



Idaho Power Company American Falls FERC Relicensing – Joint Meeting

Friday, May 29, 2020
9:00 am – 12:00 pm



Joint Meeting Agenda

- Welcome and Introduction of IPC Staff
- Joint Meeting Purpose & Logistics
- FERC Relicensing Process & Schedule
- Summary of American Falls Pre-Application Document (PAD)
- Stakeholder Discussion and Q&A
- Comment and Study Request Requirements, Reminders & Next Steps



Introduction of Idaho Power Staff

- David Zayas, FERC Hydro Coordinator
- Josh Schultz, Sr. Resource Professional (Water Resources)
- Tracy Richter, Resource Professional Leader (Resident Fish)
- Joey Santos, Park Team Leader (Recreation)
- Shane Baker, Resource Scientist Leader (Cultural & Historic)



Joint Meeting Purpose & Logistics

The purpose of the Joint Meeting is to review the information included in the PAD and discuss the data and studies to be provided by IPC.

- COVID-19
- WebEx virtual meeting – no in-person or site tour
- Joint Meeting Recording
- Conducting Q&A
- Conference Line Etiquette – Mute not hold



Who and What is FERC?

Independent Federal agency that regulates the interstate transmission of electricity, natural gas, and oil

Exclusive authority to license non-federal hydroelectric projects under the Federal Power Act (30-50 year license terms). License defines operations, requirements, and conditions.



Office of Energy Projects (OEP)

- Division of Hydropower Licensing (DHL)
- Division of Hydropower Administration & Compliance (DHAC)
- Division of Dam Safety & Inspections (D2SI)

State and federal agencies and Native American Tribes have separate authorities independent of FERC but coordinated by FERC (i.e. ESA, CWA, NHPA, among others)



FERC Relicensing Process

- IPC requested to use the Traditional Licensing Process (TLP) with the filing of the PAD on February 27; FERC granted our request on April 7.
- 3-Stage Consultation
 - Stage 1: Notice of Intent, PAD, **Joint Meeting**, and Stakeholder Comments/Study Requests
 - Stage 2: Completion of reasonable and necessary studies requested by Stakeholders at end of Stage 1; provide study results and develop Draft License Application (DLA) for Stakeholder review and comment
 - Stage 3: File Final License Application (FLA) with FERC
- Post FLA: FERC conducts NEPA, consults with Stakeholders, issues new license.



FERC Relicensing Process

- FLA Contents – An evolution of the PAD
 - Exhibit A: Description of Project
 - Exhibit B: Project operation / Resource Utilization
 - Exhibit C: History of Project
 - Exhibit D: Statement of Costs and Financing
 - Exhibit E: Environmental Analysis
 - Exhibit F: Facilities Drawings
 - Exhibit G: Maps and Boundaries

Activity	Responsibility	Time Frame	Deadline
File NOI, PAD, and Request to use TLP	IPC	5 to 5.5 years before license expiration	February 27, 2020
Comments on TLP Request	Stakeholders	Within 30 days of TLP request submittal	March 27, 2020
Issue Public Notice of NOI, PAD, and decision on TLP Request and non-federal representation designation	FERC	Within 60 days of NOI, PAD, and TLP Request Submittal	April 7, 2020
Notify FERC of Joint Meeting, Site Visit and Newspaper Notice	IPC	At least 15-days in advance of joint meeting	May 8 and May 13, 2020
Joint Meeting for Consultation with Stakeholders	IPC, Stakeholders	Within 30-60 days of FERC’s Approval of TLP Request	May 29, 2020
Comments on PAD and Submit Study Requests	Stakeholders	Within 60 Days of Joint Meeting	July 29, 2020
Develop Study Plans	IPC	Following Receipt of PAD Comments and Study Requests	August – December 2020*
Conduct Field Studies	IPC	Following Development of Study Plans	May – October 2021*
Summarize Study Results, Develop and File Draft License Application (DLA), and Distribute to Stakeholders	IPC	Following Conclusion of Studies	July 2022*
Comments on Study Results and DLA	Stakeholders	90-Day Comment Period	November 2022*
Develop and File Final License Application (FLA) with FERC	IPC	No Later Than 2-Years Before Current License Expires	February 28, 2023
Current License Expires	FERC	50 Years After Effective Date of Current License	February 28, 2025

Summary of American Falls PAD

- Project Overview, Location & Operations
- Water Resources
- Fishery
- Recreation
- Historic & Cultural



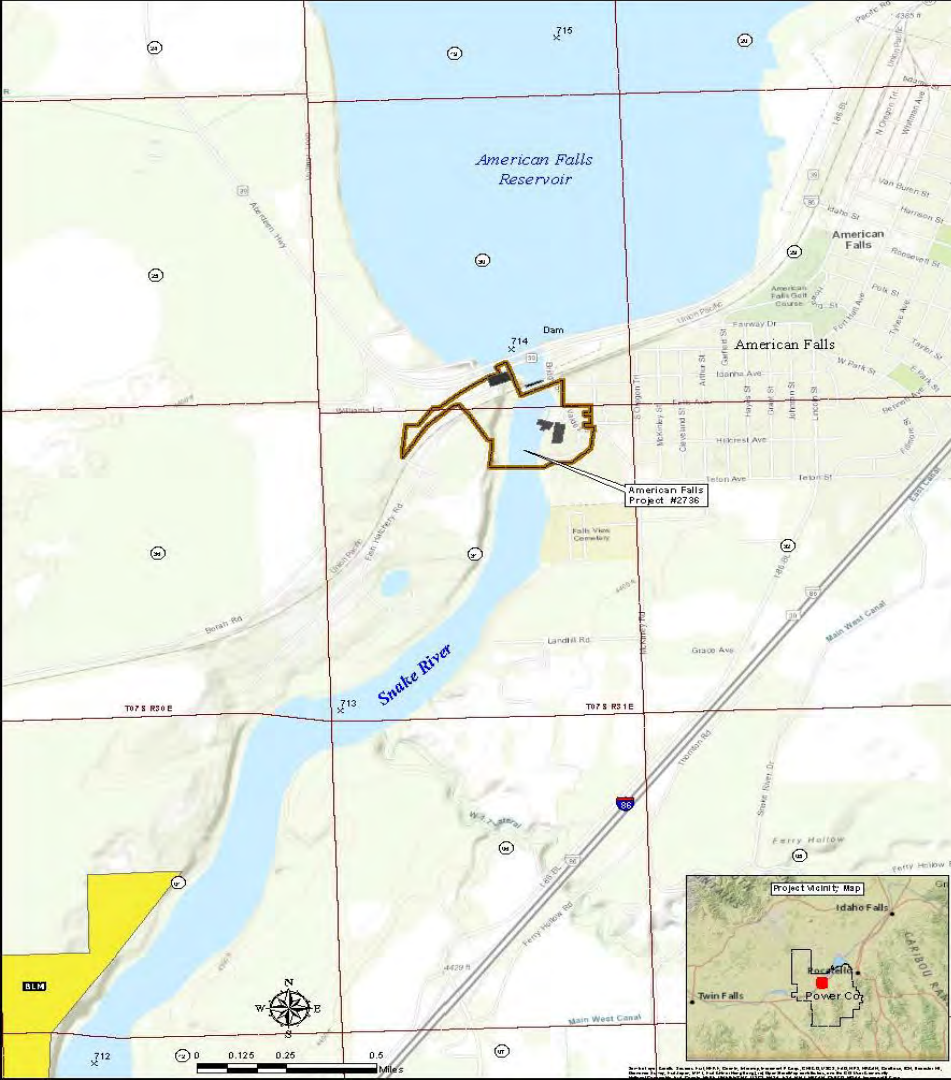


**Snake River (RM 714), Power County, ID.
City of American Falls, 25 miles southwest of
Pocatello, ID**

**Located on the American Falls Dam, which
created the American Falls Reservoir, both
owned and operated by the U.S. Bureau of
Reclamation.**

Small FERC project boundary.

**IPC is not proposing any changes to the current
operations of the project. Operations are
completely dependent on Reclamation's
operation of the dam and reservoir.**



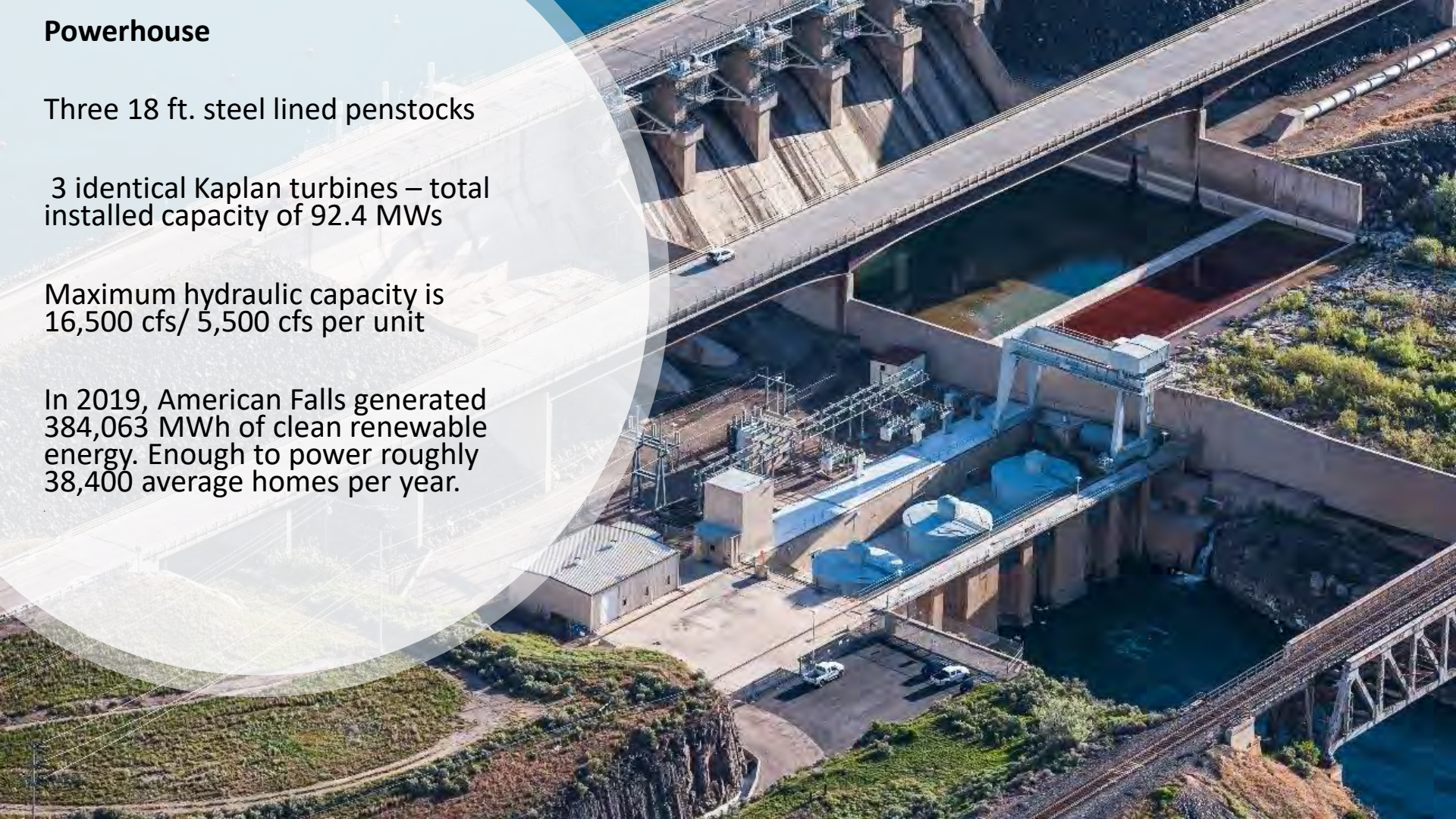
Powerhouse

Three 18 ft. steel lined penstocks

3 identical Kaplan turbines – total installed capacity of 92.4 MWs

Maximum hydraulic capacity is 16,500 cfs/ 5,500 cfs per unit

In 2019, American Falls generated 384,063 MWh of clean renewable energy. Enough to power roughly 38,400 average homes per year.



Transmission

Single 138-kv steel-pole transmission line extends approximately 2,100 ft. (0.4 miles) along the right bank and across the Snake River to the American Falls Station.





Water Resources

- License Overview
- Consent Order
- Water Quality Standards
- DO Mitigation
- Water Quality Monitoring
- Compliance Reporting



License Article 46

- Cooperate with Bureau of Reclamation and American Falls Reservoir District in the installation, maintenance, and continuous operation of a water temperature and dissolved oxygen (DO) monitoring system
- Instantaneous measures are available to the public on the Idaho Power webpage
- Mitigate for low DO



DEQ Consent Order

- Amended 1983
- Compliance period
 - Winter operations
- Penstock and river probes
- DO mitigation
- Point of compliance
- Monthly reporting to DEQ



DO Mitigation

- Blowers
 - Automated system
 - 3 blower system (2 primary, 1 backup)
 - Compliance monitor trigger
 - Blower 1: 6.0 mg/L
 - Blower 2: 5.0 mg/L
 - Significantly increases DO during low DO periods
- Spill
 - Manual operation
 - Operator receives alarm: 4.5 mg/L
 - Spill initiated: 3.8 mg/L
 - Significantly increases DO during low DO periods



Water Quality Standards

Dissolved Oxygen

- Site specific criteria
 - 1993
- Instantaneous minimum
 - 3.5 mg/L
- 7-day mean minimum
 - 4.7 mg/L
- 30-day mean
 - 5.5 mg/L
- Seasonal
 - May 15 – Oct 15

Temperature

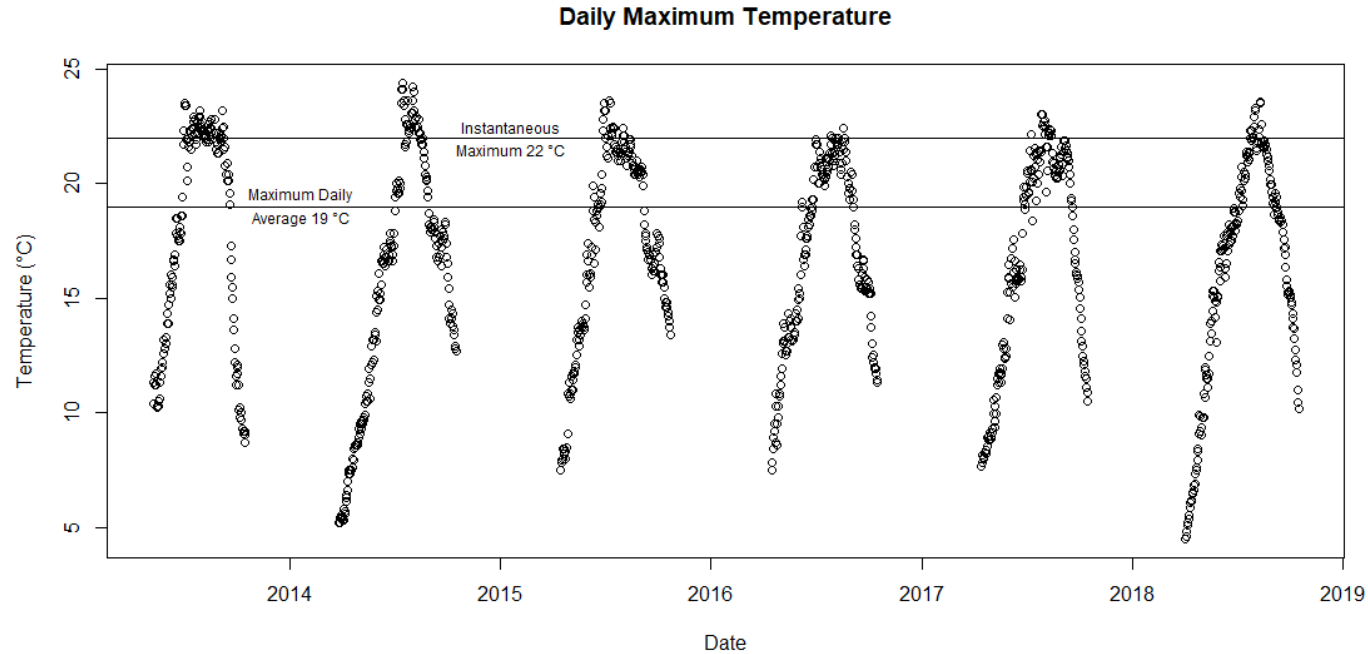
- COLD
- 22 °C or less
- Maximum daily average of no greater than 19 °C



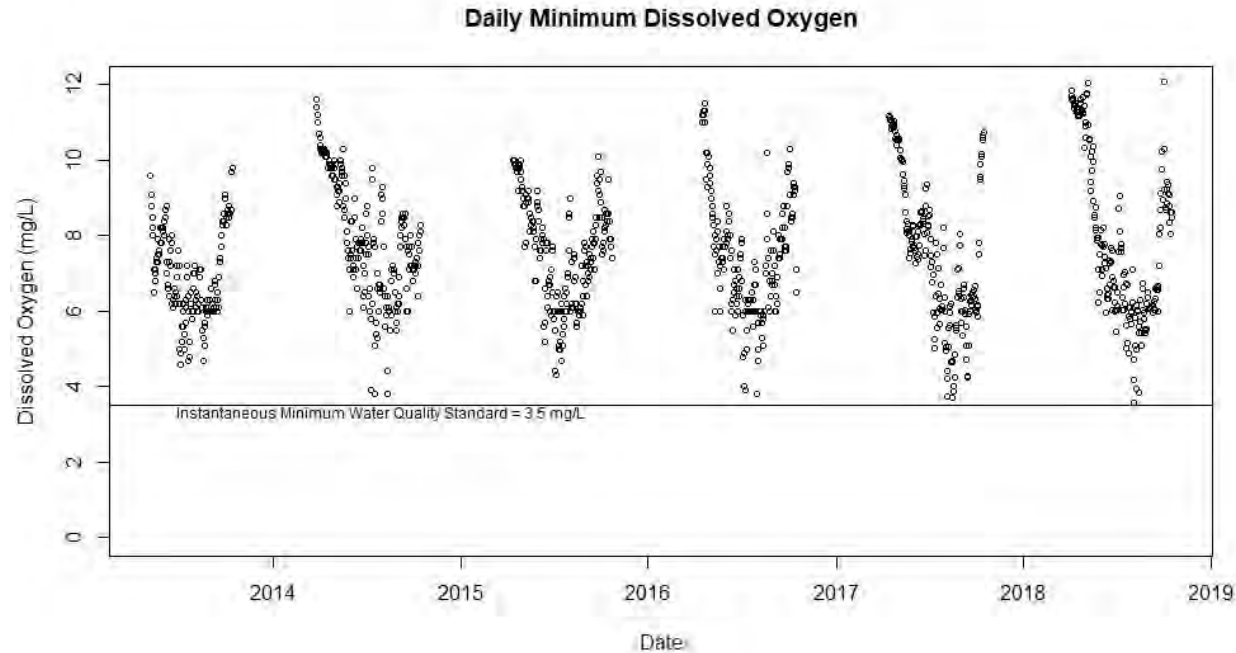
Temperature and Dissolved Oxygen

- Extensive record
 - Compliance point
- PAD 2013- 2018
 - Variable hydrologic conditions
 - Variable water quality conditions
 - Variable climactic conditions

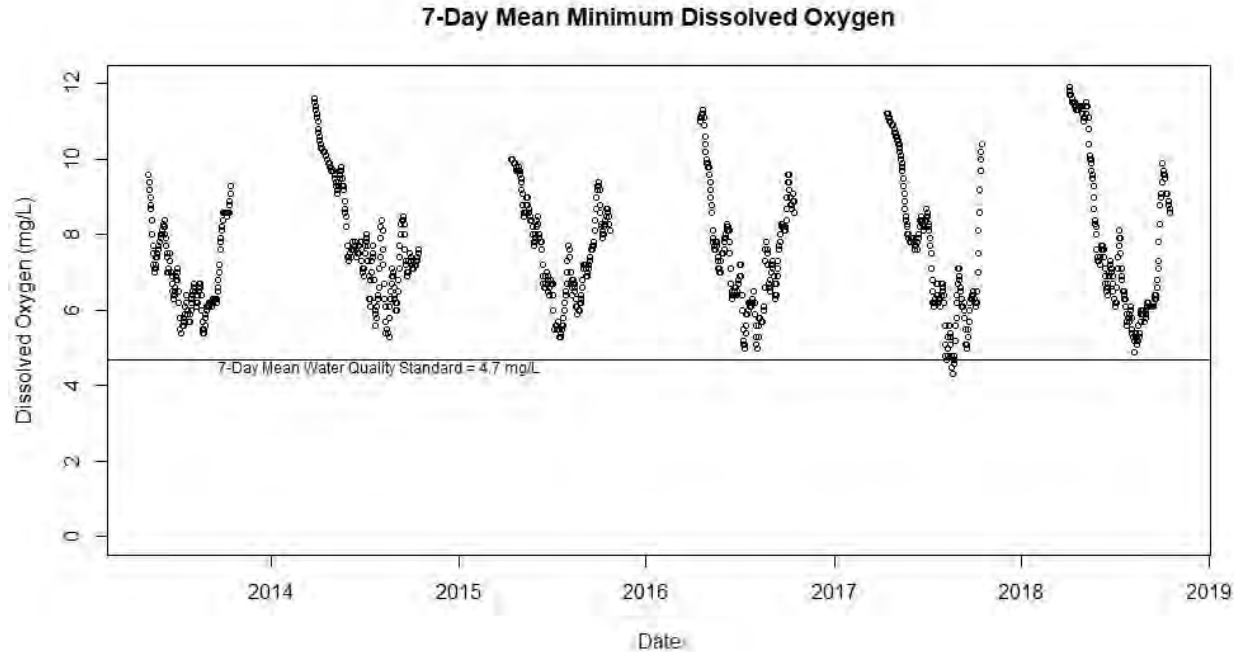
Temperature Record



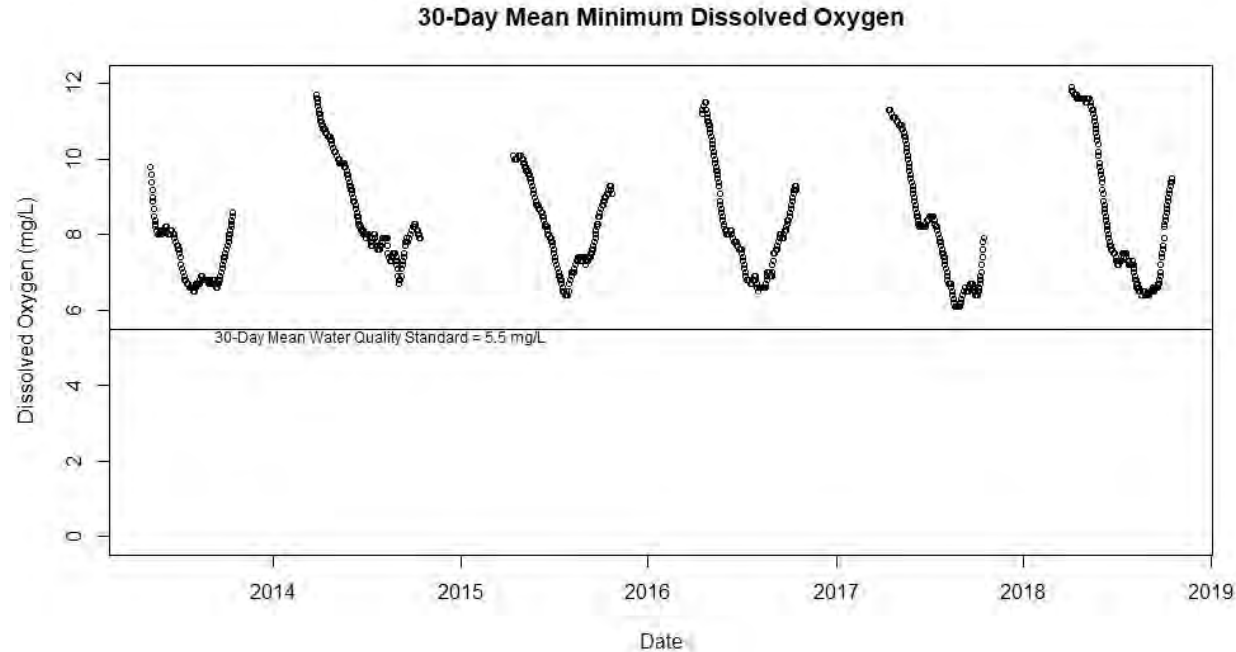
Dissolved Oxygen – Instantaneous Min



Dissolved Oxygen 7-Day Mean Min



Dissolved Oxygen 30-Day Mean





DO Compliance Record

- Instantaneous minimum
 - 3.5 mg/L: 100% Compliance Record
- 7-day mean minimum
 - 4.7 mg/L: 5 excursions (no observed biological effects)
- 30-day mean
 - 5.5 mg/L: 100% Compliance Record
- Winter operations
 - 6.0 mg/L: 100% Compliance Record



Fisheries Resources





Original license fishery issues:

- Entrainment and Turbine Mortality – specific to rainbow trout
- Several study attempts to quantify turbine mortality
 - IDFG estimated 30% turbine mortality
- Resulted in a Settlement Agreement
 - The 1980 American Falls Fish Compensation Agreement
 - Stocking of 8,000 lbs of hatchery reared rainbow trout
 - Size and location has varied – currently 1 fish per pound stocked above the dam
- Turbine mortality issue revisited in 1989
 - IDFG concluded 30% mortality, possibly higher for larger fish

Fish Communities



Reservoir

Native species

Mountain Whitefish
Yellowstone Cutthroat trout
Utah Chub
Utah suckers

Nonnative species

White sturgeon
Rainbow trout
Brown trout
Common Carp
Black bullhead
Black crappie
Smallmouth bass
Largemouth bass
Yellow perch

Downstream

Native species

Mountain Whitefish
Yellowstone Cutthroat trout
Utah Chub
Speckled dace
Redside shiners
Utah suckers
Bluehead suckers
Mountain suckers
Mottled sculpin

Nonnative species

White sturgeon
Rainbow trout
Brown trout
Brook trout
Common Carp
Brown bullhead
Channel catfish
Green sunfish
Bluegill sunfish
Smallmouth bass
Largemouth bass
Yellow perch

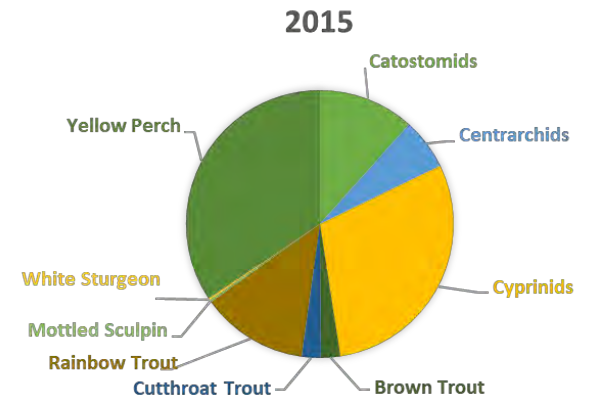
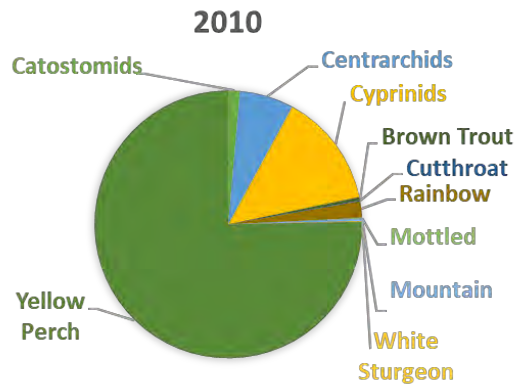
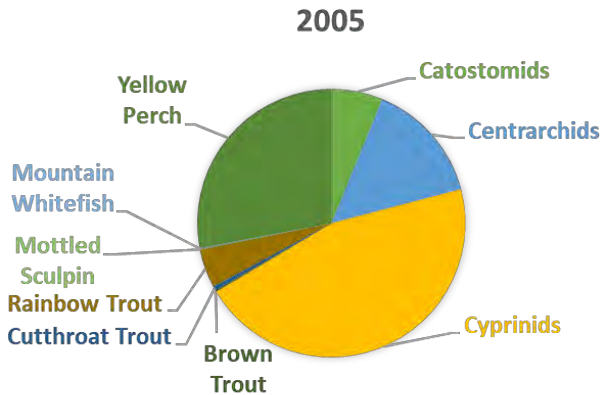
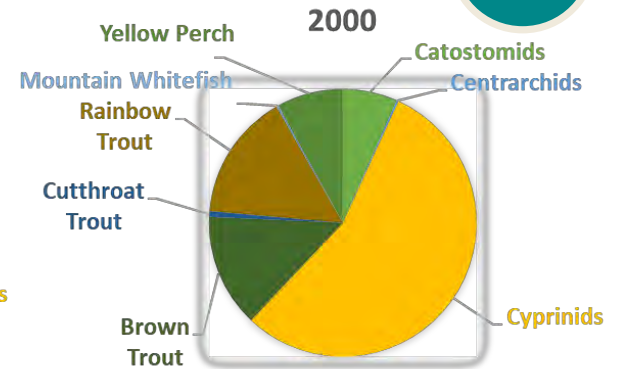
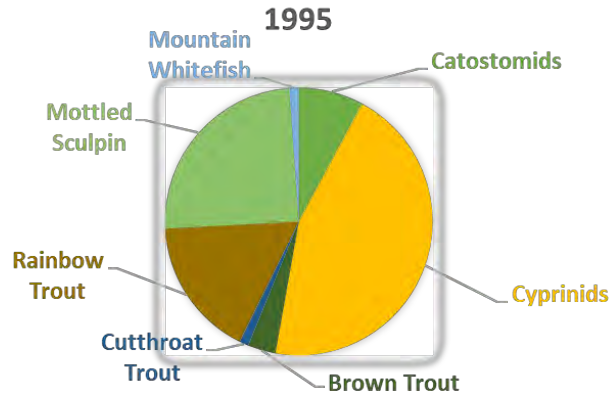
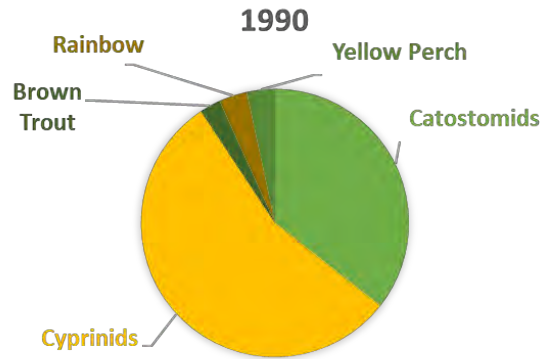
Fish Community below the dam



- Popular trout and smallmouth bass fishery.
- Trout fishery comprised of hatchery rainbow trout, brown trout and Yellowstone cutthroat trout
- Trout fishery largely supported by fish moving downstream from the reservoir



Project tailrace fish community trends ...





Fishery Management Direction

- Managed for recreational purposes.
- Focus is on providing a quality fishing experience for both native and introduced species (IDFG 2018).
- The non-native smallmouth bass fishery is managed by regulating harvest.
- Fish and fish population size is dependent on the amount of water retained in American Falls Reservoir (IDFG 2018)
- Developing introduced white sturgeon fishery



Recreation

- Fishing
- Boating
- Picnicking
- Birding
- Sightseeing



Four Developed facilities





Trenner Memorial Park (3-Layer Park)

- One turfed level with 3 picnic tables
- Two graveled levels with bench seating
- Stairway access to fishing dock and bank angling opportunities
- Gravel trail leading to boat ramp area



American Falls Day Use Park

- 2 areas totaling 2 acres
- Both areas turfed and accented with shrubbery and juniper trees
- ADA accessible flush restroom facility with potable water
- Picnic tables- 6 total
 - 4 uncovered
 - 2 covered with BBQ grills



Power County Boat Ramp

- 1.5 acres of paved parking
- 26 single vehicle sites (1 ADA)
- 30 boat Trailer parking sites
- 2 lane concrete boat launch
- 2 Launch docks on either side of ramp
- ADA fishing pier adjacent to ramp
- Double vault restroom
- 2 covered picnic tables
- Limited overnight camping
- Maintained by Power County



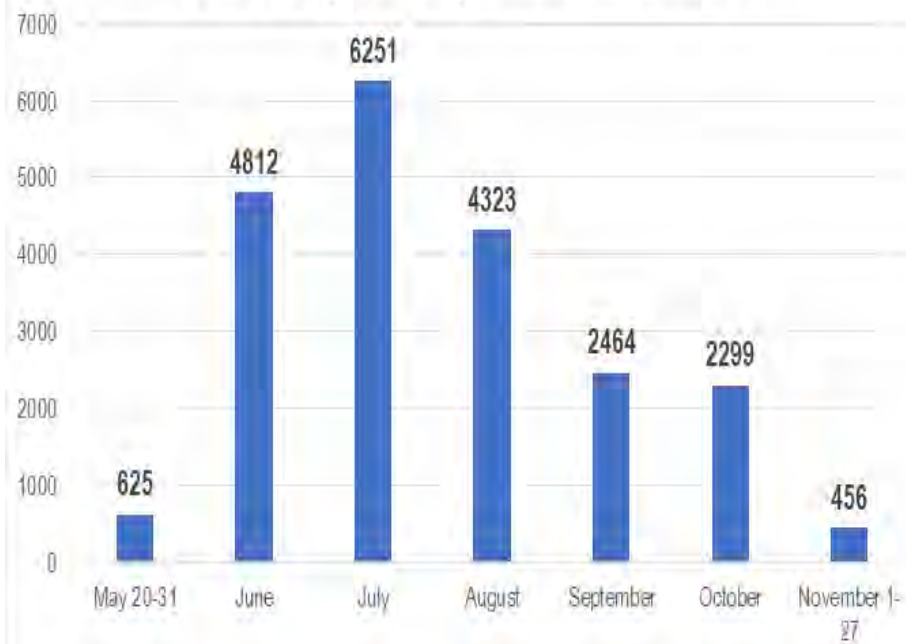
River Access Trail

- Fishing trail access on west side of the river
- Directional signage
- Stairway to access water for bank angling

Usage



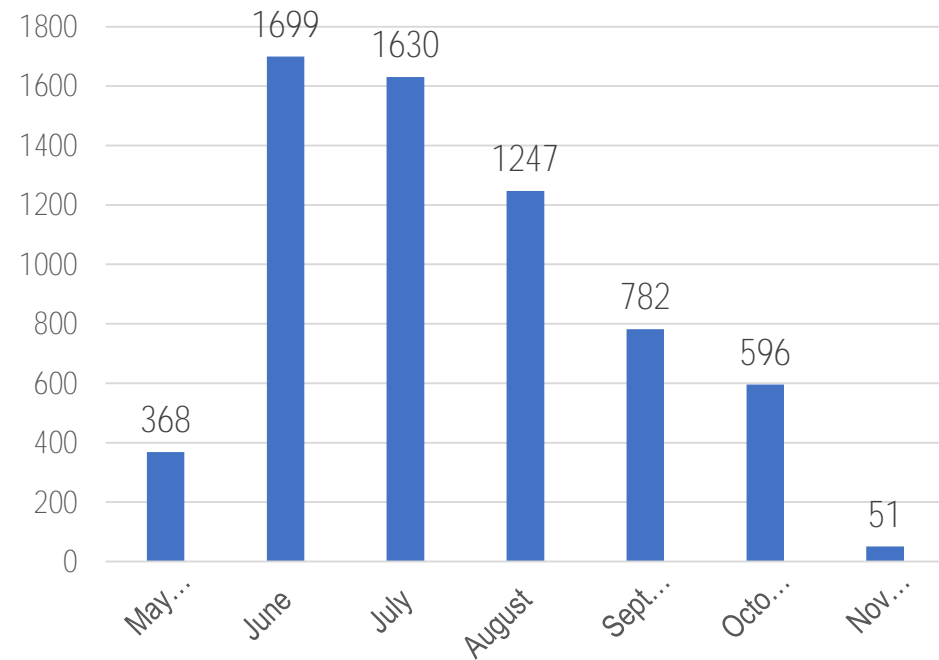
Power County Boat Ramp 2019 Number of Visitors



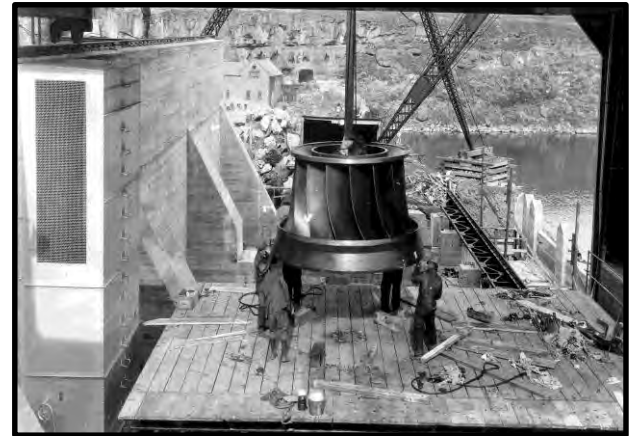
Usage



Power Plant 2019 Number of Visitors



Historic & Cultural Resources





Historic & Cultural Resources

- Native Americans
 - Shoshone
 - Bannock
- Fort Hall Reservation
 - Executive Order, June 16, 1867
 - Fort Bridger Treaty, July 3, 1868



- Oregon Trail - 1836-1869
- American Falls Town - 1800
- First BOR Dam - 1925
- Oregon Short Line Railroad - 1882
- Early Hydroelectric Development
 - Island Plant - 1902
 - West Side Plant - 1904
 - East Side Plant - 1913
- Second BOR Dam - 1978
- American Falls Power Plant - 1978



Archaeological and Built Resources

Identification Efforts

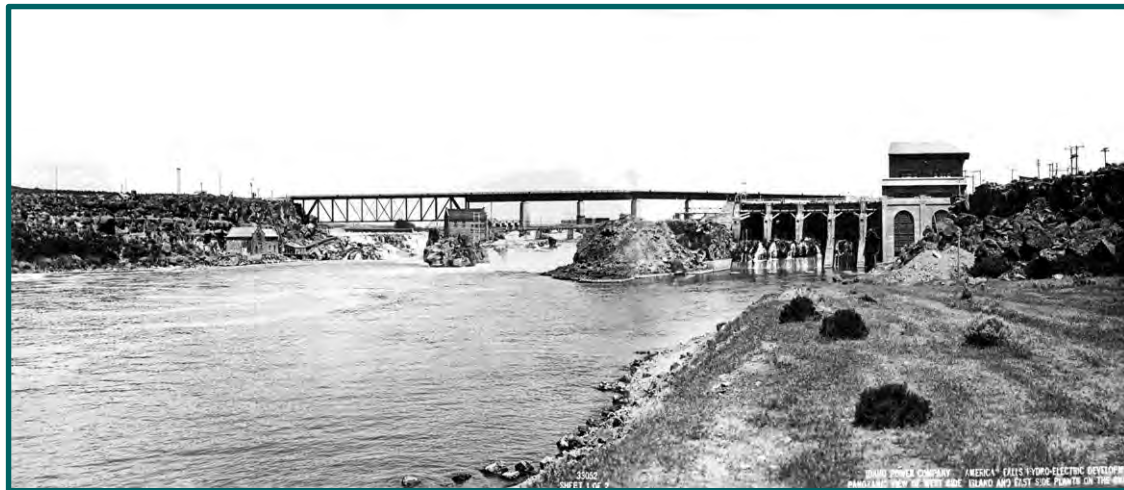
- Archaeological survey
- Architectural (built environment)

Cultural and historic resources within the Project boundary

	Total	NRHP * Eligible	NRHP Ineligible	NRHP Listed	Unevaluated
Archeological Sites	1	0	1	0	0
Built Resources	7	1	4	1	1

* NRHP – National Register of Historic Places

Historic Resources



Site of East Side Plant and Trenner Park (IHSI #77-17117 and #77-17114)



Island Power Plant
(IHSI #77-1587) &
Oregon Short Line
(Union Pacific)
Railroad
(IHSI #77-17111)



Site of West Side Plant
(IHSI #77-17117)

Historic Resources



1978 BOR Dam

American Falls
Power Plant (1978)

Oregon Short Line (Union
Pacific) Railroad
(IHSI #77-17111)

Island Power Plant
(IHSI #77-1587)

Site of West Side Plant
(IHSI #77-17117)



Historic and Cultural Resources

Summary of Known Resources

Archaeological Sites

- 10PR793 – Not Eligible

Architectural/Built Resources

- Oregon Trail (10PR813) – Listed on NRHP – No Known Preserved Segments in FERC Boundary
- American Falls Island Powerhouse (IHSI #77-1587) – Listed on NRHP
- American Falls West Side Plant Site (IHSI #77-17117) – Not Eligible
- American Falls East Side Plant Site (IHSI #77-17115) – Listed on NRHP 1976, Demolished 1977
- American Falls Horseshoe Dam Remnant (IHSI #77-17113) – Not Eligible
- Trenner Park (IHSI #77-17114) – Not Eligible
- Oregon Short Line/Union Pacific Railroad (IHSI #77-17111) – Eligible
- East Main Canal (IHSI #77-17096) – Unevaluated

IPC American Falls Powerhouse – Will reach 50 years of age in 2028



Historic Proposed Study Measures

- Class I Records Review at SHPO
- Recordation and evaluation of IPC owned architectural/built resources in FERC Project Area

An aerial photograph showing a large dam structure across a river. The river is a deep blue-green color. To the right of the dam, there is a residential area with houses, green lawns, and trees. A road curves along the right side of the image. In the background, there is a large body of water, possibly a lake or reservoir, and some industrial or commercial buildings. The sky is clear and blue.

Stakeholder Discussion and Q&A



Study Requests and Comments

- **Comments due on July 29 (send to IPC and/or file with FERC)**
- Written comments and study requests must reference **P-2736** and sent to:

David Zayas
FERC Hydro Coordinator
Idaho Power Company
P.O. Box 70 (83707)
1221 W. Idaho Street
Boise, ID 83702
208.388.2915
dzayas@idahopower.com

and/or

File comments and study requests through FERC's eLibrary. Accessed through FERC's homepage at:
<https://ferc.gov/>



Comment and Study Request Requirements

18 CFR 16.8(b)(5) – Comments must:

1. Identify determination of necessary studies or information needed
2. Identify basis for determination
3. Discuss your understanding of the resource issues and goals and objectives for the resource
4. Explain why any recommended study methodology is more appropriate than other available methodologies
5. Document that your recommended methodology is generally accepted
6. Explain how studies and information will be useful in furthering resource goals and objectives

Additional FERC Study Request “Guidelines” found at:

<https://www.ferc.gov/industries/hydropower/gen-info/guidelines/guide-study-criteria.pdf>

1. Describe Goals & Objectives
2. Explain Relevant Resource Management Goals
3. Explain Relevant Public Interest Considerations
4. Describe Existing Information and Need for Additional Information
5. Explain Project Nexus (project effect and resource to be studied)
6. Explain Proposed Study Methodology
7. Describe Level of Effort and Cost



Wrap-Up & Reminders

- American Falls Relicensing Information:
 - FERC Docket – Project No. p-2736
 - IPC Relicensing Website - <https://www.idahopower.com/energy-environment/energy/energy-sources/hydroelectric/relicensing/>
- IPC maintains distribution list and will update
 - Contact David Zayas, FERC Hydro Coordinator, dzayas@idahopower.com or 208.388.2915
- **Comments due on July 29 (send to IPC or file with FERC)**



Thank You!