), and all lands and waters necessary for the operation and maintenance of the project and for other project purposes, such as recreation, shoreline control, or protection of environmental resources, as designated in the project license. Project boundaries are used to designate the geographic extent of the hydropower project that FERC determines a licensee must own or control on behalf of its licensed hydropower project. For the purposes of this document, the Project Boundary is defined as all lands and waters within the existing FERC Project Boundary for the Idaho Falls and Gem State Hydroelectric Projects No. 2842 & 2952, as denoted on the Projects' Exhibit G.
Project area	The geographic area comprised of the lands and waters within the Project Boundary and those lands immediately adjacent to the Project Boundary. For the purposes of this document, the Project area is the area which contains all Project features (encompassing the Project Boundary as defined above), and which extends out for the purposes of characterization and analysis from the edge of the Project Boundary plus a 0.5-mile buffer .
Project vicinity	Refers to a larger geographic area near a project. For the purposes of this document, the Project vicinity is the area which contains all Project features (encompassing the Project Boundary as defined above), and which extends out for the purposes of characterization and analysis from the edge of the Project Boundary plus a 5-mile buffer . A 5-mile buffer may not be applicable to all resource sections; for some, an alternative geographic scope, such as a county, will be used for characterization and analysis.

1.0 INTRODUCTION

1.1 APPLICANT AND PROJECT BACKGROUND

Idaho Falls Power (IFP) is a municipal electric utility that serves the city of Idaho Falls, Idaho. IFP, the current licensee, owner, and operator, plans to file a new application for relicensing of two major projects, the Idaho Falls Hydroelectric Project (Idaho Falls Project), Federal Energy Regulatory Commission (FERC) Project No. 2842 and the Gem State Hydroelectric Project (Gem State Project), FERC Project No. 2952, herein collectively referred to as the “Projects”.

The 24.6-megawatt (MW) Idaho Falls Project consists of three developments on the Snake River in Bonneville County, Idaho, including: Upper Plant, located at approximately river mile (RM) 815.2; City Plant (RM 810.4); and Lower Plant (RM 808.7). The 22.6 MW Gem State Project consists of one development located at approximately RM 804.2 on the Snake River in Bonneville and Bingham Counties, Idaho. The Idaho Falls Project is located 1.9 miles upstream of the Gem State Project on the Snake River and extends approximately 11.9 miles north through the city of Idaho Falls. The Idaho Falls Project and Gem State Project Boundaries are separated by approximately 1.9 miles of free-flowing river between the tailrace of Idaho Falls Lower Plant Project and the headwaters of the Gem State Project. Land ownership in the Projects is a mix of federal, non-federal, and municipally owned lands. The United States Bureau of Land Management (BLM) administers 27.24 acres of lands within the Idaho Falls Project Boundary and 5.78-acres of lands within the Gem State Project Boundary.

FERC issued a 50-year license for both Projects. The existing Idaho Falls Project license was issued on February 8, 1979 and expires January 31, 2029, and the existing Gem State Project license was issued on December 12, 1983 and was originally set to expire on November 30, 2033. Because the two Projects are located in succession along the Snake River, and share similar resource issues and stakeholders, IFP intends to license the Projects concurrently to efficiently combine the relicensing process and studies for both Projects, as appropriate. In support of this approach, IFP requested FERC to shorten the Gem State Project license term to align with the

Idaho Falls Project license expiration date of January 31, 2029¹. Prior to filing this request, IFP consulted with various stakeholders including, Greater Yellowstone Coalition, BLM, Idaho Department of Parks and Recreation, Idaho Rivers United, United States Army Corps of Engineers, and Burns Paiute Tribe, regarding the license acceleration. None of the stakeholders objected to the request, and FERC granted this extension per Order dated October 12, 2021.²

IFP intends to file applications for new licenses for both Projects two years before the license expiration date, as required by Title 18 Code of Federal Regulations (CFR) Section (§) 5.17(a). Prior to filing the Draft License Applications, IFP will make a determination if a combined, single license for all developments is in the best interest of the utility. Reasons for a single license include administrative efficiencies, and a streamlined compliance environment.

IFP has elected to use the Integrated Licensing Process (ILP), as defined in 18 CFR Part 5. IFP has drafted this combined Pre-Application Document (PAD) pursuant to the content requirements of 18 CFR Part 5 and which will accompany IFP's Notice of Intent (NOIs) to seek new licenses for the Projects.

1.2 DOCUMENT PURPOSE

This PAD was prepared in compliance with 18 CFR Part 5, which defines the form and content requirements of the document. The purpose of the PAD is to provide FERC, federal and state agencies, and other interested stakeholders with existing background information related to facilities and engineering, operational, economic, and environmental aspects of the Projects. The PAD defines pertinent issues and potential study needs related to the Projects. In accordance with the regulations, the PAD and associated NOI will be filed with FERC and distributed to federal and state resource agencies, local governments, relevant tribal entities, non-governmental organizations (NGOs) and other interested parties.

¹ By letter dated August 12, 2021, IFP filed an application with FERC to accelerate the license term for the Gem State Hydroelectric Project from November 30, 2023 to January 31, 2029 (FERC 2021).

² FERC Order Accelerating License Term, Gem State Hydroelectric Project No 2952, issued October 12, 2021, 177 FERC ¶ 62,023.

By filing the NOI and PAD with FERC, IFP is initiating the FERC ILP relicensing process for the Idaho Falls and Gem State Projects. The purpose of this PAD is to describe the existing facilities and current and proposed operations at both Projects and to summarize existing information relevant to the evaluation of relicensing. In addition, the PAD is intended to assist resource agencies, municipalities, Native American tribes, NGOs and interested parties in identifying potential resource issues and related informational needs, and to develop potential study requests (18 CFR § 5.6(b)).

FERC’s regulations require that a licensee exercise due diligence to obtain and include existing relevant and reasonably available information about the Project and related resources. To fulfill this requirement, IFP reviewed its own files for relevant information and contacted appropriate resource agencies requesting information and data they may have about the Projects or Project-related resources. In addition, IFP conducted searches of other potential information sources, including peer-reviewed journal articles, reference books, and the internet. Information sources cited in this PAD are referenced in the associated chapters where they are used.

1.3 AUTHORIZED AGENTS

The following persons are authorized to act as agents for the applicant pursuant to 18 CFR § 5.6(d)(2)(i):

Richard Malloy
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140 S. Capital Avenue
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208-612-8428
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Travis (Bear) Prairie
General Manager
Idaho Falls Power
140 S. Capital Avenue
Idaho Falls, ID 83402
208-612-8429
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1.4 PRE-APPLICATION DOCUMENT CONTENT

This PAD contains all information required by 18 CFR § 5.6(c) and (d) for distribution to federal and state resource agencies, local governments, Native American tribes, members of the public, and others likely to be interested in the relicensing proceeding.

Volume I of this PAD is organized as follows:

- Table of Contents; List of Tables; List of Figures; List of Appendices; List of Photographs; Definitions of Terms, Acronyms, and Abbreviations
- Section 1.0 – Introduction and Background Information
- Section 2.0 – Process Plan and Schedule, per 18 CFR § 5.6(d)(1)
- Section 3.0 – General Description of the River Basin, per 18 CFR § 5.6(d)(3)(xiii)
- Section 4.0 – Projects Locations, Facilities, and Operations, per 18 CFR § 5.6(d)(2)
- Section 5.0 – Description of Existing Environment, per 18 CFR §5.6(3)(ii)-(xii)
- Section 6.0 – Preliminary Listing of Potential Issues, Information Needs, and Mitigation per 18 CFR § 5.6(d)(3) and (4)
- Section 7.0 – Description of Relevant Comprehensive Management Plans, per 18 CFR § 5.6(d)(4)(iii-iv);
- Appendices
 - Appendix A – Project Mapset
 - Appendix B – Flow Duration Curves
 - Appendix C – Historic Architectural Resources
 - Appendix D – Stakeholder Consultation

Volume II (CEII) of the PAD is organized as follows:

- Single-line Diagrams

2.0 PROCESS PLAN AND SCHEDULE

2.1 PROCESS PLAN AND SCHEDULE

The process plan and schedule outline actions by FERC, IFP, and other participants in the relicensing process, beginning with the NOI and PAD and continuing through the filing of the Final License Application (FLA). This proposed relicensing process plan and schedule for the Projects was developed consistent with the regulations provided in 18 CFR Part 5. IFP's proposed schedule (Table 2-1) provides each of the major relicensing activities in the ILP, the associated CFR references, the party responsible for implementation of the activity, and the deadline for each activity. All dates provided in Table 2-1 are derived from the NOI and PAD filing date of August 2, 2023, with an FLA filing date of January 29, 2027. IFP is also including timeframes for a Formal Dispute Resolution (18 CFR § 5.14), with the goal of working to resolve any study disputes that may through informal dispute resolution. Relicensing activities may be completed earlier than the deadline indicated below, and in many instances, the initiation of an activity is dependent up on the completion date of other activities. Accordingly, the schedule may change and as necessary, IFP will revise and maintain the updated version of the process plan and schedule on the Project website, as appropriate, which is available at: <https://www.ifpower.org/about-us/relicensing>.

2.2 COMBINED LICENSING PROCEEDING

In electing to align license expiration dates of the Idaho Falls Power Project and the Gem State Project, IFP anticipates the many steps of the licensing process will be combined into a single proceeding. However, for purposes of adhering to the licensing requirements of Part 1 of the Federal Power Act (FPA), the Administrative Record for each of the current licenses will be maintained separately, preserving the separate dockets at FERC. IFP's licensing documents will clearly identify whether content is applicable to one or both Projects. For example, it is anticipated that a single Study Plan will be filed, which may include some studies that are only applicable to one Project or the other. Stakeholders will also need to apply this treatment for the two dockets to ensure that their comments, recommendations, or proposed measures appropriately identify the intended Project. IFP is committed to assisting stakeholders in this process to minimize confusion.

TABLE 2-1 TIMELINE OF PROCESS PLAN AND SCHEDULE

PRE-FILING MILESTONE	PROPOSED DATE	FERC REGULATION	RESPONSIBLE PARTY
Issue Public Notice for NOIs/PAD	August 2, 2023	5.3(d)(2)	IFP
File NOIs/PAD	August 2, 2023	5.5, 5.6	IFP
Tribal Consultation Meeting	August 30, 2023	5.7	FERC
Issue Notice of Commencement of Proceeding and SD1	September 29, 2023	5.8(a)(c)	FERC
Scoping Meetings and Projects Site Visit	October-November, 2023*	5.8(b)(viii)	FERC
File Comments on PAD/SD1 and Study Requests	November 28, 2023	5.9(a)(b)	Stakeholders
Issue SD2 (if necessary)	January 12, 2024	5.10	FERC
File Proposed Study Plan	January 12, 2024	5.11(a)	IFP
Host Proposed Study Plan Meeting	February 09, 2024	5.11(e)	IFP
File Comments on Proposed Study Plan	April 11, 2024	5.12	Stakeholders
Issue Study Plan Determination	June 10, 2024	5.13(c)	FERC
File Any Study Disputes	June 28, 2024	5.14(a)	Mandatory Conditioning Agencies
Select Third Dispute Resolution Panel Member	July 5, 2024	5.14(d)	Dispute Panel
Convene Dispute Resolution Panel	July 15, 2024	5.14(d)(3)	Dispute Panel
File Comments on Study Disputes	July 25, 2024	5.14(i)	Dispute Panel
Dispute Resolution Panel Technical Conference	August 5, 2024	5.14(j)	Dispute Panel
Issue Dispute Resolution Panel Findings	August 19, 2024	5.14(k)	Dispute Panel
Issue Director’s Study Dispute Determination	September 6, 2024	5.14(l)	FERC
First Study Season and Study Review	June 10, 2025	5.15(a)	IFP
File Initial Study Report	June 10, 2025	5.15(c)(1)	IFP
Initial Study Report Meeting	June 25, 2025	5.15(c)(2)	Stakeholders
File Initial Study Report Meeting Summary	July 10, 2025	5.15(c)(3)	IFP
Second Study Season and Study Review	June 10, 2026	5.15(a)	IFP
File Updated Study Report	June 10, 2026	5.15(c)(1)	IFP
Updated Study Report Meeting	June 25, 2026	5.15(c)(2)	Stakeholders

PRE-FILING MILESTONE	PROPOSED DATE	FERC REGULATION	RESPONSIBLE PARTY
File Updated Study Report Meeting Summary	July 10, 2026	5.15(c)(3)	IFP
File Draft License Application ³	September 4, 2026	5.16(a)-(c)	IFP
File comments on Draft License Application	December 3, 2026	5.16(e)	Stakeholders
File Final License Application	February 1, 2027	5.17, 5.18	IFP
Issue Tending Notice and Decision on AIRs	February 15, 2027	5.19	FERC
Issue Notice of Acceptance and Ready for EA	February 15, 2027	5.22	FERC
Comments/Interventions and Preliminary Terms and Conditions	April 16, 2027	5.23	Stakeholders
Issue Non-Draft EA	June 15, 2027	5.24	FERC
Issue Modified Terms and Conditions	June 15, 2027	5.24	FERC
Issue Final License Order	September 13, 2027	2.25	FERC

Activities in shaded rows are not necessary if there are no study disputes.

*Dates show for the FERC Scoping meeting are tentative and subject to FERC planning and approval.

2.3 HOW TO PARTICIPATE IN RELICENSING

2.3.1 FERC RELICENSING PROCESS AND PARTICIPATION

Relicensing documents are available to the public through FERC’s eLibrary, a records information system on the internet that contains documents submitted to and issued by FERC. The eLibrary can be accessed through FERC’s home page, at <http://www.ferc.gov>, or directly at <https://elibrary.ferc.gov/idmws/search/fercgensearch.asp>. Anyone with internet access can open the public documents on FERC’s eLibrary website or be provided with a description of non-public records. There is no registration or login required to use eLibrary. eLibrary contains most of FERC’s documents, including microfilm records from 1981 forward. Most records after 1989 are in portable document format (PDF), which can be opened, copied, and downloaded to a computer. Documents only available in microfilm form can be requested from FERC’s Public Reference

³ The ILP regulations typically require the filing of a Preliminary Licensing Proposal at this stage; however, applicants can opt to submit a draft license application instead. IFP plans to utilize this option.

Room (<https://www.ferc.gov/public-reference-room>). Documents filed with FERC as part of the Projects' relicensing process are available for viewing and printing via eLibrary by searching under the Projects' docket numbers; the Idaho Falls Project number is P-2842 and the Gem State Project number is P-2952. Once relicensing begins, it is likely FERC will provide a sub-docket number for all relicensing-related filings and issuances. As described above, IFP anticipates that most filings will reference both docket numbers and encourages stakeholders to (1) be specific where their comments relate to only one Project, and (2) reference both docket numbers where applicable.

To facilitate communication during the relicensing process, IFP has established a publicly accessible website for the relicensing of the Projects which contains information regarding past and current relicensing activities, including relevant meeting materials, key decisions, and links to applicable information sources. IFP's website for the Idaho Falls and Gem State Projects relicensing is available at: <https://www.ifpower.org/about-us/relicensing>.

2.3.1.1 FERC COMMUNICATION

FERC has assigned a Project Manager to participate in relicensing meetings and provide guidance during the relicensing process in accordance with rules and regulations for the ILP. Kristin Sinclair is the current FERC Project Manager, who may be reached at 202-502-6587 (or email at kristen.sinclair@ferc.gov) to address questions related to FERC communication.

2.3.1.2 RESTRICTED DOCUMENTS

Certain Project-related documents known as Critical Energy Infrastructure Information (CEII) are restricted from public viewing in accordance with FERC Regulation 18 CFR § 388.113. CEII documents related to the design and safety of dams and its appurtenant facilities, as well as information that is necessary to protect national security and public safety are restricted. Anyone seeking CEII information from FERC must file a CEII request. FERC's website at www.ferc.gov/help/how-to/file-ceii.asp contains additional details related to CEII.

Information related to protecting sensitive archaeological or other culturally significant information is restricted under Section 106 of the National Historic Preservation Act (NHPA). Some information related to threatened and endangered species may be protected under Section 7 of the Endangered Species Act (ESA). Anyone seeking confidential or privileged information from

FERC must file a Freedom of Information Act (FOIA) request. Instructions for FOIA are available on the FERC website at www.ferc.gov/legal/ceii-foia/foia.asp.

2.3.1.3 SCOPING MEETING AND SITE VISIT

As set forth in the ILP regulations, FERC will issue Scoping Document 1 (SD1) within 60 days of the filing date of the NOIs and PAD. In addition, pursuant to 18 CFR § 5.8(b), FERC will hold scoping meetings and site visits to the Projects within 30 days of issuing notice of the NOI and PAD in accordance with its responsibilities under NEPA. FERC will provide public notice and schedule public scoping meetings and site visits to the Projects, to be held within 30 days of issuing SD1. IFP assumes that FERC will hold the scoping meetings concurrently for the Projects in late October or early November 2023. FERC will notice the dates, times, and location of the scoping meetings and publish that information in local papers after the filing the NOIs and PAD.

3.0 GENERAL DESCRIPTION OF THE RIVER BASIN

Per 18 CFR § 5.6(d)(3)(xiii), the following section provides a general description of the river basin or subbasin, in which the Projects are located.

3.1 SNAKE RIVER BASIN

The Snake River is a 1,076-mile-long river with headwaters in the Rocky Mountains of northwestern Wyoming. The Snake River flows through the state of Idaho, before turning north along the Idaho-Oregon border, and then into eastern Washington, before emptying into the Columbia River (Shallat 2022) as shown in Figure 3-1. The Snake River is the 13th longest river in the United States and is the largest tributary of the Columbia River (Shallat 2022), which itself is the nation's fourth largest river by volume (Kammerer 1990). The Snake River adds just over 30 percent to the Columbia River's volume. The watershed of the Snake River includes 41 percent of the Columbia River Basin (Shallat 2022).

The Snake River likely got its name from the first European explorers who misinterpreted the sign made by the Shoshone people who identified themselves in sign language by moving the hand in a swimming motion which may have appeared to be a snake; it actually signified that they lived near the river with many fish (USFWS n.d.). In 1811, Canadian explorer David Thompson referred to the Snake River by the Native American name of Shawpatin (Nisbet 2009). Between 1800 and 1912, the Snake River was given at least 15 different names by European explorers and settlers; in 1912 the United States Geographic Board officially named the river, Snake River (Hansen Whitewater n.d.).

The Snake River watershed encompasses 107,904 square miles and six states: Wyoming, Idaho, Oregon, Washington, Nevada, and Utah (Figure 3-1). The terrain of the Snake River basin is varied, from its headwaters in the Rocky Mountains, to the mile-deep Hells Canyon, and the Columbia River plateau (Shallat 2022). The area includes rugged mountains, semi-arid desert, fertile agricultural land (primarily irrigated), and barren outcrops of lava flows (University of Idaho 1998).

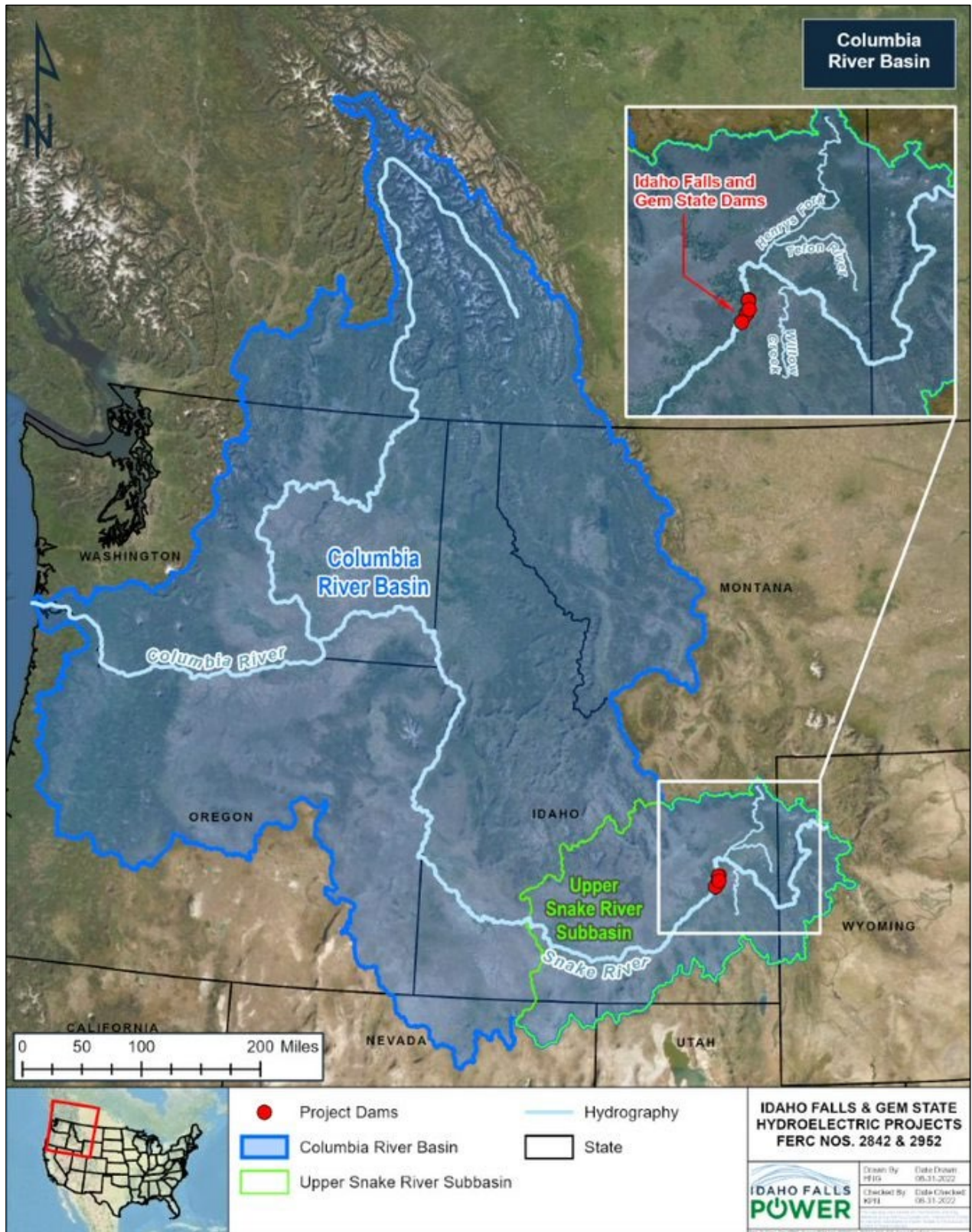


FIGURE 3-1 COLUMBIA RIVER BASIN

The Projects are located in the Upper Snake River Subbasin (Subbasin or Upper Snake), a 35,873-square-mile area in Idaho, Montana, Wyoming, Utah, and Nevada (BOR 2022) (Figure 3-2). Outside the developed urban area of the city of Idaho Falls, the general visual character of the Snake River in the area around the Idaho Falls and Gem State Projects is that of a wide, slow, meandering river passing through flat, irrigated cropland (FERC 1983a).

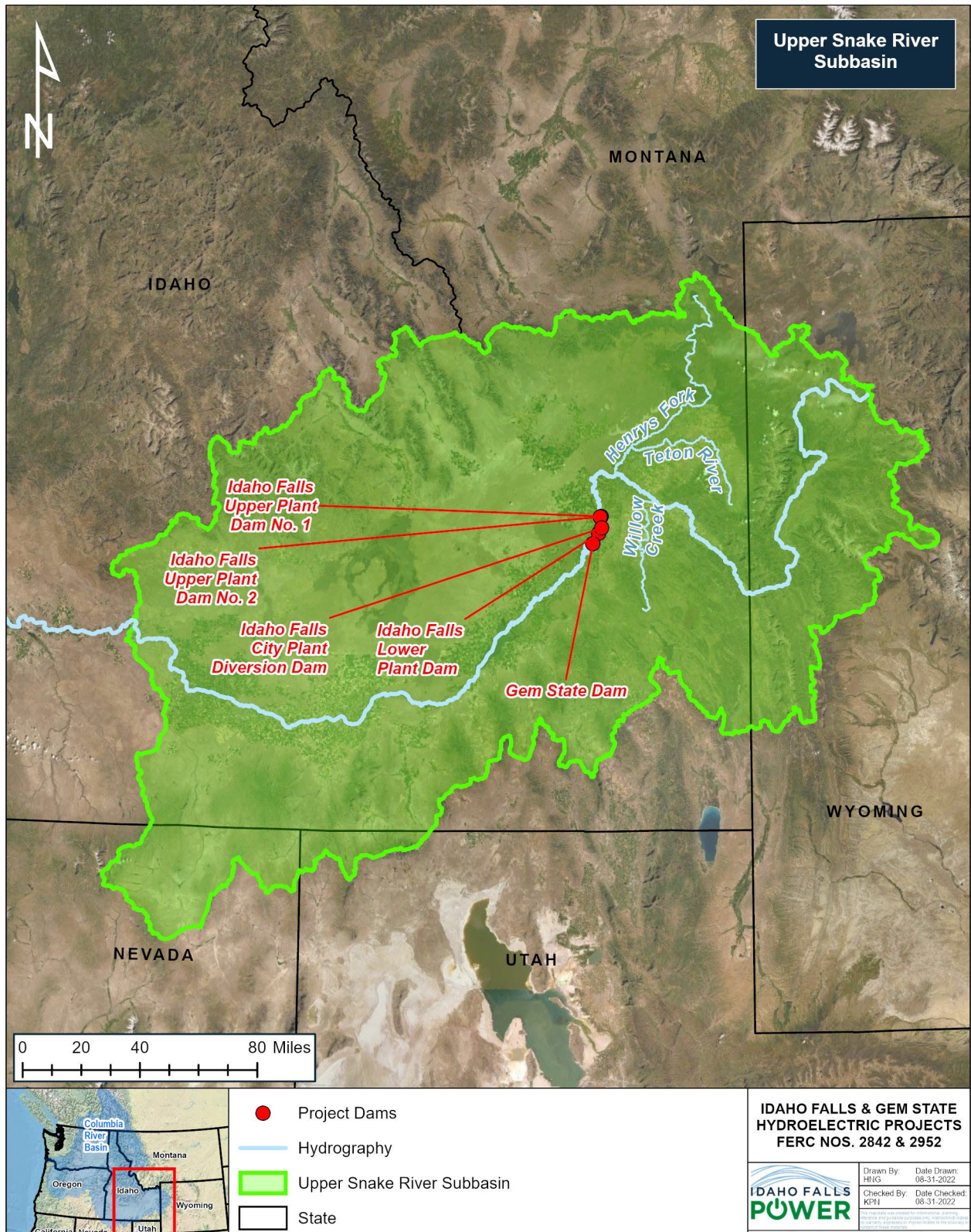


FIGURE 3-2 UPPER SNAKE RIVER SUBBASIN

3.2 MAJOR LAND AND WATER USES

The Snake River and its tributaries support many land uses including agricultural, municipal, industrial, and domestic, as well as recreation, Native American cultural uses and needs, and habitat for fish and wildlife (University of Idaho 1998).

Agriculture, Idaho's leading industry, is the largest water user in the state (University of Idaho 2010). The Snake River discharge in the Idaho Falls area is used extensively for irrigation purposes (FERC 1983a). Agricultural crops dominate this region of Idaho, including alfalfa, potatoes, and small grains (FERC 1983a). Two canal companies (Woodville Canal Company and the Snake River Irrigation Company) have water rights to divert a total of 1,604 cubic feet per second (cfs) from the Snake River via canals off the Gem State Project reach. This use is primarily restricted to the April through October growing season, with peak diversions occurring in June. There are no other diversions from the Snake River between the Gem State Project and the United States Geological Survey (USGS) gaging station at Shelley, Idaho, which is located at RM 802.3 (FERC 1983a). IFP is a department of the city of Idaho Falls, who has a year-round non-consumptive water right for 24,540 cfs authorized for a power beneficial use associated with the Projects (IDWR 2022).

In addition to agriculture, food processing, lumber, fertilizers, and concrete manufacturing also utilize high annual withdrawals of water from the Snake River. Food-processing industries withdraw relatively large volumes of water for meatpacking; fruit, vegetable and fish preparation and preservation; and beet sugar refining. Withdrawals for food processing follow a distinct seasonal pattern, with water use for sugar refining and potato processing being highest from September through March; water for canning and freezing of fruits and vegetables peaks from July through October; and water use for milk and meat processing industries is relatively constant throughout the year (Goodell 1988). Fish farms and hydroelectric power facilities are the primary non-consumptive⁴ uses of water in the Upper Snake (Clark et al. 1998).

⁴ Non-consumptive use is a term for water that is captured, treated, and may be reused, because it is not removed from the system. Once the water is used it may then be discharged back into the surface water or groundwater systems for recycling of supply (Arthur and Saffer n.d.).

3.2.1 MUNICIPAL AND DOMESTIC USE

The potable water for the city of Idaho Falls is supplied solely by groundwater sources derived from 19 water wells distributed across the city's service boundary. The water supply comes from the lower zone of the East Snake River Plain Aquifer, which stretches from St. Anthony, Idaho to Thousand Springs, near Twin Falls, Idaho (City of Idaho Falls 2015). More than 95 percent of public supply in the Snake River Plain is groundwater (Goodell, 1988). No municipal or domestic water is withdrawn from either the Idaho Falls Project or Gem State Project waters.

Additional details about water and land uses in the Project areas and vicinities are provided in Section 5.0, *Existing Environment* of this PAD.

3.2.2 RECREATION

The Snake River is a major feature in the city of Idaho Falls and as such, the city has developed several recreational facilities not relating to the hydro Projects providing residents and visitors access to the river. These include the Idaho Falls River Walk⁵ (Photo 3-1), a 5-mile paved trail on both sides of the Snake River (City of Idaho Falls, n.d.). Separately, IFP manages recreation facilities as part of its existing licenses for the Idaho Falls Project and the Gem State Project (FERC 1979, 1983b). Detailed descriptions of recreational facilities associated with the Idaho Falls and Gem State Projects, as well as regional recreation access areas are provided in Section 5.7, *Recreation and Land Use*, of this PAD.

⁵ While the river walk shares the Idaho Falls name, it is not associated with the Idaho Falls Hydroelectric Project as a FERC designated recreation facility.



Source: Kleinschmidt 2019

PHOTO 3-1 IDAHO FALLS RIVER WALK

3.3 OTHER DAMS AND DIVERSIONS

A hydropower dam built at RM 460.7 in 1901 at Swan Falls became the first to impound the mainstem of the Snake River. This was followed by Milner Dam at RM 647.2 in 1905, and Minidoka Dam at RM 682.2, completed in 1906 (Shallat 2022). The IFP dams were originally built between 1913 and 1946 and were rehabilitated in 1978 and 1982 (City of Idaho Falls 1978; IFP 2021). The Gem State Project Dam completed construction in 1988. The next dam upstream of the Idaho Falls Project on the Snake River is Palisades Dam; 92.9 miles upstream of the IFP Upper Plant. The Bureau of Reclamation’s American Falls Dam is located 79.0 miles downstream from the Gem State Project (Table 3-1).

On the lower Snake River, 699.2 miles downstream of the IFP Projects, upstream of its confluence with the Columbia River, are four United States Army Corps of Engineers (USACE) operated hydropower dams including the 603-megawatt (MW) Ice Harbor Lock and Dam at RM 8.6, 810-MW Lower Monumental Lock and Dam at RM 39.2, 810-MW Little Goose Lock and Dam at RM 67.8, and 810-MW Lower Granite Lock and Dam at RM 104.9 (Shallat 2022). Figure 3-3, below, shows all dams and diversions present on the Snake River.

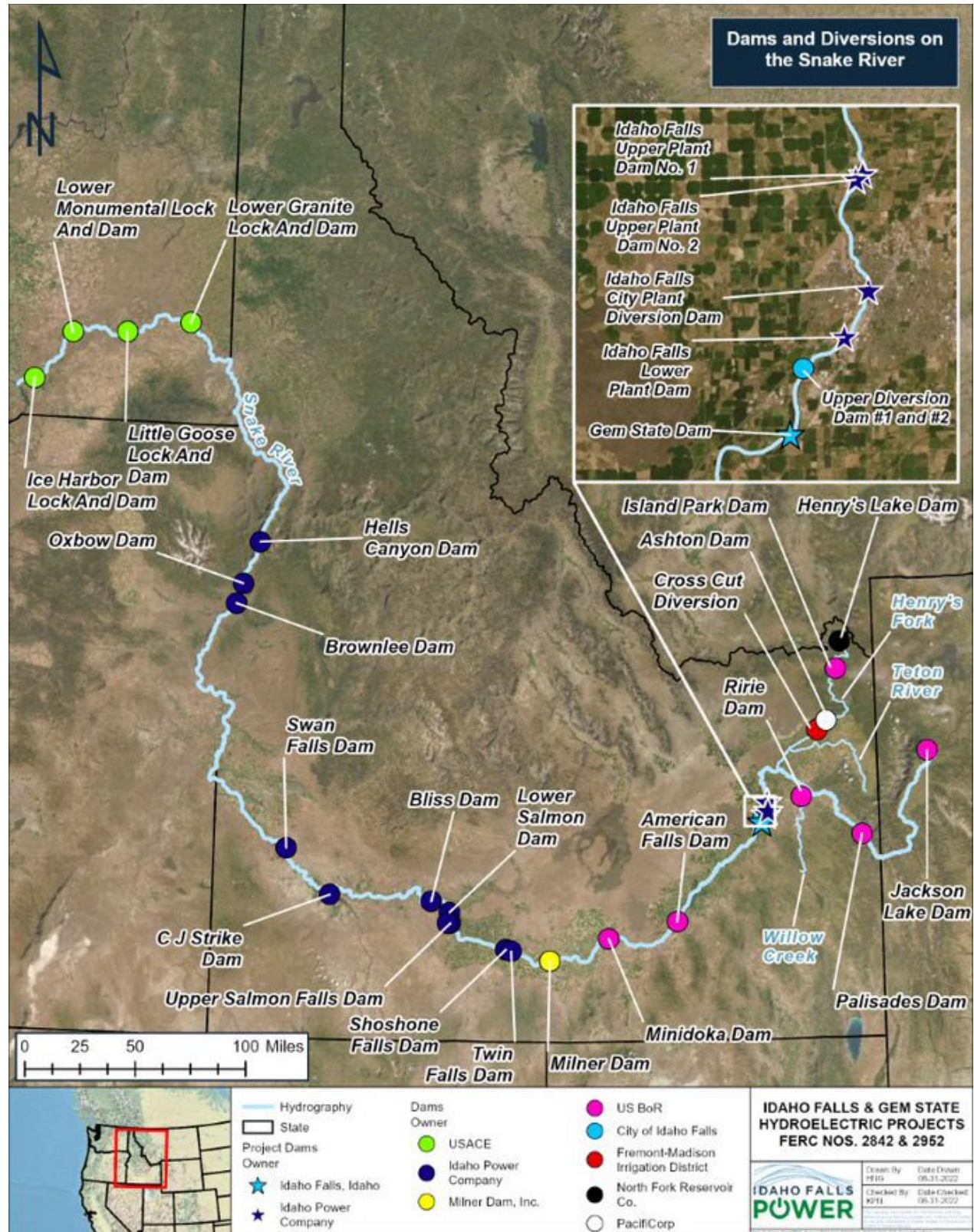


FIGURE 3-3 DAMS AND DIVERSIONS ON THE SNAKE RIVER

TABLE 3-1 NON-PROJECT DAMS ALONG THE SNAKE RIVER

Dam	River Mile	Owner
Swan Falls Dam	460.6	Idaho Power Company
Shoshone Falls Dam	622.4	Idaho Power Company
Twin Falls Dam	624.9	Idaho Power Company
Lower Salmon Dam	579.6	Idaho Power Company
Bliss Dam	566.7	Idaho Power Company
C J Strike Dam	497.7	Idaho Power Company
Hells Canyon Dam	246.1	Idaho Power Company
Brownlee Dam	282.8	Idaho Power Company
Oxbow Dam	271.7	Idaho Power Company
Upper Salmon Falls Dam	588.2	Idaho Power Company
Palisades Dam	908.6	BOR
American Falls Dam	725.1	BOR
Minidoka Dam	682.2	BOR
Milner Dam	647.2	Milner Dam, Inc.
Lower Monumental Lock and Dam	39.0	USACE
Little Goose Lock and Dam	67.8	USACE
Ice Harbor Lock and Dam	8.6	USACE
Lower Granite Lock and Dam	104.9	USACE
Jackson Lake Dam	1007.5	BOR

Source: Goodell 1988

BOR = United States Bureau of Reclamation, USACE = United States Army Corps of Engineers

3.3.1 TRIBUTARY RIVERS AND STREAMS

The Snake River has many tributary streams that provide a means of collecting the precipitation that accumulates in the mountains surrounding the Snake River Plain (University of Idaho 1998). The main tributaries that enter the Upper Snake Subbasin are Henry’s Fork, Teton River, and Willow Creek. North of the city of Idaho Falls, the Snake River is joined by Henry’s Fork and the Teton River, and Willow Creek from the south (City of Idaho Falls 1978) (Figure 3-4).

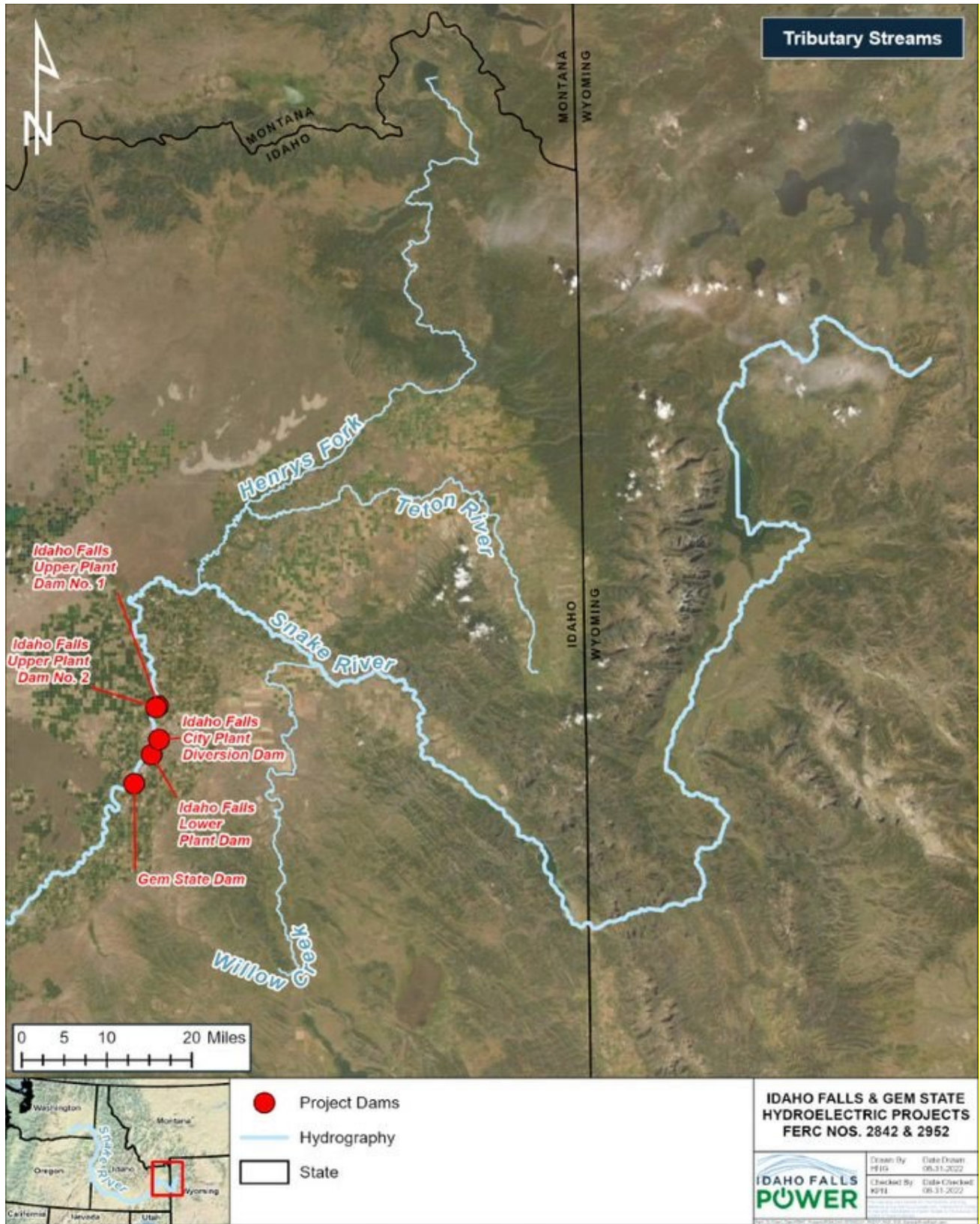


FIGURE 3-4 MAJOR TRIBUTARIES TO THE SNAKE RIVER IN THE UPPER SNAKE SUBBASIN

3.4 REFERENCES

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4.0 PROJECTS LOCATIONS, FACILITIES, AND OPERATIONS

Per 18 CFR § 5.6(d)(2), the following sections describe the location, facilities, and operations of the Idaho Falls Project and the Gem State Project. Please note that measurements reported from the 1978 City of Idaho Falls License Application (Idaho Falls 1978) and 1979 FERC License (FERC 1979) are assumed to be in National Geodetic Vertical Datum (NGVD) unless referenced otherwise.

4.1 PROJECTS' LOCATIONS

The Projects are located on the Snake River near the city of Idaho Falls, in Bingham and Bonneville counties, Idaho (Figure 4-1). The three-development Idaho Falls Project facilities are located between RM 808.7 and 815.2, and the single-development Gem State Project is located at RM 804.2 (Figure 4-2). The Idaho Falls FERC Project Boundary is depicted in Figure 4-3 and the Gem State FERC Project Boundary is depicted in Figure 4-4. There are 27.6 acres of federal lands associated with the Idaho Falls Project and 5.78 acres of federal lands associated with the Gem State Project. A complete set of detailed maps showing lands and waters within the Project Boundary of each Project, as well as the township, range and section, state, county, river, river mile, and closest town, and the specific locations of any federal and tribal lands, are included in Appendix A of this PAD.

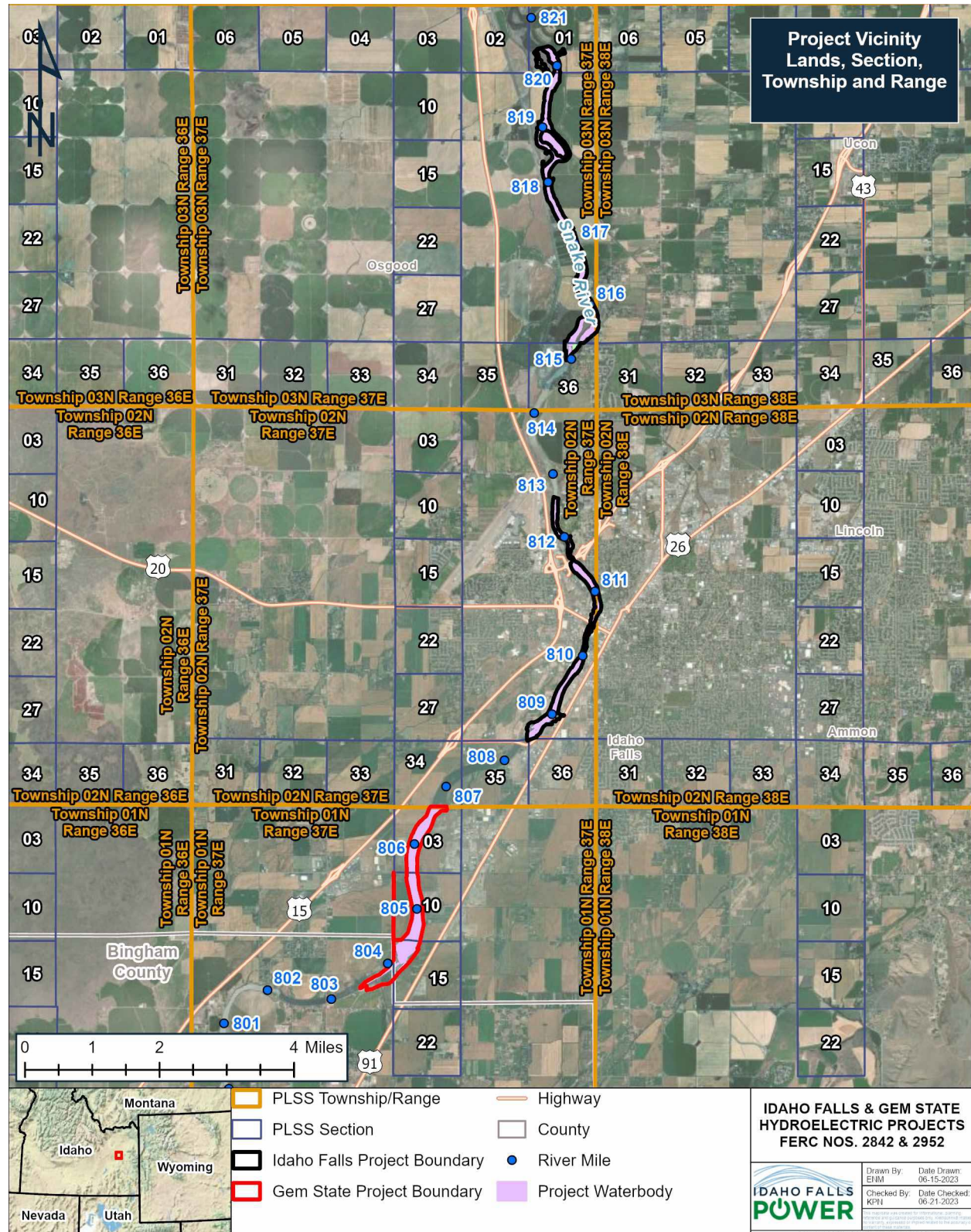


FIGURE 4-1 IDAHO FALLS AND GEM STATE PROJECT BOUNDARIES

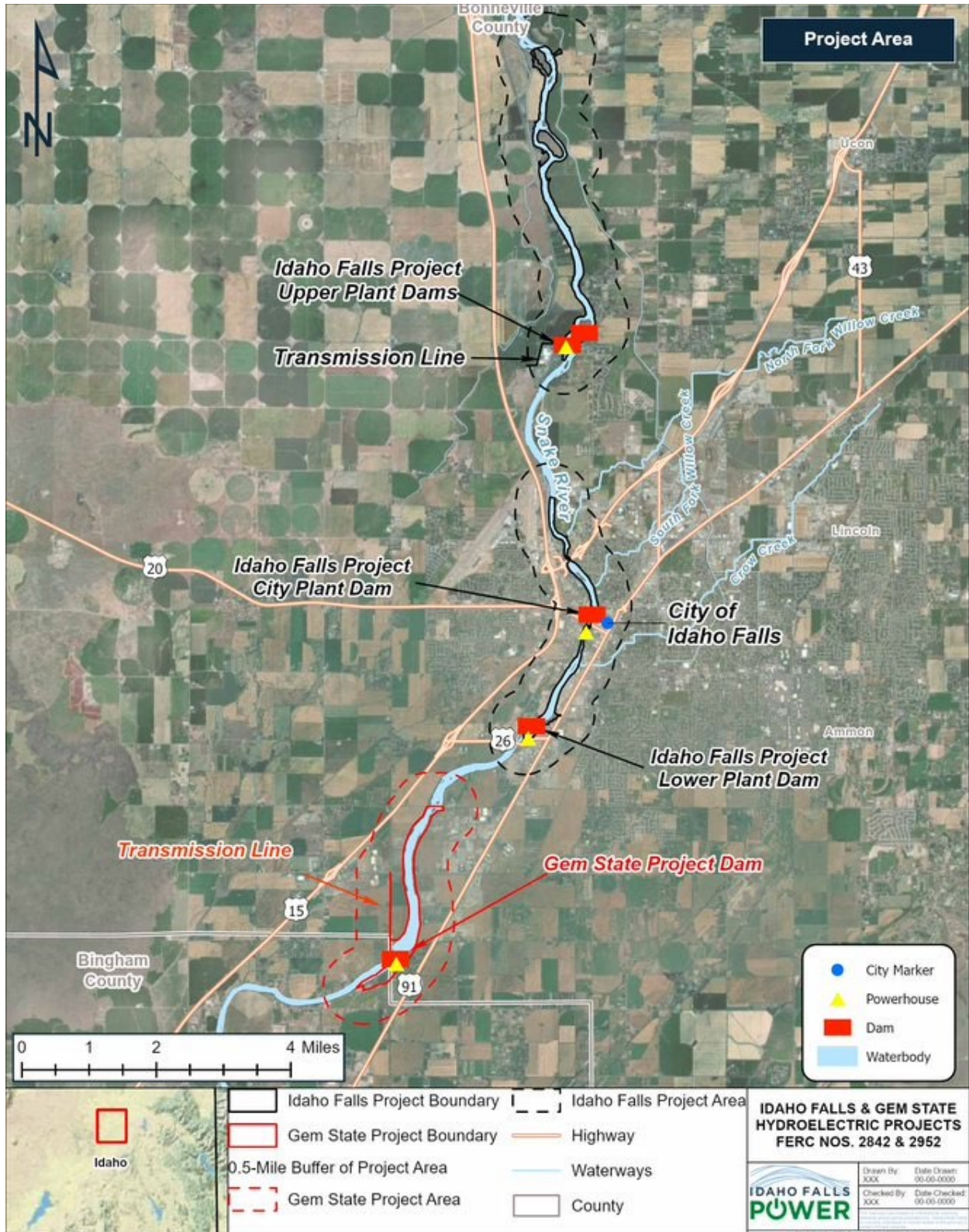


FIGURE 4-2 IDAHO FALLS PROJECT AND GEM STATE PROJECT LOCATIONS

4.2 PROJECTS' FACILITIES

4.2.1 IDAHO FALLS PROJECT FACILITIES

The Idaho Falls Project is a run-of-river facility consisting of three plants which all began commercial operation in 1982. The 24.6 MW Idaho Falls Project consists of three developments (Upper Plant, City Plant, and Lower Plant), located directly upstream of the Gem State Project on the Snake River in Bonneville County and extending approximately 7 miles upstream through and north of the city of Idaho Falls (Figure 4-2). Recreation facilities are described in Section 5.7, *Recreation and Land Use*, of this PAD. From north to south, the Idaho Falls Upper Plant is located in Township 03N, Range 37E and Township 03N, Range 38E, and the City and Lower Plant are located in Township 02N, Range 37E and Township 02N, Range 38E (Figure 4-2).



FIGURE 4-3 IDAHO FALLS FERC PROJECT BOUNDARY

4.2.1.1 TURBINES AND GENERATORS AT IDAHO FALLS PROJECT POWERHOUSES

The generating units at Upper, City, and Lower Plants are comprised of three identical axial-flow, horizontal bulb turbine generator with Kaplan runner and adjustable wicket gates (one at each plant) (FERC 1986). In each plant the generator is installed upstream of the turbine in a bulb-shaped steel casing. Table 4-1 provides the turbines capacity. The bulb unit is placed in the water flow at the center of the water passage, the shape and dimensions of which are dictated by the unit. The generator bulb provides a watertight casing for the assembled parts of the immersed equipment and give necessary access for inspection and maintenance. The turbine runner and generator rotor are mounted on a horizontal shaft with two guide bearings and a two-way thrust bearing (FERC 1986).

The loads and thrusts affecting the bulb are transferred to the concrete structure through a fixed vertical pedestal below the bulb and a fixed vertical column above the bulb. The column provides two access means into the turbine shaft and bearing area downstream of the generator. A separate shaft upstream of the generator carries the outgoing electrical bus duct, piping, and control cable as well as providing maintenance access to the generator. The wicket gate operating ring is equipped with a counterweight to ensure emergency closure (FERC 1986).

An electronic-hydraulic governor controls the speed and load according to the forebay water level. Each governor includes a steel oil reservoir with an air-over-oil pressure tank accumulator; oil pumping equipment; an air compressor; and speed-sensing equipment with a speed signal generator mounted on the turbine generator shaft (FERC 1986).

TABLE 4-1 IDAHO FALLS PROJECT RATED CAPACITY OF TURBINES

Rated Capacity (hp)	Rated Capacity (MW)	Rated Head (ft)	Rated Speed (rpm)	Max. Net Head (ft)	Min. Net Head (ft)	Runner Diameter (ft)
11,130	8.3	18	94.7	20.1	13.3	15.91

Source: FERC 1986

The generators at the Upper, City, and Lower Plants are three-phase synchronous machines, forced air cooled, complete with static exciters. Table 4-2 provides their characteristics. An indoor-type,

5 kV generator circuit breaker is provided for all plants. The circuit breakers for all plants are installed in the control room of each plant (FERC 1986).

TABLE 4-2 IDAHO FALLS PROJECT GENERATOR CAPACITIES

Continuous Rating (kVA)	Voltage, Phase-to-Phase	Power Factor	Frequency (Hz)	Rated Speed (rpm)
8,900	4.16	0.80	60	94.7

Source: FERC 1986, Personal Communication 2023

Two upstream bulkheads and two downstream draft-tube bulkheads are provided for each unit. The turbine inlet has a central pier with two openings; each is provided with a steel bulkhead in four sections to enable the entrance to the unit to be closed completely. The draft-tube with two openings has two similar bulkheads. Each opening has side slots with fixed metal guide frames. One lifting beam with an automatic hooking device is used for removing and storing bulkheads.

4.2.1.2 UPPER PLANT FACILITIES

The Upper Plant Development facilities consist of two concrete and earthfill dams (Dam No. 1 and Dam No. 2), spillways and a powerhouse (Photo 4-1). Details of Upper Plant Facilities are described in Table 4-3.



Source: Kleinschmidt 2019

PHOTO 4-1 UPPER PLANT DAM NO. 1

TABLE 4-3 IDAHO FALLS UPPER PLANT DAM NO. 1 COMPONENTS SUMMARY

UPPER PLANT DAM NO. 1 FACILITIES	
ITEM	DESCRIPTION
Upper Plant Dam No. 1 Dependable Capacity	6.4 MW
Upper Plant Dam No. 1 River Mile (RM)	805 RM
Reservoir	
Normal Surface Area	100 acres
Normal Surface Elevation	4734.7 feet
Usable Storage Capacity	N/A
Gross Storage Capacity	800 acre-feet
Dams	
Height	23 feet
Normal Crest Elevation	4,740.5 feet
Length	600 feet
Layout (Composition & Configuration)	Low, concrete, earthfill, diversion structure with 150 feet by 10 feet hydraulically operated Pelican flap gates (for flood, ice-jam, and debris protection) and an uncontrolled concrete overflow spillway
Overflow Dam Dimensions	23 feet high, 600 feet long, 430 feet wide
Spillway Crest Elevation	4,734.7 feet
Intake	
Intake Construction	Installed for maximum flood discharge of 61,000 cfs with temporary surcharge upstream to elevation 4,378.7 feet
Intake Dimensions	39 feet 5.25 inches tall by 14 feet wide
Trashrack Dimensions	44 feet tall by 14 feet wide
Transmission Lines	
Number	N/A
Length	N/A
Voltage	N/A
Interconnections	Travels west into the Paine Substation and connects directly to the existing city of Idaho Falls 46 kV and 161 kV transmission system. The Upper Plant is connected to a 4.16 kV – 46 kV transformer rated at 7 mega volt ampere

Source: FERC 1978, IFP 2022, Personal Communication 2023

TABLE 4-4 IDAHO FALLS UPPER PLANT DAM NO. 2 COMPONENTS SUMMARY⁶

UPPER PLANT DAM NO. 2 FACILITIES	
ITEM	DESCRIPTION
Upper Plant Dam No. 2 Capacity	6.4 MW
Upper Plant Dam No. 2 River Mile (RM)	805 RM
Average Annual Energy Production	50,413.21 MWh
Average Annual Monthly Production	5.75 MWh
Reservoir	
Normal Surface Area	N/A
Normal Surface Elevation	N/A
Usable Storage Capacity	N/A
Gross Storage Capacity	N/A
Dams	
Height	33 feet
Normal Crest Elevation	4,734 feet
Length	470 feet
Layout (Composition & Configuration)	Concrete and earthfill diversion structure with a 40-foot by 11-foot pelican gate and concrete uncontrolled overflow spillway
Overflow Dam Dimensions	23 feet high, 600 feet long, 430 feet wide
Spillway Crest Elevation	4,734 feet
Intake	
Intake Construction	Installed on the left side of the powerhouse with temporary surcharge in the forebay up to 4,739 feet for maximum flood discharge to 16,200 cfs.
Intake Dimensions	39 feet 5.25 inches tall by 14 feet wide
Trashrack Dimensions	44 feet tall by 14 feet wide
Powerhouse	
Year Built	1982

⁶ Idaho Power 1978, Personal Communication 2023

UPPER PLANT DAM NO. 2 FACILITIES	
ITEM	DESCRIPTION
Construction Type	Concrete
Dimensions	140 feet long, 38 feet wide, 62 feet tall
Penstock	N/A
Tailrace	Extends 1,000 feet downstream from the powerhouse
Capacity of Generator	One 7,200 kW, 0.8 power factor, 4.16 kV, three-phase, synchronous machine, forced air cooled, complete with stator exciters installed
Installed (Rated) Capacity of Generator	One 7,200 kW, 0.8 power factor, 4.16 kV, three-phase, synchronous machine, forced air cooled, complete with stator exciters installed
Turbines	
Number	1
Type	Axial-flow, horizontal bulb, Kaplan runner and adjustable wicket gates
Estimated Hydraulic Capacity	6,000 cfs
Capacity of Turbine	8.3 MW
Installed (Rated) Capacity of Turbine	8.3 MW
Transmission Lines	
Number	One 3 phase
Length	0.5 miles
Voltage	46 kV
Interconnections	Travels west into the Paine Substation and connects directly to the existing city of Idaho Falls 46 kV and 161 kV transmission system. The Upper Plant is connected to a 4.16 kV – 46 kV transformer rated at 7 mega volt ampere

UPPER PLANT DAMS AND SPILLWAY

Located at RM 805 on the Snake River, Dam No. 1 is a 600-foot-long and 23-foot-high concrete and earthfill structure containing a 30-inch square sluice gate and two 150-foot by 10-foot pelican gates with a spillway crest elevation of 4,734.7 feet (United States Geological Survey [USGS] datum). Dam No. 1 diverts Snake River flows into the west channel for power generation at the powerhouse. This unlined channel extends about 3,000 feet downstream from the Snake River to the powerhouse.

Dam No. 2 is a 470-foot-long and 33-foot-high concrete and earthfill structure across the west channel of the river about 1,800 feet downstream of Dam No. 1, containing a 40-foot by 11-foot pelican gate with a spillway crest elevation of 4,734.0 feet (USGS datum) and an integral powerhouse containing a 7,200 kilowatt horizontal Kaplan bulb turbine generator; and appurtenant

facilities including generator leads, step-up transformers and approximately 300 feet of cable extending to IFP's distribution system (FERC 1979). The forebay channel extends downstream from the end of the diversion dam to the powerhouse for approximately 2,000 feet, passing under the Broadway Bridge.

RESERVOIR

The Dam No. 1 reservoir is a two-mile-long, 800-acre-foot gross capacity reservoir with a normal surface area of 100 acres (FERC 1979) and no usable storage capacity as the Project is considered run-of-river. The normal maximum water surface elevation is 4,734.7 feet. There is no reservoir associated with Dam No. 2 (City of Idaho Falls 1978).

POWERHOUSE

The Upper Plant Powerhouse is a 140-foot-long by 38-foot wide and 62-foot-tall concrete structure, flanked on both sides by concrete overflow dams and non-overflow earthfill dikes (Dam No. 2). A concrete deck provides access to the powerhouse (City of Idaho Falls 1978). The powerhouse contains a 7,200-kilowatt axial-flow horizontal Kaplan bulb turbine generator; and appurtenant facilities including generator leads, step-up transformers and approximately 300 feet of cable extending to IFP's overhead distribution system located on the east side of the powerhouse (FERC 1979).

TAILRACE

The tailrace channel at the Upper Plant extends about 1,000 feet downstream from the powerhouse to the river. The channel is excavated basalt bedrock for the deeper setting of the bulb turbine generator (City of Idaho Falls 1978).

TRANSMISSION LINES

One 3 phase 46 kV radial transmission line of approximately 0.5 miles in length, heading west into the Paine Substation and connects directly to the existing city of Idaho Falls 46 kV and 161 kV transmission system. The Upper Plant is connected to a 4.16 kV – 46 kV transformer rated at 7 mega volt ampere (MVA) /8.15 MVA (Oil and Air cooled [OA]/Forced Air [FA]) (City of Idaho Falls 1978).

4.2.1.3 CITY PLANT FACILITY

The City Plant Facility is located at RM 800 within the city of Idaho Falls (Photo 4-2). Components of the City Plant Facility are detailed in Table 4-5.



Source: Kleinschmidt 2019

PHOTO 4-2 CITY PLANT DAM

TABLE 4-5 CITY PLANT COMPONENTS SUMMARY TABLE⁷

CITY PLANT	
ITEM	DESCRIPTION
City Plant Dam Capacity	5.6 MW
City Plant Dam River Mile (RM)	RM 800
Average Annual Energy Production	47784.68 MWh
Average Monthly Energy Production	5.45 MWh
Reservoir	
Normal Surface Area	50 acres
Normal Surface Elevation	4,694 feet
Usable Storage Capacity	N/A
Gross Storage Capacity	400 acre-feet
City Plant Dam	
Height	7 feet on average, 20-30 feet at upstream section, and 18 feet at downstream section
Normal Crest Elevation	4,694.7 feet
Length	1,970 feet (1,870-foot-long section and 100-foot-long section)
Layout (Composition & Configuration)	Concrete gravity diversion dam with a 40-foot by 5-foot Bascule gate near the right abutment
Overflow Dam Dimensions	7-foot-tall main concrete section, 1,757-foot-long, and overflow section approximately 70 feet long
Spillway Crest Elevation	4,694.75 feet
Intake	
Intake Construction	Reinforced concrete 1980

⁷ Idaho Power 1978, Personal Communication 2023

CITY PLANT	
ITEM	DESCRIPTION
Intake Dimensions	39 feet 5.25 inches tall by 14 feet wide
Trashrack Dimensions	44 feet tall by 14 feet wide
Powerhouse	
Year Built	1982
Construction Type	Concrete
Dimensions	140 feet long, 38 feet wide, maximum height of 62 feet with an adjacent control building-maintenance shop that is 50 feet by 115 feet
Penstock	N/A
Tailrace	350 feet downstream from powerhouse
Capacity of Generator	One 7,200 kW horizontal bulb turbine generator
Installed (Rated) Capacity of Generator	One 7,200 kW horizontal bulb turbine generator
Turbines	
Number	1
Type	Axial-flow, horizontal bulb, Kaplan runner and adjustable wicket gates
Estimated Hydraulic Capacity	6,000 cfs
Capacity of Turbine	8.3 MW
Installed (Rated) Capacity of Turbine	8.3 MW
Transmission Lines	
Number	N/A
Length	N/A
Voltage	N/A
Interconnections	Power output will be transmitted by a 300-foot cable to the existing 44/12.5-kV City substation

CITY PLANT DAM AND SPILLWAY

The City Plant Dam is a 1,970-foot-long and 30-foot-high concrete dam containing a 40-foot by 5-foot Bascule gate with a spillway crest elevation of 4,694.7 feet (USGS datum), located at RM

800. The City Plant Dam contains a 126-foot by 20-foot trashrack with a 20-foot-wide by 5-foot-high gated spillway that has a discharge capacity of 2,500 cfs and water surface elevation of 4,699 feet and is located across the east channel of the river about 600 feet upstream of the powerhouse.

RESERVOIR

The reservoir at the City Plant extends approximately one mile upstream from the City Plant Dam. It covers an area of approximately 50 acres at the normal water surface elevation of 4,694 feet. The gross storage capacity is 400 ac-ft (City of Idaho Falls 1978). There is no usable storage capacity associated with the Project as it is run-of-river.

POWERHOUSE

The City Plant Powerhouse is a 140-foot-long, 38-foot-wide, and 62-foot-tall concrete structure (FERC 1979), with a 50-foot-long by 115-foot-wide control building-maintenance shop adjacent to the powerhouse (City of Idaho Falls 1978). The powerhouse contains one axial-flow horizontal bulb Kaplan runner turbine with adjustable wicket gates. The proposed turbine has an installed (rated) capacity of 8.3MW (City of Idaho Falls 1978). The powerhouse also contains a 7,200-kW horizontal bulb turbine generator, and appurtenant facilities including generator leads, step-up transformers and about 200 feet of cable extending to the City Plant Substation (FERC 1979).

TAILRACE

The City Plant tailrace extends 350 feet downstream from the powerhouse to the river, and the channel is excavated basalt bedrock. Additional excavation was needed to deepen the setting for a new bulb turbine generator but did not pose any special problems. A 15-foot-wide ramp along the east side of the tailrace channel provides access to the top of the powerhouse draft-tube deck.

TRANSMISSION LINES

The City Plant does not have an associated transmission line. The power output of the City Plant is transmitted by a 46 kV cable approximately 300 feet in length which connects directly to the existing city of Idaho Falls 44/12.5-kV substation (City of Idaho Falls 1983). The City Plant generator is connected to a 4.16 – 46 kV -12.47/7.3kV transformer rated at 7.75/25/25 MVA (Forced Oil and Forced Air). This generator can be replaced by the IFP standard spare without the

12.47kv winding. Low voltage connections to the power transformer are by insulated cable. High voltage connections to the transformer are by uninsulated overhead conductors (City of Idaho Falls 1983). A single line drawing for the City Plant can be found in Volume II of this PAD.

4.2.1.4 LOWER PLANT FACILITY



Source: Kleinschmidt 2019

PHOTO 4-3 LOWER PLANT DAM AND POWERHOUSE

TABLE 4-6 LOWER PLANT COMPONENTS SUMMARY TABLE

LOWER PLANT	
ITEM	DESCRIPTION
Lower Plant Dam Capacity	6.1 MW
Lower Plant Dam River Mile (RM)	798 RM
Average Annual Energy Production	40,223.58 MWh
Average Monthly Energy Production	4.58 MWh
Reservoir	
Normal Surface Area	100 acres
Normal Surface Elevation	4,674 feet
Usable Storage Capacity	N/A
Gross Storage Capacity	800 acre-feet

LOWER PLANT	
ITEM	DESCRIPTION
Dam	
Height	14.0 feet
Normal Crest Elevation	4,674.5 feet
Length	930 feet
Layout (Composition & Configuration)	Concrete uncontrolled spillway section with eight 20 feet by 14 feet radial gates (one radial gate with concrete non-overflow section and seven radial gates with a gated spillway section), one 42 feet by 12 feet pelican flap gate, an intake/powerhouse section, and a new intake/powerhouse section.
Overflow Dam Dimensions	638 feet long with a non-overflow dam on the left side of the overflow dam and overflow section on right side of the existing overflow dam (both sides rebuilt in 1977)
Spillway Crest Elevation	4,674.5 feet
Intake	
Intake Construction	Reinforced concrete
Intake Dimensions	39 feet 5.25 inches tall by 14 feet wide
Trashrack Dimensions	Two 44 feet tall by 14 feet wide intakes
POWERHOUSE	
Year Built	1982
Construction Type	Reinforced concrete
Dimensions	Two concrete structures across the east channel (powerhouse one is 85 feet by 80 feet with two 1,500 kW generating units and powerhouse 2 is 140 feet by 38 feet with a 7,200-kW horizontal bulb turbine generator)
Penstock	N/A
Tailrace	Extends 80 feet downstream from the powerhouse
Capacity of Generators	Two generators with 2.4kV, 0.8 power factor, each are three-phase with nameplate rating of 1875 kVA
Installed (Rated) Capacity of Generators	Two generators with 2.4kV, 0.8 power factor, each are three-phase with nameplate rating of 1875 kVA
Turbines	
Number	2
Type	Standby Morgan Smith turbines with axial-flow, horizontal bulb, a Kaplan runner and adjustable wicket gates
Estimated Hydraulic Capacity	6,000 cfs
Capacity of Turbines	8.3 MW

LOWER PLANT	
ITEM	DESCRIPTION
Installed (Rated) Capacity of Turbines	8.3 MW
Transmission Lines	
Number	N/A
Length	N/A
Voltage	N/A
Interconnections	Connected by underground cable to the Rack Substation, the city of Idaho Falls kV transmission system, and to a 4.16 kV – 46 kV transformer rated at 7 mega volt ampere (MVA)/ 8.15 MVA.

LOWER PLANT DAMS AND SPILLWAY

The Lower Plant Dam is a 930-foot-long concrete dam with a crest elevation of 4,674.5 feet (USGS datum) across the west channel of the river at RM 798. The Lower Plant Dam has a spillway with a crest elevation of 4,674.5 feet (USGS datum) containing eight 20-foot by 14-foot radial gates and a 42-foot by 12-foot pelican gate (FERC 1979).

RESERVOIR

The Lower Plant reservoir is 2 miles long and covers an area of approximately 100 acres at the normal water surface elevation of 4,674 feet and has a minor effect on the tailwater at the City Plant. The gross storage capacity of the Lower Plant reservoir is approximately 800 acre-feet. There is no usable storage capacity associated with the Project as it is run-of-river.

POWERHOUSE

The Lower Plant began commercial operation in April 1982, although the two old Lower Plant units were installed and have been operational since 1942. There are two concrete powerhouse structures, which collectively constitute the structure across the east channel of the river. One powerhouse is an 85-foot by 80-foot powerhouse containing two 1,500 kW generating units, and the other is a 140-foot by 38-foot concrete powerhouse containing a 7,200-kW horizontal bulb turbine generator (FERC 1979).

STANDBY TURBINES AND GENERATORS

The Lower Power Plant has two Standby Morgan Smith turbines. One unit was installed in 1940 and the other in 1946 and are adjustable-blade (Kaplan) and fixed-blade propeller type, respectively. Each unit has a nameplate rating of 2,300 hp at 18-foot head and 138.5 rpm and an installed (rated) capacity of 8.3MW. The generators are 2.4 kV, 0.8 power factor, three-phase having nameplate rating of 1875 kVA each. Both generators are connected through generator circuit breakers to one three-phase 3750 kVA, 2.4-12.5 kV power transformer. The power plant is connected by an underground cable to a 12.5 kV circuit breaker position at the existing Rack Substation approximately 1,000 feet from the existing powerhouse (FERC 1979).

TAILRACE

The basalt bedrock tailrace channel at the Lower Plant extends 80 feet downstream from the powerhouse to the Snake River.

TRANSMISSION LINES

The Lower Plant is connected to the 46 kV system at the Rack Substation located approximately 1,000 feet upstream of the powerhouse. Like the Upper and City plants, the Lower Plant is also connected directly to the city of Idaho Falls kV transmission system. The Lower Plant is connected to a 4.16 kV – 46 kV transformer rated at 7 mega volt ampere (MVA) /8.15 MVA (Oil and Air cooled [OA]/Forced Air [FA]).

4.2.1.5 IDAHO FALLS PROJECT APPURTENANT FACILITIES

Electrical auxiliary equipment is located at the upper level of each power plant. This equipment is comprised of control switchboards, a station service transformer, station batteries and charger, low voltage alternating current (AC) and direct current (DC) switchgear, and other auxiliary and control equipment.

A 12-foot-wide service road downstream from the Upper Plant Powerhouse on the right bank provides access to the top of the draft-tube deck.

Two trashracks, composed of several panels of flat bars supported on cross beams, are provided for each unit; one for each turbine inlet opening.

4.2.2 GEM STATE PROJECT FACILITIES

The 22.6 megawatt (MW) Gem State Project is a run-of-river generating facility consisting of one development, built in 1987, and is located on the Snake River at RM 804.2, in Bingham and Bonneville counties, Idaho, approximately 5.5 miles southwest of the city of Idaho Falls (Figure 4-3). The Gem State Project is located in Township 02N, Range 37E and Township 01N, Range 37E (Figure 4-4). All facilities associated with the Gem State Project are described in Table 4-7.

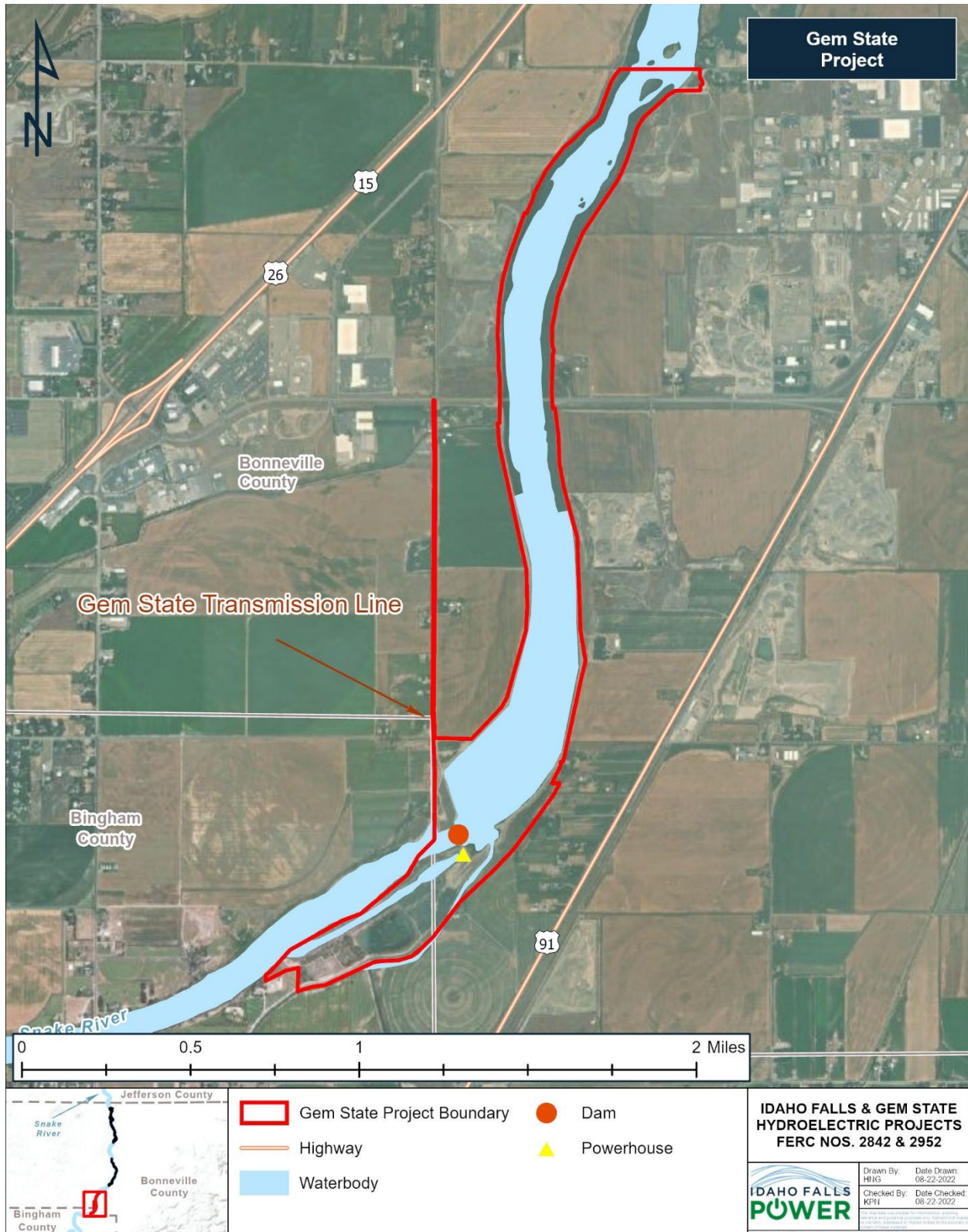


FIGURE 4-4 GEM STATE FERC PROJECT BOUNDARY



Source: Kleinschmidt 2019

PHOTO 4-4 GEM STATE DAM

TABLE 4-7 GEM STATE PROJECT COMPONENTS SUMMARY

ITEM	DESCRIPTION
Gem State Dam Capacity	22.3 MW
Gem State Dam River Mile	RM 790
Average Annual Energy Production	132,113.27 MWh
Average Monthly Energy Production	15.05 MWh
Reservoir	
Normal Surface Area	305 acres
Normal Surface Elevation	4,655.0 feet
Usable Storage Capacity	N/A
Gross Storage Capacity	Approximately 5,000 acre-feet
Dam	
Height	40 feet
Normal Crest Elevation	4,600 feet
Length	900 feet
Layout (Composition & Configuration)	900-foot-long earth and rock fill dam with a maximum height of approximately 60 feet, a 7,300-foot-long earth fill dike on right bank and a 10,400-foot-long earth fill dike on left bank
Spillway Crest Elevation	4,625 feet
Intake	

ITEM	DESCRIPTION
Intake Construction	Reinforced concrete
Intake Dimensions	Two 45 feet tall by 25 feet and 2 inch wide
Trashrack Dimensions	30 feet 10 inches tall by 25 feet by 2 inches wide
Powerhouse	
Year Built	1988
Construction Type	Reinforced concrete
Dimensions	66 feet wide by 152 feet long by 110 feet high
Penstock	N/A
Tailrace	3,300 feet long and 100 feet wide located between the powerhouse and river
Capacity of Generator	One vertical-axis Kaplan unit with adjustable-blade runner and wicket gates
Installed (Rated) Capacity of Generator	One vertical-axis Kaplan unit with adjustable-blade runner and wicket gates
Turbines	
Number	1
Type	Single Kaplan Vertical
Estimated Hydraulic Capacity	7,000 cfs
Capacity of Turbine	22.3 MW
Installed (Rated) Capacity of Turbine	22.3 MW
Transmission Lines	
Number	1
Length	1.4 miles
Voltage	161-kV
Interconnections	Connect from the powerhouse across the spillway discharge channel to the Utah Power and Light existing distribution line and then ties into the city of Idaho Falls' existing 161-kV south loop transmission line

4.2.2.1 DAM

The Gem State Project Dam is a 900-foot-long, 40-foot-high earthfill, concrete, and rockfill dam (Photo 4-4). The crest elevation is 4,600 feet; the top width is 20 feet, including riprap. The dam embankment is zoned and includes an impervious core, sand filter, and gravel shells. The upstream face is protected from erosion using rock riprap (FERC 1990).

4.2.2.2 RESERVOIR

The Gem State Project reservoir extends 20,000 feet upstream. The normal reservoir water surface elevation is 4,655 feet. At normal pool elevation, the reservoir has a surface area of 305 acres and

gross storage capacity of 5,000 ac-ft. There is no usable storage capacity associated with the Project as it is run-of-river (FERC 1990).

4.2.2.3 POWERHOUSE

The Gem State Project powerhouse is located adjacent to the spillway. The dimensions of the powerhouse are 152 feet long, 66 feet wide, and 107 feet deep measured from rock beneath the draft-tube to roadway deck (FERC 1990).

4.2.2.4 SPILLWAY

The Gem State Project spillway has five radial gates with the spillway crest at elevation 4,625 feet. In the fully closed position, the top of the gates is at elevation 4,656 feet. With all spillway gates in the fully opened position, the hydraulic capacity is 11,300 cfs, which approaches the Probable Maximum Flood (PMF). Each bay is 46 feet wide and 31 feet high. A 20-foot-wide roadway has been provided over the spillway (FERC 1990).

4.2.2.5 TAILRACE

The 3,300-foot-long tailrace is located between the powerhouse and the river with a constant width of 100 feet, excavated from native basalt rock and includes one 700-foot riprapped section. The tailrace enters the river via flared and curved section that raises the invert elevation from elevation 4,595 feet to the riverbed elevation of 4,607 feet. Access to the area between the tailrace and the river is provided from the gravity wall between the powerhouse and the spillway (FERC 1990).

4.2.2.6 DRAINAGE FACILITIES

Earthfill dikes (river-right and river-left) are constructed so that surrounding area drainage does not collect at their toes. The left dike has an open-jointed reinforced concrete collection pipe beneath its landward toe to intercept any seepage coming through the dike. The diameter varies from 24 inches to 36 inches discharging into the tailrace. In addition to dike seepage, this drain also accommodates excess irrigation water from three adjacent landowners by means of strategically located catch basins. The right bank dike also has a seepage collector drain beneath its landward toe, made of perforated corrugated PVC pipe varying in diameter from 12 inches to

24 inches. Its discharge point is slightly beneath ground surface on the right abutment (FERC 1990).

4.2.2.7 TURBINES AND GENERATORS

The Gem State Project consists of one conventional vertical-axis Kaplan turbine and generator. The unit has an adjustable-blade runner with wicket gates. Characteristics are provided in Table 4-8 below. An outdoor-type, 161-kV circuit breaker is provided (FERC 1990).

TABLE 4-8 GEM STATE TURBINE CAPACITY

Rated Discharge (cfs)	Output at Rated Head (hp)	Output at Rated Head (kW)	Rated Head (ft)	Max. Head (ft)	Runner Diameter (ft)
7,000	31,258	22,600	42	42	18.37

Source: FERC 1990

The Gem State Project generator is a three-phase synchronous machine, forced air collect, with static exciter (FERC 1990). The generator specifications are included in Table 4-9 below.

TABLE 4-9 GEM STATE GENERATOR CHARACTERISTICS

Continuous Rating (kVA)	Rated Armature Voltage	Power Factor	Frequency (Hz)	Synchronous Speed (rpm)
26,000	13,800	0.8	60	100

Source: FERC 1990

An electronic-hydraulic governor controls the turbine load according to the forebay water level. The governor includes a steel oil reservoir with an air-over-oil pressure tank accumulator, oil pumping equipment, air compressor, and speed-sensing equipment with a speed signal generator mounted on the turbine generator shaft (FERC 1990).

One set of two upstream bulkheads and two downstream draft-tube bulkheads have been provided. The upstream bulkheads intake gates are roller-mounted and are stored in their slots. The downstream bulkheads, draft-tube gates, are slide gates and are also stored in their slots. All gates are serviced by rubber-tired mobile cranes (FERC 1990).

4.2.2.8 PRIMARY TRANSMISSION LINES

The Gem State Project transmission line is a 1.4-mile-long, 161-kV overhead line from the powerhouse across the spillway discharge channel, immediately downstream of the gates, to an intersection with the Rocky Mountain Power (RMP), formerly Utah Power & Light, existing distribution line. From that point it replaces RMP poles to a point on the north side of Highway 26, where it ties into the city of Idaho Fall's existing 161-kV south loop transmission line. The previously existing RMP distribution line is now underbuilt on the Project 161-kV poles (FERC 1990).

Power generated at the Gem State Plant is stepped up to transmission voltage at a substation located at the powerhouse. The transmission line leaves this substation via a takeoff tower (FERC 1990).

One three-phase 13.8-161 kV, 15/20-250 MVA OA/FA power transformer is provided to step up the voltage. Primary and secondary connections to the power transformer are by insulated cable (FERC 1990).

4.2.2.9 GEM STATE PROJECT APPURTENANT FACILITIES

Electrical auxiliary equipment is located on the operating level of the power plant. This equipment is comprised of control switchboards, a station service transformer, station batteries and charger, low voltage AC and DC switchgear, and other auxiliary and control equipment.

Gravel surface access roads have been provided at the spillway and powerhouse. Access from the right bank to the spillway is from improved gravel access via the top of the dam. Access to the left bank and powerhouse is from Canyon Road, a county line road, via an access road to the site.

4.2.3 PROJECTS' OPERATIONS

Both the Idaho Falls and Gem State Projects are run-of-river projects. Flows through each powerhouse (in cfs) are displayed in the IFP control room to ensure operators are aware of the flow rate at all times. A single supervisory control and data acquisition (SCADA) system is run from the control room at the IFP main office located adjacent to the City Plant bulb turbine unit. This system is used for all three bulb projects (Idaho Falls Project) as well as the Gem State Project (IFP 2018).

More information is provided below on the Projects. Additional information concerning water quantity and quality, water rights, and usage of water is provided in Section 5.2, *Water Resources*, of this PAD.

4.2.3.1 IDAHO FALLS PROJECT OPERATIONS

During normal operations, all three of the Idaho Falls Project's hydroelectric plants are controlled remotely from a central room located in the control and maintenance building at the City Plant. The master station of the SCADA system is installed in this room. Local controls are also provided at each plant.

Pursuant to the current Idaho Falls Project license, Article 40 requires IFP to discharge a continuous minimum flow of 100 cfs at the Upper Plant diversion dam, and reserves FERC's authority to order an increase in minimum flows if 100 cfs proves to be inadequate to maintain water quality.

The water rights for the Project include existing prior rights plus additional claims and applications on file with the state of Idaho Department of Water Resources (IDWR). The sum of these existing rights, claims, and applications total 6,000 cfs for the Upper Plant; 6,000 cfs for the City Plant; and 8,440 cfs for the Lower Plant. The right to use these flow volumes at each site allows operation of the plants at full design capacity (City of Idaho Falls 1978).

4.2.3.2 GEM STATE PROJECT OPERATIONS

The Gem State Project is a run-of-river project with no draw down and fill operations. Flow forecasting is done with a combination of upstream gates and releases scheduled from upstream storage reservoirs not controlled by IFP. All river flows, except for the license required bypass flow of approximately 20 cfs, are passed through the turbine for flows up to 7,000 cfs, which is the hydraulic capacity of the turbine. The powerhouse wicket gates are adjusted to maintain plant intake/forebay elevation between 4,654.9 and 4,655.2 feet. Spillway radial gates are to be opened gradually at flows greater than 7,000 cfs to maintain the normal pool elevation (IFP 2018).

If the powerplant trips offline or is taken offline for maintenance and flow through the powerhouse is interrupted, Radial Gates 1 and/or 2 are opened to pass the flow and maintain the forebay level. The gates are also opened to pass flows that exceed 7,000 cfs (IFP 2018).

Flood flows greater than turbine capacity (7,000 cfs) are routed through the spillway. Gates can be opened manually or automatically from the central control room. Normal operation is sequential rather than partial opening of multiple gates. Should flows in excess of 70,000 cfs occur, Radial Gates 3, 4, or 5 would be opened accordingly to maintain the forebay elevation parameters defined in the existing license. The powerhouse will be shut down and protected against high tailwater by placing stoplogs in the tailrace at flows above 70,000 cfs. All flows will then pass through the spillway. The capacity of the spillway at the normal reservoir elevation, with all gates open, is 114,000 cfs (IFP 2018).

Additional information concerning water quantity and quality, water rights, and usage of water is provided in Section 5.2, *Water Resources*, of this PAD.

4.2.4 DEPENDABLE CAPACITY

The dependable capacity, in MWs, and the average annual, and average monthly energy production in kilowatt hours (kWh) for the Idaho Falls and Gem State Projects are provided in Table 4-10.

TABLE 4-10 DEPENDABLE CAPACITY OF PROJECTS FROM 2017-2021

Project	Dependable Capacity (MW)	Average Annual Energy Production (kWh)	Average Monthly Energy Production (kWh)
Idaho Falls Upper Plant	8.2	50,413.21	5.75
Idaho Falls City Plant	8.2	47,784.68	5.45
Idaho Falls Lower Plant	8.2	40,223.58	4.58
Total Idaho Falls Project	24.6	138,421.47	5.25
Gem State Project	22.6	132113.27	15.05

Source: Idaho Falls Power

4.2.5 EXISTING LICENSE

Per 18 CFR § 5.6(d)(2)(v), the following text describes information required to be included in the Pre-Application Document for an existing license.

4.2.5.1 IDAHO FALLS PROJECT CURRENT LICENSE REQUIREMENTS

The Idaho Falls Project license is subject to FERC's standard terms and conditions designated Articles 1 through 19 and 21 through 37 set forth in Form L-6 (revised October 1975), entitled Terms and Conditions of License for Unconstructed Major Project Affecting Navigable Waters and Lands of the United States. Additional, Project-specific license articles are stated in the 1979 Order Issuing License (Major) and are summarized in Table 4-11.

TABLE 4-11 IDAHO FALLS PROJECT LICENSE REQUIREMENTS

Article	Requirement
Article 38	Before beginning construction of any project work, the Licensee shall submit and obtain approval by the Director, Office of Electric Power Regulation, revised Exhibit L drawings conforming to the Commission’s Regulations and showing the final designs of that project work. The project works shall be designed to be stable, structurally sound, and safe, to the satisfaction of the Director.
Article 39	Within one year from the date of issuance of this license, the licensee shall submit for approval by the Director, Office of Electric Power Regulation, a plan and schedule for replacing the concrete in the radial gate portion of the Lower Plant development.
Article 40	Pending further order by the Commission, on its own motion or at the request of others, the Licensee shall discharge a continuous minimum flow of 100 cfs at Dam No. 1 at the Upper Plant. This flow may be modified temporarily if required: (1) by operating emergencies beyond the control of the Licensee; or (2) for fishery management purposes, upon mutual agreement between the Licensee and the Idaho Department of Fish and Game.
Article 41	The licensee shall dispose of, in a suitable location, all waste material generated from demolition of existing and temporary structures at each plant site, dredged or excavated material, unused timber, brush, refuse, or other unneeded material resulting from construction, from clearing land, or from the maintenance or alteration of project works. All clearing of lands and disposal of waste material shall be carried out with due diligence in a manner that will preserve the environmental values of the project area, to the satisfaction of the authorized representative of the Commission, and in accordance with appropriate Federal, state, and local laws and regulations. All material accumulated behind cofferdams installed to facilitate project construction and development shall be removed for disposal before the cofferdams are removed.
Article 42	Within one year from the date of issuance of this order the Licensee shall file for approval a revised Exhibit R that conforms to the requirements of the Commission’s Regulations. The revised Exhibit R shall include, among other things: a description, schedule, and estimated costs for developing the potential recreational resources on the Upper Plant Island, at the boat access area near the Upper Plant diversion dam, and on Keefer Island in the reservoir of the City Plant development; revised Exhibit R drawings (with appropriate references to Exhibit K), to include within the project boundary: (a) all lands currently designated by the Licensee (in its master plan or elsewhere) as existing or future recreation sites at the project for boat ramps, docks, and

Article	Requirement
	swimming areas; and (b) all islands or parts of islands in project waters that are owned by the Licensee; and detailed site development drawings of all existing and future project recreational areas.
Article 43	If any previously unrecorded archeological or historical sites are discovered during the course of construction or development of any project works or other facilities, construction activity shall be halted in the vicinity, a qualified archeologist shall be consulted to determine the significance of the sites, and the Licensee shall consult with the State Historic Preservation Officer (SHPO) to develop a mitigation plan for the protection of significant archeological or historic resources. The Licensee shall provide funds in a reasonable amount for such activity. If the Licensee and SHPO cannot agree on the amount of money to be expended on archeological or historic work related to the project, the Commission reserves the right to require the Licensee to conduct, at its own expense, any such work found necessary.
Article 44	Within one year of completion of project construction, the Licensee shall file a revised Exhibit F and, for approval, ‘as built’ Exhibits K, L and M, to show and describe the project works and equipment and appurtenances as finally constructed and located, including the project generator leads, step-up transformers, and cables extending to the Licensee’s distribution system.
Article 45	Licensee shall file with the Commission, implement, and modify when appropriate, an emergency action plan designed to provide an early warning to upstream and downstream inhabitants and property owners if there should be an impending or actual sudden release of water caused by an accident to, or failure of, project works. That plan shall be submitted prior to initial operation of the project and shall include: instructions to be provided on a continuing basis to operators and attendants for actions they are to take in the event of an emergency; detailed and documented plans for notifying law enforcement agents, appropriate Federal, state, and local agencies, operators of water-related facilities, and those residents and owners of properties that could be endangered; actions that would be taken to reduce the inflow to the reservoir, if possible, by limiting the outflow from upstream dams or control structures; and actions to reduce downstream flows by controlling the outflow from dams located on tributaries to the stream on which the project is located. Licensee shall also submit a summary of the study used as a basis for determining the areas that may be affected by an emergency, including criteria and assumptions used. Licensee shall monitor any changes in upstream or downstream conditions which may influence possible flows or affect areas susceptible to damage and shall promptly make and file with the Commission appropriate changes in the emergency action plan. The Commission reserves the right to require modifications to the plan.

Article	Requirement
Article 46	<p>In the interests of protecting and enhancing the scenic, recreational and other environmental values of the project, the Licensee: (1) shall supervise and control the use and occupancy of project lands and waters; (2) shall prohibit, without further Commission approval, the further use and occupancy of project lands and waters other than as specifically authorized by this License; (3) may authorize, without further Commission approval, the use and occupancy of project lands and waters for landscape plantings and the construction, operation, and maintenance of access roads, power and telephone distribution lines, piers, landings, boat docks, or similar structures and facilities, and embankments, bulkheads, retaining walls, or other similar structures for erosion control to protect the existing shoreline; (4) shall require, where feasible and desirable, the multiple use and occupancy of facilities for access to project lands and waters; and (5) shall ensure to the satisfaction of the Commission’s authorized representative that all authorized uses and occupancies of project lands and waters (a) are consistent with shoreline aesthetic values, (b) are maintained in a good state of repair, and (c) comply with state and local health regulations. Under item (3) of this article, the Licensee may, among other things, institute a program for issuing permits to a reasonable extent for the authorized types of use and occupancy of project lands and waters. Under appropriate circumstances, permits may be subject to the payment of a fee in a reasonable amount. Before authorizing the construction of bulkheads or retaining walls, the Licensee shall: (a) inspect the site of the proposed construction, (b) determine that the proposed construction is needed, and (c) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site. If an authorized use or occupancy fails to comply with the conditions of this article or with any reasonable conditions imposed by the Licensee for the protection of the environmental quality of project lands and waters, the Licensee shall take appropriate action to correct the violations, including, if necessary, cancellation of the authorization and removal of any non-complying structures or facilities. The Licensee’s consent to an authorized use or occupancy of project lands and waters shall not without its express agreement, place upon the Licensee any obligation to construct or maintain any associated facilities.</p>
Article 47	<p>Requires the licensee to install and operate signs, lights, sirens, or other safety devices that may reasonably be needed to warn public of fluctuations in flow from the project and protect the public in its recreational use of project lands and waters.</p>

Article	Requirement
	The Licensee shall, to the satisfaction of the Commission’s authorized representative, install and operate any signs, lights, sirens, or other safety devices that may reasonably be needed to warn the public of fluctuations in flow from the project and protect the public in its recreational use of project lands and waters.
Article 48	<p>Requires the licensee to continue to consult and cooperate with U.S. Fish and Wildlife Service (FWS) and other appropriate agencies, during the period of the license, for the protection and enhancement of natural values and resources of the project area.</p> <p>During the period of this license, the Licensee shall continue to consult and cooperate with the U.S. Fish and Wildlife Service of the Department of the Interior, and other appropriate Federal, state, and local agencies for the protection and enhancement of the natural resources and values of the project area.</p>
Article 49	The Licensee shall commence construction of the project within two years from the effective date of this license and, in good faith and with due diligence, shall prosecute and complete construction of the project works within six years of the effective date of this license.
Article 50	During the construction of project works, Licensee shall take all necessary precautions to prevent accidental spillage of chemical, toxic, or other polluting materials into project waters. If spillage of such materials should occur, Licensee shall take all practicable measures to clean up and dispose of those materials to preserve the ecosystem in the vicinity of the project.
Article 51	<p><i>FERC’s January 26, 1993 Order Amending License and Revising Annual Charges Revised Article 51 to read as follows:</i></p> <p>The Licensee shall pay the United States the following annual charge, effective the first day of the month in which this license is issued:</p> <p>(i) For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable annual charge as determined by the Commission in accordance with the provisions of its Regulations in effect from time to time. The authorized installed capacity for that purpose is 32,800 horsepower;</p>

Article	Requirement
	<p>(ii) For the purpose of recompensing the United States for the use, occupancy, and enjoyment of its lands, an amount as may be determined from time to time pursuant to the Commission’s regulations. The acreage of land for such purpose is as follows:</p> <ul style="list-style-type: none">a. The acreage for land other than for transmission line right-of-way is 9.61.b. The acreage for land for transmission line right-of-way is 0.25.

Source: FERC 1979

4.2.5.2 GEM STATE PROJECT CURRENT LICENSE REQUIREMENTS

The Gem State Project license is subject to FERC's standard terms and conditions set forth in Form L-6 (revised October 1975), entitled Terms and Conditions of License for Unconstructed Major Project Affecting Navigable Waters and Lands of the United States. Additional, Project-specific license articles are stated in the 1983 Order Issuing License (Major) and summarized in Table 4-12.

TABLE 4-12 GEM STATE PROJECT LICENSE REQUIREMENTS

Article	Requirement
Article 38	The Licensee shall, within 90 days of completion of construction file, for approval by the Director, Office of Electric Power Regulation, revised Exhibits F, G, and A to describe the project as-built.
Article 39	The Licensee shall review and approve the design of contractor-designed cofferdams and deep excavations prior to start of construction and shall ensure that construction of cofferdams and deep excavations are consistent with the approved design. At least 30 days prior to start of construction of the cofferdam, the Licensee shall file with the Commission's Regional Engineer and Director, Office of Electric Power Regulation, one copy of the approved cofferdam construction drawings and specifications and a copy of the letter(s) of approval.
Article 40	The Licensee shall commence construction of the project works within two years from the issuance date of the license and shall complete construction of the project within five years from the issuance date of the license.
Article 41	The Licensee shall file with the Commission's Regional Engineer and the Director, Office of Electric Power Regulation, one copy each of the contract drawings and specifications for pertinent features of the project, such as water retention structures, powerhouse and water conveyance structures, at least 60 days prior to the start of construction. The Director, Office of Electric Power Regulation, may require changes in the plans and specifications to assure a safe and adequate project.
Article 42	The Licensee shall retain a Board of three or more qualified; independent, engineering consultants to review the design, specifications and construction of the project for safety and adequacy, inter alia: (1) possible foundation problems in the basalt bedrock; (2) potential groundwater problems; (3) length of earthfill dam and dikes and slurry cutoff wall; (4) lack of PMF determination; and (5) possible inadequate spillway capacity.
Article 43	The Licensee shall file revised Exhibit F drawings showing the final design of the project structures for approval by the Director, Office of Electric Power Regulation. The revised Exhibit F drawings shall be filed at least 60-days prior to start of construction and shall be accompanied by a supporting design report. The Licensee shall not commence construction of any project structure until the revised Exhibit F therefore has been approved.

Article	Requirement
Article 44	<p>(a) In accordance with the provisions of this article, the Licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain other types of use and occupancy, without prior Commission approval. The Licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the Licensee shall also have continued responsibility to supervise and control the use and occupancies for which it grants permission, and to monitor the use of, ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the Licensee for protection and enhancement of the project’s scenic, recreational, or other environmental values, or, if a covenant of a conveyance made under the authority of this article is violated, the Licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.</p> <p>(b) The type of use and occupancy of project lands and waters for which the Licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) noncommercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; (4) food plots and other wildlife enhancements. To the extent feasible and desirable to protect and enhance the project’s scenic, recreational, and other environmental values, the Licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The Licensee shall also ensure, to the satisfaction of the Commission’s authorized representative, that the uses and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the Licensee shall: (1) inspect the site of the proposed construction; (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site; and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline. To implement this paragraph (b), the Licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the Licensee’s costs of administering the permit program. The Commission reserves the right to require the Licensee to file a description</p>

Article	Requirement
	<p>of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.</p> <p>(c) The Licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges or roads where all necessary state and Federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69 kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the Licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.</p> <p>(d) The Licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and Federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary Federal and state water quality certificates or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary Federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least one-half mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from the edge of the project reservoir at normal maximum surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 60 days before conveying any interest in project lands under this paragraph (d), the Licensee must submit a letter to the Director, Office of Energy Projects, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G map may be used), the nature of the proposed use, the identity of any Federal or state agency official</p>

Article	Requirement
	<p>consulted, and any Federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the Licensee to file an application for prior approval, the Licensee may convey the intended interest at the end of that period.</p> <p>(e) The following additional conditions apply to any intended conveyance under paragraphs (c) or (d) of this article:</p> <p>(1) Before conveying the interest, the Licensee shall consult with Federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.</p> <p>(2) Before conveying the interest, the Licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved report on recreational resources of an Exhibit E; or, if the project does not have an approved report on recreational resources, that the lands to be conveyed do not have recreational value.</p> <p>(3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project; and (iii) the grantee shall not unduly restrict public access to project waters.</p> <p>(4) The Commission reserves the right to require the Licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project’s scenic, recreational, and other environmental values.</p> <p>(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G drawings would be filed for approval for other purposes.</p>

Article	Requirement
Article 45	<p><i>FERC's July 23, 1990 Order Amending Articles 45 and 46 and Approving and Modifying a Revised Water Quality Monitoring Plan Revised Article 45 to read as follows:</i></p> <p>The licensee shall conduct water quality monitoring according to the plan approved by the Commission. Monitoring results shall be maintained by the licensee and provided to the U.S. Fish and Wildlife Service, the Idaho Department of Fish and Game, and the Environmental Protection Agency upon completion of the monitoring study. The Licensee shall file a report regarding project-induced changes in water quality with the Commission by November 30, 1990. The report shall include, but be not limited to, plots of water temperatures and dissolved oxygen concentrations versus sampling date for each of the test flows, a summary of the water quality monitoring data in tabular form, and the aforementioned resource agency comments. Based on this report, the Commission reserves the right to change project operations and or require additional monitoring to ensure maintenance of the dissolved oxygen concentrations and water temperatures necessary to protect the fish resources of the Snake River.</p>
Article 46	<p><i>FERC's July 23, 1990 Order Amending Articles 45 and 46 and Approving and Modifying a Revised Water Quality Monitoring Plan Revised Article 46 to read as follows:</i></p> <p>The licensee shall maintain in the reach between the toe-of-the-dam and backwater reach of the Snake River a continuous minimum flow of 20 cubic feet per second, as measured immediately downstream from the dam, or inflow to the reservoir, whichever is less, for the purpose of maintaining state water quality standards and protecting aquatic resources. The flow may be temporarily modified if required by operating emergencies beyond the control of the Licensee, and for short periods upon mutual agreement between Licensee, the Idaho Department of Fish and Game, and the U.S. Fish and Wildlife Service.</p>
Article 47	<p>The Licensee shall, after consultation with the U.S. Environmental Protection Agency and the Idaho Department of Health and Welfare, and prior to any sediment disturbing activity, survey the Snake River bottom in the project construction area, to ensure that no containers of hazardous materials exist, and sample the bottom sediments to determine whether detectable levels of hazardous materials are present. The results of the surveys and sampling shall be provided to the consulted agencies.</p> <p>Should the results of the survey or sampling indicate the need for hazardous material removal, the Licensee shall in cooperation with the consulted agencies develop a removal plan, to be filed with the Commission, for approval.</p>

Article	Requirement
	Hazardous material removal, if needed, shall be completed prior to any project construction or operation related sediment disturbing activity.
Article 48	The Licensee, after consultation with the U.S. Fish and Wildlife Service, Bureau of Land Management, and Soil Conservation Service, and the Idaho Department of Fish and Game, shall prepare and file with the Commission's Regional Engineer in Fort Worth, Texas, and the Director, Office of Electric Power Regulation, at least 60 days prior to any ground disturbing activity at the Gem State Project, a detailed plan to control erosion, dust, and slope stability and to minimize the quantity of inorganic sediment or other potential water pollutants resulting from construction and operation of project facilities.
Article 49	<p><i>FERC's November 5, 1985 Order Amending License Revised Article 49 to read as follows:</i></p> <p>The Licensee, after consultation with the Idaho Department of Fish and Game, U.S. Fish and Wildlife Service, Bureau of Land Management, and soil conservation Service, shall prepare and file for Commission approval, by March 31, 1986, a mitigation plan (Plan) for wildlife and botanical resources. The Plan shall include, but not be limited to a schedule of implementation; the location and number of acres of riparian habitat to be acquired outside the project boundary; number of acres and location of the riparian habitat, including the goose nesting islands to be replaced within the project boundary; and specific construction and maintenance techniques to be used for on-site mitigation of riparian habitat. Documentation of agency consultation on the report and recommendations shall be included in the filing.</p>
Article 50	The Licensee shall, after consultation with BLM, the National Park Service, and the Idaho Department of Parks and Recreational (IDPR), prepare a revised Report on Recreation Resources for Project No. 2952, which shall include, but not be limited to (1) the location of appropriate facilities to be developed for Recreational Sites, A,G, and H, as designated in the application, filed September 11, 1981; (2) a plan for removal of rock outcroppings and submerged features that could pose a boating hazard; (3) the location and type of markers to warn boaters of hazardous areas that would remain within the project reservoir; (4) compatible treatment of the shoreline greenbelt and BLM river trail; (5) a schedule for the development, operation, and maintenance of the proposed recreational facilities; and (6) copies of any letters received from consulted agencies and any agreement entered into for the development and operation of the project recreation facilities. Further, the Licensee shall coordinate with IDPR in the preparation of a reservoir zoning plan that would designate areas for specific recreational uses. Further, the Licensee shall, within 1 year from the date of issuance of this license, file with the Commission a copy of the zoning plan for the project reservoir, and for approval, the revised Report on Recreational Resources.

Article	Requirement
Article 51	<p>The Licensee shall, prior to the initiation of any construction that will impact the historic Woodville Canal and the Snake River Valley Canal, and after consultation with the Idaho State Historic Preservation Officer (SHPO) and the Historic American Engineering Record (HAER) of the U.S. Department of the Interior implement a cultural resources management plan to avoid and mitigate impacts to these properties. The plan shall consist of the followings (1) documentation of the impact areas of the canals according to the standards of the HAER, and (2) filing of copies of any existing engineering drawings or photographs of these facilities with the SHPO. A report documenting the mitigation, and its acceptance in writing by the SHPO and HAER, shall be filed with the Commission at least 60 days prior to any construction at the project that would impact the significant historical attributes of these canals. The Licensee shall make available funds in a reasonable amount for any such work as required.</p> <p>If any previously unrecorded archeological or historical sites are discovered during the course of construction or development of any project works or other facilities at the project, construction activity in the vicinity shall be halted, a qualified archeologist shall be consulted to determine the significance of the sites, and the Licensee shall consult with the SHPO to develop a mitigation plan for the protection of significant archeological or historical resources. If the Licensee and the SHPO cannot agree on the amount of money to be expended on archeological or historical work related to the project, the Commission reserves the right to require the Licensee to conduct, at its own expense, any such work found necessary.</p>
Article 52	<p><i>FERC's January 2, 1992 Order Amending License and Revising Annual Charges Revised Article 52 to read as follows:</i></p> <p>The licensee shall pay the United States the following annual charges effective the first day of the month in which the license was issued:</p> <p>(a) For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable amount, as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 30,130 horsepower.</p> <p>(b) For the purpose of recompensing the United States for the use, occupancy, and enjoyment of 3.13 acres of its lands other than for transmission line right-of-way, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time.</p>

Article	Requirement
Article 53	The Commission reserves the authority to order, upon its own motion or upon the recommendation of Federal or State fish and wildlife agencies or affected Indian Tribes, alterations of project structures and operations to take into account to the fullest extent practicable at each stage of the decision-making process the regional fish and wildlife program developed and amended pursuant to the Pacific Northwest Electric Power Planning and Conservation Act.

Source: FERC 1983

4.2.6 PROJECT GENERATION AND OUTFLOW RECORDS

IFP's system of electric generating facilities consist of the Idaho Falls and Gem State Projects. At the Idaho Falls Projects, each of the three plants (Lower, Upper, and City) channel up to 6,000 cfs of water through the turbines and have a nameplate generating capacity of 8 MW; the Lower Plant also provides an additional 3 MW of generating capacity. In total, the three plants produce an average of 145 million kWh of electricity annually (IFP 2020).

The generating capacity of the Gem State Project is nearly as large as the combined capacity of the Idaho Falls Project. The powerhouse contains one turbine generator with an installed capacity of 22.6 MW and produces an average of 130 million kWh of electricity annually. The city of Idaho Falls sells 39 percent of the output of the Gem State Project to PacifiCorp (a successor to the Utah Power & Light Company) under a cost-based power sales agreement entered into in 1985. Under this power sales contract, PacifiCorp is entitled to its annual share of the output of the Gem State Project in the months of May through August, and the city of Idaho Falls receives output from the Gem State Project from September through April. This power sales agreement contract ends early 2023, after which, IFP will be utilizing all of the power from the Gem State Project.

Table 4-13 provides the five-year system generation for the Upper, City, and Lower Plants as well as the Gem State Project. Table 4-14 provides the five-year average annual project total outflow as recorded by USGS Gage No. 13060000 near Shelley, ID.

TABLE 4-13 TOTAL SYSTEM GENERATION FROM 2017 TO 2021 (MWH)

Plant	2017	2018	2019	2020	2021
Upper Plant	45,797	56,221	50,597	49,946	42,625
City Plant	46,149	49,788	46,722	48,028	40,568
Lower Plant	48,597	58,216	51,380	49,266	30,486
Gem State	131,734	157,674	130,683	126,444	111,083
Total Generation	272,277	321,899	279,382	273,684	224,762

Source: IFP 2020, IFP 2021

TABLE 4-14 AVERAGE ANNUAL SYSTEM OUTFLOW RECORDS FROM 2017 TO 2021 (CFS)

Plant	2017	2018	2019	2020	2021
Total Outflow	9,183	8,255	5,931	6,080	4,609

Source: USGS Gage No. 13060000, Snake River near Shelley, ID

4.2.6.1 CURRENT NET INVESTMENT

As of December 31, 2022, IFP has incurred an original cost investment of \$258,186,227.02, accumulated depreciation of \$160,675,427.32, with a net book value of \$97,510,800.16 for the Idaho Falls Project. For the Gem State Project, IFP has incurred an original cost investment of \$48,910,778.98, accumulated depreciation of \$40,047,092.51, with a net book value of \$8,863,686.47.

4.2.6.2 COMPLIANCE HISTORY⁸

IFP has developed a sound compliance and dam safety program and has only encountered one violation that was corrected on the record. Seven potential violations have been noted by FERC but have been either corrected or dismissed.

On August 28, 1989, IFP failed to properly notify and receive authorization from FERC to perform construction at the Upper Development Dam No. 2 per license conditions outlined in Article 3 and 4. IFP was given 15 days to respond and outline steps to correct the issue. The potential violation was corrected but was recorded by FERC to reference for potential future violations.

Inspections are conducted at the Projects by FERC's Portland Regional Office on a regular basis, and IFP completes all necessary corrective actions to address comments and recommendations arising from FERC inspections in a timely manner.

4.2.7 POTENTIAL FOR NEW FACILITIES OR CHANGES IN PROJECT OPERATION

IFP does not propose the addition of any new facilities or components to be constructed at either the Idaho Falls Project or Gem State Project. There are no plans for future development or rehabilitation of either Project, nor are there any proposed changes to the Project operations at either Project.

⁸ FERC eLibrary Accession Number: 19980909-0235, Accession Number: 19990216-0638

4.3 REFERENCES

- City of Idaho Falls. 1978. Application for License: Idaho Falls Hydroelectric Project.
- City of Idaho Falls 1983. Application For Amended License: Exhibit M.
- Federal Energy Regulatory Commission. (FERC). 1979. Order Issuing License (Major) Idaho Falls Hydroelectric Project No. 2842.
- Federal Energy Regulatory Commission. (FERC). 1983. Order Issuing License (Major) Gem State Hydroelectric Project No. 2952
- Federal Energy Regulatory Commission. (FERC). 1986. Order Approving Exhibit M.
- Federal Energy Regulatory Commission. (FERC). 1990. Order Approving Revised Exhibit A.
- Federal Energy Regulatory Commission (FERC). 1998. Violation Notification. Accession Number: 19980909-0235, Available online: [eLibrary | File List \(ferc.gov\)](#)
- Federal Energy Regulatory Commission (FERC). 1999. Violation Correction. Available online: [eLibrary | File List \(ferc.gov\)](#)
- Idaho Falls Power. (IFP). 2018. Gem State Hydroelectric Project Supporting Technical Information.
- IFP. 2020. Idaho Falls Power 2020 Annual Report. Available online: <https://www.ifpower.org/gopower/resources/content/21-0601ifp-arr2digital.pdf>. Accessed June 8, 2022.
- _____. 2021. Idaho Falls Power 2021 Annual Report. Available online: <https://www.ifpower.org/gopower/resources/content/22-0804ifp-arr4digital.pdf>. Accessed July 24, 2023.
- Kleinschmidt Associates. 2019. Photographs provided by Kleinschmidt Associates staff.

5.0 EXISTING ENVIRONMENT

Per 18 CFR § 5.6(d)(3)(i), this section includes a discussion based on the existing, relevant, and reasonably available information with respect to each resource area as required by paragraphs (d)(3)(ii)-(xiii) of this section, including summaries of existing data or studies regarding the resource; a description of any known or potential adverse impacts and issues associated with the construction, operation or maintenance of the Projects, including continuing and cumulative impacts; and a description of any existing or proposed Project facilities or operations, and management activities undertaken for purpose of protecting, mitigating impacts to, or enhancing resources affected by the Projects, including a statement of whether such measures are required by the Project licenses, or were undertaken for other reasons.

The resource areas, as defined by 18 CFR § 5.6(d)(3)(ii)-(xiii) are discussed in the following pages:

- Geology and Soils
- Water Resources
- Fish and Aquatic Resources
- Wildlife and Botanical Resources
- Floodplains and Wetlands: Wetlands, Riparian, and Littoral Habitat
- Rare, Threatened, and Endangered Species
- Recreation and Land use
- Aesthetic Resources
- Socioeconomic Resources, including Environmental Justice
- Cultural & Tribal Resources

5.1 GEOLOGY AND SOILS

Per 18 CFR §5.6(d)(3)(ii), this section presents descriptions and maps of the existing geology, topography, and soils in the vicinity of the Idaho Falls and Gem State Projects and surrounding areas. The descriptions and maps presented in this section are based on readily available information.

5.1.1 REGIONAL GEOGRAPHY

The Idaho Falls and Gem State Projects are located along the Snake River in eastern Idaho, in the Snake River Plain. The Snake River Plain is divided into eastern and western parts based on geologic features and depositional environments. The Projects lie in the Eastern Snake River Plain (ESRP), directly northwest of the Blackfoot Mountains, and to the east of Hell's Half Acre Lava Field which is the easternmost basaltic lava field of the Snake River Plain (USGS 2022) (Figure 5-1).

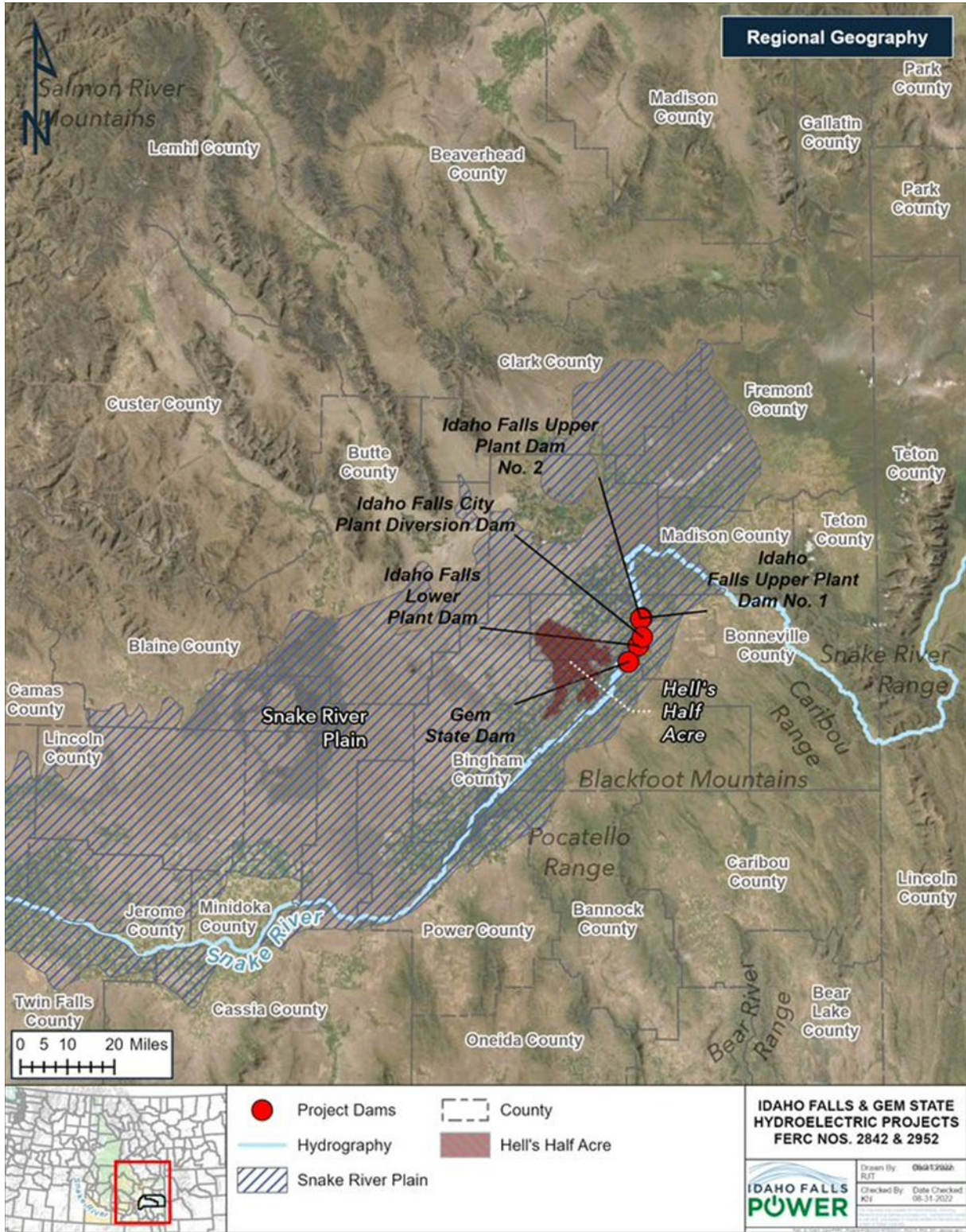


FIGURE 5-1 REGIONAL GEOGRAPHY IN THE PROJECTS' VICINITIES

5.1.2 VOLCANISM AND MOVEMENT OF YELLOWSTONE HOTSPOT

Over the past 16 million years, the crust of the North American tectonic plate has been progressively moving across a mantle plume. This mantle plume is hypothesized to be the cause of the Yellowstone hotspot (Hughes 1999). Interactions between the crust and the mantle plume have resulted in uplift and rhyolitic caldera eruptions, followed by subsidence and basaltic volcanism (Hughes 1999). The Yellowstone hotspot formed the Miocene-Pliocene rhyolitic calderas and Quaternary basaltic lavas and shield volcanoes that are evident in the Snake River Plain and found within the vicinity of the Projects (Figure 5-2).

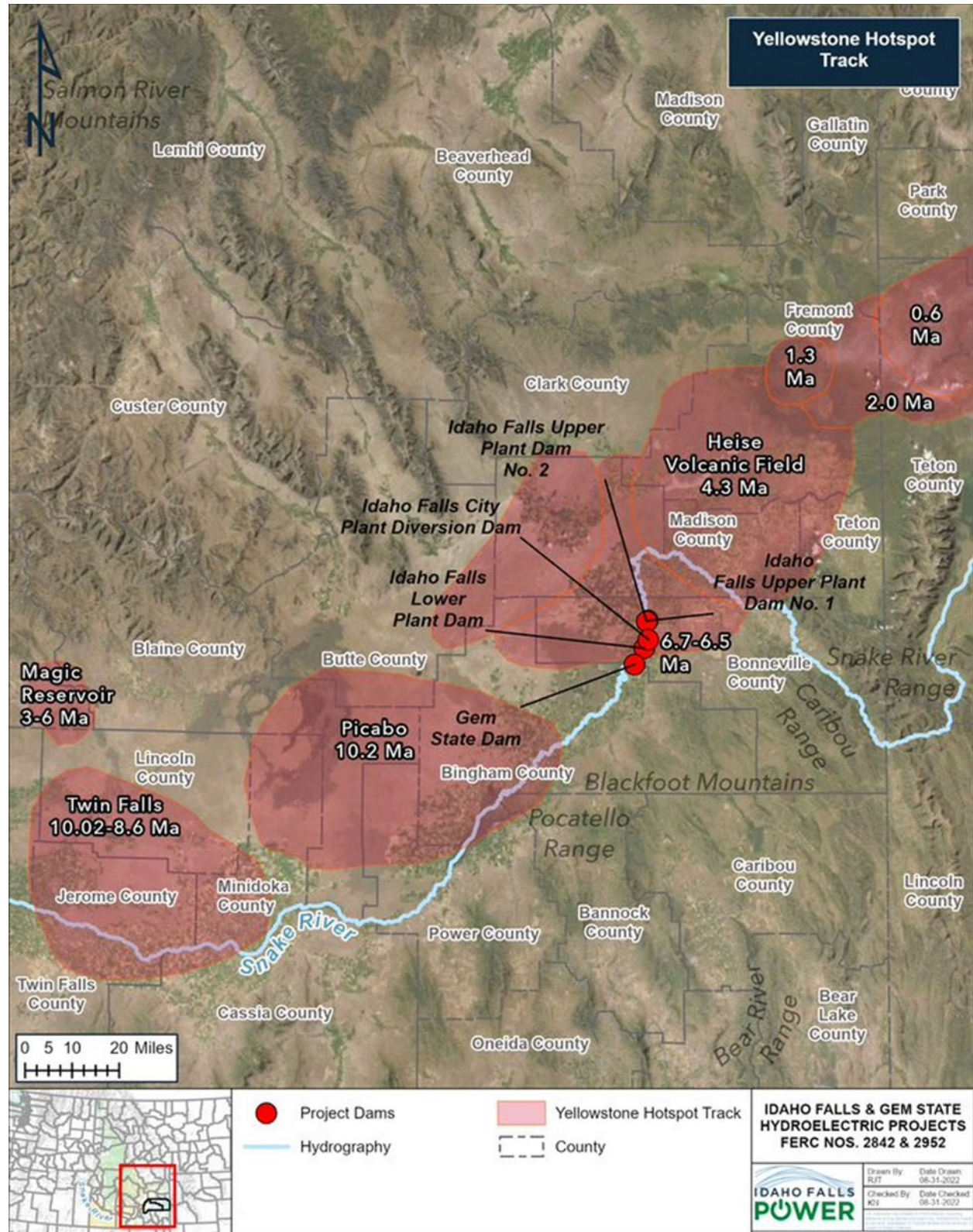


FIGURE 5-2 YELLOWSTONE HOTSPOT TRACK

5.1.3 MIOCENE-PRESENT CRUSTAL EXTENSION OF BASIN AND RANGE

Subduction of the Farallon Plate under the North American continental plate resulted in crust thickening in the western United States. By the middle Miocene, the Farallon Plate and Pacific-Farallon ridge subducted, forming the San Andreas Fault. It is generally accepted that crustal shearing of the San Andreas Fault is the cause of extensional faulting in the Basin and Range region (NPS 2022), which is observed within both the Idaho Falls and Gem State Projects.

The ESRP deformational history can be observed in the local rock formations. Late Quaternary volcanic rift zones present in the ESRP overlie basalt dikes resulting from crustal extensions (Rodgers et al. 2002). The rifting zones run parallel to the Basin and Range faults. Where individual faults can be traced from the Basin and Range into the ESRP, the faulting becomes weaker and obscured by volcanic rift zones (Rodgers et al. 2002).

5.1.4 QUATERNARY CATASTROPHIC FLOODING, GLACIATION AND ASSOCIATED EOLIAN, AND SEDIMENTATION

Catastrophic flooding on the Snake River Plain has occurred three times in geologic history. These megaflood events include the Henry's Fork Flood (approximately 100 to 140 thousand years ago [kya]), the Big Lost River Flood (20.5 kya), and most recently the Bonneville flood (14.5 to 17.4 kya) (Amidon and Clark 2014). The Bonneville flood occurred when the alluvial dam at Red Rock Pass failed, thus draining historic Lake Bonneville. This resulted in an approximate 100-meter-drop in water level and release of approximately 4,750 cubic kilometers (km³) of water. Floodwaters joined the Snake River, eroding large cataracts and depositing gravel and boulders downstream (Amidon and Clark 2014). Because of the Pleistocene glacial climate, eolian features developed in the ESRP (Phillips 2022). Substantial amounts of silt and sand were deposited along the lower plain by meltwaters from upland glaciers.

The Yellowstone plateau developed a recurrent ice sheet during the Pinedale glaciation (14-25 kya) and Bull Lake Glaciation (140 to 150 kya) (Phillips 2022). During the glacial periods, the meltwater from the Yellowstone ice sheet was the primary source of the Snake River, resulting in a broad braided stream system 10 to 30-kilometers-wide (Phillips 2022). Eolian sediments in the form of gravels, sands, and silts were deposited in the Snake River Plain as a result.

Paleosol dating of loess⁹ deposits indicates that the modern Snake River became incised between 14.4 and 12.6 kya as a result of diminishing discharge from the retreating Yellowstone ice sheet (Forman et al. 1993).

5.1.5 BEDROCK LITHOLOGY AND STRATIGRAPHY

Because of the geologic history, the area below the Projects are underlain primarily by Quaternary alluvial deposits. There are Quaternary basalts present in the surface geology of the Idaho Falls Project area. The coverage within two Project areas and descriptions of the lithologic units are provided in Table 5-1 and Table 5-2, and can be seen in Figure 5-3.

⁹ Windblown dust and silt that blanket the land; a layer of fine, mineral-rich material is called loess. <https://education.nationalgeographic.org/resource/loess>. Accessed August 2022.

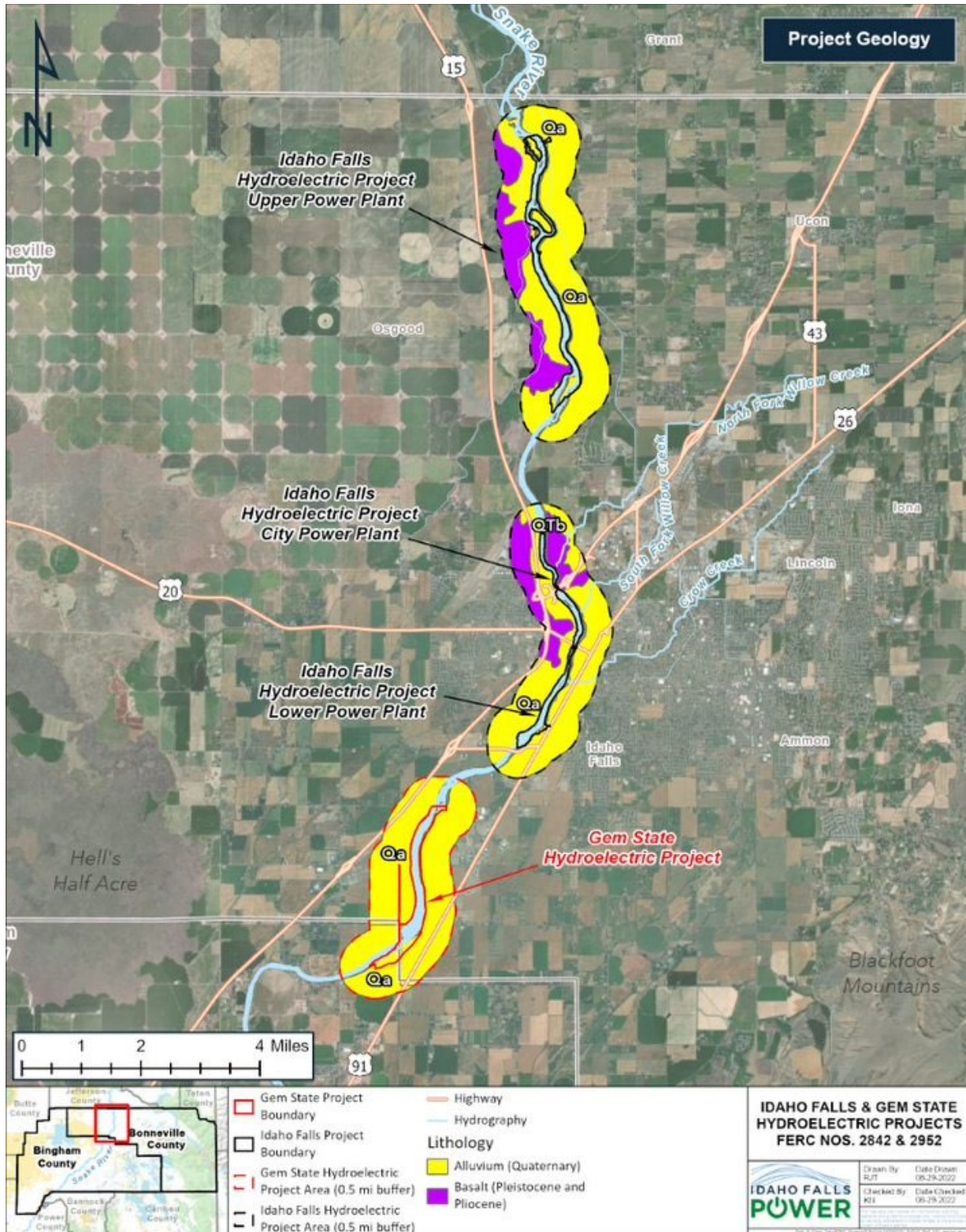


FIGURE 5-3 GEOLOGY WITHIN 0.5 MILES OF THE PROJECT BOUNDARIES

TABLE 5-1 LITHOLOGIES IN THE IDAHO FALLS PROJECT AREA

LITHOLOGIES IN THE IDAHO FALLS PROJECT AREA					
MAP UNIT LABEL	GEOLOGIC AGE	LITHOLOGY DESCRIPTION	DESCRIPTION	AREA (ACRES)	PERCENT OF PROJECT AREA
Qa	Quaternary	Unconsolidated sediments, alluvial deposits of gravel, sand, and silt.	Gravel and sand of the modern Snake River floodplain. Thickness generally <3 m (10 ft). Consists of gravel-rich point-bar deposits of the main channel and low terraces composed of finer-grain overbank deposits overlain by Harston, Heiseton and Xeric torrifluent soils.	5702.3	71.2
QTb	Quaternary-Tertiary, Pleistocene-Pliocene	Quaternary to Eocene continental volcanic and intrusive rocks. Seen in basalt flows and cinder cones.	Basalt flows and cinder cones of olivine tholeiite basalt in and near Snake River Plain. Largely Pleistocene but includes flows as old as 2 Ma. Covered with 1 to 3 m (3 to 10 ft) of loess. These basalts include Basalt of Rifle Range (middle to late Pleistocene) and Basalt of Shattuck Butte (middle Pleistocene).	1591.0	19.9
wtr	Present	Water	Bodies of fresh or salt water.	713.7	9.0

Source: Idaho Geological Survey (IGS) 2011. Geologic Map of the Idaho Falls South Quadrangle, Bingham and Bonneville Counties, Idaho

TABLE 5-2 LITHOLOGIES IN THE GEM STATE PROJECT AREA

LITHOLOGIES IN THE GEM STATE PROJECT AREA					
MAP UNIT LABEL	GEOLOGIC AGE	LITHOLOGY Description	DESCRIPTION	AREA (ACRES)	PERCENT OF PROJECT AREA
Qa	Quaternary	Unconsolidated sediments, alluvial deposits of gravel, sand, and silt.	Gravel and sand of the modern Snake River floodplain. Thickness generally <3 m (10 ft). Consists of gravel-rich point-bar deposits of the main channel and low terraces composed of finer-grain overbank deposits overlain by Harston, Heiseton and Xeric torrifluent soils.	2939.3	91.5
wtr	Present	Water	Bodies of fresh or salt water.	341.2	8.5

Source: Idaho Geological Survey (IGS) 2011. Geologic Map of the Idaho Falls South Quadrangle, Bingham and Bonneville Counties, Idaho.

5.1.6 SOILS

An analysis of the United States Department of Agriculture (USDA) Natural Resources Conservation Service's (NRCS) Web Soil Survey indicates that approximately 35 different soils categorized into 25 individual groups for the Idaho Falls Project area (Table 5-3, Figure 5-4) and approximately 22 different soils categorized into 16 soil groupings for the Gem State Project area (0.5 mile) (Table 5-4).

Primary soils of the Idaho Falls Project area include the Pancheri silt loam, Bannock loam, and the Harston fine sandy loam (27.8 percent, 20.8 percent, and 15.1 percent respectively). Primary soils of the Gem State Project area include the Bannock Loams, Harston Fine Sandy Loam, Bock Loams, and the Heiseton fine sandy loam (33.1 percent, 19.9 percent, 13.5 percent, and 12.5 percent respectively). These soils are described in greater detail in the following text; a full list of soils with brief descriptions are summarized in tables Table 5-3 and Table 5-4 (USDA 2022).

TABLE 5-3 NRCS SOILS WITHIN 0.5-MILE OF THE IDAHO FALLS PROJECT BOUNDARY

SOIL GROUP	DESCRIPTION	TOTAL ACRES	% SOILS
Bannock loam	Well drained soils that formed in medium textured alluvium over gravel and sand. Bannock soils are on stream terraces and alluvial fans and have slopes of 0 to 10 %.	984.5	20.7
Bock loam	Very deep, well drained soils that formed in alluvium from mixed sources. Bock soils are on terraces and alluvial fans and have slopes of 0 to 10 %.	294.8	3.7
Harston fine sandy loam	Deep, well drained soils that formed in moderately coarse textured alluvium. Harston soils are on alluvial fans and low terraces and have slopes of 0 to 4 %.	658.2	8.2
Heiseton fine sandy loam	Deep, moderately-well drained soils that formed in moderately coarse textured alluvium. Heiseton soils are on bottomlands and low stream terraces and have slopes of 0 to 4 %. Soils are mostly cultivated; natural vegetation is rangeland.	1108.5	13.8
Packham gravelly loam	Very deep, well drained soils on stream and fan terraces. They formed in mixed alluvium. Permeability is moderate in the upper part and very rapid in the lower part. Slopes range from 0 to 8 %.	409.1	5.1
Paesl silty clay loam	Very deep, well drained soil found on flood plains along rivers. The soil is formed in alluvium with slopes from 0 to 2 %.	57.0	0.7

SOIL GROUP	DESCRIPTION	TOTAL ACRES	% SOILS
Pancheri silt loam	Deep and very deep, well drained soils that formed in loess covered lava plains. Slopes range from 0 to 50 %. Permeability is moderate.	2158.6	27.0
Pancheri-Rock outcrop complex	This complex is about 70 % Pancheri silt loam with 4 to 25 % slopes, and 25 % rock outcrop. The soils is very deep and well drained, formed mainly in loess. Rock outcrop is bare exposures of basalt through loess. This soil is mainly used for rangeland, wildlife, and recreational use.	101.4	1.3
Paul silty clay loam	Deep, well drained soils that formed in alluvium from mixed sources, but mainly from sandstone and limestone. Paul soils are on alluvial fans and river terraces and have slopes of 0 to 2 %.	169.4	2.1
Pits	Excavations from which the surface layer and underlying material may have been removed, exposing rock or other materials.	97.6	1.2
Polatis-Rock outcrop complex	Loess covered basalt plains in elevations from 4,600 to 5,400 feet. The complex is 65% Polatis silt loam and 25% rock outcrop.	261.8	3.3
Stan sandy loam	Deep, well drained soils on terraces and alluvial fans. They formed in moderately coarse alluvium derived dominantly from quartzite and sedimentary rocks. Slopes are 0 to 4 %.	631.7	7.9
Water	Waterbody.	755.8	9.4
Wolverine sand	Very deep, excessively drained soil found on sand dunes on river terraces. The group formed in aeolian sand.	186.0	2.3
Xeric Torrifluvents	Very deep, well drained, nearly level to sloping soils are found on lower river terraces and islands. Forms in mixed alluvium	132.4	1.7
	Total	8006.8	108.4

Source: USDA 2022

TABLE 5-4 NRCS SOILS WITHIN 0.5 MILE OF GEM STATE PROJECT BOUNDARY

SOIL GROUP	DESCRIPTION	TOTAL ACRES	PERCENT OF SOILS WITHIN BUFFER
Bannock Loam	Well drained soils that formed in medium textured alluvium over gravel and sand. Bannock soils are on stream terraces and alluvial fans and have slopes of 0 to 10 %.	695.3	21.6
Bock Loam	Very deep, well drained soils that formed in alluvium from mixed sources. Bock soils are on terraces and alluvial fans and have slopes of 0 to 10 %.	409.7	12.8
Harston fine sandy loam	Deep, well drained soils that formed in moderately coarse textured alluvium. Harston soils are on alluvial fans and low terraces and have slopes of 0 to 4 %.	754.6	23.5
Heiseton fine sandy loam	Deep, well drained soils that formed in moderately coarse textured alluvium. Harston soils are on alluvial fans and low terraces and have slopes of 0 to 4 %.	575.0	17.9
Heiseton sandy loam	Deep, moderately well drained soils that formed in moderately coarse textured alluvium. Heiseton soils are on bottomlands and low stream terraces and have slopes of 0 to 4 %. Soils are mostly cultivated; natural vegetation is rangeland.	24.6	0.8
Lava Flows	Miscellaneous land type made up of bare basalt.	3.1	0.1
Packham gravelly loam	Very deep, well drained soils on stream and fan terraces. They formed in mixed alluvium. Permeability is moderate in the upper part and very rapid in the lower part. Slopes range from 0 to 8 %.	56.0	1.7
Pits	Excavations from which the surface layer and underlying material may have been removed, exposing rock or other materials.	41.3	1.3
Presto loamy sand	Moderately deep, somewhat excessively well drained soils are on level to very gently sloping terraces from 0 to 4 %. The soils formed mainly in loamy sand over medium textured lake deposits or alluvium.	140.1	4.4
Sasser fine sandy loam	Moderately deep, well drained soils, with slopes from 0 to 2 %, These soils are found on river terraces.	80.5	2.5
Stan fine sandy loam	Deep, well drained soils on terraces and alluvial fans. They formed in moderately coarse alluvium derived dominantly from quartzite and sedimentary rocks. Slopes are 0 to 4 %.	20.0	0.6
Stan sandy loam	Deep, well drained soils on terraces and alluvial fans. They formed in moderately coarse alluvium derived	26.8	0.8

SOIL GROUP	DESCRIPTION	TOTAL ACRES	PERCENT OF SOILS WITHIN BUFFER
	dominantly from quartzite and sedimentary rocks. Slopes are 0 to 4 %.		
Wapello fine sandy loam	Moderately deep, well drained soil found on stream terraces.	42.5	1.3
Water	Waterbody.	317.1	9.9
Wolverine sand	Very deep, excessively drained soil found on sand dunes on river terraces. The group formed in aeolian sand.	16.4	0.5
Xeric Torrfluvents	Very deep, well drained, nearly level to sloping soils are found on lower river terraces and islands. Forms in mixed alluvium	9.0	0.3
	Total	3212.0	100.0

Source: USDA 2022

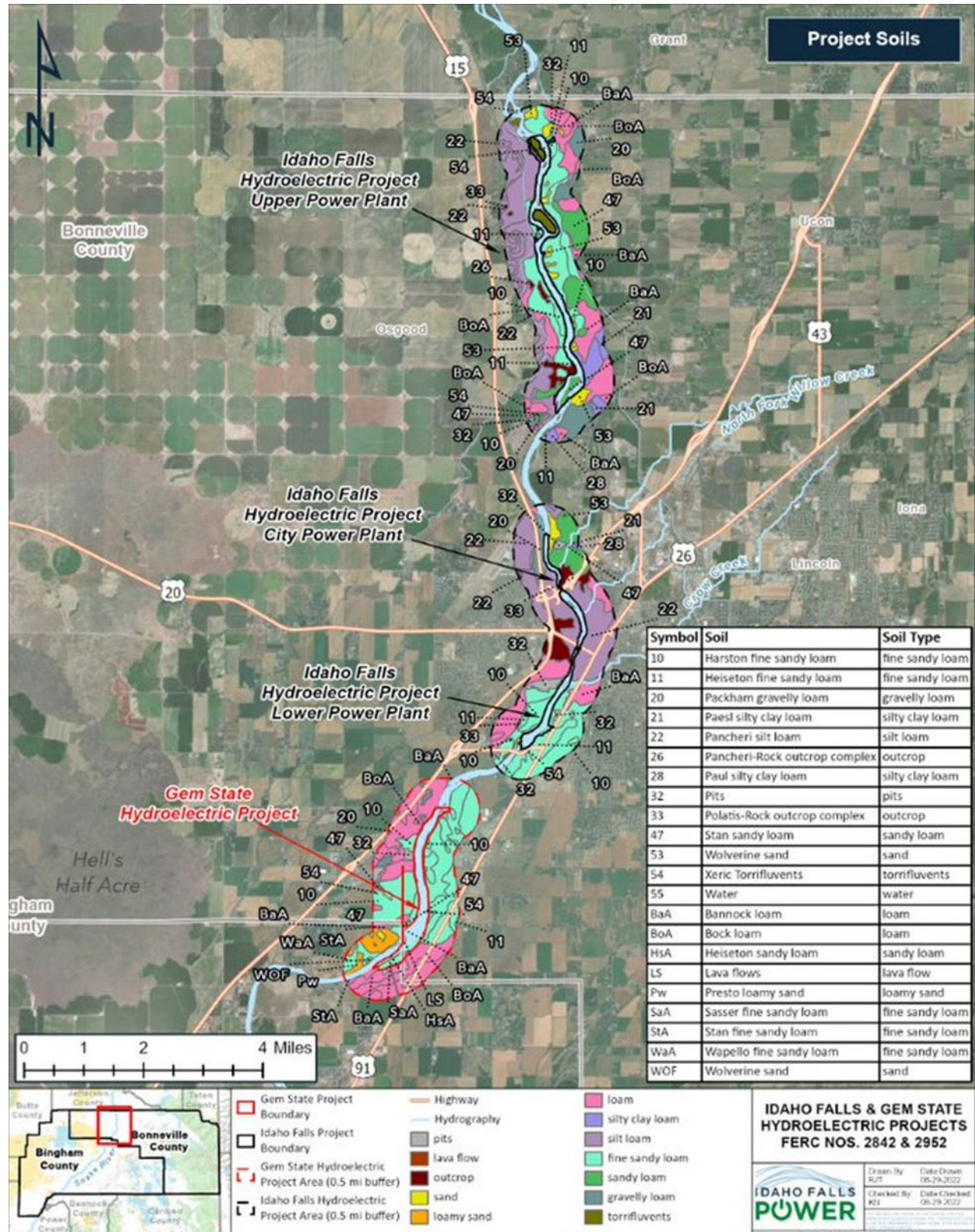


FIGURE 5-4 SOILS WITHIN 0.5 MILE BUFFER OF THE PROJECTS

The Bannock Loam group makes up 20.7 percent of the Idaho Falls Project area and 33.1 percent of the Gem State Project area. The Bannock Loam is characterized as deep and well drained, with nearly level to moderately sloping soils (0 to 10 percent) that are 20 to 40-inches-deep overlaying gravelly sands. These soils formed under sagebrush and bunchgrass in medium textured alluvium on high river terraces. The alluvium is dominantly from quartzite and sedimentary rock sources but contain rhyolitic, basaltic, and granitic materials. In places, the upper part may be eolian sediments. Bannock Loam is typically found on stream terraces and alluvial fans along the high terraces of the Snake River.

The Bock Loam group makes up 4.6 percent of the Idaho Falls Project area and 13.5 percent of the Gem State Project area. The Bock Loam is characterized as deep, well drained, loamy soil, with slopes from 0 to 2 percent. The soils formed in medium textured, mixed alluvium, dominantly from quartzite and sedimentary rock sources. In places, the upper part is eolian deposits. Bock Loam is typically found on long, higher terraces of the Snake River and alluvial fans.

The Harston fine sandy loam makes up 15.1 percent of the Idaho Falls Project area and 19.9 percent of the Gem State Project area. The fine sandy loam is characterized as a very deep, well drained soil, with slopes from 0 to 2 percent. These soils formed in moderately coarse textured alluvium over stream deposited gravel, sand, and lake shore sediments. The alluvium is dominantly derived from quartzite and sedimentary rock sources with lesser influence from rhyolite, basaltic, and granitic materials. The Harston fine sandy loam is typically found on flood plains along the snake river.

The Heiseton fine sandy loam makes up 0.1 percent of the Idaho Falls Project area and 12.5 percent of the Gem State Project area. The Heiseton fine sandy loam is characterized as very deep and well drained, with slopes from 0 to 4 percent. The soils formed mainly in moderately coarse textured alluvium, which may overlie sand and gravel or other stratified sediments. The alluvium is dominantly from quartzite and sedimentary rock sources but contains rhyolitic, basaltic, and granitic material.

The Pancheri Silt Loam makes up of 27.8 percent of the Idaho Falls Project area and is not present in the Gem State Project area. The Pancheri silt loam is characterized as very deep and well drained, with slopes from 8 to 15 percent in the Idaho Falls Development area. Pancheri soils

formed in loess covered lava plains at elevations of 4,200 to 6,000 feet. The parent material is mainly loess. The Pancheri silt loam is found on basalt plains.

5.1.7 GEOLOGIC HAZARDS

An assessment of available Idaho Geological Survey datasets yielded no geological hazards within either of the Project areas (IGS 2011, County Geology and Hazard Maps of Idaho).

5.1.8 MINERAL RESOURCES

Mineral resources located in the Project areas were identified using the USGS (2022) Mineral Resources Data System (MRDS) (Figure 5-5).

There are 14 mineral resource features identified in the Idaho Falls Project area. Of the identified mineral resources in the Idaho Falls Project area, all but one are actively producing sand and gravel for construction, pumice, and stone (MRDS 2022). One mineral resource feature was identified in the Gem State Project area, a gravel pit associated with Quaternary alluvial deposits. These mineral resources are summarized in Table 5-5.

TABLE 5-5 MINERAL RESOURCES IN THE IDAHO FALLS AND GEM STATE PROJECT AREAS

PROJECT	NAME(S)	STATUS	COMMODITY
Idaho Falls	Rock Hollow	Producer	Pumice
	Ancor Crushing Plant	Producer	Pumice
	Gravel Pit	Producer	Sand and Gravel, Construction
	Gravel Pit, Id Hwy Dpt	Producer	Sand and Gravel, Construction
	Gravel Pit	Producer	Sand and Gravel, Construction
	Gravel Pit	Producer	Sand and Gravel, Construction
	Gravel Pit	Producer	Sand and Gravel, Construction
	Gravel Pit	Past Producer	Sand and Gravel, Construction
	Gravel Pit	Producer	Sand and Gravel, Construction
	Gravel Pit	Producer	Sand and Gravel, Construction
	Gravel Pit, Id Hwy Dpt	Producer	Sand and Gravel, Construction
	Gravel Pit	Producer	Sand and Gravel, Construction
	Idaho Falls Pit and Plant	Producer	Sand and Gravel, Construction
	Burns Pit	Producer	Stone
Gem State	Gravel Pit, Id Hwy Dpt	Producer	Sand and Gravel, Construction

Source: USGS. 2022. Mineral Resources Data System (MRDS).

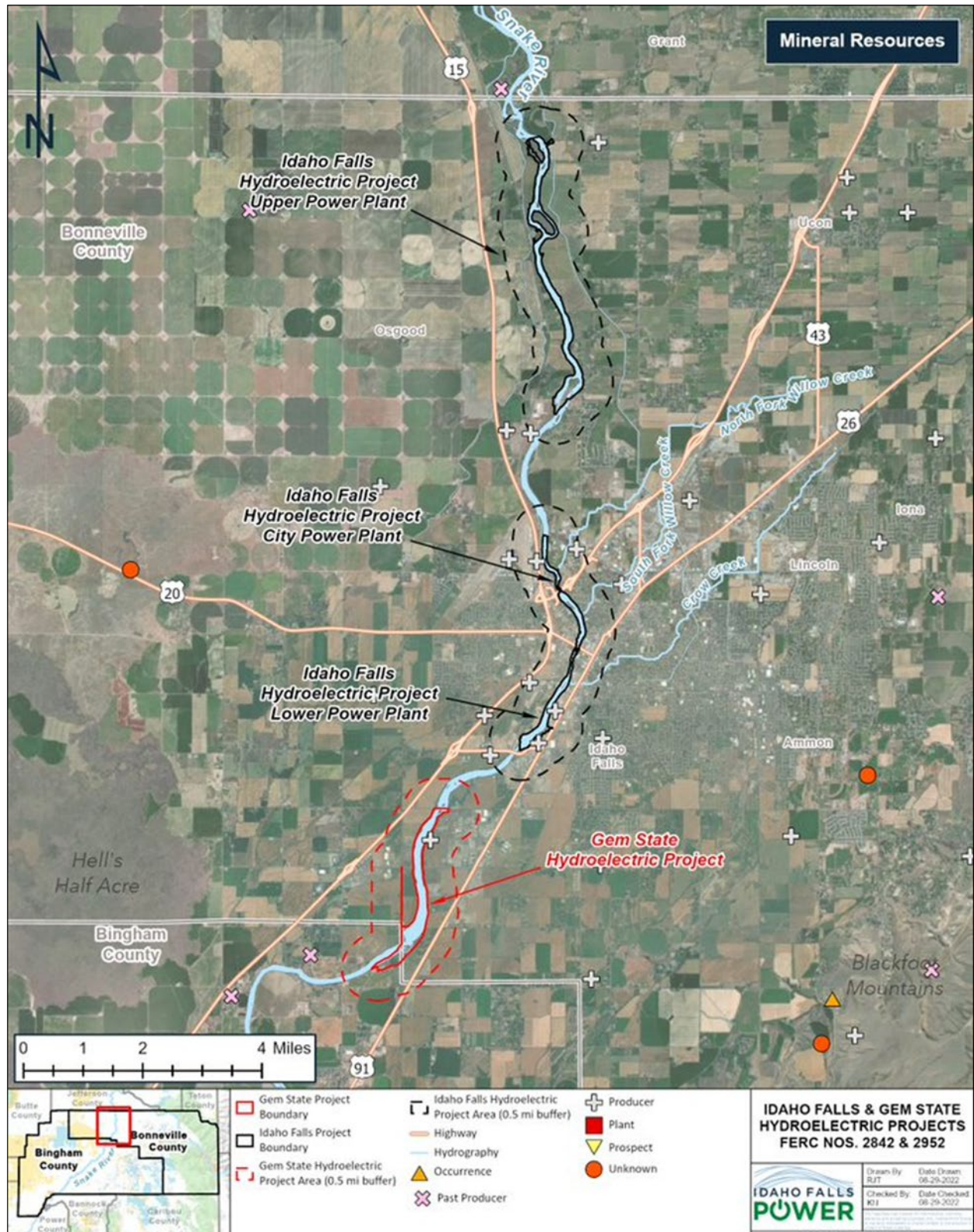


FIGURE 5-5 MINERAL RESOURCES IDENTIFIED WITHIN 0.5 MILES OF THE PROJECTS

5.1.9 RESERVOIR SHORELINES AND STREAMBANKS

Generally, the shorelines for both the Idaho Falls and Gem State Projects are primarily deposits of silts, sands, and gravels approximately 10 feet to 20 feet thick overlying local basalts on both sides of the Snake River.

The southern half of the Gem State Project shoreline consists of engineered water-retaining dike structures, while the northern half is engineered dikes with impervious core.

5.1.10 REFERENCES

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5.2 WATER RESOURCES

As required by 18 CFR §5.6(d)(3)(iii), this section provides descriptions of the water resources of the proposed IFP Projects and surrounding area. This section must address the quantity and quality (chemical/physical parameters) of all waters affected by the Projects, including but not limited to the Project reservoir(s) and tributaries thereto, bypassed reach, and tailrace.

5.2.1 SNAKE RIVER DRAINAGE AREA

The Snake River watershed encompasses 107,904 square miles in six states: Wyoming, Idaho, Oregon, Washington, Nevada, and Utah (Figure 3-1). The hydrologic unit code (HUC) is the USGS numbering system for watersheds. The entire country was mapped with a 2-digit to 12-digit number that uniquely identifies each of the six levels of classification: six-digit HUCs identify basins, 8-digit HUCs identify subbasins (USGS 2022a). The IFP Projects are in the Upper Snake Basin (HUC 170402), which spans Idaho, Wyoming, Utah, and Nevada. The three-development Idaho Falls Project facilities are located on the Snake River between RM 808.7 and 815.4 in the Idaho Falls subbasin (HUC 17040201), which covers 563 square miles (Figure 3-3) (IDEQ 2004). The single-development Gem State Project is on the Snake River at RM 804.2 in the American Falls subbasin (HUC 17040206), which covers 2,869 square miles (IDEQ et. al 2012).

USGS gage 13057160 on the Snake River above Eagle Rock near Idaho Falls, Idaho is approximately 3.7 miles upstream of the Idaho Falls Upper Plant at RM 819.4. The drainage area of the Snake River above Eagle Rock near Idaho Falls is 9,533 square miles (USGS 2022b). Table 5-6 summarizes drainage areas for each development within the Projects. USGS gage 13060000 on the Snake River near Shelley, Idaho is at RM 802.4 and drains an area of approximately 9,790 square miles, excluding indeterminate non-tributary areas on Snake River Plain (Table 5-6) (USGS 2022b).

TABLE 5-6 USGS GAGES AND DRAINAGE AREAS AT THE PROJECTS

FEATURE	RIVER MILE	DRAINAGE AREA (SQUARE MILES)
USGS Gage 13057155: Snake River above Eagle Rock near Idaho Falls, Idaho	819.4	9,533
Idaho Falls Project Upper Plant	815.2	9,231
Idaho Falls Project City Plant	810.4	9,285
Idaho Falls Project Lower Plant	808.7	9,285
Gem State Project Powerhouse	804.2	9,300
USGS Gage 1306000: Snake River near Shelley, Idaho	802.3	9,790

Source: USGS 2022b

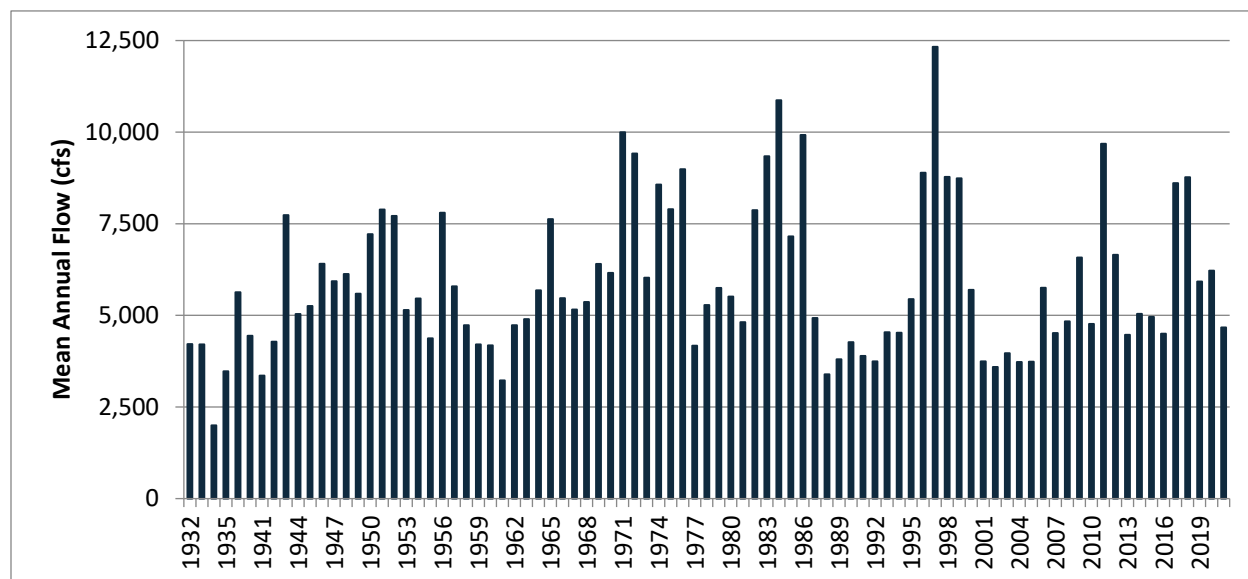
5.2.2 RECORDED FLOWS

The USGS maintains a network of stream gages in the Snake River; two USGS gages currently operate near the Idaho Falls and Gem State Projects (Table 5-7). USGS gage 13060000 on the Snake River at Shelley has been in place since March 1915; although, records for the entire year were not begun until October 1931. Due to its proximity to the projects' areas and its long data record, this gage was used to summarize flows for the IFP Projects. The 2004 Idaho Subbasin Assessment and total maximum daily load (TMDL) identifies a reduction in average annual mean flow of 480 cubic feet per second (cfs) between USGS gage 13057155 on the Snake River above Eagle Rock and USGS gage 1306000 near Shelley despite inflows from Willow Creek due to irrigation withdrawals (IDEQ 2004).

Since the 1932 water year (WY), the average annual flow of the Snake River at Shelley (October 1- to September 31) ranged from 1,998 cfs in 1934 to 12,330 cfs in 1997 (Figure 5-6). (USGS 2022b). Seasonal discharge patterns are primarily dictated by snowmelt, although upstream storage reservoirs and irrigation demands influence the distribution of streamflow in the IFP Projects Areas. Flows at this gage reflect some regulation by active storage in Jackson Lake (847,000 ac-ft), Palisades Reservoir (1,200,000 ac-ft on the Snake River approximately 80 miles-upstream of the Upper Dam), Island Park Reservoir (135,200 ac-ft approximately 90 miles-upstream on the Henry's Fork of the Snake River), Henry's Lake (90,400 ac-ft), and Grassy Lake (15,470 ac-ft) (Figure 3-3). Initial fill of the forebay pool at the Gem Power plant 2 miles upstream occurred

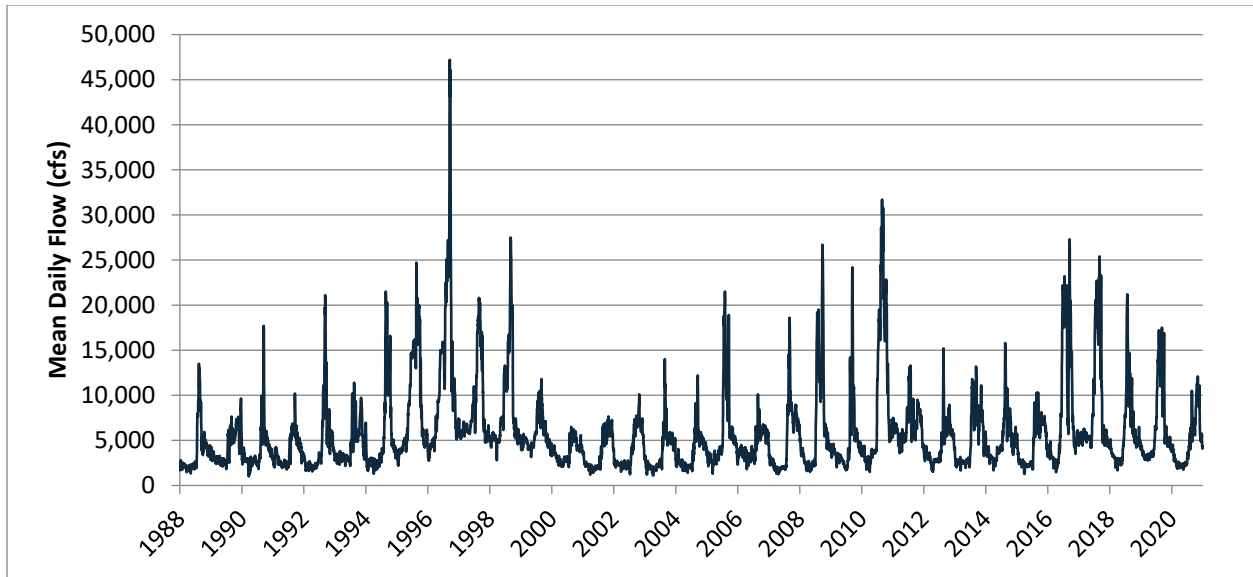
during March and April 1988. This summary includes WYs 1989 through 2021 (October 1–September 31). Mean monthly flows have ranged between 3,077 cfs in January and 11,285 in June. Typical flows were lowest during the winter and spring months (October-March), increased with snowmelt in April, and peaked in May and June. Daily flows were highly variable; during WYs 1997, 1999, 2009, 2011, 2017, and 2018 peak flows exceeded 25,000 cfs (Figure 5-7 and Figure 5-8).

The flood of June 6, 1894 reached an estimated discharge of 75,000 cfs at former USGS gage 13059000 on Snake River at Eagle Rock (now Idaho Falls), 7 miles upstream from the gage near Shelly, ID (USGS 2022b). Excluding the peak flow of 67,300 cfs on June 6, 1976 due to the Teton Dam failure, peak flows of 47,800 cfs were observed on June 17, 1997 (USGS 2022b).



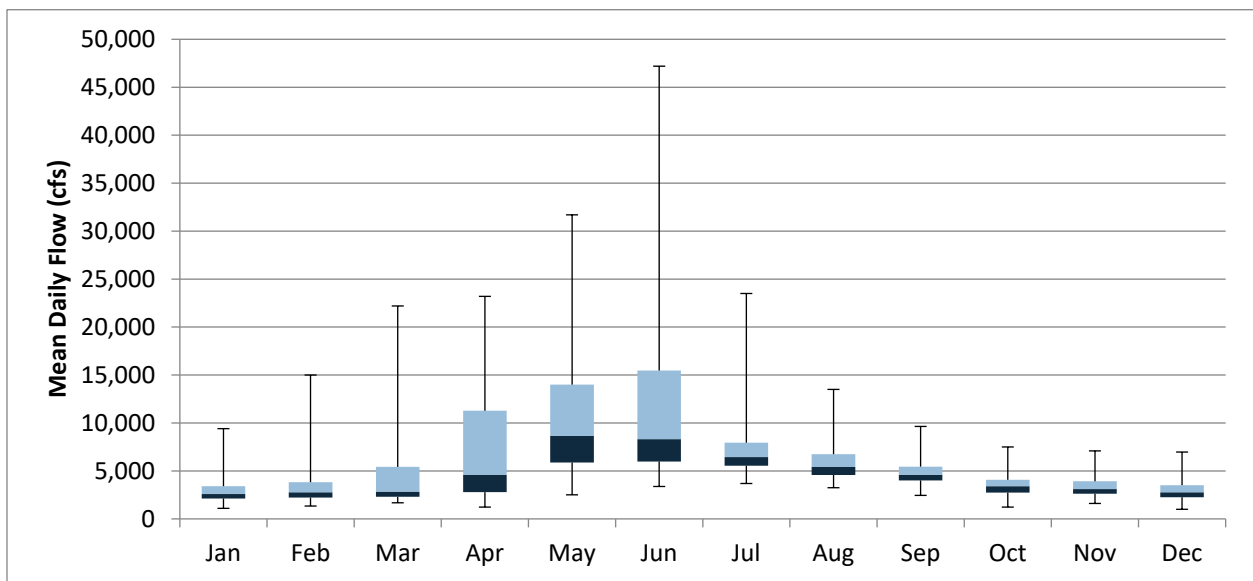
Source: USGS 2022b

FIGURE 5-6 MEAN ANNUAL FLOW FOR THE SNAKE RIVER NEAR SHELLEY, ID (1935-2021)



Source: USGS 2022b

FIGURE 5-7 DAILY FLOWS FOR SNAKE RIVER NEAR SHELLY, ID (WYS 1989-2021)



Source: USGS 2022b

FIGURE 5-8 BOX WHISKER PLOT OF MINIMUM, 25TH PERCENTILE, MEDIAN, 75TH PERCENTILE AND MAXIMUM DAILY FLOWS BY MONTH IN SNAKE RIVER NEAR SHELLY, ID (WYS 1989-2021)

TABLE 5-7 MONTHLY FLOW STATISTICS FOR SNAKE RIVER NEAR SHELLY, ID (WYS 1989-2021)

MONTH	MINIMUM (CFS)	MEDIAN (CFS)	MEAN (CFS)	MAXIMUM (CFS)
January	1,100	2,590	3,077	9,410
February	1,340	2,780	3,512	15,000
March	1,680	2,840	4,663	22,200
April	1,230	4,585	7,472	23,200
May	2,510	8,640	10,584	31,700
June	3,380	8,315	11,285	47,200
July	3,690	6,440	7,464	23,500
August	3,250	5,410	5,858	13,500
September	2,450	4,610	4,787	9,640
October	1,230	3,410	3,529	7,500
November	1,610	3,105	3,443	7,090
December	1,000	2,780	3,116	6,970

Source: USGS 2022b

5.2.3 FLOW DURATION CURVES

Figure 5-9 is the flow duration curve calculated from daily values for the period of analysis including WYs 1989 through 2021 at USGS Shelley gage 1306000. The Snake River had a median flow of approximately 4,400 cfs with flows ranging between approximately 1,975 cfs and 16,200 cfs 90 percent of the time. Monthly flow duration curves are presented in Appendix B.

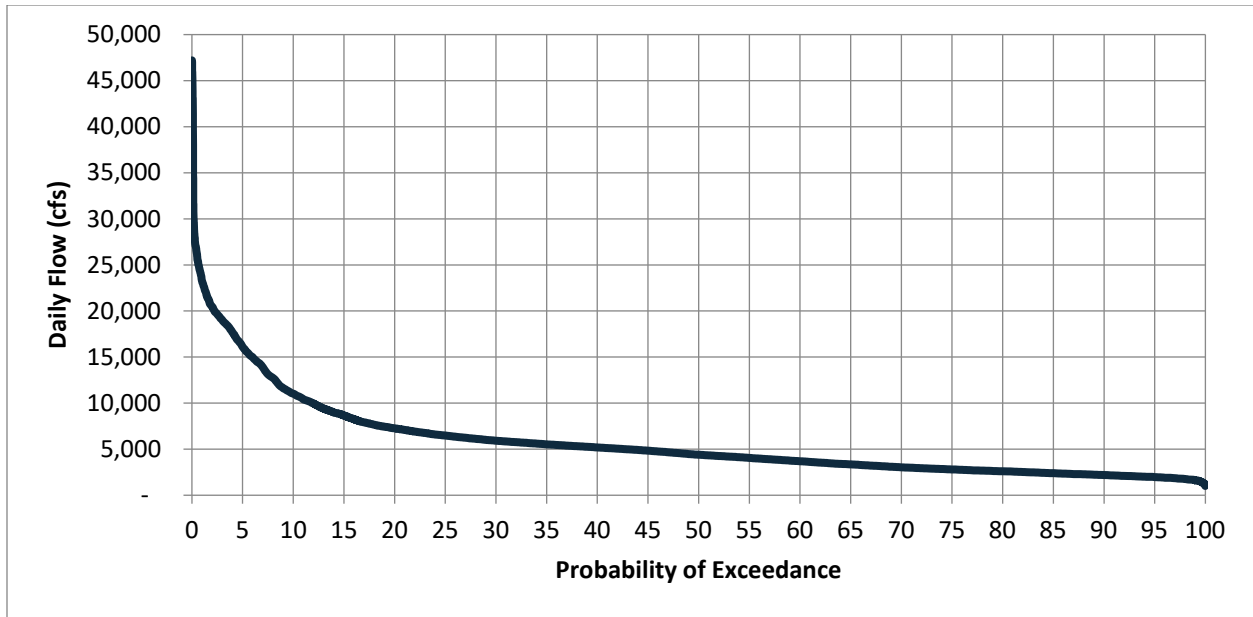


FIGURE 5-9 FLOW DURATION CURVE FOR THE SNAKE RIVER AT SHELLEY, IDAHO (WYs 1989-2021)

5.2.4 EXISTING AND PROPOSED USES OF PROJECT WATER

Water resources of the Upper Snake River Basin were developed extensively for irrigation, power generation, aquaculture, and municipal and industrial supply (IWRB 1998). Irrigation has altered the hydrologic system of the Snake River; the construction of dams, reservoirs, canals, and diversion of large volumes of surface water for irrigation have changed the flow characteristics of the Snake River and many of its tributaries (Goodell 1988). Diversions above the USGS gaging station on the Snake River above Eagle Rock near Idaho Falls provide irrigation for approximately 700,000 acres (USGS 2022b). In 1995, IDWR estimated annual surface water diversions averaged 3.4-million ac-ft in the reach between Palisades and Blackfoot (IWRB 1998). The IFP Projects are located within the state of Idaho Water District No. 1 (District); approximately 345 surface water diversions are administered by the District (IDWR 2020). These diversions account for approximately 1,142 surface water rights within the District authorizing a combined diversion rate in excess of 122,000 cfs (IDWR 2022).

Three irrigation canals divert water to the Projects' vicinities but are not part of either of the Projects. Flows at the three IFP plants are essentially equal most of the year. The irrigation diversion structure for the Porter Canal (Site ID 13057250) is located between the City Plant and the Upper Plant and diverted up to 364 cfs to farmlands southwest of the city of Idaho Falls in 2016 and 2021 (IDWR 2022).

Two water delivery entities (Woodville Canal Company and the Snake River Irrigation District) have water rights that authorize diversion of 1,604 cfs from the Snake River via canals off the Gem State Project reach. This use is primarily restricted to the April through October growing season, with peak diversions occurring in June. Both canals are concrete; the control gates for the Woodville Canal Company are manually operated, while the gates for the Snake River Irrigation District are hand or electrically operated. Operation of the structures is by the water delivery entities (FERC 1990). There are no other diversions from the Snake River between the Gem State Project and the USGS gaging station at Shelley, Idaho (FERC 1983i).

TABLE 5-8 MEAN MONTHLY FLOW (CFS) FOR CANALS DIVERTING FLOWS FROM SNAKE RIVER IN IFP PROJECTS' AREA (WY 2021)

MONTH	PORTER CANAL ¹ (13057250)	WOODVILLE CANAL (13059505)	SNAKE RIVER VALLEY CANAL (13059525)
January	0	0	0
February	0	0	0
March	0	0	0
April	32	16	147
May	235	49	404
June	327	53	522
July	253	45	448
August	178	35	313
September	165	32	304
October	57	7.9	85
November	0	0	0
December	0	0	0

Source: IDWR 2022

5.2.5 EXISTING INSTREAM FLOW USES AND WATER RIGHTS

IFP is a department of the City of Idaho Falls, who has a year-round non-consumptive water right for 10 cfs authorized for a wildlife beneficial use associated with the Project (IDWR 2022). The City of Idaho Falls also has water rights authorized for hydropower uses associated with the Projects including 6,000 cfs for the Upper Plant, 6,000 cfs for the City Plant, and 8,440 cfs for the Lower Plant of the Idaho Falls Project and 5,000 cfs for the Gem State Project (Table 5-9). There are no instream flow requirements for the Snake River in the Project areas.

**TABLE 5-9 CITY OF IDAHO FALLS SURFACE WATER RIGHTS FOR HYDROPOWER USE
SUMMARIZED BY PROJECT FACILITY**

FACILITY	WATER RIGHT NUMBER	PRIORITY DATE	DIVERSION RATE (CFS)
Upper Plant	1-2047	10/28/1927	500
	1-2049	2/14/1936	1,080
	1-4003	5/3/1930	580
	1-7013	11/9/1977	2,600
	1-7023	2/15/1979	1,240
	Upper Plant Total		
City Plant	1-40	4/20/1900	140
	1-41	10/22/1904	48
	1-360	7/18/1919	394
	1-361	10/5/1923	485
	1-2014	12/3/1907	485
	1-4002	2/5/1915	388
	1-7015	11/9/1977	2,600
	1-7024	2/15/1979	1,460
City Plant Total			6,000
Lower Plant	1-281	12/29/1905	1,500
	1-4001	10/5/1940	1,240
	1-7014	11/9/1977	4,800
	1-7025	10/28/1927	500
	Lower Plant Total		
Gem State	1-7018	3/17/1978	5,000

Source: IDWR 2022

5.2.6 ICE CONDITIONS

Ice forms on the Snake River throughout the Project during the winter. The extent of ice cover depends on water temperatures, air temperatures, river flow and the channel configuration among river reaches. Ice is most extensive during extended periods of subzero air temperatures and low river flows under 3,000 cfs (FERC 1994). Ice jams have formed at the Upper Plant Development

reservoir (Zufelt et al. 1990). Frazil ice¹⁰ formed in turbulent open water sections of the Snake River downstream of the Idaho Canal diversion structure 6 miles upstream of the Upper Plant Dam accumulated at the upstream edge of the reservoir's sheet ice cover (Zufelt et al. 1990). Additional ice that can break away from the shoreline areas in the open portion of the river also accumulates at the upstream extent of the reservoir. These ice jams have led to localized flooding of property along the reservoir (winters of 1982-83 and 1984-85) (Zufelt et al. 1990). Interviews with residents describe ice jam flooding on at least two occasions between 1950 and 1958 (Zufelt et al. 1990). An analysis funded by the USACE concluded that dams have neither caused nor aggravated ice jam problems at Bear Island (Zufelt et al. 1990). Ice jams do not occur downstream of the Upper Project because of the insulating ice cover on the IFP Projects reservoirs that keep river waters from supercooling sufficiently thereby preventing frazil ice formation.

5.2.7 WATER QUALITY STANDARDS

Idaho water quality standards consist of three parts: the designated uses of waters, the numeric or narrative criteria to protect those uses, and an anti-degradation policy. Water quality criteria used to protect these beneficial uses include narrative "free from" criteria applicable to all waters (IDAPA 58.01.02.200¹¹), and numerical criteria, which vary according to beneficial uses (IDAPA 58.01.02.210¹², 250¹³, 251¹⁴, and 252¹⁵). Idaho water quality standards require that surface waters of the state be protected for beneficial uses, wherever attainable (IDAPA 58.01.02.054¹⁶). Typical numeric criteria include bacteriological criteria for recreational uses, physical and chemical criteria for aquatic life (e.g., pH, temperature, dissolved oxygen [DO]), ammonia, and toxics and turbidity criteria for water supplies.

¹⁰ Frazil ice is a collection of loose, randomly oriented ice crystals millimeter and sub-millimeter in size and with various shapes.

¹¹ General Surface Water Quality Criteria

¹² Numeric Criteria for Toxic Substances for Waters Designated for Aquatic Life, Recreation, or Domestic Water Supply Use

¹³ Surface Water Quality Criteria for Aquatic Life Use Designations

¹⁴ Surface Water Quality Criteria for Recreation Use Designations

¹⁵ Surface Water Quality Criteria for Water Supply Use Designation

¹⁶ Beneficial Use Support Status

The Snake River throughout the Idaho Falls and American Falls subbasins, including the Idaho Falls and Gem State Project areas, is designated for cold-water aquatic life, salmonid spawning, primary contact recreation, agricultural and domestic water supplies. The numerical water quality criteria associated with those beneficial uses are summarized in Table 5-10.

TABLE 5-10 NUMERIC CRITERIA TO SUPPORT BENEFICIAL USES IN THE IFP PROJECT AREAS FOR SELECT WATER QUALITY PARAMETERS

BENEFICIAL USE	PARAMETER	CRITERIA	IDAHO ADMINISTRATIVE CODE 58.01.02 REFERENCE
Aquatic Life (General)	pH	6.5-9.0	250.01a
	TDG	<110% saturation	250.01b
Aquatic Life (Cold Water)	Dissolved Oxygen	Instantaneous >6.0 mg/L During salmonid spawning: inter-gravel Daily min : ≥ 5.0 mg/L 7-day avg: ≥ 6.0 mg/L	250.02a 250.05.f.i 250.02.f.ii
		During salmonid spawning: water column Daily min : ≥ 6.0 mg/L or 90% saturation 7-day avg : ≥ 6.0 mg/L	276.02
		Discharged from dams and hydroelectric facilities (June 15-October 15) Instantaneous ≥ 3.5 mg/L 7-day avg : ≥ 4.7 mg/L 30-day avg : ≥ 6.0 mg/L	
	Temperature	Instantaneous ≤22°C Daily Average ≤19°C During salmonid spawning: Instantaneous ≤13°C Daily average ≤9°C	250.02.b 250.02.f
	Ammonia	Dependent on temperature and pH. The acute criterion (CMC) is the 1-hour average concentration of total ammonia nitrogen; this is not to be exceeded more than once every 3 years. The chronic criterion (criterion continuous concentration) is the 30-day	250.02b

BENEFICIAL USE	PARAMETER	CRITERIA	IDAHO ADMINISTRATIVE CODE 58.01.02 REFERENCE
		average concentration of total ammonia nitrogen, which is not to be exceeded more than once every 3 years.	
Primary Contact Recreation	<i>E. coli</i>	< 126 <i>E. coli</i> counts per 100mL (geometric mean) based on a minimum of 5 samples taken every 3 to 11 days over a 45-day period; or < a STV of 410 <i>E. coli</i> counts per 100mL in more than 10% of samples collected over a 45-day period.	251.02a
	Enterococci	<35 enterococci counts per 100mL (geometric mean) based on a minimum of 5 samples taken every 3 to 11 days over a 45-day period; or <a STV of 130 enterococci counts per 100mL in more than 10% of samples collected over 45-day period.	251.02.b
Domestic Water Supply	Turbidity	<5 NTU above background when background turbidity is 50 NTU or less; <10% above background when background turbidity is > 50 NTU and < 250 NTU; or <25 NTU above background when background turbidity is 250 NTU or greater	252.02.b

Source: IDEQ 2004

Key:

- CMC criterion continuous concentration
- mg/L milligrams per liter
- mL milliliter
- NTU Nephelometric Turbidity unit
- STV statistical threshold value

5.2.8 EXISTING WATER QUALITY DATA

Limited current water quality data are available in the Project areas. A summary of available water quality assessments, available data sources, and select water quality parameters are summarized below.

Section 303(d) of the Clean Water Act states that waters unable to support their beneficial uses and not meeting water quality standards must be listed as water quality limited waters. Subsequently, these waters are required to have TMDLs developed to bring them into compliance with water quality standards. The IFP Project areas are within a 21.4-mile reach of the Snake River from Dry Bed Creek to RM 804.2. According to the 2022 Integrated Report, this reach is designated as Category 3, not assessed due to insufficient (or no) data and information to determine if beneficial uses are being attained or impaired (IDEQ 2022). The Gem State Project area is within the 58.9-mile reach of the Snake River between RM 804.2 and American Falls Reservoir. The 2022 Integrated Report designates this reach as Category 5, not meeting applicable water quality standards for one or more beneficial uses due to one or more pollutants; therefore, an Environmental Protection Agency (EPA)-approved TMDL is needed. Elevated mercury concentrations are identified as impairing the primary contact recreation, salmonid spawning, and cold-water aquatic life beneficial uses.

The USGS collected limited water quality data at USGS gage 13060000 near Shelley Idaho Irrigation District and New Sweden Irrigation District collected water temperature upstream of the IFP Projects in 2014-2016 to support evaluation of the proposed County Line Hydroelectric Project (IID and NSID 2020). Additional water temperature data were collected by IFP in 1991 to support evaluation of bypass flows (Ralston and Associates 1991). In addition, City monitoring for the water treatment plant permitting includes monthly DO data upstream of the Idaho Falls wastewater treatment plant.

Seasonal exceedances of temperature criteria were documented in the IFP Projects areas. Monitoring just upstream of the IFP Projects from 2014 to 2016 documented several days in late July to early August of both 2015 and 2016 that exceeded the cold-water aquatic life standard (IID and NSID 2020). The salmonid spawning standard was consistently exceeded between early April and late October (IID and NSID 2020). These observations are consistent with temperature

monitoring in the Gem State Project area in 1989 and 1990 that documented temperatures exceeding water quality standards in July and August when air temperatures exceeded 90°F (Ralston and Associates 1991). Notably, these periods of temperature exceedances were not accompanied by DO concentrations below the standard for cold-water aquatic life (Ralston and Associates 1991). More recent monitoring in the Snake River upstream of the Idaho Falls sewage treatment facility under National Pollutant Discharge Elimination System (NPDES) Permit #ID0021261 also documented DO concentrations meeting criteria during all monthly samples (2003-2012; IID and NSID 2020). Under the current NPDES program, IFP monitors temperature, pH, and grease and oil levels. This is done by testing non-contact cooling water discharge from heat exchangers that cool the bearing water, heating ventilation and air conditioning systems at three sampling locations per plant. Since fall 2022, IFP Projects have been tested and reported to the Idaho Department of Environmental Quality (IDEQ) on a monthly basis and have stayed within required levels with no oil or grease detection (IFP Personal Communication).

Generally, the Snake River in the IFP Projects Areas would be described as a slightly basic, hard-water stream, rich in dissolved material and nutrients, with high concentrations of total residue and associated turbidity levels (FERC 1983). Excess mercury in fish is a widespread problem in Idaho (Essig and Kosterman 2008). The IFP Projects Areas are listed as impaired based on the IDEQ assessment of arsenic, mercury, and selenium in fish tissue and water from Idaho's major rivers (Essig and Kosterman 2008). A mercury level of 0.317 milligrams per kilogram (mg/kg), which exceeds the human health criterion of 0.3 mg/kg, was reported in fish tissue from American Falls Reservoir downstream of the IFP Projects Area (Essig and Kosterman 2008).

5.2.9 RESERVOIR DATA

5.2.9.1 UPPER PLANT

The Snake River meanders over a wide floodplain, with the river slope steepening near Idaho Falls. The bed slope increases from 0.0002 upstream of the Idaho Canal Diversion Structure to 0.0011 in the reach between the Idaho Canal Diversion Structure and Upper Dam No. 1 (Zufelt et al. 1990). Just downstream of the Idaho Canal Diversion Structure, the flow regime is dominated by turbulent riffles. South of the County Line Bridge, the river has multiple channels and is characterized by several riffle and pool sections. The river forms a single channel, straightens, and

becomes more tranquil as it enters the backwater of the Upper Power Project reservoir. The Upper Plant impoundment is 100 acres at a normal pool elevation of 4,734.7 feet National Geodetic Vertical Datum (NGVD) and extends approximately 2 miles upstream. The impoundment has a storage capacity of 800 ac-ft at elevation 4,734.7 feet NGVD. The deepest part of the river in the study reach is just upstream of Upper Dam No. 1, where the reservoir is nearly 80 feet deep (Zufelt et al. 1990).

5.2.9.2 CITY PLANT

The City Plant impoundment is 50 acres at a normal pool elevation of 4,700 feet and extends approximately 1 mile upstream. The impoundment has a storage capacity of 400 ac-ft at elevation 4,700 feet.

5.2.9.3 LOWER PLANT

The Lower Plant impoundment is 100 acres at a normal pool elevation of 4,674 feet and extends approximately 2 miles upstream. The impoundment has a storage capacity of 800 ac-ft at elevation 4,674 feet. Operated as run-of-river facilities, the Idaho Falls impoundments experience little fluctuation during normal operations.

5.2.9.4 GEM STATE

The Gem State impoundment is 305 acres at a normal pool elevation of 4,655 feet and extends approximately 20,000 feet upstream. The impoundment has a storage capacity of 5,000 ac-ft at elevation 4,655 feet. Operated as a run-of-river facility, the Gem State impoundment experiences little fluctuation during normal operations. The Snake River in the Gem State Project area is of moderate gradient, falling approximately 1.8 feet per 1,000 feet of stream length (FERC 1983). Substrate through this reach ranges from gravel to boulder-size material on basaltic bedrock. Stream width is approximately 500 feet at the dam site, but rapidly narrows downstream of the dam to a width of approximately 150 feet.

5.2.10 DOWNSTREAM REACHES

The Snake River downstream of the Idaho Falls and Gem State developments is generally a wide, slow, meandering river passing through flat, irrigated cropland (FERC 1983a). The namesake falls

in Idaho Falls were created by the City Plant dam and are not a natural feature. Water surface elevations between the two USGS gages spanning the two projects drop approximately 131 feet over 17.1 miles; channel gradients are gentle and average less than one percent.

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5.3 FISH AND AQUATIC RESOURCES

Per 18 CFR § 5.6(d)(3)(iv), this section provides a description of the fish and other aquatic resources, including invasive species in the general vicinity of the two Projects. This section discusses the existing fish and macroinvertebrate communities, including the presence or absence of anadromous, catadromous, or migratory fish, and any known or potential upstream or downstream impacts of the Projects on the aquatic community.

5.3.1 EXISTING AQUATIC COMMUNITY

GENERAL OVERVIEW

The reach of the Snake River that encompasses the southeastern region of Idaho supports numerous native and non-native fish species. Native fish species found throughout all or parts of this reach include mountain whitefish (*Prosopium williamsoni*), Yellowstone cutthroat trout (*Oncorhynchus clarkia bouvieri*), Utah chub (*Gila atraria*), longnose dace (*Rhinichthys cataractae*), speckled dace (*Rhinichthys osculus*), redbelt shiner (*Richardsonius balteatus*), Utah sucker (*Catostomus ardens*), bluehead sucker (*Catostomus discobolus*), mountain sucker (*Catostomus platyrhynchus*), and mountain sculpin (*Cottus sp.*). Non-native species include white sturgeon (*Acipenser transmontanus*), rainbow trout (*Oncorhynchus mykiss*), brown trout (*Salmo trutta*), brook trout (*Salvelinus fontinalis*), common carp (*Cyprinus carpio*), brown bullhead (*Ameiurus nebulosus*), channel catfish (*Ictalurus punctatus*), green sunfish (*Lepomis cyanellus*), bluegill (*Lepomis macrochirus*), smallmouth bass (*Micropterus dolomieu*), largemouth bass (*Micropterus salmoides*), and yellow perch (*Perca flavescens*) (IDFG 2019).

The Snake River, between Gem State Dam to the confluence of the South Fork is considered a cold-water fishery supporting rainbow trout, brown trout, cutthroat trout, and mountain whitefish (IFG 2019). Additionally, a catch-and-release fishery of white sturgeon is supported between the outfall of the Idaho Falls Upper Plant and the Gem State Dam (IDGH 2019). The 39-mile reach of the Snake River upstream from the Upper Dam to the confluence of the Henry's Fork and South Fork supports a trophy fishery for rainbow trout, brown trout, and cutthroat trout. Catch rates are generally relatively low upstream of the IFP Projects, although trophy-size fish are caught. The 1976 Teton Dam failure and associated silt deposition caused a loss of spawning habitat in this reach (DFG 2007). Some limited natural trout reproduction occurs; The reach downstream of the

Gem State Project is managed for larger trout, with some stocking of adult rainbow trout occurring annually (IDFG 2019). Brown trout stocking historically occurred in this reach but was discontinued in 1999 (IDFG 2007).

HABITAT WITHIN BOTH PROJECT AREAS

The IDFG and City of Idaho Falls stock the Snake River between the Upper Plant of the Idaho Falls Project and the Gem State Project with rainbow trout to support a put-and-take fishery (IDFG 2007). Fingerling and catchable-sized rainbow trout are stocked within both Project areas (IDFG 2022a). Additional species pursued by anglers in the reach between the Idaho Falls and Gem State Projects include yellowstone cutthroat trout, brown trout, and wild rainbow trout (IDFG 2007). The impoundments associated with each Project limit trout migration and spawning habitat within this reach (IDFG 2007). Some natural reproduction is believed to occur between the projects, but annual stocking is necessary to maintain the fishery (IDFG 2019).

Other fish species that have been documented in the vicinity of the Projects include mountain whitefish, Utah sucker, and Utah chub, as well as non-native smallmouth bass and white sturgeon (City of Idaho Falls 1978; IDFG 2019). Smallmouth bass were introduced to the Snake River reach that encompasses the Projects through stocking in 1990 and 1991 (IDFG 1993a). IDFG has stocked white sturgeon between the Upper Plant of the Idaho Falls Project and Gem State Dam since 2007, and in other reaches of the Snake River since 1989. Multiple reaches between the two Projects offer opportunities for anglers to pursue white sturgeon. The fishery is currently designated as catch-and-release only, although future harvest goals are being considered (IDFG 2019).

The Snake River, upstream of the Idaho Falls Upper Plant to the confluence of the Henry's Fork and South Fork, contains a fishery of rainbow trout, cutthroat trout, and brown trout. No fish are stocked upstream of the Idaho Falls Upper Plant (IDFG 2019). Some reproduction does occur, and although catch rates are low, trout that are caught can reach trophy size. Brown trout exceeding 30-inches and rainbow trout exceeding 8 pounds were caught by anglers during recent years (IDFG 2019).

AQUATIC HABITAT

Numerous irrigation diversions exist both upstream and downstream of the Projects. The effect of the diversions on fish entrainment has not been well documented throughout the upstream and downstream reaches but is believed to have substantial effects on fish populations through mortality or removal of fish from the river and into canals (IDFG 2019). Quality and availability of aquatic habitats, and associated habitat suitability upstream of the Idaho Falls Project, is largely influenced by the amount of water diverted from the Snake River for irrigation (IDFG 2019). Effects of irrigation on river flows are especially variable from April to October during the irrigation season (IDFG 2007).

Irrigation releases from the Palisades Reservoir has reduced the maximum summer water temperature of the Snake River upstream of the Idaho Falls Project, maintaining suitable habitat for cold-water species (City of Idaho Falls 1978). Article 40 of the Idaho Falls Project license requires a continuous minimum flow of 100 cfs from the Upper Plant Dam into the east channel and cold water temperatures for select species to discourage reproduction of warm-water species (FERC 1979). Flow into the west channel is maintained through generation (City of Idaho Falls 1978). The Gem State Project is required to maintain a continuous 20 cfs minimum flow for aquatic habitat downstream of the project (FERC 1985).

5.3.2 DISTRIBUTION OF FISH AND AQUATIC COMMUNITY

5.3.2.1 RESIDENT FISH COMMUNITY

The Snake River reach that encompasses the Projects supports a cold-water fishery for multiple trout species, including brown trout, Yellowstone cutthroat trout, hatchery stocked rainbow trout, and wild rainbow trout (IDFG 2019). Mountain whitefish and yellow perch are also pursued by anglers throughout the reach (City of Idaho Falls 1978). Additional gamefish species that occur between the Projects include smallmouth bass and white sturgeon, with white sturgeon stocking efforts ongoing (Table 5-11). Nongame fish species documented in the Idaho Falls Project area include Utah chub and Utah sucker (City of Idaho Falls 1978; IDFG 2019). Electrofishing efforts targeting gamefish species downstream of the Idaho Falls Lower Plant and Gem State Dam have documented relatively high numbers of mountain whitefish relative to the overall fish population (IFP 2018). Hatchery rainbow trout comprise a majority of the salmonid population. Minimal

salmonid spawning activity occurs in the impounded reaches between the Idaho Falls Upper Plant and Gem State Dam (IDFG 2019). Wild trout are present in reaches upstream of the Upper Plant, likely through a combination of some successful spawning activity and emigration (IDFG 1993b, 2019).

TABLE 5-11 GAMEFISH SPECIES KNOWN TO OCCUR IN THE PROJECT AREA

SCIENTIFIC NAME	COMMON NAME	NATIVE/NON-NATIVE TO REACH
<i>Acipenser transmontanus</i>	White sturgeon	Non-native
<i>Micropterus dolomieu</i>	Smallmouth bass	Non-native
<i>Oncorhynchus clarkii bouvieri</i>	Yellowstone cutthroat trout	Native
<i>Oncorhynchus mykiss</i>	Rainbow trout*	Non-native
<i>Prosopium williamsoni</i>	Mountain whitefish	Native
<i>Salmo trutta</i>	Brown trout	Non-native

Source: IDFG 1993b, 2007

*includes hatchery and wild fish

5.3.2.2 FISHERIES MANAGEMENT

The overall management objectives for the reach of the Snake River that includes the Projects include: 1) stocking of white sturgeon in the Project pools and evaluating success, as well as the public's desire to engage in limited sturgeon harvest; 2) offsetting limited spawning habitat by stocking trout, and evaluating effectiveness, as well as maintaining put-and take trout fishing opportunities; 3) evaluating thermal and physical trout habitat characteristics through the reach; 4) maintaining a trophy component to the fishery in some reaches, including assessment of additional regulations, and 5) improving angler access through easements or acquisitions (IDFG 2019).

Goals related to maintenance of a trophy trout fishery are largely applicable to reaches of the Snake River that are outside of the Project areas, while goals within the Project areas emphasize angler success, catch rates, and opportunity. Fisheries management goals specific to the reach of the Snake River that encompasses the Projects include: 1) maintaining a catch rate for trout of 0.5 fish per hour through stocking; 2) monitoring of smallmouth bass populations, and 3) continued stocking of white sturgeon. Species specific management activities are described below (IDFG 2019).

TROUT SPECIES

The IDFG regularly stocks fingerling and catchable-sized rainbow trout throughout several Project pools. Stocking during recent years occurred in the John's Hole Pool (upstream of the City Plant), the Tourist Park Pool (upstream of the Lower Plant), and in Gem Lake (upstream of Gem State Dam) (Figure 5-13 and Figure 5-14). A total of 13,300 rainbow trout were stocked in the John's Hole Pool during 2021 and 2022, and a total of 7,806 rainbow trout were stocked in the Tourist Park Pool between 2018 and 2022. Fish stocked during all of these years were greater than 6-inches in length. A majority of trout stocking in the Project areas occurred in Gem Lake. Stocking records for this reach go back to 1988 with a total of 591,093 trout stocked during the past 10 years (2012-2022) (Table 5-12). Most of the rainbow trout stocked in Gem Lake were greater than 6-inches in length, but rainbow trout less than 6-inches were also stocked (IDFG 2022a). Cutthroat trout stocked during recent years, included 5,002 individuals stocked during 2017 (Table 5-12). The angler daily bag limits in the Gem Lake, John's Hole Pool and Tourist Park Pool are six total trout, only two of which may be cutthroat trout (IDFG 2022b).

Since 2018, IFP has stocked the Gem State Kids Fishing Pond located just downstream of the Gem State Dam with 8-inch and 11-inch trout. From 2018 to 2020, IFP stocked the pond with 1,800 pounds of 8-inch trout and 600 pounds of 11-inch trout. In 2021, Idaho Falls reduced the quantity stocked and supplied 800 pounds of 8-inch trout and 200 pounds of 11-inch trout for only the month of August, 800 pounds of 8 inch trout and 200 pounds of 11 inch trout for only the month of June in 2022, and 800 pounds of 8 inch trout and 200 pounds of 11 inch trout for only the month of August in 2023 (Table 5-13).

TABLE 5-12 IDAHO FISH & GAME TEN-YEAR TROUT STOCKING HISTORY IN THE PROJECT AREA

LOCATION	# STOCKED	GENERAL SIZE	YEAR
John's Hole Pool	9,351	Greater than 6 inches	2022 (through May)
	3,949	Greater than 6 inches	2021
Tourist Park Pool	1,200	Greater than 6 inches	2022 (through May)
	3,600	Greater than 6 inches	2021
	3,006	Greater than 6 inches	2018
Gem Lake	3,003	Greater than 6 inches	2022
	12,000	Greater than 6 inches	2021
	12,000	Greater than 6 inches	2020
	12,000	Greater than 6 inches	2019
	81,498	Less than 6 inches	2018
	12,005	Greater than 6 inches	2018
	5,002 ²	Less than 6 inches ²	2017 ²
	115	Adult	2017
	12,999	Greater than 6 inches	2017
	19,240	Greater than 6 inches	2016
	38,988	Less than 6 inches	2015
	23,445	Greater than 6 inches	2015
	503	Adult	2015
	11,900	Greater than 6 inches	2014
	79,421 ²	Less than 6 inches ²	2014 ²
	12,000	Greater than 6 inches	2013
	232,625 ²	Less than 6 inches ²	2013 ²
9,000	Greater than 6 inches	2012	
13,349 ²	Less than 6 inches ²	2012 ²	

Source: IDFG 2022a

¹ rainbow trout unless otherwise noted;

² cutthroat trout

TABLE 5-13 IDAHO FALLS POWER FIVE-YEAR TROUT STOCKING HISTORY IN THE PROJECT AREA

LOCATION	YEAR	8-INCH TROUT (LBS)	11-INCH TROUT (LBS)
Gem State Fish Pond	2023 (August only)	800	200
	2022 (June only)	800	200
	2021 (August only)	800	200
	2020	1800	600
	2019	1800	600
	2018	1800	600

Source: [Idaho Fish Stocking 2018-2023](#)

WHITE STURGEON

White sturgeon is the largest freshwater fish in North America, and one of eight sturgeon species found on the continent. The historical range of the species includes the Snake River from Shoshone Falls downstream to its confluence with the Columbia River. Shoshone Falls presents a natural high migration barrier to the species, preventing further range expansion; therefore, white sturgeon were not historically found in the reach of the Snake River that encompasses the IFP Projects (IDFG 2008).

White sturgeon were stocked in pools between the Upper and Lower Idaho Falls Plants and downstream of Gem State Dam during most years since 2007, with total of 4,571 white sturgeon stocked in the Snake River upstream of American Falls Reservoir and within the Project areas. Initial stocking events occurred upstream of the City Plant, with additional stocking efforts occurring upstream of the Lower Plant and City Plant during recent years (Figure 5-13 and Figure 5-14) (Table 5-14) (IDFG 2008, 2022a). Catchable-sized adult fish were stocked (e.g., approximately 4- to 7-feet), along with fish classified as “greater than 6 inches” are often approximately 16 inches long (Idaho News 2019). The IDFG goal associated with the current white sturgeon stocking regimen is to diversify sport fishing opportunities for anglers by adding an additional species that can be pursued. Longer term goals include evaluation of angler parameters, continued white sturgeon stocking based on biological observations, detection of emigration from the reach, and promoting sturgeon angling opportunities (IDFG 2008, 2019). The species is

currently closed to harvest, with catch-and-release angling allowed. Alternate regulations may be considered that could allow some harvest as a part of future management goals, although harvest of the species is not allowed as of 2022 (IDFG 2019, 2022b). Genetics are not considered as a stocking parameter, as the nearest wild population occurs over 150 RM downstream of the Gem State Project. Fishing regulations for white sturgeon in the Snake River include the use of barbless hooks, and use of a sliding swivel with light line attached to a weight. The purpose of this type of fishing tackle is to allow for minimal tackle to be lost, reducing sturgeon mortality associated with angling activities (IDFG 2022b).

The IDFG conducted surveys during 2021 to document white sturgeon distribution in the reach of the Snake River that includes the Project areas. The surveys documented that some individual white sturgeon remained in the vicinity of their original stocking locations, while others made downstream movements. Most individuals were documented within 5 miles of their original stocking location. One individual that was stocked in the Project areas was found to have migrated past Project dams and was found approximately 80 miles downstream of the Gem State Project. Surveys of white sturgeon anglers suggest that catch rates, and overall sturgeon abundance, are highest immediately downstream of Gem State Dam (IDFG 2021).

TABLE 5-14 WHITE STURGEON STOCKING HISTORY IN THE PROJECT AREAS

LOCATION	# STOCKED	GENERAL SIZE	YEAR
John's Hole Pool	10	Adult	2021
	2	Adult	2019
	84	Greater than 6 inches	2019
	151	Adult	2017
	256	Greater than 6 inches	2017
Tourist Park Pool	154	Adult	2022
	52	Adult	2021
	87	Greater than 6 inches	2018
	200	Adult	2017
Gem Lake	253	Greater than 6 inches	2019
	100	Adult	2016

LOCATION	# STOCKED	GENERAL SIZE	YEAR
	389	Adult	2015
	44	Greater than 6 inches	2015
American Falls Reservoir to Gem Lake Dam*	2	Adult	2019
	250	Adult	2018
	50	Greater than 6 inches	2018
	309	Adult	2017
	215	Adult	2016
	744	Adult	2015
	77	Greater than 6 inches	2015
	381	Adult	2014
	251	Adult	2013
	436	Adult	2010
	74	Adult**	2007

Source: IDFG 2022a

*2007 stocking event is listed as occurring between American Falls Reservoir and Gem Lake Dam in historical stocking records. The white sturgeon Management Plan (IDFG 2008) notes that the stocking event occurred at John’s Hole Pool. Additional stocking efforts listed for American Falls Reservoir to Gem Lake Dam may be associated with efforts that occurred upstream of Gem Lake Dam and into the Idaho Falls Project

**Size class for 2007 stocking event is listed as “juvenile” in the white sturgeon Management Plan (IDFG 2008). Other instances of adult size class could include juveniles

5.3.3 AQUATIC INVASIVE SPECIES

Two aquatic invasive species, the Asian clam (*Corbicula fluminea*) and the New Zealand mudsnail (*Potamopyrgus antipodarum*), are abundant in reaches of the Snake River downstream of the IFP Projects. Specifically, the Asian clam is abundant in the reach beginning at the C.J. Strike Reservoir and continuing downstream through the Hells Canyon Complex. The New Zealand mudsnail is abundant in the reach of the Snake River that includes C.J. Strike Reservoir and upstream to American Falls Reservoir (Lysne 2009). Despite their abundance in these downstream reaches, neither species is currently known to occur in the reach of river that includes the IFP Projects (IDFG 2022c, 2022d). An invasive aquatic plant, Eurasian water milfoil (*Myriophyllum spicatum*) was documented in 17 counties in Idaho (IDFG 2019). The nearest documented location of Eurasian water milfoil in the Snake River is approximately 200 RMs downstream of the Gem State Project (ISDA 2020a). Another aquatic invasive plant, hydrilla (*Hydrilla verticillata*) was

documented in approximately the same reach of the Snake River as Eurasian watermilfoil, but is not known to occur further upstream in the basin (ISDA 2020b).

5.3.4 FRESHWATER MUSSELS AND BENTHIC MACROINVERTEBRATES

Mussel species that have been documented in the Snake River system include the western ridged mussel (*Gonidea angulata*) and the western pearlshell (*Margaritifera falcata*). Individual occurrences of western ridged mussel were documented upstream of the IFP Projects in the South Fork (Jefferson County), and downstream of the IFP Projects in the reach of the Snake River below the American Falls Reservoir (Power County) during the early 1990s (IDFG 2022e). The western pearlshell was documented more recently in the Snake River system. Occurrences of the species were noted near the confluence of the South Fork and Henry's Fork, approximately 40 miles upstream of the Upper Plant (Teton County) (IDFG 2022f). No observations of western ridged mussel or western pearlshell have been documented in Bonneville or Bingham counties.

Benthic macroinvertebrates were sampled in the Gem State Project area in November 1980 and in March 1981. A total of 27 taxa were documented, and macroinvertebrate densities ranged from 154 to 1,092 organisms per square foot. Samples collected during March were dominated by midges (Diptera) from the family Chironomidae. Caddisfly (Trichoptera) larvae were the second most abundant taxa collected during March. Caddisfly larvae, from the family Hydropsychidae, were the most abundant taxa collected during November (FERC 1983).

The desert valvata snail (*Valvata utahensis*) was documented immediately upstream of the Lower Plant. This species was listed as endangered under the ESA and was believed to only occur below American Falls Dam until survey work located populations upstream of Blackfoot (IFP 2009). Since then, the desert valvata was removed from the ESA list (USFWS 2010). Desert valvata snail prefers deep pools of the Snake River and flowing waters of less swift Snake River tributaries. The snail inhabits a variety of substrates from silts to small pebbles, gravel and rooted aquatic vegetation. In the IFP 2009 Biological Opinion, the presence of the desert valvata snail was confirmed from a site survey conducted by USFWS of the boat launch located at the lower development of the Idaho Falls Project (IFP 2009).

5.3.5 ESSENTIAL FISH HABITAT

National Marine Fisheries Service (NMFS) identifies essential fish habitat (EFH) for fish species that are commercially managed under the Magnuson-Stevens Fishery Conservation and Management Act. EFH is defined as the habitat needed for managed fish species to spawn, breed, feed, and grow to maturity (NOAA 2007). There are no federally managed commercial fish species near the IFP Projects. The IFP Projects are outside the historic range of all anadromous fish species that occur further downstream in the basin; therefore, there is no EFH in the IFP Project vicinity.

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5.4 WILDLIFE AND BOTANICAL RESOURCES

Per 18 CFR § 5.6(d)(3)(v), this section describes the wildlife and botanical resources, including invasive species, in the Idaho Falls and Gem State Project vicinities.

5.4.1 WILDLIFE HABITAT

The Idaho Falls and Gem State Projects occur within the Upper Snake River Plain ecoregion. The land within this ecoregion is dominated by grassland/shrubland, which covers approximately two-thirds of the region (Sleeter 2012). The sagebrush steppe ecosystems include species such as big sagebrush (*Artemisia tridentata*), bluebunch wheatgrass (*Pseudoroegneria spicata*), basin wildrye (*Leymus cinereus*), rabbitbrush (*Chrysothamnus viscidiflorus*), Thurber needlegrass (*Achnatherum thurberianum*), Idaho fescue (*Festuca idahoensis*), threetip sagebrush (*Artemisia tripartita*), Gardner's saltbush (*Atriplex gardneri*), black greasewood (*Sarcobatus vermiculatus*), Indian ricegrass (*Achnatherum hymenoides*), fourwing saltbush (*Atriplex canescens*), crested wheatgrass (*Agropyron cristatum*), alkali sagebrush (*Artemisia longiloba*), and cheatgrass (*Bromus tectorum*) (Sleeter 2012).

The Idaho Falls and Gem State Projects are located within Bingham and Bonneville counties and are surrounded by urban development and agricultural areas. Although only 0.5 percent of the land cover in the Upper Snake River ecoregion is categorized as developed, this region is home to five of Idaho's largest cities: Boise, Nampa, Pocatello, Twin Falls, and Idaho Falls, the latter of which is where the Project is located (Sleeter 2012). The plains and low hills within the Idaho Falls and Gem State Project Boundaries offer ideal conditions for anthropogenic use, and habitat within the Project vicinities is dominated by cultivated crops (small grain, sugar beet, potato, and alfalfa) and livestock. Heavy irrigation in the Upper Snake River Plain is a major cause of stream degradation in the region, along with channelization, dams, sewage treatment, nonpoint pollution, food processing, and phosphate processing (McGrath et al. 2002).

5.4.2 WILDLIFE RESOURCES

Quality habitat for wildlife species that occur within the Upper Snake River Plain ecoregion is unlikely to be present in the Idaho Falls and Gem State Project Boundaries due to heavy

development and abundance of agricultural lands adjacent to the Snake River. It is likely that many of these wildlife species may occur within the Project vicinities rather than the Project Boundaries.

5.4.2.1 MAMMALS

Land within the Idaho Falls and Gem State Project Boundaries are primarily comprised of aquatic habitat of the Snake River. There is a thin border of terrestrial habitat adjacent to the Project's reservoirs that are included within the Project Boundaries. Mammalian species may use this riparian corridor for movement and occasional foraging. It is unlikely that larger wildlife species common to the Snake River Plain such as elk (*Cervus canadensis*), American black bear (*Ursus americanus*), and mule deer (*Odocoileus hemionus*) will be present within the Idaho Falls and Gem State Project Boundaries, and more likely that smaller, semi-aquatic mammals such as the American beaver (*Castor canadensis*) and common muskrat (*Ondatra zibethicus*) will utilize the banks of the Snake River for foraging and shelter (Francisco and Griffith 2011). Species such as the raccoon (*Procyon lotor*) are common, especially along the riparian corridors associated with the Project Boundaries. Other mammals present in the vicinity of the Idaho Falls and Gem State Projects include furbearers, small game species, and rodents. Smaller mammals such as various species of mice, shrew, and vole are expected to be abundant in the surrounding grassland and agricultural lands of the Project Boundaries.

The IDFG reports there are 10 species of bat that have the potential to occur within the Projects' vicinities (IDFG 2022) (Table 5-15). Riverine habitat within the Idaho Falls and Gem State project boundaries may serve as a feeding corridor for the identified bat species in Table 5-15, all of which are insectivores. Summer roosting habitat is not likely to be present within the grass-dominated riparian corridor of the portion of the Snake River within the Project Boundaries. Winter hibernaculum for bat species includes mines, caves, forests, and anthropogenic roosts. Although the Snake River Plain has a high density of hibernacula for Townsend's big-eared bat and western small-footed myotis, it is unlikely that natural winter hibernaculum occur within the Project Boundaries (Whiting et al. 2018). Whiting et al. (2018) monitored bat populations in 64 caves over 32 years, which were in part located in Bingham and Bonneville counties on land managed by the National Park Service, BLM, and the U.S. Department of Energy, Idaho Operations Office. There are 33.7 acres of land managed by the BLM within the Project Boundaries. The exact locations of

monitored caves are not stated in Whiting et al. (2018), but due to the proximity of the BLM-managed land to the Snake River, it is unlikely that caves are present on these parcels (Figure 5-10, Figure 5-11, Figure 5-12). Idaho has implemented the North American Bat Monitoring Program since 2015, which is identified as a conservation need in the Idaho State Wildlife Action Plan (IDFG 2017).

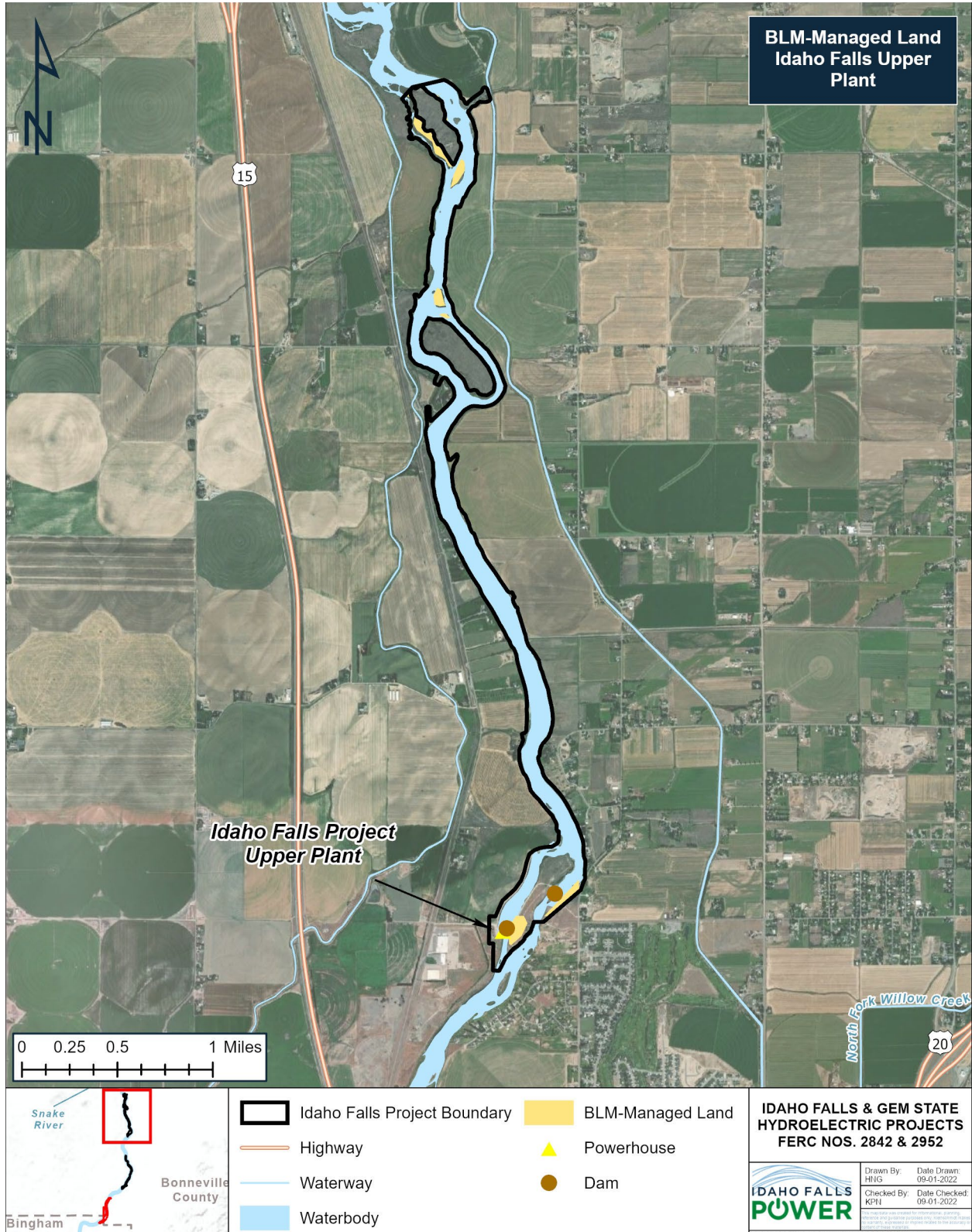


FIGURE 5-10 BLM-MANAGED LAND NEAR THE UPPER PLANT BOUNDARY



FIGURE 5-11 BLM-MANAGED LAND NEAR THE CITY AND LOWER PLANTS

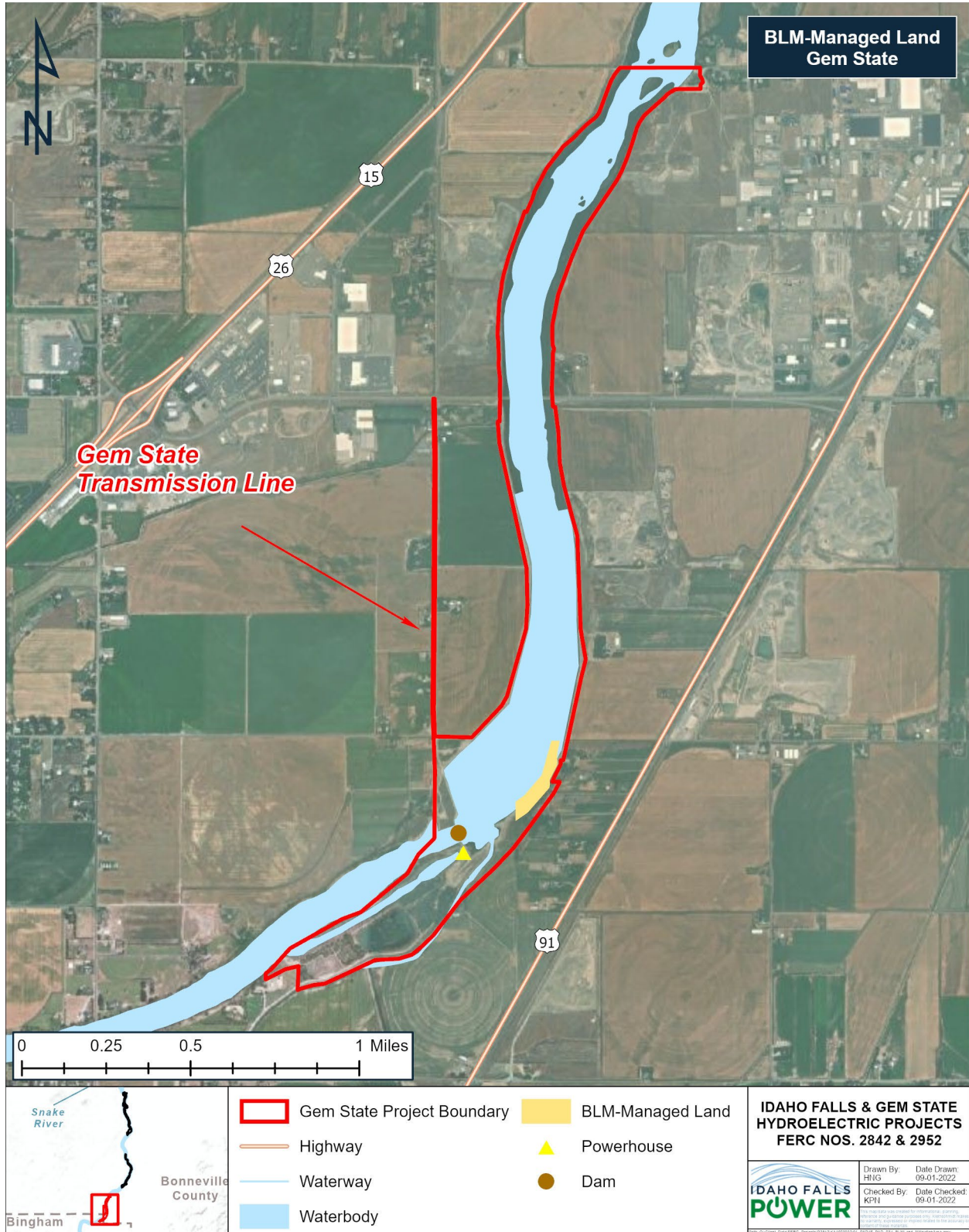


FIGURE 5-12 BLM-MANAGED LAND IN THE GEM STATE PROJECT BOUNDARY

Table 5-15 provides the list of mammal species for Bingham and Bonneville counties that have the potential to occur within the vicinity of the Projects (IDFG 2022).

TABLE 5-15 LIST OF MAMMALS POTENTIALLY OCCURRING IN THE PROJECTS' VICINITIES

SCIENTIFIC NAME	COMMON NAME	CONSERVATION STATUS ¹
MARSUPIALS		
<i>Didelphis virginiana</i>	Virginia opossum	SNA
BATS		
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	S3
<i>Eptesicus fuscus</i>	Big brown bat	S3
<i>Lasiorycteris noctivagans</i>	Silver-haired Bat	S3
<i>Lasiurus cinereus</i>	Hoary bat	S3
<i>Myotis ciliolabrum</i>	Western small-footed myotis	S3
<i>Myotis evotis</i>	Long-eared myotis	S3
<i>Myotis lucifugus</i>	Little brown myotis	S3
<i>Myotis thysanodes</i>	Fringed myotis	S3
<i>Myotis volans</i>	Long-legged myotis	S3
<i>Myotis yumanensis</i>	Yuma myotis	S3
SHREWS AND VOLES		
<i>Lemmyscus curtatus</i>	Sagebrush vole	S5
<i>Microtus longicaudus</i>	Long-tailed vole	S5
<i>Microtus montanus</i>	Montane vole	S4
<i>Microtus pennsylvanicus</i>	Meadow vole	S5
<i>Microtus richardsoni</i>	North American water vole	S4
<i>Myodes gapperi</i>	Southern red-backed vole	S4
<i>Sorex cinereus</i>	Masked shrew	S5
<i>Sorex merriami</i>	Merriam's shrew	S4
<i>Sorex navigator</i>	Western water shrew	S4
<i>Sorex obscurus</i>	Northern montane shrew	S5
<i>Sorex vagrans</i>	Vagrant shrew	S5
RODENTS		
<i>Brachylagus idahoensis</i>	Pygmy rabbit	S3
<i>Callospermophilus lateralis</i>	Golden-mantled ground squirrel	S5
<i>Castor canadensis</i>	American beaver	S4
<i>Dipodomys ordii</i>	Ord's kangaroo rat	S4
<i>Erethizon dorsatum</i>	North American porcupine	S5
<i>Glaucomys sabrinus</i>	Northern flying squirrel	S4
<i>Lepus americanus</i>	Snowshoe hare	S3
<i>Lepus californicus</i>	Black-tailed Jackrabbit	S4
<i>Lepus townsendii</i>	White-tailed Jackrabbit	S4
<i>Marmota flaviventris</i>	Yellow-bellied marmot	S4

SCIENTIFIC NAME	COMMON NAME	CONSERVATION STATUS ¹
<i>Neotamias amoenus</i>	Yellow-pine chipmunk	S5
<i>Neotamias minimus</i>	Least chipmunk	S5
<i>Neotamias umbrinus</i>	Uinta chipmunk	S4
<i>Neotoma cinerea</i>	Bushy-tailed woodrat	S5
<i>Ochotona princeps</i>	American pika	S3
<i>Ondatra zibethicus</i>	Common muskrat	S4
<i>Onychomys leucogaster</i>	Northern grasshopper mouse	S4
<i>Perognathus parvus</i>	Columbia plateau pocket mouse	S5
<i>Peromyscus maniculatus</i>	North American deer mouse	S5
<i>Reithrodontomys megalotis</i>	Western harvest mouse	S4
<i>Sylvilagus nuttallii</i>	Mountain cottontail	S4
<i>Tamiasciurus hudsonicus</i>	Red squirrel	S5
<i>Thomomys idahoensis</i>	Idaho pocket gopher	S4
<i>Thomomys talpoides</i>	Northern pocket gopher	S5
<i>Thomomys townsendii</i>	Townsend's pocket gopher	S4
<i>Urocitellus armatus</i>	Uinta ground squirrel	S4
<i>Urocitellus elegans</i>	Wyoming ground squirrel	S3
<i>Urocitellus mollis</i>	Piute ground squirrel	S4
<i>Zapus princeps</i>	Western jumping mouse	S4
UNGULATES		
<i>Alces alces</i>	Moose	S3
<i>Antilocapra americana</i>	Pronghorn	S4
<i>Cervus canadensis</i>	Elk	S5
<i>Odocoileus hemionus</i>	Mule deer	S4
<i>Odocoileus virginianus</i>	White-tailed Deer	S5
<i>Oreamnos americanus</i>	Mountain goat	S3
<i>Ovis canadensis</i>	Bighorn sheep	S3
<i>Ovis canadensis canadensis</i>	Rocky Mountain bighorn sheep	S1
CARNIVORES		
<i>Bassariscus astutus</i>	Ringtail	SNA
<i>Canis latrans</i>	Coyote	S5
<i>Canis lupus</i>	Gray wolf	S4
<i>Gulo gulo</i>	Wolverine	S1
<i>Lontra canadensis</i>	Northern river otter	S4
<i>Lynx canadensis</i>	Canada lynx	SNA
<i>Lynx rufus</i>	Bobcat	S4
<i>Martes caurina</i>	Pacific marten	SNR
<i>Mephitis mephitis</i>	Striped skunk	S4
<i>Mustela erminea</i>	Ermine or short-tailed weasel	S4

SCIENTIFIC NAME	COMMON NAME	CONSERVATION STATUS ¹
<i>Mustela frenata</i>	Long-tailed weasel	S5
<i>Procyon lotor</i>	Northern raccoon	S5
<i>Puma concolor</i>	Mountain lion, cougar, or puma	S5
<i>Taxidea taxus</i>	American badger	S4
<i>Ursus arctos</i>	Grizzly bear or brown bear	S2
<i>Vison vison</i>	American mink	S3
<i>Vulpes vulpes</i>	Red fox	S4
OMNIVORES		
<i>Ursus americanus</i>	American black bear	S4

Source: IDFG 2022, NatureServe 2022

¹S – State rank indicator; denotes rank based on status within Idaho.

S1 – Critically imperiled because of extreme rarity or because some factor of its biology makes it especially vulnerable to extinction (typically 5 or fewer occurrences)

S2 – Imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction (typically 6 to 20 occurrences)

S3 – Rare or uncommon but not imperiled (typically 21 to 100 occurrences)

S4 – Not rare and apparently secure, but with cause for long-term concern (usually more than 100 occurrences).

S5 – Demonstrably widespread, abundant, and secure.

SNR – Not ranked

SNA – Conservation status rank is not applicable

5.4.2.2 BIRDS

Avian species within the Idaho Falls and Gem State Project Boundaries are expected to utilize the Snake River for foraging, hunting, and as habitat. The Snake River also serves as a migration corridor for avian species. The riparian corridor along the Snake River offers some nesting habitat for small to medium sized songbirds, but the limited canopy habitat within the Project Boundaries is not expected to support an abundance of these birds. Birds of prey occurrences may be more common within the Project Boundaries due to aquatic hunting grounds within the Project’s reservoirs, but these species are temporary inhabitants and are not expected to nest within the Project Boundaries. Similarly, nocturnal birds of prey, which include various species of owl, may temporarily occur within the Projects’ vicinities where small prey such as mice, shrew, and voles are present. Waterfowl such as teal and duck will utilize the Projects’ reservoirs for habitat, breeding, and as a migration route.

Table 5-16 provides the list of bird species for Bingham and Bonneville counties that have the potential to occur within vicinity of the Projects (IDFG 2022), including the NatureServe State Conservation Status Rank for each species describing if a given species is thriving, rare, or

declining (IDFG 2017). No species identified in the Projects' vicinities were listed under the ESA except for the Yellow-billed Cuckoo (YBC; *Coccyzus americanus*), a federally threatened species (Section 5.6.1, *Wildlife Species*).

TABLE 5-16 AVIAN SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE PROJECTS' VICINITIES

SCIENTIFIC NAME	COMMON NAME	LISTING & CONSERVATION STATUS ¹
<i>Acanthis flammea</i>	Common Redpoll	S3N
<i>Accipiter cooperii</i>	Cooper's Hawk	S4
<i>Accipiter gentilis</i>	Northern Goshawk	S3
<i>Accipiter striatus</i>	Sharp-shinned Hawk	S4
<i>Actitis macularius</i>	Spotted Sandpiper	S3B
<i>Aechmophorus clarkii</i>	Clark's Grebe	S2B
<i>Aechmophorus occidentalis</i>	Western Grebe	S2B
<i>Aegolius acadicus</i>	Northern Saw-whet Owl	S4
<i>Aeronautes saxatalis</i>	White-throated Swift	S4B
<i>Agelaius phoeniceus</i>	Red-winged Blackbird	S5
<i>Aix sponsa</i>	Wood Duck	S4B,S4N
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	S3B
<i>Anas - Teal spp.</i>	Unclassified Teal	NL
<i>Anas acuta</i>	Northern Pintail	S4B,S4N
<i>Anas americana</i>	American Wigeon	S4B,S4N
<i>Anas clypeata</i>	Northern Shoveler	S4B,S4N
<i>Anas crecca</i>	Green-winged Teal	S4B,S3N
<i>Anas cyanoptera</i>	Cinnamon Teal	S4B
<i>Anas discors</i>	Blue-winged Teal	S2B
<i>Anas penelope</i>	Eurasian Wigeon	S1N
<i>Anas platyrhynchos</i>	Mallard	S4B,S4N
<i>Anas strepera</i>	Gadwall	S3
<i>Anatidae - Duck spp.</i>	Unclassified Duck	NL
<i>Anthus rubescens</i>	American Pipit	S3B
<i>Aphelocoma californica</i>	Western Scrub-Jay	S3
<i>Aquila chrysaetos</i>	Golden Eagle	S3
<i>Archilochus alexandri</i>	Black-chinned Hummingbird	S5B
<i>Ardea alba</i>	Great Egret	S2B
<i>Ardea herodias</i>	Great Blue Heron	S5B
<i>Artemisiospiza nevadensis</i>	Sagebrush Sparrow	S3B
<i>Asio flammeus</i>	Short-eared Owl	S3
<i>Athene cunicularia</i>	Burrowing Owl	S2B

SCIENTIFIC NAME	COMMON NAME	LISTING & CONSERVATION STATUS ¹
<i>Aythya - Scaup spp.</i>	Unclassified Scaup	NL
<i>Aythya affinis</i>	Lesser Scaup	S3B,S3N
<i>Aythya americana</i>	Redhead	S4
<i>Aythya collaris</i>	Ring-necked Duck	S4B,S4N
<i>Aythya marila</i>	Greater Scaup	SNA
<i>Aythya valisineria</i>	Canvasback	S3B,S3N
<i>Baeolophus ridgwayi</i>	Juniper Titmouse	S1
<i>Bombycilla cedrorum</i>	Cedar Waxwing	S5
<i>Bombycilla garrulus</i>	Bohemian Waxwing	S4N
<i>Bonasa umbellus</i>	Ruffed Grouse	S4
<i>Botaurus lentiginosus</i>	American Bittern	S1B
<i>Branta canadensis</i>	Canada Goose	S5B,S5N
<i>Bubo virginianus</i>	Great Horned Owl	S5
<i>Bubulcus ibis</i>	Cattle Egret	S1B
<i>Bucephala - Goldeneye spp.</i>	Unclassified Goldeneye	NL
<i>Bucephala albeola</i>	Bufflehead	S1B,S1N
<i>Bucephala clangula</i>	Common Goldeneye	S5B,S5N
<i>Bucephala islandica</i>	Barrow's Goldeneye	S3B,S3N
<i>Buteo jamaicensis</i>	Red-tailed Hawk	S4
<i>Buteo lagopus</i>	Rough-legged Hawk	S4N
<i>Buteo regalis</i>	Ferruginous Hawk	S3B
<i>Buteo swainsoni</i>	Swainson's Hawk	S5B
<i>Calamospiza melanocorys</i>	Lark Bunting	S1B
<i>Calidris alba</i>	Sanderling	S1M
<i>Calidris bairdii</i>	Baird's Sandpiper	S2M
<i>Calidris canutus</i>	Red Knot	SNA
<i>Calidris himantopus</i>	Stilt Sandpiper	SNA
<i>Calidris mauri</i>	Western Sandpiper	S3M
<i>Calidris melanotos</i>	Pectoral Sandpiper	S2M
<i>Calidris minutilla</i>	Least Sandpiper	S3M
<i>Calidris pusilla</i>	Semipalmated Sandpiper	S1M
<i>Callipepla californica</i>	California Quail	SNA
<i>Cardellina pusilla</i>	Wilson's Warbler	S4B
<i>Cathartes aura</i>	Turkey Vulture	S5B
<i>Catharus ustulatus</i>	Swainson's Thrush	S5B
<i>Catherpes mexicanus</i>	Canyon Wren	S5
<i>Centrocercus urophasianus</i>	Greater Sage-Grouse	S3
<i>Certhia americana</i>	Brown Creeper	S4

SCIENTIFIC NAME	COMMON NAME	LISTING & CONSERVATION STATUS ¹
<i>Chaetura vauxi</i>	Vaux's Swift	S3B
<i>Charadrius montanus</i>	Mountain Plover	SNA
<i>Charadrius semipalmatus</i>	Semipalmated Plover	S1M
<i>Charadrius vociferus</i>	Killdeer	S4B,S4N
<i>Chen caerulescens</i>	Snow Goose or Blue Goose	S5M
<i>Chen rossii</i>	Ross's Goose	S3M
<i>Chlidonias niger</i>	Black Tern	S2B
<i>Chondestes grammacus</i>	Lark Sparrow	S4B
<i>Chordeiles minor</i>	Common Nighthawk	S4B
<i>Cinclus mexicanus</i>	American Dipper	S3
<i>Circus cyaneus</i>	Northern Harrier	S4
<i>Cistothorus palustris</i>	Marsh Wren	S5B,S5N
<i>Clangula hyemalis</i>	Long-tailed Duck	S1N
<i>Coccothraustes vespertinus</i>	Evening Grosbeak	S4
<i>Coccyzus americanus</i>	Yellow-billed Cuckoo	ESA Threatened/S1B
<i>Colaptes auratus</i>	Northern Flicker	S5
<i>Columba livia</i>	Rock Pigeon	SNA
<i>Contopus cooperi</i>	Olive-sided Flycatcher	S3B
<i>Contopus sordidulus</i>	Western Wood-Pewee	S5B
<i>Corvus brachyrhynchos</i>	American Crow	S5
<i>Corvus corax</i>	Common Raven	S5
<i>Cyanocitta stelleri</i>	Steller's Jay	S5
<i>Cygnus buccinator</i>	Trumpeter Swan	S1B,S4N
<i>Cygnus columbianus</i>	Tundra Swan	S4M,S4N
<i>Dolichonyx oryzivorus</i>	Bobolink	S2B
<i>Dumetella carolinensis</i>	Gray Catbird	S5B
<i>Egretta thula</i>	Snowy Egret	S1B
<i>Empidonax hammondii</i>	Hammond's Flycatcher	S5B
<i>Empidonax oberholseri</i>	Dusky Flycatcher	S4B
<i>Empidonax occidentalis</i>	Cordilleran Flycatcher	S5B
<i>Empidonax traillii</i>	Willow Flycatcher	S4B
<i>Empidonax wrightii</i>	Gray Flycatcher	S4B
<i>Eremophila alpestris</i>	Horned Lark	S5
<i>Euphagus cyanocephalus</i>	Brewer's Blackbird	S4
<i>Falco columbarius</i>	Merlin	S4
<i>Falco mexicanus</i>	Prairie Falcon	S4
<i>Falco peregrinus</i>	Peregrine Falcon	S3B
<i>Falco sparverius</i>	American Kestrel	S4

SCIENTIFIC NAME	COMMON NAME	LISTING & CONSERVATION STATUS ¹
<i>Fulica americana</i>	American Coot	S4B,S4N
<i>Gallinago delicata</i>	Wilson's Snipe	S3N,S4B
<i>Gavia immer</i>	Common Loon	S1B,S2N
<i>Geothlypis tolmiei</i>	MacGillivray's Warbler	S5B
<i>Geothlypis trichas</i>	Common Yellowthroat	S5B
<i>Grus canadensis</i>	Sandhill Crane	S3B
<i>Haemorhous cassinii</i>	Cassin's Finch	S4
<i>Haemorhous mexicanus</i>	House Finch	S4
<i>Haliaeetus leucocephalus</i>	Bald Eagle	ESA Delisted/S5
<i>Himantopus mexicanus</i>	Black-necked Stilt	S4B
<i>Hirundo rustica</i>	Barn Swallow	S5B
<i>Histrionicus histrionicus</i>	Harlequin Duck	S1B
<i>Hydroprogne caspia</i>	Caspian Tern	S1B
<i>Icteria virens</i>	Yellow-breasted Chat	S4B
<i>Icterus bullockii</i>	Bullock's Oriole	S4B
<i>Junco hyemalis</i>	Dark-eyed Junco	S5
<i>Lanius excubitor</i>	Northern Shrike	S3N
<i>Lanius ludovicianus</i>	Loggerhead Shrike	S3
<i>Laridae - Tern spp.</i>	Unclassified Tern	NL
<i>Larus californicus</i>	California Gull	S3B, S2N
<i>Larus delawarensis</i>	Ring-billed Gull	S2B,S2N
<i>Larus fuscus</i>	Lesser Black-backed Gull	SNA
<i>Larus glaucooides</i>	Iceland Gull	SNA
<i>Leucophaeus pipixcan</i>	Franklin's Gull	S3B
<i>Limnodromus scolopaceus</i>	Long-billed Dowitcher	S4M
<i>Limosa fedoa</i>	Marbled Godwit	S2M
<i>Lophodytes cucullatus</i>	Hooded Merganser	S2B,S2N
<i>Loxia leucoptera</i>	White-winged Crossbill	S4
<i>Megaceryle alcyon</i>	Belted Kingfisher	S4
<i>Megascops kennicottii</i>	Western Screech-Owl	S1
<i>Meleagris gallopavo</i>	Wild Turkey	SNA
<i>Melospiza lincolni</i>	Lincoln's Sparrow	S5B
<i>Melospiza melodia</i>	Song Sparrow	S5
<i>Mergus merganser</i>	Common Merganser	S3
<i>Mergus serrator</i>	Red-breasted Merganser	S1M
<i>Molothrus ater</i>	Brown-headed Cowbird	S5B
<i>Myadestes townsendi</i>	Townsend's Solitaire	S5
<i>Myiarchus cinerascens</i>	Ash-throated Flycatcher	S4B

SCIENTIFIC NAME	COMMON NAME	LISTING & CONSERVATION STATUS ¹
<i>Nucifraga columbiana</i>	Clark's Nutcracker	S2
<i>Numenius americanus</i>	Long-billed Curlew	S2B
<i>Nycticorax nycticorax</i>	Black-crowned Night-Heron	S2B,S2N
<i>Oreoscoptes montanus</i>	Sage Thrasher	S3B
<i>Oreothlypis celata</i>	Orange-crowned Warbler	S4B
<i>Oreothlypis virginiae</i>	Virginia's Warbler	S3B
<i>Oxyura jamaicensis</i>	Ruddy Duck	S2
<i>Pandion haliaetus</i>	Osprey	S4B
<i>Passer domesticus</i>	House Sparrow	SNA
<i>Passerculus sandwichensis</i>	Savannah Sparrow	S5B
<i>Passerella iliaca</i>	Fox Sparrow	S4B
<i>Passerina amoena</i>	Lazuli Bunting	S4B
<i>Patagioenas fasciata</i>	Band-tailed Pigeon	SNA
<i>Pelecanus erythrorhynchos</i>	American White Pelican	S3B
<i>Perdix perdix</i>	Gray Partridge	SNA
<i>Petrochelidon pyrrhonota</i>	Cliff Swallow	S5B
<i>Phalacrocorax auritus</i>	Double-crested Cormorant	S4B
<i>Phalaenoptilus nuttallii</i>	Common Poorwill	S4B
<i>Phalaropus lobatus</i>	Red-necked Phalarope	S3M
<i>Phalaropus tricolor</i>	Wilson's Phalarope	S4B
<i>Phasianus colchicus</i>	Ring-necked Pheasant	SNA
<i>Pheucticus melanocephalus</i>	Black-headed Grosbeak	S5B
<i>Pica hudsonia</i>	Black-billed Magpie	S5
<i>Picoides pubescens</i>	Downy Woodpecker	S4
<i>Picoides villosus</i>	Hairy Woodpecker	S4
<i>Pipilo chlorurus</i>	Green-tailed Towhee	S4B
<i>Pipilo maculatus</i>	Spotted Towhee	S4
<i>Piranga ludoviciana</i>	Western Tanager	S5B
<i>Plectrophenax nivalis</i>	Snow Bunting	S4N
<i>Plegadis chihi</i>	White-faced Ibis	S2B
<i>Pluvialis squatarola</i>	Black-bellied Plover	S1M
<i>Podiceps auritus</i>	Horned Grebe	S2N
<i>Podiceps nigricollis</i>	Eared Grebe	S1N,S2B
<i>Podilymbus podiceps</i>	Pied-billed Grebe	S3
<i>Poecile atricapillus</i>	Black-capped Chickadee	S4
<i>Poecile gambeli</i>	Mountain Chickadee	S4
<i>Polioptila caerulea</i>	Blue-gray Gnatcatcher	S5B
<i>Pooecetes gramineus</i>	Vesper Sparrow	S5B

SCIENTIFIC NAME	COMMON NAME	LISTING & CONSERVATION STATUS ¹
<i>Porzana carolina</i>	Sora	S1N,S4B
<i>Psiloscops flammeolus</i>	Flammulated Owl	S3B
<i>Quiscalus quiscula</i>	Common Grackle	S1B
<i>Rallus limicola</i>	Virginia Rail	S2N,S3B
<i>Recurvirostra americana</i>	American Avocet	S3B,S3M
<i>Regulus calendula</i>	Ruby-crowned Kinglet	S4
<i>Regulus satrapa</i>	Golden-crowned Kinglet	S5
<i>Rhodostethia rosea</i>	Ross's Gull	SNA
<i>Riparia riparia</i>	Bank Swallow	S4B
<i>Salpinctes obsoletus</i>	Rock Wren	S5B
<i>Sayornis saya</i>	Say's Phoebe	S5B
<i>Scolopacidae - Sandpiper spp.</i>	Unclassified Sandpiper	NL
<i>Selasphorus calliope</i>	Calliope Hummingbird	S4B
<i>Selasphorus platycercus</i>	Broad-tailed Hummingbird	S5B
<i>Selasphorus rufus</i>	Rufous Hummingbird	S4B
<i>Setophaga citrina</i>	Hooded Warbler	SNA
<i>Setophaga coronata</i>	Yellow-rumped Warbler	S5
<i>Setophaga nigrescens</i>	Black-throated Gray Warbler	S4B
<i>Setophaga petechia</i>	Yellow Warbler	S5B
<i>Sialia currucoides</i>	Mountain Bluebird	S5B
<i>Sitta canadensis</i>	Red-breasted Nuthatch	S4
<i>Sitta carolinensis</i>	White-breasted Nuthatch	S4
<i>Sphyrapicus nuchalis</i>	Red-naped Sapsucker	S4B
<i>Spinus pinus</i>	Pine Siskin	S4
<i>Spinus psaltria</i>	Lesser Goldfinch	S5
<i>Spinus tristis</i>	American Goldfinch	S5
<i>Spizella arborea</i>	American Tree Sparrow	S3N
<i>Spizella breweri</i>	Brewer's Sparrow	S4B
<i>Spizella passerina</i>	Chipping Sparrow	S5B
<i>Stelgidopteryx serripennis</i>	Northern Rough-winged Swallow	S4B
<i>Sterna forsteri</i>	Forster's Tern	S2B
<i>Sterna hirundo</i>	Common Tern	SNA
<i>Sterna paradisaea</i>	Arctic Tern	SNA
<i>Streptopelia decaocto</i>	Eurasian Collared-Dove	SNA
<i>Sturnella neglecta</i>	Western Meadowlark	S5
<i>Sturnus vulgaris</i>	European Starling	SNA
<i>Tachycineta bicolor</i>	Tree Swallow	S5B

SCIENTIFIC NAME	COMMON NAME	LISTING & CONSERVATION STATUS ¹
<i>Tachycineta thalassina</i>	Violet-green Swallow	S5B
<i>Tringa flavipes</i>	Lesser Yellowlegs	S2M
<i>Tringa melanoleuca</i>	Greater Yellowlegs	S3M
<i>Tringa semipalmata</i>	Willet	S3B
<i>Tringa solitaria</i>	Solitary Sandpiper	S1M
<i>Troglodytes aedon</i>	House Wren	S4B
<i>Turdus migratorius</i>	American Robin	S5
<i>Tympanuchus phasianellus columbianus</i>	Columbian Sharp-tailed Grouse	SNA
<i>Tyrannus tyrannus</i>	Eastern Kingbird	S5B
<i>Tyrannus verticalis</i>	Western Kingbird	S5B
<i>Tyto alba</i>	Barn Owl	S4
<i>Vireo gilvus</i>	Warbling Vireo	S5B
<i>Vireo plumbeus</i>	Plumbeous Vireo	S2B
<i>Xanthocephalus xanthocephalus</i>	Yellow-headed Blackbird	S4B
<i>Zenaida macroura</i>	Mourning Dove	S5
<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	S5
<i>Zonotrichia querula</i>	Harris's Sparrow	SNA
<i>Alectoris chukar</i>	Chukar	SNA
<i>Anser albifrons</i>	Greater White-fronted Goose	S4M
<i>Asio otus</i>	Long-eared Owl	S5
<i>Branta hutchinsii</i>	Cackling Goose	SNR
<i>Bubo scandiacus</i>	Snowy Owl	SNA
<i>Buteo platypterus</i>	Broad-winged Hawk	SNA
<i>Calcarius lapponicus</i>	Lapland Longspur	S1N
<i>Catharus fuscescens</i>	Veery	S3B
<i>Catharus guttatus</i>	Hermit Thrush	S4B
<i>Chroicocephalus philadelphia</i>	Bonaparte's Gull	S3M
<i>Cyanocitta cristata</i>	Blue Jay	S1N
<i>Dendragapus obscurus</i>	Dusky Grouse	S5
<i>Gavia pacifica</i>	Pacific Loon	SNA
<i>Glaucidium gnoma</i>	Northern Pygmy-Owl	S3
<i>Grus americana</i>	Whooping Crane	SNA
<i>Gymnorhinus cyanocephalus</i>	Pinyon Jay	S3
<i>Larus argentatus</i>	Herring Gull	S2N
<i>Larus thayeri</i>	Thayer's Gull	SNA
<i>Leucosticte tephrocotis</i>	Gray-crowned Rosy-Finch	S4
<i>Loxia curvirostra</i>	Red Crossbill	S4

SCIENTIFIC NAME	COMMON NAME	LISTING & CONSERVATION STATUS ¹
<i>Melanerpes lewis</i>	Lewis's Woodpecker	S3B
<i>Melanitta americana</i>	Black Scoter	SNA
<i>Melanitta fusca</i>	White-winged Scoter	SNA
<i>Melanitta perspicillata</i>	Surf Scoter	SNA
<i>Mimus polyglottos</i>	Northern Mockingbird	S1B
<i>Oreothlypis ruficapilla</i>	Nashville Warbler	S4B
<i>Picoides albolarvatus</i>	White-headed Woodpecker	S2
<i>Poecile rufescens</i>	Chestnut-backed Chickadee	S5
<i>Progne subis</i>	Purple Martin	SNA
<i>Psaltriparus minimus</i>	Bushtit	S3
<i>Quiscalus mexicanus</i>	Great-tailed Grackle	S1B
<i>Rhynchophanes mccownii</i>	McCown's Longspur	SNA
<i>Setophaga ruticilla</i>	American Redstart	S2B
<i>Setophaga townsendi</i>	Townsend's Warbler	S5B
<i>Sphyrapicus thyroideus</i>	Williamson's Sapsucker	S4B
<i>Strix nebulosa</i>	Great Gray Owl	S3
<i>Troglodytes pacificus</i>	Pacific Wren	S5
<i>Vireo cassinii</i>	Cassin's Vireo	S5B
<i>Xema sabini</i>	Sabine's Gull	SNA
<i>Zenaida asiatica</i>	White-winged Dove	SNA

Source: IDFG 2022

¹ NL – Not Listed

S – State rank indicator; denotes rank based on status within Idaho.

S1 – Critically imperiled because of extreme rarity or because some factor of its biology makes it especially vulnerable to extinction (typically 5 or fewer occurrences)

S2 – Imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction (typically 6 to 20 occurrences)

S3 – Rare or uncommon but not imperiled (typically 21 to 100 occurrences)

S4 – Not rare and apparently secure, but with cause for long-term concern (usually more than 100 occurrences).

S5 – Demonstrably widespread, abundant, and secure.

SNR – Not ranked

SNA – Conservation status rank is not applicable

A – Accidental (occurring only once or a few times) or casual (occurring more regularly although not every year) in Idaho; a few of these species might have bred on one or more of the occasions when they were recorded

B – Breeding population

M – Only applies when migrant occurs in an irregular, transitory, and dispersed manner. Occurrences cannot be defined from year-to-year

N – Nonbreeding population

5.4.2.3 INVASIVE WILDLIFE

Invasive species are non-native to the ecosystem in which they occur and are likely to cause environmental harm, impacting the economy and human health. There is an abundance of invasive wildlife species within Idaho that have the potential to occur within the Idaho Falls and Gem State Project Boundaries due to urban disturbance adjacent to the Project, which can facilitate the spread of these species. These invasive species include a range of taxa including mammals, insects, fish, and birds (Table 5-17). Aquatic invertebrates pose a particular threat to the Snake River Habitat. Quagga (*Dreissena rostriformis*) and zebra mussels (*Dreissena polymorpha*) are known to inhabit the Snake River, which outcompete native mussel populations and can clog water intake structures such as pipes and screens, increasing maintenance costs for water treatment and power plants (University of California at Riverside 2022).

Table 5-17 provides a list of invasive wildlife species in Idaho, identified by the Invasive Species of Idaho (ISI 2022). Currently there are 71 weed species designated by Idaho law; 2 amphibians, 1 bird, 14 fish, 54 insect, 11 aquatic invertebrate, 1 mammal, and 6 reptile species (Table 5-17).

TABLE 5-17 IDAHO INVASIVE WILDLIFE LIST

SCIENTIFIC NAME	COMMON NAME
Amphibians	
<i>Rana catesbeiana</i>	Bullfrog
<i>Taricha granulosa</i>	Rough skinned newt
Bird	
<i>Myiopsitta monachus</i>	Monk Parakeet
Fish	
<i>Acipenser medirostris</i>	Green sturgeon
<i>Amia calva</i>	Bowfin
<i>Channidae</i>	Snakehead
<i>Clarias batrachus</i>	Walking catfish
<i>Ctenopharyngodon idella var. diploid</i>	Diploid grass carp
<i>Gymnocephalus cernuus</i>	Ruffe
<i>Hypophthalmichthys molitrix</i>	Silver carp
<i>Hypophthalmichthys nobilis</i>	Big headed carp
<i>Lepisosteidae</i>	Gar
<i>Leuciscus idus</i>	Ide
<i>Mylopharyngodon piceus</i>	Black carp
<i>Neogobius melanostomus</i>	Round goby
<i>Piranha</i>	Piranhas

SCIENTIFIC NAME	COMMON NAME
<i>Scardinius erythrophthalmus</i>	Rudd
Aquatic Invertebrates	
<i>Bythotrephes longimanus</i>	Spiny waterflea
<i>Cercopagis bengoi</i>	Fishhook waterflea
<i>Cherax cainii</i>	Marron crayfish
<i>Cherax destructor</i>	Yabby crayfish
<i>Cherax quadricarinatus</i>	Red claw crayfish
<i>Corbicula fluminea</i>	Asian clam
<i>Dreissena polymorpha</i>	Zebra mussel
<i>Dreissena rostriformis</i>	Quaqua mussel
<i>Orconectes rusticus</i>	Rusty crayfish
<i>Potamopyrgus antipodarum</i>	New Zealand mud snail
<i>Procambarus virginalis</i>	Marbles crayfish/marmorkrebs
Mammal	
<i>Myocastor coypus</i>	Nutria
Reptile	
<i>Chelydra serpentina</i>	Snapping turtle
<i>Hemidactylus turcicus</i>	Mediterranean gecko
<i>Podarcis muralis</i>	Common wall lizard
<i>Podarcis sicula</i>	Italian wall lizard
<i>Ramphotyphlops braminus</i>	Brahminy blindsnake
<i>Trachemys scripta elegans</i>	Red-eared slider

Source: ISI 2022

5.4.2.4 WILDLIFE IN THE OFFSITE MITIGATION AREA

In 1995, IFP submitted their Revised Program to Mitigate Impacts to Wetlands, Riparian Areas, and Wildlife Resources for the Gem State Hydroelectric Project. The offsite mitigation area is a 46.5-acre parcel that was purchased by Idaho Falls along the Snake River near Roberts, Idaho, for offsite mitigation (IFP 1995). This land is located outside the Idaho Falls and Gem State Project Boundaries in Section 12, Township 5 North, Range 37 East, and is approximately six miles downstream of the confluence of the Henry's Fork and South Fork of the Snake River. The parcel purchased by Idaho Falls Power contains a total of approximately 46.5 acres of Snake River floodplain.

The offsite mitigation area provide habitat for songbirds, raptors including rough-legged hawks (*Buteo lagopus*) and red-tailed hawks (*Buteo jamaicensis*), small mammals, and aquatic and

upland furbearers. Mule deer, elk, moose (*Alces alces*), and white-tailed deer (*Odocoileus virginianus*) occur in the area at certain times of the year (IFP 1995).

5.4.3 BOTANICAL HABITAT

Two common natural biotic plant communities within the Idaho Falls and Gem State Project areas are grass-shrub and mixed riparian communities. The dominant community of the area is agricultural crops, which replaced the natural vegetation after land clearing practices, and is maintained by irrigation.

The grass-shrub community is a generally treeless, shrub dominated community with perennial bunch grasses characterizing the understory. This community in the Idaho Falls and Gem State Project areas is bordered on one side by the riparian community and constrained on the other side by agricultural crops. Dominant woody species include big sagebrush, rabbitbrush, and horsebrush (*Tetradymia glabrata*). The dominant grass species are cheatgrass, Sandberg's bluegrass (*Poa sandbergii*), and Indian ricegrass. Disturbed areas within the community are dominated by cheatgrass and herbaceous species such as milkweed (*Asclepias speciosa*), cocklebur (*Xanthium strumarium*), and mullein (*Verbascum thapsus*). The grass-shrub community stops abruptly at the edges of roads, canal banks and agricultural fields; however, there is a transition zone between the riparian community and the grass-shrub community. The dominant species in the transition zone are big sagebrush and cheatgrass (Francisco and Griffith 2011).

The riparian community occurs as a band of vegetation approximately 6 to 90 feet wide on either side of the Snake River and is composed of herbaceous and woody riparian types. The dominant components of the woody overstory includes several willow species (*Salix* spp.), two cottonwood species (*Populus* spp.), and Russian Olive (*Eleagnus angustifolia*). The dominant components of the woody understory includes squawbush (*Rhus trilobata*), golden current (*Ribes aureum*), and Wood's rose (*Rosa woodsii*). Common herbaceous species include clematis (*Clematis lingusticifolia*), Solomon seal (*Smilacina stellata*), spiny sowthistle (*Sonchus asper*), and reed canarygrass (*Phalaris arundinacea*).

5.4.4 BOTANICAL RESOURCES

Table 5-18 provides IDFG County list of plant species for Bingham and Bonneville counties that have the potential to occur within the vicinity of the Projects (IDFG 2022) (Table 5-18).

TABLE 5-18 PLANT SPECIES THAT MAY OCCUR IN BINGHAM AND/OR BONNEVILLE COUNTIES

SCIENTIFIC NAME	COMMON NAME	LISTING & CONSERVATION STATUS ¹
<i>Asclepias incarnata</i>	swamp milkweed	S2?
<i>Asclepias speciosa</i>	showy milkweed	SNR
<i>Eriogonum hookeri</i>	Hooker's buckwheat	S1
<i>Eschscholzia minutiflora ssp. covillei</i>	pygmy poppy	Not Listed
<i>Asclepias fascicularis</i>	narrowleaf milkweed	SNR
<i>Physaria carinata ssp. paysonii</i>	Payson's bladderpod	S2
<i>Pinus albicaulis</i>	whitebark pine	ESA Candidate/S3
<i>Poa paucispicula</i>	Alaska bluegrass	S1
<i>Spiranthes diluvialis</i>	Ute ladies'-tresses	ESA Threatened/S1

Source: IDFG 2022

¹ S – State rank indicator; denotes rank based on status within Idaho.

S1 – Critically imperiled because of extreme rarity or because some factor of its biology makes it especially vulnerable to extinction (typically 5 or fewer occurrences)

S2 – Imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction (typically 6 to 20 occurrences)

SNR – Not ranked

? – Uncertainty exists about the stated rank

5.4.4.1 BOTANICAL RESOURCES ON THE OFFSITE MITIGATION AREA

The floodplain in the 46.5-acre offsite mitigation area is a mosaic of dense shrubs, weedy openings, and a small forest stand. Shrubs such as Wood's rose, red-osier dogwood (*Cornus sericea*), Pacific willow (*Salix lucida*), sandbar willow (*Salix exigua*), and narrowleaf cottonwood (*Populus angustifolia*) are present. Major vegetative communities in this area are weedy clearings and scrub/shrub riparian communities. Clearings have a few scattered Wood's rose but consist mostly of weedy introduced forbs including thistle (*Cirsium* spp.), knapweed (*Centaurea* sp.), and leafy spurge (*Euphorbia esula*), all of which are noxious weeds. The floodplain area has been heavily grazed, as evidenced by the predominance of the noxious weeds in the clearings and the stunted, gnarled growth form of the few shrubs that occur in the clearings. A former river channel on the site, which has been cut off from a larger backwater channel that connects to the main Snake River, is bordered by dense willow and dogwood (*Cornus* spp.) (IFP 1995).

5.4.4.2 UPLAND INVASIVE PLANTS AND WEEDS

The state of Idaho defines a noxious weed as “any plant having the potential to cause injury to public health, crops, livestock, land or other property; and which is designated as noxious by the director” (Idaho Code title 22, Chapter 24¹⁷). Currently there are 71 weed species and four plant genera designated by Idaho law (ISI 2022) (Table 5-19).

TABLE 5-19 IDAHO TERRESTRIAL INVASIVE PLANT LIST

SCIENTIFIC NAME	COMMON NAME
Statewide EDRR List¹	
<i>Carduus cinereus</i>	Turkish thistle
<i>Centaurea calcitrapa</i>	purple starthistle
<i>Centaurea iberica</i>	Iberian starthistle
<i>Galega officinalis</i>	goatsrue
<i>Heracleum mantegazzianum, Asclepias speciosa</i>	giant hogweed, showy milkweed
<i>Hieracium piloselloides</i>	tall hawkweed
<i>Himalayan balsam</i>	policeman’s helmet
<i>Imperata cylindrica</i>	cogon grass
<i>Pilosella caespitosa</i>	yellow devil hawkweed
<i>Sentaurea virgata</i>	squarrose knapweed
<i>Zigophyllum fabagl</i>	Syrian beancaper
Statewide Control List²	
<i>Anchusa arvensis</i>	small bugloss
<i>Carduus nutans</i>	musk thistle
<i>Centarea debeauxii</i>	meadow knapweed
<i>Crupina vulgaris</i>	common crupina
<i>Cytisus scoparius</i>	scotch broom
<i>Echium vulgare</i>	viper’s bugloss
<i>Fillopia x bohemia</i>	bohemian knotweed
<i>Hieracium caespitosum</i>	yellow hawkweed
<i>Hordeum vulgare</i>	matgrass
<i>Hyoscyamus niger, Eschscholzia minutiflora ssp. covillei</i>	black henbane, pygmy poppy
<i>Isatis tinctoria</i>	dryer’s woad
<i>Pilosella aurantiaca</i>	orange hawkweed
<i>Reynoutria japonica</i>	Japanese knotweed
<i>Reynoutria sachalinensis</i>	giant knotweed
<i>Rhaponticum repens</i>	Russian knapweed

¹⁷ <https://legislature.idaho.gov/statutesrules/idstat/title22/>

SCIENTIFIC NAME	COMMON NAME
<i>Salvia aethiopsis</i>	Mediterranean sage
<i>Solanum rostratum</i>	buffalobur
<i>Sonchus arvensis</i>	perennial sowthistle
<i>Sorghum halepense</i>	Johnsongrass
Statewide Containment List³	
<i>Aegilops cylindrica</i>	jointed goatgrass
<i>Berteroa incana</i>	hoary alyssum
<i>Bryonia alba</i>	white bryony
<i>Carduus acanthoides</i>	plumeless thistle
<i>Centaria diffusa</i>	diffuse knapweed
<i>Centaurea solstitialis</i>	yellow starthistle
<i>Centaurea stoebe</i>	spotted knapweed
<i>Chondrilla juncea</i>	rush skeletonweed
<i>Cirsium arvense, Physaria carinata ssp. paysonii</i>	Canada thistle, payson's bladderpod
<i>Conium maculatum</i>	poison hemlock
<i>Convolvulus arvensis</i>	field bindweed
<i>Cynoglossum officinale</i>	houndstongue
<i>Euphorbia esula</i>	leafy spurge
<i>Jacobaea vulgaris</i>	tansy ragwort
<i>Lepidium draba</i>	whitetop
<i>Lepidium latifolium</i>	perennial pepperweed
<i>Leucanthemum vulgare</i>	oxeye daisy
<i>Linaria dalmatica</i>	dalmatian toadflax
<i>Linaria vulgaris</i>	yellow toadflax
<i>Lythrum salicaria</i>	puncturevine
<i>Lythrum salicaria</i>	purple loosestrife
<i>Milium</i>	milium
<i>Onopordum acanthium</i>	scotch thistle
<i>Tamarix</i>	saltcedar
Statewide Prohibited Genera⁴	
<i>Cytisus</i>	
<i>Genista</i>	
<i>Spartium</i>	
<i>Chameacytisus</i>	

Source: ISI 2022

¹ Early Detection Rapid Response– (EDRR) Weeds shall be eradicated during the same growing season as identified.

² Control– Concentration of weeds where control and/or eradication may be possible.

³ Containment– Reduce or eliminate new or expanding weed populations.

⁴ Statewide Prohibited Genera– All plants, plant parts, and subtaxa of listed genera are prohibited in Idaho.

5.4.5 REFERENCES

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5.5 FLOODPLAINS AND WETLANDS

The USFWS describes wetlands as “lands where saturation with water is the dominant factor determining the nature of substrate development and the types of plant and animal communities living in the substrate and on its surface” (USFWS 2016). The United States Federal Geographic Data Committee (FGDC) Wetlands Classification Standard (FGDC 2013) defines wetlands according to Cowardin et. al. (1979) below:

“...wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water...Wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year (Cowardin et. al., 1979).”

5.5.1 WETLAND, RIPARIAN, AND LITTORAL HABITAT

Cover types in the general vicinity of the Idaho Falls and Gem State Projects consist of sparse riparian areas, agriculture, residential, and industrial areas. The USFWS National Wetlands Inventory (NWI) indicates there are 13 wetland types within the Idaho Falls and Gem State Project Boundaries that encompass approximately 664 acres (Table 5-20). Major wetland types include freshwater emergent, freshwater forested/shrub, freshwater pond, and riverine (Figure 5-13 through 5-15). Riverine wetlands comprise 94 percent (629.1 acres) of the total wetlands within the Idaho Falls and Gem State Project Boundaries (Table 5-20). There is a vast diversity of wetland plant species present in Idaho that have the potential to occur within these wetlands. Table 5-21 outlines the most encountered wetland plant species in the state of Idaho.

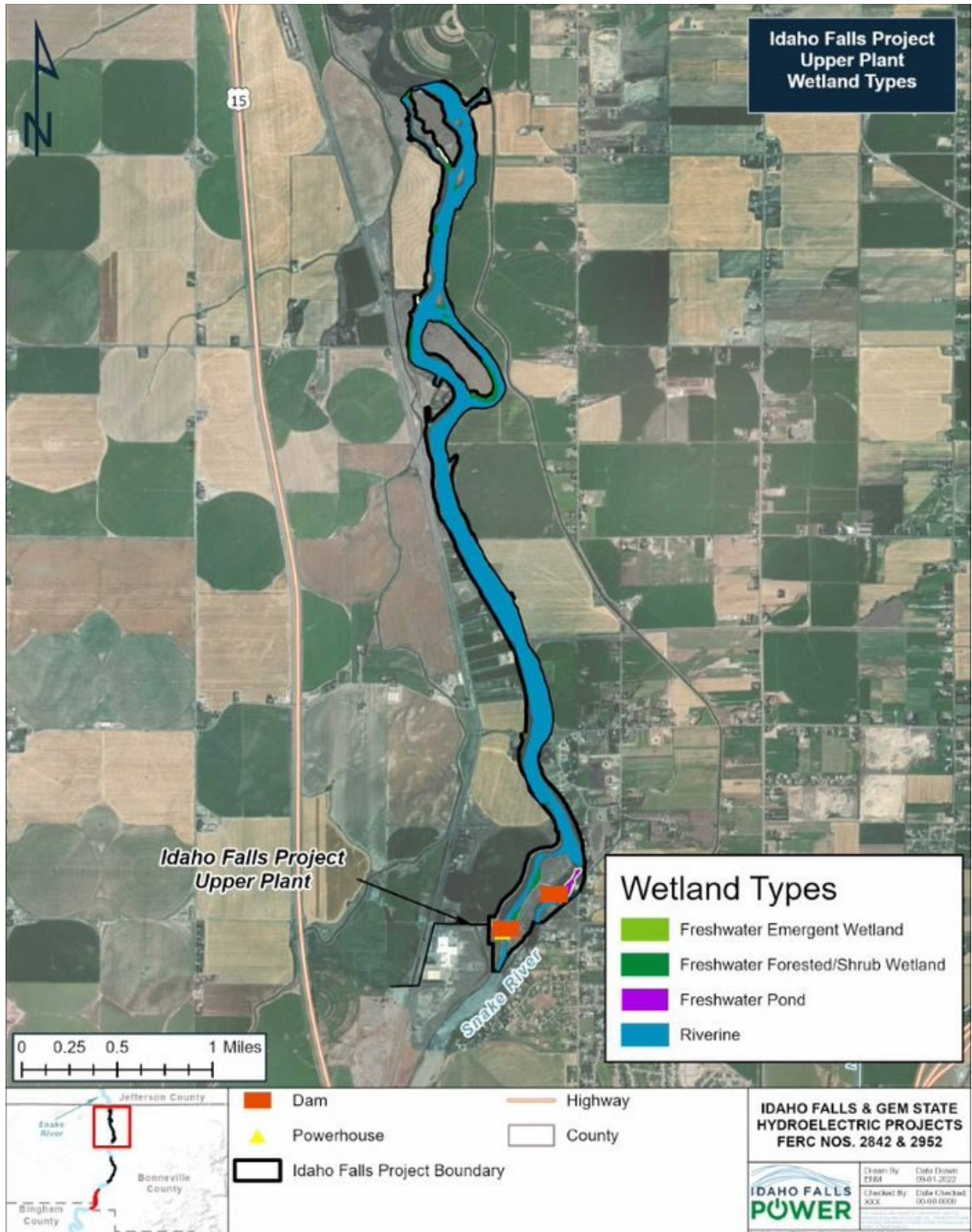


FIGURE 5-13 IDAHO FALLS PROJECT UPPER PLANT WETLAND TYPES

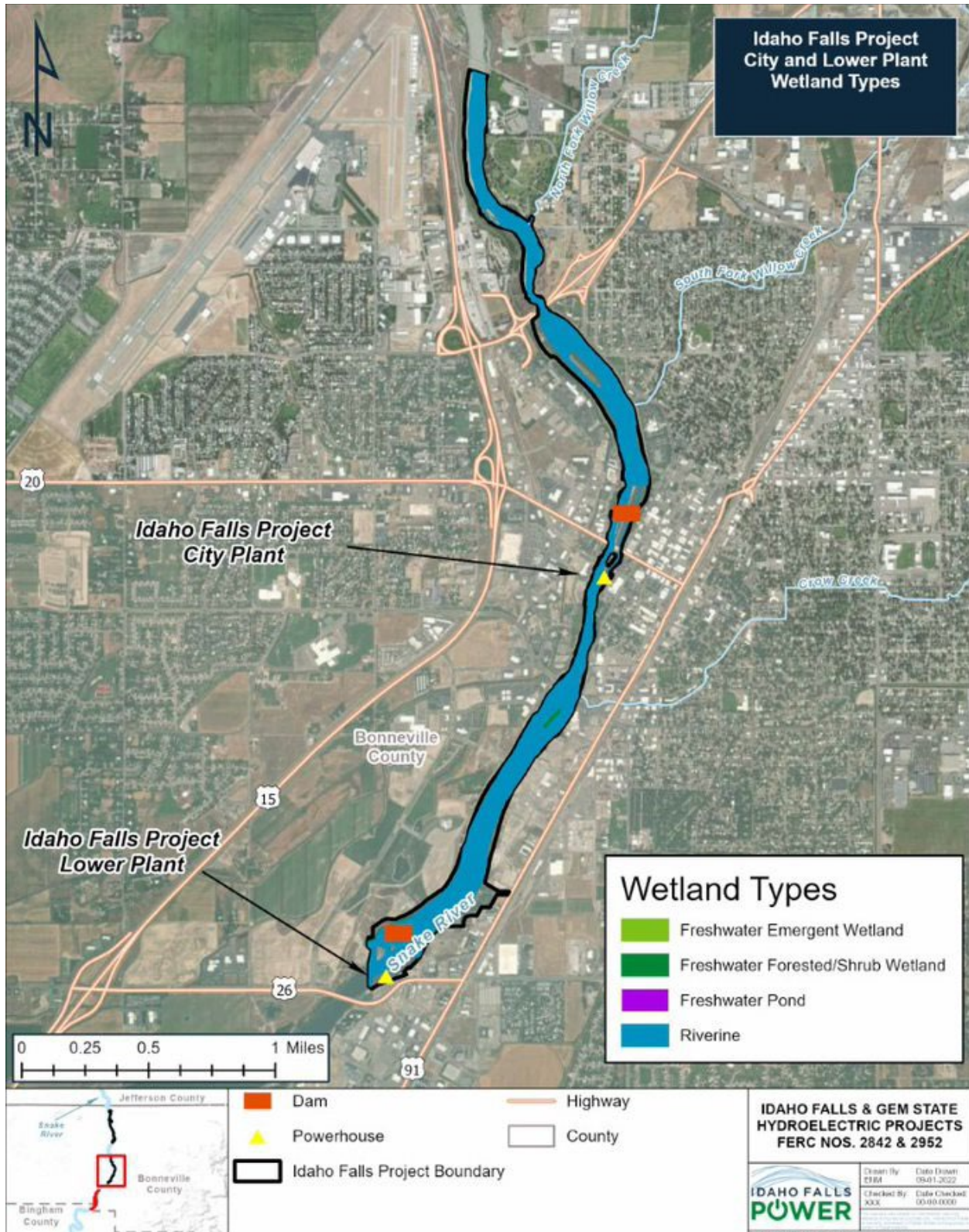


FIGURE 5-14 IDAHO FALLS PROJECT CITY AND LOWER PLANT WETLAND TYPES

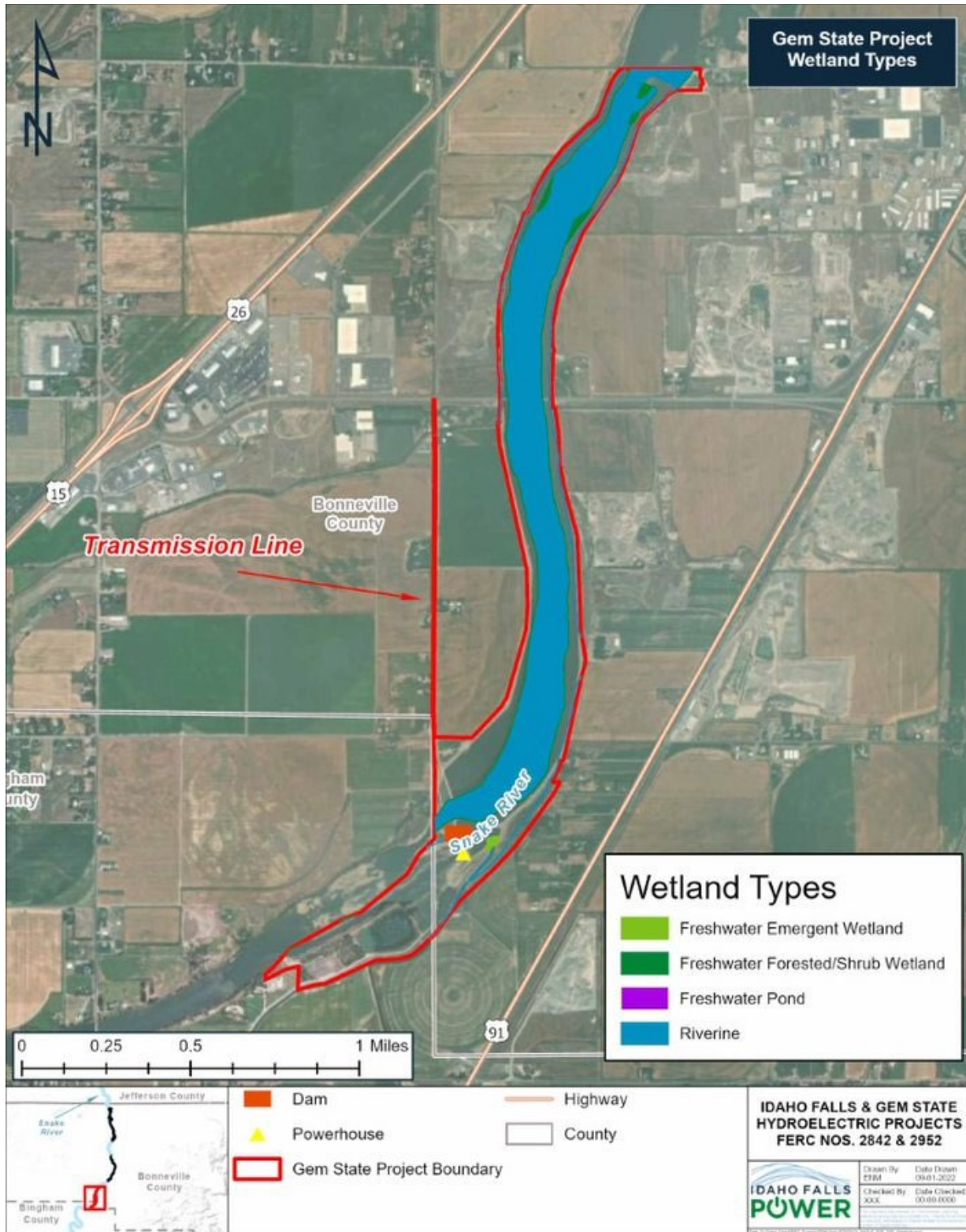


FIGURE 5-15 IDAHO FALLS PROJECT CITY AND LOWER PLANT WETLAND TYPES

TABLE 5-20 WETLANDS FOUND WITHIN THE PROJECT BOUNDARY OF THE IDAHO FALLS AND GEM STATE PROJECTS¹

WETLAND CODE	WETLAND TYPE	IDAHO FALLS PROJECT			GEM STATE PROJECT
		Upper Plant	City Plant	Lower Plant	
PEM1C	Freshwater Emergent Wetland	0.1	0.0	0.0	0.0
PEM1F	Freshwater Emergent Wetland	0.0	0.0	0.0	0.8
PFO1A	Freshwater Forested/Shrub Wetland	1.6	0.0	0.0	0.0
PSS1A	Freshwater Forested/Shrub Wetland	7.1	0.0	0.0	0.0
PSS1C	Freshwater Forested/Shrub Wetland	4.1	0.0	1.4	15.5
PUBH	Freshwater Pond	0.2	0.0	0.0	0.0
PUBHh	Freshwater Pond	3.9	0.0	0.0	0.0
PUBHx	Freshwater Pond	0.1	0.0	0.0	0.0
R2UBHx	Riverine	0.7	0.3	0.0	11.1
R3UBH	Riverine	258.4	82.8	99.9	168.4
R3USC	Riverine	2.1	2.4	0.0	0.0
R5UBH	Riverine	0.0	2.0	0.0	1.1
R5UBFx	Riverine	0.1	0.0	0.0	0.0
Acres at each Idaho Falls Project		278.3	87.4	101.3	
Total Acres at each Project			467.0		196.9
<i>Wetland Code Glossary of Terms:</i>					
<p>C = Water Regime Seasonally Flooded: Surface water is present for extended periods especially early in the growing season but is absent by the end of the growing season in most years. The water table after flooding ceases is variable, extending from saturated to the surface to a water table well below the ground surface.</p> <p>EM = EMERGENT: Characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.</p> <p>P = PALUSTRINE: The Palustrine System includes all non-tidal wetlands dominated by trees, shrubs, persistent emergent, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 ppt. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 ppt.</p> <p>R = RIVERINE: The Riverine System includes all wetlands and deep water habitats contained within a channel, with two</p>					

WETLAND CODE	WETLAND TYPE	IDAHO FALLS PROJECT			GEM STATE PROJECT
		Upper Plant	City Plant	Lower Plant	
<p>exceptions: (1) wetlands dominated by trees, shrubs, persistent emergent, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.</p> <p>RS = ROCKY SHORE: High energy shoreline environments characterized by bedrock, stones, or boulders which singly or in combination have an areal cover 75% or more and less than 30% vegetative cover by area.</p> <p>SB = STREAMBED: Includes all wetlands contained within the Intermittent Subsystem of the Riverine System and all channels of the Estuarine System or of the Tidal Subsystem of the Riverine System that are completely dewatered at low tide.</p> <p>US = UNCONSOLIDATED SHORE: Includes all wetland habitats having two characteristics: (1) unconsolidated substrates with less than 75% areal cover of stones, boulders or bedrock and, (2) less than 30% areal cover of vegetation. Landforms such as beaches, bars, and flats are included in the Unconsolidated Shore class.</p> <p>x = Excavated: This Modifier is used to identify wetland basins or channels that were excavated by humans.</p> <p>1 = Persistent: Dominated by species that normally remain standing at least until the beginning of the next growing season. This subclass is found only in the Estuarine and Palustrine systems.</p> <p>2 = LOWER PERENNIAL: This Subsystem is characterized by a low gradient. There is no tidal influence, and some water flows all year, except during years of extreme drought. The substrate consists mainly of sand and mud. Oxygen deficits may sometimes occur. The fauna is composed mostly of species that reach their maximum abundance in still water, and true planktonic organisms are common. The gradient is lower than that of the Upper Perennial Subsystem and the floodplain is well developed.</p> <p>3 = UPPER PERENNIAL: This Subsystem is characterized by a high gradient. There is no tidal influence, and some water flows all year, except during years of extreme drought. The substrate consists of rock, cobbles, or gravel with occasional patches of sand. The natural dissolved oxygen concentration is normally near saturation. The fauna is characteristic of running water, and there are few or no planktonic forms. The gradient is high compared with that of the Lower Perennial Subsystem, and there is very little floodplain development.</p> <p>4 = INTERMITTENT: This Subsystem includes channels that contain flowing water only part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent.</p> <p>5= UNKNOWN PERENNIAL: This Subsystem designation was created specifically for use when the distinction between lower perennial, upper perennial, and tidal cannot be made from aerial photography and no data is available.</p> <p>h = Diked/Impounded: These wetlands have been created or modified by a man-made barrier or dam that obstructs the inflow or outflow of water.</p> <p>H = Permanently Flooded: Water covers the substrate throughout the year in all years.</p>					

WETLAND CODE	WETLAND TYPE	IDAHO FALLS PROJECT			GEM STATE PROJECT
		Upper Plant	City Plant	Lower Plant	
<p>UB = UNCONSOLIDATED BOTTOM: Includes all wetlands and deep-water habitats with at least 25% cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30%.</p> <p>FO = FORESTED: Characterized by woody vegetation that is 6 m (19.7 ft) tall or taller.</p> <p>1 = Broad-Leaved Deciduous: Woody angiosperms (trees or shrubs) with relatively wide, flat leaves that are shed during the cold or dry season; e.g., black ash (<i>Fraxinus nigra</i>).</p> <p>A = Temporary Flooded: Surface water is present for brief periods (from a few days to a few weeks) during the growing season, but the water table usually lies well below the ground surface for most of the season.</p> <p>SS = SCRUB-SHRUB: Includes areas dominated by woody vegetation less than 6-m (19-ft) tall. The species include true shrubs, young trees (saplings), and trees or shrubs that are small or stunted because of environmental conditions.</p> <p>F = Semi-permanently Flooded: Surface water persists throughout the growing season in most years. When surface water is absent, the water table is usually at or very near the land surface.</p>					

Sources: USFWS 2022, USGS 2022

¹ Acreages were calculated in a GIS using NAD 1983 State Plane Idaho East projected coordinate system

Notes:

- cm centimeter
- ft feet
- m meter
- ppt parts per thousand

The USFWS NWI provides a publicly available resource of abundance, distribution, and characteristics of United States wetlands. The NWI Database (USFWS 2022) identifies 13 NWI identified wetland features within the Idaho Falls Project Boundary and five wetland features within the Gem State Project (Table 5-21).

Wetlands and riparian habitats support many varieties of mammal, bird, reptiles, and amphibian species. Many of the species identified in Section 5.4, *Wildlife and Botanical Resources*, are likely to occur within and depend on these habitats during their life cycle.

TABLE 5-21 COMMONLY ENCOUNTERED WETLAND VEGETATION IN IDAHO

SCIENTIFIC NAME	COMMON NAME
Grasses	
<i>Agrostis gigantea</i>	Redtop bentgrass
<i>Alopecurus aequalis</i>	Shortawnfoxtail
<i>Alopecurus arundinaceus</i>	Creeping meadow foxtail
<i>Beckmannia</i>	Beckmannia
<i>Calamagrostis canadensis</i>	Bluejoint reedgrass
<i>Dactylis</i>	Orchardgrass
<i>Deschampsia cespitosa</i>	Tufted hairgrass
<i>Distichlis spicata</i>	Inland saltgrass
<i>Elymus repens</i>	Quackgrass
<i>Glyceria striata</i>	Fowl managrass
<i>Hordeum brachyantherum</i>	Meadow barley
<i>Hordeum jubatum</i>	Foxtail barley
<i>Hordeum murinum</i>	Mouse barley
<i>Muhlenbergia asperifolia</i>	Alkali muhly
<i>Phleum pratense</i>	Timothy
<i>Poa pratensis</i>	Kentucky bluegrass
<i>Polypogon monspeliensis</i>	Rabbitsfoot grass
<i>Puccinellia distans</i>	Weeping alkaligrass
<i>Puccinellia lemmonii</i>	Lemmon's alkaligrass
<i>Spartina gracilis</i>	Alkali cordgrass
<i>Sphenopholis obtusata</i>	Prairie wedgegrass
<i>Sporobolus airoides</i>	Alkali sacaton
Sedges	
<i>Bolboschoenus robustus</i>	Alkali bulrush
<i>Carex aquatilis</i>	Water sedge

SCIENTIFIC NAME	COMMON NAME
<i>Carex nebrascensis</i>	Nebraska sedge*
<i>Carex pellita</i>	Wooly sedge
<i>Carex praegracilis</i>	Clustered field sedge
<i>Carex rostrata</i>	Beaked sedge
<i>Eleocharis palustris</i>	Creeping spikerush
<i>Schoenoplectus acutus</i>	Hardstem bulrush*
<i>Schoenoplectus pungens</i>	Three-square bulrush*
Rushes	
<i>Juncus balticus</i>	Baltic rush*
<i>Juncus ensifolius</i>	Swordleaf rush
<i>Juncus torreyi</i>	Torrey's rush

Source: Tilly 2019

*Indicates species that were planted in shallow areas of the wetland/pond, stated as part of the Revised Onsite Emergent Wetland Plan (IFP 1995)

In 1988, the city of Idaho Falls submitted the *Mitigation Program for Wetlands and Wildlife Resources* (Wetlands Mitigation Plan) for the Gem State Project. The Wetlands Mitigation Plan was established due to the Gem State Project's impact to 56 acres of wetlands and riparian communities. The Wetlands Mitigation Plan lists a diverse mixture of trees and shrubs, such as Narrowleaf Cottonwood (*Populus angustifolia*), Pacific willow (*Salix lucida*), and Blue Elder (*Sambucus cerulea*) as well as areas to provide food and cover for a variety of species (Table 5-22).

TABLE 5-22 TREES AND SHRUBS PLANNED FOR IMPLEMENTATION IN THE GEM STATE MITIGATION PROGRAM

SCIENTIFIC NAME	COMMON NAME
<i>Acer saccharinum</i>	Silver maple
<i>Amelanchier alnifolia</i>	Western serviceberry
<i>Betula occidentalis</i>	Water birch
<i>Cornus stolonifera</i>	Red-osier dogwood
<i>Crataegus douglassii</i>	Black hawthorn
<i>Juniperus scopulorum</i>	Rocky Mountain juniper
<i>Philadelphus lewisii</i>	Syringa
<i>Populus angustifolia</i>	Narrowleaf cottonwood
<i>Populus trichocarpa</i>	Black cottonwood
<i>Prunus virginiana</i>	Western chokecherry
<i>Pseudotsuga menziesii</i>	Douglas-fir
<i>Rhus trilobata</i>	Skunkbush sumac
<i>Ribes aureum</i>	Golden currant
<i>Rosa woodsii</i>	Wood's rose

SCIENTIFIC NAME	COMMON NAME
<i>Salix amygdaloides</i>	Peachleaf willow
<i>Salix exigua</i>	Sandbar willow
<i>Salix lasiandra</i>	Pacific willow
<i>Sambucus cerulea</i>	Blue elder

Source: City of Idaho Falls 1988

5.5.2 INVASIVE SPECIES

5.5.2.1 WILDLIFE

A list of invasive wildlife species that have the potential to occur within the Idaho Falls and Gem State Project boundaries are listed in Section 5.4, *Wildlife and Botanical Resources*. All species listed in Table 5-23 have the potential to occur in or adjacent to wetland habitats within the boundaries of both Projects.

5.5.2.2 PLANTS

Currently there are 71 weed species and four plant genera designated by Idaho law, 17 of which are aquatic (ISI 2022). Section 5.4, *Wildlife and Botanical Resources*, reviews invasive plant species in further detail.

The Wetlands Mitigation Plan notes several species of noxious weeds that inhabited clearings in a 19-acre BLM parcel that is adjacent to the Gem State Project Boundary. Species included leafy spurge (*Euphorbia esula*), knapweed (*Rhaponticum repens*), Canada thistle (*Cirsium arvense*), and musk thistle (*Carduus nutans*) (City of Idaho Falls 1988). Due to the parcel’s proximity, the species in Table 5-23 have a high likelihood to occur within the Gem State Project Boundary.

TABLE 5-23 IDAHO AQUATIC INVASIVE PLANT LIST

SCIENTIFIC NAME	COMMON NAME
Statewide EDRR List¹	
<i>Azolla pinnata</i>	Feathered mosquito fern
<i>Cabomba caroliniana</i>	Fanwort
<i>Egeria densa</i>	Brazilian elodea
<i>Eichhornia crassipes</i>	Water hyacinth
<i>Eleocharis dulcis</i>	Water chestnut
<i>Hydrilla</i>	Hydrilla
<i>Hydrocharis morsus-ranae</i>	Common/European frogbit
<i>Myriophyllum heterophyllum</i>	Variable-leaf milfoil

SCIENTIFIC NAME	COMMON NAME
<i>Nitellopsis obtuse</i>	Starry stonewort
<i>Nymphoides peltate</i>	Yellow floating heart
<i>Salvinia molesta</i>	Giant salvinia
Statewide Control List²	
<i>Butomus umbellatus</i>	Flowering rush
<i>Myriophyllum aquaticum</i>	Parrotfeather milfoil
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil
<i>Phragmites australis</i>	Common reed
Statewide Containment List³	
<i>Iris pseudacorus</i>	Yellow flag iris
<i>Potamogeton crispus</i>	Curlyleaf pondweed

Source: ISI 2022

¹ Early Detection Rapid Response– (EDRR) Weeds shall be eradicated during the same growing season as identified.

² Control– Concentration of weeds where control and/or eradication may be possible.

³ Containment– Reduce or eliminate new or expanding weed populations.

5.5.3 REFERENCES

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United States Geological Survey (USGS). 2022. Wetlands Code Interpreter. Available online: <https://fwsprimary.wim.usgs.gov/decoders/wetlands.aspx>. Accessed: June 28, 2022.

5.6 RARE, THREATENED, AND ENDANGERED SPECIES

Per 18 CFR §5.6(d)(3)(vii), this section describes any listed rare, threatened and endangered (RTE), candidate, or special-status species that may be present in the Idaho Falls and Gem State Project vicinities.

5.6.1 WILDLIFE SPECIES

The ESA was passed in 1973 to protect those animals, plants, and associated habitats that are in danger of becoming extinct. The United States Fish and Wildlife Service (USFWS) classifies animals and plants into two categories: "endangered species" are in danger of extinction throughout the area in which they are usually found, and "threatened species" are those that could become endangered in the near future. IFP used the USFWS Information for Planning and Consultation (IPaC) tool to determine if species listed as threatened or endangered under the ESA or critical habitat are present within the Idaho Falls and Gem State Project vicinities (USFWS 2022a).

The following species have the potential to occur within the vicinity of the Projects (USFWS 2022a):

5.6.1.1 YELLOW-BILLED CUCKOO

The YBC is listed as threatened under the ESA and a state Species of Greatest Conservation Need¹⁸ (SGCN) (IDFG 2016, USFWS 2022a). As a migratory species, the YBC winters in Central and South America and breeds in North America, having distinct populations in the east and west that are separated by the Rocky Mountains (USGS 2022). YBCs utilize dense, wooded habitat near water for both migration and breeding, often utilizing river corridors as travel routes. In the Midwest, this species can be found in shrublands, often containing willow (*Salix* spp.) and dogwood (*Cornus* spp.) (USFWS 2022b). The use of this habitat is variable due to changing conditions in food resources, vegetation growth, and stream dynamics, so the YBC may move

¹⁸ The Idaho State Wildlife Action Plan provides a framework for conserving Species of Greatest Conservation Need and the habitats upon which they depend. It is the state's guiding document for managing and conserving at-risk species.

between areas in its breeding grounds based on habitat conditions and food availability. The conversion of riparian habitat to farmland and urban housing is the leading cause of population decline in the western population. There is currently no recovery plan, biological opinion, or status report pertaining to the YBC. There are currently 298,845 acres of critical habitat designated to the western distinct population segment (DPS) of the YBC in Arizona, California, Colorado, Idaho, New Mexico, Texas, and Utah, but the critical habitat range does not occur within the Idaho Falls or Gem State Project Boundaries (USFWS 2021).

5.6.1.2 MONARCH BUTTERFLY

The monarch butterfly (*Danaus plexippus*) is a federally listed candidate¹⁹ species and a state SGCN (IDFG 2016, USFWS 2022a). Monarch butterflies are present in Idaho from May through September (Cracroft et al. 2016) and may be found in the Idaho Falls and Gem State Project vicinities if appropriate habitat exist. Monarch butterflies rely on milkweed (*Asclepias* spp.) for successful reproduction and nectaring, and on appropriate nectar-rich forbs, shrubs and trees to feed adult butterflies.

5.6.2 PRIOR U.S. FISH AND WILDLIFE SERVICE CONSULTATION

Based on a 2009 consultation with the USFWS (IDF 2009), other species were considered to have the potential to occur in the Idaho Falls Project vicinity:

5.6.2.1 GRAY WOLF

The gray wolf (*Canis lupus*) was listed as endangered with experimental/non-essential populations within the Idaho Falls Project vicinity. However, on May 5, 2011, the gray wolf was removed from the ESA list in Idaho due to the species recovery (IDFG 2021). Wolves in Idaho are currently managed under the 2002 Idaho Wolf Conservation and Management Plan and are classified as a big game animal with harvest authorized for both hunting and trapping (Hayden 2017).

¹⁹ Candidate species receive no statutory protection under the ESA. The USFWS encourages cooperative conservation efforts for these species because they are, by definition, species that may warrant future protection under the ESA.

5.6.3 OTHER SPECIAL-STATUS SPECIES - WILDLIFE

In addition to the species federally listed discussed above, the IDFG Information System Species Diversity Database provides sensitive species observation records by county (IDFG 2016). The Idaho Falls Project Boundary is located in Bonneville County, and the Gem State Project Boundary is located in Bonneville and Bingham Counties (Figure 4-2). A list of species that have been observed in Bonneville and Bingham counties is included in Table 5-24. Additionally, the State Wildlife Action Plan (SWAP), SGCN, and BLM sensitive species for the Upper Snake Field Office, are included in Table 5-24.

TABLE 5-24 FEDERAL AND STATE LISTED, CANDIDATE, DELISTED, AND SPECIES WITH OTHER CONSERVATION STATUS THAT MAY OCCUR IN BINGHAM AND BONNEVILLE COUNTIES, IDAHO

Scientific Name	Common Name	Federally Listed	State Listed and Conservation Status ¹²³
Amphibian			
<i>Anaxyrus boreas</i>	Western toad	-	SGCN, BLM-S
<i>Lithobates pipiens</i>	Northern leopard frog	-	SGCN, BLM-S
Fish			
<i>Catostomus discobolus</i>	Bluehead sucker		BLM-S
<i>Oncorhynchus clarkii bouvieri</i>	Yellowstone cutthroat trout	-	BLM-S
Mammals			
<i>Antrozous pallidus</i>	Pallid bat	-	BLM-S
<i>Brachylagus idahoensis</i>	Pygmy rabbit	-	SGCN, BLM-S
<i>Canis lupus</i>	Gray wolf	Delisted	BLM-S
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	-	SGCN, BLM-S
<i>Eptesicus fuscus</i>	Big brown bat	-	BLM-S
<i>Euderma maculatum</i>	Spotted bat	-	BLM-S
<i>Gulo gulo</i>	Wolverine	-	SGCN, BLM-S
<i>Lasionycteris noctivagans</i>	Silver-haired bat	-	SGCN, BLM-S
<i>Lasiurus cinereus</i>	Hoary bat	-	SGCN, BLM-S
<i>Lynx canadensis</i>	Canada lynx	Threatened	Threatened
<i>Lynx canadensis</i>	Grizzly bear or brown bear	Threatened	SGCN
<i>Myotis ciliolabrum</i>	Western small-footed myotis	-	SGCN, BLM-S
<i>Myotis evotis</i>	Long-eared Myotis	-	BLM-S
<i>Myotis lucifugus</i>	Little brown myotis	-	SGCN, BLM-S
<i>Myotis volans</i>	Long-legged Myotis	-	BLM-S
<i>Myotis yumanensis</i>	Yuma myotis	-	BLM-S
<i>Oreamnos americanus</i>	Mountain goat	-	SGCN
<i>Ovis canadensis</i>	Bighorn sheep	-	SGCN, BLM-S
<i>Pekania pennanti</i>	Fisher	-	BLM-S
Birds			
<i>Accipiter gentilis</i>	Northern Goshawk	-	BLM-S
<i>Aechmophorus clarkii</i>	Clark's Grebe	-	SGCN
<i>Aechmophorus occidentalis</i>	Western Grebe	-	SGCN

Scientific Name	Common Name	Federally Listed	State Listed and Conservation Status ¹²³
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	-	SGCN, BLM-S
<i>Amphispiza bilineata</i>	Black-throated Sparrow	-	BLM-S
<i>Aquila chrysaetos</i>	Golden Eagle	-	SGCN, BLM-S
<i>Artemisiospiza nevadensis</i>	Sagebrush Sparrow	-	SGCN, BLM-S
<i>Asio flammeus</i>	Short-eared Owl	-	SGCN, BLM-S
<i>Athene cunicularia</i>	Burrowing Owl	-	SGCN, BLM-S
<i>Botaurus lentiginosus</i>	American Bittern	-	SGCN
<i>Buteo regalis</i>	Ferruginous Hawk	-	SGCN, BLM-S
<i>Centrocercus urophasianus</i>	Greater Sage-Grouse	-	SGCN, BLM-S
<i>Chlidonias niger</i>	Black Tern	-	SGCN
<i>Chordeiles minor</i>	Common Nighthawk	-	SGCN
<i>Coccyzus americanus</i>	Yellow-billed Cuckoo	Threatened	SGCN
<i>Contopus cooperi</i>	Olive-sided Flycatcher	-	SGCN, BLM-S
<i>Cygnus buccinator</i>	Trumpeter Swan	-	SGCN, BLM-S
<i>Dolichonyx oryzivorus</i>	Bobolink	-	SGCN
<i>Empidonax trailii</i>	Willow Flycatcher	-	BLM-S
<i>Falco peregrinus</i>	Peregrine Falcon	Delisted	Protected Nongame
<i>Gavia immer</i>	Common Loon	-	SGCN
<i>Grus canadensis</i>	Sandhill Crane	-	SGCN
<i>Gymnorhinus cyanocephalus</i>	Pinyon Jay	-	SGCN, BLM-S
<i>Haliaeetus leucocephalus</i>	Bald Eagle	Delisted	Protected Nongame, BLM-S
<i>Histrionicus histrionicus</i>	Harlequin Duck	-	SGCN
<i>Hydroprogne caspia</i>	Caspian Tern	-	SGCN
<i>Lanius ludovicianus</i>	Loggerhead Shrike	-	BLM-S
<i>Larus californicus</i>	California Gull	-	SGCN
<i>Larus delawarensis</i>	Ring-billed Gull	-	SGCN
<i>Leiostyris virginiae</i>	Virginia's Warbler	-	BLM-S
<i>Leucophaeus pipixcan</i>	Franklin's Gull	-	SGCN
<i>Melanerpes lewis</i>	Lewis's Woodpecker	-	SGCN, BLM-S
<i>Nucifraga columbiana</i>	Clark's Nutcracker	-	SGCN
<i>Numenius americanus</i>	Long-billed Curlew	-	SGCN, BLM-S
<i>Oreoscoptes montanus</i>	Sage Thrasher	-	SGCN, BLM-S

Scientific Name	Common Name	Federally Listed	State Listed and Conservation Status ¹²³
<i>Pelecanus erythrorhynchos</i>	American White Pelican	-	SGCN
<i>Picoides albolarvatus</i>	White-headed Woodpecker	-	SGCN
<i>Pipilo chlorurus</i>	Green-tailed Towhee	-	BLM-S
<i>Plegadis chihi</i>	White-faced Ibis	-	SGCN
<i>Psilosops flammeolus</i>	Flammulated Owl	-	BLM-S
<i>Strix nebulosa</i>	Great Gray Owl	-	SGCN
<i>Tympanuchus phasianellus columbianus</i>	Columbian Sharp-tailed Grouse	-	BLM-S
Arachnids			
<i>Flabellorhagidia pecki</i>	Cave obligate mite	-	SGCN
<i>Speleomaster lexi</i>	Cave obligate harvestman	-	SGCN
<i>Speleomaster pecki</i>	Cave obligate harvestman	-	SGCN
Gastropod			
<i>Colligyrus greggi</i>	Rocky Mountain dusksnail	-	SGCN
<i>Fluminicola fuscus</i>	Ashy pebblesnail	-	BLM-S
<i>Oreohelix peripherica</i>	Deseret mountainsnail	-	SGCN
<i>Physella columbiana</i>	Rotund physa	-	SGCN
Aquatic Invertebrates			
<i>Anodonta californiensis</i>	California floater	-	SGCN, BLM-S
<i>Pacifastacus connectens</i>	Snake river pilose crayfish	-	SGCN
Millipedes			
<i>Idahona westcotti</i>	Idaho Lava Tube Millipede	-	SGCN
Insects			
<i>Acrolophitus pulchellus</i>	Idaho point-headed grasshopper	-	SGCN, BLM-S
<i>Agrilus pubifrons</i>	Metallic wood-boring beetle	-	SGCN
<i>Amblyderus owyhee</i>	Ant-like flower beetle	-	SGCN
<i>Ashmeadiella sculleni</i>	Leafcutting bee	-	SGCN
<i>Bombus fervidus</i>	Yellow bumble bee	-	SGCN
<i>Bombus huntii</i>	Hunt's bumble bee	-	SGCN
<i>Bombus morrisoni</i>	Morrison's bumble bee	-	SGCN
<i>Bombus occidentalis</i>	Western bumble bee	-	SGCN, BLM-S

Scientific Name	Common Name	Federally Listed	State Listed and Conservation Status ¹²³
<i>Bombus suckleyi</i>	Suckley’s cuckoo bumble bee	-	BLM-S
<i>Calliopsis barri</i>	Miner bee	-	SGCN
<i>Chrysobothris horningi</i>	Metallic wood-boring beetle	-	SGCN
<i>Chrysobothris idahoensis</i>	Metallic wood-boring beetle	-	SGCN
<i>Cicindela arenicola</i>	Idaho dunes tiger beetle	-	SGCN, BLM-S
<i>Danaus plexippus</i>	Monarch butterfly	Candidate	SGCN, BLM-S
<i>Euproserpinus wiesti</i>	Wiest's primrose sphinx	-	SGCN
<i>Glacicavicola bathysciodies</i>	Blind cave leiodid beetle	-	SGCN, BLM-S
<i>Glossosoma idaho</i>	Caddisfly	-	SGCN
<i>Hoplitis producta subgracilis</i>	Mason bee	-	SGCN
<i>Hylaeus lunicraterius</i>	Yellow-masked bee	-	SGCN
<i>Judolia gaurotoides</i>	Long-horned beetle	-	SGCN
<i>Melanoplus</i>	Spur-throated grasshopper	-	SGCN
<i>Parameletus columbiae</i>	Mayfly	-	SGCN

Sources: BLM 2022, IDAPA 13.01.06, IDFG 2016, USFWS 2022a

¹SGCN – Species of Greatest Conservation Need (Idaho SWAP)

²BLM-S – BLM Sensitive Species

³Protected Nongame and Threatened or Endangered Species: No person may take or possess those species of wildlife classified as Protected Nongame or Threatened or Endangered at any time or in any manner, except as provided in Idaho Code (including Sections 36-106E, and 36-1107), and Commission rules. Protected Nongame status is not intended to prevent unintentional take of these species, protection of personal health or safety, limit property and building management, or prevent management of animals to address public health concerns or agricultural damage.

5.6.4 CRITICAL HABITAT

There are no federally designated critical habitats that occur within the Idaho Falls or Gem State Project Vicinities (USFWS 2022a).

5.6.5 BIRDS OF CONSERVATION CONCERN

Fifteen Birds of Conservation Concern (BCC) are included in the USFWS IPaC report that may occur in the Idaho Falls and Gem State Project Vicinities that are protected under the Migratory Bird Treaty Act (MBTA) (USFWS 2022a). The bald eagle was removed from the ESA list on June 28, 2007 (NWF 2022). However, bald eagles remain federally protected under the Bald and Golden

Eagle Protection Act (BGEPA) of 1940 and the MBTA. A list of those birds and their breeding window is included in Table 5-25.

TABLE 5-25 BCC, MBTA AND/OR BGEPA BIRD SPECIES THAT MAY OCCUR IN THE IDAHO FALLS AND GEM STATE PROJECT VICINITIES

Scientific Name	Common Name	Breeding Season
<i>Aechmophorus clarkii</i>	Clark's Grebe	June 1 to August 31
<i>Carpodacus cassinii</i>	Cassin's Finch	May 15 to July 15
<i>Chlidonias niger</i>	Black Tern	May 15 to August 20
<i>Coccothraustes vespertinus</i>	Evening Grosbeak	May 15 to August 10
<i>Contopus cooperi</i>	Olive-sided Flycatcher	May 20 to August 31
<i>Dolichonyx oryzivorus</i>	Bobolink	May 20 to July 31
<i>Gymnorhinus cyanocephalus</i>	Pinyon Jay	February 15 to July 15
<i>Haliaeetus leucocephalus</i>	Bald Eagle	December 1 to August 31
<i>Leucophaeus pipixcan</i>	Franklin's Gull	May 1 to July 31
<i>Limosa fedoa</i>	Marbled Godwit	Breeds Elsewhere
<i>Melanerpes lewis</i>	Lewis's Woodpecker	April 20 to September 30
<i>Oreoscoptes montanus</i>	Sage Thrasher	April 15 to August 10
<i>Selasphorus rufus</i>	Rufous Hummingbird	April 15 to July 15
<i>Tringa flavipes</i>	Lesser Yellowlegs	Breeds Elsewhere
<i>Tringa semipalmata</i>	Willet	April 20 to August 5

Source: USFWS 2022a

5.6.6 BOTANICAL SPECIES

During the 2009 USFWS Consultation, the following listed species were found to have the potential to occur in the Idaho Falls Project vicinity, specifically northwest of the Idaho Falls Project, in Bonneville, Jefferson and Madison Counties. (IDFG 2022a).

5.6.6.1 UTE LADIES'-TRESSES

The Ute ladies'-tresses orchid (*Spirantes diluvialis*) is listed as threatened under the ESA. This orchid utilizes moist soils along riparian edges, gravel bars, old oxbows, and moist-wet meadows along perennial streams where vegetation is present, but not dense (USFWS 1995). It prefers a range of soils from fine silt/sand to gravels and cobbles. Habitat modification due to agricultural use is not thought to have a negative impact on the species, as historic occurrences of the Ute ladies'-tresses orchid have inhabited lands previously or currently used for agriculture. These sites may be wet meadows or supplied with irrigation water. The Ute ladies'-tresses orchid is not known

to exist within the project boundaries of the Projects (IFP 2009); however, it has been observed in Bonneville County (IDFG 2022b).

5.6.6.2 OTHER SPECIAL-STATUS SPECIES - BOTANICAL

According to IDFG list of species observation by county, the Ute ladies'-tresses, and the whitebark pine (*Pinus albicaulis*), candidate species under the ESA listing, have been observed in Bonneville County (IDFG 2022b). Table 5-26 includes species identified by the IDFG that occur within Bingham and/or Bonneville Counties. NatureServe Global and State Conservation Status Ranks describing if a given species is thriving, if it is rare or declining is included for each species. Additionally, BLM sensitive species for the Upper Snake Field Office, are included in Table 5-26.

TABLE 5-26 GLOBAL, FEDERAL, AND STATE RANKED PLANT SPECIES THAT MAY OCCUR IN BINGHAM AND/OR BONNEVILLE COUNTIES

Scientific Name	Common Name	Federal Listing	Global Rank ¹	State Rank ²	Other Conservation Status ³
<i>Asclepias fascicularis</i>	narrowleaf milkweed		G5	SNR	
<i>Asclepias incarnata</i>	swamp milkweed		G5	S2?	
<i>Asclepias speciosa</i>	showy milkweed		G5	SNR	
<i>Eriogonum hookeri</i>	hooker's buckwheat		G5	S1	BLM-S
<i>Physaria carinata ssp. paysonii</i>	Payson's bladderpod		G3	S2	BLM-S
<i>Pinus albicaulis</i>	whitebark pine	Candidate	G3G4	S3	BLM-S
<i>Poa paucispicula</i>	Alaska bluegrass		G5T5	S1	
<i>Spiranthes diluvialis</i>	Ute ladies'-tresses	Threatened	G2G3	S1	BLM-S

Source: IDFG 2022b

¹G1: Critically Imperiled — At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.

G2: Imperiled — At high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.

G3: Vulnerable — At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.

G4: Apparently Secure — At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.

G5: Secure — At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.

T = Trinomial rank indicator; denotes global status of infraspecific taxa.

²S1: Critically imperiled because of extreme rarity or because some factor of its biology makes it especially vulnerable to extinction (typically 5 or fewer occurrences)

S2: Imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction (typically 6 to 20 occurrences)

S3: Rare or uncommon but not imperiled (typically 21 to 100 occurrences)

SNR: Not ranked

³BLM-S: BLM Sensitive species

5.6.7 REFERENCES

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5.7 RECREATION AND LAND USE

Pursuant to 18 CFR §5.6(d)(3)(viii), this section provides a description of the existing recreational and land uses and opportunities within the Project Boundaries.

5.7.1 REGIONALLY OR NATIONALLY IMPORTANT RECREATION AREAS

Situated on Interstate Highway 15, which runs from Los Angeles via the Provo-Salt Lake region to the northern border of the United States (in western Montana), Idaho Falls is a major gateway to Yellowstone and Grand Teton National Parks, as well as many other major nearby recreational attractions.

5.7.1.1 YELLOWSTONE NATIONAL PARK

Located in northeastern Wyoming, Yellowstone National Park is the first national park designated by the United States on March 1, 1872 and is approximately 112 miles northeast of Idaho Falls Project and Gem State Project. Yellowstone National Park encompasses 2.2 million acres of land which is home to incredible geologic sights, wildlife, and opportunities to interact with the cultural aspects of the land (NPS 2022). With more than 900 miles of hiking trails (NPS 2022), Yellowstone National Park offers visitors a variety of trails and scenery to experience. More than 4,860,242 people visited Yellowstone National Park in 2021 (NPS n.d).

5.7.1.2 GRAND TETON NATIONAL PARK

Located in northeastern Wyoming, the Grand Teton National Park is approximately 102 miles east of the city of Idaho Falls, and boasts a variety of wildlife, scenery, and recreation opportunities. In 2021, Grand Teton National Park had a total visitation of 3,885,230 people (Grand Teton NPS). The Grand Teton National Park sits in the Teton mountain range which spans 40 miles in length and 7 miles in width. The most notable feature of the Teton mountain range is Grand Teton which sits at an elevation of 13,775 feet. Having over 17 species of carnivores (black and grizzly bears being the most recognizable), 6 species of hoofed animals, 4 species of reptiles and 300+ species of birds, Grand Teton National Park offers diverse options of animals as well as recreation activities ranging from mountain climbing to fishing to backpacking/hiking (NPS 2019).

5.7.1.3 CAMAS NATIONAL WILDLIFE REFUGE

The Camas National Wildlife Refuge, located on Interstate Highway 15 approximately 31 miles north of Idaho Falls, is managed by the USFWS and is one of three refuges that comprise the Southeast Idaho National Wildlife Refuge Complex. This approximately 11,000-acre facility, at elevation of 4,800 feet, consists of lakes, ponds, and marshlands along with sagebrush steppe uplands, meadows, and farm fields (USFWS n.d.). The diversity of landscape features resulted in a variety of habitats that are attractive to many types of animal life, including game species. Hunting, biking, birding, hiking, skiing, dog-walking, picnicking, and wildlife viewing are some of the recreational opportunities available to the public (USFWS n.d.). Fishing is not permitted on the refuge.

5.7.1.4 GRAY'S LAKE NATIONAL WILDLIFE REFUGE

Gray's Lake National Wildlife Refuge is managed by the USFWS and one of the Southeast Idaho National Wildlife Refuge Complex. The refuge occupies 22,000 acres and is located 37 miles southeast of Idaho Falls. Gray's Lake National Wildlife Refuge, at elevation 6,400 feet is a large marsh area but stretches of open water appear during the late spring runoff. Access is by means of a gravel road from Idaho Falls, and the paved State Highway 34 from Soda Springs to the south side of the refuge. Outdoor recreation in Gray's Lake National Wildlife Refuge include hunting, birding, boating, skiing, hiking, photography, picnicking, snowshoeing, and wildlife observation (USFWS n.d.).

5.7.1.5 RIRIE DAM AND RESERVOIR

Ririe Dam and Reservoir is a 1,500-acre reservoir approximately 15 miles east of Idaho Falls, which allows for irrigation, flood control, and provides recreational opportunities (Recreation.gov 2022). The USACE constructed the dam between 1970 and 1977 but transferred operations to the Bureau of Reclamation in 1976 (USBR 2020). Recreation activities include picnicking, water sports, fishing, boating, swimming, camping, hiking and hunting. The reservoir allows for 32 miles of accessible shoreline for fishing of rainbow, brown, and cutthroat trout from May through November. The site offers restrooms, a boat ramp and dock, a campground, and a visitor center (Recreation.gov 2022).

5.7.1.6 PALISADES RESERVOIR

Palisades Reservoir is a United States Bureau of Reclamation (USBR) irrigation storage project on the south fork of the Snake River 43 miles southeast of Idaho Falls (Recreation.gov 2022). It is readily accessible from U.S. Highway 26, which parallels the reservoir's eastern shore. The Targhee National Forest administers the recreational development. Water uses include boating, year-round fishing of cutthroat and brown trout, kokanee and mackinaw, waterskiing, and swimming. Other recreational uses of the area include sightseeing, camping, picnicking, and hunting. The site offers restrooms, six boat ramps, five picnic areas and five campgrounds (USFS n.d.). No commercial services are available within the reservoir area.

5.7.2 RECREATION FACILITIES AT THE PROJECTS

The following sections describe the existing recreational facilities within the FERC-approved Project Boundaries of the Idaho Falls and Gem State Projects. Figure 5-13 shows the recreation facilities in the Idaho Falls Project.

5.7.2.1 IDAHO FALLS PROJECT RECREATION FACILITIES

Article 42 of the existing Idaho Falls Project license requires IFP to file, for FERC approval, a revised Exhibit R that conforms to FERC's regulations. There have been multiple amendments to the Exhibit R, mostly concerning buoy lines, boat restraints, and public safety, as follows:

- February 8, 1979 – Article 42 required IFP to file a revised Exhibit R recreation plan to include buoy lines.
- May 30, 1980 – IFP files amended Exhibit R, including buoy lines in the Project drawings, with FERC.
- November 16, 1981 – Amended Exhibit R is approved by FERC.
- April 14, 1989 – IFP files a request to amend its license and new Exhibit R drawings, proposing the installation of various combination buoy lines, freestanding buoys, and warning signs at the Project's diversion structures.
- April 27, 1989 – FERC approves the amendment and revised Exhibit R drawings.

IFP provides free public access to Project waters and adjacent land throughout the Project area. Signs at the Project providing public access to persons with disabilities are consistent with the rules outlined in 18 CFR Part 8 requirements for recreation areas. The following recreational facilities fall within the FERC-approved Project Boundary of the Idaho Falls Project (Figure 5-16).

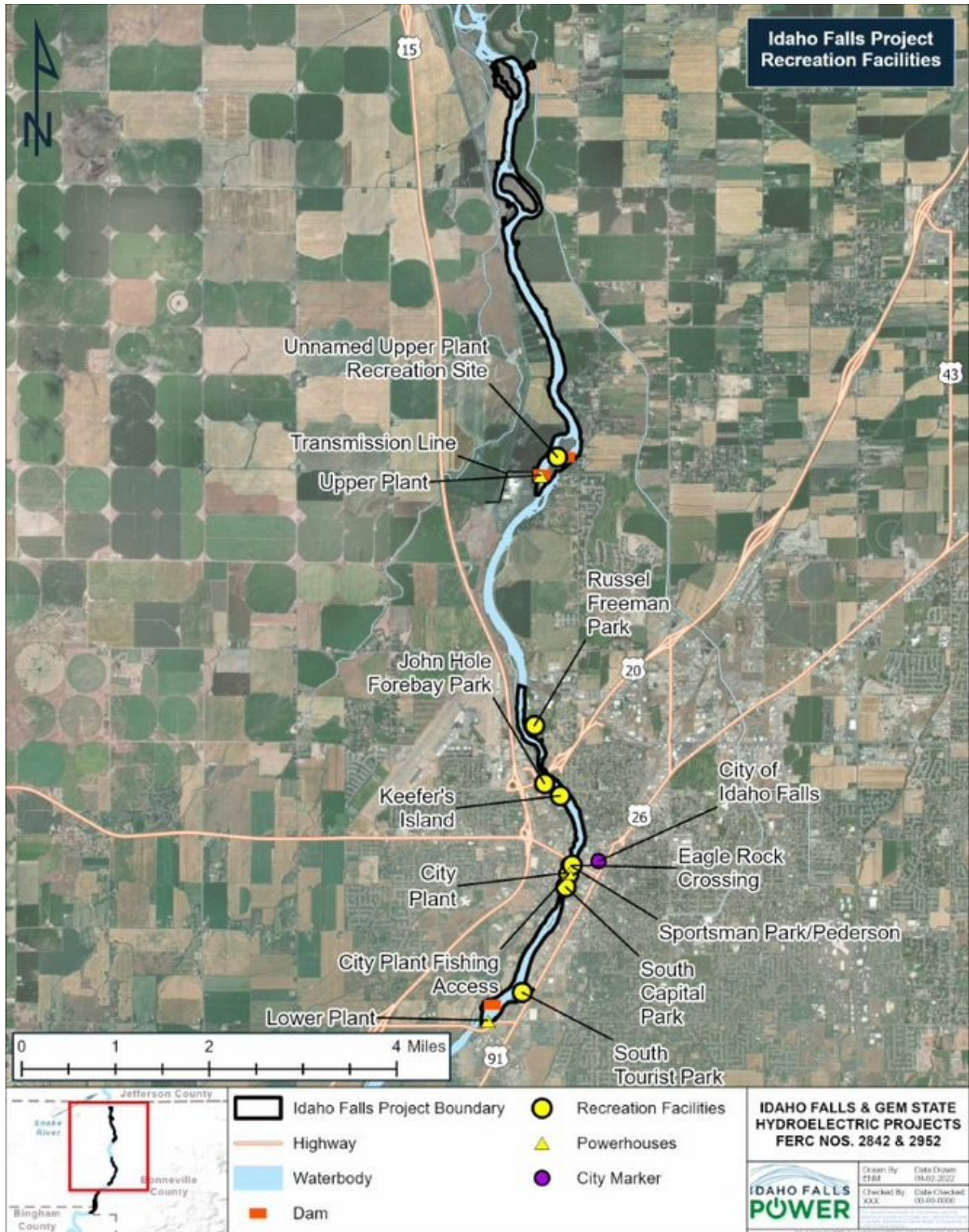


FIGURE 5-16 RECREATION FACILITIES WITHIN THE IDAHO FALLS PROJECT BOUNDARY

UPPER PLANT

Three areas at the Upper Plant site are used for public recreational and included in the current license. These areas do not have formal names but will be referred to here as: Site 1: unimproved parking river access; Site 2: access road to the island and; Site 3: unimproved parking area and boat launch. Collectively, these sites include one boat launch, tailwater fishing opportunities, reservoir fishing opportunities, parking, a mile-long trail, and an overlook area. Site 1 is adjacent to the existing Upper Plant powerhouse and dam, on the west bank of the forebay channel. This area, consisting of approximately 3 acres of city-owned land, is used for vehicle parking and river access. Principle activities include fishing and picnicking, although the site is heavily used for vehicle parking by people who cross Dam No. 2 to gain access to the island (Upper Plant Island), which separates the powerhouse and dam from the main channel of the Snake River. No facilities other than the access road have been provided at this site.

Site 2 at the Upper Plant site that is used for recreational purposes is located at the south end of the island and along the east channel of the river. This area, which is part of a BLM Power Site Withdrawal, comprises approximately 11 acres, of which about 6 acres are owned by the city of Idaho Falls. It is a sloping area covered with grasses, open stands of sagebrush and scatterings of trees.

Site 3 is approximately 8 acres at the east abutment located 0.47 miles northeast of the Upper Plant Powerhouse of the diversion dam (Dam No. 1) in the east channel of the Snake River. A portion of this area is within the power site withdrawal leased by the city of Idaho Falls from the BLM. An unimproved parking area and boat launching ramp have been provided at the upper end of the area, and a narrow road leads through a stand of willows and cottonwood trees to the east abutment of Dam No. 1.

CITY PLANT

City Plant Fishing Access Area

There is a fishing platform in the tailrace area near the City Plant and dispatch center. This is a restricted area and any fishermen that are interested in fishing here must sign in with IFP before accessing the area. A parking area is available for recreational use as well.

Eagle Rock Crossing

Located just north of Pedersen's Sportsman's Park on the east riverbank is Eagle Rock Crossing. The historical landmark provides a picnic area with benches and a drinking fountain, overlook structures, a parking area, restroom facilities and trail access to the Greenbelt.

John's Hole Forebay Park

John's Hole is a boat launching facility on the west side of the Snake River, just below the bridge carrying U.S. Highway 20 over the river. Constructed in 1975, it marks the northernmost part of the continuous greenbelt. It is situated on a narrow strip of land between the Porter Canal and the Snake River and contains approximately 4.13 acres and is 2.58 miles north of the Lower Plant Powerhouse (IFPR 2020). Public floating docks which line the edge of a 6-foot-high retaining wall are used by boaters, swimmers, and sunbathers. A swimming area was designated at the northern end of the park. Recreation at John's Hole consists of boat ramp and dock, picnic facilities, parking areas, restroom facilities, fishing access, and a section of the Greenbelt, a trail along the river including picnic facilities, restrooms, and scenic viewpoints. This area is picnic/swim and boat launch day-use area.

Keefer's Island

Located south of John's Hole lies a historic landmark known as Keefer's Island. The island is only accessible by boat and provides a looping trail system with picnic tables.

Pederson's Sportsman's Park

Pederson's Sportsman's Park is located between the City Plant and Broadway Bridge. The 4-acre park (IFPR 2020), on an island in the Snake River, is a heavily used recreational area and is located .07 miles north of the City Powerhouse. A low diversion dam that channels water into the City Plant forebay extends from the island to the downstream face of a pier of Broadway Bridge. Access to the island is provided by a footbridge over the forebay near the northern end of the island and by a walkway along a railroad trestle near the southern end. Recreation at Sportsman Park includes walking paths and bridges that span the river, an amphitheater sitting area, and fishing access to the river. There is also a water fill-up facility and sewage dumping facility for campers and motor

homes. The Friendship Garden is located on the island with Pederson's Sportsman's Park and was implemented to the park in 2011. The garden was developed to celebrate 30 years of associating with the Japanese sister city, Tokai-Mura and to encourage friendship with peoples throughout the world. The Friendship Garden contains a traditional Japanese garden gate, many water features, a viewing platform, a deck, a "Dragon's Path" across a pond, and a large Japanese lantern given to the city by Tokia-Mura. One abutment of a historic bridge across the Snake River, erected in 1865, is located on the west side of the island, and its companion is visible across the river from this park.

Russell Freeman Park

Russell Freeman Park and the Intermountain Science Experience Center occupy approximately 60.83 acres on the north edge of Idaho Falls on a site that was formerly a sanitary landfill. This area is hilly and has local relief of more than 50 feet. Established in 1968, the park has been seeded to grasses, and ornamental trees and shrubs have been planted throughout. Four baseball diamonds, complete with bleachers, dugouts, and parking areas, have been established. One diamond is lighted. A road system connects all areas of the park. Four picnic shelters have been built, and picnic tables and fireplaces have been established at regular intervals throughout the park. The park has two restrooms available on site as well as shelters, band shelter, disc golf course, and a war memorial. Several pieces of playground equipment have been installed, and some boat launching already occurs in the park. A large parking area has been constructed, and a nature trail, designed for use by older and persons with disabilities as well as others, has been established. Local plants, animals, geology, early Indian history, and aspects of the June 1976 flood, which inundated most of the trail area are identified along the trail.

South Capital Park

South of IFP on the east riverbank is the South Capital Park and Shelter, also called Memorial Park and War Mother's Park (Parks & Rec, n.d.). Visitors have access to a parking area, picnic shelter with tables, a fishing pier, playground, restroom facilities, a river overlook and trail access to the Greenbelt.

LOWER PLANT

South Tourist Park

South Tourist Park is located near the south city limit of Idaho Falls on the east bank of the Snake River, approximately 0.4-mile northeast of the Lower Plant site. It is accessible from the South Yellowstone Highway (U.S. 26/91). The 13.90-acre recreational area is owned by the city of Idaho Falls and operated by the City Parks and Recreation Department (IFPR 2020). It is a combination overnight and day-use area and receives heavy picnic, boat launch, and overnight transient use. This is the only public area in the Project vicinity that provides overnight camping facilities. Facilities available for public use at South Tourist Park include a boat launching ramp and docking facilities with adjacent parking, informal swimming and fishing access, a restroom building connected to city water and sewer systems, 16 designated camping areas, movable picnic tables, garbage cans, area lighting, playground equipment, extensive grassed areas and access to the Greenbelt trail. As of October 1st, 2021, the price per camper, recreational vehicle, or tent per night is \$18. Camping is open from April-October, weather permitting. No hook ups (no water or power); however, the park does have a dump station (IFPR 2020).

Pursuant to Order Approving Revised Exhibit R, the licensee is required to maintain South Tourist Park, which provides a boat launch and other recreation facilities. In 2008, the licensee noticed that the park's concrete boat ramp had deteriorated to the point of causing damage to boat trailers that used the launch. In order to prevent further trailer damage, the licensee temporarily closed the boat ramp in order to replace it. FERC approved the boat launch replacement in 2009.

5.7.2.2 GEM STATE PROJECT RECREATION FACILITIES

Article 50 of the current Gem State Project license required IFP, after consultation with BLM, NPS, and the IDPR, to prepare a revised Report on Recreation Resources for the Gem State Project. This Recreation Resources Report includes:

1. The location of appropriate facilities to be developed for Recreational Sites A, G, and H, as designated in the application;
2. A plan for removal of rock outcroppings and submerged features that could pose a boating hazard;

3. The location and type of markers to warn boaters of hazardous areas that would remain within the project reservoir;
4. Compatible treatment of the shoreline greenbelt and BLM river trail;
5. A schedule for the development, operation, and maintenance of the proposed recreational facilities; and
6. Copies of any letters received from consulted agencies and any agreement entered into for the development and operation of the project recreation facilities.

A revised Report on Recreation Resources was approved by FERC on January 11, 1985. Since approval, the plan has been amended multiple times for minor changes to implementation requirements. IFP has completed substantial implementation required by Article 50 and continues to maintain all FERC-approved recreation sites.

Article 50 also required IFP to coordinate with IDPR in the preparation of a reservoir zoning plan to designate areas for specific recreational use, and to file a zoning plan with FERC within one year of license issuance (FERC 1983).

The following recreational facilities fall within the FERC-approved Project Boundary of the Gem State Project.

UPPER MARINA (GEM LAKE RECREATION AREA)

Owned by the city of Idaho Falls, Upper Marina (Gem Lake Recreation Area) is located 2.38 miles north of the Gem State Powerhouse and consists of a boat ramp, docks, floats, parking, picnic tables, fire pits, toilets meeting Americans with Disabilities Act (ADA) standards, garbage cans and a parking area that was extended in 2004. Here, members of the public have boating access for fishing, water skiing, and general enjoyment on the north side of Highway 26 bridge. A boat restraining barrier upstream of the Gem State Dam as well as warning signs, buoys, sirens, and lights are maintained by IFP to notify boaters and the public of facilities and to alert tailrace anglers to the potential for rapidly rising water levels.

LOWER MARINA

The Lower Marina recreation site is located approximately 0.30 miles west of the Gem State Powerhouse and provides car-top boat access to the Snake River between the Gem State dam and

the Highway 26 bridge through a footpath over the dike embankment. Parking is available within 800 feet from the access road. A boat ramp, docks, restrooms and picnic shelters are also available at the marina. For safety purposes, IFP maintains a buoyed rope across the channel to prevent smaller boats from approaching the hydroelectric facilities and dam (Idaho Falls 1984).

FISHING ACCESS

Primarily used to maintain fishing stream access, public access is largely be restricted to the west bank, even during minimum release from the dam. The facility is located 0.12 miles from the Gem State Powerhouse and includes of parking, ADA restroom facilities, garbage cans, and informational signage. These facilities are also accessible to sportsmen using the reservoir access at the Lower Marina site. This area allows access to the tailrace for fishing.

GEM STATE FISHING POND

The 5-acre Gem State Fishing Pond provides public fishing access for children under 14 years of age and is located 0.33 miles south of the Gem State Powerhouse, near the powerhouse tailrace on the east bank. A parking area is provided about 1,000 feet north of Canyon Road. Access to the pond, from the parking area, is about 1,000 feet, restricting access to foot traffic only. The pond is stocked three times throughout the year with a variety of fish by IFP (FERC 2016). This area is equipped with picnic tables, benches, and trash receptacles. The Pond is closed March 1st through June 15th to allow nesting of waterfowl in the area.

5.7.3 RECREATIONAL OPPORTUNITIES IN THE VICINITY OF THE PROJECTS

This section describes recreational opportunities in the Projects' vicinities, but not associated with the current license, for each the Idaho Falls Project and the Gem State Project. As both the Idaho Falls and Gem State Projects are located in close succession from each other, a 5-mile buffer around each Project was used to identify recreational facilities and opportunities within each Project vicinity. Table 5-27 includes a list of recreation amenities located within the Projects' vicinitiesProject vicinity.

TABLE 5-27 LIST OF PARKS AND AMENITIES (NON-PROJECT FACILITIES) LOCATED WITHIN THE PROJECTS' VICINITIES

Park Name	Address	Shelter	Rest Rooms	Play Ground	Picnic Area	Ball Fields	Soccer Fields	Tennis/Skate
Antares Park	1436 Anteres Drive	-	-	X	-	-	-	-
Civitan Plaza	510 Park Avenue and B	-	-	-	X	-	-	-
Freeman Park	1290 Science Center	X	X	X	X	X	-	-
Greenbelt Eastside	Broadway & Memorial	X	X	-	X	-	-	-
Greenbelt Westside	Broadway & Riverside	-	X	-	X	-	-	-
Highland Park/Melaleuca	568 E. Elva	X	X	X	X	X	-	-
Idaho Falls Greenbelt Trail	N/A	-	-	-	-	-	-	-
Poitevin Park	300 W. 13 th Street	-	-	X	X	-	-	-
Reinhart Park	1055 Washburn	X	X	X	X	X	-	-
Rollandet Park	2280 Rollandet Avenue	N/A	X	X	-	X	-	-
Ryder Park	2001 W. Sunnyside Road	X	-	-	X	-	-	-
Sage Lakes Golf Course	100 E. 65 th N.	-	X	-	-	-	-	-
Snake River Animal Park	2930 Lindsay Boulevard	-	-	-	X	-	-	-
Tautphaus Park	2800 S. Boulevard	X	X	X	X	X	X	X
Taylors Crossing	River Walk Drive	-	-	-	X	-	-	-
Tennis Court SHHS	1855 Skyline Drive	-	-	-	-	-	-	X
West River Boat Ramp	9404 N. River Road	-	-	-	-	-	-	-

Source: IFPR, n.d.

Plans by the Idaho Falls Parks and Recreation Department to expand existing recreational areas in the Project Vicinity are consistent with expectations that current trends in the local demand for recreation would continue. The increasing demand for day-use recreational facilities along the Snake River is being met in accordance with a comprehensive recreational plan, as funding becomes available.

Along with the recreational opportunities listed above, the following Figure 5-17 shows recreational opportunities in the vicinity of the Projects.

GREENBELT

Several segments of a planned, continuous Snake River greenbelt have been completed in Idaho Falls. One completed portion extends nearly a mile northward from the City Plant along the east bank of the river. The other developed section occupies more than a mile of the west river bank from the Broadway Bridge to Johns Hole Park, where U.S. Highway 20 crosses the Snake River. Because of its proximity to downtown Idaho Falls on the east and a major hotel area on the west, the greenbelt receives heavy daytime use by both residents and visitors. Benches and portable picnic tables are located at varying intervals throughout the greenbelt, and pedestrian/bicycle paths wind along the river, separated from the adjacent city streets. Naturally occurring trees have been preserved. Landscaping and extensive lawns have been planted. The contrast presented by the relatively quiet waters of the forebay adjacent to the cascading waters of the Idaho Falls of the Snake River provide a unique scenic attraction in the greenbelt.

CIVITAN PARK

At the northern end of the greenbelt, east of Riverside Drive, is the 2.63-acre, triangular Civitan Park. This park is a grassed area with plantings of ornamental trees and shrubs. Its primary function is to provide a regulation baseball diamond complete with backstop, outfield fence, and spectator bleachers. Restroom facilities have been built. Four picnic shelters equipped with tables provide a view across the Snake River and of Keefer's Island (a small island about 1300 feet downstream from the U.S. Highway 20 Bridge).

5.7.4 CURRENT AND FUTURE RECREATION NEEDS AND MANAGEMENT FOR THE PROJECTS

5.7.4.1 FERC FORM 80

The most recent recreational use information for the Idaho Falls Project and Gem State Project is provided in the Licensed Hydropower Development Recreation Report, FERC Form No. 80 (Form 80) filed in 2014 for both projects. Until recently (FERC Order 852, effective March 28, 2019), licensees were required to file Form 80 reports for each project development every 6 years, unless the licensee obtained an exemption from FERC (Table 5-28). The information provided by the licensee was used to document overall recreational use of project lands and waters at each Project

Development. below illustrate the available amenities of the Idaho Falls Project and Gem State Project along with their capacities as indicated on the most recent FERC Form 80 in 2014.

TABLE 5-28 2014 IDAHO FALLS UPPER PLANT FORM 80 RESULTS

Facility	Capacity Utilization (percent)
Idaho Falls Project Upper Plant	0-10
Idaho Falls Project Lower Plant	0-40
Idaho Falls Project City Plant	0-50
Gem State Project	0-50

Source: FERC 2014

5.7.4.2 IDAHO FALLS COMPREHENSIVE AND STRATEGIC MASTER PLAN

Idaho Falls Comprehensive and Strategic Master Plan gives detailed insight to what is needed and what recommendations will be needed for the future pertaining to recreation within the city limits. Goals for this plan include:

- Engage the community, leadership and stakeholders through innovative public input means to build a shared vision for parks, open space, trails, and recreation in the city of Idaho Falls for the next 10 to 20 years
- Utilize a wide variety of data sources and best practices, including a statistically valid survey to predict trends and patterns of use and how to address unmet needs in the city of Idaho Falls
- Determine unique Level of Service Standards to develop appropriate actions regarding parks, open space, trails, and recreation that reflects the city of Idaho Fall’s strong commitment in providing high quality recreational activities for the community
- Shape financial and operational preparedness through innovative and “next” practices to achieve the strategic objectives and recommended actions with achievable strategies
- Develop a dynamic and realistic strategic plan that creates a road map to ensure long-term success and financial sustainability for the city of Idaho Fall’s parks, open space, trails and recreation, as well as action steps to support the family-oriented community and businesses that call Idaho Falls home

When analyzing the facilities offered by the Idaho Falls Department of Parks and Recreation, residents identified the need for multiuse paved trails, picnic areas and shelters, small neighborhood parks, and large community parks. The facilities that were the most important to households were multiuse paved trails, outdoor swimming pools/water parks, and multiuse

unpaved trails. The plan identified that focusing on multiuse paved trails would provide the greatest benefit for the largest number of residents within the city of Idaho Falls (IFPR 2020).

5.7.4.3 IDAHO STATE COMPREHENSIVE OUTDOOR RECREATION PLAN AND RELATED REPORTS

Idaho Statewide Comprehensive Outdoor Recreation Plan (SCORP) is created by the IDPR to provide an all-encompassing document for Idaho's outdoor recreation for the next 5 years. The Idaho SCORP provides current assessment of the outdoor recreation system in Idaho which includes detailing providers and supply, understanding the demands and needs, and identifying issues impacting outdoor recreation throughout the state (IDPR 2018). While SCORP helps identify statewide and regional trends and issues, IDPR strongly encourages local and regional planning, research, and interagency cooperation in order to meet and understand local demands and needs (IDPR 2018). Throughout the development of this plan, the following themes emerged as current and potential areas of concern over the next 5 years:

- Loss of public lands, including federal land transfers
- Loss of motorized trail access due to administrative closures, and non-motorized trail access due to lack of funding for maintenance
- Balancing population growth, increased participation and natural resource protection
- Engaging youth in outdoor recreation
- Maintaining existing facilities and infrastructure
- Improving communication between providers and the public
- Funding for programming and interpretation
- Improving education and stewardship/respect for natural resources
- Building new and unique partnerships
- Adapting to changes in activities and emerging activities; staying relevant
- Blending technology with outdoor recreation
- Connecting with new users, including minority and underserved populations
- Improving access for people with disabilities

5.7.5 PROTECTED RIVER SEGMENTS

The National Wild and Scenic Rivers System was created by Congress in 1968 to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the

enjoyment of present and future generations (NWSRS n.d). Though certain portions of the upstream headwaters of the Snake River fall within the Wild and Scenic River System, no segments of the river within either of the Project Boundaries are designated as wild and scenic.

The National Trails System is composed of more than 55,000 miles of scenic, historic and recreation trails that traverse wilderness, rural, suburban and urban areas in 49 states (USFS 2016). The National Trails System Act of 1968 calls for establishing trails in both urban and rural settings for people of all ages, interests, skills, and physical abilities (NPS 2021). No trails are designated as part of the National Trail System within both the Idaho Falls Project and Gem State Project Boundaries. The nearest national scenic trail to both Projects is the Continental Divide Trail (CDT n.d), which traverses along the southeastern side of the Beaverhead and Deerlodge National Forests, approximately 150 miles northeast of the Idaho Falls Project.

There are no wilderness areas within the Idaho Falls Project or Gem State Project.

5.7.6 LAND USE AND MANAGEMENT

5.7.6.1 AGRICULTURE AND INDUSTRY IN THE VICINITY OF THE PROJECTS

Agriculture, Idaho's leading industry, is the largest water user in the state (University of Idaho 2010). The Snake River discharge in the Idaho Falls area is used extensively for irrigation purposes (FERC 1983a). Agricultural crops dominate this region of Idaho, including alfalfa, potatoes, and small grains (FERC 1983a) (Photo 5-1).



Source: Brownell & Sons, n.d.

PHOTO 5-1 HISTORIC PHOTO OF RUSSET POTATO HARVEST IN IDAHO FALLS

Many food-processing industries are concentrated around the cities of Idaho Falls, Burley, Twin Falls, Boise, and Payette.

Idaho Falls is the 4th largest city in the state of Idaho. The city provides a myriad of residential and commercial developments. As shown in Figure 5-18, the majority of land within the Project areas is developed to medium intensity or is used for cultivated crops. The main crops grown in Idaho include potatoes, various grain and seed, sugarbeets, onions, legumes, fruit and mint (Idaho State Department of Agriculture, n.d.).

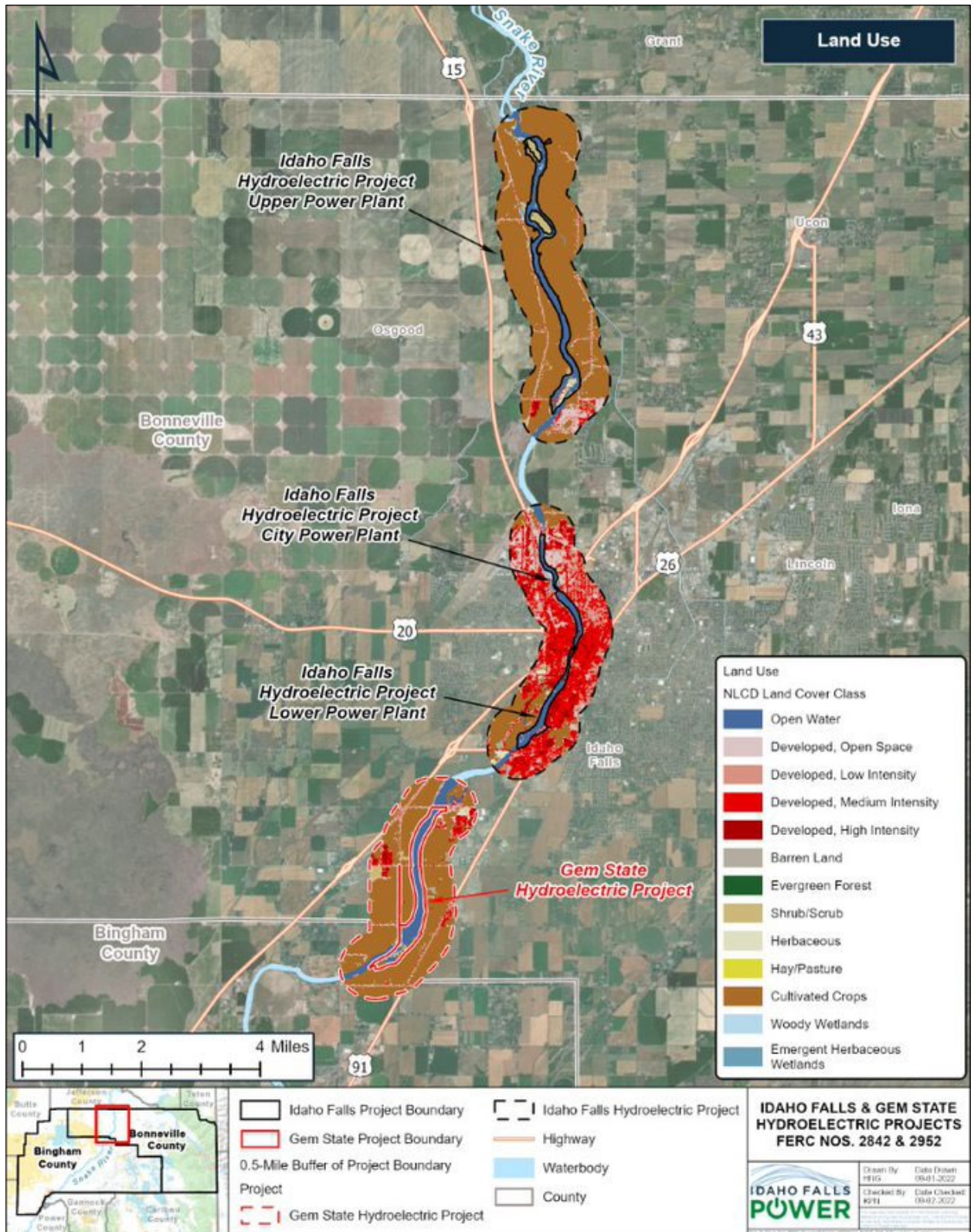


FIGURE 5-18 PROJECT LAND USE

5.7.6.2 IDAHO FALLS HYDROELECTRIC PROJECT

UPPER PLANT

The Upper Plant, which was constructed in 1930, is located approximately 4 miles upstream from the Idaho Falls city center at RM 805. Approximately 31.89 acres of privately owned land are contained within the Project Boundary. Nearly 304 acres of public lands owned by the State of Idaho within the Project Boundary are occupied by the Snake River channel. Agricultural and rural residential land uses are dominant near the plant site, but gravel pits, junk yards, and other industrial uses occur along the westside highway adjacent to the railroad. Upstream lies level agricultural land of the Snake River plain.

CITY PLANT

The City Plant, built in 1913, is located in downtown Idaho Falls at the falls of the Snake River at RM 800, adjacent to the central business section of the city of Idaho Falls. The City Plant impoundment is 50 acres at a normal pool elevation of 4,700 feet NGVD and extends approximately 1 mile upstream. Approximately 0.2 acres are within the existing railroad right-of-way for the Union Pacific Railroad spur line, which crosses the property. Approximately 0.6 acres are owned by the city of Idaho Falls.

LOWER PLANT

The Lower Plant, erected in 1940, is located 2 miles downstream from the city center at RM 798. A commercial and industrial strip facing the Yellowstone Highway and the Union Pacific Railroad parallels the east side of the Snake River south of Idaho Falls. A small area of irrigated cropland, evolving toward industrial and commercial uses, lies just east of the plant. The Lower Plant impoundment is 100 acres at a normal pool elevation of 4,674 feet NGVD and extends approximately 2 miles upstream. Approximately 4.0 acres of private property are included within a right-of-way for a dike on the east bank of the river upstream from the power plant to the 17th Street Bridge. Approximately 5.6 acres are owned by the city of Idaho Falls.

TABLE 5-29 LAND USE IN THE IDAHO FALLS PROJECT AREA

Land Cover Class	Area (Acres)			Gem State Hydroelectric Project
	Upper Plant	City Plant	Lower Plant	
Open Water	313.8	93.9	102.3	274.0
Developed, Open Space	2.3	5.3	2.0	2.0
Developed, Low Intensity	4.6	7.5	8.9	1.8
Developed, Medium Intensity	2.7	6.4	8.6	1.2
Developed, High Intensity	0.2	4.8	3.5	0.7
Barren Land	2.9	0.0	0.2	4.6
Evergreen Forest	0.0	0.0	0.0	0.5
Shrub/Scrub	29.3	0.8	0.5	21.0
Herbaceous	15.6	0.0	0.0	2.2
Cultivated Crops	57.2	0.0	1.3	62.5
Woody Wetlands	8.0	0.1	1.3	4.0
Emergent Herbaceous Wetlands	11.3	1.1	0.0	2.2

Source: USGS 2021

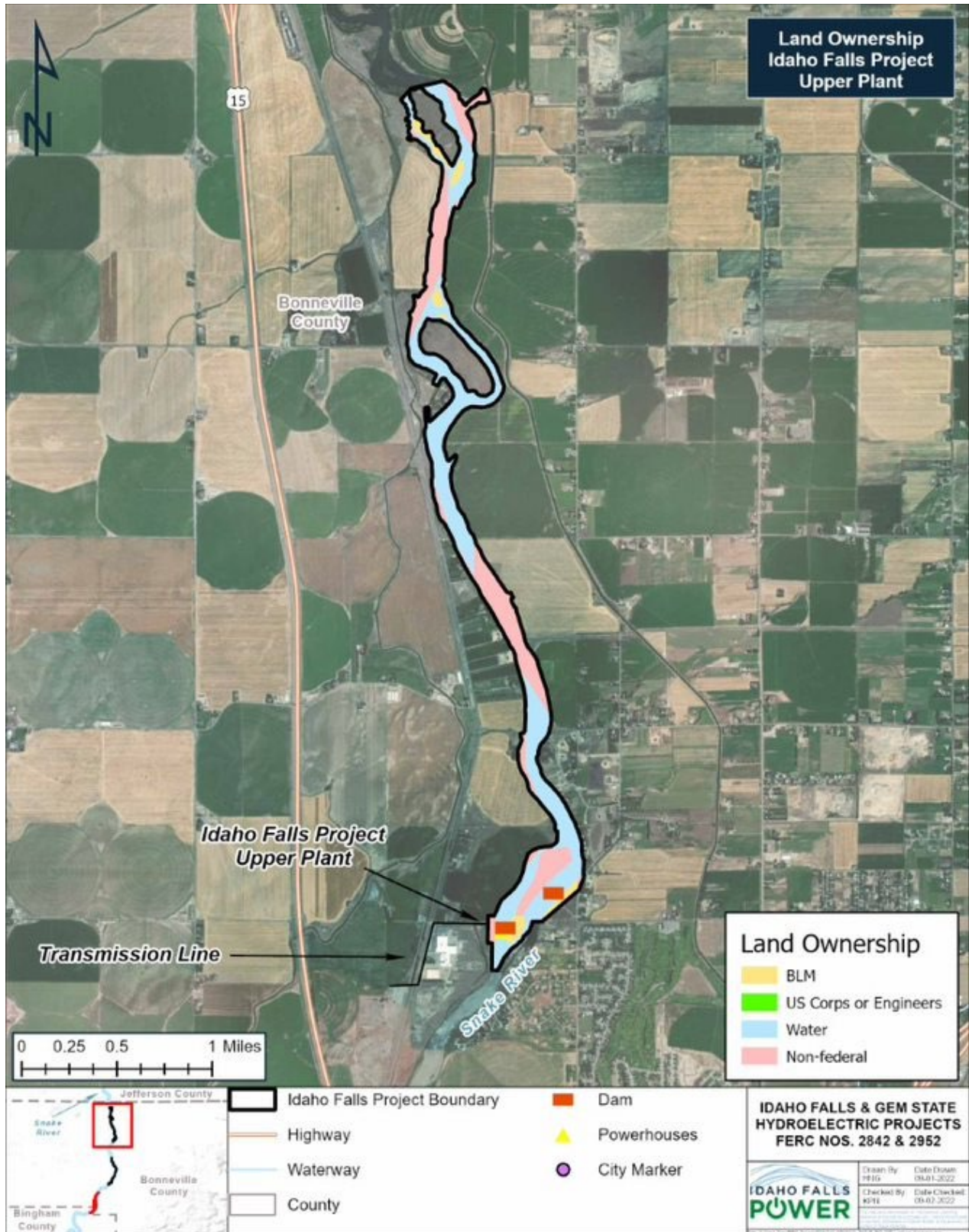


FIGURE 5-19 LAND OWNERSHIP IN THE IDAHO FALLS PROJECT—UPPER PLANT

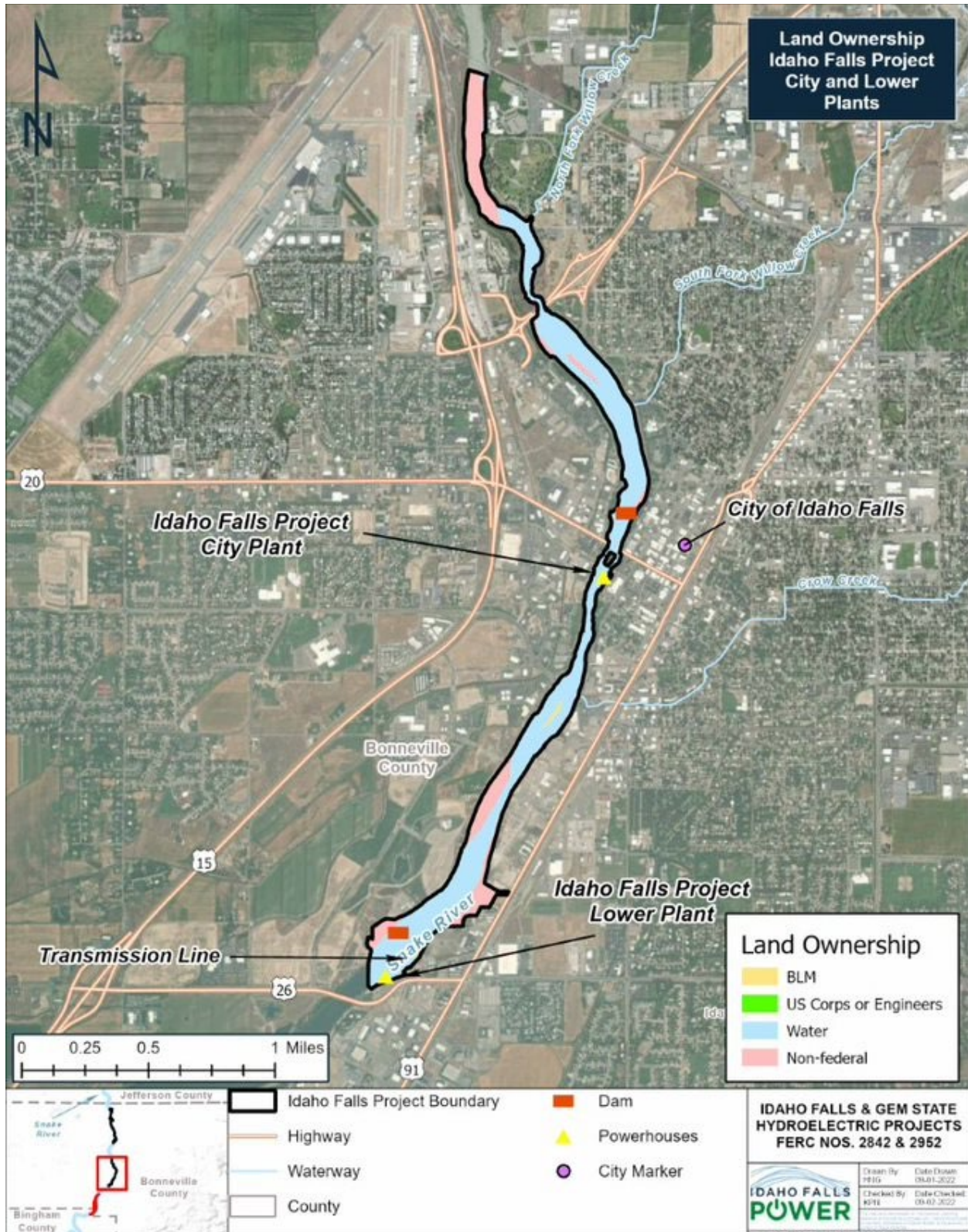


FIGURE 5-20 LAND OWNERSHIP IN THE IDAHO FALLS PROJECT AREA—CITY AND LOWER PLANTS

5.7.6.3 GEM STATE HYDROELECTRIC PROJECT

The Gem State Hydroelectric Project is located on the Snake River, near the southern edge of the Snake River Plain at RM 789.76, approximately 5.5 miles southwest of the city of Idaho Falls. The Project is located entirely on municipally owned lands and consists of one development. The Project is located in Bonneville and Bingham counties in the State of Idaho. The Project occupies a total of 197.7 acres of land, including 189.4 acres of non-federal lands and 5.8 acres of United States lands administered by the BLM. The average elevation in the Project area is about 4,700 feet mean sea level (msl), with slightly to moderately sloping terrain.

There is one 3.13 acre lot belonging to the United States located on the left bank of the Snake River within the Project Boundary (Figure 5-21), Lot 7 in Section 15, Township 1 North, Range 37 East of the Boise Meridian, Bonneville County, Idaho. The United States has retained easements under provisions of the Omitted Lands Act of 1962 to 50- and 100-foot strips parallel to the ordinary high-water line. These easements are for recreational facilities and general recreational use. These easements are along the right bank throughout Section 10, Township 1 North, Range 37 East of the Boise Meridian, Bonneville County, Idaho, and along the left bank in the tailrace area.

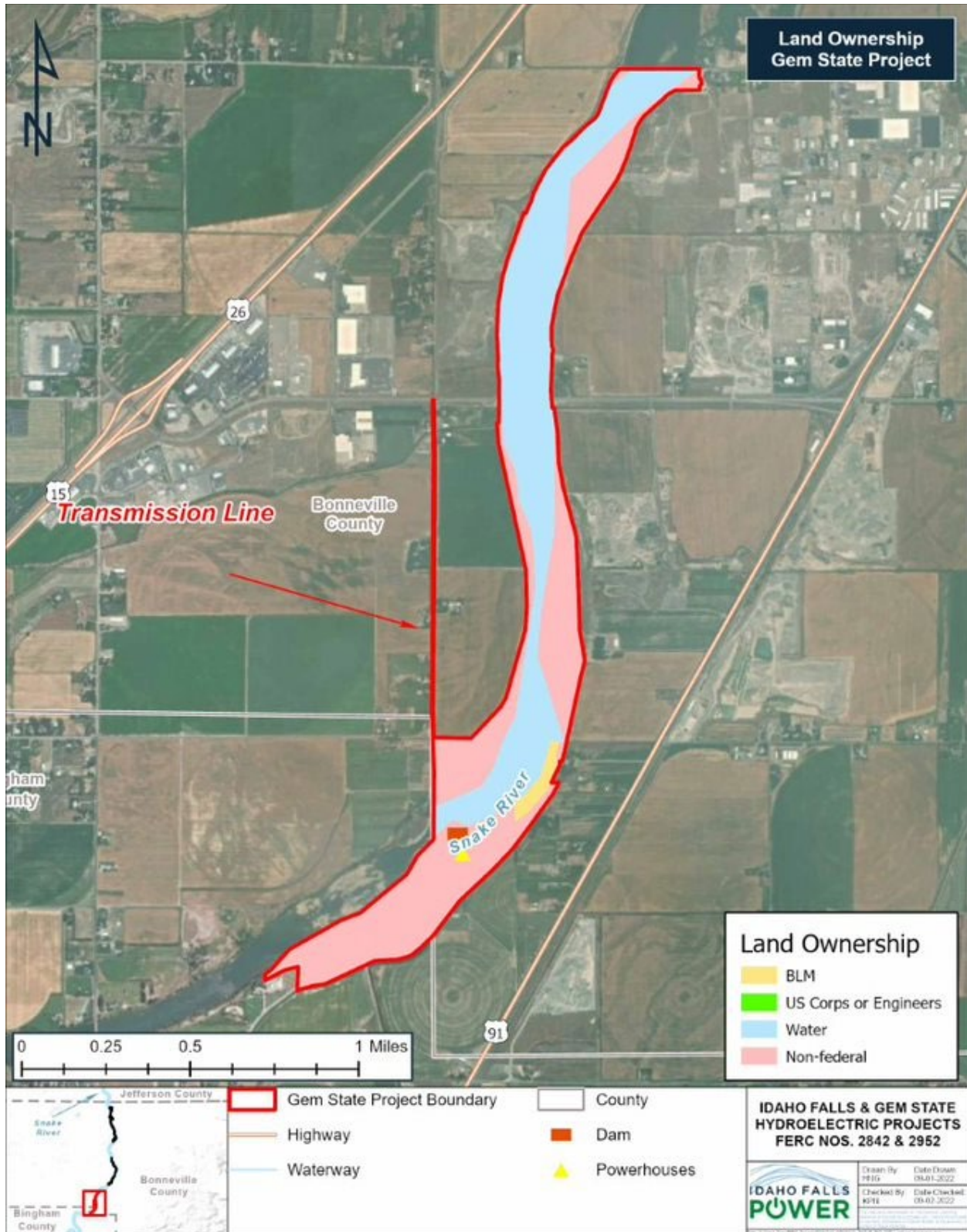


FIGURE 5-21 LAND OWNERSHIP IN THE GEM STATE PROJECT AREA

5.7.6.4 COMPREHENSIVE PLANS

IDAHO FALLS COMPREHENSIVE PLAN

According to the City Core Plan for Idaho Falls, the downtown area is comprised of commercial business while south of downtown is considered an “urban neighborhood” that permits a range of building types and commercial uses complimentary to residencies.

The River Edge subdistrict contains valuable public and cultural services and amenities on the Riverwalk. IFP is contiguous to these uses. The city of Idaho Falls aims to improve South Capital Avenue and its connectivity to the rest of South Downtown while preserving its valuable natural amenities. Idaho Falls plans to integrate form-based codes, which offer an alternative zoning type that relies less on land use designations and focuses instead on the built characteristic of individual sites

BONNEVILLE COUNTY COMPREHENSIVE PLAN

Agriculture dominates Bonneville County's land use. Just under 96 percent of all private lands in the county are used for farmsteads, primary processing of agricultural commodities, cropland or rangeland. Agriculture and agribusiness enterprises are also the second largest source of employment and personal income in the county, falling just behind the Idaho National Engineering Laboratory and its associated firms. According to the 2013 Bonneville County Comprehensive Plan, the maintenance of agricultural land and water resources, and of viable farm units, is essential to the county's continued prosperity. Agriculture is also an integral part of Bonneville County history and the principal contributor of the pastoral open spaces that compose much of its scenic landscape.

BINGHAM COUNTY COMPREHENSIVE PLAN

Agriculture is Bingham County's dominant land use. Agriculture and agribusiness enterprises are an important source of personal income in the county. The maintenance of agricultural land and water resources and of viable farm units is essential to the county's continued prosperity. The 2018 Bingham County Comprehensive plan encourages agricultural land uses in Bingham County to provide an economic base.

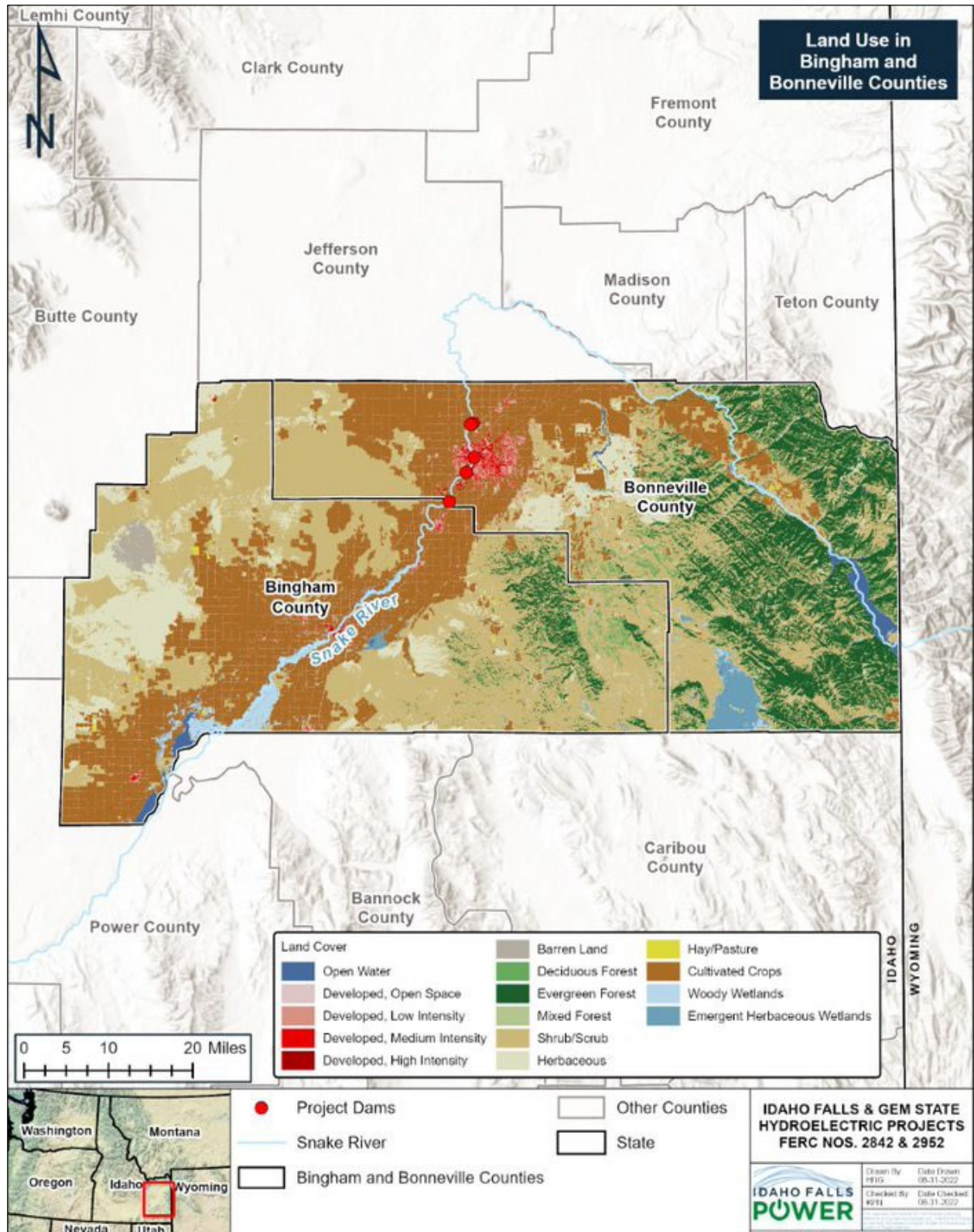


FIGURE 5-22 LAND USE IN BINGHAM AND BONNEVILLE COUNTIES

BIG DESERT MANAGEMENT FRAMEWORK PLAN

The Big Desert Management Framework Plan (MFP) guides management of public lands managed by the Upper Snake BLM Field Office. Covering 1.8 million acres of public lands (BLM, 2022), this MFP guides the decisions and actions taken by the BLM in managing resources on public lands. This land use plan is currently under revision to be a part of a comprehensive land use management direction. Direction is needed to designate public lands for retention or disposal as well as to allow for the development of alternative energy sources.

5.7.6.5 SHORELINE MANAGEMENT AND BUFFER ZONES

There are no existing shoreline buffer zones within the boundaries of the Projects.

5.7.7 REFERENCES

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5.8 AESTHETIC RESOURCES

Pursuant to 18 CFR § 5.6(d)(3)(ix), the text in this section includes a description of the aesthetic, or visual, characteristics of the lands and waters potentially affected by the Idaho Falls and Gem State Projects.

5.8.1 EXISTING REGIONAL VISUAL CHARACTER

The Snake River is the major natural water feature present in the vicinity of the Projects, with smaller tributaries emptying into the Snake River (Figure 3-2). Both Projects are located within the Upper Snake River Floodplain EPA Level IV ecoregion (EPA 2002) which is characterized by nearly level river terraces and floodplains containing canals and other water diversions.

Lands north of the city of Idaho Falls, and near the Upper Plant, are characterized by agricultural fields, industrial uses, and scattered residential development. The southern portion of the Idaho Falls Project is located in a moderately-to-heavily developed urban area within the heart of the city of Idaho Falls (MRLC 2019). The west bank of the Snake River includes a mixture of industrial, retail, and parkland or other open space. Lands on the east bank of the Snake River consist of industrial, retail, residential, and parkland or other open space. As the distance from the Snake River increases, urban development becomes less dominant and land use transitions to agricultural uses (see Figure 5-18 in the Land Use Section of this PAD). The Gem State Project is surrounded by a mixture of industrial, retail, and agricultural lands, with some residential areas (see Figure 5-18 in the Land Use Section of this PAD).

Other nearby reservoirs include the Ririe Reservoir, Palisades Reservoir, and American Falls Reservoir. Ririe Reservoir is located on Willow Creek, approximately 15 miles east of the Idaho Falls Project. Palisades Reservoir is located on the South Fork Snake River, approximately 43 miles southeast of the Idaho Falls Project. The American Falls Reservoir is located approximately 40 miles downstream of the Gem State Project on the Snake River. These reservoirs are popular

for day-use activities, camping, boating, fishing, waterskiing, and swimming, and other uses (City of Idaho Falls 1978).

The Snake River watershed above the Projects extend into the Teton Range of the Rocky Mountains. The upper portion of the watershed lies in the high, rugged area of northwestern Wyoming, including Yellowstone and Grand Teton National Parks. These areas are forested and protected under the management plans of the NPS and the surrounding national forests. The lower portion of the watershed, in which the Projects are located, is characterized by grazing and agricultural use (City of Idaho Falls 1978).

5.8.2 VISUAL CHARACTER OF PROJECT LANDS AND WATERS

The visual character of the Snake River in the vicinity of the Projects is that of a wide, slow, meandering river passing through flat, irrigated cropland (FERC 1983), except for its passage through the urban area of the city of Idaho Falls (Photo 5-2 through Photo 5-8) and the small falls at and near the Project facilities. Residential areas are present adjacent to both Idaho Falls and Gem State Projects, including dense residential neighborhoods along the east bank of the river in the city of Idaho Falls. Dispersed residences occur in proximity to the Snake River, including several residences with frontage on the Snake River north and south of Idaho Falls.

5.8.2.1 IDAHO FALLS PROJECT

The Idaho Falls Project is a run-of-river facility consisting of three developments; the Upper, City, and Lower Plants. All dams and associated facilities are located along the Snake River within Bonneville County, with the southern two plants also located within the city limits of Idaho Falls, Idaho. The three dams vary in height from 23 feet- to 33 feet tall and are comprised of concrete and earth fill structures stretching across the Snake River. The powerhouses contain generators, transmission lines, and other infrastructure associated with these three plants as well as a reservoir upstream from each dam. No new facilities are planned to be constructed at these three dam sites.

5.8.2.2 GEM STATE PROJECT

The Gem State Project is a run-of-river facility consisting of one development, completed in 1987 and is located on the Snake River, within Bonneville and Bingham counties, approximately 5 miles downstream of the Idaho Falls Project. This dam is a 40-foot-high earth fill, concrete, and rock fill

structure stretching across the Snake River. The hydroelectric plant consists of a powerhouse, transmission line, and other infrastructure as well as a reservoir upstream from the dam. No new facilities are planned to be constructed at this dam site.

5.8.3 VISUALLY SENSITIVE AREAS AND OTHER SCENIC ATTRACTIONS

Two scenic byways are located near the Idaho Falls Project; the Sacajawea Historic Byway and the For Henry Historic Byway. The Fort Henry Historic Byway begins about 26 miles north of the city of Idaho Falls, near Rexburg, ID. Fort Henry was the earliest European settlement in Idaho Territory, the 81-mile route runs through high-altitude desert into deep forest near Island Park, Idaho. The 135-mile Sacajawea Historic Byway begins about 26 miles northwest from the city of Idaho Falls where Highways 33 and 15 meet and parallels the Continental Divide for most of the drive.

The city of Idaho Falls is a major gateway to the Yellowstone and Grand Teton National Parks, as well as many other major nearby recreational attractions (Section 5.7; City of Idaho Falls 1978). Many of the recreational attractions described in Section 5.7, *Recreation and Land Use*, provide scenic and aesthetic value and contribute to the overall rural character of the region around the city of Idaho Falls. No segments of the Snake River within the Idaho Falls and Gem State Project Boundaries are designated as wild and scenic under the National Wild and Scenic Rivers system (Refer to Section 5.7, *Recreation and Land Use*, for additional information).

5.8.4 FEDERAL AND LOCAL VISUAL RESOURCE PLANNING OBJECTIVES

5.8.4.1 BUREAU OF LAND MANAGEMENT

As inventoried by the BLM, through the development of the Upper Snake Field Office Visual Resource Inventory (VRI), both Projects are located on lands classified as VRI Class III, and specifically including Class B scenery (Main Snake near Ferry Butte scenic quality rating unit [SQRU]) with moderate visual sensitivity associated with the lands adjacent to the Snake River) and located within the foreground/middle ground distance zone (BLM 2010).

These values are based on BLM Manual 8410-1, VRI, using the following factors: (1) diversity of landscape features that define and characterize landscapes in a given planning area (scenic quality), (2) public concern for the landscapes that make up a planning area (sensitivity levels), and

(3) landscape visibility from public viewing locations (distance zones). These factors are combined to determine VRI Classes, which identify the overall scenic value of different portions of the landscape. Although the BLM only has jurisdiction over the specific land it manages, VRI data are often collected for most, if not all land jurisdictions within a given BLM field office, district office, or planning area. The VRI classes and individual factors provide baseline visual resources data that are used in combination with other resource needs, to determine Visual Resource Management (VRM) classes on BLM lands. VRM classes are established to provide management objectives in terms of allowable levels of disturbance and noticeability (i.e., visual contrast) and are established through the BLM's land use planning process, as described in BLM Manual 8410-1 (BLM 1986a).

The BLM Upper Snake Field Office, through their land use planning process, manages the isolated BLM-administered parcels along the Snake River as VRM Class II. BLM Manual 8431-1, Visual Contrast Rating, outlines the objectives for VRM Class II are to:

Retain the existing character of the landscape. The level of change [contrast] to the characteristic landscape should be low. Management activities may be seen but should not attract attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape (BLM 1986b).

BLM parcels included within the Idaho Falls Project 27.2 acres and 5.8 acres within the Gem State Project.

5.8.4.2 REGIONAL MANAGEMENT PLANS VISUAL PLANNING OBJECTIVES

Through review of city and county comprehensive plans and other planning documents within the vicinity of the Projects, Bingham County is the only area with specific visual planning objectives. The 2018 Bingham County Comprehensive Plan goals state that community design should relate to the visual appearance and physical relationship of both the natural and man-made environments within the county, and that all rural communities, neighborhoods and cities within Bingham County should be encouraged to develop with sensitivity and appreciation for the aesthetic qualities of the surrounding physical environment (Bingham County 2018). The Bingham County

Comprehensive Plan provides following policies: encourage visually attractive and aesthetically pleasing development in the community and improve the visual characteristics of the county by establishing and enforcing location standards and setback requirements and preserving locations of visual corridors. These county goals and policies provide the intentions and interests of Bingham County, rather than providing specific compliance requirements for the Idaho Falls and Gem State Projects. No other federal, state, or local visual management requirements were identified for the Projects.

5.8.5 PROJECT PHOTOS



Source: Kleinschmidt 2019

PHOTO 5-2 THE SNAKE RIVER NEAR THE CITY PLANT IN IDAHO FALLS



Source: Kleinschmidt 2019

PHOTO 5-3 THE SNAKE RIVER NEAR THE CITY PLANT



Source: Kleinschmidt 2019

PHOTO 5-4 THE SNAKE RIVER NEAR THE CITY PLANT



Source: Kleinschmidt 2019

PHOTO 5-5 LOWER PLANT AND POWERHOUSE



Source: Kleinschmidt 2019

PHOTO 5-6 THE SNAKE RIVER AT CITY PLANT



Source: Kleinschmidt 2019

PHOTO 5-7 VEGETATED AREA IN A BEND OF THE SNAKE RIVER NEAR THE GEM STATE PROJECT



Source: Kleinschmidt 2019

PHOTO 5-8 IRRIGATED FIELDS NEAR THE GEM STATE PROJECT

5.8.6 REFERENCES

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5.9 SOCIOECONOMIC RESOURCES

Per 18 CFR § 5.6(d)(3)(xi), this section includes a general description of socioeconomic conditions in the vicinity of the Idaho Falls and Gem State Projects.

5.9.1 BONNEVILLE COUNTY

Bonneville County, Idaho covers 1,866.0 square miles of land and is the 15th largest county in Idaho by total area (U.S. Census 2020b). Agriculture is Bonneville County's dominant land use; according to the 1995 Bonneville County Comprehensive Plan (Amended 2013) just under 96 percent of all private lands in the county are used for farmsteads, primary processing of agricultural commodities, cropland, or rangeland. Agriculture and agribusiness enterprises are the second largest source of employment and personal income in the county (behind the Idaho National Engineering Laboratory and its associated firms) (Bonneville County 1995).

Approximately 71 percent of Bonneville County's residents live within the incorporated cities of Ammon, Idaho Falls, Iona, Irwin, Ririe, Swan Valley, and Ucon (Bonneville County 1995).

5.9.2 BINGHAM COUNTY

Bingham County, Idaho covers 2,093 square miles of land area and is the 12th largest county in Idaho by total area (U.S. Census 2020c). Lying entirely within the Snake River Plain, Bingham County is situated on a high plateau forming a wide intermountain belt in southern Idaho. Both the Blackfoot River and the Snake River flow through Bingham County. Bingham County is known as the potato capital of the world (Photo 5-9) however, other major crops grown in the county include alfalfa hay, sugar beets, oats, barley, wheat (spring and winter), mixed grains, rye, clover, and corn silage (Bingham County 2018).



Source: VisitIdaho 2017

PHOTO 5-9 IDAHO POTATO MUSEUM IN BLACKFOOT, IDAHO, BINGHAM COUNTY

The 2018 Bingham County Comprehensive Plan indicates that there is significant rural population growth in the county, with a major part of rural growth occurring close to, but outside of the city limits of the larger towns in the county, such as Blackfoot, Shelley, and Aberdeen. Some of this growth at the northern end of the county can be attributed to spillover from the increase in population of the Idaho Falls area (Bingham County 2018).

5.9.3 POPULATION PATTERNS

This section describes population patterns at the state, county, and city level, with respect to the location of the Idaho Falls and Gem State Projects.

5.9.3.1 STATE OF IDAHO

According to the 2020 Census, Idaho was the second-fastest growing state during the last decade, with a total change of 17.3 percent in population between 2010 and 2020 (U.S. Census 2021). The state of Idaho's population was 1,754,367 with a median age of 36.6 years (U.S. Census 2020a) with an average of 22.3 people per square mile (U.S. Census 2021). The five largest population centers in Idaho are the cities of Boise, Meridian, Nampa, Idaho Falls, and Caldwell (U.S. Census

2019). There are 649,299 households in the state (Table 5-30) (U.S. Census 2020a) with homeownership at 70.8 percent (U.S. Census 2020a) and the median sale price for homes at \$512,600 in April 2022 (Redfin 2022).

TABLE 5-30 STATE OF IDAHO CENSUS PROFILE AT-A-GLANCE

MEASURED CHARACTERISTIC	STATISTIC
Total Population	1,839,106
Median Household Income	\$58,915
Bachelor's Degree or Higher	28.7%
Employment Rate	60.2%
Total Housing Units	751,859
Percentage without Health Care Coverage	10.4%
Total Employer Establishments	51,957
Total Households	649,299
Hispanic or Latino (of any race)	239,407

Source: U.S. Census 2020a

5.9.3.2 BONNEVILLE COUNTY

Bonneville County's total population was 123,964 residents with a median age of 33 years old based on the 2020 census (U.S. Census 2020b). The population density of Bonneville County is 66.4 people per square mile (U.S. Census 2021). Bonneville County experienced growth of 18.9 percent between 2010 and 2020 (U.S. Census 2021). Approximately 115,000 residents identified as white (U.S. Census 2020d), even though the 2020 census results confirmed an increase in the number of residents who identify as two or more races (U.S. Census 2021) (Table 5-33). In Bonneville County, 17,094 residents identified as Hispanic or Latino (of any race) (U.S. Census 2020b) with English as the dominant language spoken in the home (U.S. Census 2020b). The median price of homes listed for sale was \$425,500 in Bonneville County as of April 2022 (Realtor 2022a) with an ownership rate of 69.8 percent (U.S. Census 2020b).

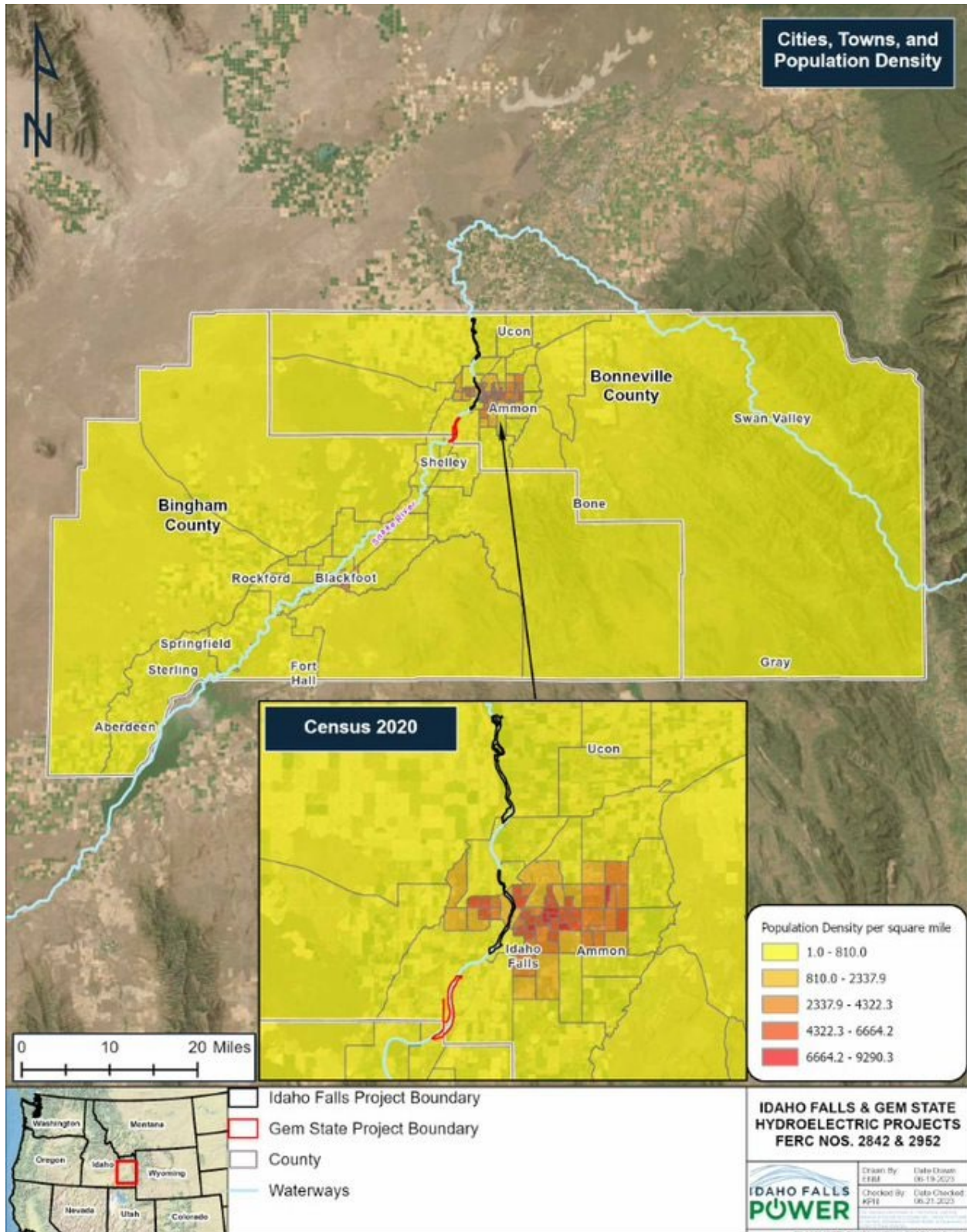


FIGURE 5-23 POPULATION DENSITY OF BONNEVILLE AND BINGHAM COUNTIES

5.9.3.3 BINGHAM COUNTY

The total population of Bingham County, Idaho was 47,992 based on the 2020 census (U.S. Census 2022c), with a population density of 22.9 persons per square mile (U.S. Census 2021). Between 2010 and 2020, the population in Bingham County increased 5.2 percent (U.S. Census 2021). The median age of Bingham County residents was 34.1 years old with English as the dominant language spoken in the home (U.S. Census 2020c). The number of residents who identify as white is 36,630 (U.S. Census 2020e). As with Bonneville County, based on the 2020 census there was an increase in the percentage of residents who identified as two or more races (Table 5-31). The number of Bingham County residents who identified as Hispanic or Latino (of any race) was 8,831 (U.S. Census 2020c). The Bingham County homeownership rate was 78.2 percent (U.S. Census 2020c) while the median listed home price was \$375,000 as of April 2022 (Realtor 2022b).

TABLE 5-31 CHANGE IN RESIDENTS IDENTIFYING AS TWO OR MORE RACES, 2010-2020

LOCATION	PERCENT OF RESIDENTS 2010 POPULATION	PERCENT OF RESIDENTS 2020 POPULATION
State of Idaho	2.5	8.3
Bonneville County	2.1	7.2
Bingham County	2.1	7.3

Source: U.S. Census 2021

5.9.3.4 CITY OF IDAHO FALLS

As of the 2020 census, the city of Idaho Falls' population was 64,818 with a median age of 33.4 (U.S. Census 2020f). Most residents identify as white with English as the dominant language spoken in the home (U.S. Census 2020g, 2020f) (Table 5-32). The races of the city of Idaho Falls are provided in Table 5-32 and Table 5-33. The number of residents who identify as Hispanic or Latino (of any race) in the city of Idaho Falls is 10,041 (U.S. Census 2020f).

TABLE 5-32 2020 POPULATION OF IDAHO FALLS BY RACE

RACE	TOTAL POPULATION
White	52,860
Black or African American	437
American Indian and Alaska Native	833
Asian	870
Native Hawaiian and Other Pacific Islander	93
Some Other Race	4,671
Total Population of One Race	59,764

Source: U.S. Census Bureau 2020g

TABLE 5-33 2020 POPULATION OF IDAHO FALLS BY RACE, TWO RACES

TWO RACES	TOTAL POPULATION
White; Black or African American	331
White; American Indian and Alaska Native	869
White; Asian	482
White; Native Hawaiian and Other Pacific Islander	73
White; Some other Race	2,868
Black or African American; American Indian and Alaska Native	16
Black or African American; Native Hawaiian and other Pacific Islander	2
Black or African American; Some other Race	28
American Indian and Alaska Native; Asian	6
American Indian and Alaska Native; Some Other Race	77
Asian; Native Hawaiian and Other Pacific Islander	13
Asian; Some Other Race	8
Native Hawaiian and Other Pacific Islander; Some Other Race	7
Total Population of Two or More Races ¹ :	5,054

Source: U.S. Census Bureau 2020g

¹The U.S. Census provides additional data on residents who identify as more than two races; the total number of Idaho Falls residents who identify as three, four, five, or six races was 256, 17, 1, and 0, respectively.

5.9.4 SOURCES OF EMPLOYMENT

5.9.4.1 BONNEVILLE COUNTY

The employment rate in Bonneville County was 62.4 percent with a median household income of \$61,435 (U.S. Census 2020b). The largest percentage of workers are employed in educational services, health care, and social assistance, followed by professional, scientific, and management, and administrative and waste management services (Table 5-34) (U.S. Census 2020b). The top occupations are in management, business, science, and arts, followed by sales and office work (U.S. Census 2020b). Most workers are employees of private companies, and on average, employed Bonneville County residents work 37.6 hours per week (U.S. Census 2020b).

TABLE 5-34 BONNEVILLE COUNTY EMPLOYMENT PERCENTAGES BY INDUSTRY

INDUSTRY	PERCENTAGE OF CIVILIAN EMPLOYED POPULATION 16 YEARS AND OVER
Agriculture, Forestry, Fishing and Hunting, Mining	2.8
Construction	8.8
Manufacturing	8.0
Wholesale Trade	3.3
Retail Trade	11.9
Transportation and Warehousing, and Utilities	4.1
Information	1.4
Finance and Insurance, and Real Estate and Rental and Leasing	4.2
Professional, Scientific, and Management, and Administrative and Waste Management Services	14.2
Educational Services, and Health Care and Social Assistance	23.8
Arts, Entertainment, and Recreation, and Accommodation and Food Services	10.5
Other services, except Public Administration	3.7
Public Administration	3.4

Source: U.S. Census 2020b

5.9.4.2 BINGHAM COUNTY

The 2020 employment rate in Bingham County was 59.4 percent with a median household income of \$58,260 (U.S. Census 2020c). The industry that employs the highest percentage of Bingham County's population is educational services, health care, and social assistance (Table 5-35) (U.S. Census 2020c). The top occupations are in management, business, science, and arts, followed by sales and office (U.S. Census 2020c). Most workers are employees of private companies, and on average, work 39.1 hours per week (U.S. Census 2020c).

TABLE 5-35 BINGHAM COUNTY EMPLOYMENT PERCENTAGES BY INDUSTRY

INDUSTRY	PERCENTAGE OF CIVILIAN EMPLOYED POPULATION 16 YEARS AND OVER
Agriculture, Forestry, Fishing and Hunting, Mining	9.2
Construction	7.7
Manufacturing	9.6
Wholesale Trade	2.6
Retail Trade	9.7
Transportation and Warehousing, and Utilities	6.9
Information	1.1
Finance and Insurance, and real estate and rental and leasing	4.3
Professional, scientific, and management, and administrative and waste management services	10.5
Educational services, and health care and social assistance	23.7
Arts, entertainment, and recreation, and accommodation and food services	6.5
Other services, except public administration	3.6
Public administration	4.7

Source: U.S. Census 2020c

Blackfoot is Bingham County's largest city and is a major farm service, potato processing, and potato-shipping center (Bingham County 2018).

Bingham County is heavily dependent on agriculture and agriculture-related industries. The county supports large agriculture-related manufacturers like Basic American Foods and Idaho Supreme Potatoes, along with Sputnik and Milestone, fabricators of farm machinery. High-tech fabricators such as Premier Technology are diversifying the county's workforce. The city of Blackfoot is home to the Bingham Memorial Hospital and State Hospital South. The county is located between two trade centers: Pocatello to the south, and Idaho Falls to the north, which assure diverse work options for citizens of the county (Bingham County 2018).

Other employment centers in the county and surrounding areas include the Idaho Nuclear Engineering and Environmental Laboratory (Idaho National Laboratory), the Fort Hall Indian Reservation, the National Grain Repository, and the University of Idaho Research and Extension Center (Bingham County 2018).

5.9.4.3 CITY OF IDAHO FALLS

Major industries in the city of Idaho Falls, in the Project areas of both the Idaho Falls Project and Gem State Project include education and health care, scientific and professional, retail trade, and construction (City of Idaho Falls n.d.(a)) (Table 5-36) The largest employer in Idaho Falls is the Idaho National Laboratory, opened in 1949 by the Atomic Energy Commission; the Idaho National Laboratory leads research on energy production challenges, with contributions in energy transmission, energy security, renewable energy integration, transportation transformation, water utilization, energy critical materials, biomass feedstock assembly, and advanced manufacturing (City of Idaho Falls n.d.(b)). The Idaho National Laboratory has over 5,000 employees, and the average base salary for an employee was \$104,1547 in 2020, with a total economic impact from Idaho National Laboratory on the region of over \$339 million (IFP 2020).

The Idaho Falls area ranks high in the labor market engagement index (LMEI), a measure of how engaged residents are in the local labor market. The LMEI is calculated using a formula provided by the U.S. Department of Housing and Urban Development and is based on the level of employment, labor force participation, and educational attainment in a geography. The value calculated is a national percentile ranking, where higher scores are representative of better LMEI than lower scores. The Idaho Falls area has an LMEI ranking of 84 (City of Idaho Falls n.d.(a)).

The city of Idaho Falls itself employs 675 full time employees and 946 temporary employees (IFP 2020). The city serves as a regional center for retail, wholesale, medical, educational, and governmental services, with an underlying strong base of agriculture production and processing (IFP 2020).

TABLE 5-36 EMPLOYMENT BY INDUSTRY IN THE IDAHO FALLS AREA

INDUSTRY	NUMBER OF PEOPLE EMPLOYED
Agriculture, Fishing, and Mining	2,869
Construction	6,004
Manufacturing	5,308
Wholesale Trade	2,097
Retail Trade	8,188
Transportation	3,029
Information	922
Finance & Insurance	3,004
Scientific & Professional	8,777

INDUSTRY	NUMBER OF PEOPLE EMPLOYED
Education & Healthcare	15,473
Arts, Food, and Entertainment	6,477
Public Administration	2,748
Other Services	2,668

Source: City of Idaho Falls n.d.(a).

5.9.5 ENVIRONMENTAL JUSTICE

Pursuant to Executive Orders 12898²⁰ and 14008²¹ FERC is required to complete an analysis of potential impacts from project operations on the local community in the vicinity of the Projects to understand the impacts to human health and the environment as they relate to environmental justice communities, or communities that stand to be disproportionately impacted by construction of a new facility or the continued operation of an existing facility, including socioeconomic and/or sociocultural impacts.

Additionally, FERC understands that it plays an integral role in regulating large parts of the United States energy industry, having far-reaching impacts to the nation, especially regarding the move toward cleaner energy (FERC 2022). Although FERC is not required to comply with Executive Order 13985²², it has voluntarily elected to participate in the process, in an effort to ensure that everyone benefits from the clean energy transition (FERC 2022). Pursuant to Executive Order 13985, FERC developed an Equity Action Plan (EAP) based on five focus areas, which discusses barriers traditionally experienced by underserved and environmental justice communities regarding FERC practices, and outlines actions to remove those barriers and foster a commitment to equity (FERC 2022).

FERC recognizes that many of the licensed hydropower projects were constructed prior to implementation of the National Environmental Policy Act (NEPA), or the issuance of executive

²⁰ Exec. Order No. 12898, 59 Fed. Reg. 7629 (Feb. 16, 1994). Federal Actions to Address Environmental Justice in Minority and Low-Income Populations.

²¹ Exec. Order No. 14008, 86 Fed. Reg. 7619-7633 (Jan. 27, 2021) Tackling the Climate Change Crisis at Home and Abroad.

²² Exec. Order No. 13985 (June 2021). Advancing Racial Equity and Support for Underserved Communities Through the Federal Government.

orders related to equity or environmental justice (FERC 2022). The steps taken by FERC related to the three executive orders will include equity considerations when making decisions regarding hydropower relicensing and consider environmental justice communities as they relate to the relicensing process.

5.9.5.1 IDENTIFICATION OF ENVIRONMENTAL JUSTICE COMMUNITIES

The thresholds used for populations meeting environmental justice status are as follows:

- For minority populations, the meaningfully greater analysis method was used, where the minority population in a block group is at least 10 percent greater than that of the same population for the county:
$$(\text{County population}) \times (1.10) = \text{threshold above which a minority population must be for inclusion as an environmental justice community}$$
- The low-income threshold criteria was used to identify environmental justice communities based on income level, where the block group must have a higher percentage of low-income households than the county.

5.9.5.2 ENVIRONMENTAL JUSTICE COMMUNITIES

The Idaho Falls and Gem State Projects are located on the Snake River in the city of Idaho Falls, Bonneville County, Idaho. Small portion of the Idaho Falls and Gem State Projects flow through Jefferson County and Bingham County. Those census block groups were included in this analysis. Within 1 mile of the Idaho Falls and Gem State Projects are 35 census block groups that could potentially be impacted by relicensing. Of the 35 census block groups within the Idaho Falls and Gem State Projects Areas, 32 include environmental justice communities. As of the 2020 United States Census, the environmental justice communities based on race within the Idaho Falls and Gem State Project areas include:

- African American
- American Indian/Alaska Native
- Asian
- Pacific Islander/Native Hawaiian
- Individuals identifying as a race other than one of the surveyed choices
- Individuals identifying as two or more races
- Hispanic

The most commonly occurring environmental justice community based on race is Hispanic, with 18 individual groups, followed by Asian and individuals identifying as two or more races, each with 11 groups (Table 5-37). American Indian/Alaska Native represents seven groups, and African American represents three groups, while Pacific Islander/Native Hawaiian, and individuals identifying as a race other than one of the surveyed choices each represent one group Table 5-37.

In addition to race, environmental justice communities include groups of individuals with income levels below poverty level, measured by household. Within the Idaho Falls and Gem State Project areas there are 20 communities meeting environmental justice status related to household income level (Table 5-37 and Figure 5-24 and Figure 5-25).

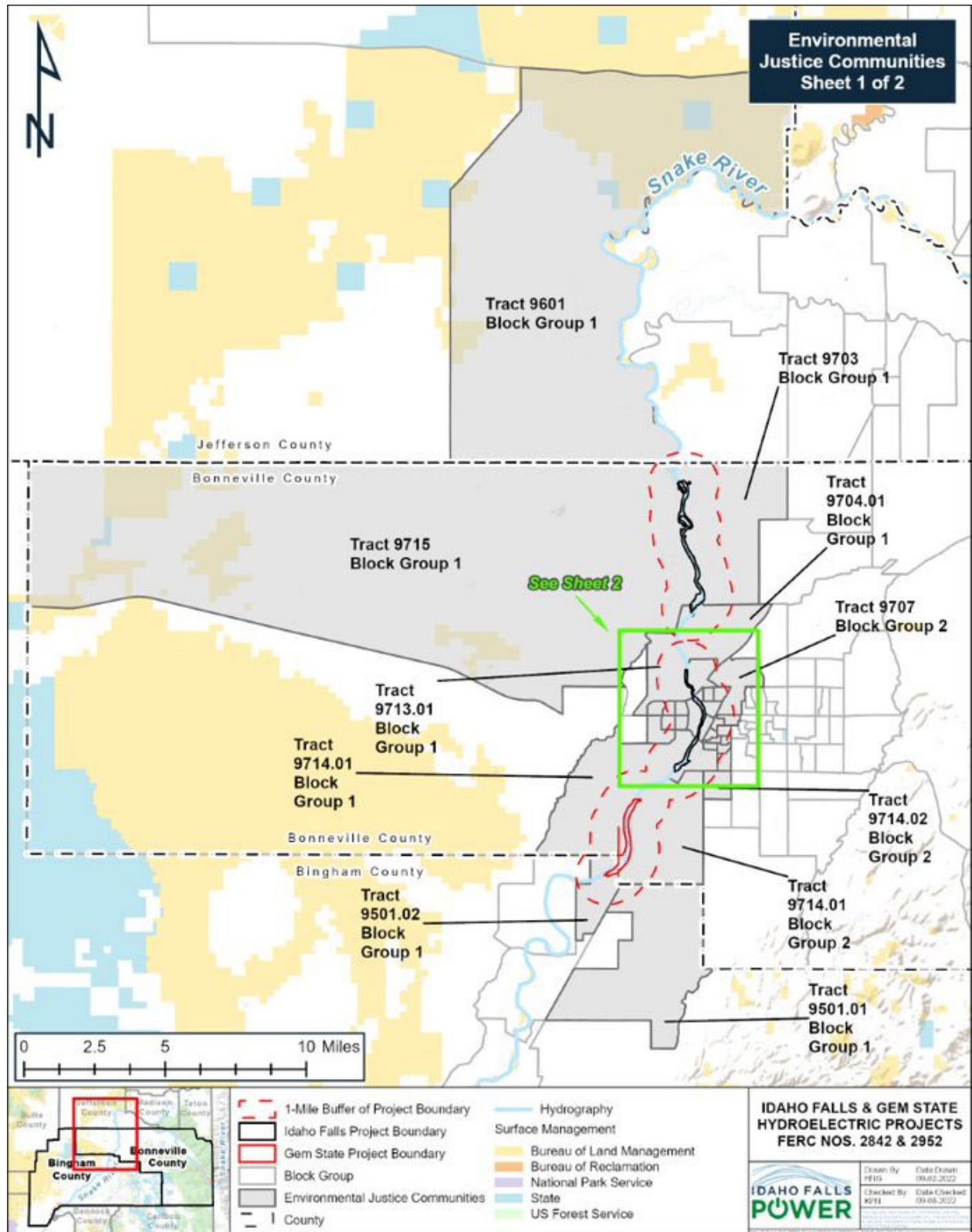


FIGURE 5-24 ENVIRONMENTAL JUSTICE COMMUNITIES (SHEET 1 OF 2)

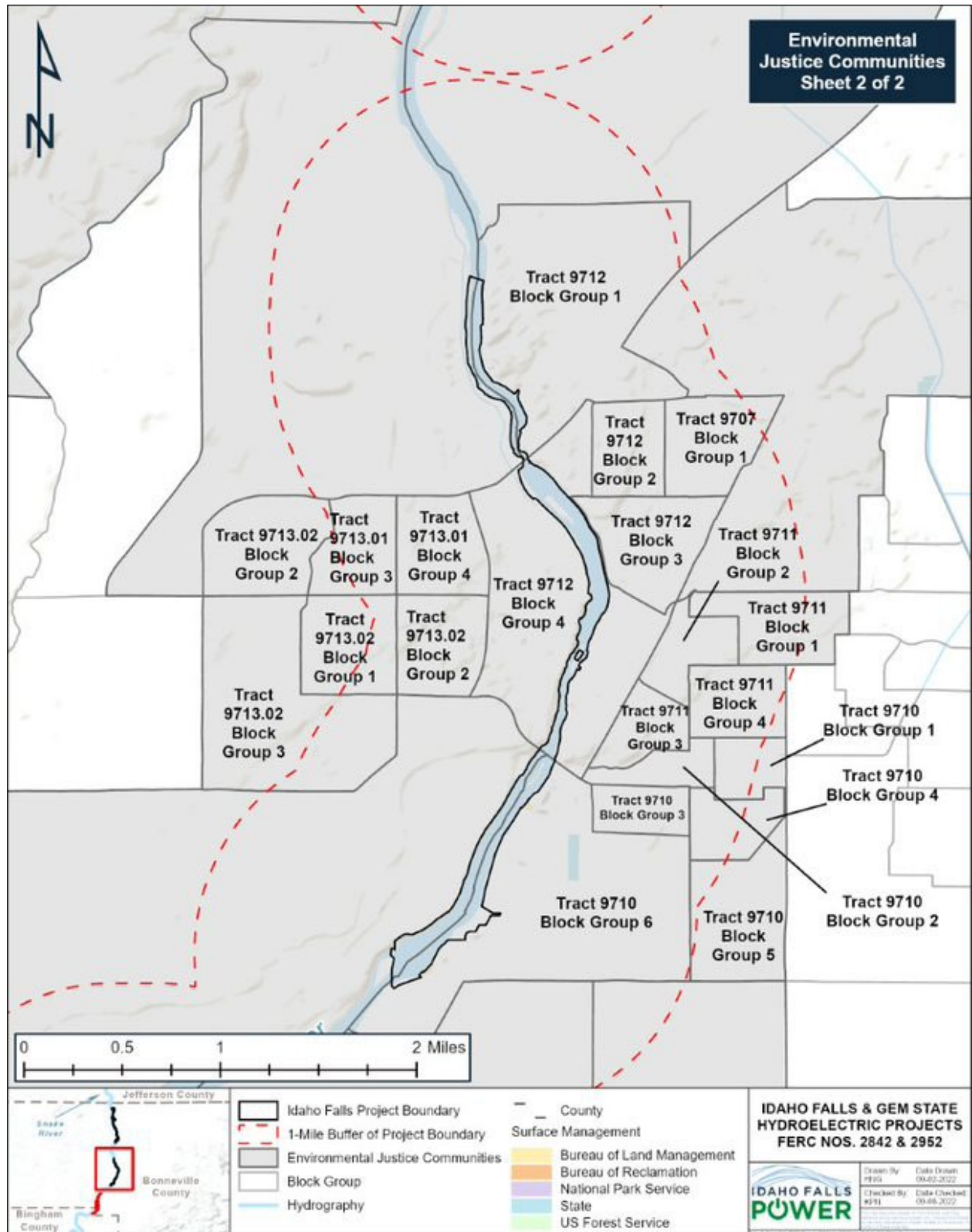


FIGURE 5-25 ENVIRONMENTAL JUSTICE COMMUNITIES (SHEET 2 OF 2)

TABLE 5-37 CURRENT COMMUNITY DATA FOR THE 1-MILE ZONE AROUND THE IDAHO FALLS HYDROELECTRIC PROJECT

Geographic Area			Total Population (Count)	White Alone, not Hispanic (%) ^a	African American/ Black (%) ^a	American Indian/ Alaska Native (%) ^a	Asian (%) ^a	Native HI & Other Pacific Islander (%) ^a	Some Other Race (%) ^a	Two or More Races (%) ^a	Hispanic Origin (any race) (%) ^a	Total Minority Population (%)	Households in Poverty (%) ^b
Census Tract	Block Group	Associated Project											
Idaho			1687809	82.22%	0.64%	1.11%	1.35%	0.14%	0.06%	2.10%	12.39%	17.78%	13.55%
Bonneville County			112397	83.23%	0.51%	0.39%	0.86%	0.14%	0.05%	1.94%	12.88%	16.77%	11.63%
9714.02	Block Group 2	Idaho Falls City and Lower Plant	2731	82.86%	0.00%	0.00%	2.12%	0.00%	0.00%	2.45%	12.56%	17.14%	3.78%
9711	Block Group 3	Idaho Falls City and Lower Plant	545	86.97%	0.00%	0.00%	0.00%	0.00%	2.20%	0.00%	10.83%	13.03%	10.84%
9713.01	Block Group 4	Idaho Falls City and Lower Plant	668	80.39%	0.00%	0.00%	0.00%	0.00%	0.00%	5.54%	14.07%	19.61%	30.00%
9711	Block Group 1	Idaho Falls City and Lower Plant	743	83.58%	0.00%	0.00%	1.62%	3.23%	0.00%	2.56%	83.58%	90.98%	15.02%
9707	Block Group 1	Idaho Falls City and Lower Plant	825	68.85%	0.00%	1.70%	0.00%	0.00%	0.00%	0.00%	29.45%	31.15%	14.71%
9710	Block Group 3	Idaho Falls City and Lower Plant	430	95.81%	0.00%	0.00%	1.63%	0.00%	0.00%	0.70%	1.86%	4.19%	14.11%
9708	Block Group 4	Idaho Falls City and Lower Plant	807	97.89%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.11%	2.11%	5.13%
9707	Block Group 2	Idaho Falls City and Lower Plant	3108	64.51%	5.15%	2.96%	0.90%	0.00%	0.00%	3.12%	23.36%	35.49%	29.57%
9710	Block Group 1	Idaho Falls City and Lower Plant	701	79.03%	0.00%	0.00%	0.00%	0.00%	0.00%	4.85%	16.12%	20.97%	33.57%
9710	Block Group 2	Idaho Falls City and Lower Plant	634	89.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.88%	10.88%	19.01%
9710	Block Group 4	Idaho Falls City and Lower Plant	914	69.69%	0.00%	0.00%	0.00%	0.00%	0.00%	4.60%	25.71%	30.31%	2.99%
9710	Block Group 5	Idaho Falls City and Lower Plant	1192	97.15%	0.00%	0.00%	1.34%	0.00%	0.00%	0.00%	1.51%	2.85%	3.58%
9710	Block Group 6	Idaho Falls City and Lower Plant	845	97.63%	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	2.13%	2.37%	30.52%
9711	Block Group 2	Idaho Falls City and Lower Plant	1030	73.11%	0.00%	0.00%	2.33%	0.00%	0.00%	2.23%	22.33%	26.89%	18.11%

Geographic Area			Total Population (Count)	White Alone, not Hispanic (%) ^a	African American/ Black (%) ^a	American Indian/ Alaska Native (%) ^a	Asian (%) ^a	Native HI & Other Pacific Islander (%) ^a	Some Other Race (%) ^a	Two or More Races (%) ^a	Hispanic Origin (any race) (%) ^a	Total Minority Population (%)	Households in Poverty (%) ^b
Census Tract	Block Group	Associated Project											
9711	Block Group 4	Idaho Falls City and Lower Plant	426	80.52%	0.00%	0.00%	0.00%	0.00%	0.00%	1.41%	18.08%	19.48%	9.52%
9713.02	Block Group 1	Idaho Falls City and Lower Plant	1148	61.67%	0.00%	1.39%	1.48%	0.00%	0.00%	10.02%	25.44%	38.33%	2.72%
9712	Block Group 1	Idaho Falls City and Lower Plant	1127	83.14%	0.00%	0.00%	0.80%	0.00%	0.00%	1.60%	14.46%	16.86%	24.69%
9712	Block Group 2	Idaho Falls City and Lower Plant	1536	78.78%	0.00%	0.00%	0.00%	0.00%	0.00%	0.91%	20.31%	21.22%	25.21%
9712	Block Group 3	Idaho Falls City and Lower Plant	1447	72.08%	0.00%	0.90%	0.00%	0.00%	0.00%	0.00%	27.02%	27.92%	18.64%
9712	Block Group 4	Idaho Falls City and Lower Plant	342	64.91%	5.26%	0.00%	3.22%	0.00%	0.00%	0.00%	26.61%	35.09%	19.80%
9713.01	Block Group 2	Idaho Falls City and Lower Plant	1637	66.22%	4.52%	0.00%	0.00%	0.00%	0.00%	2.57%	26.70%	33.78%	14.51%
9713.01	Block Group 3	Idaho Falls City and Lower Plant	743	57.20%	0.00%	0.00%	2.56%	0.00%	0.00%	0.00%	40.24%	42.80%	39.85%
9713.02	Block Group 2	Idaho Falls City and Lower Plant	787	41.93%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	58.07%	58.07%	21.21%
9713.02	Block Group 3	Idaho Falls City and Lower Plant	1602	90.95%	0.00%	0.75%	3.56%	0.00%	0.00%	3.18%	1.56%	9.05%	4.78%
9713.01	Block Group 1	Idaho Falls City and Lower Plant, Upper Plant	1603	85.96%	0.00%	2.31%	0.87%	0.00%	0.00%	0.00%	10.85%	14.04%	8.48%
9704.01	Block Group 1	Idaho Falls City and Lower Plant, Upper Plant	1992	96.23%	0.00%	0.00%	1.15%	0.00%	0.00%	0.00%	2.61%	3.77%	1.16%
9703	Block Group 1	Idaho Falls Upper Plant	2194	99.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.91%	0.91%	12.41%
9715	Block Group 1	Idaho Falls Upper Plant	704	64.63%	0.00%	0.00%	0.00%	0.00%	0.00%	1.28%	34.09%	35.37%	19.34%

Geographic Area			Total Population (Count)	White Alone, not Hispanic (%) ^a	African American/ Black (%) ^a	American Indian/ Alaska Native (%) ^a	Asian (%) ^a	Native HI & Other Pacific Islander (%) ^a	Some Other Race (%) ^a	Two or More Races (%) ^a	Hispanic Origin (any race) (%) ^a	Total Minority Population (%)	Households in Poverty (%) ^b
Census Tract	Block Group	Associated Project											
9714.01	Block Group 2	Idaho Falls City and Lower Plant, Gem State	2183	88.23%	0.00%	0.73%	0.55%	0.00%	0.00%	1.24%	9.25%	11.77%	11.17%
9714.01	Block Group 1	Idaho Falls City and Lower Plant, Gem State	1497	73.61%	0.00%	0.00%	0.00%	0.00%	0.00%	0.33%	26.05%	26.39%	5.88%
Jefferson County			27969	86.82%	0.09%	0.55%	0.51%	0.05%	0.00%	1.47%	10.52%	13.18%	7.34%
9601	Block Group 1	Idaho Falls Upper Plant	1362	75.33%	0.00%	0.00%	3.82%	0.00%	0.00%	0.00%	20.85%	24.67%	19.25%
9602	Block Group 3	Idaho Falls Upper Plant	1534	94.39%	0.00%	0.00%	0.00%	0.00%	0.00%	5.61%	0.00%	5.61%	0.00%
Bingham County			45551	73.78%	0.25%	5.24%	0.76%	0.00%	0.10%	1.90%	17.97%	26.22%	12.65%
9501.02	Block Group 1	Gem State	1310	89.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.53%	10.53%	23.08%
9501.02	Block Group 2	Gem State	1249	80.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.30%	19.30%	0.00%
9501.01	Block Group 1	Gem State	2128	89.38%	0.00%	0.00%	0.00%	0.00%	0.00%	4.18%	6.44%	10.62%	6.68%
<p>a Percent of total population Table B03002 - Hispanic or Latino Origin by Race American Community Survey. 2020 ACS 5-Year Estimates Detailed Tables. U.S. Census Bureau retrieved from https://data.census.gov/cedsci/table?q=United%20States&t=Race%20and%20Ethnicity&g=0100000US_0400000US16_0500000US16019,16073,16075_1500000US160199703001,160199704011,160199707001,160199707002,160199708004,160199710001,160199710002,160199710003,160199710004,160199710005,160199710006,160199711001,160199711002,160199711003,160199711004,160199712001,160199712002,160199712003,160199712004,160199713011,160199713012,160199713013,160199713014,160199713021,160199713022,160199713023,160199714011,160199714012,160199714022,160199715001,160739501021,160739501022,160759601001,160759602003&tid=ACSDT5Y2018.B03002&moe=false on August 30, 2022.</p>													
<p>b Percent of Households Table B17017 - Poverty Status in the Past 12 Months by Household Type by Age of Householder. 2020 ACS 5-Year Estimated Detailed Tables. U.S. Census Bureau retrieved from https://data.census.gov/cedsci/table?q=United%20States&t=Income%20and%20Poverty&g=0100000US_0400000US16_0500000US16019_1500000US160199703001,160199704011,160199707001,160199707002,160199708004,160199710001,160199710002,160199710003,160199710004,160199710005,160199710006,160199711001,160199711002,160199711003,160199711004,160199712001,160199712002,160199712003,160199712004,160199713011,160199713012,160199713013,160199713014,160199713021,160199713022,160199713023,160199714011,160199714012,160199714022,160199715001&tid=ACSDT5Y2018.B17017&moe=false on August 30, 2022.</p>													
* Grey-shaded cells indicate Environmental Justice community													

5.9.6 REFERENCES

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5.10 CULTURAL AND TRIBAL RESOURCES

Pursuant to Title 18 CFR § 5.6(d)(3)(x) and (xii), this section includes a description of the known cultural or historical resources of the proposed Idaho Falls and Gem State Projects and surrounding area and a description of Indian tribes, tribal lands, and interests that may be affected by the Projects.

Cultural resources include historic architectural resources such as buildings and structures and archaeological sites of past human occupation or activities that are non-renewable and important to our history. Previously recorded archaeological sites, historic architectural resources, linear sites, historic districts, and previous projects located within 1 mile of the Idaho Falls and Gem State Project Boundaries are listed in Table 5-38 and Table 5-40 and Appendix C. These lists were compiled from records requests submitted to the Idaho State Historic Preservation Office (SHPO) on May 10, 2022, supplemented by a review of the National Register of Historic Places (NRHP) database, USGS historical topographic maps, General Land Office (GLO) historical topographic maps, and aerial imagery from Google Earth.

5.10.1 AREA OF POTENTIAL EFFECT

The Area of Potential Effects (APE) as defined under Section 106 of the NHPA, 36 CFR § 800.16(d) entails “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.” IFP proposes that the APE for the relicensing proceedings associated with the Idaho Falls Project and the Gem State Project include the lands within the existing Project Boundaries for each Project, respectively. While the APE will be limited to the areas within the Project Boundaries; a background search was conducted to include an area of the APE plus 1 mile per Idaho SHPO guidance.

5.10.2 IDAHO FALLS

The Idaho SHPO records request and NRHP database review for the Idaho Falls Project indicated that three previously recorded archaeological sites (Table 5-38), 1,224 previously recorded historic architectural resources (Table 5-39 and Appendix C), 20 previously recorded linear resources (Table 5-40), and six historic districts (Table 5-41) are within the Project Boundary or within 1

mile of the Project Boundary. All three of the archaeological sites fall within the Project Boundary, likely fall within it, or are adjacent to (i.e., within 200 feet of) it, while four of the historic architectural resources, six linear resources, and one historic district fall within or are adjacent to the Project Boundary.

TABLE 5-38 PREVIOUSLY RECORDED ARCHAEOLOGICAL SITES LOCATED WITHIN ONE MILE OF THE IDAHO FALLS PROJECT BOUNDARY

SITE NUMBER	SITE NAME	SITE CLASS	SITE TYPE	NRHP ELIGIBILITY
10BV52*	–	Prehistoric	Artifact scatter	Undetermined
10BV161*	Keefer Bridge	Historic	Bridge	Undetermined
10BV280*	–	Historic	Concrete box	Ineligible

Source: Idaho SHPO 2022

*Within or adjacent to (i.e., within 200 feet of) the Project Boundary

TABLE 5-39 PREVIOUSLY RECORDED HISTORIC ARCHITECTURAL RESOURCES WITHIN OR ADJACENT TO THE IDAHO FALLS PROJECT BOUNDARY

IHSI #	PROPERTY NAME/	STREET	CITY	ELIGIBILITY
19-18149*	Lower Power Plant	W. Sunnyside Road at the Snake River	Idaho Falls	Eligible
19-18272*	John’s Hole bridge	U.S. 20 over the Snake River	Idaho Falls	Ineligible
19-18397*	Sky-Vu Drive-In	3000 S. Yellowstone Highway	Idaho Falls	Unevaluated
19-482*	Eagle Rock Ferry	Snake River	Idaho Falls	NRHP listed

Source: Idaho SHPO 2022

Note: IHSI = Idaho Historic Sites Inventory

*Within or adjacent to (i.e., within 200 feet of) the Project Boundary

Refer to Appendix C for previously recorded historic architectural resources located within 1 mile of the Idaho Falls Project Boundary.

TABLE 5-40 PREVIOUSLY RECORDED LINEAR SITES WITHIN ONE MILE OF THE IDAHO FALLS PROJECT BOUNDARY

SITE NUMBER	IHSI #	SITE NAME	TYPE	ELIGIBILITY
10BV197	19-18170	Idaho Canal	Canal	Eligible
10BV203	–	Harrison Canal	Canal	Eligible
10JF331	51-17930	Idaho Canal	Canal	Eligible
–	19-18142	Gustafson Lateral Canal	Canal	Eligible
–	19-18147	Sidehill Canal	Canal	Eligible
–	19-18175	Butte Arm Canal	Canal	Eligible
–	19-18227*	Burgess Canal	Canal	Eligible
–	51-17950	Burgess Canal	Canal	Eligible
–	19-18241*	Sage Canal	Canal	Ineligible
–	19-18268	East Lateral Canal	Canal	Eligible
–	19-18315	Great Western Canal	Canal	Eligible
–	51-18002	Great Western Canal	Canal	Eligible
–	19-18316*	Wilkins Canal	Canal	Eligible
–	19-18317	Owners Mutual Canal (also known as Kennedy Canal)	Canal	Eligible
–	19-18169	Yellowstone Highway	Highway	Eligible
–	19-18251*	US Highway 20	Highway	Eligible
–	19-18299*	Idaho Falls Canal; Old City Canal	Canal	Ineligible
10JF258	51-17931	Utah Northern Railroad, UPRR	Railroad	Eligible
–	19-18172*	Union Pacific Railroad	Railroad	Eligible
–	19-18174	Union Pacific Railroad - Yellowstone Branch	Railroad	Eligible

Note: IHSI = Idaho Historic Sites Inventory; UPRR = Union Pacific Railroad

*Within or adjacent (i.e., within 200 feet) of the Project Boundary
Source: Idaho SHPO 2022

TABLE 5-41 NATIONAL REGISTER DISTRICTS WITHIN ONE MILE OF THE IDAHO FALLS PROJECT BOUNDARY

DISTRICT NAME	NATIONAL REGISTER REFERENCE NUMBER	DATE LISTED
Proposed Keefer’s Addition Historic District	Not listed	–
Art Troutner Houses Historic District	08000868	9/10/2008
Eagle Rock Ferry*	74000734	6/7/1974
Ridge Avenue Historic District	93000388	5/20/1993
Eleventh Street Historic District	97000863	8/8/1997
Idaho Falls Airport Historic District	97001126	9/10/1997

*Within or adjacent to (i.e., within 200 feet of) the Project Boundary
Source: Idaho SHPO 2022

None of the three archaeological sites identified from the SHPO records request, all of which are within or adjacent to the Project Boundary, were listed in or determined eligible for the NRHP; however, based on the SHPO record information, one of the sites, 10BV52, may be subject to the Native American Graves Protection and Repatriation Act. One of the previously recorded architectural resources located within the Project Boundary, the Eagle Rock Ferry (19-482), is listed on the NRHP, and another, Lower Power Plant (19-18149), was determined eligible for the NRHP. Four previously recorded linear sites located in the Project Boundary were determined eligible for the NRHP: the Burgess Canal (19-18227) and the Wilkins Canal (19-18316); the Union Pacific Railroad (19-18172); and U.S. Highway 20 (19-18251). In 1974, Eagle Rock Ferry was listed in the NRHP historic district.

One previously recorded architectural resource located within or adjacent to the Project Boundary, the currently abandoned Sky-Vu Drive-In (movie theater), has not been evaluated for the NRHP. The remaining previously recorded archaeological resources, historic architectural resources, and linear sites located within or adjacent to the Project Boundary have either been determined not eligible for the NRHP or demolished.

Consistent with SHPO guidelines, historical GLO maps and topographic maps were also examined to identify archaeological resources, historic architectural resources, and linear sites that may be present in or near the Project Boundary but have not been previously recorded. The area covered by the Project Boundary is included on several historical GLO and topographic maps, several of which show historic features in or within 1 mile of the Project Boundary, as listed in Table 5-46. Previously unrecorded historic features shown on these maps consist of multiple roads (unnamed), dams, bridges, and a power plant.

TABLE 5-42 HISTORIC FEATURES SHOWN ON GLO AND HISTORICAL TOPOGRAPHIC MAPS WITHIN ONE MILE OF THE IDAHO FALLS PROJECT BOUNDARY

MAP TYPE	YEAR	AUTHOR	MAP LOCATION/ QUADRANGLE NAME	HISTORIC FEATURES
GLO	1877	David	3N 37E	Two roads
GLO	1908	Mosley	3N 37E	None
GLO	1916	Bardsley	3N 37E	None
GLO	1933	Bardsley	3N 37E	Two dams
GLO	1943	Harris	3N 37E	One dam
GLO	1969	Good	3N 37E	Possibly a road
GLO	1878	Chandler	3N 37E	None
GLO	1878	David	3N 38E	None
GLO	1878	David	2N 37E	None
GLO	1933	Bardsley	2N 37E	None
GLO	1943	Harris	2N 37E	None
GLO	1965	Good	2N 37E	None
GLO	1878	Carter	2N 37E	None
GLO	1878	David	2N 38E	None
GLO	1878	Carter	2N 38E	None
Historic topo	1948	USGS	Idaho Falls North	One dam, Idaho Falls Municipal Power Plant
Historic topo	1949	USGS	Idaho Falls North	One dam, Idaho Falls Municipal Power Plant
Historic topo	1955	USGS	Idaho Falls	Road, dam, power plant, bridge, power plant
Historic topo	1958	USGS	Idaho Falls	Three bridges, one road, two power plants

Source: BLM GLO (undated)

5.10.3 GEM STATE

The Idaho SHPO records request and NRHP database review for the Gem State Project indicate that one previously recorded archaeological site (10BV329), 14 previously recorded historic architectural resources (Table 5-43), and 11 previously recorded linear sites (Table 5-44) fall in the Project Boundary or within 1 mile of it. The archaeological site does not fall within the Project Boundary, one of the historic architectural resources falls within or is adjacent to (i.e., within 200 feet of) the Project Boundary, and two of the linear sites fall within or are adjacent to the Project Boundary.

TABLE 5-43 PREVIOUSLY RECORDED ARCHAEOLOGICAL SITES LOCATED WITHIN ONE MILE OF THE GEM STATE PROJECT BOUNDARY

SITE NUMBER	SITE NAME	SITE CLASS	SITE TYPE	NRHP ELIGIBILITY
10BV329	—	Historic	Building foundation	Ineligible

Source: Idaho SHPO 2022

TABLE 5-44 PREVIOUSLY RECORDED HISTORIC ARCHITECTURAL RESOURCES LOCATED WITHIN ONE MILE OF THE GEM STATE PROJECT BOUNDARY

IHSI #	PROPERTY NAME	STREET	CITY	NRHP ELIGIBILITY
11-17815	Snake River Valley Canal Bridge	US 91, approx. 2.0 miles northeast of Shelley at milepost 120.4	Shelley	Eligible
11-17825	N. Hwy 91 Private Residence - 1472	1472 N. Hwy 91	Shelley	Ineligible
11-17876	N. Hwy 91 House - 1468	1468 N. Hwy 91	Shelley vicinity	Ineligible
19-18118	H-K Contractor House and Barn	York Rd. just east of US 91	Idaho Falls	Ineligible
19-18144	Rotenberger/Pointner Property	2364 W. 8100 S.	Idaho Falls	Ineligible
19-18145	George Property	2506/2508 W. 8100 S.	Idaho Falls	Ineligible
19-18146	Eastern Idaho Potato Warehouse	Just northeast of the intersection of US 91 and 8100 S. (Cotton Rd.)	Idaho Falls	Ineligible

IHSI #	PROPERTY NAME	STREET	CITY	NRHP ELIGIBILITY
19-18148	S. Bellin Rd. Farmstead	S. Bellin Rd., adjacent to Sidehill Canal	Idaho Falls	Eligible
19-18168	Belia Mora Home	7397 S. 4500 W. (New Sweden Rd.)	Idaho Falls	Ineligible
19-18208	S. Yellowstone Hwy. Private Residence - 9648	9648 S. Yellowstone Hwy	Idaho Falls	Ineligible
19-18210	S. Yellowstone Hwy. Private Residence - 7320	7320 S. Yellowstone Hwy	Idaho Falls	Ineligible
19-18211	S. Yellowstone Hwy. Private Residence - 6624	6624 S. Yellowstone Hwy	Idaho Falls	Ineligible
19-18270	New Sweden Road Bridge	New Sweden Rd. at I-15	Idaho Falls vicinity	Ineligible
19-18296*	Gem State Dam	Southwest of Idaho Falls at Snake River	Idaho Falls vicinity	**

Source: Idaho SHPO 2022

Note: IHSI = Idaho Historic Sites Inventory

*Within or adjacent to (i.e., within 200 feet of) the Project Boundary

**No information provided in SHPO records

TABLE 5-45 PREVIOUSLY RECORDED LINEAR SITES LOCATED WITHIN ONE MILE OF THE GEM STATE PROJECT

SITE NUMBER	IHSI #	SITE NAME	TYPE	ELIGIBILITY
10BM694	11-7851	Cedar Point Canal	Canal	Eligible
–	19-18147	Sidehill Canal	Canal	Eligible
–	19-18041*	Woodville Canal	Canal	Eligible
–	19-18042*	Snake River Valley Canal	Canal	Eligible
–	11-7851	Snake River Valley Canal, Cedar Point Canal	Canal	Eligible
–	11-17826	Quigg Lateral and Siphon	Ditch	Ineligible
–	19-18209	Quigg Lateral and Siphon	Ditch	Ineligible
–	11-17818	Yellowstone Highway	Highway	Eligible
–	19-18169	Yellowstone Highway	Highway	Eligible
–	11-17822	Union Pacific Railroad	Railroad	Eligible
–	19-18172	Union Pacific Railroad	Railroad	Eligible

Source: Idaho SHPO 2022

Note: IHSI = Idaho Historic Sites Inventory

*Within or adjacent to (i.e., within 200 feet of) the Project Boundary

None of the previously recorded archaeological sites or the previously recorded historic architectural resources located in or adjacent to the Project Boundary were listed in or determined to be eligible for the NRHP. The two previously recorded linear sites located in or adjacent to the Project Boundary were both determined eligible for the NRHP. These resources are the Woodville Canal (19-18041) and the Snake River Valley Canal (19-18042), each of which parallels the Snake River within the Project Boundary. Both canals extend beyond the Project Boundary.

Historical GLO maps and topographic maps were also examined to identify archaeological resources, historic architectural resources, and linear sites that may be present in or near the Project Boundary but have not been previously recorded. The area covered by the Project Boundary is included on several historical GLO and topographic maps (Table 5-46). The Snake River Valley

Canal (19-18042) is the only resource within 1 mile of the Project Boundary that was identified from the review of these maps.

TABLE 5-46 HISTORIC FEATURES SHOWN ON GLO AND HISTORICAL TOPOGRAPHIC MAPS WITHIN ONE MILE OF THE GEM STATE PROJECT BOUNDARY

MAP TYPE	YEAR	AUTHOR	MAP LOCATION/ QUADRANGLE NAME	HISTORIC FEATURES
GLO	1878	David	2N 37E	None
GLO	1878	Carter	2N 37E	None
GLO	1877	David	1N 37E	None
GLO	1968	Good	1N 37E	Snake River Valley Canal
GLO	1877	Carter	1N 37E	None
Historic topo	1955	USGS	Idaho Falls	None
Historic topo	1958	USGS	Idaho Falls	None

Note: GLO = General Land Office; topo = topographic
Source: BLM GLO (undated)

5.10.4 DISCOVERY MEASURES

5.10.4.1 IDAHO FALLS

Based on the Idaho SHPO records searched, 95 cultural resources projects were conducted within 1 mile of the Project Boundary (Table 5-47). It is unknown which of these projects intersect or are adjacent to the Project Boundary because SHPO did not provide project spatial data. No projects appear to be related to the Gem State Project.

TABLE 5-47 PREVIOUS CULTURAL RESOURCES PROJECTS WITHIN ONE MILE OF THE IDAHO FALLS PROJECT BOUNDARY

TITLE	AUTHOR	YEAR	AGENCY
Snake River Greenbelt Riverside Trail Extension (Union Pacific Bridge to Private Lands North of Proposed BLM Administrative Site)	Hill, Dick	1991	BLM, Idaho Falls District
City of Idaho Falls Upper Plant No. 1 ROW	Hill, Richard D.	1992	BLM, Idaho Falls District
Sage Junction State/BLM Land Exchange	Hill, Richard D.	1996	BLM, Idaho Falls District
Greenbelt Expansion and ROW, City of Idaho Falls. North Wind, Inc., Idaho Falls, ID	Harding, William M.	2007	BLM, Idaho Falls District
Idaho Falls Power New Substation. North Wind, Inc., Idaho Falls, ID	Shelton, J.	2009	BLM, Idaho Falls District
Annual Report of Archaeological Investigations 1982	Gaston, Jenna	1983	ITD
Annual Report of Archaeological Investigations, 1984	Gaston, Jenna	1984	ITD
Annual Report of Archaeological Investigations, 1985	Gaston, Jenna	1985	ITD
ARR, Pancheri Drive Corridor Study	Gaston, Jenna	1986	ITD
Idaho Bridge Inventory: Volume 1 History	Herbst, Rebecca	1983	ITD
Taylor Toll Bridge Replica	Petersen, Nick	1994	ITD
Cranny Pit	Myler, Terrie	1997	ITD
Britton Pit, Contractor's Future	Lohse, E.S.	1998	ITD
South Boulevard Grade Separation	Petersen, N.	1998	ITD
Riviera Intersection, Idaho Falls	Gaston, J.	1999	ITD

TITLE	AUTHOR	YEAR	AGENCY
Holmes Avenue/Anderson Street to Iona Road, US20B	Gaston, J.	2000	ITD
I-15, Sunnyside Interchange to I-15B, Idaho Falls	Science Applications International Corporation	2001	ITD
Fremont Avenue Pathway/Interchange Landscape, Idaho Falls	Crockett, Stephanie	2001	ITD
Sunnyside Road Corridor Improvement Project; Idaho Falls, ID	Miller, S.	2000	ITD
Virgin Contractors Aggregate Source. Faunal Analysis and CRM Services, Idaho Falls, ID	Miller, S.	2001	ITD
US 20 St. Leon Grade Interchange. Bionomics Environmental, Inc., Boise, ID	Mausser, L.	2001	ITD
University Place Pathway Project, Idaho Falls. SERG, Inc., Idaho Falls	Crockett, Stephanie	2002	ITD
H-K Towers Material Source. Prepared for ITD by Northwind Environmental, Idaho Falls.	Harding, William M.	2002	ITD
Sunnyside Ic to I-15b, Idaho Falls. North Wind, Inc., Idaho Falls, ID	Harding, William M.	2004	ITD
Sunnyside Interchange to I-15b, Idaho Falls, Key No. 7771. North Wind, Inc., Idaho Falls, ID	Harding, William M.	2004	ITD
U.S. 91 North Corrido Plan: Shelley to York Road	Cooper, J.	2005	ITD
District 6 RWIS Sites	Munch, Marc	2006	ITD
HK Sunnyside Staging Area, Idaho Falls. North Wind, Inc., Idaho Falls, ID.	Harding, William M.	2007	ITD

TITLE	AUTHOR	YEAR	AGENCY
Miskin Waste Area, Idaho Falls. North Wind, Inc., Idaho Falls, ID.	Harding, William M.	2007	ITD
John Adams Parkway Bridge, Idaho Falls. North Wind, Inc., Idaho Falls, ID.	Harding, William M.	2009	ITD
Garfield Street Idaho Canal Bridge, Idaho Falls. North Wind, Inc., Idaho Falls, ID.	Harding, William M.	2009	ITD
Rhodehouse Gravel Source. North Wind, Inc., Idaho Falls, ID.	Harding, William M.	2009	ITD
State, FY2010 Highway Advisory Radio Installation	Munch, M.	2009	ITD
I-15, Pancheri Dr. Overpass, NR Idaho Falls, ITD, Boise, Idaho	Everhart, D.	2011	ITD
Pancheri Dr., Bellin Rd to Skyline Dr	Nickoloff, N	2011	ITD
Pancheri Br Over E Lateral Canal, Idaho Falls	Nickoloff, Niki	2012	ITD
Pancheri Underpass/Hyde Waste Area	Harding, William M.	2012	ITD
Idaho Falls Area Bridge Preservation	Hartmans, Donna	2013	ITD
Grandview Drive; Skyline Drive to Saturn Avenue	Richards, Martha, et al.	2015	ITD
FY17b (FY18) D6 Bridge Repair, Bonneville and Jefferson Counties. Arrow Rock Architects, PLLC.	Hartmans, Donna	2016	ITD
Lomax and F Streets, Flashing Stop Signs, Idaho Falls, Bonneville County. Arrow Rock Architects, PLLC.	Hartmans, Donna	2016	ITD
South Boulevard Corridor RRFB Light, Idaho Falls, Bonneville County. Arrow Rock Architects, PLLC.	Hartmans, Donna	2016	ITD

TITLE	AUTHOR	YEAR	AGENCY
Elva to Holmes and North Tourist Park, Idaho Falls. North Wind Resource Consulting	Ruter, Helena, and Greta Rayle	2017	ITD
12th Street/Idaho Canal Culvert, Idaho Falls	Bauer, Barbara P.	2017	ITD
Intersection of E. 17th Street and S. Woodruff Avenue, Idaho Falls: Bonneville County, Idaho. Bionomics Environmental, Inc.	Martin, Jillian C.	2018	ITD
East River Road (N 5th W) Curve Improvement, Bonneville County. Horrocks Engineers	Calkins, Nancy, Ben Pearson, and Peter Steele	2019	ITD
Idaho Canal Trail, Phase 1 & Phase 2, Idaho Falls. North Wind Resource Consulting	Mooney, Courtney, Kasey Fulwood, and Greta Rayle	2019	ITD
Cultural Resources Review: Higbee Bridge, Idaho Falls	Kriegl, Matthew	2020	ITD
Historic Survey of Roads in Idaho's State Highway System Volume 1: Historic Context and Volume 2: <i>Application of the National Register of Historic Places Criteria for Evaluation</i>	Mead & Hunt	2019	ITD
Historic Survey of Roads in Idaho's State Highway System Volume 1: Historic Context and Volume 2: <i>Application of the National Register of Historic Places Criteria for Evaluation</i>	Mead & Hunt	2019	ITD
US-91 Shelley to York Rd Phase II (Anheuser Busch Material Source and Staging Area): (Anheuser Busch Material Source and Staging Area). Commonwealth Heritage Group, Inc.	Johnson, Wendy Simmons	2020	ITD

TITLE	AUTHOR	YEAR	AGENCY
Archaeological Investigations: Gem State Hydroelectric Project, Idaho Falls. Basin and Range Research, Pocatello	Druss, Claudia, Steven Wright, and Mark Druss	1981	Basin and Range Research
Agricultural Landscapes Survey. Prepared by Idaho State Historical Society. IHSI Survey #104	Eastman, Jennifer Attebery	1987	Idaho State Historical Society
Archaeological Investigations: Gem State Hydroelectric Project, Idaho Falls. Basin & Range Research	Druss, Claudia, Steven Wright, and Mark Druss	1981	Basin & Range Research
Cultural Resource Survey of Idaho Innovation Center Technological Park, Idaho Falls. EG&G Idaho, Inc.	Ringe, Brenda L.	1993	Idaho National Laboratory
Gary Dixon Irrigation Mainline. Frank Fink, SCS Boise	Robertson M.	1995	Frank Fink, SCS Boise
Cultural Resources Investigations for the Idaho Falls Environmental Engineering and Science Center. INEEL, Idaho Falls, Idaho	Pace, B.	1998	Idaho National Laboratory
Archaeological Clearance Surveys and Cultural Resource Inventories on the Idaho National Engineering Laboratory, April 1967-March 1985	Miller, S.	1985	Idaho National Laboratory
S.M. Stoller Corporation Phase 1 Cell Towers #3519, Seven (1-acre) Parcel Survey. Report prepared by Office of Anthropological Research, ISU, Pocatello, Idaho	Williamson, A.	2001	Other
50 Clear Talk Wireless Cell Phone Tower Locations in Southeast and South-Central Idaho. Prepared for Clear Talk Wireless by Northwind Environmental, Inc., Idaho Falls, Idaho	Harding, W., J. Shelton, and C. Green	2001	Other

TITLE	AUTHOR	YEAR	AGENCY
Ammon/Shelley Regional Wastewater Project. Prepared for East Central Idaho Planning & Development Association, Rexburg, Idaho. SERG, Inc.	Crockett, Stephanie	2004	Other
Edge Wireless Idaho Falls Sunnyside Cell Tower. North Wind, Idaho Falls, ID.	Wester, S.	2005	Other
Edge Wireless, Post Register Cell Tower. North Wind, Inc., Idaho Falls, ID.	Shelton, J.	2005	Other
ID-06-Union Pacific Cell Tower, Idaho Falls	Gray, D.	2006	Other
ID-4073 Post Cellular Collocation. SWCA, Salt Lake City, UT.	Smith, Ellen W.	2010	Other
Idaho Falls Airport Fence and Irrigation Improvements. FAA, Renton, WA.	Harding, William M.	2010	C. Morgan, FAA, Renton, Washington
T-Mobile West New Conduit; SL01443D, Idaho Falls KIDK TV	Bonner, Wayne	2012	Other
Verizon Wireless ID6 Union Pacific Communications Facility, 1112 Centre Avenue, Idaho Falls, Bonneville County	Valentine, Melissa	2013	Other
Museum of Idaho Expansion Project, Idaho Falls, Bonneville County Historical Society, NEH	Smith, Claire	2014	Other
Cultural Resource Evaluation and Visual Effect Analysis for the Proposed 'ID6 Taylorview' Telecommunications Project, Bonneville County, Idaho Falls, Idaho (South Holmes Avenue)	Buckard, Jason	2014	FCC
'ID6 West Broadway' Cellular Telecommunications Project 1770 West Broadway, Idaho Falls, Bonneville County	Retter, Michael	2014	FCC
Idaho Falls Airport Improvements	Shelton, Jeff A.	2014	Other

TITLE	AUTHOR	YEAR	AGENCY
A Cultural Resource Inventory and Visual Effects Analysis for the Proposed 'ID6 Auditorium' Cellular Telecommunications Facility, Idaho Falls, Bonneville County, Idaho. SWCA Environmental Consultants	Moon, Jennifer	2016	FCC
A Cultural Resource Inventory and Visual Effects Analysis for the Proposed 'ID6 Compass' Cellular Telecommunications Facility, Idaho Falls, Bonneville County, Idaho. SWCA Environmental Consultants	Moon, Jennifer, and Nicole Kromarek	2016	FCC
A Cultural Resource Inventory and Visual Effects Analysis for the Proposed 'ID6 Sage Lakes' Self-Support Cellular Telecommunications Facility, Idaho Falls, Bonneville County, Idaho. SWCA Environmental Consultants	Kromarek, Nicole	2016	FCC
A Cultural Resource Inventory and Visual Effects Analysis for the Proposed 'ID6 Cotton' Cellular Telecommunications Facility, Idaho Falls, Bonneville County, Idaho. SWCA Environmental Consultants	Moon, Jennifer	2016	FCC
Keefer's Addition Reconnaissance Survey. Idaho Falls HPC	Williams, Julie Braun, Christina Olson, and Renee Magee	2016	Idaho Falls HPC
Idaho Military Division Survey and Inventory of Army National Guard Armories. Arrow Rock Architects PLLC	Hartmans, Donna	2004	Army National Guard
Class III Cultural Resource Inventory and Visual Impact Assessment for the Compass-B Communication Facility, Bonneville County, Idaho. Cannon Heritage Consultants, Inc.	Peart, Jonathan M., Maureen P. Boyle, Kenneth P. Cannon, and Ron Sladek	2017	FCC

TITLE	AUTHOR	YEAR	AGENCY
CLR Hydroelectric Project Cultural Survey, Jefferson and Bonneville Counties, Idaho. Frontier Historical Consultants	Gray, Dale M.	2017	FERC
Idaho Falls Commercial Survey. Prepared by Idaho SHPO	Attebery, Jennifer Eastman	1983	Idaho State Historical Society
Idaho Falls Reconnaissance Survey Year End Report, August 1988	Idaho Falls CLG	1988	Idaho Falls HPC
Idaho Falls Reconnaissance Survey Year End Report, August 1989	Idaho Falls CLG	1989	Idaho Falls HPC
City of Idaho Falls Intensive Level Survey Report: Stone Residences. Prepared for Idaho Falls HPC	Magee, Renee R., Mark Platt, and June Howard	1990	Idaho Falls HPC
City of Idaho Falls Reconnaissance Level Survey Report of Numbered Streets (9th, 10th, 11th, 12th, and 13th). Prepared for Idaho Falls Historic Preservation Commission	Vaughn, William, et. al.	1991	Idaho State University
City of Idaho Falls Reconnaissance Level Survey Report - Sixth and Seventh Streets. Prepared for Idaho Falls HPC	Magee, Renee	1993	Idaho Falls HPC
Downtown Idaho Falls Reconnaissance Survey - 1996. Prepared for Idaho Falls HPC	Magee, Renee, and Mark Platt	1996	Idaho Falls HPC
New Sweden-Riverview Study Interim Report. Prepared by Idaho SHPO	Attebery, Jennifer Eastman	1990	Idaho State Historical Society
Section 110 Documentation for Excess of Federal Property: Idaho National Laboratory IORC	Olson, Christina L.	2020	US DOE
Idaho Falls Regional Airport Historic Resource Documentation. Preservation Solutions LLC. T-O Engineers.	Davis, Kerry, and Joe Guenther	2019	FAA

TITLE	AUTHOR	YEAR	AGENCY
Multiple Project in Jerome, Idaho Falls, and Boise.	Fruhlinger, Jake	2020	Department of Defense
Submission Packet, FCC Form 621, for proposed Collocation Project 333 Northgate Mile, Idaho Falls, Bonneville County, 83402, IDL04073 / THE POST / 10129915. EBI Consulting.	Bowman, Maureen A.	2020	FCC
Idaho Falls Stockyard Phase II Environmental Site Assessment: 701 Northgate Mile, Idaho Falls, Bonneville County, ID 83401. Stantec Consulting Services, Inc.	Herrick, Daniel	2020	US EPA
Site-Specific Sampling and Analysis Plan: Teton Vista Property, 260 Olive Plaza, Idaho Falls, Idaho 83401.	Stantec Consulting Services Inc.	2020	US EPA
A Cultural Resource Assessment of the Modification of an Existing Wireless Telecommunications Service Facility “Idaho Falls KIDK TV/ SL01443D” for T-Mobile West LLC, in Idaho Falls, Bonneville County, Idaho. Environmental Assessment Specialists, Inc.	Billat, Scott	2020	FCC

Note: Project titles and agency/contractor names appear as listed by the Idaho SHPO and have been only lightly edited.
BLM = Bureau of Land Management; ROW = right-of-way; FAA = Federal Aviation Association; FCC = Federal Communications Commission; HPC = Historic Preservation Commission; ITD = Idaho Transportation Department; DOE = U.S. Department of Energy; IORC = Information Operations and Research Center; U.S.EPA = U.S. Environmental Protection Agency; IHSI = Idaho Historic Sites Inventory
Source: Idaho SHPO 2022

5.10.4.2 GEM STATE

Based on the Idaho SHPO records search, 35 cultural resources projects were conducted within 1 mile of the Project Boundary (Table 5-48). It is unknown which of these projects intersect or are adjacent to the Project Boundary because Idaho SHPO did not provide project spatial data. Of the projects provided in the records search, one appears to be associated with the Gem State Project. In 1981, the Archaeological Investigations: Gem State Hydroelectric Project was conducted by Basin and Range Research.

TABLE 5-48 PREVIOUS CULTURAL RESOURCES PROJECTS WITHIN ONE MILE OF THE GEM STATE PROJECT BOUNDARY

TITLE	AUTHOR	YEAR	AGENCY
Woodville Community Well and Pipeline ROW	Hill, Richard D.	1997	BLM, Idaho Falls District
Couillard ROW IDI-35763. North Wind, Inc., Idaho Falls, ID	Harding, William M.	2008	BLM, Idaho Falls District
Robert Hay Jr. Road ROW IDI-35763	Hill, Richard D.	2007	BLM, Idaho Falls District
Karl and Aleeta David Road ROW IDI-35783	Hill, Richard D.	2007	BLM, Idaho Falls District
Annual Report of Archaeological Investigations 1979, 1980	Gaston, Jenna	1981	ITD
Annual Report of Archaeological Investigations, 1984	Gaston, Jenna	1984	ITD
Idaho Falls South Interchange	Petersen, Nick	1992	ITD
York Road Source	Myler, Terrie	1997	ITD
Riviera Intersection, Idaho Falls	Gaston, J.	1999	ITD
Ancor Precast Source	Horting, C.	2000	ITD
Valley Redi-Mix Gravel Aggregate Source Expansion (Pit No. BN-140C). Idaho State University, Pocatello, ID	Horting, C.	2000	ITD
I-15, Sunnyside Interchange to I-15B, Idaho Falls	SAIC	2001	ITD
Burns Aggregate Source: Bn-152c	Miller, S.	2001	ITD
I-15 Traveler's Radio Advisory Project-B, Key No. 7818. North Wind, Inc., Idaho Falls, ID	Harding, William M.	2004	ITD
Sunnyside Interchange to I-15b, Idaho Falls, Key No. 7771. North Wind, Inc., Idaho Falls, ID	Harding, William M.	2004	ITD
U.S. 91 North Corrido Plan: Shelley to York Road	Cooper, J.	2005	ITD

TITLE	AUTHOR	YEAR	AGENCY
State, Dynamic Message Signs	Munch, M.	2009	ITD
State, FY2010 Highway Advisory Radio Installation	Munch, M.	2009	ITD
Idaho Falls Area Bridge Preservation	Hartmans, Donna	2013	ITD
FY 16 District 5 Bridge Repair	Davis, Kerry	2014	ITD
US-91 Shelley to York Road Expansion, Addendum 1. Versar	Noll, Christopher D.	2015	ITD
Historic Survey of Roads in Idaho's State Highway System Volume 1: Historic Context and Volume 2: <i>Application of the National Register of Historic Places Criteria for Evaluation</i>	Mead & Hunt	2019	ITD
US-91 Shelley to York Rd Phase II (Anheuser Busch Material Source and Staging Area): (Anheuser Busch Material Source and Staging Area). Commonwealth Heritage Group, Inc.	Johnson, Wendy Simmons	2020	ITD
Archaeological Investigations: Gem State Hydroelectric Project, Idaho Falls. Basin and Range Research, Pocatello.	Druss, Claudia, Steven Wright, and Mark Druss	1981	Basin and Range Research
Report on Cultural Resources in the Shelley Hydroelectric Project Area. FERC Preliminary Permit No. 5090-00 CH2M Hill.	Simmons, Alexy	1985	FERC/CH2M-Hill
Agricultural Landscapes Survey. Prepared by Idaho State Historical Society. IHSI Survey #104.	Eastman, Jennifer Attebery	1987	Idaho State Historical Society
Archaeological Investigations: Gem State Hydroelectric Project, Idaho Falls. Basin & Range Research.	Druss, Claudia, Steven Wright, and Mark Druss	1981	Basin and Range Research
50 Clear Talk Wireless Cell Phone Tower Locations in Southeast and South-Central Idaho. Prepared for Clear Talk Wireless by Northwind Environmental, Inc., Idaho Falls, Idaho	Harding, W., J. Shelton, and C. Green	2001	Other

TITLE	AUTHOR	YEAR	AGENCY
Ammon/Shelley Regional Wastewater Project. Prepared for East Central Idaho Planning & Development Association, Rexburg, Idaho. SERG, Inc.	Crockett, Stephanie	2004	Other
Depatco Gravel Source	Crockett, Stephanie	2010	Misc
Cultural Resource Evaluation and Visual Effect Analysis for the ID6 Wapiti Cellular Telecommunications Project, 6775 South Overland Drive, Idaho Falls, Bonneville County, Idaho	Kromarek, Nicole, Susan Leary, Jim Steely, and Michael Ritter	2014	FCC
Archaeological Records Check and Phase IA (Class III) Archaeological Reconnaissance of Approximately 0.3 Acres for the SL80XCR80 Idaho Falls Tower Site, Bonneville County. RESCOM Environmental Corp.	Smith, Andrew	2017	FCC
Idaho's Historic Bridges: A Context Study	Gray, Dale	2004	ITD
Copper Meadows Subdivision: Cultural Resources Survey. Sundance Consulting, Inc.	Larsen, David N.	2019	US EPA
New Sweden-Riverview Study Interim Report. Prepared by Idaho State Historic Preservation Office	Attebery, Jennifer Eastman	1990	Idaho State Historical Society

Note: Project titles and agency/contractor names appear as listed by the Idaho SHPO and have been only lightly edited.
 Note: ITD = Idaho Transportation Department; U.S.EPA = U.S. Environmental Protection Agency; FCC = Federal Communications Commission; ROW = right-of-way; IHSI = Idaho Historic Sites Inventory; FERC = Federal Energy Regulatory Commission
 Source: Idaho SHPO 2022

5.10.5 TRIBAL RESOURCES

Under Section 106 of the NHPA, FERC is obligated to seek out any federally recognized Indian Tribe that can demonstrate a traditional cultural or religious connection to land under its jurisdiction and involve them in the relicensing process.

Although the Project Boundary encompasses no federally recognized Tribal lands, there are tribes that may have an interest in the Idaho Falls and Gem State Project relicensing processes. The

following tribes are included on FERC’s mailing list and/or are identified on the U.S. Department of the Interior’s Bureau of Indian Affairs website, as well as other Tribes that may have a traditional cultural or religious connection to the lands in or around the Projects (BIA 2022).

- Shoshone Tribe of the Wind River Reservation
- Shoshone-Bannock Tribes of the Fort Hall Reservation
- Northwestern Band of Shoshone Nation
- Kootenai Tribe
- Nez Perce Tribe
- Coeur d’Alene Tribe
- Confederated Tribes of the Warm Springs Reservation
- Fort Belknap Indian Community of the Fort Belknap Reservation

Concurrent with the NOI and PAD filings, IFP requested to be FERC’s non-federal representative for Section 106 Consultation with the Tribes. The following sections identify Tribes that may have an interest in the Projects and a brief history. Pending Tribal consultation, no Indian traditional or religious cultural properties are known in or near the Gem State or Idaho Falls Project Boundaries.

5.10.5.1 SHOSHONE TRIBES

Historically, Shoshoni-speaking bands lived in the part of the northern Great Basin that includes the upper Snake and Salmon Rivers in Idaho and the Green and Bear Rivers in Utah and Wyoming. In the early 1700s, horses were introduced to North American tribes and these groups began traveling over large areas, covering portions of what is now Montana, southern Alberta in Canada, and across Wyoming. However, by the mid-1700s, the Plains tribes that acquired both horses and guns from European settlers resisted this expansion. The Shoshone returned to their earlier territories within the western river valleys: the Lemhi Shoshones and Flathead Salish along the Salmon River, the Northern Shoshones and Bannocks along the Snake River, and the Eastern Shoshones along the Green and Bear Rivers. Throughout the nineteenth century these groups continued to participate in annual bison hunts to the east (Jackson Hole Historical Society 2022; Murphy and Murphy 1986; Steward 1937). Most bands later organized into federally recognized tribes, including the Shoshone-Bannock Tribes, the Northwest Band of Shoshone Nation, and the Shoshone Tribes of the Wind River Reservation.

Steward (1937) reported that a band known as the Bohogue' generally wintered near Fort Hall, although they traveled seasonally from Camas Prairie in the west to Wyoming in the northeast. This band was comprised of two integrated but culturally and linguistically distinct groups: the Bannocks, a Northern Paiute group that moved into the area in the seventeenth century, and the Northern Shoshones (Murphy and Murphy 1986; Shoshone-Bannock Tribes 2021; Steward 1937). While the Bannocks were a minority, the chief who led the band may have come from either group (Murphy and Murphy 1986).

Once horses arrived in the area in the 1700s, the Northern Shoshones and Bannocks gathered for fall bison hunts in Wyoming, after which they would typically return to winter camps in the Snake River bottoms, near the Gem State Project area (Murphy and Murphy 1986; Shoshone-Bannock Tribes 2021). In the spring, groups would fish for salmon below Shoshone Falls and then travel west to Camas Prairie to gather during the summer months.

British and American fur trappers began moving into the Snake River Valley in the early nineteenth century. By the 1840s the fur trade had collapsed and the bison herds west of the Continental Divide had been exterminated (Murphy and Murphy 1986). Emigration along the Oregon Trail brought more Euro-American settlers through the region. The members of the Church of Jesus Christ of Latter-day Saints began settling in the 1860s (Murphy and Murphy 1986). The last great bison hunt by the Northern Shoshones and Bannocks was in 1864 (Shoshone-Bannock Tribes 2021). The two groups entered peace treaties with the United States government in 1863 and 1868, which led to the establishment of the Fort Hall Reservation in 1869. Other Shoshone groups were relocated to the Fort Hall Reservation as well, including the Northwestern Band of Shoshone Nation, a group comprised of Bannocks and the former Lemhi and Sheepeater Shoshones who were forced off their original reservation in both 1905 and 1907 (American Indian Relief Council 2022; Murphy and Murphy 1986). The Northwestern Band of Shoshone Nation received federal recognition in 1980 (American Indian Relief Council 2022).

The ancestors of the Shoshone Tribe of the Wind River Reservation were Eastern Shoshone peoples who lived in what is now western Wyoming. They were accomplished bison hunters prior to the introduction of the horse (Shimkin 1986). In the 1800s, the Eastern Shoshone Tribe inhabited

an area along the eastern slope of the Rocky Mountains that extended from what is now southwestern Wyoming to southwestern Montana (Eastern Shoshone 2022).

In 1805, Lewis and Clark's famous expedition met with the Lemhi Shoshones (Jackson Hole Historical Society 2022) and was accompanied by a Shoshone woman, Sacajawea, on their expedition through the Northwest (Eastern Shoshone 2022).

By the 1860s, the Eastern Shoshone lived primarily in the Wind River Valley in Wyoming, spending the summer months in the Fort Bridger area. Chief Washakie became a prominent leader in the 1850s, and in 1852, he was the sole Shoshone representative to negotiate the Latter-day Saint settlement with Brigham Young in Salt Lake City (Jackson Hole Historical Society 2022; Shimkin 1986). In 1863, Chief Washakie negotiated the first treaty of Fort Bridger, which set rough boundaries for a Shoshone Reservation that included parts of Utah, Idaho, Montana, Wyoming, and Colorado. However, the second treaty of Fort Bridger in 1868 limited the boundaries to an area in west-central Wyoming (Eastern Shoshone 2022). The boundaries of the Wind River Reservation were further reduced in 1874 when gold was discovered near South Pass, and the southern portion of the reservation was purchased (Eastern Shoshone 2022). In 1877, Chief Washakie and other Shoshone leaders agreed to allow the Arapaho to move onto the Wind River Reservation (Jackson Hole Historical Society 2022). The Arapaho were given fertile, irrigable lands on the east side of the reservation by the United States government (Shimkin 1986). In 1939, lands north of the Big Wind River were restored to the Shoshone, along with a monetary settlement from the federal government after the Tribe won a legal suit, which the Shoshone Tribal Council put towards economic development of the Tribe (Shimkin 1986). While both Tribes still live on the Wind River Reservation, they operate as two separate Tribal governments. The Shoshone Tribe of the Wind River Reservation is federally recognized.

Given the Tribes' history in the area, the Shoshone-Bannock Tribes, the Northwest Band of Shoshone Nation, and the Shoshone Tribes of the Wind River Reservation may attach cultural or religious significance to land and/or resources in the Gem State Project Boundary.

5.10.5.2 KOOTENAI TRIBE OF IDAHO

Historically, the Kootenai people lived along the Kootenay River in the Rocky Mountains, covering a territory that encompassed what is now northern Montana and Idaho and portions of British Columbia in Canada. Winters were spent in upriver villages, hunting, fishing, and pursuing bison herds by snowshoe to the east of the Rocky Mountains. In the summer, as wetlands flooded, people would move downriver to temporary camps to participate in communal deer hunts, hunt waterfowl, and gather fish and plant foods. Euro-American twentieth-century ethnographers described a linguistic division between the Upper Kootenai, who lived upriver and to the east, and the Lower Kootenai, who lived downriver to the west (Brunton 1998). When horses were introduced to the Tribe, the Kootenai people joined other Plateau groups and organized joint bison hunts on the plains to the east (Brunton 1998).

Euro-Americans moved into the territory of the Kootenai at the beginning of the 1800s, drawn by the fur trade. Catholic missionaries attempted to influence the Tribes, both the Kootenai and their neighbors, the Flathead (Brunton 1998). The Kootenai people, as well as bands and tribes at several locations in British Columbia and Montana, were divided into geographic communities following the designation of the U.S.-Canada border (UCUT 2022). Epidemics of smallpox and other diseases heavily impacted the Tribe. A signed treaty in 1855 established the Flathead Reservation, to the southeast of the Kootenay River where the Kootenai people settled (Brunton 1998). However, the Lower Kootenai did not sign the 1855 Treaty, and in 1974 the remaining 67 Kootenais declared a peaceful war on the United States to reclaim their traditional lands. As a result, the federal government and the State of Idaho transferred 12.5 acres of land to the Kootenai Tribe of Idaho for a reservation (Brunton 1998; UCUT 2022). In 1982 the Kootenai Tribe of Indians joined the Upper Columbia United Tribes (UCUT) alongside the Coeur d'Alene Tribe of Indians, Confederated Tribes of the Colville Reservation, Kalispel Tribe of Indians, and Spokane Tribe of Indians and are actively managing 2 million acres (UCUT 2022). The Kootenai Tribe of Idaho is federally recognized.

Given the Tribe's history in the area, the Kootenai Tribe of Idaho may attach cultural or religious significance to land and/or resources in the Gem State Project Boundary.

5.10.5.3 NEZ PERCE TRIBE

The Nez Perce Tribe are Sahaptin speakers who traditionally occupied parts of what is now Idaho, Oregon, and Washington (Nez Perce Tribe 2018). French fur traders gave this group the name Nez Percé, which means “pierced nose” in French, but they call themselves the Nimiipuu, which means “we the people” (Hillstrom and Hanes 2022; Nez Perce Tribe 2018).

The Nez Perce Tribe fished during the spring and fall salmon runs, gathered camas roots in the late summer, and hunted large game and birds. Once horses were introduced to the area after 1700, like many other groups, the Nez Perce would organize short bison hunting trips in Montana and Wyoming to augment their winter stores of meat (Nez Perce Tribe 2018; Walker 1998). The Nez Perce maintained large herds and became skilled horse breeders and trainers, developing the breed known as Appaloosas (Hillstrom and Hanes 2022).

In 1800, the Nez Perce Tribe had more than 70 permanent villages and hundreds of temporary camps centering on three rivers: the Middle Snake, Clearwater, and Salmon Rivers (Walker 1998). They soon began trading with Euro-American and European fur trappers, including the North West Company. However, the demand for furs in Europe quickly decimated the beaver and other fur-bearing animals on the plateau (Walker 1998).

A treaty was negotiated with the United States government in 1855, which ensured both Nez Perce reservation lands and the right to continued use of traditional off-reservation lands for fishing, hunting, gathering, and grazing livestock in their usual and accustomed places. The original reservation boundaries were significantly reduced in 1863, after gold was discovered, and even more land was lost due to the Allotment Act, which resulted in a “checkerboard” of Indian allotments and non-Indian-owned parcels within the reservation boundaries by the end of the 1800s. However, the Tribe’s off-reservation rights were repeatedly upheld in the state courts (Nez Perce Tribe 2018). The Nez Perce is a federally recognized Tribe.

Given the Tribe’s history in the area, the Nez Perce Tribe may attach cultural or religious significance to land and/or resources in the Gem State Project Boundary.

5.10.5.4 CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON

The Confederated Tribes of the Warm Springs Reservation of Oregon consist of members of three different Indian tribes: Wascoes, Warm Springs, and the Paiutes. In 1937, the three tribes were organized into a single governing body, the Confederated Tribes of Warm Springs Reservation of Oregon (CTWS 2021).

The Wascoes are Chinookan-speaking Indians who historically lived along the south shores of the Columbia River in what is now Oregon (CTWS 2021; French and French 1998). They were primarily salmon fishermen, but the Wascoes engaged in extensive trade with neighboring groups. For example, they traded root bread, salmon, and bear grass to the Nez Perce in return for game, clothing, and horses (CTWS 2021).

The Warm Springs people are Sahaptin speakers who traditionally lived along the tributaries of the Columbia River to the east of the Wascoes (CTWS 2021; Hunn and French 1998). They fished for salmon but had a tendency to move between winter and summer villages. Game, roots, and berries were important staples in their diet. The Warm Springs people sometimes joined intertribal group hunts for bison to the east of the Rocky Mountains in the 1700s after the introduction of horses (Hunn and French 1998). While the Warm Springs and Wasco people did not share linguistic or cultural roots, the two groups traded heavily with one another prior to Euro-American contact (CTWS 2021).

Beginning in the early 1800s, Euro-American fur trappers began entering the Columbia River valley to trade (Hunn and French 1998). During the 1840s, thousands of Euro-American immigrants began traveling through the Wasco and Warm Spring territories as they traveled west into Oregon and California. In 1855, the Wasco and Warm Springs people negotiated a treaty with the superintendent of the Oregon Territory that designated the Warm Springs Reservation on the Warm Springs River for the Tribes' sole use and maintained rights to harvest fish, game, and other foods in their usual and accustomed places on off-reservation lands. However, salmon was less plentiful than it had been on the Columbia River (CTWS 2021).

In 1879, a group of 38 Paiutes moved to Warm Springs from the Yakima Reservation in Washington. The Paiutes are Shoshonean speakers whose traditional territory included portions of what is now Oregon, Nevada, Idaho, and western Utah. Prior to contact, they were hunter-gatherers who were highly nomadic and traveled long distances in the Great Basin. The Paiute bands that settled at Warm Springs originated from southeast Oregon. At the end of the 1878 Bannock War against the United States government, many Northern Paiute bands were forcibly relocated to the Yakama Reservation and Fort Vancouver. Despite the differences in their traditional lifeways, the Paiutes became a permanent part of the Warm Spring Reservation (CTWS 2021). The Confederated Tribes of the Warm Springs Reservation of Oregon is a federally recognized Tribe.

Given the Tribe's history in the area, members of the Confederated Tribes of the Warm Springs Reservation of Oregon may attach cultural or religious significance to land and/or resources in the Gem State Project Boundary.

5.10.5.5 FORT BELKNAP INDIAN COMMUNITY OF THE FORT BELKNAP RESERVATION

The Fort Belknap Indian Community of the Fort Belknap Reservation consists of two tribes: the Nakoda (also known as the Assiniboine, the Ojibwa name for the Tribe) and the Aaniiih (called Gros Ventre by French fur trappers). The Gros Ventre were members of the Blackfeet Confederacy. Both groups were nomadic bison hunters from the northern Great Plains (Fort Belknap Indian Community 2022).

The Assiniboine are Siouxan-speaking people who traditionally lived in what is now Canada, but in the 1740s, some bands moved south into an area that extended from Minnesota west to Montana (Fort Belknap Indian Community 2022). They followed and hunted the bison herds, and their clothing, tools, and homes were primarily made from bison products (Fort Belknap Indian Community 2022). However, they hunted other large and small game and gathered plant foods (Miller 2011).

The Gros Ventre are Algonquin-speaking people who lived along the Saskatchewan River and were once affiliated with the Arapaho and Cheyenne. By the 1830s, the Gros Ventre were found in north central Montana, west of Assiniboine territory and east of the Blackfeet (Fleming 2011;

Fort Belknap Indian Community 2022). They relied on bison for their primary source of food and clothing (Fleming 2011). The Gros Ventre joined the Blackfeet and their territory stretched north into Canada (Fort Belknap Indian Community 2022).

In 1855, the governor of the Washington Territory negotiated a peace treaty with the Blackfeet, Flathead, and Nez Perce Tribes that created a large joint territory. The Gros Ventre, included as members of the Blackfeet Confederation, and the Assiniboine were signatories to the treaty (Fort Belknap Indian Community 2022). However, the discovery of gold in Montana in 1862 and the completion of the Union Pacific and Northern Pacific railroads increased settling of the area by Euro-Americans (Fleming 2011).

Fort Belknap was established along the Milk River in the 1870s as a substation post and trading post. The Gros Ventre and Assiniboine both received their allotted rations and annuity goods from the fort until it was closed in 1876. The Tribes were then directed to relocate to Fort Peck and Wolf Point, but the Gros Ventre would not go because of long-standing enmity with the Sioux who lived there. In 1888, the Fort Belknap Reservation was established for the Gros Ventre and Assiniboine people who had remained in the area, one of three smaller reservations that were created from the earlier joint reservation. However, after gold was discovered in the Little Rocky Mountains in 1884, the Fort Belknap reservation was reduced in size. In 1935, the Assiniboine and Gros Ventre members of Fort Belknap adopted a constitution and created a community council (Fort Belknap Indian Community 2022). The Fort Belknap Reservation is a federally recognized reservation.

Given the Tribe's history in the area, members of the Fort Belknap Indian Community of the Fort Belknap Reservation may attach cultural or religious significance to land and/or resources in the Gem State Project Boundary.

5.10.6 REFERENCES

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5.11 PURPA BENEFITS

IFP is a domestic, municipal utility and is not claiming preference under Section 7(a) of the FPA, nor seeking benefits under Section 210 of the Public Utility Regulatory Policies Act of 1978.

6.0 PRELIMINARY LIST OF POTENTIAL ISSUES

This section presents potential resource issues and lists proposed studies and analyses needed to support evaluation of potential effects from continued Project Operations and Maintenance (O&M). This section also describes existing and proposed environmental measures and relevant comprehensive plans. FERC content requirements for this section are specified in 18 CFR § 5.6(d)(4). Potential resource issues associated with the Project that are listed in subsections herein were identified from the following:

- Review and evaluation of relevant readily available information (see Section 5.0, *Description of Existing Environment*).
- Discussions with IFP personnel familiar with Project O&M and resources in the Idaho Falls and Gem State Project vicinities.
- Early engagement meetings held with stakeholders (including resource agencies, tribes, and interested members of the public).
- IFP has identified a suite of issues that could result from potential Project-induced effects and have a clear nexus to ongoing O&M activities relating to both the Idaho Falls and Gem State Projects.
- Section 6.1, *Preliminary Issues and Studies*, presents issues for which additional data gathering or studies are needed to assess potential Project effects. Note that no potential resource issues or data gaps related to Project effects have been identified for socioeconomic or aesthetic resources.

6.1 PRELIMINARY ISSUES AND STUDIES

This section identifies preliminary issues identified for which data gathering, potential studies, and/or analyses may be needed to address Project effects or complete the license application. IFP has identified preliminary topics related to water resources, aquatic resources, wildlife resources, botanical resources, recreation use, and cultural/tribal resources in Table 6-1.

Items identified in Table 6-1 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, *Process Plan and Schedule*.

TABLE 6-1 SUMMARY OF POTENTIAL ISSUES AND STUDIES

STUDY PLAN TOPIC	POTENTIAL RESOURCE ISSUE	PROPOSED STUDY AND APPROACH
Water Quality	Project operations have the potential to alter water quality in Project reservoirs and affected stream reaches, which may affect fish or other aquatic species, or exceed Regional Quality Control objectives for Project waters. Limited current water quality data are available in the Project areas.	<p>Water Quality Study (WQ-1)</p> <ul style="list-style-type: none"> • Profiles of water temperature, DO, pH, specific conductivity, and turbidity could be measured at the reservoirs. Profiles may be measured during spring, summer, and fall at each site, at 1-meter intervals at each reservoir’s location of maximum depth. A multi-parameter water quality meter (HydroLab, YSI, or similar) may be used to measure profiles, and a GPS unit will be used to record the location of each profile. • Stream samples could be collected from just below the water surface as a composite sample from a well-mixed area of each stream site. Parameters may be measured in spring, summer, and fall.
Fish Assemblage	Project operations have the potential to impact local fish assemblage within Project-affected reaches. There is limited current information regarding the distribution of fish species of management interest in the Project area.	<p>Fish Assemblage Study (AQ-1)</p> <ul style="list-style-type: none"> • Sampling could be conducted using gillnetting and boat electrofishing, dependent on access. • Species composition, relative abundance, age-distribution, and condition could be characterized within Project Boundaries. • Study could focus on white sturgeon and salmonids.
Fish Mortality	Project operations have the potential to affect fish mortality due to entrainment. The effect of the diversions on fish entrainment has not been well documented throughout the Project reaches.	<p>Fish Entrainment Study (desktop review) (AQ-2)</p> <ul style="list-style-type: none"> • A literature review of fish entrainment data for facilities with similar operation specifications could be conducted to assess potential entrainment rates at the Project.

STUDY PLAN TOPIC	POTENTIAL RESOURCE ISSUE	PROPOSED STUDY AND APPROACH
		<ul style="list-style-type: none"> • Could conduct a desktop analysis of the fish species present and Project operations in order to estimate entrainment and assign injury and mortality estimates based on Project O&M.
Aquatic Habitat and Sediment Characterization	Operations from the Projects have the potential to affect quantity and quality of aquatic habitat for fish populations within Project-affected reaches. There is limited information available to characterize habitat types, identify spawning patches, or to determine potential habitat-related limiting factors for the fish populations.	<p>Aquatic Habitat Assessment (AQ-3)</p> <ul style="list-style-type: none"> • Pedestrian surveys to delineate aquatic habitat could be conducted in Project-affected reaches during late summer/fall base flows. • Concurrent with habitat mapping, the location, size, quality, and particle distribution of spawnable gravel patches (i.e., coarse sediment) could be recorded.
Botanical	Special-status botanical resources or USFS SCC that are either known or have the potential to occur in the Project areas and could be affected by Project O&M, including Ute ladies'-tresses. Introduction and/or spread of invasive plant populations have the potential to occur due to Project maintenance activities. There is limited current information available on the Project for special status botanical, USFS SCC, or invasive plant populations.	<p>Botanical Survey (TERR-1)</p> <ul style="list-style-type: none"> • A literature review could be conducted to determine if any special-status botanical resources or invasive species have been identified as having the potential to occur within the Project areas. • Could conduct mapping of potentially suitable habitat for special status plants. • May conduct pedestrian surveys focused around areas of Project features and those likely to be impacted by project O&M activities
Wildlife and RTE	Potential effects from Project O&M on special-status wildlife species that are either known or have the potential to occur in the Project areas, including the	<p>General Wildlife Study (TERR-2)</p> <ul style="list-style-type: none"> • Could perform pedestrian surveys at appropriate times of the year (e.g., nesting season) to maximize the opportunity to

STUDY PLAN TOPIC	POTENTIAL RESOURCE ISSUE	PROPOSED STUDY AND APPROACH
	Yellow-billed Cuckoo. There is limited current information available on the Project for special status wildlife species or USFS SCC.	observe special-status wildlife species as determined by the literature review.
Recreation	Characterize existing recreation use and access, assess future recreation needs associated with the Projects. Use data is minimal for determining how recreation users are utilizing the Project areas.	<p>Recreation Use and Needs Study (REC-1)</p> <ul style="list-style-type: none"> • Could audit existing Exhibit R (as applicable) and update drawings with as-builts and any facilities proposed under a new license. • Visitor surveys could be conducted in the second study season using a survey form to collect recreation user characteristics and demographics (e.g., origin, gender, age and group size); satisfaction; type of activities; length of stay; and perception of crowdedness, site conditions, fees and site needs. • Spot counts and/or traffic/trail counters could also be implemented at certain locations but may not be necessary. • Creel surveys could potentially be conducted but may not be necessary.
Facilities Condition assessment	It is necessary to evaluate the condition of and public accessibility to existing recreation facilities directly related to the Projects. Limited information regarding existing conditions and accessibility is available.	<p>Existing Recreation Facilities Condition Assessment (REC-2)</p> <ul style="list-style-type: none"> • A facility inventory and condition assessment could be performed on Project recreation sites. • Generally, the study could include an inventory and cursory condition assessment of the following within the study area: general assessment of the condition of facilities; universal accessibility of facilities; public safety measures; signage and

STUDY PLAN TOPIC	POTENTIAL RESOURCE ISSUE	PROPOSED STUDY AND APPROACH
		wayfinding; and site-specific circulation roads, campsite spurs, and parking areas
Project Lands and Roads	It may be necessary to modify the current existing FERC Project Boundaries, lands, and roads to address current use and future needs. A comprehensive catalogue of how existing roads are used to access the Project is limited.	<p>Project Lands and Roads Study (LAND-1)</p> <ul style="list-style-type: none"> • May build on recent analysis of the existing FERC Project Boundaries • Could ensure no mapping errors or omissions are present in the representation of Project lands needed for operation under the current license. • May consult with IFP O&M staff to determine whether the existing FERC Project Boundaries adequately encompasses all lands needed for current operations or any proposed changes to facilities or operations. • Could assess the condition of roads or access trails identified for Project purposes.
Cultural	O&M for the Projects could affect cultural resources that are listed in or eligible for listing in the NRHP.	<p>Cultural Resource (CUL-1)</p> <ul style="list-style-type: none"> • May complete a records search and compile additional information from available repositories. • Could conduct a pedestrian survey within the APE for each Project in areas that have not been surveyed or should be resurveyed and identify any new sites. • Could record and document all sites and built environment resources.

STUDY PLAN TOPIC	POTENTIAL RESOURCE ISSUE	PROPOSED STUDY AND APPROACH
Tribal	O&M for the Projects may be currently or potentially impacting NRHP-eligible cultural resources.	Tribal Resource Study (TRI-1) <ul style="list-style-type: none"> • May conduct background archival research of the study area. • Could identify and document tribal resources identified within or immediately adjacent to the APE. • Could conduct a thorough Native American ethnographic/ethnohistoric survey of the APE. • Could conduct interviews with knowledgeable informants.

The Project will continue run-of-river operations without changes to facilities. No change to aesthetic resources is anticipated due to the proposed relicensing, and no studies or PME measures are proposed for the Projects. Additionally, continued run-of-river operation is not anticipated to disproportionately adversely affect the identified Environmental Justice communities. No studies or mitigation measures related to socioeconomic resources or Environmental Justice are proposed.

6.1.1 STUDY REQUESTS

During the scoping phase of this process (see Section 2.0), IFP will work with interested parties and relicensing participants to identify areas where there is little or no information relevant to issues of potential concern for project effects to the human and natural environments. Stakeholders may identify additional studies for consideration. As specified by 18 CFR 18 §5.9(b), any study request must:

- Describe the goals and objectives of each study proposal and the information to be obtained;
- If applicable, explain the relevant resource management goals of the agencies or Native American tribes with jurisdiction over the resource to be studied;
- If the requestor is not a resource agency, explain any relevant public interest considerations regarding the proposed study;
- Describe existing information concerning the subject of the study proposal, and the need for additional information;
- 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;
- 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;
- 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; and
- Describe any available cost-share funds or in-kind services that the sponsor of the request may contribute towards the study effort.

Study requests must be in MS Word or PDF format and be uploaded to the FERC eLibrary with a copy to: Richard Malloy (see Section 1.3 of this PAD for contact information).

6.2 REFERENCES

Federal Energy Regulatory Commission (FERC). 2020. Integrated Licensing Process (ILP). Available online: <https://www.ferc.gov/industries-data/hydropower/licensing/licensing-processes/integrated-licensing-process-ilp>. Accessed May 4, 2022.

7.0 COMPREHENSIVE MANAGEMENT PLANS

7.1 RELEVANT COMPREHENSIVE MANAGEMENT PLANS

Section 10(a)(2) of the FPA requires FERC to consider the extent to which a project is consistent with federal and state comprehensive plans for improving, developing, and conserving waterways affected by a project. In accordance with Section 10(a)(1) of the FPA, the list of FERC-approved federal and state comprehensive plans for Idaho was reviewed to determine applicability to the Projects (FERC 2022). The federal and state resource agencies have prepared a number of comprehensive plans, which provide a general assessment of a variety of environmental conditions in Idaho. These plans address wildlife resources and their habitats, fisheries management, recreational access, and scenic river management issues. The Projects’ consistency with pertinent state and federal comprehensive plans is discussed below. FERC currently lists 55 comprehensive plans for the state of Idaho, of which 20 are potentially relevant to the vicinity of the Projects (Table 7-1).

TABLE 7-1 LIST OF RESOURCE MANAGEMENT PLANS POTENTIALLY RELEVANT TO THE PROJECTS

FEDERAL, STATE, REGIONAL, LOCAL	RESOURCE MANAGEMENT PLANS/POLICIES
Federal	Bureau of Land Management. Forest Service. 1991. Snake River final activity/operations plan. Department of the Interior, Idaho Falls, Idaho. Department of Agriculture, Idaho Falls, Idaho. February 1991.
Federal	National Park Service. The Nationwide Rivers Inventory. Department of the Interior, Washington, D.C. 1993.
Federal	U.S. Fish and Wildlife Service. n.d. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C.
State	Idaho Department of Water Quality. 2018. Water Quality Standards. Boise, Idaho.
State	Idaho Department of Fish and Game. 2005. Idaho comprehensive wildlife conservation strategy. Boise, Idaho. September 2005.
State	Idaho Department of Fish and Game. 2007. Management plan for the conservation of Yellowstone cutthroat trout in Idaho. Boise, Idaho. April 2007.
State	Idaho Department of Fish and Game. 2008. Idaho mule deer management plan: 2008-2017. Boise, Idaho. March 2008.

FEDERAL, STATE, REGIONAL, LOCAL	RESOURCE MANAGEMENT PLANS/POLICIES
State	Idaho Department of Fish and Game. 2008. Management plan for the conservation of Snake River white sturgeon in Idaho. Boise, Idaho. September 2008.
State	Idaho Department of Fish and Game. 2010. Mule deer initiative action plan. Boise, Idaho. 2010.
State	Idaho Department of Fish and Game. 2019. Fisheries Management Plan, 2019-2024. Boise, Idaho. 2019.
State	Idaho Department of Fish and Game. 2013. Management plan for the conservation of Westslope cutthroat trout in Idaho. Boise, Idaho. November 2013.
State	Idaho Department of Fish and Game. 2014. Idaho Elk management plan: 2014-2024. Boise, Idaho. June 2014.
State	Idaho Department of Fish and Game. 2015. Idaho State Wildlife Action Plan (SWAP). Boise, Idaho. 2015.
State	Idaho Department of Fish and Game. Bonneville Power Administration. 1986. Pacific Northwest Rivers Study. Final report. Boise, Idaho.
State	Idaho Department of Parks and Recreation. 2018. Idaho Statewide Comprehensive Outdoor Recreation Plan 2018-2022. Boise, Idaho.
State	Idaho Water Resource Board. 2012. Idaho State water plan. Boise, Idaho. November 2012.
State	State of Idaho. State of Oregon. State of Washington. Confederated Tribes of the Warm Springs Reservation of Oregon. Confederated Tribes of the Umatilla Indian Reservation. Nez Perce Tribe. Confederated Tribes and Bands of the Yakima Indian Nation. 1987. Settlement Agreement pursuant to the September 1, 1983, Order of the U.S. District Court for the District of Oregon in Case No. 68-5113. Columbia River fish management plan. Portland, Oregon. November 1987.
Local	Idaho Water Resource Board. 2009. Eastern Snake Plain aquifer comprehensive aquifer management plan. Boise, Idaho. January 2009.
Regional	Northwest Power and Conservation Council. 2014. Columbia River Basin Fish and Wildlife Program. Portland, Oregon. Council Document 2014-12. October 2014.

FEDERAL, STATE, REGIONAL, LOCAL	RESOURCE MANAGEMENT PLANS/POLICIES
Regional	Northwest Power and Conservation Council. 2016. The Seventh Northwest Conservation and Electric Power Plan. Portland, Oregon. Council Document 2016-02. February 2016.
Regional	Northwest Power and Conservation Council. 1988, 1991. Protected areas amendments and response to comments. Portland, Oregon.

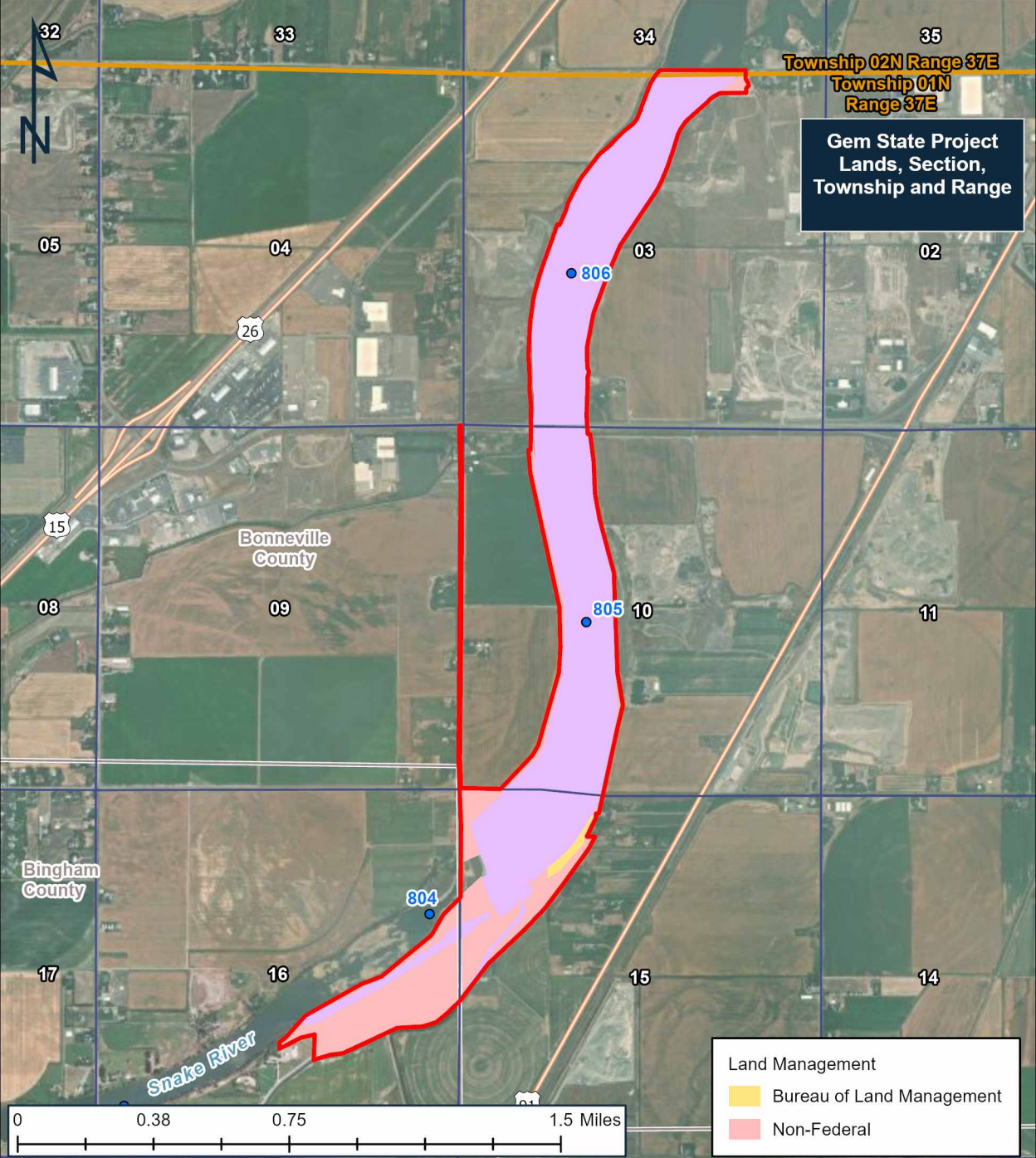
Source: FERC 2022

7.2 REFERENCES

Federal Energy Regulatory Commission (FERC). 2022. *List of Comprehensive Plans*. Federal Energy Regulatory Commission Office of Energy Projects, Washington, D.C., March 2022.



APPENDIX A
PROJECT MAPSET



Township 02N Range 37E
 Township 01N
 Range 37E

**Gem State Project
 Lands, Section,
 Township and Range**

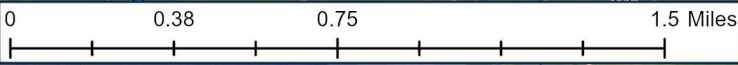
Bonneville
 County

Bingham
 County

Snake River

Land Management

- Bureau of Land Management
- Non-Federal



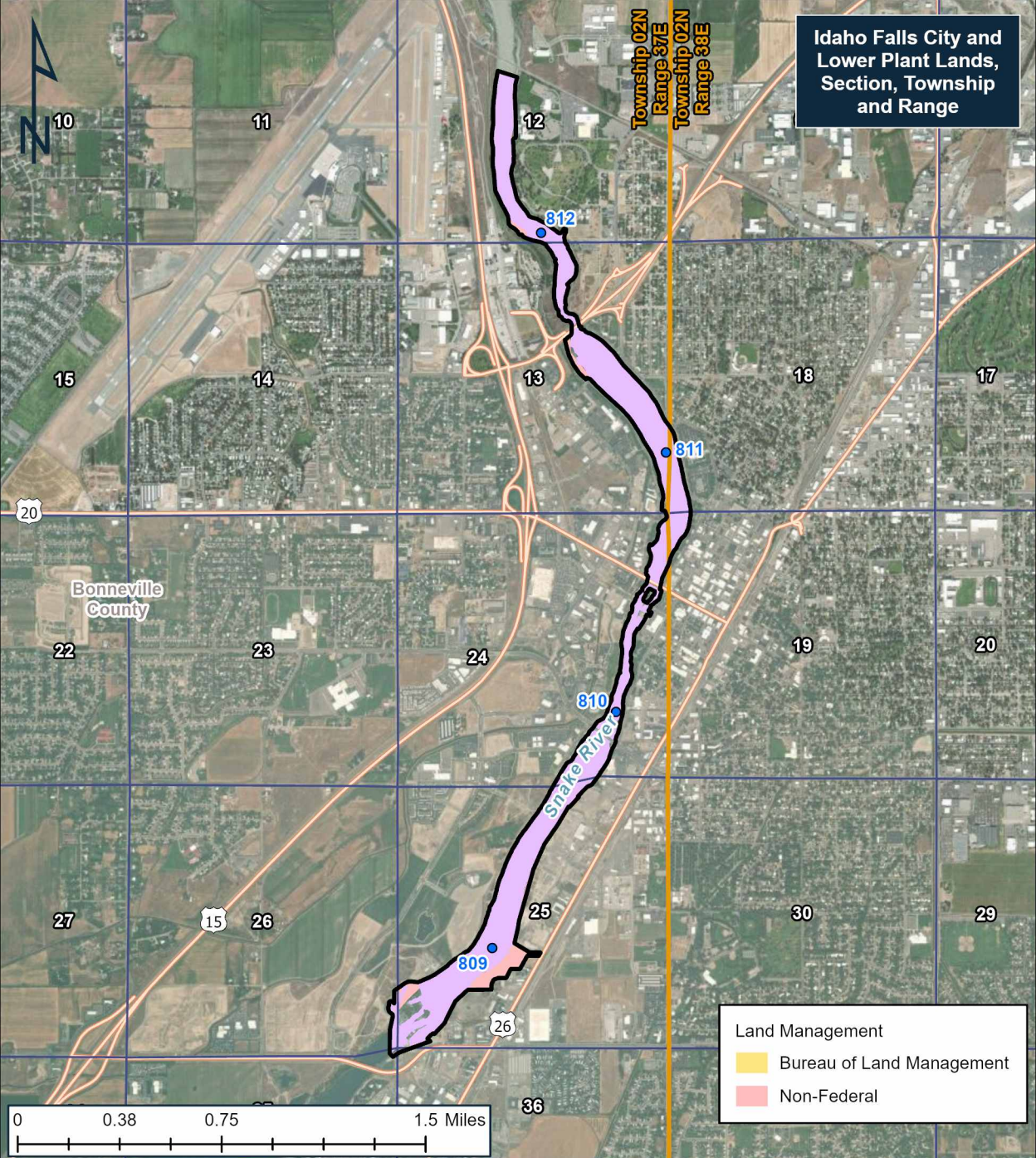
- PLSS Township/Range
- County
- PLSS Section
- River Mile
- Gem State Project Boundary
- Project Waterbody
- Highway

**IDAHO FALLS & GEM STATE
 HYDROELECTRIC PROJECTS
 FERC NOS. 2842 & 2952**

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 Checked By: KPH Date Checked: 06-21-2023

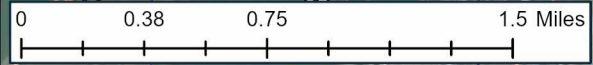
Page: 0 of 20

Idaho Falls City and Lower Plant Lands, Section, Township and Range



Land Management

- Bureau of Land Management
- Non-Federal



- PLSS Township/Range
- PLSS Section
- Project Waterbody
- Idaho Falls Project Boundary
- Highway
- County
- River Mile

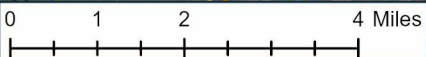
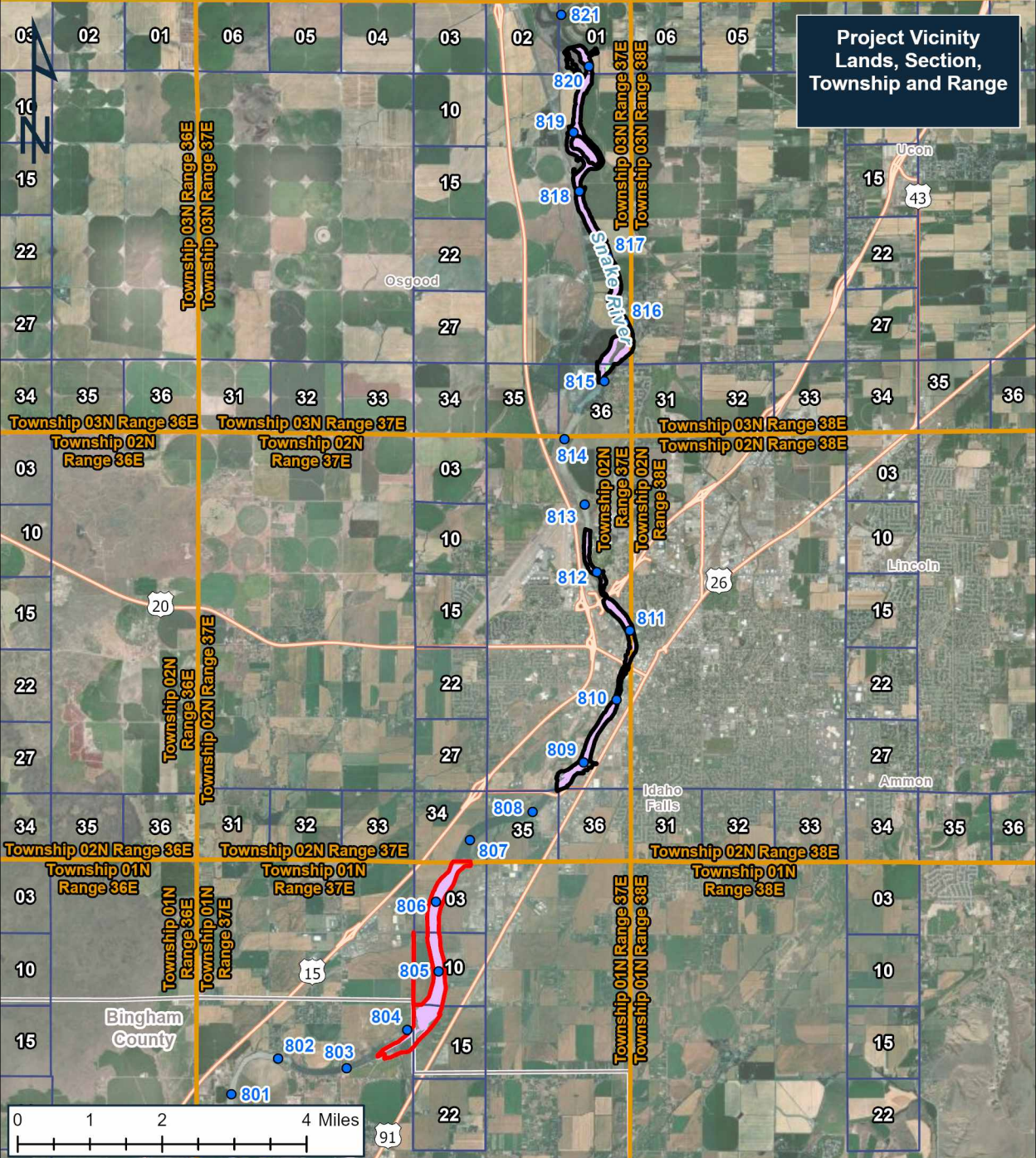
IDAHO FALLS & GEM STATE HYDROELECTRIC PROJECTS
FERC NOS. 2842 & 2952

IDAHO FALLS POWER

Drawn By: EHIM	Date Drawn: 06-15-2023
Checked By: KPH	Date Checked: 06-21-2023

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Project Vicinity Lands, Section, Township and Range



- PLSS Township/Range
- PLSS Section
- Idaho Falls Project Boundary
- Gem State Project Boundary
- Highway
- County
- River Mile
- Project Waterbody

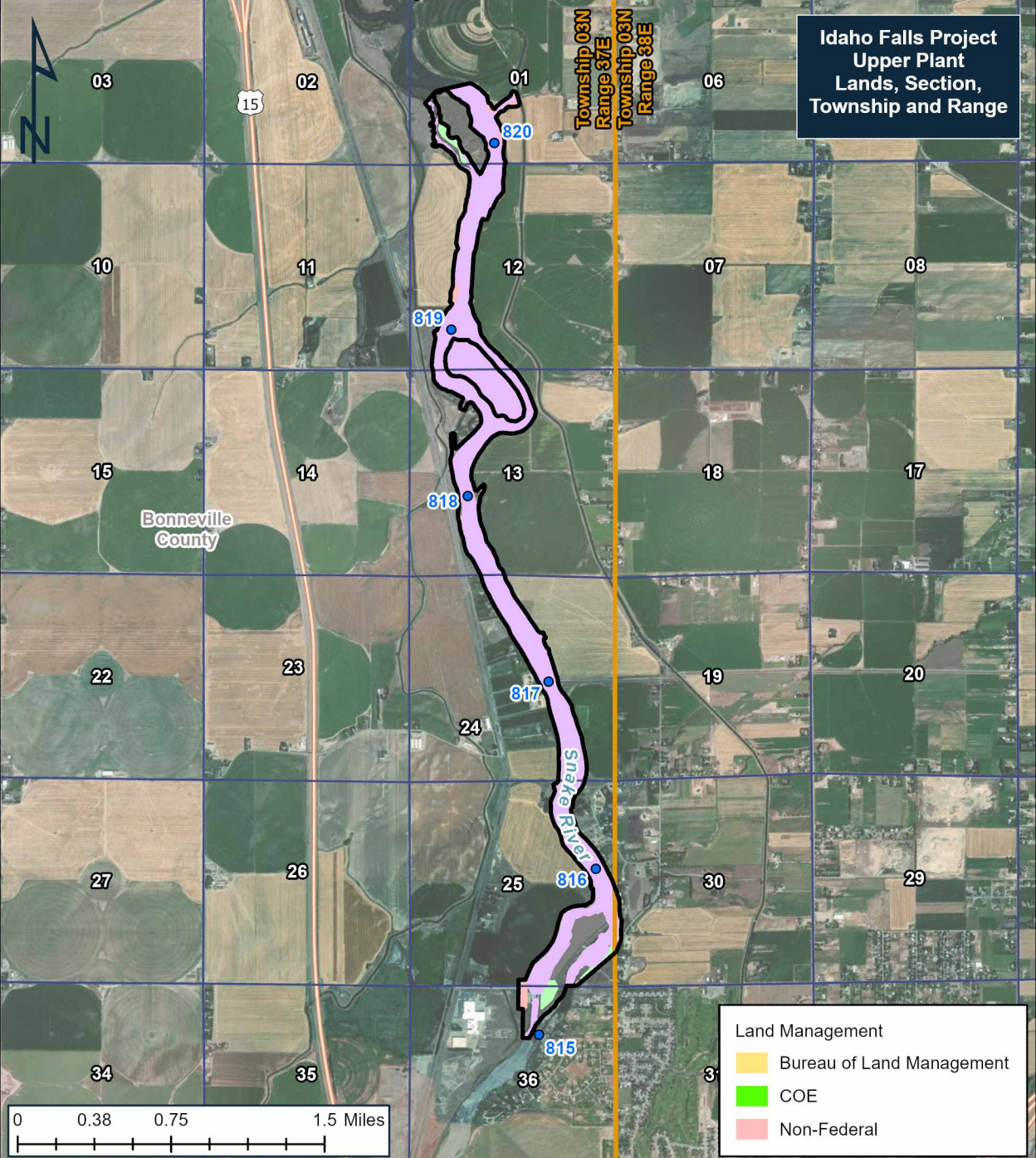
**IDAHO FALLS & GEM STATE
HYDROELECTRIC PROJECTS
FERC NOS. 2842 & 2952**

**IDAHO FALLS
POWER**

Drawn By: EHIM	Date Drawn: 06-15-2023
Checked By: KPH	Date Checked: 06-21-2023

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**Idaho Falls Project
Upper Plant
Lands, Section,
Township and Range**



Land Management

- Bureau of Land Management
- COE
- Non-Federal

Legend

- PLSS Township/Range
- Highway
- PLSS Section
- County
- Project Waterbody
- Idaho Falls Project Boundary
- River Mile

**IDAHO FALLS & GEM STATE
HYDROELECTRIC PROJECTS
FERC NOS. 2842 & 2952**

**IDAHO FALLS
POWER**

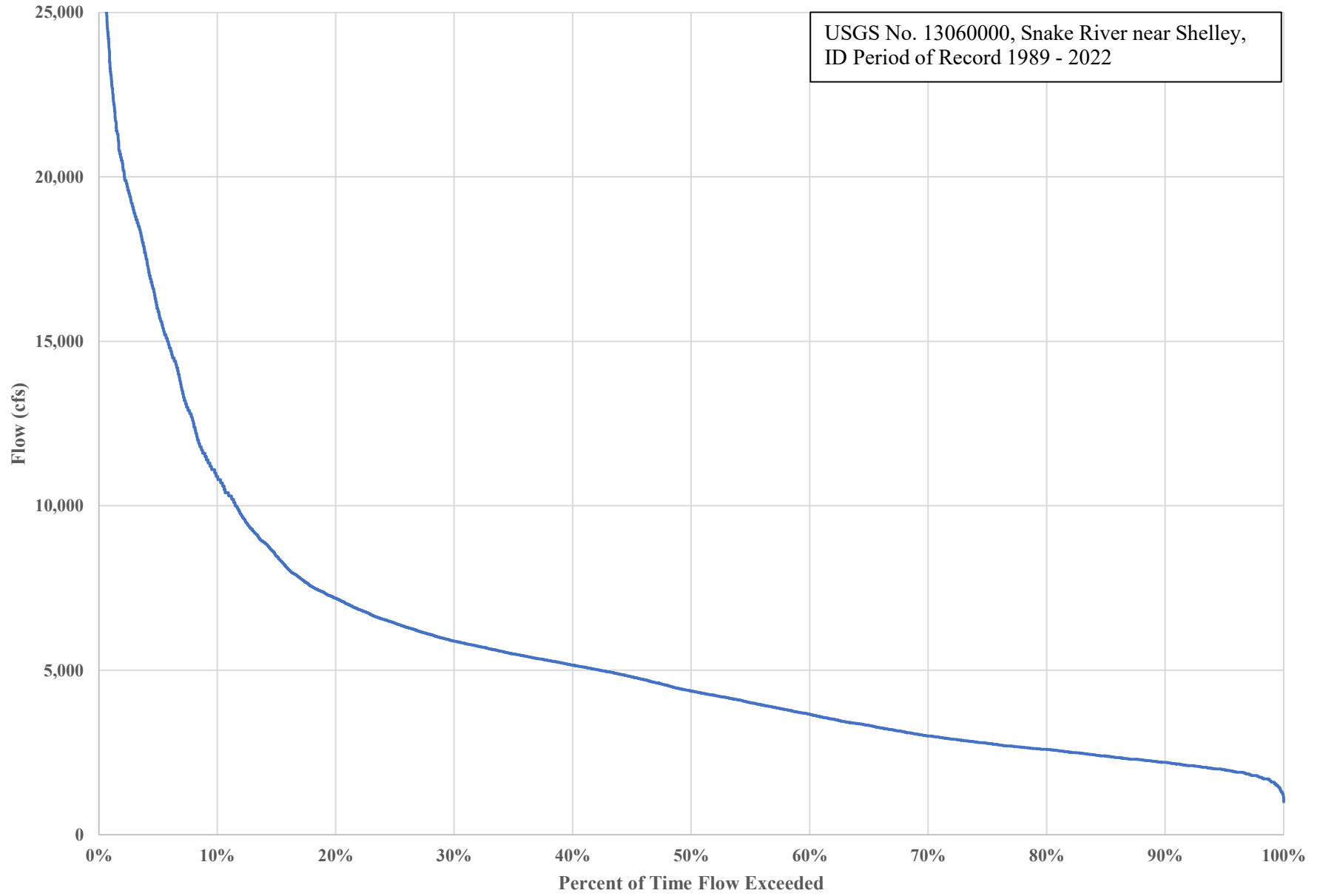
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 Checked By: KPH Date Checked: 06-21-2023

Page: 0 of 20

APPENDIX B
FLOW DURATION CURVES

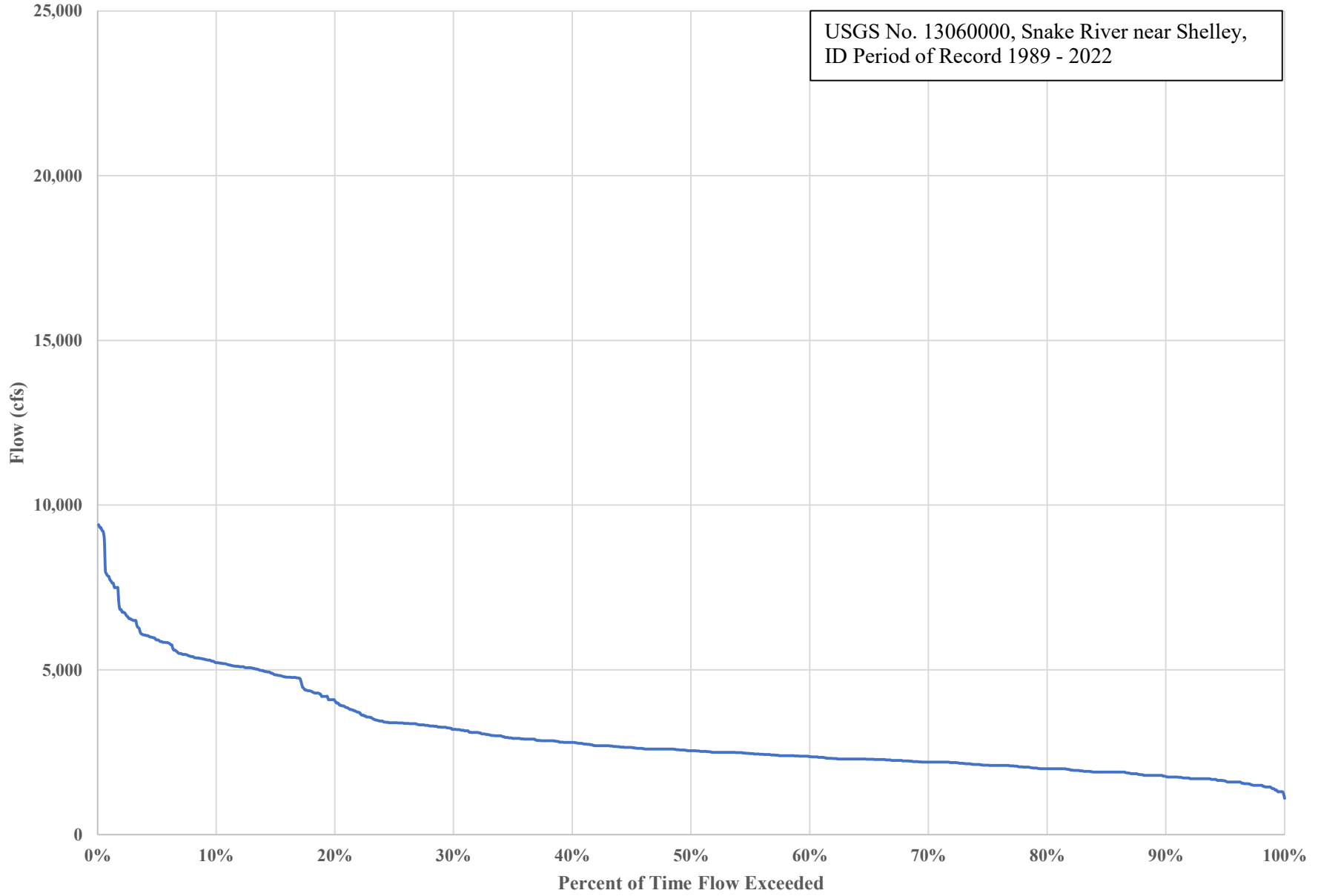
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USGS No. 13060000, Snake River near Shelley,
ID Period of Record 1989 - 2022



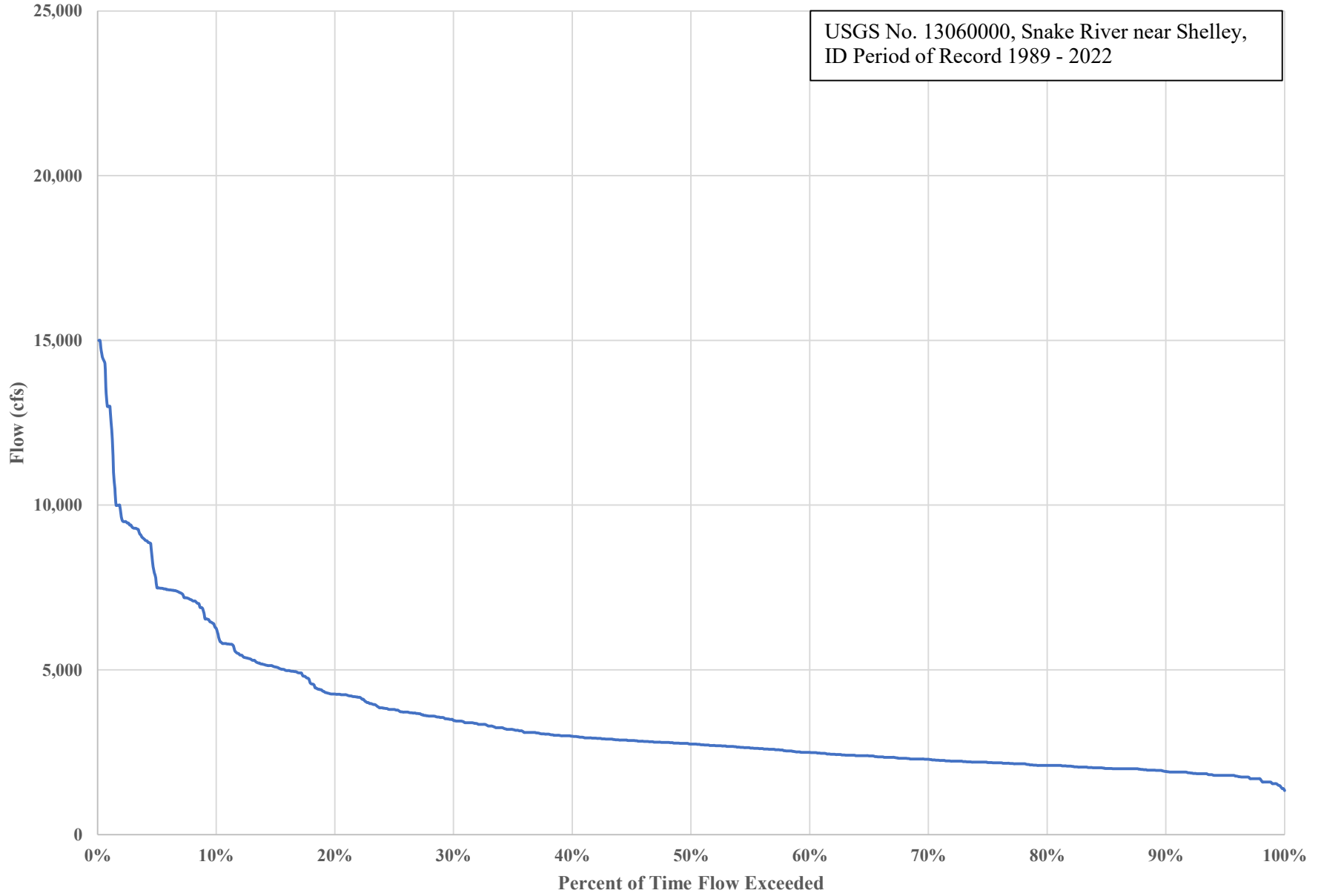
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ID Period of Record 1989 - 2022



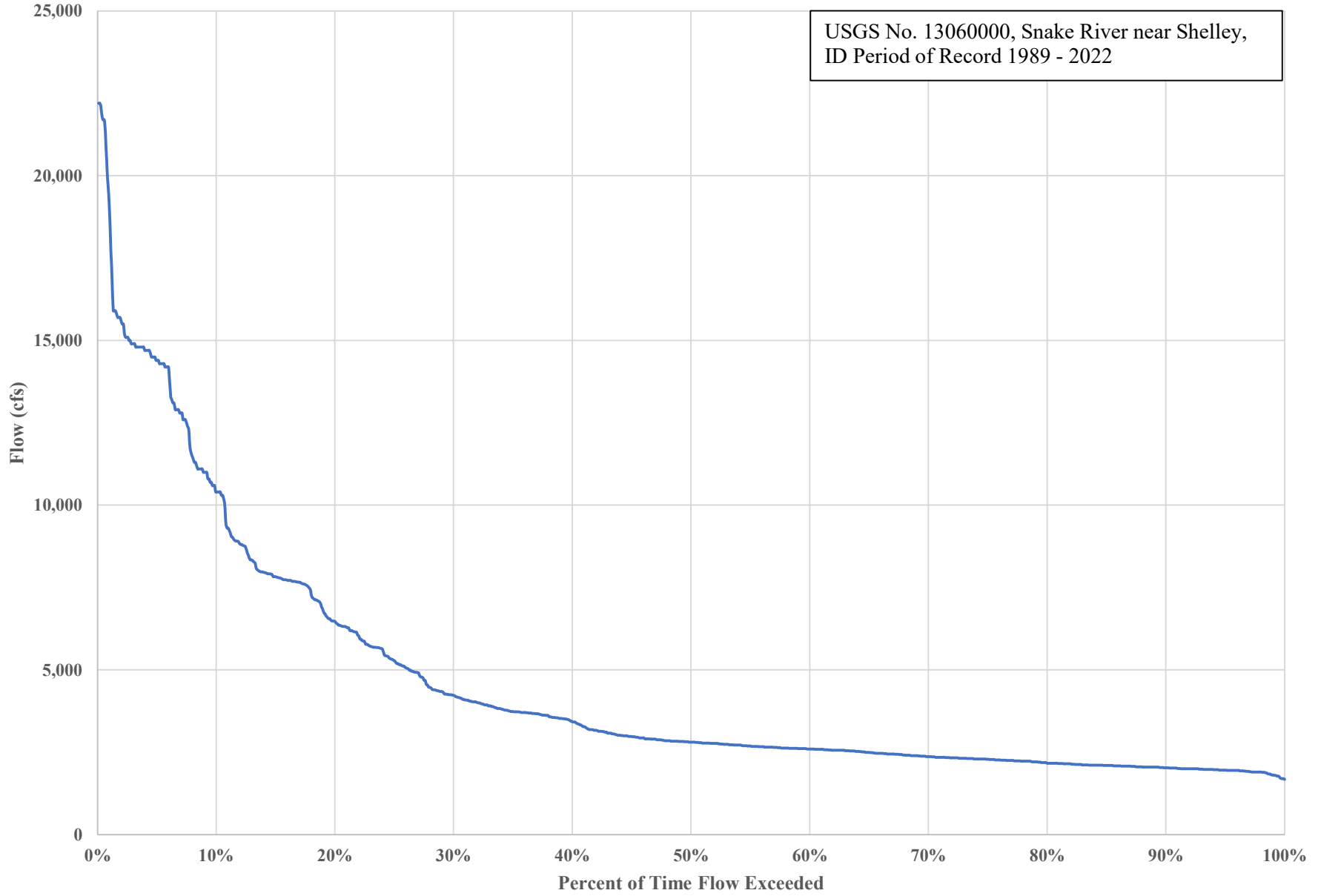
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ID Period of Record 1989 - 2022



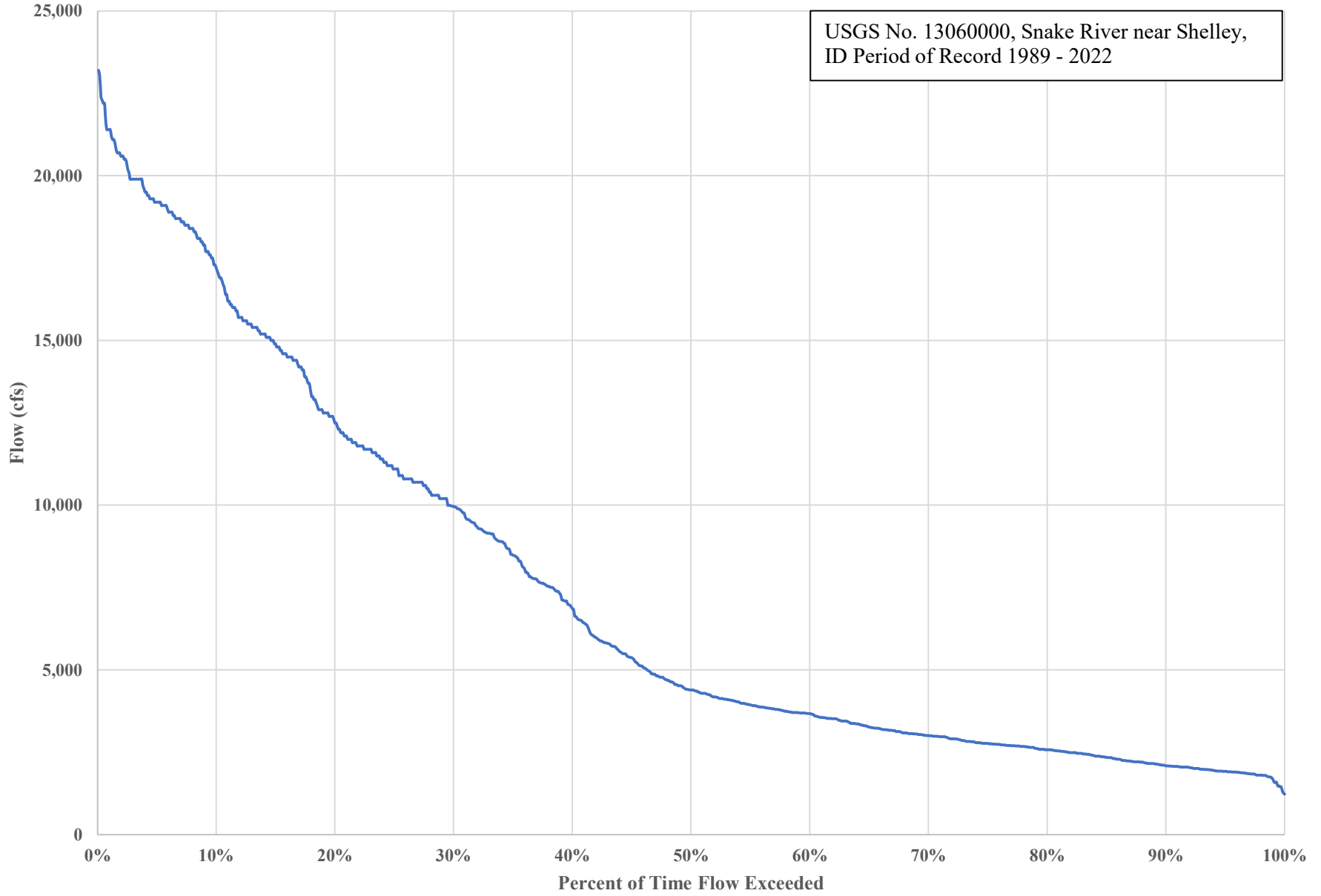
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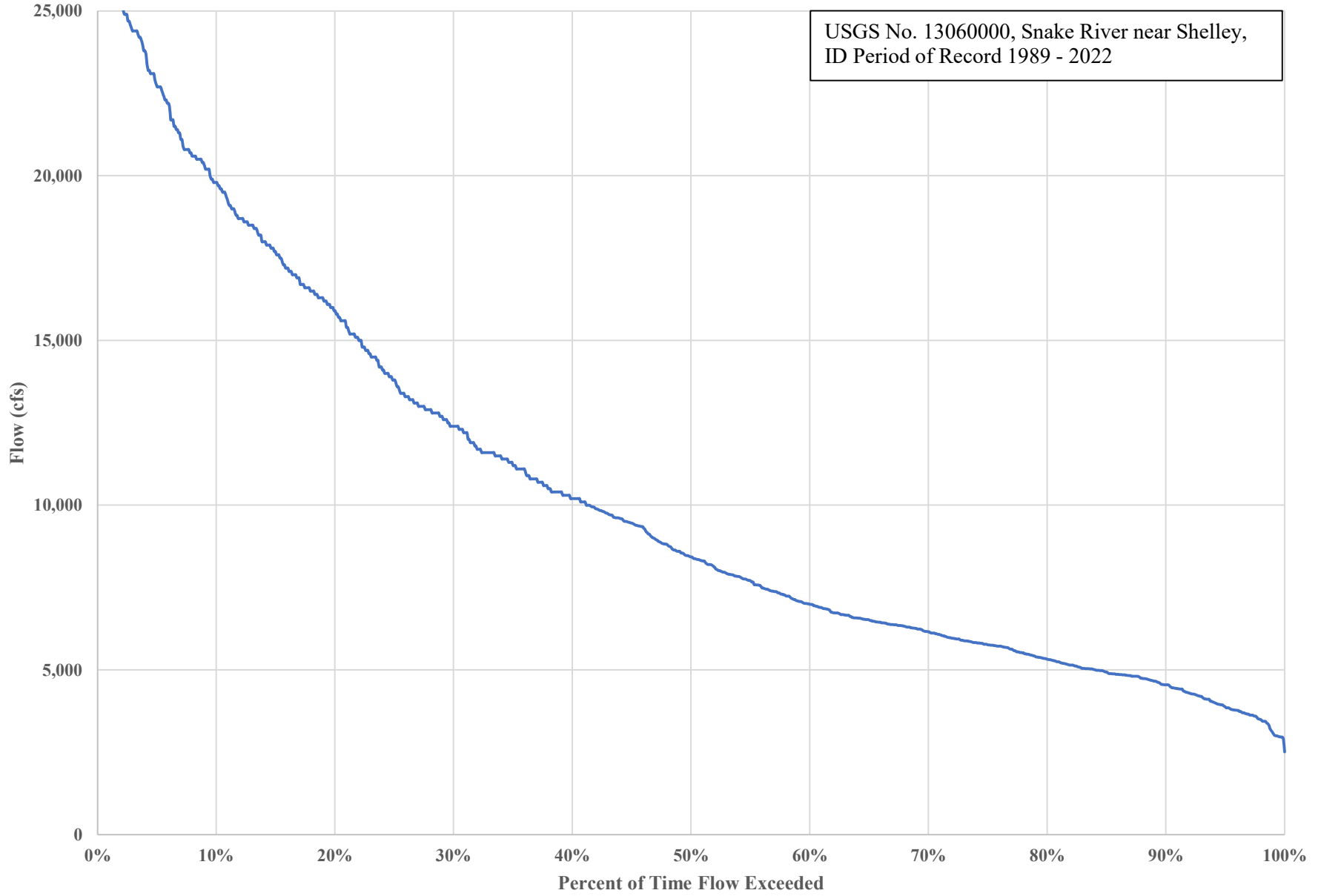
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ID Period of Record 1989 - 2022



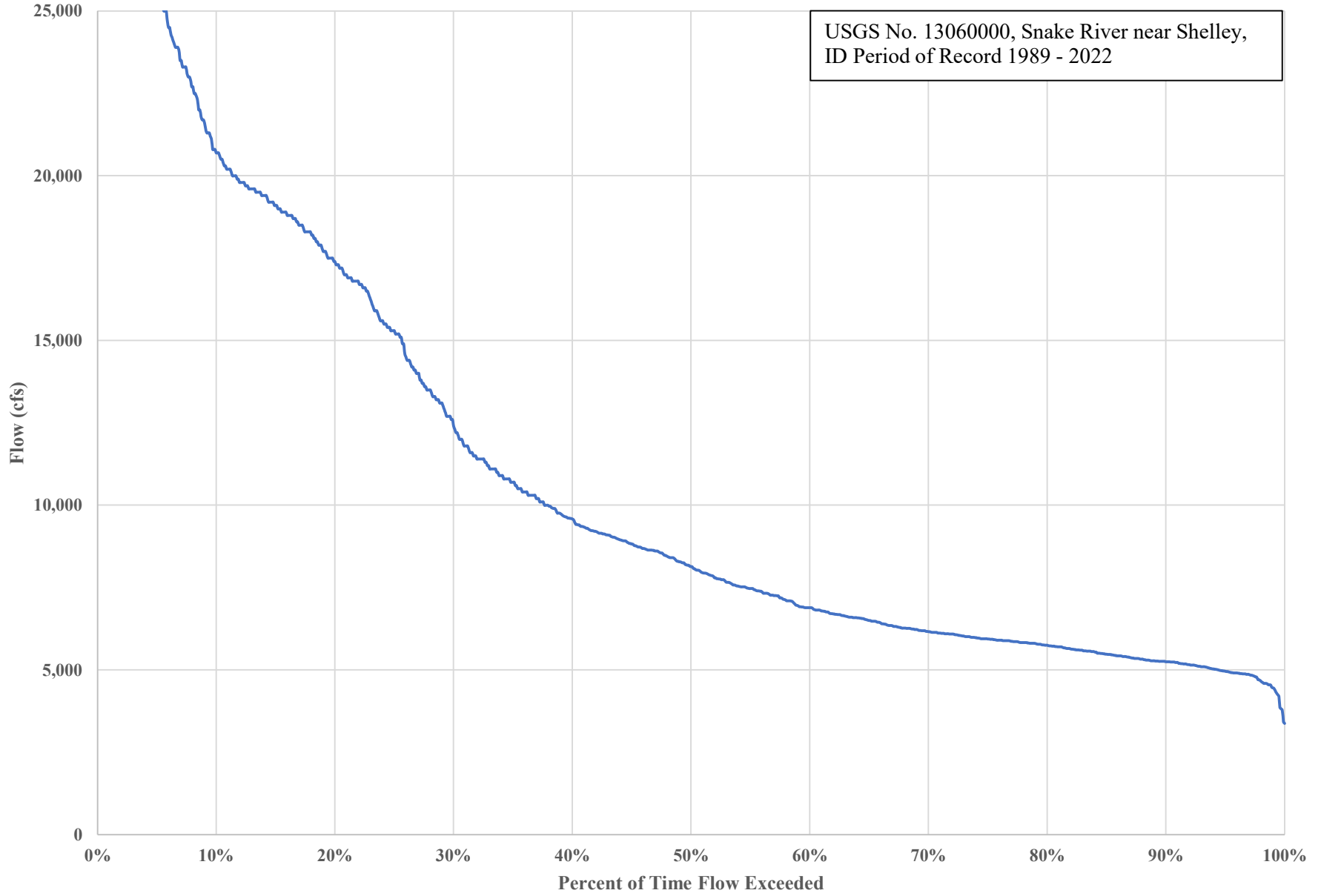
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ID Period of Record 1989 - 2022



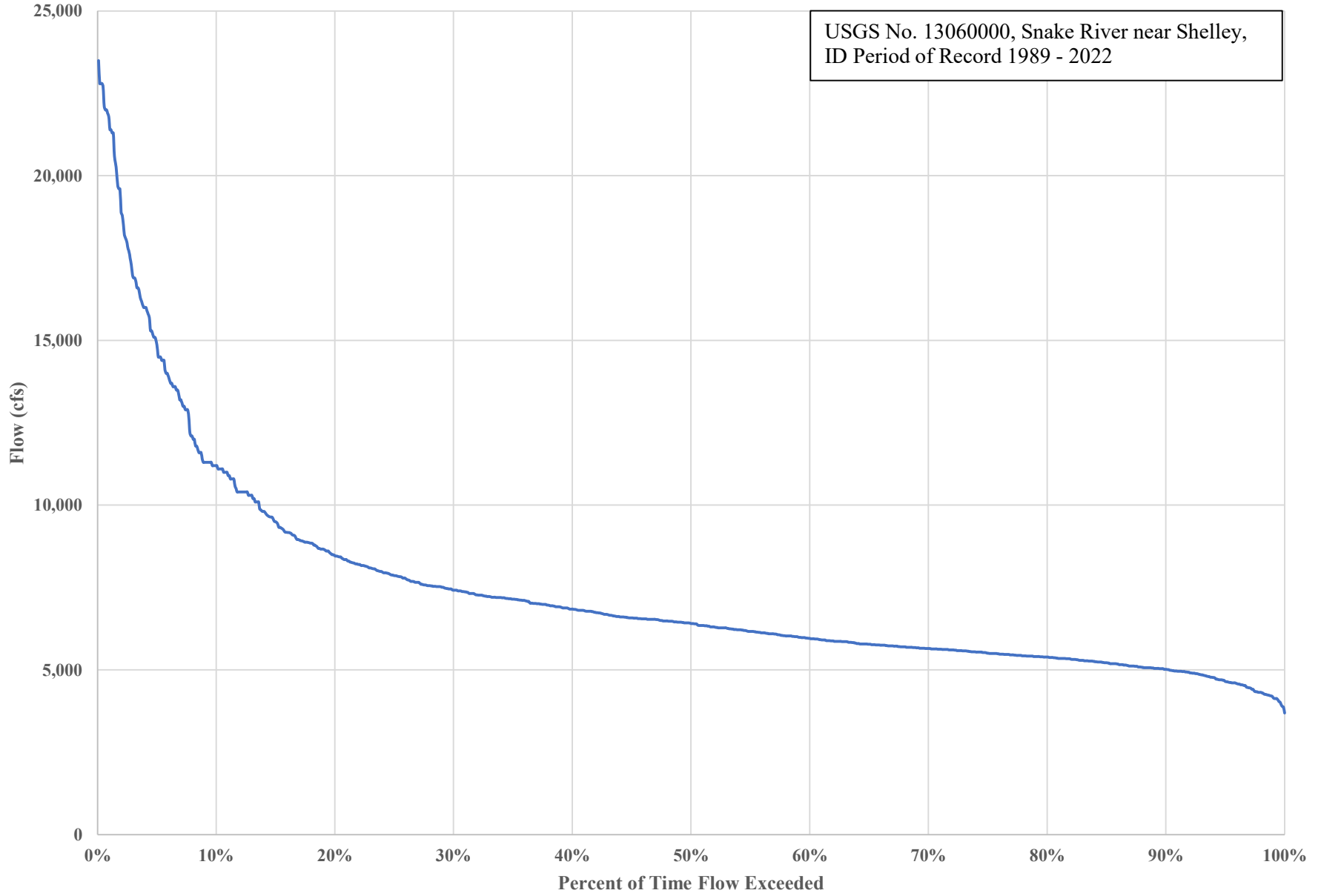
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ID Period of Record 1989 - 2022



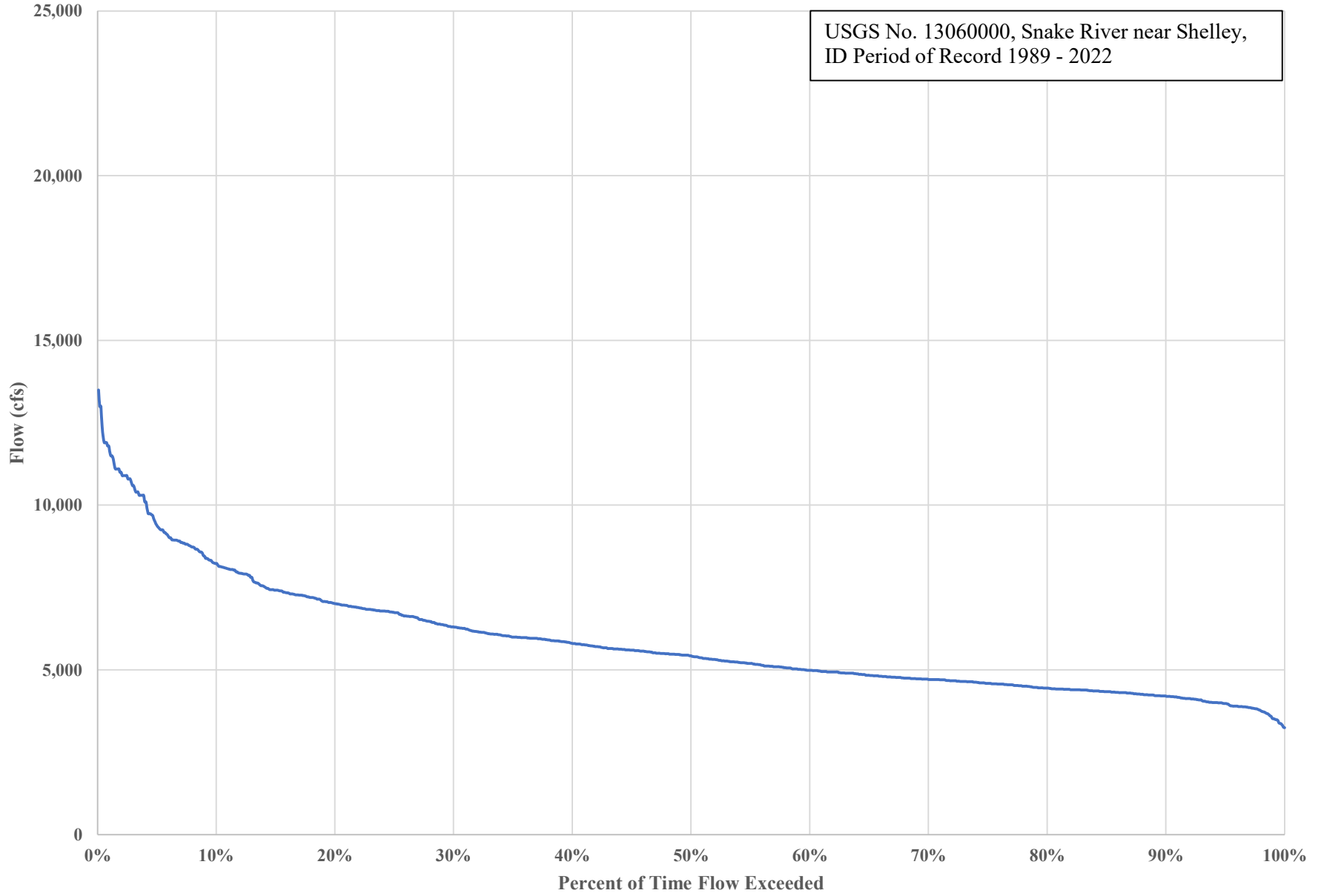
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ID Period of Record 1989 - 2022



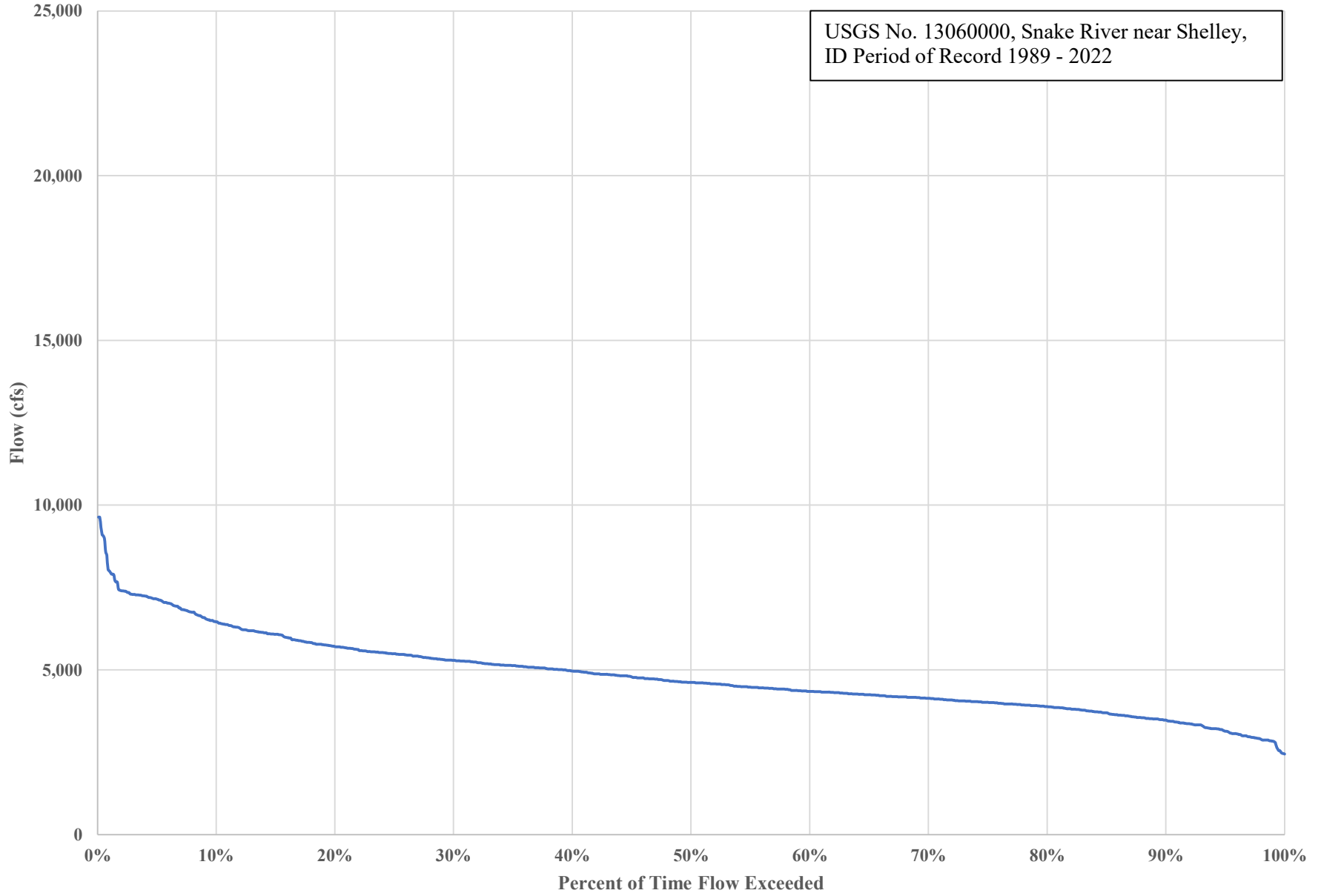
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ID Period of Record 1989 - 2022



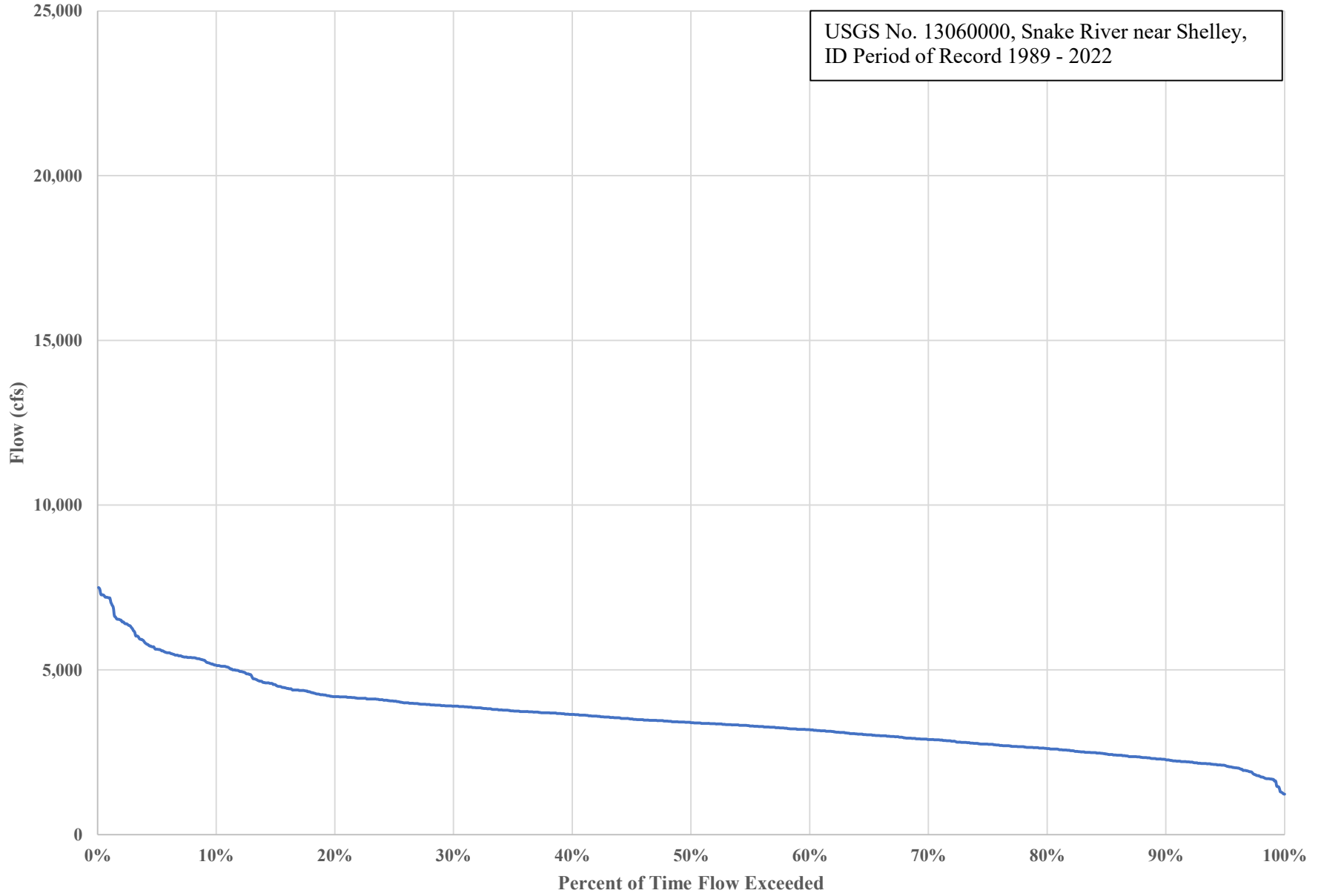
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ID Period of Record 1989 - 2022



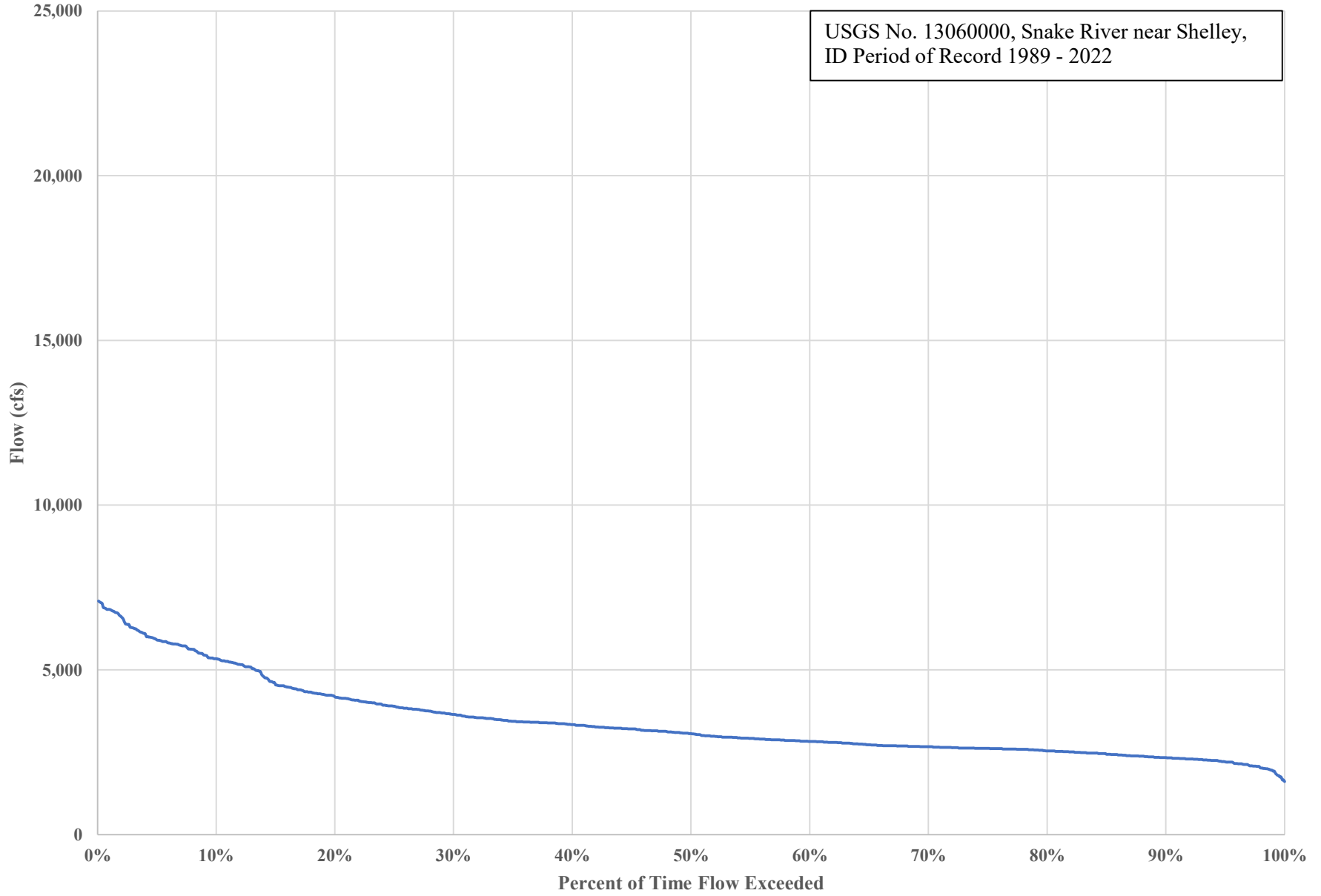
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ID Period of Record 1989 - 2022



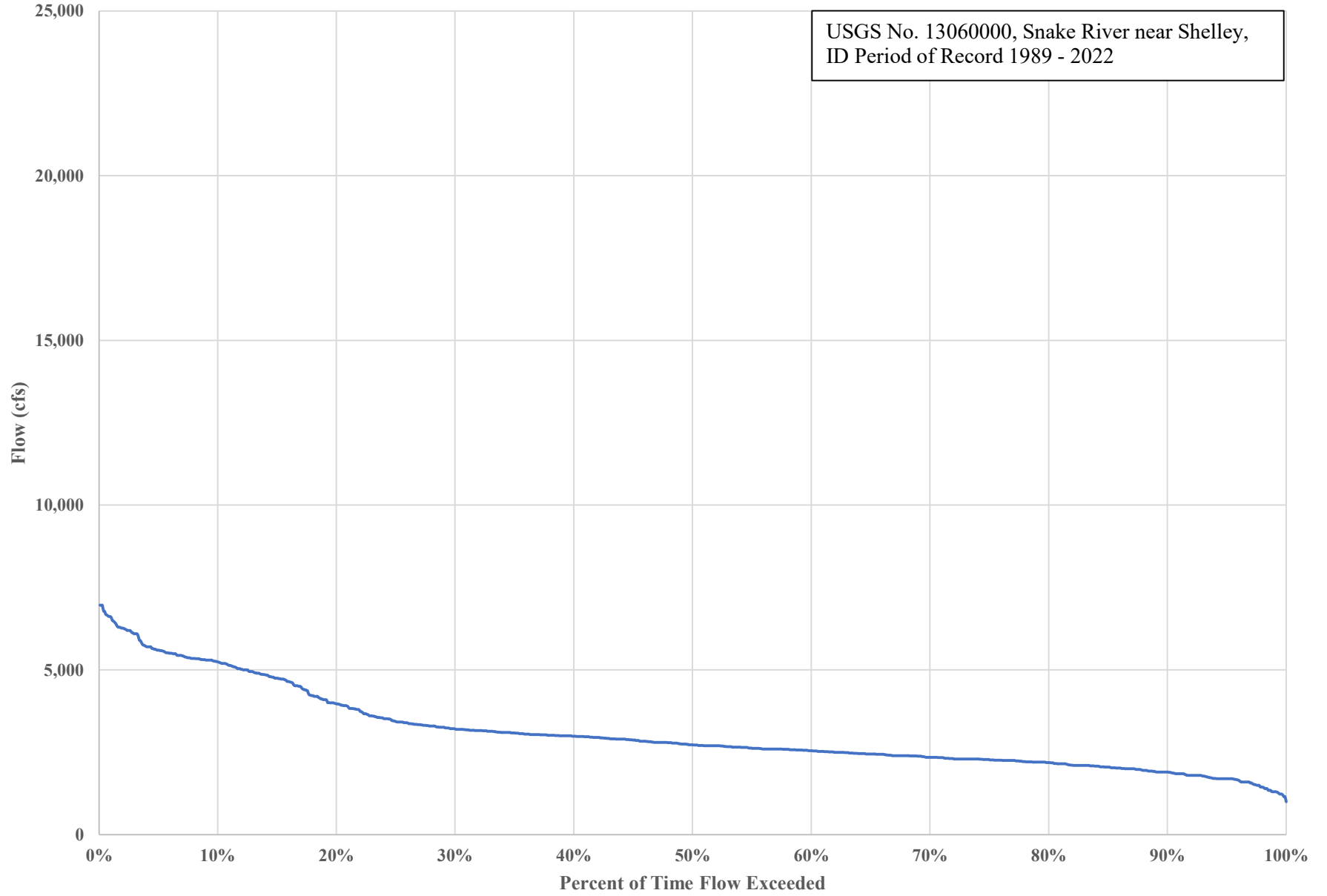
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ID Period of Record 1989 - 2022



December

USGS No. 13060000, Snake River near Shelley,
ID Period of Record 1989 - 2022



APPENDIX C
HISTORIC ARCHITECTURAL RESOURCES

Historic Sites (IHSI)

05/10/2022

IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-6	12	415826	4816040	IOOF Building	393 N. Park Ave.	Idaho Falls	84001090		Eligible	1/2/1997
19-17	12	414637	4815007	Popular Crossing Ferry	Snake River	Idaho Falls				
19-420	12	416162	4815642	O.E. Bell Junior High School	151 N Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-482	12	414658	4828791	Eagle Rock Ferry	Snake River	Idaho Falls	74000734		NR Listed	6/7/1974
19-556	12	415527	4816047	Eagle Rock Bridge	Snake River				Ineligible	6/23/1994
19-823	12	416102	4815775	Trinity United Methodist Church	237 N. Water Ave.	Idaho Falls	77000458		NR Listed	12/16/1977
19-825	12	415685	4815826	Peterson/Catmull Buildings (non-extant)	253-357 Eagle Rock St.	Idaho Falls			De-listed	11/4/1986
19-826	12	415675	4815831	Eagle Rock Building (non-extant)	361 Eagle Rock Street	Idaho Falls			De-listed	11/4/1986
19-827	12	415664	4815836	Sawyer (Elg) Building (non-extant)	361 Eagle Rock Street	<null>			De-listed	11/4/1986
19-880	12	416234	4815692	First Presbyterian Church	325 Elm St.	Idaho Falls	78001052		NR Listed	3/29/1978
19-1088	12	416232	4815567	Fuller & Soderquist Hospital	101 N. Placer Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-1089	12	416264	4815627	Frank Sheppard House	197 N. Placer Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-1091	12	416221	4815524	Walnut St. bldg. - 382	382 Walnut St.	Idaho Falls				
19-1264	12	416200	4816199	Tower Pumphouse	by site of Union Pacific RR station	Idaho Falls				
19-1298	12	416182	4815596	P. B. VanBlaricom House	315 Walnut St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-2012	12	416664	4815790	Patricia B. Hembree House	208 8th St.	Idaho Falls				
19-2013	12	416390	4815983	George Apartments	514 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-2455	12	415825	4816316	Bonneville County Courthouse	605 Capital Ave.	Idaho Falls	79000781		Eligible	1/2/1997
19-4391	12	415894	4816304	Hotel Idaho	482 W. C St. (482 Constitution Wy.)	Idaho Falls	84001042		Eligible	1/2/1997
19-4916	12	414737	4819167	Idaho Falls Railroad Bridge	NE of Idaho Falls spanning Snake River	Idaho Falls				
19-5767	12	415657	4814807	Idaho Falls Underpass	U.S. Hwy 26/Yellowstone	Idaho Falls				

Historic Sites (IHSI)

05/10/2022

IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
					Ave.					
19-9685	12	415956	4816269	Bonneville Hotel	410 Constitution Wy. (400 Block W. C St.)	Idaho Falls	84001032		Eligible	1/2/1997
19-9686	12	415980	4816308	Hudson's Café	691 N. Park	Idaho Falls				
19-9687	12	415990	4816328	Brunt Building	411-449 D St.	Idaho Falls			Unevaluated	1/2/1997
19-9689	12	415929	4816334	W. D St. house - 400 block	400 Block W. D St.	Idaho Falls				
19-9690	12	415924	4816227	US Post Office -- Idaho Falls	581 Park Ave.	Idaho Falls	79000782		Eligible	1/2/1997
19-9691	12	415897	4816251	Eastern Idaho Agriculture Credit Union	455 Constitution Way	Idaho Falls			Ineligible	1/2/1997
19-9692	12	415879	4816260	C.C. Anderson Department Store	485 Constitution Way	Idaho Falls			Eligible	5/8/2015
19-9693	12	415870	4816266	Law Offices	552-598 Capital Ave.	Idaho Falls			Eligible	1/2/1997
19-9694	12	415903	4816183	Earl Building	434 Park Ave.	Idaho Falls			Eligible	1/2/1997
19-9695	12	415873	4816188	Galusha & Higgins	444 B St.	Idaho Falls			Unevaluated	1/2/1997
19-9696	12	415859	4816196	Piper Jaffray	450 B St.	Idaho Falls			Ineligible	10/31/2006
19-9697	12	415853	4816199	I M & R	470 B St.	Idaho Falls			Unevaluated	1/2/1997
19-9698	12	415834	4816205	Washington Federal S & L	500 Capital Ave	Idaho Falls			Unevaluated	1/2/1997
19-9699	12	415814	4816162	Douglas-Farr Building	493 N. B Ave. (493 N. Capital Ave.)	Idaho Falls	84001035		NR Listed	8/30/1984
19-9700	12	415884	4816141	Hudson's	489 Park Ave.	Idaho Falls			Ineligible	10/1/2018
19-9701	12	415879	4816129	Centre Theatre	461 Park Ave.	Idaho Falls			Eligible	9/13/2013
19-9702	12	415866	4816115	Kress Building	451-455 N. Park Ave.	Idaho Falls	84001095		Eligible	9/13/2013
19-9703	12	415859	4816096	AJW Building	431-447 Park Ave.	Idaho Falls			Eligible	1/2/1997
19-9704	12	415854	4816085	Sideboard Kitchen Accessories	425-429 Park Ave.	Idaho Falls			Eligible	1/2/1997
19-9705	12	415851	4816077	Hockey Store	415-417-419 Park Ave.	Idaho Falls			Eligible	1/2/1997

Historic Sites (IHSI)

05/10/2022

IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-9706	12	415845	4816069	Subby's	418-422 A St.	Idaho Falls			Eligible	4/25/2007
19-9707	12	415821	4816088	Nelson Hotel	446 A St.	Idaho Falls			Ineligible	1/2/1997
19-9708	12	415804	4816097	Colonial Theatre	466 A St.	Idaho Falls			Eligible	9/13/2013
19-9709	12	415783	4816110	L. F. Hanson Building	496-498 A St.	Idaho Falls			Ineligible	1/2/1997
19-9710	12	415792	4816133	G & S Structural Engineering	440 Capital Ave.	Idaho Falls			Ineligible	1/2/1997
19-9711	12	415879	4816069	Salisbury Building	428-450 Park Ave	Idaho Falls			Eligible	11/21/2006
19-9712	12	415896	4816100	Pioneer Art and Frame	460 Park Ave	Idaho Falls			Ineligible	2/25/2010
19-9713	12	415923	4816113	The Sims Company Garage	490 Park Ave.	Idaho Falls			Unevaluated	7/2/2019
19-9714	12	415959	4816086	The Bon Marche	477 Shoup Ave.	Idaho Falls			Ineligible	1/2/1997
19-9715	12	415959	4816060	Scott's Stationers	459 Shoup Ave.	Idaho Falls			Ineligible	1/2/1997
19-9716	12	415938	4816027	First Security Bank	320 A St.	Idaho Falls			Ineligible	1/2/1997
19-9717	12	415901	4816040	W. A St. bldg - 352	352 W. A St.	Idaho Falls				
19-9718	12	415895	4816042	W. A St. bldg - 358	358 W. A St.	Idaho Falls				
19-9719	12	415891	4816049	Great Harvest Bread Co.	360 A St.	Idaho Falls			Ineligible	1/2/1997
19-9720	12	415955	4816200	N. Park bldg. - 566/560	566/560 N. Park	Idaho Falls				
19-9721	12	415941	4816175	Harris Publishing Inc.	520-530-540 Park Ave.	Idaho Falls			Eligible	1/2/1997
19-9722	12	415948	4816160	Public Restroom	390 B St.	Idaho Falls			Ineligible	1/2/1997
19-9723	12	415941	4816145	Kugler's Jewelers	380 B St.	Idaho Falls			Ineligible	1/2/1997
19-9724	12	415954	4816139	Rogers Hotel Annex	360 B St.	Idaho Falls			Eligible	1/2/1997
19-9725	12	415986	4816135	Rogers Hotel	545 Shoup Ave.	Idaho Falls			Eligible	9/13/2013
19-9726	12	415950	4816191	N. Park bldg. - 552	552 N. Park	Idaho Falls				

Historic Sites (IHSI)

05/10/2022

IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-9727	12	415988	4816192	Rogers Brothers Seed Company	357 Constitution Way	Idaho Falls			Eligible	1/2/1997
19-9728	12	416012	4816187	Underwood Hotel	347-349 Constitution Wy. (343-349 W. C St.)	Idaho Falls	84001102		Eligible	1/2/1997
19-9729	12	416021	4816180	Printcraft Press	319 Constitution Way	Idaho Falls			Ineligible	1/2/1997
19-9730	12	416050	4816229	Idaho Falls City Building	308 W. C St.	Idaho Falls	84001092		Eligible	1/2/1997
19-9731	12	416021	4816254	City Maintenance	300 block C	Idaho Falls				
19-9732	12	415999	4816247	Public Works	380 C	Idaho Falls				
19-9733	12	415987	4816253	City Annex	620 Park	Idaho Falls				
19-9734	12	416106	4816260	Custom Interiors Unlimited	262 Constitution Way	Idaho Falls			Unevaluated	1/2/1997
19-9735	12	416099	4816246	Custom Interiors Unlimited	262 Constitution Way	Idaho Falls			Unevaluated	1/2/1997
19-9736	12	416078	4816204	Nick's Trading Co.	262 Constitution Way	Idaho Falls			Unevaluated	1/2/1997
19-9737	12	416035	4816124	A Street Village	548 Shoup Ave.	Idaho Falls			Eligible	1/2/1997
19-9738	12	416033	4816101	Montgomery Ward Building	504-520 Shoup Ave.	Idaho Falls	84001096		Eligible	1/2/1997
19-9739	12	416055	4816081	Ahlstrom's Light House	242 B St.	Idaho Falls				
19-9740	12	416067	4816094	Chamber of Commerce	575 Yellowstone	Idaho Falls				
19-9741	12	416088	4816093	Four Seasons Greenhouse	545 N. Yellowstone	Idaho Falls			Unevaluated	1/2/1997
19-9742	12	415999	4816072	Coben Plaza	474 Shoup Ave.	Idaho Falls			Eligible	9/13/2013
19-9743	12	416002	4816045	Town Square	478 Shoup Ave.	Idaho Falls			Unevaluated	1/2/1997
19-9744	12	415974	4816036	Chili Shop	430-432 Shoup Ave.	Idaho Falls			Unevaluated	1/2/1997
19-9745	12	415968	4816028	Executive Suites	414 Shoup Ave.	Idaho Falls			Ineligible	4/10/2007
19-9746	12	415962	4816003	ERM Offices	402-408 Shoup Ave.	Idaho Falls			Ineligible	4/10/2007
19-9747	12	415765	4816080	Cooper Norman and Co.	390 N. Capital	Idaho Falls			Unevaluated	1/2/1997

Historic Sites (IHSI)

05/10/2022

IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-9748	12	415777	4816075	Cooper Norman and Co.	390 N. Capital	Idaho Falls			Unevaluated	1/2/1997
19-9749	12	415789	4816069	Wheat Blossom Bakery	445 A St.	Idaho Falls			Ineligible	7/31/2007
19-9750	12	415794	4816053	Books & Co. / DD Mudd	435-439 A St.	Idaho Falls			Unevaluated	1/2/1997
19-9752	12	415825	4816034	Insights Bead Store	375-387 Park Ave.	Idaho Falls			Unevaluated	1/2/1997
19-9753	12	415822	4816028	Print Masters International	369 Park Ave.	Idaho Falls			Unevaluated	1/2/1997
19-9754	12	415820	4816023	Navajo Spirit Gallery	367 Park Ave.	Idaho Falls			Ineligible	10/31/2006
19-9755	12	415817	4816017	Variety Mart	365 Park Ave.	Idaho Falls			Eligible	6/25/2021
19-9756	12	415807	4816003	Samoa Club	339-345 Park Ave.	Idaho Falls			Unevaluated	1/2/1997
19-9757	12	415799	4815989	Royal Shoe Shop	321-329 Park Ave.	Idaho Falls			Eligible	3/17/2020
19-9758	12	415793	4815980	C.W. Mulhall Building	301 Park Ave. / 410 Broadway	Idaho Falls			Ineligible	9/27/2006
19-9759	12	415764	4815989	J.C. Penney Store	440 W. Broadway	Idaho Falls			Ineligible	5/28/2008
19-9760	12	415768	4815937	Ferrell's Clothing Store	417 W. Broadway	Idaho Falls			Unevaluated	7/2/2019
19-9761	12	415717	4815939	Idaho Falls Public Library	400 block W. Broadway	Idaho Falls				
19-9763	12	415854	4816020	Farmers and Merchants Bank Building	396 Park Ave. / 383 W. A St.	Idaho Falls	84001037		NR Listed	9/5/2014
19-9764-9766	12	415869	4816021	Ingram's Fine Jewelers	369-371 A St.	Idaho Falls			Ineligible	1/2/1997
19-9767	12	415879	4816015	Paper Bag Princess / Anna's Pantry	357 A St.	Idaho Falls			Ineligible	1/2/1997
19-9768	12	415885	4816012	Leymaster Jewelry	351 A St.	Idaho Falls			Ineligible	1/2/1997
19-9769	12	415890	4816009	Elegance in Art	343 A St.	Idaho Falls			Ineligible	1/2/1997
19-9770	12	415896	4816005	Deluxe Barber Shop	335-339 A St.	Idaho Falls			Eligible	1/2/1997
19-9771	12	415919	4815993	Shane Building	381 N. Shoup Ave.	Idaho Falls	84001101		Eligible	1/2/1997
19-9772	12	415899	4815972	John Henry Block	365 Shoup Ave.	Idaho Falls			Ineligible	1/2/1997

Historic Sites (IHSI)

05/10/2022

IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-9773	12	415832	4815989	Mama Inez	346 Park Ave.	Idaho Falls			Ineligible	9/6/2011
19-9774	12	415823	4815983	Pfaff Sewing Center	336 Park Ave.	Idaho Falls			Unevaluated	1/2/1997
19-9775	12	415846	4816003	Hasbrouck Building	362 Park Ave.	Idaho Falls	84001039		Eligible	1/2/1997
19-9776	12	415824	4815974	Dance Image	318 Park Ave.	Idaho Falls			Ineligible	10/31/2006
19-9777	12	415820	4815970	Visual Expressions	310-312 Park Ave.	Idaho Falls			Unevaluated	1/2/1997
19-9778	12	415812	4815961	Bar building	398 W. Broadway	Idaho Falls			Unevaluated	9/19/2006
19-9779	12	415839	4815945	Paris Cafe	354 W. Broadway	Idaho Falls			Eligible	1/2/1997
19-9780	12	415846	4815942	Paris Cafe	354A W. Broadway	Idaho Falls			Ineligible	1/2/1997
19-9781	12	415870	4815966	West One Bank Drive Thru	330 W. Broadway	Idaho Falls			Ineligible	1/2/1997
19-9782	12	415974	4815886	All State Insurance	244 W. Broadway	Idaho Falls			Unevaluated	1/2/1997
19-9784	12	415936	4815852	Grand Hotel and Bar	221 W. Broadway	Idaho Falls			Unevaluated	1/2/1997
19-9786	12	415850	4815900	Chesbro Co. Building	327 W. Broadway	Idaho Falls			Ineligible	9/27/2006
19-9787	12	415836	4815908	Antique Gallery	339-351 W. Broadway	Idaho Falls			Unevaluated	1/2/1997
19-9788	12	415818	4815913	Scenic Theatre	367 W. Broadway	Idaho Falls			Unevaluated	1/2/1997
19-9789	12	415803	4815922	Newer Building	385 W. Broadway	Idaho Falls			Unevaluated	1/2/1997
19-9790	12	415796	4815934	MusiCare Musical Instruments	319 W. Broadway	Idaho Falls			Unevaluated	1/2/1997
19-13559	12	415777	4828067	House		Coltman				
19-13560	12	415777	4827897	House		Coltman				
19-13561	12	416757	4827547	House		Coltman				
19-13565	12	415737	4828827	House		Coltman				
19-14571	12	416076	4817257	L Street House - 710	710 L Street	Idaho Falls				

Historic Sites (IHSI)

05/10/2022

IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-14572	12	416061	4817270	L Street House - 740	740 L Street	Idaho Falls				
19-14573	12	415998	4817264	L Street House - 795	795 L Street	Idaho Falls				
19-14574	12	416009	4817250	L Street House - 765	765 L Street	Idaho Falls				
19-14575	12	416103	4817202	L Street House - 669	669 L Street	Idaho Falls				
19-14576	12	416164	4817218	L Street House - 624	624 L Street	Idaho Falls				
19-14579	12	415935	4817173	K Street House - 791	791 K Street	Idaho Falls				
19-14580	12	415944	4817143	K Street House - 741	741 K Street	Idaho Falls				
19-14582	12	416037	4817108	Mound Street House - 1396	1396 Mound Street	Idaho Falls				
19-14583	12	416060	4817095	K Street House - 655	655 K Street	Idaho Falls				
19-14584	12	416087	4817082	K Street House - 619	619 K Street	Idaho Falls				
19-14585	12	416118	4817107	Sage Street House - 1405	1405 Sage Street	Idaho Falls				
19-14586	12	416133	4817132	Sage Street House - 1407	1407 Sage Street	Idaho Falls				
19-14587	12	416066	4817162	Mound Street House - 1446	1446 Mound Street	Idaho Falls				
19-14588	12	415931	4817089	J Street House - 760	760 J Street	Idaho Falls				
19-14589	12	415952	4817085	J Street House - 724	724 J Street	Idaho Falls				
19-14590	12	415972	4817072	J Street House - 706	706 J Street	Idaho Falls				
19-14591	12	415883	4817071	J Street House - 793	793 J Street	Idaho Falls				
19-14592	12	415948	4817035	J Street House - 708	709 J Street	Idaho Falls				
19-14593	12	415891	4816989	I Street House - 750	750 I Street	Idaho Falls				
19-14594	12	415864	4817002	I Street House - 766	766 I Street	Idaho Falls				
19-14595	12	415857	4817086	J Street House - 813	813 J Street	Idaho Falls				

Historic Sites (IHSI)

05/10/2022

IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-14596	12	415786	4817127	J Street House - 897	897 J Street	Idaho Falls				
19-14597	12	416002	4817050	J Street House - 696	696 J Street	Idaho Falls				
19-14598	12	416110	4816993	J Street House - 574	574 J Street	Idaho Falls				
19-14599	12	416122	4816985	J Street House - 562	562 J Street	Idaho Falls				
19-14600	12	416136	4816977	J Street House - 550	550 J Street	Idaho Falls				
19-14601	12	416150	4816971	J Street House - 520	520 J Street	Idaho Falls				
19-14602	12	416161	4816961	Canal Street House - 1305	1305 Canal Street	Idaho Falls				
19-14603	12	416196	4817023	Canal Street House - 1395	1395 Canal Street	Idaho Falls				
19-14604	12	416190	4817071	K Street House - 542	542 K Street	Idaho Falls				
19-14605	12	416185	4817153	L Street House - 561	561 L Street	Idaho Falls				
19-14606	12	416243	4817166	L Street House - 538	538 L Street	Idaho Falls				
19-14607	12	416257	4817161	L Street House - 526	526 L Street	Idaho Falls				
19-14608	12	416248	4817119	L Street House - 501	501 L Street	Idaho Falls				
19-14609	12	416262	4817170	L Street House - 525	526 L Street	Idaho Falls				
19-14610	12	416219	4817124	L Street House - 543	543 L Street	Idaho Falls				
19-14611	12	416316	4817265	Highland Street House - 520	520 Highland Street	Idaho Falls				
19-14612	12	416286	4817212	Highland Street House - 525	525 Highland Street	Idaho Falls				
19-14613	12	416303	4817272	Highland Street House - 530	530 Highland Street	Idaho Falls				
19-14614	12	416260	4817227	Highland Street House - 559	559 Highland Street	Idaho Falls				
19-14615	12	415850	4816700	Latter Day Saints Hospital/Riverview Hospital	Riverside Dr.	Idaho Falls				
19-14616	12	416304	4817146	L Street House - 492	492 L Street	Idaho Falls				

Historic Sites (IHSI)

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-14617	12	416316	4817139	L Street House - 474	474 L Street	Idaho Falls				
19-14618	12	416330	4817131	L Street House - 460	460 L Street	Idaho Falls				
19-14619	12	416274	4817093	L Street House - 497	497 L Street	Idaho Falls				
19-14620	12	416244	4817021	L Street House - 475	475 L Street	Idaho Falls				
19-14621	12	416301	4817077	L Street House - 459	459 L Street	Idaho Falls				
19-14622	12	416339	4817068	Idaho Street House - 1475	1475 Idaho Street	Idaho Falls				
19-14623	12	416354	4817048	Idaho Street House - 1458	1458 Idaho Street	Idaho Falls				
19-14624	12	416350	4817103	Idaho Street House - 1501	1501 Idaho Street	Idaho Falls				
19-14625	12	416357	4817115	Idaho Street House - 1525	1525 Idaho Street	Idaho Falls				
19-14626	12	416364	4817128	Idaho Street House - 1549	1549 Idaho Street	Idaho Falls				
19-14627	12	416395	4817082	Idaho Street House - 1502	1502 Idaho Street	Idaho Falls				
19-14628	12	416405	4817100	Idaho Street House - 1526	1526 Idaho Street	Idaho Falls				
19-14629	12	416376	4817145	Idaho Street House - 1575	1575 Idaho Street	Idaho Falls				
19-14630	12	416419	4817071	L Street House - 358	358 L Street	Idaho Falls				
19-14631	12	416357	4817001	Idaho Street House - 1450	1450 Idaho Street	Idaho Falls				
19-14632	12	416347	4816983	Idaho Street House - 1424	1424 Idaho Street	Idaho Falls				
19-14633	12	416304	4817007	Idaho Street House - 1401	1401 Idaho Street	Idaho Falls				
19-14634	12	416315	4817025	Idaho Street House - 1447	1447 Idaho Street	Idaho Falls				
19-14635	12	416316	4816943	Idaho Falls General Hospital	1398 Idaho Street	Idaho Falls				
19-14636	12	416291	4816901	J Street House - 390	390 J Street	Idaho Falls				
19-14637	12	416304	4816893	J Street House - 366	366 J Street	Idaho Falls				

Historic Sites (IHSI)

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-14638	12	416331	4816878	J Street House - 340	340 J Street	Idaho Falls				
19-14639	12	416414	4816826	J Street House - 258	258 J Street	Idaho Falls				
19-14640	12	416381	4816905	Lake Avenue House - 1357	1357 Lake Avenue	Idaho Falls				
19-14641	12	416368	4816913	K Street House - 325	325 K Street	Idaho Falls				
19-14642	12	416333	4816933	K Street House - 375	375 K Street	Idaho Falls				
19-14643	12	416372	4816981	K Street House - 374	374 K Street	Idaho Falls				
19-14644	12	416385	4816973	K Street House - 360	360 K Street	Idaho Falls				
19-14645	12	416398	4816966	K Street House - 320	320 K Street	Idaho Falls				
19-14646	12	416294	4816992	K Street House - 442	422 K Street	Idaho Falls				
19-14647	12	416272	4817028	K Street House - 456	456 K Street	Idaho Falls				
19-14648	12	416040	4816986	Sage Street House - 1285	1285 Sage Street	Idaho Falls				
19-14649	12	416076	4816966	J Street House - 599	599 J Street	Idaho Falls				
19-14650	12	416097	4816941	J Street House - 555	555 J Street	Idaho Falls				
19-14651	12	416110	4816934	J Street House - 545	545 J Street	Idaho Falls				
19-14652	12	416140	4816930	Canal Street House - 1285	1285 Canal Street	Idaho Falls				
19-14653	12	416130	4816910	Canal Street House - 1265	1265 Canal Street	Idaho Falls				
19-14654	12	416166	4816902	J Street House - 499	499 J Street	Idaho Falls				
19-14655	12	416179	4816894	J Street House - 475	475 J Street	Idaho Falls				
19-14656	12	416205	4816879	J Street House - 435	435 J Street	Idaho Falls				
19-14657	12	416219	4816872	J Street House - 425	425 J Street	Idaho Falls				
19-14658	12	416203	4816790	I Street House - 404	404 I Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-14659	12	416164	4816777	I Street House - 423	423 I Street	Idaho Falls				
19-14660	12	416181	4816837	I Street House - 438	438 I Street	Idaho Falls				
19-14661	12	416138	4816792	I Street House - 457	457 I Street	Idaho Falls				
19-14662	12	416168	4816845	I Street House - 444	444 I Street	Idaho Falls				
19-14663	12	416125	4816799	I Street House - 459	459 I Street	Idaho Falls				
19-14664	12	416155	4816852	I Street House - 474	474 I Street	Idaho Falls				
19-14665	12	416084	4816838	Canal Street House - 1193	1193 Canal Street	Idaho Falls				
19-14666	12	416079	4816825	Canal Street House - 1165	1165 Canal Street	Idaho Falls				
19-14667	12	416021	4816869	I Street House - 595	595 I Street	Idaho Falls				
19-14668	12	416052	4816925	Sage Street House - 1246	1246 Sage Street	Idaho Falls				
19-14669	12	416029	4816967	Sage Street House - 1275	1275 Sage Street	Idaho Falls				
19-14670	12	416065	4816947	Sage Street House - 1252	1252 Sage Street	Idaho Falls				
19-14671	12	416017	4816931	Sage Street House - 1221	1221 Sage Street	Idaho Falls				
19-14672	12	416004	4816938	I Street House - 624	624 I Street	Idaho Falls				
19-14673	12	416036	4817012	I Street House - 639	639 I Street	Idaho Falls				
19-14674	12	415947	4816900	I Street House - 655	655 I Street	Idaho Falls				
19-14675	12	415934	4816908	I Street House - 675	675 I Street	Idaho Falls				
19-14676	12	415922	4816951	I Street House - 699	699 I Street	Idaho Falls				
19-14677	12	416010	4816850	Sage Avenue House - 1154	1154 Sage Avenue	Idaho Falls				
19-14678	12	415950	4816843	H Street House - 610	610 H Street	Idaho Falls				
19-14679	12	415936	4816850	H Street Apartments - 640/642	640/642 H Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-14680	12	415945	4816682	G Street House - 556	556 G Street	Idaho Falls			Eligible	9/13/2013
19-14681	12	416051	4816773	Canal Street House - 1125	1125 Canal Street	Idaho Falls				
19-14682	12	416042	4816787	H Street House - 520	520 H Street	Idaho Falls				
19-14683	12	416032	4816796	H Street House - 542	542 H Street	Idaho Falls			Eligible	9/13/2013
19-14684	12	416010	4816808	H St. house - 560	560 H St.	Idaho Falls				
19-14685	12	416021	4816802	H Street House - 576	576 H Street	Idaho Falls				
19-14686	12	416083	4816756	H Street House - 496	496 H Street	Idaho Falls				
19-14687	12	416086	4816690	H Street House - 451	451 H Street	Idaho Falls				
19-14688	12	416112	4816693	H Street House - 451	421 H Street	Idaho Falls				
19-14689	12	416114	4816749	H Street House - 458	458 H Street	Idaho Falls				
19-14690	12	416125	4816710	H Street Duplex - 410-412	410-412 H Street	Idaho Falls				
19-14691	12	416150	4816720	H Street Duplex - 404-408	404-408 H Street	Idaho Falls				
19-14692	12	416170	4816757	Idaho Avenue House - 1153	1153 Idaho Avenue	Idaho Falls				
19-14693	12	416073	4816646	G Street House - 444	444 G Street	Idaho Falls				
19-14694	12	416059	4816654	G Street House - 446	446 G Street	Idaho Falls				
19-14695	12	416034	4816669	G Street House - 492	492 G Street	Idaho Falls				
19-14696	12	416118	4816661	Idaho Avenue House - 1053	1053 Idaho Avenue	Idaho Falls				
19-14697	12	416273	4816853	Idaho Avenue House - 1298	1298 Idaho Avenue	Idaho Falls				
19-14698	12	416399	4816768	J Street House - 259	259 J Street	Idaho Falls				
19-14699	12	416398	4816713	I Street House - 200	200 I Street	Idaho Falls				
19-14700	12	416212	4816761	I Street House - 399	399 I Street	Idaho Falls				

Historic Sites (IHSI)

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-14701	12	416225	4816754	I Street House - 389	389 I Street	Idaho Falls				
19-14702	12	416233	4816737	I Street House - 355	355 I Street	Idaho Falls				
19-14703	12	416246	4816730	I Street House - 347	347 I Street	Idaho Falls				
19-14704	12	416260	4816722	I Street House - 325	325 I Street	Idaho Falls				
19-14705	12	416273	4816715	I Street House - 305	305 I Street	Idaho Falls				
19-14706	12	416303	4816768	I Street House - 300	300 I Street	Idaho Falls				
19-14707	12	416290	4816775	I Street House - 320	320 I Street	Idaho Falls				
19-14708	12	416233	4816799	I Street House - 398	398 I Street	Idaho Falls				
19-14709	12	416332	4816751	I Street House - 288	288 I Street	Idaho Falls				
19-14710	12	416358	4816736	I Street House - 256	256 I Street	Idaho Falls				
19-14711	12	416372	4816728	I Street House - 240	240 I Street	Idaho Falls				
19-14712	12	416315	4816690	I Street House - 267	267 I Street	Idaho Falls				
19-14713	12	416399	4816678	I Street House - 201	201 I Street	Idaho Falls				
19-14714	12	416276	4816587	H Street House - 265	265 H Street	Idaho Falls				
19-14715	12	416267	4816592	H Street House - 263	263 H Street	Idaho Falls				
19-14716	12	416258	4816597	H Street House - 261	261 H Street	Idaho Falls				
19-14717	12	416253	4816612	H Street House - 295	295 H Street	Idaho Falls				
19-14718	12	416280	4816645	H Street & Lake Avenue Duplex - 284/1100	284 H Street/1100 Lake Avenue	Idaho Falls				
19-14719	12	416213	4816609	Lake Avenue Duplex - 1055	1055 Lake Avenue	Idaho Falls				
19-14720	12	416242	4816594	Lake Avenue Duplex - 1054	1054 Lake Avenue	Idaho Falls				
19-14721	12	416240	4816642	H Street House - 307	307 H Street	Idaho Falls				

Historic Sites (IHSI)

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-14722	12	416205	4816627	H Street House - 325	325 H Street	Idaho Falls				
19-14723	12	416192	4816634	H Street House - 335	335 H Street	Idaho Falls				
19-14724	12	416199	4816666	H Street House - 364	364 H Street	Idaho Falls				
19-14725	12	416194	4816699	H Street House - 370	370 H Street	Idaho Falls				
19-14726	12	416208	4816739	Idaho Avenue House - 1160	1160 Idaho Avenue	Idaho Falls				
19-14727	12	416155	4816646	Idaho Avenue House - 1074	1074 Idaho Avenue	Idaho Falls				
19-14728	12	416286	4816490	G Street House - 166	166 G Street	Idaho Falls				
19-14729	12	416323	4816473	G Street House - 170	170 G Street	Idaho Falls				
19-14730	12	416289	4816523	G Street House - 208	208 G Street	Idaho Falls				
19-14731	12	416276	4816531	G Street House - 210	210 G Street	Idaho Falls				
19-14732	12	416264	4816537	G Street House - 236	236 G Street	Idaho Falls				
19-14733	12	416251	4816545	G Street House - 260	260 G Street	Idaho Falls				
19-15363	12	416394	4816443	Idaho Falls Bonded Warehouse Co.	201 S. Boulevard	Idaho Falls				
19-15364	12	416398	4816298	N. Water Street House - 775	775 N. Water Street	Idaho Falls				
19-15365	12	416391	4816285	N. Water Street House - 757	757 N. Water Street	Idaho Falls				
19-15366	12	416376	4816258	N. Water Street House - 721	721 N. Water Street	Idaho Falls				
19-15367	12	416344	4816203	N. Water Street House - 675	675 N. Water Street	Idaho Falls				
19-15368	12	416363	4816139	N. Water Street House - 626	626 N. Water Street	Idaho Falls				
19-15369	12	416390	4816159	N. Water Street House - 660	660 N. Water Street	Idaho Falls				
19-15370	12	416364	4816184	N. Water Street House - 674	674 N. Water Street	Idaho Falls				
19-15371	12	416401	4816187	N. Water Street House - 696	696 N. Water Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15372	12	416382	4816146	N. Water Street House - 644	644 N. Water Street	Idaho Falls				
19-15373	12	416400	4816102	Christian Church	600 S. Boulevard	Idaho Falls			Ineligible	7/23/2013
19-15374	12	416378	4816080	Birch Street House - 252	252 Birch Street	Idaho Falls				
19-15375	12	416398	4816063	Marcon Agency	575 Ridge Street	Idaho Falls			Ineligible	5/6/2016
19-15377	12	416384	4816055	Charles C. Wilson House	573 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15378	12	416375	4816039	Oscar Johnson (Johanneson) House	557 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15379	12	416370	4816025	Otto E. McCutcheon House	543 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15380	12	416351	4816000	Hiram F. Haskins House	511 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15381	12	416320	4816037	N. Water Avenue House - 520	520 N. Water Avenue	Idaho Falls				
19-15382	12	416322	4816107	N. Water Avenue House - 586	586 N. Water Avenue	Idaho Falls				
19-15383	12	416308	4816115	N. Water Avenue House - 589	589 N. Water Avenue	Idaho Falls				
19-15384	12	416264	4816161	Rogers Brother Seed Company	136-120 Birch Street	Idaho Falls				
19-15385	12	416227	4816031	William P. Dawe Rental	156 Poplar Street	Idaho Falls	93000388		NR Listed	5/20/1993
19-15386	12	416243	4816022	William P. Dawe House	491 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15387	12	416237	4816008	Dr. T. M. Bridges House	477 N. Water Ave.	Idaho Falls	93000388		Eligible	2/1/2019
19-15388	12	416230	4815995	F. J. Hollister House	461 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15389	12	416225	4815980	W. S. Morgan House	441 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15390	12	416212	4815957	Marquis L. McKee House	409 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15391	12	416193	4815963	Marquis L. McKee Apartments	161-171 Cedar	Idaho Falls	93000388		NR Listed	5/20/1993
19-15392	12	416179	4815971	W. Jay Brown Rental	145 Cedar	Idaho Falls	93000388		NR Listed	5/20/1993
19-15393	12	416156	4815983	W. Jay Brown Boarding House	400 N. Eastern Ave.	Idaho Falls	93000388		NR Listed	5/20/1993

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15394	12	416164	4815998	W. J. Brown Rental	422 N. Eastern Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15395	12	416187	4816039	N. Eastern Ave. Bungalow	468 N. Eastern Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15396	12	416233	4816164	N. Eastern Ave. house - 588	588 N. Eastern Ave.	Idaho Falls				
19-15397	12	416194	4815921	Edward P. Coltman House	387 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15398	12	416259	4815948	Leslie B. Murphy House	408 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15399	12	416262	4815961	Charles W. Mulhall House	440 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15400	12	416269	4815974	Thomas and Mary Wilson Boarding House	460 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15401	12	416276	4815987	Ellen Moen Residence	478 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15402	12	416284	4816000	A. J. Wipperman House	498 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15403	12	416336	4815969	Thomas H. Kelly House	495 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15404	12	416329	4815957	Louis A. Haley Residence	485 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15405	12	416313	4815929	Henry M. Wilson House	441 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15406	12	416308	4815915	A. M. Brookfield House	423 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15407	12	416301	4815903	Albert L. Campbell House	409 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15408	12	416283	4815914	Henry Scarborough Rental	255 Cedar	Idaho Falls	93000388		NR Listed	5/20/1993
19-15409	12	416265	4815925	Leslie B. Murphy Rental	233-241 Cedar	Idaho Falls	93000388		NR Listed	5/20/1993
19-15410	12	416339	4815886	Wilford D. Huffaker House	406 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15411	12	416354	4815906	Fred L. Huston Residence	442 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15412	12	416361	4815921	Barzilla Clark House	460 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15413	12	416366	4815932	Wilbert J. Coltman Duplex	482 - 486 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15414	12	416373	4815947	Wilbert J. Coltman House	498 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15415	12	416388	4815932	W. J. Coltman House	344 Poplar St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15416	12	416386	4815870	Spencer Hospital	798 S. Boulevard	Idaho Falls	93000388		NR Listed	5/20/1993
19-15417	12	416371	4815822	George H. Warner House	391 N. Placer Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15418	12	416364	4815808	Albert W. Rates House	383 N. Placer Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15419	12	416341	4815771	Charles St. Clair House	311 N. Placer Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15420	12	416333	4815757	Herman J. Hasbrouck House	309 N. Placer Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15421	12	416303	4815775	Eugene Wright Rental	355 Ash St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15422	12	416288	4815784	Eugene Wright House	312 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15423	12	416292	4815799	William A. Taylor Residence	328 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15424	12	416299	4815808	Charles A. Merriman House	340 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15425	12	416309	4815825	Early William Luxton House	360 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15426	12	416315	4815837	Late William Luxton House	370 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15427	12	416359	4815831	Cedar house - 360	360 Cedar	Idaho Falls				
19-15428	12	416358	4815730	Ash house - 392	392 Ash	Idaho Falls				
19-15429	12	416321	4815714	Ash house - 356	356 Ash	Idaho Falls				
19-15430	12	416266	4815753	Frank and Minnie Hitt House	288 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15431	12	416254	4815731	Harrison Linger House	262 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15434	12	416127	4815821	Water house - 275	275 Water	Idaho Falls				
19-15435	12	416134	4815835	Water house - 293	293 Water	Idaho Falls				
19-15436	12	416069	4815793	Carnegie Public Library	N. Yellowstone Ave. (Elm and Eastern Sts.)	Idaho Falls	84001093		NR Listed	8/30/1984
19-15437	12	416341	4815631	Placer house - 210	210 Placer	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15438	12	416386	4815760	John Brand House	340 N. Placer Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15439	12	416254	4815479	S. Placer house - 143	143 S. Placer	Idaho Falls				
19-15440	12	416230	4815472	S. Placer house - 159	159 S. Placer	Idaho Falls				
19-15441	12	416319	4815472	Walnut house - 498	498 Walnut	Idaho Falls				
19-15442	12	416309	4815450	Corner house - 142	142 Corner	Idaho Falls				
19-15443	12	416298	4815436	Corner house - 160	160 Corner	Idaho Falls				
19-15444	12	416291	4815427	Corner house - 158	158 Corner	Idaho Falls				
19-15445	12	416286	4815409	Corner house - 190	190 Corner	Idaho Falls				
19-15446	12	416320	4815393	Corner house - 199	199 Corner	Idaho Falls				
19-15447	12	416322	4815410	Corner house - 194	194 Corner	Idaho Falls				
19-15448	12	416343	4815432	Corner house - 135	135 Corner	Idaho Falls				
19-15449	12	416336	4815416	Corner house - 159	159 Corner	Idaho Falls				
19-15450	12	416392	4815400	S. Boulevard house - 1248	1248 S. Boulevard	Idaho Falls				
19-15451	12	416395	4815423	S. Boulevard house - 1210 & 1220	1210 & 1220 S. Boulevard	Idaho Falls				
19-15452	12	416383	4815370	S. Boulevard house - 1270	1270 S. Boulevard	Idaho Falls				
19-15453	12	416418	4815352	S. Boulevard house - 1286	1286 S. Boulevard	Idaho Falls				
19-15454	12	416301	4815855	Ridge house - 378	378 Ridge	Idaho Falls				
19-15455	12	416004	4815318	13th St. house - 363	363 13th St.	Idaho Falls				
19-15456	12	416173	4815849	Water house - 311	311 Water	Idaho Falls				
19-15457	12	416178	4815859	Water house - 321	321 Water	Idaho Falls				
19-15458	12	416172	4815848	Water house - 310	310 Water	Idaho Falls				

Historic Sites (IHSI)

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15459	12	416180	4815862	Water house - 326	326 Water	Idaho Falls				
19-15460	12	416201	4815900	Water house - 373	373 Water	Idaho Falls				
19-15461	12	415845	4815425	Eastern house - 369	369 Eastern	Idaho Falls				
19-15462	12	415844	4815440	Eastern house - 365	365 Eastern	Idaho Falls				
19-15463	12	415849	4815454	Eastern house - 357 (non-extant)	357 Eastern	Idaho Falls				
19-15464	12	416021	4815307	W. 13th St. house - 355	355 W. 13th St.	Idaho Falls				
19-15465	12	416064	4816560	F St. house - 474	474 F St.	Idaho Falls				
19-15466	12	416091	4816561	F St. house - 460-462	460-462 F St.	Idaho Falls				
19-15467	12	416037	4816450	G St. house - 443	443 G St.	Idaho Falls				
19-15468	12	416096	4816599	G St. house - 453	453 G St.	Idaho Falls				
19-15469	12	416024	4816640	G St. house - 485	485 G St.	Idaho Falls				
19-15470	12	415895	4816495	E St. house - 565	565 E St.	Idaho Falls			Eligible	1/2/1997
19-15471	12	415942	4816469	E St. house - 509	509 E St.	Idaho Falls			Unevaluated	1/2/1997
19-15472	12	415941	4816504	E St. house - 540	540 E St.	Idaho Falls			Unevaluated	1/2/1997
19-15473	12	415970	4816364	D St. house - 460	460 D St.	Idaho Falls			Eligible	1/2/1997
19-15475	12	415874	4816416	Prestwich Architects	544 D St.	Idaho Falls			Unevaluated	1/2/1997
19-15476	12	415873	4816417	D St. house - 546	546 D St.	Idaho Falls			Unevaluated	1/2/1997
19-15477	12	415870	4816418	Scenic Falls Credit Union	550 D St.	Idaho Falls			Ineligible	1/2/1997
19-15478	12	416236	4816482	Shoup house - 900	900 Shoup	Idaho Falls				
19-15479	12	416243	4816495	Shoup house - 998	998 Shoup	Idaho Falls				
19-15480	12	416256	4816488	G St. house - 269	269 G St.	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15481	12	416277	4816467	G St. house - 249	249 G St.	Idaho Falls				
19-15482	12	416132	4816521	Commercial Building	355-383 F St.	Idaho Falls			Ineligible	1/2/1997
19-15483	12	416111	4816372	People's Hospital	343 E St.	Idaho Falls			Eligible	1/2/1997
19-15484	12	415613	4815691	Basalt house - 341	341 Basalt	Idaho Falls				
19-15485	12	415608	4815694	Basalt house - 347	347 Basalt	Idaho Falls				
19-15486	12	415617	4815688	Basalt house - 331	331 Basalt	Idaho Falls				
19-15487	12	415622	4815685	Basalt house - 317	317 Basalt	Idaho Falls				
19-15488	12	415617	4815688	Basalt shed - 331	331 Basalt	Idaho Falls				
19-15489	12	415663	4815696	Chamberlain house - 258	258 Chamberlain	Idaho Falls				
19-15490	12	415674	4815715	Chamberlain house - 204	204 Chamberlain	Idaho Falls				
19-15491	12	415632	4815692	Basalt house - 306	306 Basalt	Idaho Falls				
19-15492	12	415607	4815720	Basalt house - 360	360 Basalt	Idaho Falls				
19-15493	12	415592	4815728	Basalt house - 374	374 Basalt	Idaho Falls				
19-15494	12	415625	4815752	Cliff house - 361	361 Cliff	Idaho Falls				
19-15495	12	415627	4815734	Cliff house - 349	349 Cliff	Idaho Falls				
19-15496	12	415645	4815723	Cliff house - 335	335 Cliff	Idaho Falls				
19-15497	12	415715	4815658	Basalt house - 272	272 Basalt	Idaho Falls				
19-15498	12	415725	4815652	Basalt house - 256	256 Basalt	Idaho Falls				
19-15499	12	415698	4815612	Basalt house - 271	271 Basalt	Idaho Falls				
19-15500	12	415700	4815592	Basalt house - 257	257 Basalt	Idaho Falls				
19-15501	12	415729	4815576	Basalt house - 233	233 Basalt	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15502	12	415510	4815620	Lava house - 389	389 Lava	Idaho Falls				
19-15503	12	415527	4815611	Lava house - 379	379 Lava	Idaho Falls				
19-15504	12	415544	4815601	Lava house - 351	351 Lava	Idaho Falls				
19-15505	12	415559	4815593	Lava house - 341	341 Lava	Idaho Falls				
19-15506	12	415570	4815587	Lava house - 331	331 Lava	Idaho Falls				
19-15507	12	415581	4815580	Lava house - 321	321 Lava	Idaho Falls				
19-15508	12	415597	4815571	Chamberlain Ave. house - 418	418 Chamberlain Ave.	Idaho Falls			Ineligible	11/20/2001
19-15509	12	415627	4815610	Lava house - 302	302 Lava	Idaho Falls				
19-15510	12	415619	4815615	Lava house - 316	316 Lava	Idaho Falls				
19-15511	12	415609	4815621	Lava house - 318	318 Lava	Idaho Falls				
19-15512	12	415598	4815627	Lava house - 330	330 Lava	Idaho Falls				
19-15513	12	415581	4815636	Lava house - 348	348 Lava	Idaho Falls				
19-15514	12	415561	4815648	Lava house - 360	360 Lava	Idaho Falls				
19-15515	12	415538	4815661	Capital house - 365	365 Capital	Idaho Falls				
19-15516	12	415481	4815539	Hill house - 393	393 Hill	Idaho Falls				
19-15517	12	415498	4815529	Hill house - 371	371 Hill	Idaho Falls				
19-15518	12	415508	4815523	Hill house - 369	369 Hill	Idaho Falls				
19-15519	12	415518	4815518	Hill house - 351	351 Hill	Idaho Falls				
19-15520	12	415521	4815497	Hill house - 337	337 Hill	Idaho Falls				
19-15521	12	415537	4815488	Hill house - 317-323	317-323 Hill	Idaho Falls				
19-15522	12	415558	4815495	Hill house - 307	307 Hill	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15523	12	415579	4815539	Hill house - 302	302 Hill	Idaho Falls				
19-15524	12	415532	4815566	Hill house - 370	370 Hill	Idaho Falls				
19-15525	12	415512	4815577	Hill house - 380	380 Hill	Idaho Falls				
19-15526	12	415543	4815463	Chamberlain house - 594	594 Chamberlain	Idaho Falls			Ineligible	10/26/2020
19-15527	12	415523	4815473	Short house - 322	322 Short	Idaho Falls			Ineligible	10/26/2020
19-15528	12	415504	4815474	Short house - 336	336 Short	Idaho Falls			Ineligible	10/26/2020
19-15529	12	415477	4815168	Chamberlain house - 555	555 Chamberlain	Idaho Falls				
19-15530	12	415476	4815169	Chamberlain house - 575	575 Chamberlain	Idaho Falls				
19-15531	12	415575	4815443	Chamberlain house - 595	595 Chamberlain	Idaho Falls				
19-15532	12	415555	4815431	Short apts. - 278-292	278-292 Short	Idaho Falls				
19-15533	12	415586	4815412	Short house - 266	266 Short	Idaho Falls				
19-15534	12	415609	4815424	Short house - 250	250 Short	Idaho Falls				
19-15535	12	415625	4815415	Short house - 246	246 Short	Idaho Falls				
19-15536	12	415660	4815389	Short house - 200	200 Short	Idaho Falls				
19-15537	12	415666	4815402	Oneida house - 560	560 Oneida	Idaho Falls				
19-15538	12	415700	4815470	Oneida house - 496	496 Oneida	Idaho Falls				
19-15539	12	415677	4815483	Hill house - 228	228 Hill	Idaho Falls				
19-15540	12	415666	4815434	Hill house - 231	231 Hill	Idaho Falls				
19-15541	12	415652	4815422	Hill house - 242	242 Hill	Idaho Falls				
19-15542	12	415640	4815449	Hill house - 241	241 Hill	Idaho Falls			Ineligible	10/30/1991
19-15543	12	415628	4815455	Hill house - 257	257 Hill	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15544	12	415644	4815502	Hill house - 264	264 Hill	Idaho Falls				
19-15545	12	415631	4815510	Hill house - 272	272 Hill	Idaho Falls				
19-15546	12	415590	4815477	Hill house - 287	287 Hill	Idaho Falls				
19-15547	12	415656	4815593	Lava house - 294	294 Lava	Idaho Falls				
19-15548	12	415636	4815549	Lava house - 285	285 Lava	Idaho Falls				
19-15549	12	415673	4815584	Lava house - 284	284 Lava	Idaho Falls				
19-15550	12	415669	4815530	Lava house - 269	269 Lava	Idaho Falls				
19-15551	12	415662	4815516	Lava house - 254	254 Lava	Idaho Falls				
19-15552	12	415671	4815511	Lava house - 246	246 Lava	Idaho Falls				
19-15553	12	415685	4815521	Lava house - 253	253 Lava	Idaho Falls				
19-15554	12	415698	4815513	Lava house - 223	223 Lava	Idaho Falls				
19-15555	12	415709	4815508	Lava house - 219	219 Lava	Idaho Falls				
19-15556	12	415722	4815500	Lava house - 205	205 Lava	Idaho Falls				
19-15557	12	416277	4815869	Gilbert G. Wright House	371 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15558	12	416268	4815845	Oscar Johannesen House	353 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15559	12	416262	4815834	Orley K. Wilbur House	345 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15560	12	416204	4815848	Jay Mason House	328 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15561	12	416208	4815863	Richard and Sadie Barry House	344 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15562	12	416218	4815876	Dr. Franklin LaRue House	360 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15563	12	416231	4815901	William H. Hyde House	392 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15564	12	416174	4815884	Ralph A. Lewis House	343 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15565	12	416169	4815872	Dr. G. W. Cleary House	327 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15566	12	416159	4815859	George A. Changnon House	313 N. Water Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15567	12	415934	4815483	S. Water Ave house - 266	266 S. Water Ave	Idaho Falls				
19-15568	12	415941	4815496	S. Water Ave house - 264	264 S. Water Ave	Idaho Falls				
19-15569	12	415941	4815496	S. Water Ave house - 240	264 S. Water Ave	Idaho Falls				
19-15570	12	415960	4815532	S. Water Ave house - 224	224 S. Water Ave	Idaho Falls				
19-15571	12	416018	4815522	S. Water Ave house - 211	211 S. Water Ave	Idaho Falls				
19-15572	12	416017	4815505	S. Water Ave house - 221	221 S. Water Ave	Idaho Falls				
19-15573	12	416009	4815492	S. Water Ave house - 243	243 S. Water Ave	Idaho Falls				
19-15574	12	416002	4815479	S. Water Ave house - 257	257 S. Water Ave	Idaho Falls				
19-15575	12	415986	4815470	S. Water Ave house - 269	269 S. Water Ave	Idaho Falls				
19-15576	12	415979	4815457	S. Water Ave house - 297	297 S. Water Ave	Idaho Falls				
19-15577	12	415998	4815446	S. Pine house - 241	241 S. Pine	Idaho Falls				
19-15578	12	416210	4815651	Clinton G. Peck House	310 Elm St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15579	12	416376	4815291	W. 13th St. house - 115	115 W. 13th St.	Idaho Falls				
19-15580	12	416226	4815639	John W. Dill House	346 Elm St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15581	12	416257	4815611	Flora Keddie House	173 N. Placer Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15582	12	416242	4815582	Edward Rowles House	135 N. Placer Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15583	12	416013	4815647	Walnut St. house - 150	150 Walnut St.	Idaho Falls				
19-15584	12	416033	4815638	Water Ave. house - 112	112 Water Ave.	Idaho Falls				
19-15585	12	416079	4815614	Walnut St. house - 208	208 Walnut St.	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15586	12	416106	4815586	A. D. Morrison Residence	258 Walnut St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15587	12	416130	4815578	Nils Hoff Residence	290 Walnut St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15588	12	416162	4815563	O.J. Ellis residence	101 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15589	12	416194	4815496	S. Placer Ave. house - 160	160 S. Placer Ave.	Idaho Falls				
19-15590	12	416161	4815511	M. B. Denlinger Residence	159 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15591	12	416102	4815545	Henry F. Kunter House	156 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15592	12	416089	4815518	Guy and Ethel Smith Residence	190 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15593	12	416066	4815481	Kate and Bowen Curley House	288 Maple Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15594	12	416051	4815448	C. Fred Chandler House	258 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15595	12	416041	4815429	Arthur W. Holden House	284 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15596	12	416071	4815601	S. Water Avenue House - 125	125 S. Water Avenue	Idaho Falls				
19-15597	12	416064	4815587	S. Water Avenue House - 128	139 S. Water Avenue	Idaho Falls				
19-15598	12	416056	4815574	S. Water Avenue House - 159	159 S. Water Avenue	Idaho Falls				
19-15599	12	416049	4815561	S. Water Avenue House - 173	173 S. Water Avenue	Idaho Falls				
19-15600	12	416010	4815563	S. Water Avenue House - 189	189 S. Water Avenue	Idaho Falls				
19-15601	12	416019	4815628	S. Water Avenue House - 124	124 S. Water Avenue	Idaho Falls				
19-15602	12	416003	4815605	S. Water Avenue House - 160	160 S. Water Avenue	Idaho Falls				
19-15603	12	416000	4815573	S. Water Street House - 196	196 S. Water Street	Idaho Falls				
19-15604	12	415987	4815583	S. Maple Street House - 175	175 S. Maple Street	Idaho Falls				
19-15605	12	415977	4815590	S. Maple Street House - 173	173 S. Maple Street	Idaho Falls				
19-15606	12	416255	4815382	S. Maple Street and Corner House - 498	498 S. Maple Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-15607	12	416137	4815375	Placer Street House - 284	284 Placer Street	Idaho Falls				
19-15608	12	416155	4815426	Maple Street House - 360	360 Maple Street	Idaho Falls				
19-15609	12	416143	4815434	Maple Street House - 364	364 Maple Street	Idaho Falls				
19-15610	12	416115	4815463	Late Louis A. Hartert House	205 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15611	12	416104	4815453	Bertha Anderson House	225 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15612	12	416098	4815440	Alexander C. Gamble House	237 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15613	12	416085	4815418	D. B. Bybee House	267 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15614	12	416078	4815402	L. O. Naylor House	291 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15615	12	416058	4815371	Early Louis A. Hartert House	309 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15616	12	416181	4815900	Frank C. Bowman House	361 N. Water St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-15617	12	416232	4815348	S. Corner Street House - 250	250 S. Corner Street	Idaho Falls				
19-15888	12	415757	4814047	Tautphaus Park Zookeeper's Residence	2695 Rollandet	Idaho Falls			Eligible	8/3/2005
19-16004	12	416378	4815735	D. F. Richards Residence	425 Ash St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-16158	12	415953	4815887	Rocky Mountain Bell Telephone Co. Building	246 W. Broadway	Idaho Falls	84001099		NR Listed	8/30/1984
19-17012	12	416060	4815462	Ethyl and Jay Smith House	240 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17013	12	415812	4816852	Idaho Falls LDS Temple	1000 Memorial Drive	Idaho Falls				
19-17016	12	416680	4815671	Holy Rosary Church	228 E. 9th St.	Idaho Falls	02000802		NR Listed	7/17/2002
19-17017	12	416447	4815067	Simon Martin Jr. House	595 E 16th Street	Idaho Falls				
19-17143	12	416423	4815853	Charles Skalicky House	765-768 South Boulevard	Idaho Falls				
19-17144	12	416459	4815850	Gail Bolton House	113 8th Street	Idaho Falls				
19-17145	12	416474	4815849	8th Street House - 119 & 121	119 & 121 8th Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17146	12	416490	4815849	8th Street House - 127	127 8th Street	Idaho Falls				
19-17147	12	416505	4815849	8th Street House - 135	135 8th Street	Idaho Falls				
19-17148	12	416521	4815848	8th Street House - 141	141 8th Street	Idaho Falls				
19-17149	12	416536	4815848	8th Street House - 153	153 8th Street	Idaho Falls				
19-17150	12	416555	4815848	8th Street House - 167	167 8th Street	Idaho Falls				
19-17151	12	416574	4815848	8th Street House - 175	175 8th Street	Idaho Falls				
19-17152	12	416608	4815838	8th Street House - 187	197 8th Street	Idaho Falls				
19-17153	12	416608	4815857	South Lee Avenue House - 760	760 South Lee Avenue	Idaho Falls				
19-17154	12	416653	4815847	Ella M. Tam House	205 8th Street	Idaho Falls			Ineligible	6/16/1993
19-17155	12	416676	4815847	8th Street House - 221	221 8th Street	Idaho Falls				
19-17156	12	416691	4815847	8th Street House - 227	227 8th Street	Idaho Falls				
19-17157	12	416704	4815846	8th Street House - 237	237 8th Street	Idaho Falls				
19-17158	12	416716	4815846	8th Street House - 243	243 8th Street	Idaho Falls				
19-17159	12	416727	4815846	8th Street House - 251	251 8th Street	Idaho Falls				
19-17160	12	416739	4815846	8th Street House - 253	253 8th Street	Idaho Falls				
19-17161	12	416752	4815846	8th Street House - 261	261 8th Street	Idaho Falls				
19-17162	12	416767	4815846	8th Street House - 269	269 8th Street	Idaho Falls				
19-17163	12	416783	4815846	8th Street House - 277	277 8th Street	Idaho Falls				
19-17164	12	416798	4815845	8th Street House - 285	285 8th Street	Idaho Falls				
19-17165	12	416813	4815845	8th Street House - 295	295 8th Street	Idaho Falls				
19-17166	12	416847	4815845	8th Street House - 305	305 8th Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17167	12	416862	4815845	8th Street House - 315	315 8th Street	Idaho Falls				
19-17168	12	416877	4815845	8th Street House - 321	321 8th Street	Idaho Falls				
19-17169	12	416892	4815844	David Kudosumi	333 8th St	Idaho Falls				
19-17170	12	416907	4815844	Alice E. Cecil	335 8th St	Idaho Falls				
19-17171	12	416923	4815844	Jodi Tokita	345 8th St	Idaho Falls				
19-17172	12	416938	4815844	Randolph R. Oksendahl	355 8th St	Idaho Falls				
19-17173	12	416957	4815844	Erna Long	363 8th St	Idaho Falls				
19-17174	12	416976	4815843	Scott A. Stone	375 8th St	Idaho Falls				
19-17175	12	416995	4815843	Craig B. Burtenshaw	381 8th St	Idaho Falls				
19-17176	12	417014	4815843	Victor F. Hanks	397 8th St	Idaho Falls				
19-17177	12	417048	4815843	George Humble	401 8th St	Idaho Falls				
19-17178	12	417063	4815842	Ray A. Helm	415 8th St	Idaho Falls				
19-17179	12	417078	4815842	Rodney A. Nebeker	417 8th St	Idaho Falls				
19-17180	12	417093	4815842	Goldia Wray	419 8th St	Idaho Falls				
19-17181	12	417109	4815842	Brian Searle	451 8th St	Idaho Falls				
19-17182	12	417157	4815842	Kenneth H. Marler	469 8th St	Idaho Falls				
19-17183	12	417010	4815793	J. St. Clair	398 8th St	Idaho Falls				
19-17184	12	416998	4815787	Mike Grear	390 8th St	Idaho Falls				
19-17185	12	416983	4815787	Shelia Collins	370 8th St	Idaho Falls				
19-17186	12	416968	4815787	Curtis L. Allred	366 8th St	Idaho Falls				
19-17187	12	416949	4815787	Charles Ariss	364 8th St	Idaho Falls				

Historic Sites (IHSI)

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17188	12	416930	4815788	Garth McGary	362 8th St	Idaho Falls				
19-17189	12	416915	4815788	Tim O'Rourke	360 8th St	Idaho Falls				
19-17190	12	416899	4815788	James W. Claunch	330 8th St	Idaho Falls				
19-17191	12	416880	4815788	John D. Capek	324 8th St	Idaho Falls				
19-17192	12	416861	4815788	Dan Imbody	310 8th St	Idaho Falls				
19-17193	12	416846	4815789	Steven K. Brown	302 8th St	Idaho Falls				
19-17194	12	416812	4815789	Carolyn Murphy	298 8th St	Idaho Falls				
19-17195	12	416797	4815789	Ronald I. Larson	278 8th St	Idaho Falls				
19-17196	12	416782	4815789	Douglas Drollinger	276 8th St	Idaho Falls				
19-17197	12	416781	4815777	Larson Dean	274 8th St	Idaho Falls				
19-17198	12	416767	4815789	Robert C. Burton	272 8th St	Idaho Falls				
19-17199	12	416752	4815789	Edward Renna	268 8th St	Idaho Falls				
19-17200	12	416738	4815790	Otis K. Walker	260 8th St	Idaho Falls			Ineligible	8/12/1992
19-17201	12	416723	4815790	William Poitevin	256 8th St	Idaho Falls				
19-17202	12	416704	4815790	Paul B. Rippel	234 8th St	Idaho Falls				
19-17203	12	416685	4815790	Kenyan D. Lewis	220 8th St	Idaho Falls				
19-17204	12	416680	4815785	Olin L. Yingling	222 8th St	Idaho Falls				
19-17205	12	416689	4815783	Carol Ingraham	218 8th St	Idaho Falls				
19-17206	12	416535	4815792	James F. & Rebecca A. Smith	148 8th St	Idaho Falls				
19-17207	12	416520	4815792	Jeanne D. Green	146 8th St	Idaho Falls				
19-17208	12	416505	4815792	Al Hohback	134 8th St	Idaho Falls				

Historic Sites (IHSI)

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17209	12	416489	4815792	Jack Dent	128 8th St	Idaho Falls				
19-17210	12	416522	4815747	Holy Rosary Catholic Center	145 9th St	Idaho Falls				
19-17211	12	416648	4815748	Danny Orr	201 9th St	Idaho Falls				
19-17212	12	416671	4815747	Clayton R. Nichols	215 9th St	Idaho Falls				
19-17213	12	416700	4815747	9th St. house - 229	229 9th St	Idaho Falls				
19-17214	12	416713	4815747	Rick Nelson	233 9th St	Idaho Falls				
19-17215	12	416728	4815747	Kirk Smith	249 9th St	Idaho Falls				
19-17216	12	416747	4815747	Leon Ross Miner	263 9th St	Idaho Falls				
19-17217	12	416766	4815746	Fredk D. Fluck	271 9th St	Idaho Falls				
19-17218	12	416781	4815746	John Stevens	279 9th St	Idaho Falls				
19-17219	12	416797	4815746	Cath M. Brinkman	287 9th St	Idaho Falls				
19-17220	12	416812	4815746	W. Ralph Danner	295 9th St	Idaho Falls				
19-17221	12	416846	4815746	Albert E. Harry	301 9th St	Idaho Falls				
19-17222	12	416861	4815745	Marie Perry	313 9th St	Idaho Falls				
19-17223	12	416876	4815745	Milton L. Squires	319 9th St	Idaho Falls				
19-17224	12	416891	4815745	Charles G. Busnell	325 9th St	Idaho Falls				
19-17225	12	416906	4815745	Ray K. Spaulding	335 9th St	Idaho Falls				
19-17226	12	416922	4815745	Kay A. Johnson	347 9th St	Idaho Falls				
19-17227	12	416937	4815745	Paul A. Mesner	355 9th St	Idaho Falls				
19-17228	12	416964	4815744	Richard H. Schwarz	365 9th St	Idaho Falls				
19-17229	12	416992	4815744	Duane C. Roberts	381 9th St	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17230	12	417011	4815744	Edward W. Pike	395 9th St	Idaho Falls				
19-17231	12	416443	4815694	Thomas J. Sloan	901 S. Boulevard	Idaho Falls				
19-17232	12	416458	4815693	LDS Church Corporation	114 9th St.	Idaho Falls				
19-17233	12	416473	4815693	LDS Church Corporation	116 9th St.	Idaho Falls				
19-17234	12	416488	4815693	Brian E. Walton	126 9th St.	Idaho Falls				
19-17235	12	416504	4815693	Jim Schwarzenberger	146 9th St.	Idaho Falls				
19-17236	12	416519	4815693	Ken G. Moore	148 9th St.	Idaho Falls				
19-17237	12	416534	4815693	Arthur S. Rood	152 9th St.	Idaho Falls				
19-17238	12	416549	4815692	LaVern Allen	158 9th St.	Idaho Falls				
19-17239	12	416565	4815692	Arthur Jankovich & Bernita Jaeger	166 & 168 9th St.	Idaho Falls				
19-17240	12	416580	4815692	Jamie Ward	178 9th St.	Idaho Falls				
19-17241	12	416595	4815692	Glenn McInelly	184 9th St.	Idaho Falls				
19-17242	12	416610	4815692	Emmett Mitchell	944 & 946 S. Lee Ave.	Idaho Falls				
19-17243	12	416705	4815691	H. Ballanger	238 9th St.	Idaho Falls				
19-17244	12	416737	4815690	Willis B. Benjamin	252 9th St.	Idaho Falls				
19-17245	12	416756	4815690	Seth W. Hoffman	264 9th St.	Idaho Falls				
19-17246	12	416775	4815690	Tim Brockish	280 9th St.	Idaho Falls				
19-17247	12	416802	4815700	Bobby A. Picker	900 Emerson Ave.	Idaho Falls				
19-17248	12	416802	4815681	George F. Thompson	940 Emerson Ave.	Idaho Falls				
19-17249	12	417054	4815696	Charles E. Johnson	915 S. Higbee Ave.	Idaho Falls				
19-17250	12	417053	4815677	Tom J. Savidge	935 S. Higbee Ave.	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17251	12	417077	4815687	Phillip Powell	420 9th St.	Idaho Falls				
19-17252	12	417092	4815686	Michael H. Peterson	428 9th St.	Idaho Falls				
19-17253	12	417153	4815686	Hattie Mayes	468 9th St.	Idaho Falls				
19-17254	12	417168	4815686	H. K. Gilbert	474 9th St.	Idaho Falls				
19-17257	12	417160	4815643	Paul W. Ahlstrom, Jr.	465 10th St.	Idaho Falls				
19-17258	12	417146	4815643	Cecelia E. Stoddard	463 10th St.	Idaho Falls				
19-17259	12	417135	4815643	Margaret Antkowiak	459 10th St.	Idaho Falls				
19-17260	12	417122	4815643	Jeff Ginsburg	453 10th St.	Idaho Falls				
19-17261	12	417106	4815643	Marilyn D. Reeser	447 10th St.	Idaho Falls				
19-17262	12	417091	4815644	Tim W. Stoddard	435 10th St.	Idaho Falls				
19-17263	12	417076	4815644	Donald M. Georg	425 10th St.	Idaho Falls				
19-17264	12	417053	4815635	Rosanna Chambers	407 10th St.	Idaho Falls				
19-17265	12	416804	4815656	Schwendiman House	960 S. Emerson Ave.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17266	12	416806	4815639	Daniel J. Sweeney House	996 S. Emerson Ave.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17267	12	416776	4815641	Hahn House	269 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17268	12	416760	4815639	Ring House	265 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17269	12	416742	4815639	Monsen House	261 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17270	12	416723	4815640	Scholer House	257 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17271	12	416704	4815642	Eidson House	233 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17272	12	416689	4815641	David Sweeney House	231 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17273	12	416672	4815642	Pennington House	221 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997

Historic Sites (IHSI)

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17274	12	416649	4815647	John Bybee House	999 S. Lee Ave.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17275	12	416605	4815643	Browning House	193 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17276	12	416576	4815649	Glen Higley	177 10th St.	Idaho Falls				
19-17277	12	416562	4815649	J. A. Newman	165 10th St.	Idaho Falls				
19-17278	12	416549	4815649	Gilbert S. Roybal	161 10th St.	Idaho Falls				
19-17279	12	416520	4815650	Ethol Boyce	151 10th St.	Idaho Falls				
19-17280	12	416508	4815650	Joseph J. Wareham	145 10th St.	Idaho Falls				
19-17281	12	416492	4815650	Beth & Vern Hill	133 & 135 10th St.	Idaho Falls				
19-17282	12	416445	4815655	City Water Dept.	963 S. Blvd.	Idaho Falls				
19-17283	12	416487	4815594	Gene Summers	120 10th St.	Idaho Falls				
19-17284	12	416503	4815594	Steve L. Jespersen	130 10th St.	Idaho Falls				
19-17285	12	416518	4815593	Dennis Halls	140 10th St.	Idaho Falls				
19-17286	12	416533	4815593	Paul M. Ostler	154 10th St.	Idaho Falls				
19-17287	12	416548	4815593	Rick Waldron	160 10th St.	Idaho Falls				
19-17288	12	416563	4815593	Gavin W. & Michelle Wells	170 10th St.	Idaho Falls				
19-17289	12	416579	4815593	Claude L. Pickett	180 10th St.	Idaho Falls				
19-17290	12	416594	4815592	T. G. Harris	190 10th St.	Idaho Falls				
19-17291	12	416608	4815598	Smith House	194 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17292	12	416646	4815594	Farr House	204 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17293	12	416679	4815595	Blakely House	224 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17294	12	416693	4815598	Stumbo House	230 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17295	12	416712	4815597	Bills House	240 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17296	12	416727	4815594	Nuss House	250 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17297	12	416742	4815594	Albert H. Wackerli Residence	272 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17298	12	416758	4815595	Wackerli House	278 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17299	12	416773	4815594	Mitchell House	280 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17300	12	416784	4815595	Simpson House	282 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17301	12	416796	4815593	Williams House	284 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17302	12	416845	4815591	Harris House	1002 S. Emerson Ave.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17303	12	416844	4815590	C. Simon	1025 Emerson Ave.	Idaho Falls			NR Listed	8/8/1997
19-17304	12	416859	4815590	Peter E. Thornack	310 10th St.	Idaho Falls				
19-17305	12	416874	4815589	M. A. Finnerty	320 10th St.	Idaho Falls				
19-17306	12	416894	4815589	Mary F. Hersley	328 10th St.	Idaho Falls				
19-17307	12	416912	4815589	Elliott Lindley	338 10th St.	Idaho Falls				
19-17308	12	416931	4815589	Danny C. Beard	350 10th St.	Idaho Falls				
19-17309	12	416951	4815589	Ray Metcalf	362 10th St.	Idaho Falls				
19-17310	12	416966	4815589	John H. Davidson	370 10th St.	Idaho Falls			Ineligible	9/6/2019
19-17311	12	416981	4815588	Lillie M. Thursie	378 10th St.	Idaho Falls				
19-17312	12	416997	4815588	Marvin J. Walker	386 10th St.	Idaho Falls				
19-17313	12	417012	4815588	George C. Ragan	394 10th St.	Idaho Falls				
19-17314	12	417049	4815583	Maria M. Williamson	400 10th St.	Idaho Falls				
19-17315	12	417072	4815583	Tom Tobin, Jr.	420 10th St.	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17316	12	417091	4815583	Kathryn M. Craft	430 10th St.	Idaho Falls				
19-17317	12	417106	4815584	Pauline Gobble	450 10th St.	Idaho Falls				
19-17318	12	417125	4815585	Stephen T. Watts	454 10th St.	Idaho Falls				
19-17327	12	417113	4815544	Mrs. George W. Watkins	435 11th St.	Idaho Falls				
19-17328	12	417090	4815544	J. L. Weber	425 11th St.	Idaho Falls				
19-17329	12	417071	4815544	Carl B. Plesner	415 11th St.	Idaho Falls				
19-17330	12	417048	4815545	Falls Water Company, Inc.	405 11th St.	Idaho Falls				
19-17331	12	417011	4815545	Jerry Rowberry	393 11th St.	Idaho Falls				
19-17332	12	416996	4815545	Ray H. Wood	385 11th St.	Idaho Falls				
19-17333	12	416980	4815545	Pearl H. Misseldine	375 11th St.	Idaho Falls				
19-17334	12	416965	4815546	Elden H. Peterson	369 11th St.	Idaho Falls				
19-17335	12	416947	4815546	Larry R. Stewart	357 11th St.	Idaho Falls				
19-17336	12	416930	4815545	Darwin J. Hansen	353 11th St.	Idaho Falls				
19-17337	12	416921	4815546	Bill Davis	343 11th St.	Idaho Falls				
19-17338	12	416893	4815546	Dianna Hiatt	335/337/339 11th St.	Idaho Falls				
19-17339	12	416874	4815547	Josephine Z. Taylor	333 11th St.	Idaho Falls				
19-17340	12	416859	4815547	Gary E. Gold	321 11th St.	Idaho Falls				
19-17341	12	416843	4815540	Alice Hansen Home	311 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17342	12	416808	4815559	Pierce House	1056 S. Emerson Ave.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17343	12	416810	4815539	Smith House	293 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17344	12	416789	4815540	Mooney House	279 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17345	12	416751	4815544	Charles Aiken House	261 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17346	12	416721	4815541	Amy L. Browning House	251 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17347	12	416701	4815543	Early J. E. Browning House	239 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17348	12	416681	4815543	Charles Dowd house	227 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17349	12	416659	4815540	David Dowd House	211 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17350	12	416642	4815542	Violet Schwarze House	209 11th St.	Idaho Falls	97000863		Eligible	8/2/2016
19-17351	12	416601	4815543	Roy W. Sheppard home	191 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17352	12	416575	4815546	Harold Sheppard House	179 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17353	12	416550	4815541	Robbins House	165 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17354	12	416533	4815541	Marion Toliver House	155 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17355	12	416515	4815541	Kaufman House	151 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17356	12	416501	4815542	Coy House	131 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17357	12	416487	4815544	Dennis Home	125 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17358	12	416472	4815544	Thomas Fiscus House	121 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17359	12	416446	4815545	Briggs House	1083 S. Boulevard	Idaho Falls	97000863		NR Listed	8/8/1997
19-17360	12	416446	4815562	Briggs House	1053 S. Boulevard	Idaho Falls	97000863		NR Listed	8/8/1997
19-17361	12	416444	4815496	Cotton House	108 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17362	12	416463	4815499	C. F. Poulson House	126 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17363	12	416475	4815500	Jay R. Mason House	128 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17364	12	416489	4815500	Best House / Dean Markiss House	132 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17365	12	416506	4815498	Lundberg House	138 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17366	12	416522	4815492	Lyons House	150 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17367	12	416559	4815498	Jonathon Davis House	168 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17368	12	416578	4815497	Orr House	182 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17369	12	416596	4815499	Hanson House	192 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17370	12	416644	4815496	William Abbott House	200 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17371	12	416670	4815495	Spencer Sunblade House	218 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17372	12	416711	4815496	Hops House	248 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17373	12	416723	4815495	Fisher House	250 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17374	12	416739	4815497	Thorton House	260 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17375	12	416751	4815502	F. A. Carleson House	262 11th St.	Idaho Falls	97000863		Ineligible	6/8/2011
19-17376	12	416764	4815497	Chubb House	266 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17377	12	416779	4815497	Evans House	286 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17378	12	416792	4815493	Crumley House	288 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17379	12	416852	4815486	John Collette Residence	302 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17380	12	416873	4815490	Louella Albers House	314 11th Street	Idaho Falls				
19-17381	12	416888	4815490	Tonya Harward House	328 11th Street	Idaho Falls				
19-17382	12	416904	4815490	Jim F. Paschke House	334 11th Street	Idaho Falls				
19-17383	12	416919	4815490	Susan M. Burns House	344 11th Street	Idaho Falls				
19-17384	12	416934	4815490	Alfred E. Buckland House	352 11th Street	Idaho Falls				
19-17385	12	416949	4815489	Russel J. Buckland House	360 11th Street	Idaho Falls				
19-17386	12	416965	4815489	Joe Pehrson House	368 11th Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17387	12	416980	4815489	C.A. Crowder House	376 11th Street	Idaho Falls				
19-17388	12	416995	4815489	C. Maxine Hansen House	384 11th Street	Idaho Falls				
19-17389	12	417010	4815489	Laura A. Melquist House	1108 South Higbee Avenue	Idaho Falls				
19-17390	12	417043	4815490	Donald Shane Higbee House	400 11th Street	Idaho Falls				
19-17391	12	417069	4815488	Declan A. Detrick House	418 11th Street	Idaho Falls				
19-17392	12	417086	4815488	Carolyn Shapiro House	444 11th Street	Idaho Falls				
19-17393	12	417099	4815488	Glen Lund House	462 11th Street	Idaho Falls				
19-17406	12	417059	4815445	Shawn Clegg	415 12th St	Idaho Falls				
19-17407	12	417010	4815446	Michael McConnell	395 12th St	Idaho Falls				
19-17408	12	416991	4815446	Pat Mahoney	385 12th St	Idaho Falls				
19-17409	12	416972	4815446	Wendy J. Reece	377 12th St	Idaho Falls				
19-17410	12	416953	4815446	Ruth McBride	369 12th St	Idaho Falls				
19-17411	12	416934	4815447	John Julian Associates	353 12th St	Idaho Falls				
19-17412	12	416913	4815438	12th St. house - 333	333 12th St.	Idaho Falls			Eligible	12/10/2001
19-17413	12	416897	4815447	Robert Dean Kroupa	327 12th St	Idaho Falls				
19-17414	12	416880	4815447	Rosa K. Cowan	321 12th St	Idaho Falls				
19-17415	12	416863	4815447	Karman Klassy	315 12th St	Idaho Falls				
19-17416	12	416843	4815439	Nandorf Home	305 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17417	12	416808	4815436	Roberts House	293 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17418	12	416792	4815437	Bates House	279 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17419	12	416774	4815442	Roberts House	275 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17420	12	416757	4815441	Hartert House	267 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17421	12	416733	4815441	Crowley House	255 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17422	12	416718	4815441	J. W. Beachy House	245 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17423	12	416703	4815440	Morden House	237 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17424	12	416687	4815444	Redfield House	229 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17425	12	416671	4815444	Sweeney House	221 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17426	12	416656	4815444	Baker House	213 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17427	12	416642	4815449	Wood House	201 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17428	12	416607	4815442	Porter House	195 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17429	12	416591	4815440	Chattin House	185 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17430	12	416577	4815441	Hazen House	173 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17431	12	416564	4815445	Sidley House	171 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17432	12	416552	4815446	Scott House	167 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17433	12	416532	4815443	McCutcheon House	157 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17434	12	416519	4815446	Taylor Residence	149 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17435	12	416503	4815445	John Johnson House	141 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17436	12	416475	4815443	Nelson House	121 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17437	12	416445	4815447	Preston A. Blair House	1195 S. Boulevard	Idaho Falls	97000863		NR Listed	8/8/1997
19-17438	12	416445	4815394	Fanning House	104 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17439	12	416461	4815399	Corey House	114 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17440	12	416486	4815398	Anderson House	126 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17441	12	416506	4815400	Poulsen House	136 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17442	12	416522	4815397	King House	146 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17443	12	416538	4815397	Walton House	158 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17444	12	416560	4815395	McMullen House	170 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17445	12	416578	4815393	Poitevin House	180 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17446	12	416605	4815395	Torneten House	190 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17447	12	416641	4815397	Bistorious House	200 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17448	12	416642	4815378	Ellington House	1223 S. Lee Ave.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17449	12	416656	4815395	Kelson House	212 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17450	12	416676	4815399	Smith House	224 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17451	12	416700	4815391	Daniger House	234 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17452	12	416691	4815380	James Bryant Barnett House	230 12th St.	Idaho Falls				
19-17453	12	416716	4815396	Van Blaricom House	250 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17454	12	416728	4815398	Dawson House	252 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17455	12	416741	4815398	Blixt House	256 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17456	12	416754	4815396	Larch House	264 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17457	12	416770	4815394	Verran House	274 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17458	12	416784	4815395	Miller House	286 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17459	12	416802	4815395	Collins House	294 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17460	12	416844	4815397	Ball Apartments	302-306 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17461	12	416864	4815391	David C. Machovec House	316 12th Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17462	12	416895	4815391	Thomas D. Robson House	330 12th Street	Idaho Falls				
19-17463	12	416912	4815390	J. Paul Wengert House	340 12th Street	Idaho Falls				
19-17464	12	416927	4815390	C. Brent Nielsen House	350 12th Street	Idaho Falls				
19-17465	12	416941	4815390	D. Joan Poland House	360 12th Street	Idaho Falls				
19-17466	12	416957	4815390	Burdett H. Tracy House	368 12th Street	Idaho Falls				
19-17467	12	416973	4815390	12th St. house - 370	370 12th St.	Idaho Falls			Ineligible	12/19/2002
19-17468	12	416988	4815390	Peter Lombardozzi House	374 12th Street	Idaho Falls				
19-17469	12	417007	4815389	Brent D. Summers House	1230 Higbee Avenue	Idaho Falls				
19-17470	12	417043	4815389	John F. Lopiccicolo House	404 12th Street	Idaho Falls				
19-17471	12	417058	4815389	Delbert L. Anderson House	406 12th Street	Idaho Falls				
19-17487	12	417045	4815346	Dennis J. Harrell House	405 13th Street	Idaho Falls				
19-17488	12	417005	4815346	Jerry T. Blair House	391 13th Street	Idaho Falls				
19-17489	12	416984	4815347	Kathleen B. Smolik House	383 13th Street	Idaho Falls				
19-17490	12	416964	4815347	Sharon Zeigler House	375 13th Street	Idaho Falls				
19-17491	12	416943	4815347	Roy H. Barkas House	355 13th Street	Idaho Falls				
19-17492	12	416927	4815347	Lucille M. Sowder House	351 13th Street	Idaho Falls				
19-17493	12	416915	4815347	Von Buxton House	341 13th Street	Idaho Falls				
19-17494	12	416887	4815348	Terry O. Sheppard House	325 13th Street	Idaho Falls				
19-17495	12	416872	4815348	Dan T. Moulton House	323 13th Street	Idaho Falls				
19-17496	12	416856	4815348	Patricia A. Graves House	311 13th Street	Idaho Falls				
19-17497	12	416798	4815349	Ethel Stanger House	295 13th Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17498	12	416771	4815349	Karen K. Poduska House	285 13th Street	Idaho Falls				
19-17499	12	416751	4815349	Leonard L. Hansen House	281 13th Street	Idaho Falls				
19-17500	12	416730	4815349	J. Clifford Cook House	255 13th Street	Idaho Falls				
19-17501	12	416711	4815350	Edna W. Pickett House	245 13th Street	Idaho Falls				
19-17502	12	416693	4815350	Kerri J. Farmer House	235 13th Street	Idaho Falls				
19-17503	12	416678	4815350	Dale E. Nelson House	225 13th Street	Idaho Falls				
19-17504	12	416659	4815350	Edward R. Keifner House	213 13th Street	Idaho Falls				
19-17505	12	416587	4815359	Third Ward Church of Jesus Christ of LDS	187 13th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-17506	12	416500	4815352	Lorin A. Bressler House	139 13th Street	Idaho Falls				
19-17507	12	416485	4815352	David Turner House	125 13th Street	Idaho Falls				
19-17508	12	416469	4815352	Eva and Ray Leal House	119 13th Street	Idaho Falls				
19-17509	12	416443	4815340	William Terry Parsons House	1295 South Boulevard	Idaho Falls			Ineligible	5/6/2016
19-17510	12	416418	4815343	Peggy Southwick House	1292 South Boulevard	Idaho Falls				
19-17511	12	416447	4815365	Reed Olsen House	1267 South Boulevard	Idaho Falls				
19-17512	12	416438	4815296	Michael R. Archer House	104 East 13th Street	Idaho Falls				
19-17513	12	416452	4815296	Russell L. Talley House	108 East 13th Street	Idaho Falls				
19-17514	12	416463	4815296	Ruth Alice Brower House	124 East 13th Street	Idaho Falls				
19-17515	12	416476	4815296	David Becker House	128 East 13th Street	Idaho Falls				
19-17516	12	416490	4815296	J. Oakes House	132 13th Street	Idaho Falls				
19-17517	12	416503	4815295	Bob N. Hart House	140 13th Street	Idaho Falls				
19-17518	12	416516	4815295	Marlowe F. Barber House	148 13th Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17519	12	416530	4815295	R.W. Earl House	154 13th Street	Idaho Falls				
19-17520	12	416545	4815295	Ronald K. Rippon House	164 13th Street	Idaho Falls				
19-17521	12	416560	4815295	Gerald R. Beazer House	170 13th Street	Idaho Falls				
19-17522	12	416575	4815295	Kevin Covert House	178 13th Street	Idaho Falls				
19-17523	12	416602	4815299	13th St. apartment - 194	194 13th St.	Idaho Falls			Eligible	10/18/2001
19-17524	12	416639	4815294	Michael Uebelhack House	200 13th Street	Idaho Falls				
19-17525	12	416655	4815294	M. Kenneth Shane House	210 13th Street	Idaho Falls				
19-17526	12	416670	4815294	James J. Jonannessen	220 13th Street	Idaho Falls				
19-17527	12	416685	4815294	Becky Susan Eatinger House	230 13th Street	Idaho Falls				
19-17528	12	416700	4815293	A.I. Hawkes House	240 13th Street	Idaho Falls				
19-17529	12	416716	4815293	Lewis J. Ehardt House	250 13th Street	Idaho Falls				
19-17530	12	416738	4815293	Lisa Hart House	256 13th Street	Idaho Falls				
19-17531	12	416761	4815293	Thomas Matzen House	270 13th Street	Idaho Falls				
19-17532	12	416780	4815292	Lois J. Miller House	282 13th Street	Idaho Falls				
19-17533	12	416803	4815292	Melvin O. Fielding House	290 13th Street	Idaho Falls				
19-17534	12	416841	4815292	Elmer Moore House	300 13th Street	Idaho Falls				
19-17535	12	416856	4815292	John D. Burtt House	310 13th Street	Idaho Falls				
19-17536	12	416871	4815291	Sondra R. East House	320 13th Street	Idaho Falls				
19-17537	12	416886	4815291	Steven Ewing House	330 13th Street	Idaho Falls				
19-17538	12	416902	4815291	Cory Lee Daniel House	334 13th Street	Idaho Falls				
19-17539	12	416917	4815291	East 13th Street House - 360	360 East 13th Street	Idaho Falls			Unevaluated	2/15/1995

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17540	12	416934	4815291	Colleen Fowler House	364 13th Street	Idaho Falls				
19-17541	12	416953	4815291	Darrell D. Janning House	370 13th Street	Idaho Falls				
19-17542	12	416974	4815290	Fred W. Frank House	374 13th Street	Idaho Falls				
19-17543	12	416993	4815290	Dennis L. Tremayne House	384 13th Street	Idaho Falls				
19-17544	12	417008	4815290	Robert S. Hammon House	1320 Higbee Avenue	Idaho Falls				
19-17701	12	416195	4815619	George R. Dunmire House	142 N. Ridge Ave	Idaho Falls	93000388		NR Listed	5/20/1993
19-17702	12	416201	4815632	Catharine A. Hubbell House	158 N. Ridge Ave	Idaho Falls	93000388		NR Listed	5/20/1993
19-17704	12	416645	4815791	Chuck E. Aber	841 S. Lee	Idaho Falls				
19-17885	12	416657	4815196	E 14th St. house - 214	214 E. 14th St.	Idaho Falls			Ineligible	6/9/1992
19-17887	12	416851	4816242	4th St. house - 305	305 4th St.	Idaho Falls			Ineligible	10/14/1992
19-17888	12	416026	4816294	Park Ave. bldg. - 680	680 Park Ave	Idaho Falls			Ineligible	1/11/1993
19-17889	12	417007	4815389	S. Higbee house - 1230	1230 S. Higbee	Idaho Falls			Ineligible	1/20/1993
19-17890	12	415657	4819587	E 5th W house - 4071	4071 E 5th W	Idaho Falls			Ineligible	3/12/1993
19-17891	12	416096	4815531	Carl Nation Home	188 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17892	12	416153	4815538	Andrew McCauley Residence	145 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17893	12	416140	4815499	Rollin C. Scott Residence	185 S. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17894	12	416187	4815606	Matilda Meppen House	120 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17895	12	416197	4815584	John Fisher House	341 Walnut St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17896	12	416215	4815753	Fred P. Shuttleworth House	273 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17897	12	416246	4815815	Modern Office #1	275 Ash St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17898	12	416322	4815849	Emery Owens House	390 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17899	12	416321	4815946	Modern Duplex #1	463 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17900	12	416362	4816011	Mary McCann House	527 N. Ridge Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17901	12	416246	4815600	Modern Duplex #2	149 N. Placer	Idaho Falls	93000388		NR Listed	5/20/1993
19-17902	12	416352	4815782	Max Clark House	333 N. Placer Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17903	12	416359	4815794	Lynn Crandall House	363 N. Placer Ave.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17904	12	416200	4815836	Modern Apartment Building	225 Ash St.	Idaho Falls	93000388		NR Listed	5/20/1993
19-17905	12	416344	4815337	Maple house - 552	552 Maple	Idaho Falls			Ineligible	7/23/1993
19-17906	12	416535	4817179	Whittier house - 146	146 Whittier	Idaho Falls			Ineligible	5/26/1993
19-17908	12	416987	4816437	LDS 9th Ward Meetinghouse	2nd and Higbee	Idaho Falls				
19-17910	12	416426	4816067	Evangelical Mission Convent Church	557 S. Boulevard	Idaho Falls			Ineligible	5/6/2016
19-17911	12	416523	4816047	Strickholm Residence	145 Sixth Street	Idaho Falls				
19-17912	12	416538	4816047	William Haynie Residence	155 Sixth Street	Idaho Falls				
19-17913	12	416553	4816047	Weltfle Residence	161 Sixth Street	Idaho Falls				
19-17914	12	416568	4816047	P.R. Page Residence	167 Sixth Street	Idaho Falls				
19-17915	12	416584	4816046	Foster-Rogers Residence	169 Sixth Street	Idaho Falls				
19-17916	12	416599	4816046	Miner Residence	187 Sixth Street	Idaho Falls				
19-17917	12	416614	4816046	McMallum Residence	199 Sixth Street	Idaho Falls				
19-17918	12	416648	4816038	Sixth Street House - 205	205 Sixth Street	Idaho Falls				
19-17919	12	416661	4816046	Sixth Street House - 215	215 Sixth Street	Idaho Falls				
19-17920	12	416672	4816045	Sixth Street House - 217	217 Sixth Street	Idaho Falls				
19-17921	12	416686	4816045	Sixth Street House - 225	225 Sixth Street	Idaho Falls			Ineligible	7/18/2011

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17922	12	416703	4816045	Sixth Street Bungalow - 237	237 Sixth Street	Idaho Falls				
19-17923	12	416721	4816045	Sixth Street House - 245	245 Sixth Street	Idaho Falls				
19-17924	12	416738	4816045	Sixth Street House - 253	253 Sixth Street	Idaho Falls				
19-17925	12	416754	4816045	Sixth Street House - 263	263 Sixth Street	Idaho Falls				
19-17926	12	416769	4816044	Sixth Street House - 269	269 Sixth Street	Idaho Falls				
19-17927	12	416789	4816044	Sixth Street House - 275	275 Sixth Street	Idaho Falls				
19-17928	12	416811	4816044	Sixth Street House - 295	295 Sixth Street	Idaho Falls				
19-17929	12	416849	4816044	Sixth Street House - 305	305 Sixth Street	Idaho Falls				
19-17930	12	416868	4816043	Sixth Street House - 311	311 Sixth Street	Idaho Falls				
19-17931	12	416887	4816043	Sixth Street House - 317-319	317-319 Sixth Street	Idaho Falls				
19-17932	12	416902	4816043	Sixth Street House - 325	325 Sixth Street	Idaho Falls				
19-17933	12	416917	4816043	Sixth Street House - 337	337 Sixth Street	Idaho Falls				
19-17934	12	416932	4816043	Sixth Street House - 345	345 Sixth Street	Idaho Falls				
19-17935	12	416952	4816042	Sixth Street House - 355	355 Sixth Street	Idaho Falls				
19-17936	12	416974	4816042	Sixth Street House - 371	371 Sixth Street	Idaho Falls				
19-17937	12	417017	4816041	Sixth Street House - 395	395 Sixth Street	Idaho Falls				
19-17938	12	417050	4816041	Higbee house - 555	555 Higbee	Idaho Falls				
19-17939	12	417065	4816041	Sixth Street House - 419	419 Sixth Street	Idaho Falls				
19-17940	12	417126	4816041	Sixth Street House - 445	445 Sixth Street	Idaho Falls				
19-17941	12	417165	4815984	Viola Clark House	470 Sixth Street	Idaho Falls				
19-17942	12	417156	4816040	Sixth Street House - 465	465 Sixth Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17943	12	417203	4815983	Haller Trust House	498 Sixth Street	Idaho Falls				
19-17944	12	417187	4815983	Brown Residence	490 Sixth Street	Idaho Falls				
19-17945	12	417106	4815984	Alvin Rhoades Residence	452 - 452 1/2 Sixth Street	Idaho Falls				
19-17946	12	417087	4815985	Russell Medran Residence	424 Sixth Street	Idaho Falls				
19-17947	12	417072	4815985	DEM Inc.	420 Sixth Street	Idaho Falls				
19-17948	12	417053	4815985	Vernon George Residence	408 Sixth Street	Idaho Falls				
19-17949	12	416630	4816086	Lee Ave House - 553	533 Lee Ave	Idaho Falls				
19-17950	12	416970	4815986	Barrett Residence	370 Sixth Street	Idaho Falls				
19-17951	12	416917	4815986	Kathy Greco Residence	340 Sixth Street	Idaho Falls				
19-17952	12	416902	4815987	Joseph Gasidlo Residence	332 Sixth Street	Idaho Falls				
19-17953	12	416871	4815987	J. L. Neilsen House	316 Sixth Street	Idaho Falls				
19-17954	12	416852	4815987	Vern Berg Residence	310 Sixth Street	Idaho Falls				
19-17955	12	416811	4815988	Jon and Jennifer Cook Residence	294 Sixth Street	Idaho Falls				
19-17956	12	416792	4815988	James Freeman Residence	290 Sixth Street	Idaho Falls				
19-17957	12	416777	4815988	Clyde Perry Residence	272 Sixth Street	Idaho Falls				
19-17958	12	416761	4815988	Mildred Ames Residence	262 Sixth Street	Idaho Falls				
19-17959	12	416746	4815988	John Morrishita Residence	258 Sixth Street	Idaho Falls				
19-17960	12	416731	4815988	Eunice Cook Residence	250 Sixth Street	Idaho Falls				
19-17961	12	416712	4815989	Ruth S. Cook Residence	240 Sixth Street	Idaho Falls				
19-17962	12	416693	4815989	Sonya Owen Residence	232 Sixth Street	Idaho Falls				
19-17963	12	416677	4815989	Charles Noble Residence	220 Sixth Street	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-17964	12	416662	4815989	Julian Perez Residence	208 Sixth Street	Idaho Falls				
19-17965	12	416647	4815989	Brent Mitchell Residence	204 Sixth Street	Idaho Falls				
19-17966	12	416589	4815992	Manual Arts Bldg. - Idaho Falls High School	640 S Lee Ave.	Idaho Falls				
19-17967	12	416650	4815946	Kit & Gary Allen Residence	675 S Lee Ave	Idaho Falls				
19-17968	12	416673	4815946	Bert Hansen II Residence	215 7th St.	Idaho Falls				
19-17969	12	416692	4815946	Wayne Wilcox Residence	225 7th St.	Idaho Falls				
19-17970	12	416710	4815946	Tiffany Bensen Residence	235 7th St.	Idaho Falls				
19-17971	12	416733	4815945	James Holman Residence	245 7th St.	Idaho Falls				
19-17972	12	416751	4815939	Ellen Brower Residence	263 7th St.	Idaho Falls				
19-17973	12	416767	4815945	Berrett/Lloyd Duplex	269/273 7th St.	Idaho Falls				
19-17974	12	416814	4815937	Harold Hebdon Residence	295 7th St.	Idaho Falls				
19-17975	12	416874	4815944	Ruth Tippetts Residence	315 7th St.	Idaho Falls				
19-17976	12	416897	4815944	Dye/Hansen House	333 7th St.	Idaho Falls				
19-17977	12	416954	4815943	Richard Reed Residence	361 7th St.	Idaho Falls				
19-17978	12	416969	4815943	Mary Alice Olney Residence	365 7th St.	Idaho Falls				
19-17979	12	416985	4815943	William Arnold Residence	377 7th St.	Idaho Falls				
19-17980	12	417015	4815942	Arnold/Brown House	393 7th St.	Idaho Falls				
19-17981	12	417049	4815942	Paul Nelson Residence	695 S. Higbee Ave.	Idaho Falls				
19-17982	12	417064	4815942	Janna Jeanotte Residence	415 7th St.	Idaho Falls				
19-17983	12	417079	4815942	Robert England Residence	421 7th St.	Idaho Falls				
19-17984	12	417094	4815942	Anna Maria Naranjo Residence	437 7th St.	Idaho Falls				

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19-17985	12	417110	4815941	Stephen Hurzeler Residence	441 7th St.	Idaho Falls				
19-17986	12	417129	4815941	Everette Robbins Residence	449 7th St.	Idaho Falls				
19-17987	12	417144	4815941	Charlotte Fouts Residence	459 7th St.	Idaho Falls				
19-17988	12	417155	4815941	Caroline Goldsworthy Residence	465 7th St.	Idaho Falls				
19-17989	12	417171	4815941	Richard Hurley Residence	483 7th St.	Idaho Falls				
19-17990	12	417167	4815885	Jose Torrez Residence	474 7th St.	Idaho Falls				
19-17991	12	417099	4815885	Eva Davis House	432 7th St.	Idaho Falls				
19-17992	12	417080	4815885	Roy Whitlatch Residence	422 7th St.	Idaho Falls				
19-17993	12	417056	4815895	Joseph Buglione Residence	705 S. Higbee Ave.	Idaho Falls				
19-17994	12	417056	4815876	Richard Oler Residence	745 S. Higbee Ave.	Idaho Falls				
19-17995	12	417015	4815886	S. Higbee Ave house - 710	710 S. Higbee Ave.	Idaho Falls				
19-17996	12	416999	4815886	7th St. house - 384	384 7th St.	Idaho Falls				
19-17997	12	416984	4815886	7th St. house - 374	374 7th St.	Idaho Falls				
19-17998	12	416967	4815887	7th St. house - 364	364 7th St.	Idaho Falls				
19-17999	12	416931	4815887	7th St. house - 348	348 7th St.	Idaho Falls				
19-18000	12	416893	4815887	7th St. house - 326	326 7th St.	Idaho Falls				
19-18001	12	416878	4815888	7th St. house - 320	320 7th St.	Idaho Falls				
19-18002	12	416862	4815888	7th St. house - 310	310 7th St.	Idaho Falls				
19-18003	12	416847	4815897	S. Emerson house - 705	705 S. Emerson	Idaho Falls				
19-18004	12	416847	4815878	S. Emerson house - 711	711 S. Emerson	Idaho Falls				
19-18005	12	416780	4815887	St. John's Lutheran Church	290 7th St.	Idaho Falls				

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-18006	12	416722	4815889	7th St. house - 244	244 7th St.	Idaho Falls				
19-18007	12	416699	4815889	7th St. house - 234	234 7th St.	Idaho Falls				
19-18008	12	416661	4815890	7th St. house - 216	216 7th St.	Idaho Falls				
19-18009	12	416646	4815890	7th St. house - 204	204 7th St.	Idaho Falls				
19-18010	12	416612	4815890	7th St. house - 194	194 7th St.	Idaho Falls				
19-18011	12	416597	4815891	7th St. house - 182	182 7th St.	Idaho Falls				
19-18012	12	416582	4815891	7th St. house - 176	176 7th St.	Idaho Falls				
19-18013	12	416567	4815891	7th St. house - 156	156 7th St.	Idaho Falls				
19-18014	12	416536	4815891	7th St. house - 148	148 7th St.	Idaho Falls				
19-18015	12	416521	4815891	LDS School	140 7th St.	Idaho Falls				
19-18016	12	416506	4815891	Boarding House	138 7th St.	Idaho Falls				
19-18017	12	416487	4815892	7th St. Duplex 124-124 1/2	124-124 1/2 7th St.	Idaho Falls				
19-18018	12	416464	4815892	7th St. house - 110	110 7th St.	Idaho Falls				
19-18019	12	416432	4815918	7th St. house - 102	102 7th St.	Idaho Falls				
19-18020	12	416814	4815956	Stuart House	652 S. Emerson	Idaho Falls				
19-18021	12	416948	4815887	7th St. house - 356	356 7th St.	Idaho Falls				
19-18023	12	417249	4816245	S. Holmes house - 355	355 S. Holmes	Idaho Falls			Ineligible	2/27/1995
19-18024	12	416702	4816144	5th St. house - 241	241 5th St.	Idaho Falls			Eligible	9/13/2013
19-18043	12	414343	4818840	Red Baron Hangar	2381 Foote Dr.	Idaho Falls	97001126		Eligible	6/27/2019
19-18044	12	415386	4814666	Idaho Brewing Company, Inc.	601 W. 19th St.	Idaho Falls			Ineligible	4/8/1996
19-18047	12	415937	4815835	Dennings Appliance	201 W. Broadway	Idaho Falls			Unevaluated	1/2/1997

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-18048	12	415925	4815854	Collette Building	249-251 W. Broadway	Idaho Falls			Unevaluated	1/2/1997
19-18049	12	415913	4815859	Loan Office / El King Kong Bar	261 W. Broadway	Idaho Falls			Eligible	2/25/2009
19-18050	12	415901	4815865	Rio Theater	269-271 W. Broadway	Idaho Falls			Unevaluated	1/2/1997
19-18051	12	415888	4815871	F.O.E. Building	277-295 W. Broadway	Idaho Falls			Unevaluated	1/2/1997
19-18052	12	415652	4816064	Melaluca Co.	560 W. Broadway	Idaho Falls			Ineligible	1/2/1997
19-18053	12	415672	4816106	Saving Center	344 Memorial Dr.	Idaho Falls			Ineligible	1/2/1997
19-18054	12	415733	4816089	Bank of Eastern Idaho	399 N. Capital	Idaho Falls			Ineligible	1/2/1997
19-18055	12	415685	4816053	Aladdins Florist	504 W. Broadway	Idaho Falls			Ineligible	1/2/1997
19-18056	12	415927	4815924	West One Bank	330 Shoup Ave	Idaho Falls			Ineligible	1/2/1997
19-18057	12	415936	4815948	Mandarin Restaurant	366 Shoup Ave	Idaho Falls			Unevaluated	1/2/1997
19-18058	12	415945	4815957	Vacant Commercial Bldg.	376 Shoup Ave	Idaho Falls			Unevaluated	1/2/1997
19-18059	12	415925	4815972	All Seasons Angler	378-386 Shoup Ave	Idaho Falls			Unevaluated	1/2/1997
19-18060	12	415959	4815966	Max's Pawn - CPA Office	257-261 A St.	Idaho Falls			Unevaluated	1/2/1997
19-18061	12	415965	4815950	Bybee's Wheel Alignment	251 A St.	Idaho Falls			Unevaluated	1/2/1997
19-18062	12	415982	4815960	Mission Bautista	243 A St.	Idaho Falls			Unevaluated	1/2/1997
19-18063	12	415992	4815954	Bank of Commerce	206 A St.	Idaho Falls			Ineligible	1/2/1997
19-18064	12	415771	4816155	Capital Court	445 Capital Ave	Idaho Falls			Unevaluated	1/2/1997
19-18065	12	415709	4816169	First Interstate Bank	400 Memorial Dr	Idaho Falls			Ineligible	1/2/1997
19-18066	12	415719	4816217	Professional Offices	480-490 Memorial Dr	Idaho Falls			Unevaluated	1/2/1997
19-18067	12	415793	4816191	Capital and B Offices	497 Capital Ave	Idaho Falls			Ineligible	1/2/1997
19-18068	12	415753	4816266	Idaho National Guard Armory	520 Memorial Dr	Idaho Falls			Ineligible	4/11/2011

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-18069	12	415838	4816271	Joint Law Enforcement Facility	585 Capital Ave	Idaho Falls			Ineligible	1/2/1997
19-18070	12	415812	4816253	Courthouse Annex	547 Capital Ave	Idaho Falls			Unevaluated	1/2/1997
19-18071	12	415888	4816256	PIP Printing	467 Constitution Way	Idaho Falls			Ineligible	1/2/1997
19-18072	12	416061	4816145	US West Communications	299 Constitution Way	Idaho Falls			Unevaluated	1/2/1997
19-18073	12	416797	4816964	Sinclair Service Station	555 N. Yellowstone	Idaho Falls			Unevaluated	1/2/1997
19-18074	12	416130	4816183	B. B. Light Co. Garage	210 Constitution Way	Idaho Falls			Unevaluated	1/2/1997
19-18075	12	416115	4816191	Office Building	244 Constitution Way	Idaho Falls			Unevaluated	1/2/1997
19-18076	12	416125	4816241	Les Schwab Tire Store	690 Shoup Ave	Idaho Falls			Unevaluated	1/2/1997
19-18077	12	416956	4817174	Amoco Service Station	695 N. Yellowstone	Idaho Falls			Unevaluated	1/2/1997
19-18078	12	415973	4816236	City Hall Annex	380 Constitution Way	Idaho Falls			Unevaluated	1/2/1997
19-18079	12	416055	4816278	Farr's Candy Co.	345 D St.	Idaho Falls			Unevaluated	1/2/1997
19-18080	12	416094	4816270	City Sign Shop	685 Shoup Ave	Idaho Falls			Ineligible	1/2/1997
19-18081	12	415871	4816368	Marvin Stucki Law Office	520 Legion Dr.	Idaho Falls			Unevaluated	1/2/1997
19-18082	12	415868	4816385	Stoddard Photography	577 D St.	Idaho Falls			Unevaluated	1/2/1997
19-18083	12	415838	4816400	Shane Apartments	676 Memorial Dr.	Idaho Falls			Eligible	1/2/1997
19-18084	12	415889	4816374	Offices	683 Capital Ave.	Idaho Falls			Unevaluated	1/2/1997
19-18085	12	415885	4816410	Radin & Webb Law Offices	510-530 D St.	Idaho Falls			Ineligible	1/2/1997
19-18086	12	415888	4816507	Green Tree Realtors	796 Memorial Dr	Idaho Falls			Eligible	1/2/1997
19-18087	12	415943	4816584	US Post Office	855-875 Capital Ave	Idaho Falls			Ineligible	1/2/1997
19-18088	12	415994	4816438	Peterson-Moss Law Offices	485 E St.	Idaho Falls			Ineligible	1/2/1997
19-18089	12	416032	4816419	Romaine's	401 E St.	Idaho Falls			Unevaluated	1/2/1997

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-18090	12	415975	4816360	Offices	450-452 D St.	Idaho Falls			Ineligible	1/2/1997
19-18091	12	416030	4816341	Hart's Tux & Gowns	700 Park Ave	Idaho Falls			Unevaluated	1/2/1997
19-18092	12	416055	4816366	American Red Cross	740 Park Ave	Idaho Falls			Ineligible	1/2/1997
19-18093	12	416066	4816380	Chiropractic Office	750 Park Ave	Idaho Falls			Unevaluated	1/2/1997
19-18094	12	416103	4816321	Farr's Candy Distributing	310 D St.	Idaho Falls			Unevaluated	1/2/1997
19-18095	12	416131	4816296	Lost Arts Auto Repair	298 D St.	Idaho Falls			Eligible	10/12/2016
19-18096	12	416171	4816338	Towne Lodge Motel	255 E St.	Idaho Falls			Ineligible	1/2/1997
19-18097	12	416184	4816328	Barbeque Pit	235 E St.	Idaho Falls			Unevaluated	1/2/1997
19-18098	12	416975	4817199	General Glass	775 N. Yellowstone	Idaho Falls			Unevaluated	1/2/1997
19-18099	12	416966	4817188	Holden-McCarty Ins. Agency	725 N. Yellowstone	Idaho Falls			Unevaluated	1/2/1997
19-18100	12	416246	4816458	District 7 Health Dept.	254 F St.	Idaho Falls			Ineligible	5/6/2016
19-18101	12	416186	4816430	Apartments and Garage	850-898 Shoup Ave	Idaho Falls			Eligible	1/2/1997
19-18102	12	416179	4816472	Offices	883 Shoup Ave	Idaho Falls			Ineligible	5/6/2016
19-18103	12	416104	4816461	VacMart	840 Park Ave	Idaho Falls			Ineligible	1/2/1997
19-18104	12	416098	4816450	Beauty School	830 Park Ave	Idaho Falls			Ineligible	1/2/1997
19-18105	12	416091	4816438	Excelcis Beauty College	800 Park Ave	Idaho Falls			Ineligible	1/2/1997
19-18106	12	416106	4816445	Kurby Store	380 E St.	Idaho Falls			Unevaluated	1/2/1997
19-18107	12	416096	4816418	Merrill's & Phonecom	376-384 E St.	Idaho Falls			Unevaluated	1/2/1997
19-18108	12	416129	4816432	United Brotherhood of Carpenters & Millwrights	350-360 E St.	Idaho Falls			Eligible	1/2/1997
19-18109	12	416151	4816420	Dick Sayer's Used Cars	825 Shoup Ave	Idaho Falls			Unevaluated	1/2/1997
19-18110	12	416067	4816514	Deseret Industries	450 E St.	Idaho Falls			Ineligible	1/2/1997

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-18111	12	416155	4816536	A & W Drive In	950 Park Ave	Idaho Falls			Ineligible	5/6/2016
19-18112	12	416665	4815590	Gomperts House	218 10th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-18113	12	416647	4815562	Neil & Paul Johnson House	1055 S. Lee Ave.	Idaho Falls	97000863		NR Listed	8/8/1997
19-18114	12	416810	4815494	Melba Christa Olsen Crapo House	292 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-18115	12	416687	4815496	Phillip B. Gray House	228 11th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-18116	12	416608	4815492	James P. & Navae Stiles house	1100 S. Lee Ave.	Idaho Falls	97000863		NR Listed	8/8/1997
19-18117	12	416486	4815443	Fogg House	135 12th St.	Idaho Falls	97000863		NR Listed	8/8/1997
19-18122	12	416466	4817620	N. Blvd. house - 1050	1050 N. Blvd.	Idaho Falls			Ineligible	7/21/1999
19-18123	12	415758	4818086	Cassia Ave. house - 1299	1922 Cassia Ave.	Idaho Falls			Ineligible	9/15/1999
19-18125	12	416481	4817278	E. Elva St. house - 114	114 E. Elva St.	Idaho Falls			Ineligible	9/15/1999
19-18127	12	416565	4817178	Whittier St. house - 162	162 Whittier St.	Idaho Falls			Ineligible	9/15/1999
19-18128	12	415631	4818019	Jefferson Ave. house - 1249	1249 Jefferson Ave.	Idaho Falls			Ineligible	1/5/2000
19-18130	12	417150	4816833	Cleveland St. house - 451	451 Cleveland St.	Idaho Falls			Ineligible	10/28/1999
19-18135	12	415817	4813287	Bennett Property	415 W. Sunnyside Rd.	Idaho Falls			Eligible	8/3/2005
19-18136	12	415977	4813367	Hahn Farmhouse	350 W. Sunnyside Rd.	Idaho Falls			Ineligible	8/3/2005
19-18140	12	416310	4815349	Maple house - 530	530 Maple	Idaho Falls			Eligible	11/20/2001
19-18141	12	415975	4815546	S. Water house - 218	218 S. Water	Idaho Falls			Ineligible	10/18/2001
19-18148	12	412416	4813230	S. Bellin Rd. farmstead	S. Bellin Rd., adjacent to the Sidehill Canal	Idaho Falls			Eligible	4/26/2001
19-18149	12	414068	4813386	Lower Power Plant	W. Sunnyside Rd. at the Snake River	Idaho Falls			Eligible	8/3/2005
19-18150	12	414301	4813404	W. Sunnyside Rd. house - 1550	1550 W. Sunnyside Rd.	Idaho Falls			Ineligible	8/3/2005
19-18151	12	413944	4813201	Koester farmstead	SE side of Glen Koester Rd.	Idaho Falls			Ineligible	8/3/2005

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IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-18161	12	415456	4814511	Idaho Falls Armory	575 W. 21st St.	Idaho Falls			Ineligible	6/1/2020
19-18162	12	415495	4814465	Idaho Falls OMS 6	575 W. 21st St.	Idaho Falls			Ineligible	6/1/2020
19-18163	12	415494	4814416	Idaho Falls VSS	575 W. 21st St.	Idaho Falls			Ineligible	6/1/2020
19-18167	12	416349	4816434	Idaho Falls Union Pacific Railroad Bridge Underpass	Union Pacific Railroad tracks and Yellowstone Highway	Idaho Falls			Ineligible	5/4/2009
19-18207	12	416578	4816713	The Post Register	333 Northgate Mile	Idaho Falls			Eligible	4/8/2020
19-18212	12	417016	4816085	5th St. House - 388	388 5th St.	Idaho Falls			Eligible	3/9/2004
19-18214	12	416745	4816130	5th St. House - 267	267 5th St.	Idaho Falls			Ineligible	8/3/2006
19-18215	12	415515	4812696	Aupperle Studio	3950 S. 5th W.	Idaho Falls	08000868		NR Listed	9/10/2008
19-18216	12	415492	4812620	Migel House	4032 S. 5th W.	Idaho Falls	08000868		NR Listed	9/10/2008
19-18217	12	415546	4812645	Poitevin House	4012 S. 5th W.	Idaho Falls	08000868		NR Listed	9/10/2008
19-18244	12	413676	4815444	Skyline High School	1767 Blue Sky Drive	Idaho Falls			Ineligible	9/15/2011
19-18246	12	414798	4815613	Log Building	1021 S. Pioneer Road	Idaho Falls			Ineligible	3/28/2011
19-18247	12	414065	4815754	Hansen House	1574 W. Pancheri Drive	Idaho Falls			Ineligible	3/28/2011
19-18248	12	414046	4815755	Blair House	1590 W. Pancheri Drive	Idaho Falls			Ineligible	3/28/2011
19-18249	12	413988	4815744	Olsen House	890 S. Skyline Drive	Idaho Falls			Ineligible	3/28/2011
19-18250	12	416384	4817022	4th Ward LDS Church	605 N. Boulevard	Idaho Falls			Eligible	8/30/2010
19-18253	12	414682	4816945	Temple View Elementary School	1500 Scorpius Dr.	Idaho Falls			Ineligible	4/19/2011
19-18254	12	416492	4817284	E. Elva St. house - 124	124 E. Elva St.	Idaho Falls			Eligible	9/13/2013
19-18256	12	417260	4816011	Idaho Falls High School	601 S. Holmes Ave.	Idaho Falls			Eligible	6/15/2016
19-18261	12	416354	4814410	Graceland	2242 S. Boulevard	Idaho Falls			Eligible	7/31/2008
19-18271	12	414651	4817365	John's Hole IC bridge	US 20 over I-15	Idaho Falls			Ineligible	10/31/2013

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19-18272	12	415110	4817618	John's Hole bridge	US 20 over the Snake River	Idaho Falls			Ineligible	10/31/2013
19-18279	12	416083	4815864	Museum of Idaho Education Center	298 N. Eastern Ave.	Idaho Falls			Ineligible	5/5/2014
19-18280	12	416073	4815834	Museum of Idaho, North Galleries	252 N. Eastern Ave.	Idaho Falls			Ineligible	5/5/2014
19-18281	12	414070	4817272	Nemechek Property	880 N. Skyline Dr.	Idaho Falls			Ineligible	3/4/2015
19-18282	12	414425	4817308	Saturn Ave. house - 891	891 Saturn Ave.	Idaho Falls			Ineligible	3/4/2015
19-18283	12	414403	4817287	Claire View Ln. house - 1505	1505 Claire View Ln.	Idaho Falls			Ineligible	3/4/2015
19-18284	12	414381	4817293	Claire View Ln. house - 1509	1509 Claire View Ln.	Idaho Falls			Ineligible	3/4/2015
19-18285	12	414364	4817291	Claire View Ln. house - 1513	1513 Claire View Ln.	Idaho Falls			Ineligible	8/4/2016
19-18286	12	414348	4817292	Claire View Ln. house - 1517	1517 Claire View Ln.	Idaho Falls			Ineligible	8/4/2016
19-18287	12	414303	4817295	Claire View Ln. house - 1521	1521 Claire View Ln.	Idaho Falls			Ineligible	3/4/2015
19-18288	12	414282	4817295	Claire View Ln. house - 1525	1525 Claire View Ln.	Idaho Falls			Ineligible	3/4/2015
19-18289	12	414264	4817294	Claire View Ln. house - 1531	1531 Claire View Ln.	Idaho Falls			Ineligible	3/12/2020
19-18290	12	414237	4817295	Claire View Ln. house - 1535	1535 Claire View Ln.	Idaho Falls			Ineligible	3/4/2015
19-18291	12	414214	4817295	Claire View Ln. house - 1541	1541 Claire View Ln.	Idaho Falls			Ineligible	3/4/2015
19-18292	12	414190	4817299	Suckling Property	1545 Claire View Ln.	Idaho Falls			Ineligible	3/4/2015
19-18293	12	414170	4817290	Claire View Ln. house - 885	885 Claire View Ln.	Idaho Falls			Ineligible	3/4/2015
19-18294	12	414132	4817291	Idaho Falls City Pumphouse	890 Claire View Ln.	Idaho Falls			Ineligible	3/4/2015
19-18298	12	413085	4827676	Shattock Butte Grade Separation (Bridge) over I-15	Shattock Butte Rd. (W. 113th N.) at I-15	Idaho Falls vicinity			Ineligible	3/22/2016
19-18300	12	416470	4815754	Church of Jesus Christ of Latter Day Saints - LDS Church	885 South Blvd.	Idaho Falls			Ineligible	5/6/2016
19-18301	12	416391	4815347	South Blvd. duplex - 1290	1290 South Blvd.	Idaho Falls			Ineligible	5/6/2016
19-18307	12	416371	4815087	Hawthorne Elementary School	1520 South Blvd.	Idaho Falls			Eligible	8/11/2016

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19-18318	12	415779	4827515	Miller Place (dwelling) (non-extant)	11169 N. 5th West	Ucon			Ineligible	10/21/2017
19-18376	12	416003	4823458	Bryon and Glea Meng House	7147 North 5th West	Idaho Falls			Ineligible	9/20/2019
19-18397	12	414418	4813597	Sky-Vu Drive-In	3000 S. Yellowstone Highway	Idaho Falls			Unevaluated	11/2/2020
19-18398	12	416351	4814162	Arthur R. Hummel Home	117 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18399	12	416326	4814163	Claude L. Helm Home	135 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18400	12	416307	4814166	Ralph W. McDaniel Home	145 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18401	12	416288	4814162	Louis W. Boyle Home	155 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18402	12	416259	4814162	John D. Smith Home	175 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18403	12	416232	4814167	Lee M. Smith Home	185 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18404	12	416214	4814167	Robert E. Hayden Home	195 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18405	12	416195	4814166	James H. Julien Home	215 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18406	12	416175	4814168	Arthur R. Piccot Home	225 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18407	12	416155	4814167	Pat Brown Home	235 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18408	12	416137	4814168	James D. Soule Home	245 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18409	12	416120	4814172	Harold V. Lichtenberger Home	255 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18410	12	416100	4814171	Dale H. Johnson Home	265 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18411	12	416081	4814172	Ray L. Hadley Home	275 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18412	12	416063	4814173	Phillip E. Reichardt Home	2425 Calkins Ave.	Idaho Falls			Eligible	12/29/2016
19-18413	12	416016	4814160	Walt L. Kleypas Home	2434 Calkins Ave.	Idaho Falls			Eligible	12/29/2016
19-18414	12	416016	4814179	Thomas E. Bloom Home	2424 Calkins Ave.	Idaho Falls			Eligible	12/29/2016
19-18415	12	416020	4814205	Ella A. Chesbro Home	2420 Calkins Ave.	Idaho Falls			Eligible	12/29/2016

Historic Sites (IHSI)

05/10/2022

IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-18416	12	416022	4814234	Elvey W. Bateman Home	2400 Calkins Ave.	Idaho Falls			Eligible	12/29/2016
19-18417	12	416066	4814221	Sheldon L. Baker Home	2415 Calkins Ave.	Idaho Falls			Eligible	12/29/2016
19-18418	12	416083	4814223	Joseph A. Taylor Home	270 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18419	12	416102	4814220	Wallace H. Hanson Home	260 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18420	12	416118	4814219	Louis A. Tarallo Home	250 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18421	12	416138	4814219	Kenneth McCollom Home	240 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18422	12	416159	4814218	Henry D. Ruppel Home	230 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18423	12	416176	4814215	Albert F. Ditman Home	220 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18424	12	416196	4814217	Wendell E. Erickson Home	210 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18425	12	416213	4814215	Warren Foote Home	190 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18426	12	416236	4814215	Richard F. Poitevin Home	180 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18427	12	416262	4814213	Garth L. Peterson Home	160 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18428	12	416287	4814212	Lee O. Waters Home	150 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18429	12	416336	4814216	L. E. Andelin Home	130 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18430	12	416311	4814211	Lester E. Kimble Home	120 Tautphaus Dr.	Idaho Falls			Eligible	12/29/2016
19-18431	12	416378	4814205	Wallace E. Burns (C.) Home	2410 S. Boulevard	Idaho Falls			Eligible	12/29/2016
19-18432	12	416365	4814226	Andrew H. Keefer Home	2400 S. Boulevard	Idaho Falls			Eligible	12/29/2016
19-18433	12	416380	4814156	Elmo L. Anderson Home	2460 S. Boulevard	Idaho Falls			Eligible	12/29/2016
19-18434	12	415492	4815482	Short house - 350	350 Short St.	Idaho Falls			Ineligible	10/26/2020
19-18435	12	415483	4815491	Short house - 370	370 Short St.	Idaho Falls			Ineligible	10/26/2020
19-18436	12	415445	4815381	Rogers Seed Company's feed mill and warehouse	743 S. Capitol Ave.	Idaho Falls			Ineligible	10/26/2020

Historic Sites (IHSI)

05/10/2022

IHSI #	Zone	EAST	NORTH	PROPERTY NAME	STREET	CITY	NR Ref #	Date Listed	Eligibility	Finding Date
19-18437	12	415431	4815327	Challenge Creamery	751 S. Chamberlain Ave.	Idaho Falls			Eligible	10/26/2020
19-18438	12	416867	4817170	Idaho Falls Stockyard	701 Northgate Mile	Idaho Falls			Eligible	11/30/2020
19-18439	12	416874	4817147	Idaho Falls Stockyard, Auction Building	701 Northgate Mile	Idaho Falls			Eligible	11/30/2020
19-18440	12	416874	4817165	Idaho Falls Stockyard, Covered Pens	701 Northgate	Idaho Falls			Eligible	11/30/2020
19-18441	12	416836	4817203	Idaho Falls Stockyard, Holding Pens	701 Northgate	Idaho Falls			Eligible	11/30/2020
19-18442	12	416878	4817192	Idaho Falls Stockyard, Dispatch Booth	701 Northgate Mile	Idaho Falls			Eligible	11/30/2020
19-18445	12	414316	4817578	Information Operations and Research Center (IORC)	1155 Foote Drive	Idaho Falls			Ineligible	9/9/2020
									Total Count	1224

APPENDIX D
STAKEHOLDER CONSULTATION

INITIAL STAKEHOLDER OUTREACH MEETINGS

DATE	CONSULTING AGENCY	ATTENDEES
March 31, 2022	Idaho Fish and Game	Jacob Gray, Idaho Fish and Game Brett High, Idaho Fish and Game Curtis Hendricks, Idaho Fish and Game Joe Lukas, WMGT
April 26, 2022	Idaho Department of Environmental Quality	Alex Bell, Idaho Department of Environmental Quality Troy Saffle, Idaho Department of Environmental Quality Joe Lukas, WMGT
June 23, 2022	Idaho State Historic Preservation Office	Ashley Molloy, Idaho State Historic Preservation Office Chris Shaver, Idaho State Historic Preservation Office Joe Lukas, WMGT
July 28, 2022	National Park Service	Susan Rosebrough-Jone, National Park Service Steven Bowes, National Park Service Joe Lukas, WMGT
June 23, 2023	Idaho Fish and Game	Alex Bell, Idaho Fish and Game Richard Malloy, Idaho Falls Power Stephen Boorman, Idaho Falls Power

DATE	CONSULTING AGENCY	ATTENDEES
		Finlay Anderson, Kleinschmidt Associates Shannon Luoma, Kleinschmidt Associates

Idaho Falls and Gem State Stakeholder Outreach Meetings
June 23, 2023

Attendees:

Alex Bell	Idaho Fish and Game
Richard Malloy	Idaho Falls Power
Stephen Boorman	Idaho Falls Power
Finlay Anderson	Kleinschmidt Associates
Shannon Luoma	Kleinschmidt Associates

Agenda Notes

Overall Objectives

1. Provide an introduction to the Idaho Falls and Gem State Projects
2. Discuss potential issues/concerns
3. Preview the process plan and schedule
4. Brainstorm process efficiencies and communication

Agenda

1. Introduction to the Project and Licensing Process
 - a. Brief project description
 - i. Photos/maps (facilities, specs, operations stats)
2. Previously Identified potential issues:
 - a. Recreation
 - b. Fisheries
 - c. RTE Species
3. Discussion:
 - a. What are your (agency) current management objectives for this area?
 - b. Do you have any project-related concerns?
 - c. What resource areas are you focused on?
 - d. What is your level of engagement/availability? (resource specific contacts)
 - e. Who else should we be contacting regarding this project?
 - f. Data collection (agency reports, studies, etc)
4. Near-term project schedule
 - a. File PAD August 2023
 - b. FERC Scoping and Site Visit October 2023
 - c. What does it mean to license 2 projects together?

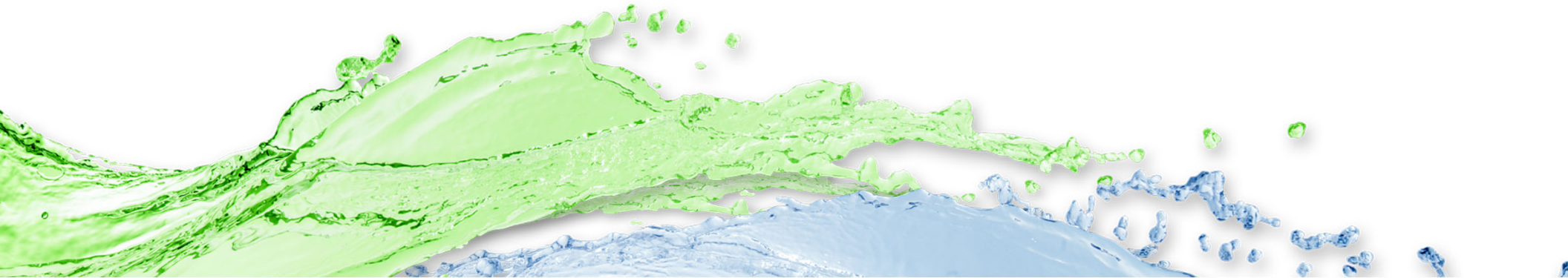


Kleinschmidt

Idaho Falls Power Relicensing

Stakeholder Introduction Meeting

June 23, 2023





Introductions

- Idaho Falls Power
- Kleinschmidt
- DEQ





Agenda and Meeting Purpose



- Provide Project Overview
- Overview of Licensing Approach
- Stakeholder Engagement
 - Identify potential studies or concerns
 - Discuss communication and contacts
- FERC 101 Introduction
- Near-term Project Schedule



General Approach for Relicensing – *A Combined Licensing Process*

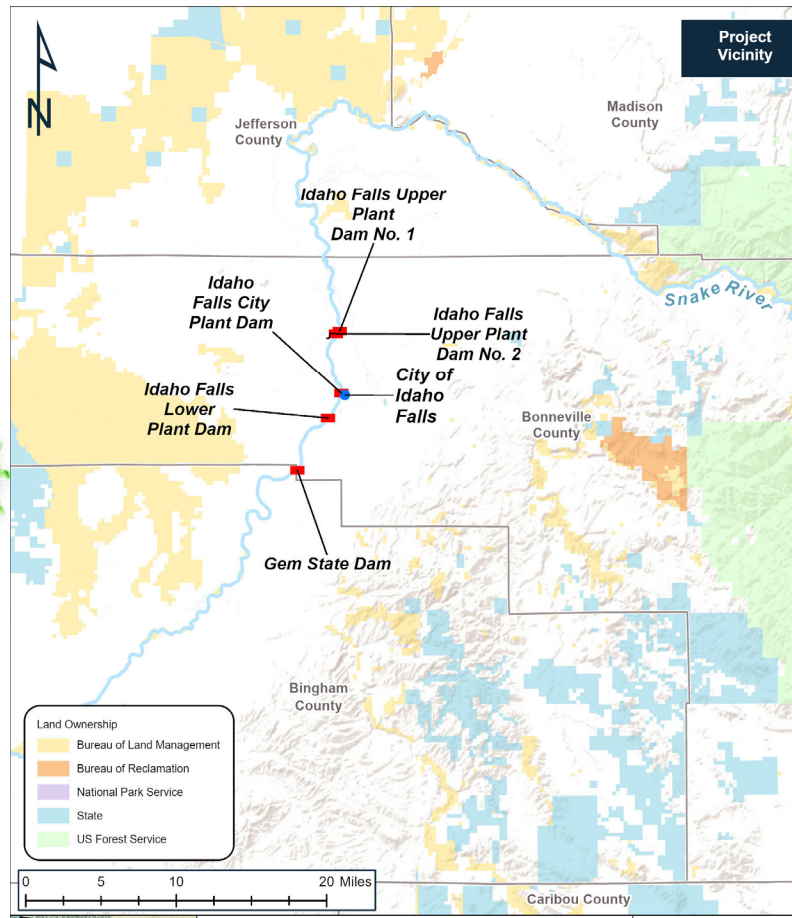
Benefits:

- Saves Time/Money
- Combined Resources
- Consistent Access and Messaging for Public
- Aligns with FERC's Watershed Approach

Logistics:

- Combining documents wherever possible but being clear in communicating license specific information
- Posting to Two Dockets
- Subscribing to Both Dockets

Project Location

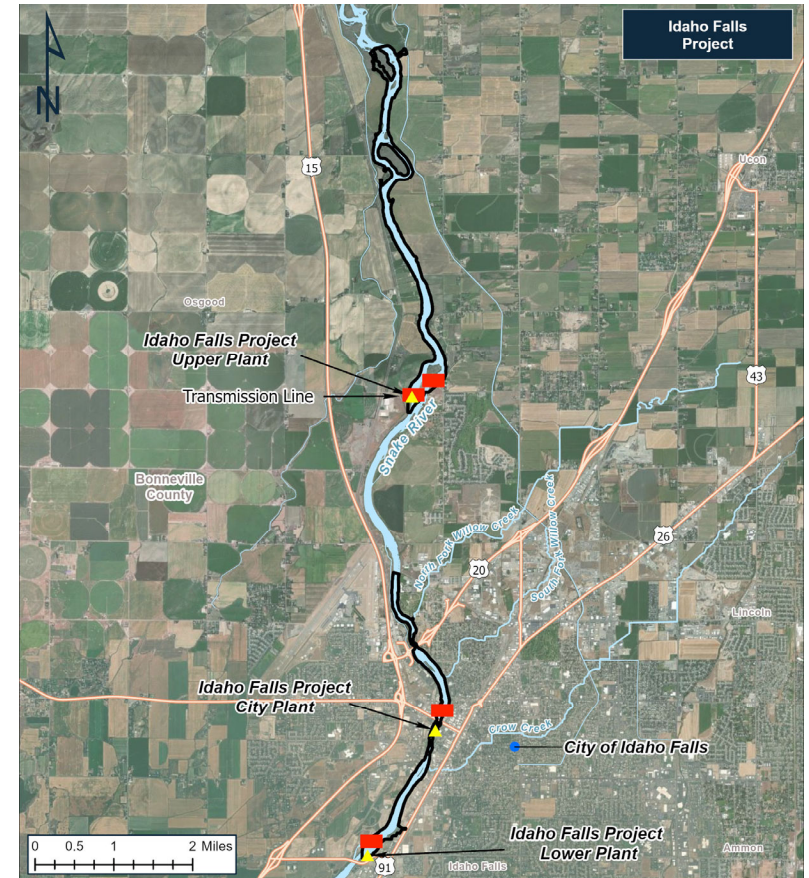


- Snake River
- Near Idaho Falls
- Bingham and Bonneville Counties
- Projects are Run of River

Idaho Falls Project Facilities

Idaho Falls Project

- 24.6 MW
- Run of River Project
- Upper Plant
 - 2 concrete dams
- City Plant
 - 1 concrete dam
- Lower Plant
 - 1 concrete dam
 - 2 powerhouses



Idaho Falls Project – Upper Plant

Facilities:

- Dam No. 1 - 23 ft high, Concrete and Earthfill
- Dam No. 2 – 33 ft high, Concrete and Earthfill
- 2 Spillways
- Powerhouse
 - Powerhouse built in 1982
 - 6.4 mw
 - Minimum flow: 100 cfs



Idaho Falls Project – City Plant

Facilities:

- 30 ft High Concrete Dam
- Spillway
- Trash Rack,
- Bascule Gate
- Maintenance Building
- Powerhouse
 - Intake built 1980
 - Powerhouse built in 1982
 - 5.6 MW



Idaho Falls Project – Lower Plant

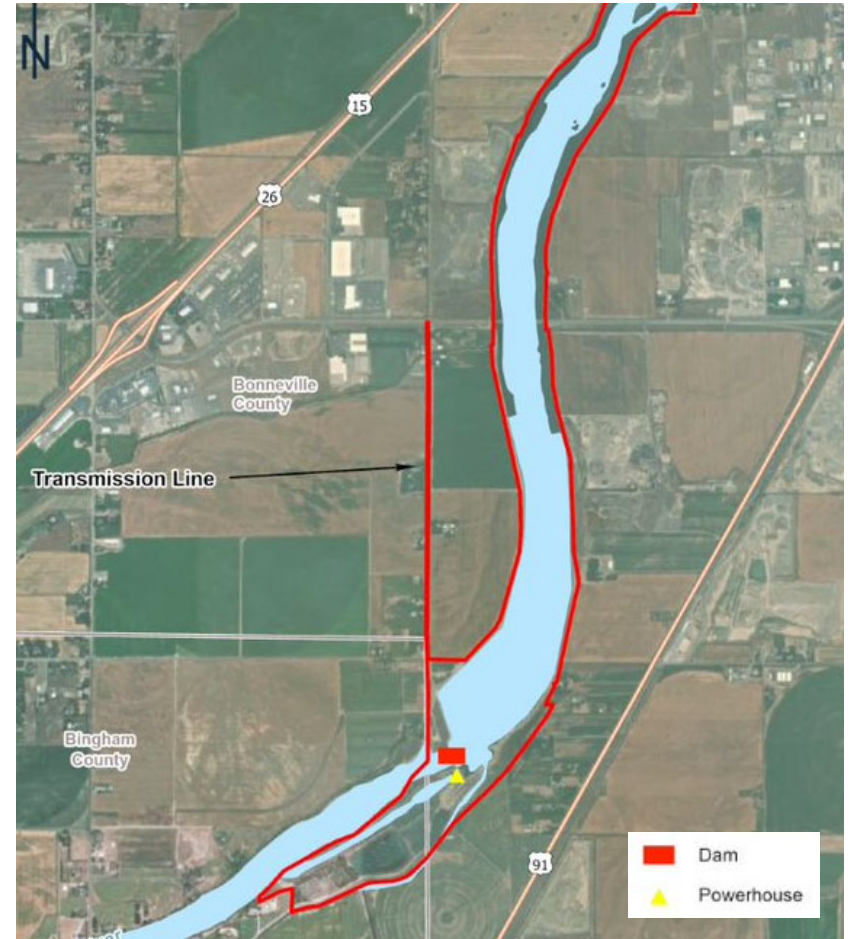
Facilities:

- 14 ft High Concrete Dam
- Spillway
- 8 Radial Gates
- 1 Pelican Gate
- 2 Powerhouses
 - Built in 1982
 - 6.1 mw



Gem State Project

- Immediately Downstream of IFP Lower Plant
- 22.6 MW
- 1 Earth and Rock Filled Dam
- Power Canal
- Transmission Line



Gem State Project

Facilities:

- 40 ft High Earth and Rock Fill Dam
- Run of River Project
- Spillway
- Power Canal
- Tailrace
- 2 Earthfill Dikes
- Irrigation Control Structures
- Powerhouse
 - 22.3 MW
 - Powerhouse built 1988
 - Minimum flow: 20cfs





Current License Compliance Idaho Falls and Gem State Projects

Minimum flow requirements

- Upper Plant Dam No. 1
 - 100 cfs minimum flows
- City Dam and Lower Dam
 - No minimum flow requirements
- Gem State
 - 20 cfs minimum bypass flows
- 12 Recreation facilities combined within both project boundaries

Process Overview

- Current Licenses Expire January 31, 2029
- Formal FERC Process to Begin August 2023 (Pre-Application Document [PAD] & Notice of Intent [NOI] filing)
- Draft License Applications (DLA) due September 3, 2026
- Final License Applications (FLA) January 31, 2027
- No Changes to Operations or Facilities Anticipated



Federal Energy Regulatory Commission (FERC)

WHAT IS FERC?

A federal, independent agency (formally the Federal Power Commission)

WHAT DOES FERC REGULATE?

Electrical transmission, hydroelectric dam licensing and safety, natural gas and oil pipelines

HOW DOES FERC IMPACT YOU?

FERC manages the participation of the public, agencies, NGOs, and other interested stakeholders.

WHEN DOES RELICENSING START?

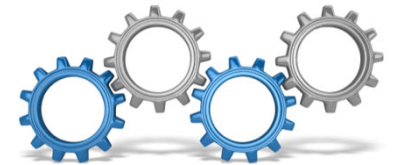
The relicensing process officially starts 5 to 5.5 years before license expiration



What is **FERC** Relicensing?

- Complex, Multiyear
- Involves Multiple Participants with Public Involvement Opportunities
- Develops an Administrative Record
- Provides FERC with Decision-Making Information
- Determines License Term and Requirements

Three Basic Stages of Relicensing



Stage 1: Initial Consultation (describe project, ask questions)

Stage 2: Studies and Application (answer questions and file license application)

Stage 3: Post-Filing (FERC conducts environmental review)



Resource Areas for Both Projects



Rare, Threatened, and Endangered (RTE) Species with Potential to Occur in the Project Area(s)

- Snake River Physa Snail – Endangered
- Yellow-billed Cuckoo – Threatened
- Monarch Butterfly – Federally Listed Candidate

Potential to Occur But Likely NOT Impacted:

- Gray wolf – Removed From ESA List in 2011
- Desert Valvata Snail – Removed From ESA List in 2010

Existing FERC Recreation Facilities - IFP

City Plant

- City Plant fishing Access Area
- Eagle Rock Crossing
- John's Hole Forebay Park
- Keefer's Island
- Pederson's Sportsman's Park
- Russell Freeman Park
- South Capital Park

Upper Plant

- Parking area
- River Access (fishing)
- Boat Ramp
- Access Road to The Island Snake River

Lower Plant

- South Tourist Park



South Tourist Park Boat Launch, Lower Plant

Existing FERC Recreation Facilities – *Gem State*

- Upper Marina
- Lower Marina
- Fishing Access
- Gem State Fishing Pond



Gem State Fishing Pond



Potential Resource Questions or Concerns

Fish/Aquatics

- Aquatic Habitat Quality and Availability
 - Rainbow Trout spawning
- Fish Population
 - Sturgeon movement
- Water Quality
 - DO, Mercury, Temperature, Turbidity

Tribal/Cultural

- Historic Properties
- Traditional Cultural Properties
- Tribal Interests

Recreation

- Availability and Quality
- Angler Satisfaction
- Fish Stocking

Terrestrial, Wildlife and Botanical

- RTE Species
- Trumpeter Swans
- Bats
- Raptors



Pulling these issues and stakeholder questions into a Study Plan

Following PAD and NOI filing:

- FERC issues scoping document and holds public meeting and site visit
- Stakeholders provide comments on PAD and study requests
- IFP responds with Proposed Study Plan and Meeting
- More opportunities to comment
- IFP revises and files the Final Study Plan
- FERC determination (with opportunities for dispute resolution)

FERC's Expectation for Study Plans

- Must Have “Nexus” to Project
- Must Relate to Public Interest or Specific Resource Agency Goals
- Relate to an Appropriate Study Area/Area of Potential Effects
- Avoid Academic Questions
- Propose Commonly Accepted Study Methods
- Reference Existing Data or Studies, if available

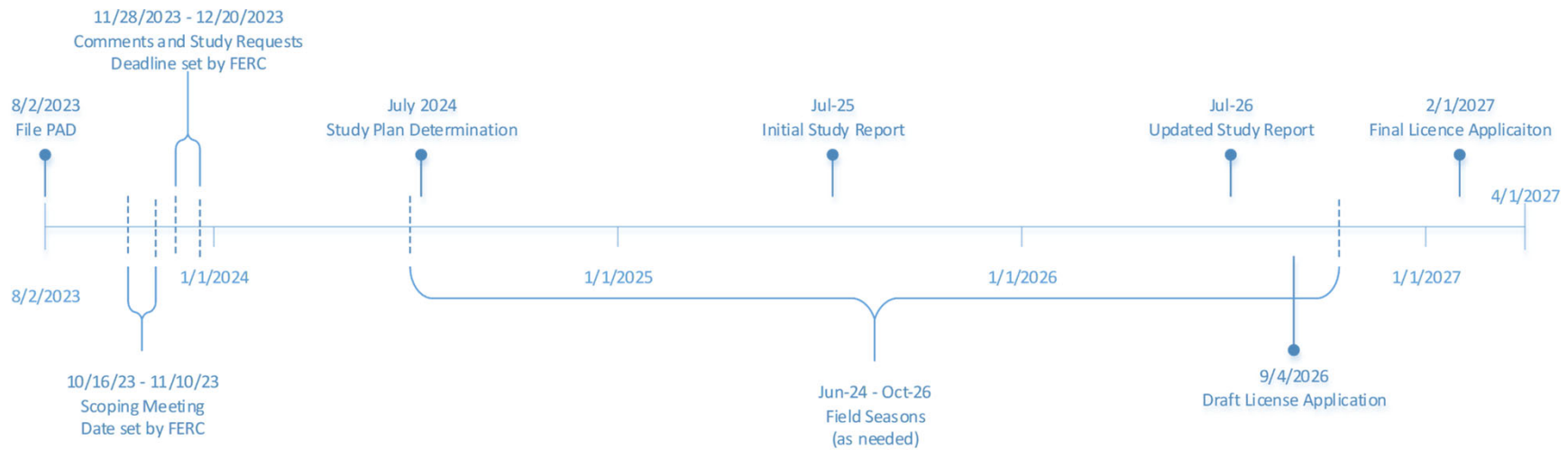
Recommend reviewing FERC guidance document (available on FERC's website):
A Guide to Understanding and Applying FERC Integrated Licensing Process Study Criteria

Near-term Schedule



PRE-FILING MILESTONE	DATE
Issue Public Notice for NOI/PAD	August 2, 2023
File NOI/PAD	August 2, 2023
Tribal Consultation Meeting (<i>FERC initiated</i>)	August 30, 2023
FERC Issues Notice of Commencement of Proceeding and SD1	September 29, 2023
Scoping Meetings and Project Site Visit (<i>FERC driven</i>)	October/November 2023
File Comments on PAD/SD1 and Study Requests	November 28, 2023

Anticipated Licensing Timeline





Questions



***Contains Critical Energy/Electric Infrastructure Information
- CUI//CEII -***

VOLUME II

SINGLE-LINE DIAGRAMS

For Agency Use Only

***Contains Critical Energy Infrastructure Information
- This has been filed separately-***