

# Idaho Falls Power Relicensing



## INITIAL STUDY REPORT (ISR) MEETING

IDAHO FALLS (P-2842-045) AND GEM STATE (P-2952-073)

MONDAY, JUNE 23, 2025, 10:00 A.M. – 2:00 P.M. (MST)







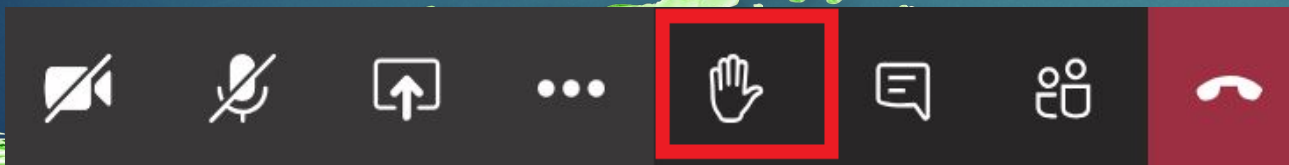
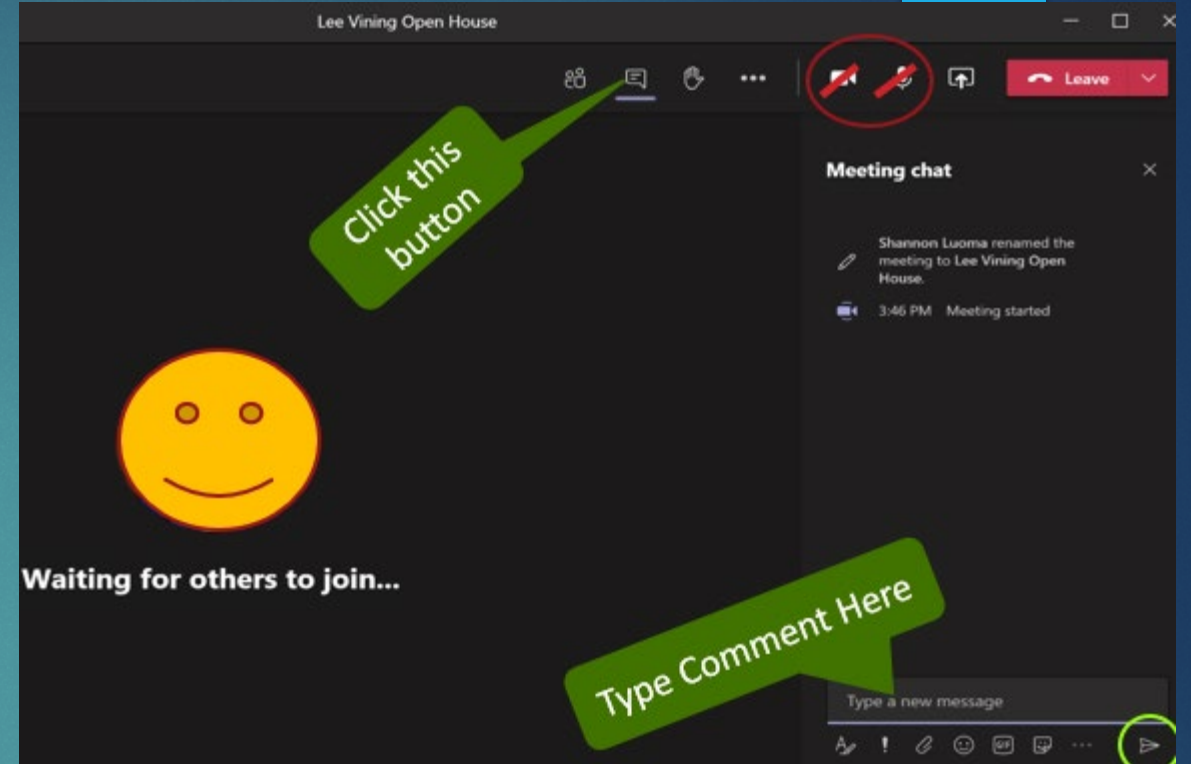
# ISR Meeting Agenda

- ▶ Welcome and Introductions
- ▶ Overview of FERC Relicensing, Process and Initial Study Report (ISR)
- ▶ Status of Studies
  - ▶ Purpose
  - ▶ Status
  - ▶ Participant questions about data summary in report
  - ▶ Planning and schedule, including need for changes
- ▶ Action Items and Adjourn



# Meeting Tips and Guidelines

- ▶ *Note that this meeting is being recorded*
- ▶ Please wait to be called on and then unmute your line
  - ▶ Introduce yourself (name and affiliation) prior to speaking
- ▶ Listen and respect each other
- ▶ Stay on topic
- ▶ Ask a question by typing it into the chat box during the presentation or by using the raise your hand feature





# Welcome and Introductions: Idaho Falls Relicensing Team

## Idaho Falls Power Team

**Richard Malloy** – Project Manager

**Bear Prairie** – General Manager

## Consulting Team

**Finlay Anderson** – Project Manager

**Olivia Smith** – Assistant Project Manager

## FERC Team

**Amy Chang**, FERC Project Coordinator, Terrestrial Resources

**Lauren Townson**, Recreation & Cultural Resources

**John Matkowski**, Aquatic Resources

**Golbahar Mirhosseini**, Engineering

## Resource Leads

**Olivia Smith** – Project Lands & Roads (LAND-1)

**Matt Harper** – Recreation (REC-1)

**Emily Waters** – Environmental Justice (EJ-1)

**Kai Steimle** – Water Quality (WQ-1)

**Mike Gagner** – Fish Assemblage (AQ-1)

**Steve Rogers** – Desktop Fish Entrainment (AQ-2)

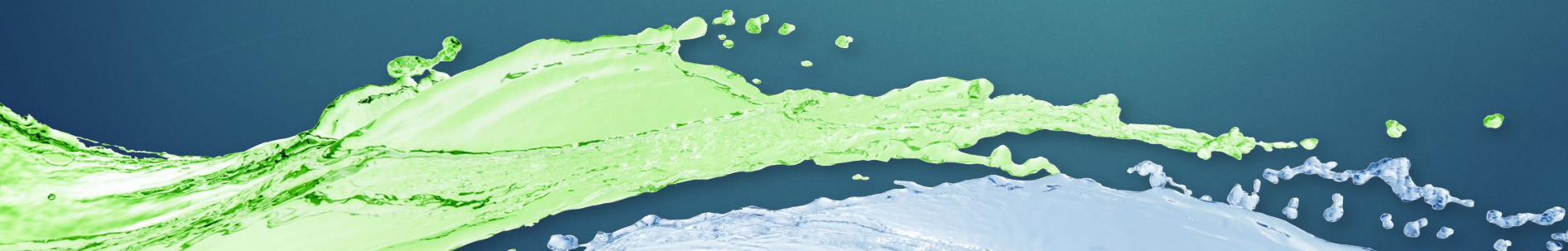
**Steve Rogers** – Aquatic Habitat & Sediment Characterization (AQ-3)

**Steve Fuller** – Wildlife & RTE (TERR-2)

**Indya Messier** – Botanical Resources (TERR-1)

**Kelly Beck** – Cultural Resources (CR-1)

**Kelly Beck** – Tribal Resources (TRI-1)





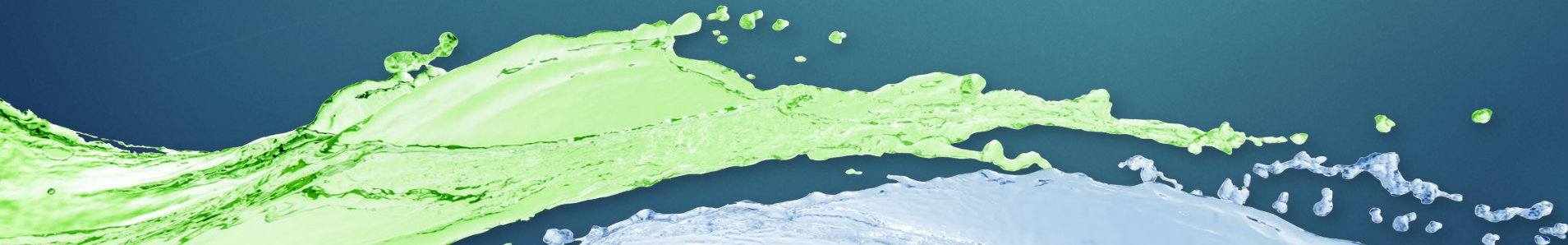


# Overview of FERC Relicensing Process, Timeline, & Initial Study Report (ISR)



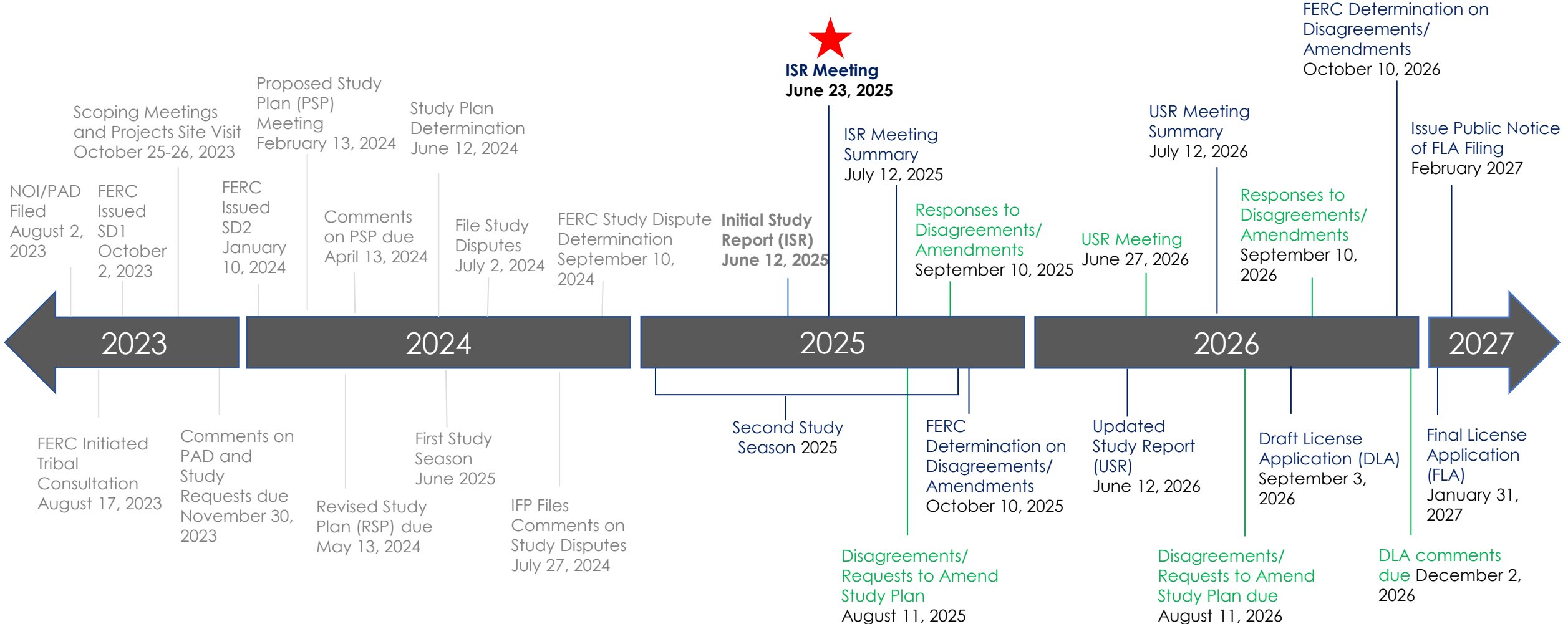
# Regulatory Process and Look Back

- ▶ Idaho Falls Power (IFP) is utilizing the Integrated Licensing Process (ILP)
  - ▶ The Federal Energy Regulatory Commission (FERC) and licensing participants engaged throughout process
  - ▶ More structured “formal” milestone schedule around studies
- ▶ Preliminary Application Document (PAD) and Notice of Intent (NOI) filed August 2023
- ▶ Site Visit and FERC Scoping Meeting – October 2023
- ▶ Study Plan Development – February to April 2024
- ▶ Studies began in 2024, continuing into 2025
- ▶ Technical memoranda distributed June 12, 2025





# Project Relicensing Timeline



**Legend**

- Past Licensing Milestones
- FERC ILP Milestones
- Stakeholder Opportunities

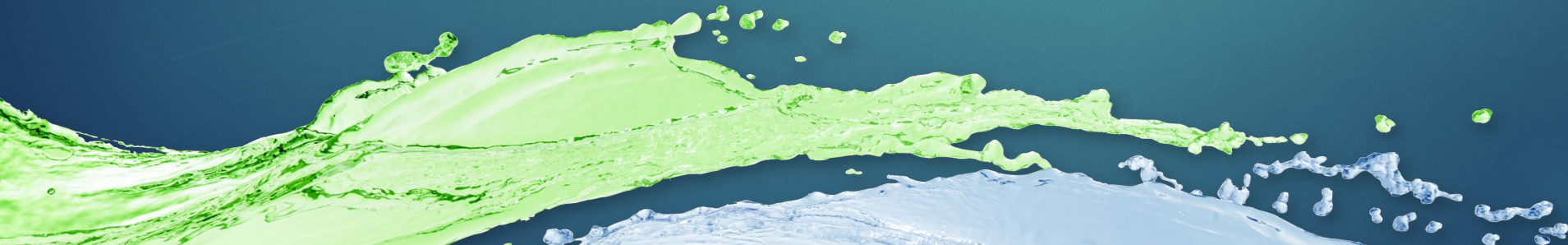
The Idaho Falls Relicensing Schedule is for planning purposes only; dates subject to change to account for weekends and holidays.\*



# Continued Operation & Combined License Proposal

IFP is proposing to continue Project operations at both the Idaho Falls and Gem State facilities as outlined in the existing licenses and is **proposing to combine the projects under one license (Idaho Falls docket number) as part of the new license.**

At this time, there are no new construction, modifications, or new environmental protection, mitigation, and enhancement measures being proposed for either project.





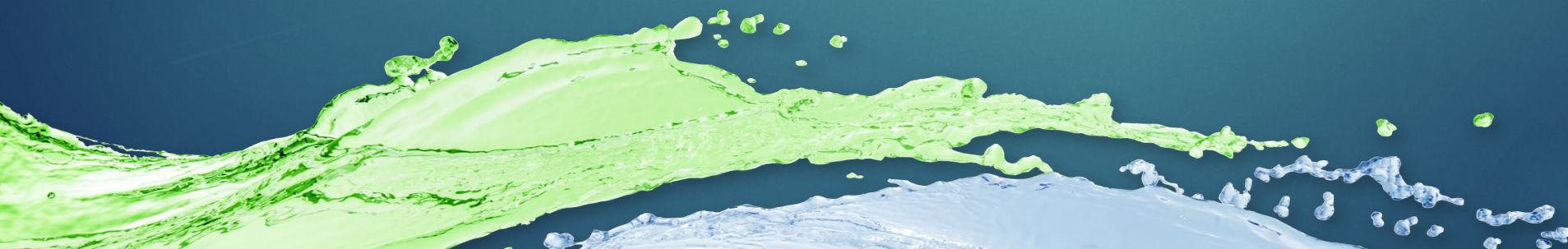
# General Approach for Relicensing – A Combined Licensing Process

## Benefits:

- ▶ Saves time & money
- ▶ Combines resources
- ▶ Consistent access and messaging for public
- ▶ Aligns with FERC's watershed approach

## Logistics:

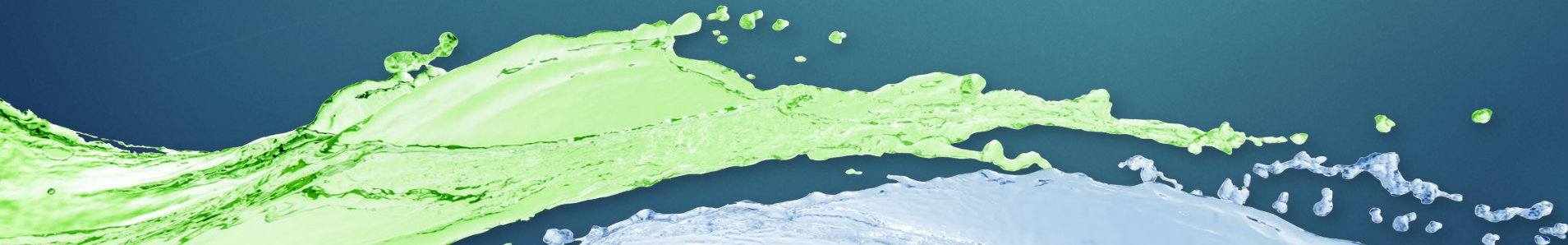
- ▶ Combining documents wherever possible but being clear in communicating license-specific information
- ▶ Filing to both dockets P-2842 & P-2952 during relicensing, but Idaho Falls docket (P-2842) in new license





# ISR Meeting Objectives

- ▶ Update relicensing participants on the process and receive any feedback
- ▶ Provide an opportunity for relicensing participant questions about the study results described in the ISR
- ▶ Confirm process for requesting new studies or modifications to existing studies





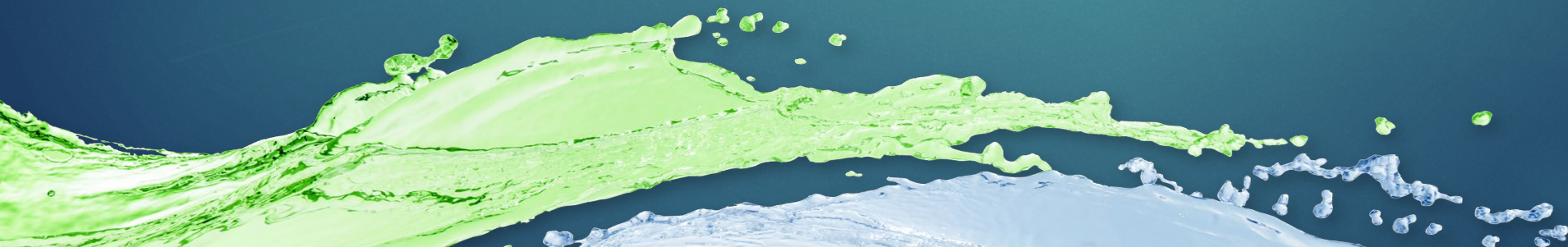
A photograph of a river with rapids and driftwood. The water is turbulent and white with foam. Large logs and branches are scattered in the river. The background shows industrial buildings and power lines under a cloudy sky. A solid blue rectangle is in the top right corner.

# Status of Studies



# Initial Study Reports

- ▶ Project Lands & Roads (LAND-1)
- ▶ Recreation (REC-1)
- ▶ Environmental Justice (EJ-1)
- ▶ Water Quality (WQ-1)
- ▶ Fish Assemblage (AQ-1)
- ▶ Desktop Fish Entrainment (AQ-2)
- ▶ Aquatic Habitat & Sediment Characterization (AQ-3)
- ▶ Botanical Resources (TERR-1)
- ▶ Wildlife & Rare, Threatened, & Endangered (RTE) Species (TERR-2)
- ▶ Cultural Resources (CR-1)
- ▶ Tribal Resources (TR-1)







# Project Lands & Roads (LAND-1)





# Project Lands & Roads Study Plan (LAND-1)

► **Goal:**

- Gather current information on existing lands and roads within the current Project Boundaries and assess their current usage and functionality.

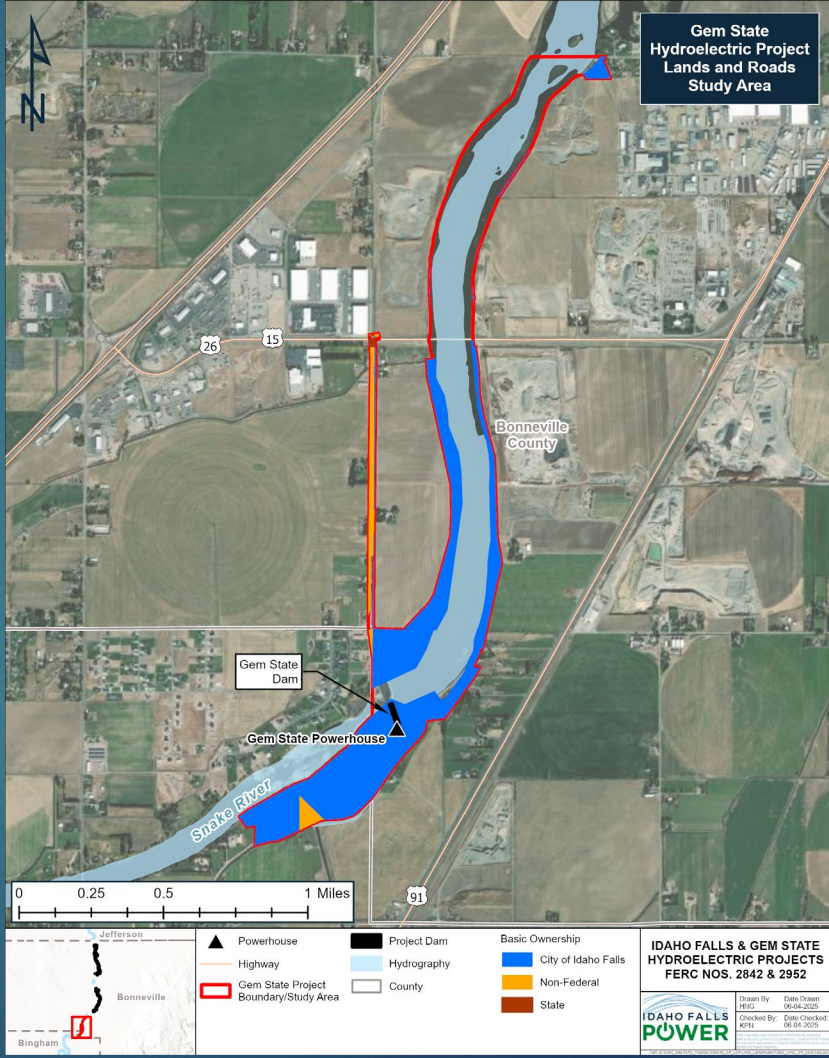
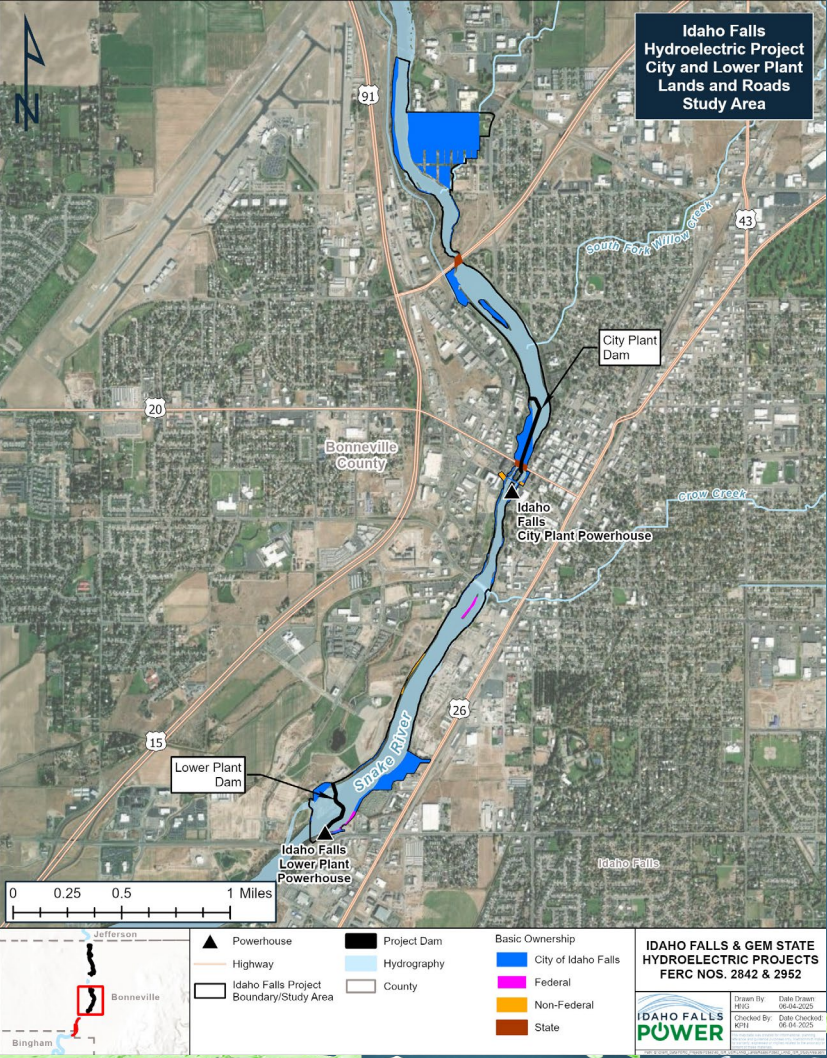
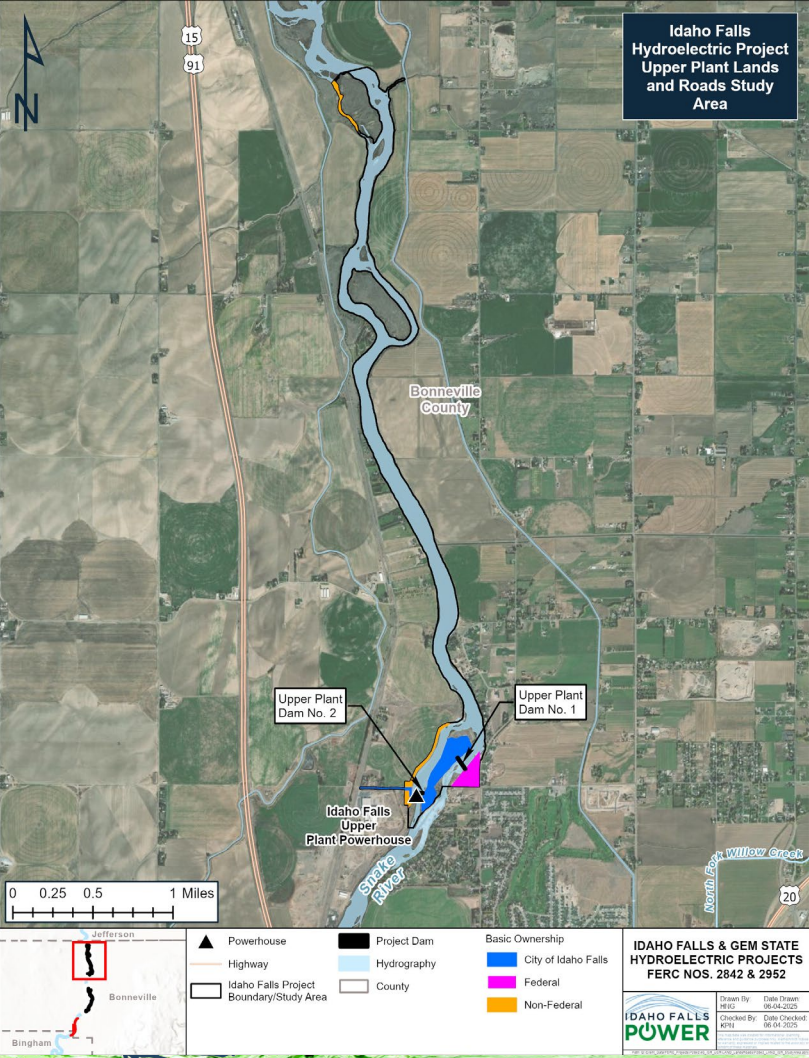
► **Objectives:**

- Assess the current Project Boundaries for accuracy, incorporating changes as warranted by new mapping techniques and technology.
- Confirm base ownership of Project lands in terms of title, easements, and other jurisdictional overlays.
- Assess parcel(s) of BLM land that may be encumbered by the Projects and for which a withdrawal for power purposes was never completed to determine the appropriate next steps to account for Project use.
- Assess the Idaho Falls Project and Gem State Project areas for roads used predominantly for project purposes.
- Assess the Idaho Falls Project and Gem State Project areas for ancillary and unintended uses arising from authorized Project activities.
- Determine if certain Project facilities (including roads) will be removed or abandoned under the term of the next license and how they will be treated.
- Identify areas outside the current Idaho Falls Project and Gem State Project Boundaries that may need to be included as Project lands in the new license terms.
- Coordinate with the REC-1 Study to update recreation areas and the Recreation Plan if necessary.



# Project Lands & Roads Study Plan (LAND-1)

## Study Area





Operations/Facilities - 6

Non-Project  
Substation

S Koester Rd

Glen Koester Ln

W Sunnyside Rd

100 200 Feet



- Idaho Falls Project Boundary
- Road
- Project Transmission Line

Proposed Project Boundary  
Changes

- No Change

IDAHO FALLS & GEM STATE  
HYDROELECTRIC PROJECT  
FERC NOS. 2842 & 2952

IDAHO FALLS  
POWER

Drawn By: HVG Date Drawn: 05-21-2025  
Checked By: KPH Date Checked: 05-21-2025

# Project Lands & Roads Study Plan (LAND-1) BLM Parcel at Lower Plant

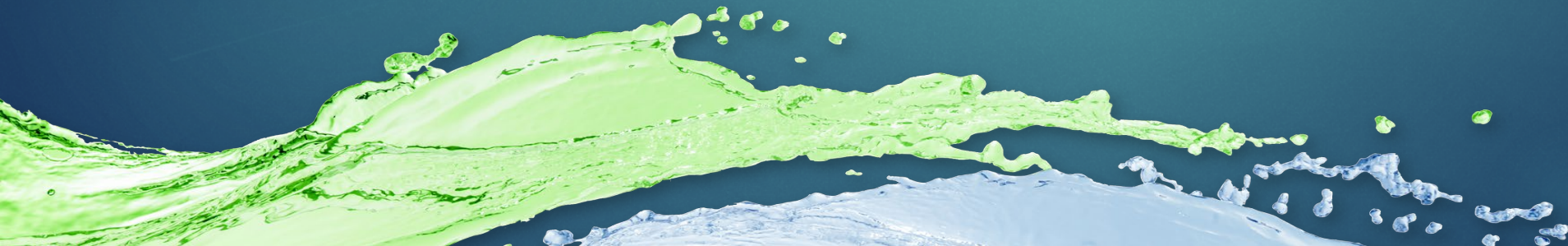
Include in relicensing and  
administratively withdraw



# Project Lands & Roads Study Plan (LAND-1)

## Preliminary Data

- ▶ Project Boundaries tightened to follow shoreline
- ▶ Licensee has purchased properties that were potentially impacted by potential ice jams and converted them to boat launch and conveyed to the County
- ▶ Proposed changes relate to ensuring Project operations and facilities, trails, and roads are accurately included in the proposed Boundary (in close coordination with the REC-1 Study)
- ▶ Mapping corrections included improved centerlines and buffers for roads, flowlines, creeks, or transmission lines
- ▶ The effort also identifies where historic recreation exhibits and management plans need to be reconciled with the Project Boundaries
- ▶ The Project Lands and Roads (LAND-1) technical memo includes a comprehensive list of additions and removals
- ▶ Ultimately, changes will result in a single Exhibit G for the combined license





# Project Lands & Roads Study Plan (LAND-1)

## Status

| Status              | Variances   | Modifications  |
|---------------------|---|--|
| Spring 2024 to 2025 | Study schedule delayed from spring 2024 to spring 2025 due to administrative and internal discussions around recreation sites and impact on Project Boundaries. |  |
| Combining licenses  |   | Since the Study Plan Determination (SPD), IFP has decided to combine the two licenses into one license and one Project Boundary. |



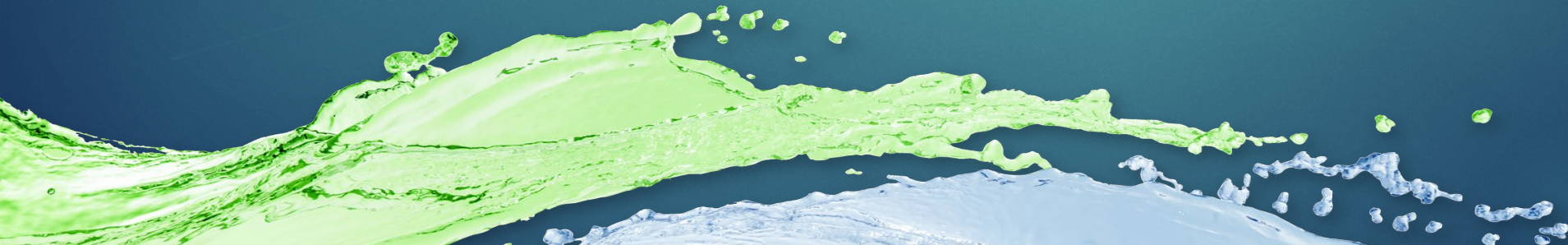
# Project Lands & Roads Study Plan (LAND-1)

## Schedule

| Date             | Activity   |
|------------------|--|
| March 2024       | Compile study data and begin analyses                            |
| June 2025        | File ISR technical memo and meeting with stakeholders            |
| Fall/Winter 2025 | Resolve comments and prepare Draft Study Report                  |
| June 2026        | File Updated Study Report (USR) and meeting with stakeholders    |
| September 2026   | Distribute Final Study Report in Draft License Application (DLA) |
| January 2027     | File Final License Application (FLA)                             |



Questions?







# Recreation Use & Facilities Inventory (REC-1)





# Recreation Use & Facilities Inventory (REC-1) Goals & Objectives

## ► Goal:

- Gather current information on recreation facilities, recreational use, and Projects' potential effects to determine existing and future recreation use and capacity at the Idaho Falls and the Gem State Projects.

## ► Objectives:

- Inventory and identify the condition of the recreation facilities and associated amenities at FERC-approved recreation sites.
- Identify who owns, operates, and maintains each recreation site and facility.
- Describe each recreation site and facility in relation to their associated Project Boundaries.
- Evaluate recreation use at the FERC-approved recreation sites, including both an assessment of the amount of use at each site (including percentage of capacity) and the recreation activities that occur at the site.
- Collect visitor feedback regarding perception and experience at recreation facilities.
- Determine the adequacy of the FERC-approved recreation sites and if modifications to the sites would be needed to meet the current or future recreation needs.





# Recreation Use & Facilities Inventory (REC-1) Methods & Schedule

## Methods:

- ▶ Recreation Facility Inventory and Condition Assessment
  - ▶ Comprehensive facility inventory to determine what recreation infrastructure is present and its condition status
- ▶ Recreation Use Assessment
  - ▶ Spot counts and intercept use surveys to determine recreation use, including a quantitative (spot count of recreators and activities being performed) and qualitative account (intercepting recreators to gauge relative use and quality of experience)
  - ▶ TRAFx counter installation, including vehicle and pedestrian trail counter types at select locations

## Schedule:

- ▶ Spring 2025 – Recreation Facility Inventory and Condition Assessment
- ▶ May to September 2025 – Recreation Use Assessment





# Recreation Use & Facilities Inventory (REC-1) Preliminary Data Collection

- ▶ Recreation sites were examined using aerial imagery and existing, on-the-ground knowledge to inform appropriate locations and types (vehicle vs. pedestrian trail) for TRAFx counter installations
- ▶ For all but three FERC-approved recreation sites, at least one vehicle counter location was established (for some sites, multiple counters were needed to accommodate multiple entry/exit points)
- ▶ Two pedestrian trail counters were chosen to collect pedestrian access across both bridges at Pederson's Sportsman's Park
- ▶ A total of 14 vehicle counters and 2 pedestrian trail counters were installed at the Projects (5 vehicle counters at the Gem State Project, and 9 vehicle counters and 2 pedestrian trail counters at the Idaho Falls Project)
- ▶ Spot counts were deemed the only reasonable form of data collection at Keefer's Island and Eagle Rock Park
- ▶ Maps of exact TRAFx counter locations are included in the Recreation Use & Facilities Inventory (REC-1) technical memo





# Recreation Use & Facilities Inventory (REC-1) General Observations

- ▶ There appears to be ample recreation capacity in the Project area:
  - ▶ The City of Idaho Falls has invested in many (Project and non-Project) recreation opportunities, especially along the Snake River and near the Projects.
  - ▶ Other entities also provide recreation options near the Snake River, including efforts to connect the Idaho Falls River Walk.
- ▶ FERC has approved and required 14 specific sites to be developed and maintained as part of the Projects' current Recreation Plans from the 1980s. Most of these sites have since been developed, though some are not fully developed due largely to lack of demand and/or safety concerns.
- ▶ Following studies and the submission of a Final License Application, FERC will evaluate IFP's proposal—and all other interested party comments—and decide which sites and amenities will be included in the future license to meet the area's needs.



# Recreation Use & Facilities Inventory (REC-1)

## Status

| Status                     | Variances | Modifications   |
|----------------------------|-----------|---|
| Updated REC-1 survey forms | -         | Updated the recreation site naming conventions and added recreation activities as user choices with the option to include photos. Other minor edits included rearranging user questions.                  |
| Recreation sites           | -         | Two FERC-approved recreation sites (Keefer's Island and Eagle Rock Park) were deemed not feasible for TRAFx counter installation. Instead, vehicle and foot traffic will be quantified using spot counts. |



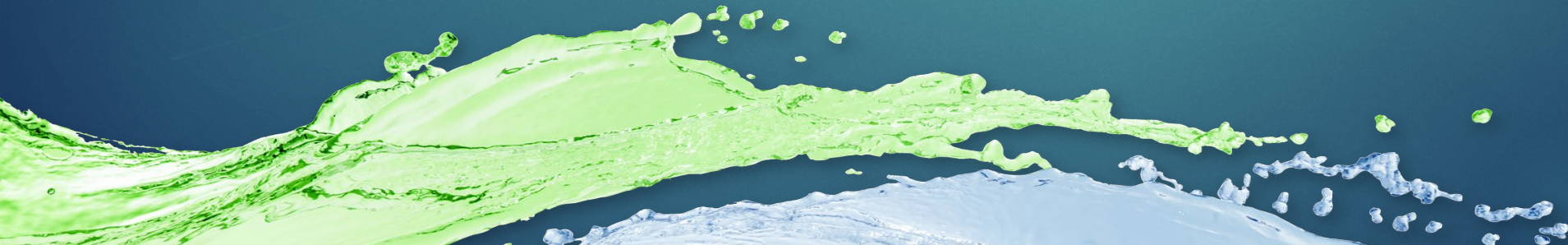
# Recreation Use & Facilities Inventory (REC-1)

## Schedule

| Date           | Activity   |
|----------------|--|
| April 2025     | Compile existing study data and prepare for fieldwork activities   |
| May 2025       | Conduct Recreation Facility Inventory and Condition Assessment and first Recreation Use Assessment / mobilize TRAFx counters |
| June 2025      | Distribute Initial Study Report technical memo and meeting with stakeholders   |
| Summer 2025    | Conduct Recreation Use Assessments / demobilize TRAFx counters   |
| June 2026      | File Updated Study Report (USR) and meeting with stakeholders  |
| September 2026 | Distribute Final Study Report in Draft License Application (DLA)   |
| January 2027   | File Final License Application (FLA)   |



Questions?







# Environmental Justice (EJ-1)



# Environmental Justice (EJ-1)

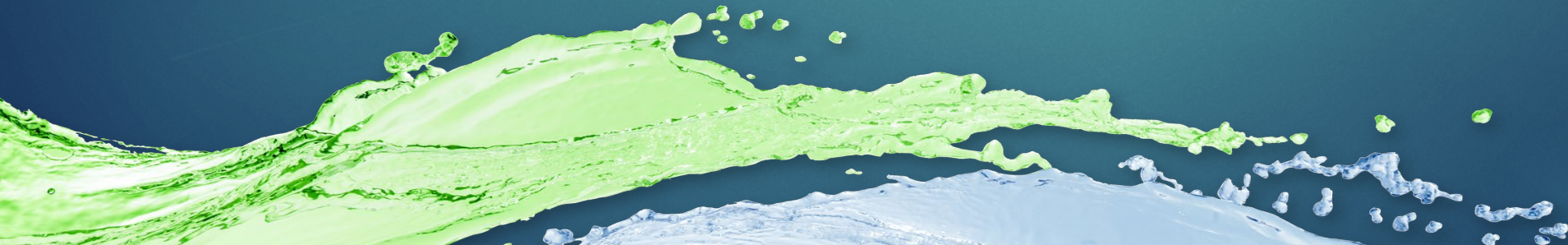
## Goal and Objectives

▶ **Goal:**

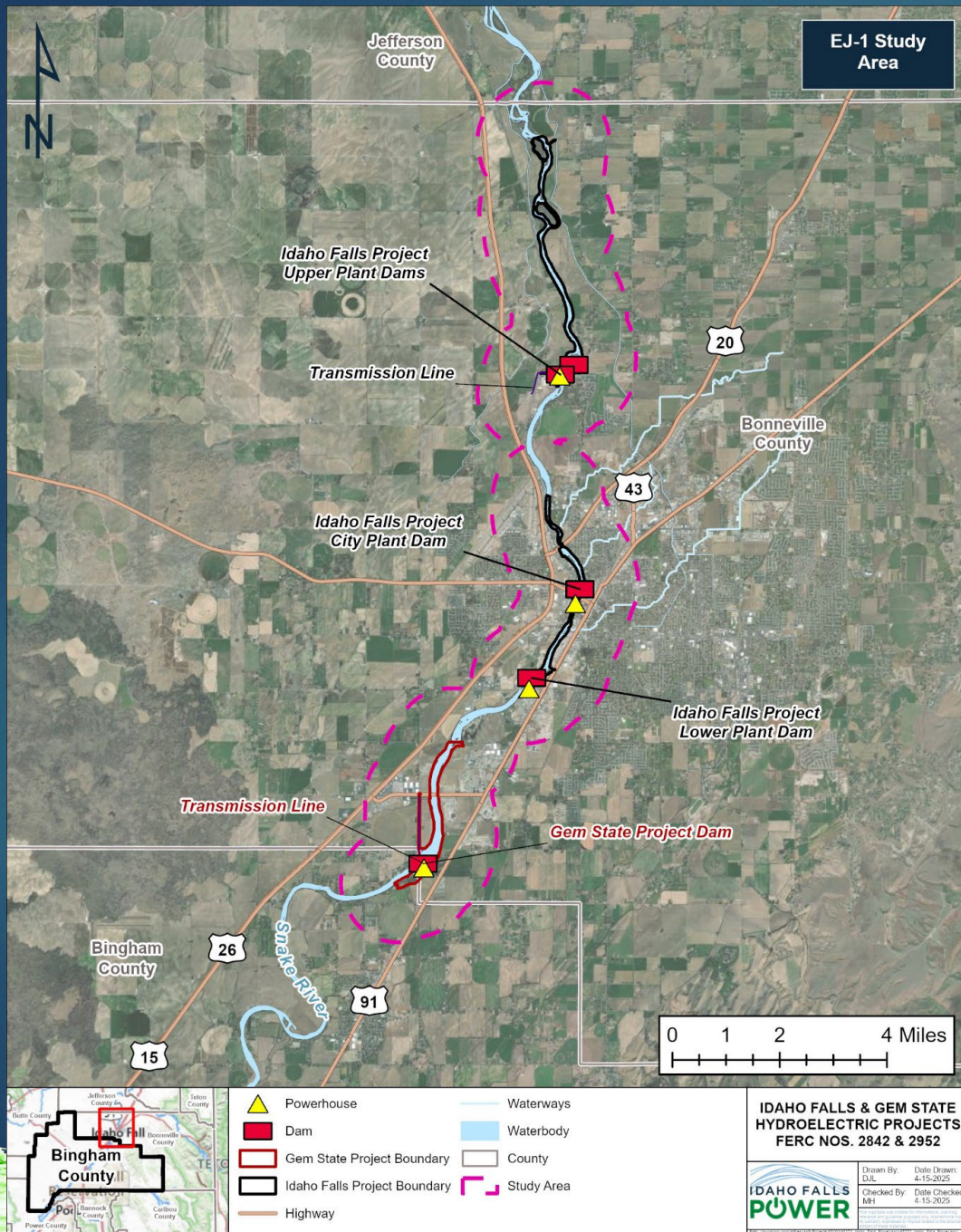
- ▶ Identify the potential effects of continued Project operations during the term of a new license on environmental justice communities in both Projects' study areas.

▶ **Objectives:**

- ▶ Identify the number and location of environmental justice communities within the study area.
- ▶ Identify the number and location of non-English-speaking populations within the study area.
- ▶ Conduct outreach to engage environmental justice communities and non-English-speaking populations in the relicensing process.
- ▶ Discuss (a) the potential effects of relicensing on the identified environmental justice communities, (b) effects that are disproportionately high and adverse, and (c) potential effects on non-English-speaking communities.







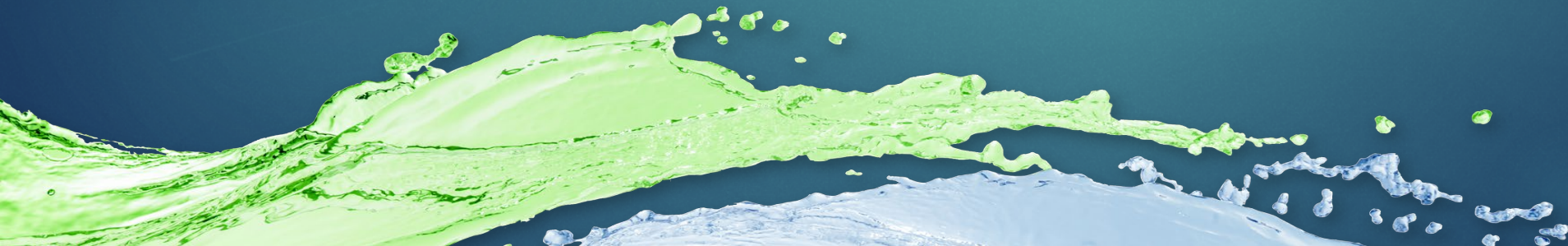
# Environmental Justice (EJ-1) Study Area



# Environmental Justice (EJ-1)

## Preliminary Data

- ▶ 36 census block groups intersect the study area, of which 24 contained environmental justice communities (either minority, low-income, or non-English-speaking, or a combination of the three).
  - ▶ Because a block group can contain multiple environmental justice communities, a total of 27 environmental justice communities were identified; 26 of these were in the Idaho Falls study area, and 1 was in the Gem State study area.
  - ▶ 36 percent of these groups were identified as belonging to a minority population, and 55 percent were below the poverty level.

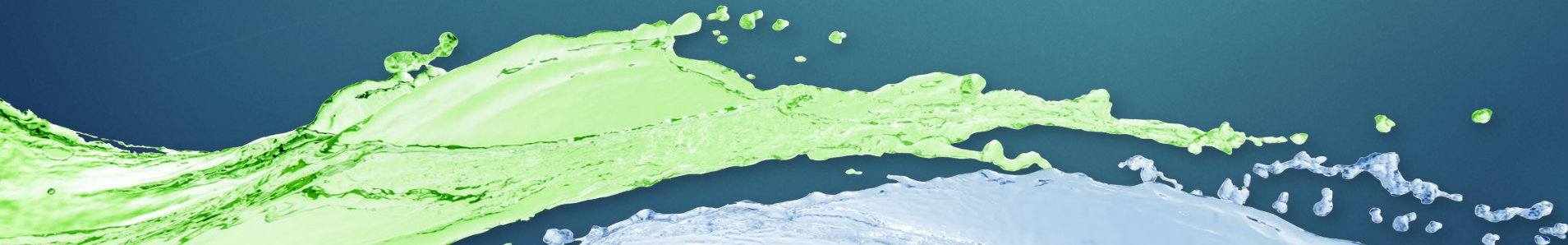




# Environmental Justice (EJ-1)

## Outreach Update

- ▶ To support the study objectives of identifying the number and location of environmental justice communities, including non-English-speaking communities, IFP developed a targeted outreach strategy to provide equitable access to information about the Projects within the framework of relicensing.
- ▶ IFP distributed 22 bilingual postcards and posted 19 bilingual flyers in high-traffic areas within identified environmental justice communities.
- ▶ IFP also developed and published bilingual engagement content on the relicensing website.





# Environmental Justice (EJ-1)

## Status

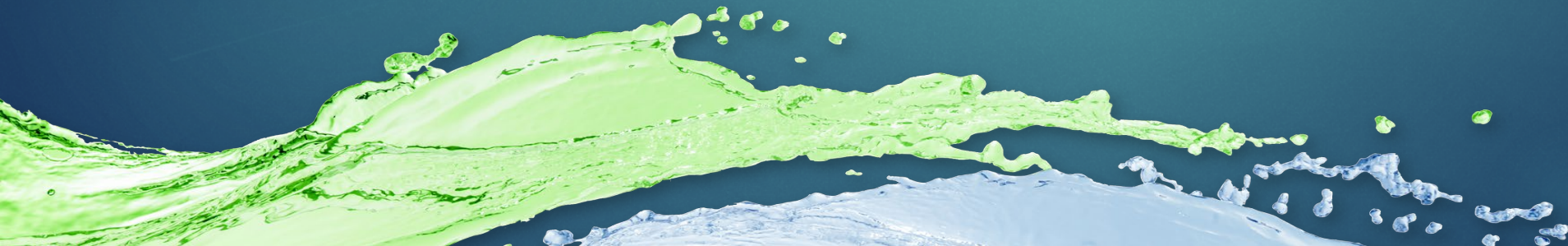
| Status  | Variances  | Modifications  |
|---|--|--|
| Fall 2024   | Delayed initial outreach from fall 2024 to spring 2025 to include Project Boundary adjustments, to be completed summer 2025 with ongoing engagement. | -  |
| Altered methods due to EOs 12898, 14008, and 14096                        | -  | Due to the rescinding of EOs 12898, 14008, and 14096, IFP modified study methods to use U.S. Census Bureau data and EPA's NEPAassist tool.   |
| Altered method in desktop analysis for identifying low-income populations | -  | Census Table C17002 ( <i>Ratio of Income to Poverty</i> ) was selected over Census Table B17017 to ensure a more accurate assessment of the population earning less than 200 percent of the federal poverty level. |



# Environmental Justice (EJ-1)

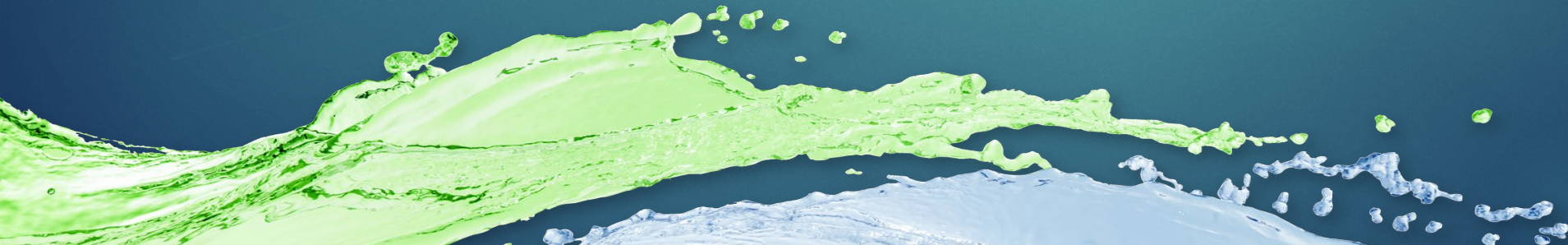
## Schedule

| Date             | Activity   |
|------------------|--|
| Winter 2024      | Compile EJ-1 study data and conduct analyses                     |
| June 2025        | Distribute ISR technical memo and meeting with stakeholders      |
| Fall/Winter 2025 | Resolve comments and prepare Final Study Report                  |
| June 2026        | File Updated Study Report (USR) and meeting with stakeholders    |
| September 2026   | Distribute Final Study Report in Draft License Application (DLA) |
| January 2027     | File Final License Application (FLA)                             |





Questions?







# Water Quality (WQ-1)





# Water Quality Study (WQ-1) Goals and Objectives

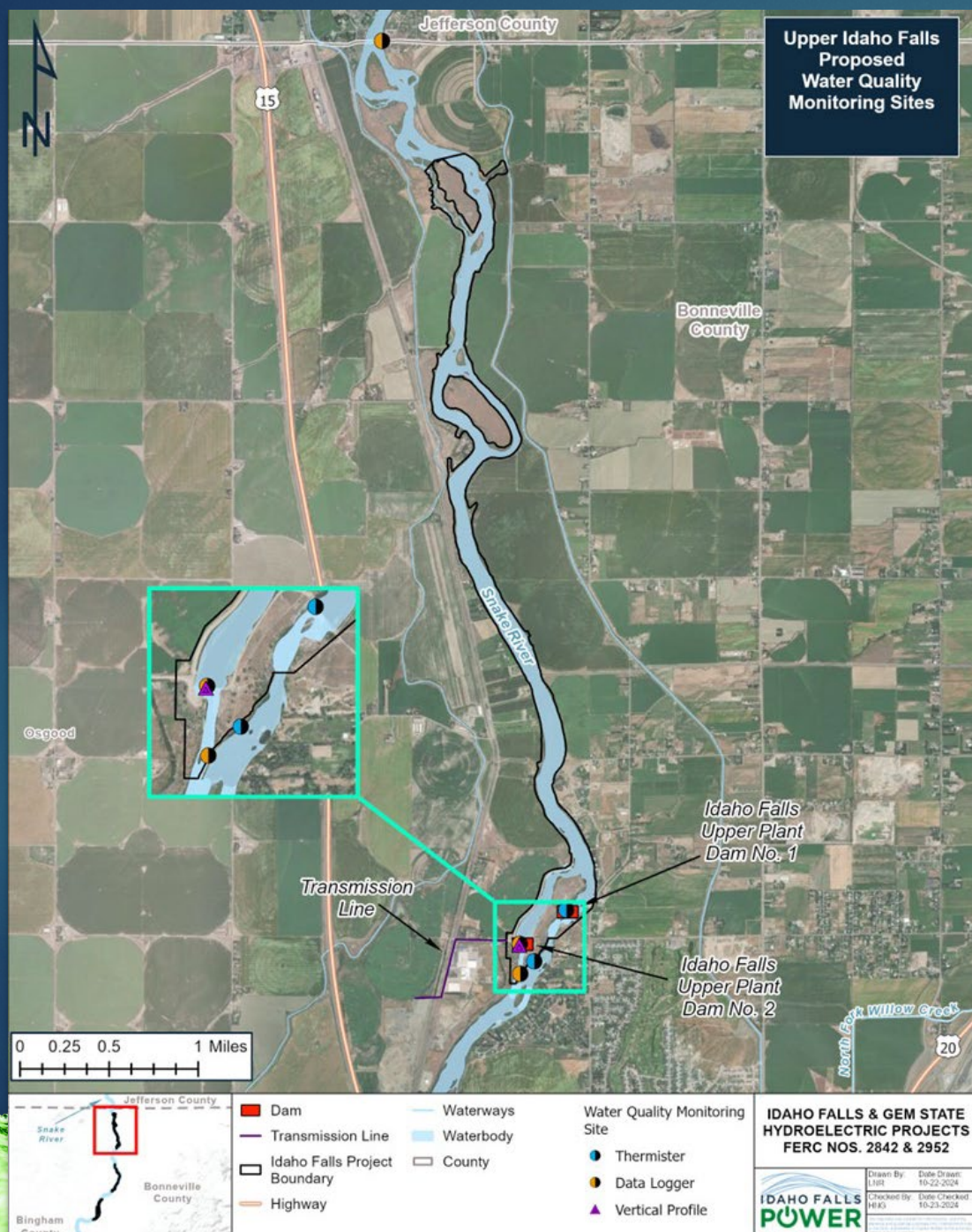
## ► Goal:

- Characterize water quality in the Snake River in the Idaho Falls Project area and the Gem State Project area.

## ► Objectives:

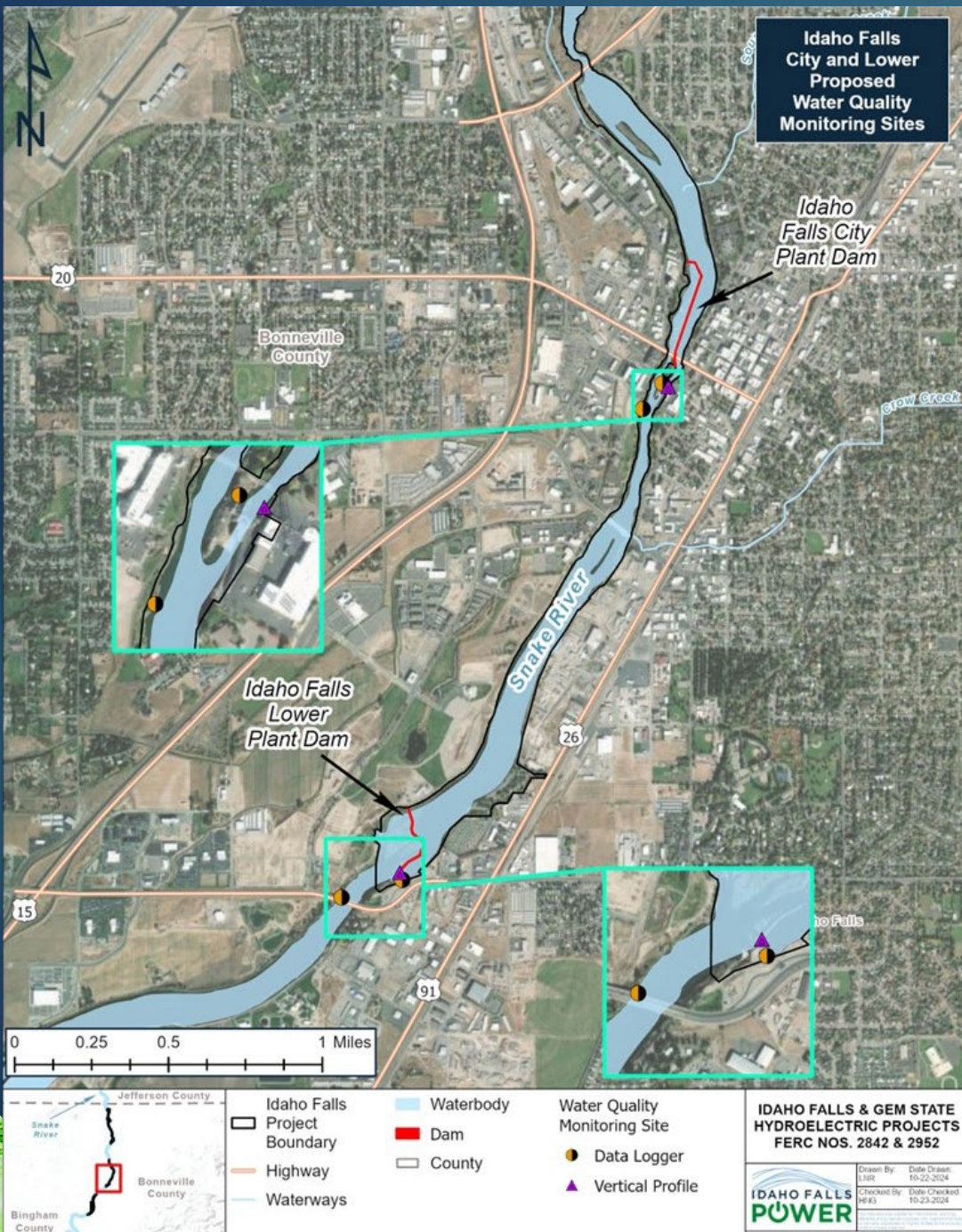
1. Characterize water temperature and dissolved oxygen (DO) upstream and downstream of each diversion in the Projects, specifically the Upper Plant, City Plant, Lower Plant, and Gem State dams.
2. Collect vertical profiles of water temperature and DO in each impoundment.
3. Analyze fish tissue samples from downstream of the Gem State Project for methylmercury.
4. Assess the ability of the Projects to comply with water quality standards based on continued operation.





# WQ-1 Study Area Upper Plant





# WQ-1 Study Area City & Lower Plant



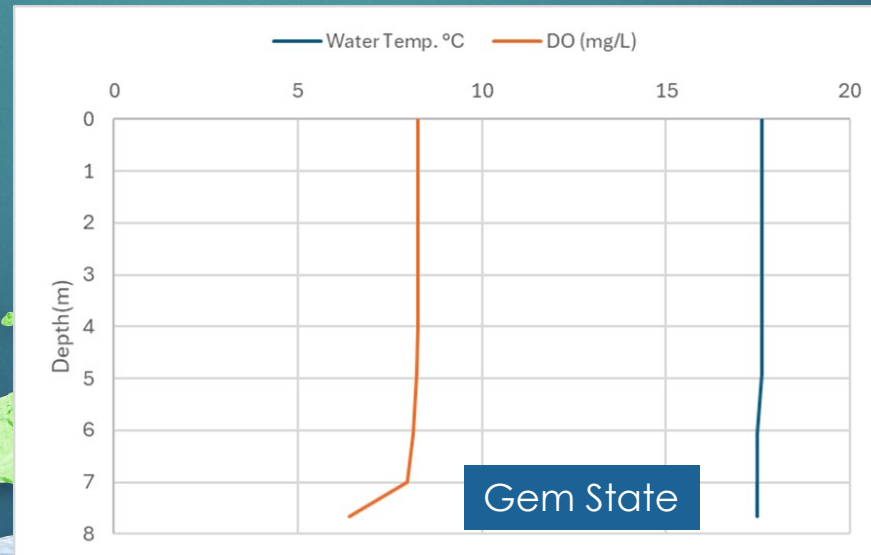
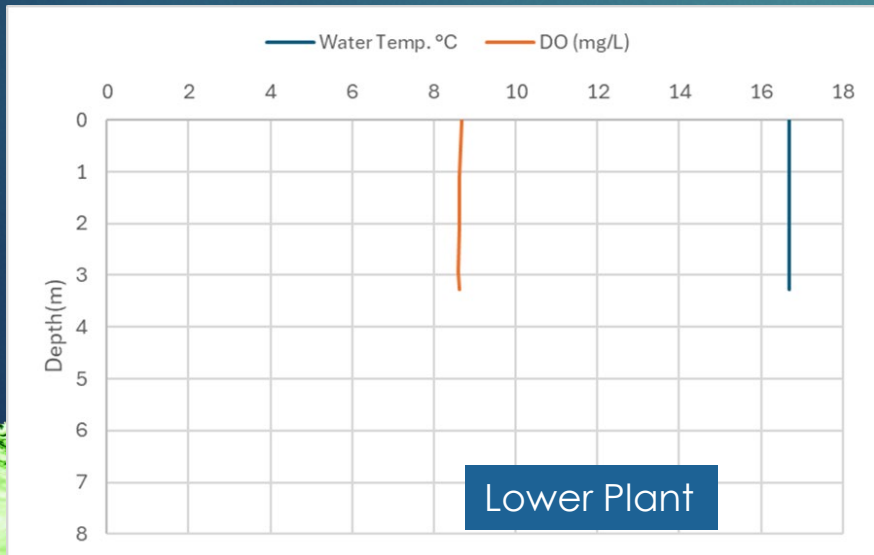
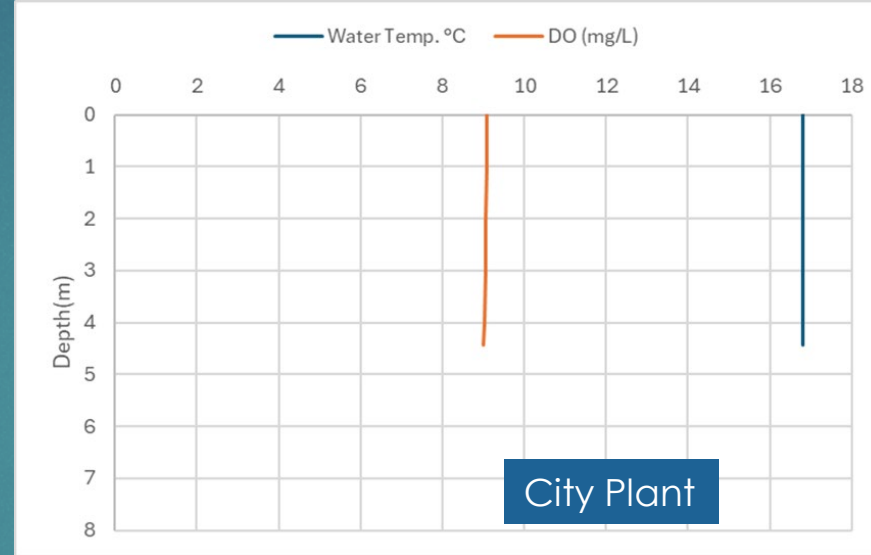
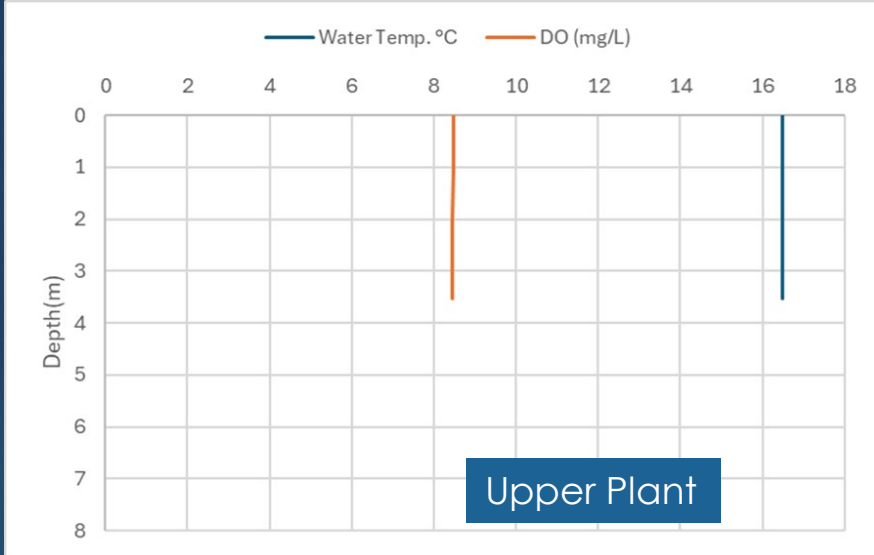


# WQ-1 Study Area Gem State



# Water Quality Study (WQ-1)

## Preliminary Data Summary



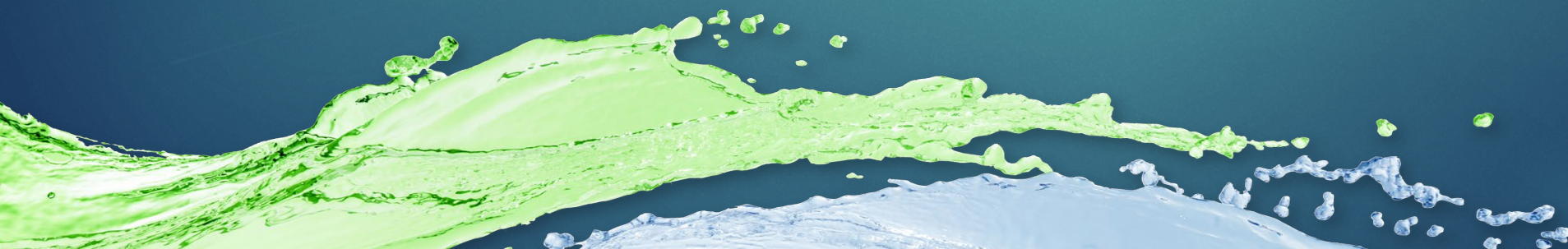
► Vertical profiles collected at the Upper, City, Lower, and Gem State plants on August 14, 2024 revealed impoundments with well-mixed conditions and no evidence of vertical stratification.



# Water Quality Study (WQ-1)

## Status

| Status                                  | Variances | Modifications  |
|---|-----------|--|
| August 2024 - Site selection - complete | None      | Accessibility challenges and potential tampering and biofouling: Continuous monitoring for one week per month.   |
| June 2025 - Deployed equipment          | None      | Lack of access to well-mixed location downstream of Upper Plant: DO/temp loggers deployed at Upper Plant forebay and tailrace; temperature-only loggers deployed at spillway forebay and tailrace. |





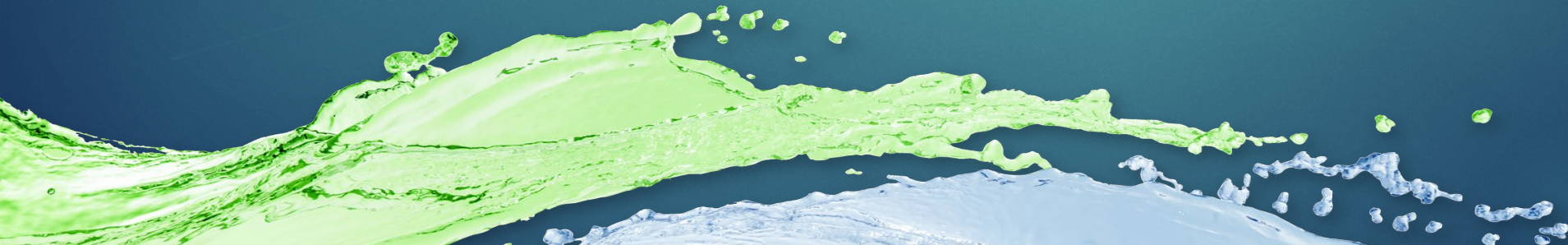
# Water Quality Study (WQ-1)

## Schedule

| Date                    | Study Plan Development Milestones |
|-------------------------|-----------------------------------|
| August 2024             | Site Selection                    |
| Summer 2025 (June-Sept) | Year 1 Field Sampling             |
| June 2025               | Initial Study Report (ISR)        |
| June 2026               | Updated Study Report (USR)        |
| September 2026          | Draft License Application (DLA)   |



Questions?







# Fish Assemblage (AQ-1)



# Fish Assemblage Study (AQ-1)

## Goal:

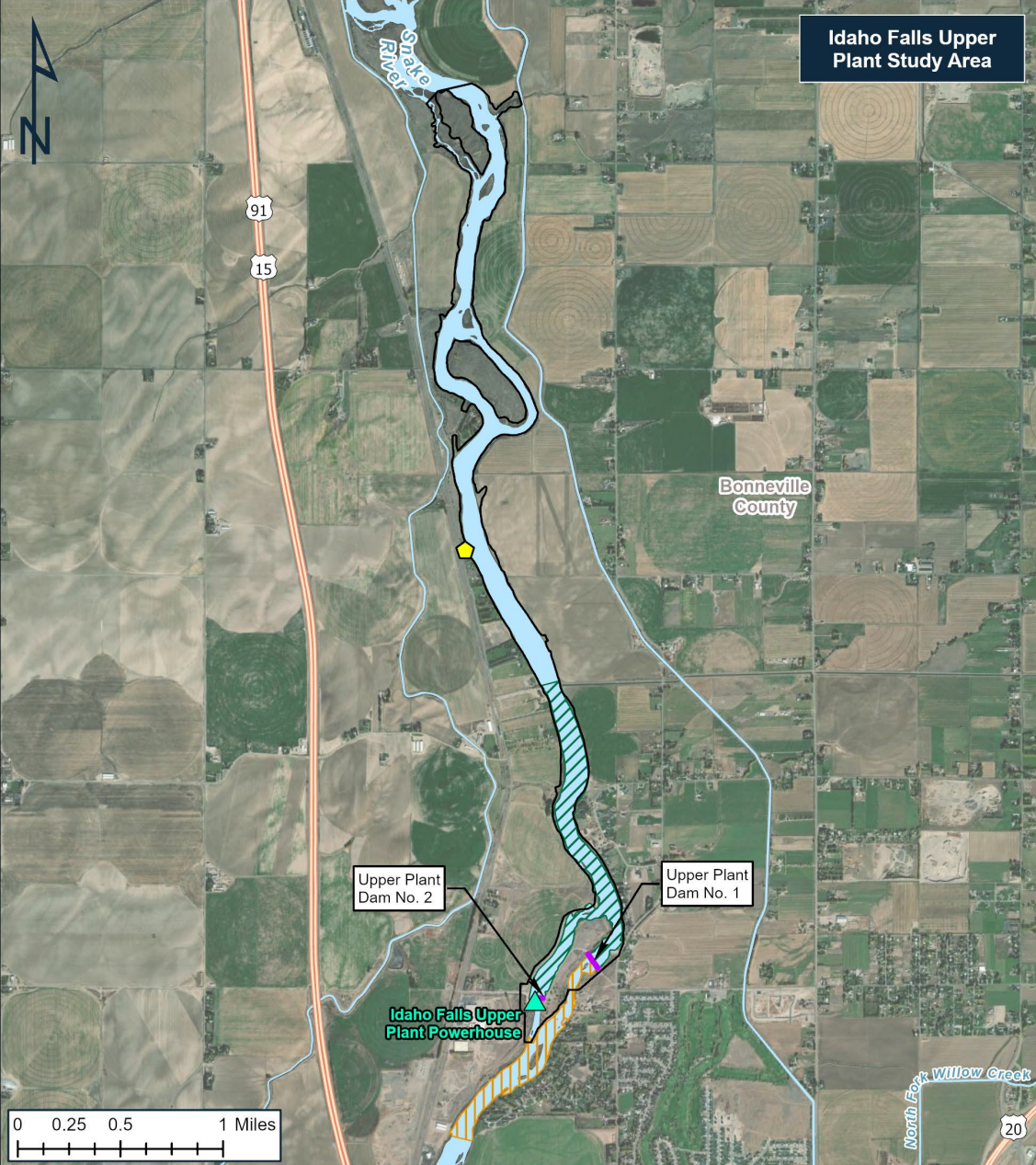
Assess fish assemblage within Project-affected reaches.

## Objectives:

- ▶ Determine seasonal changes in the distribution and abundance within reservoirs and tailrace reaches.
- ▶ Characterize habitat use of target fish species.
- ▶ Collect fish tissue samples for target species.







Idaho Falls Upper  
Plant Study Area

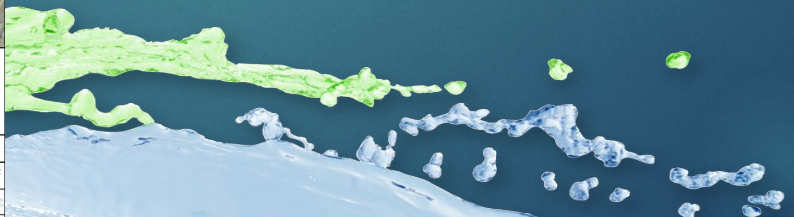
# Fish Assemblage (AQ-1) Upper Plant Study Area



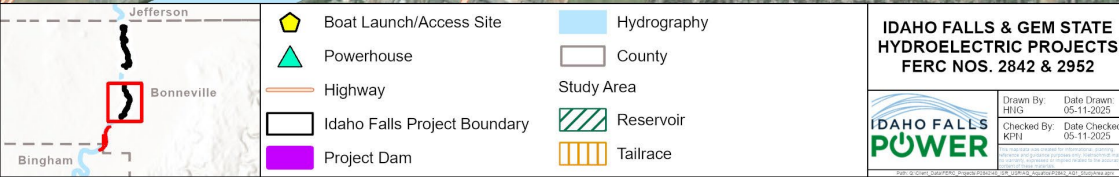
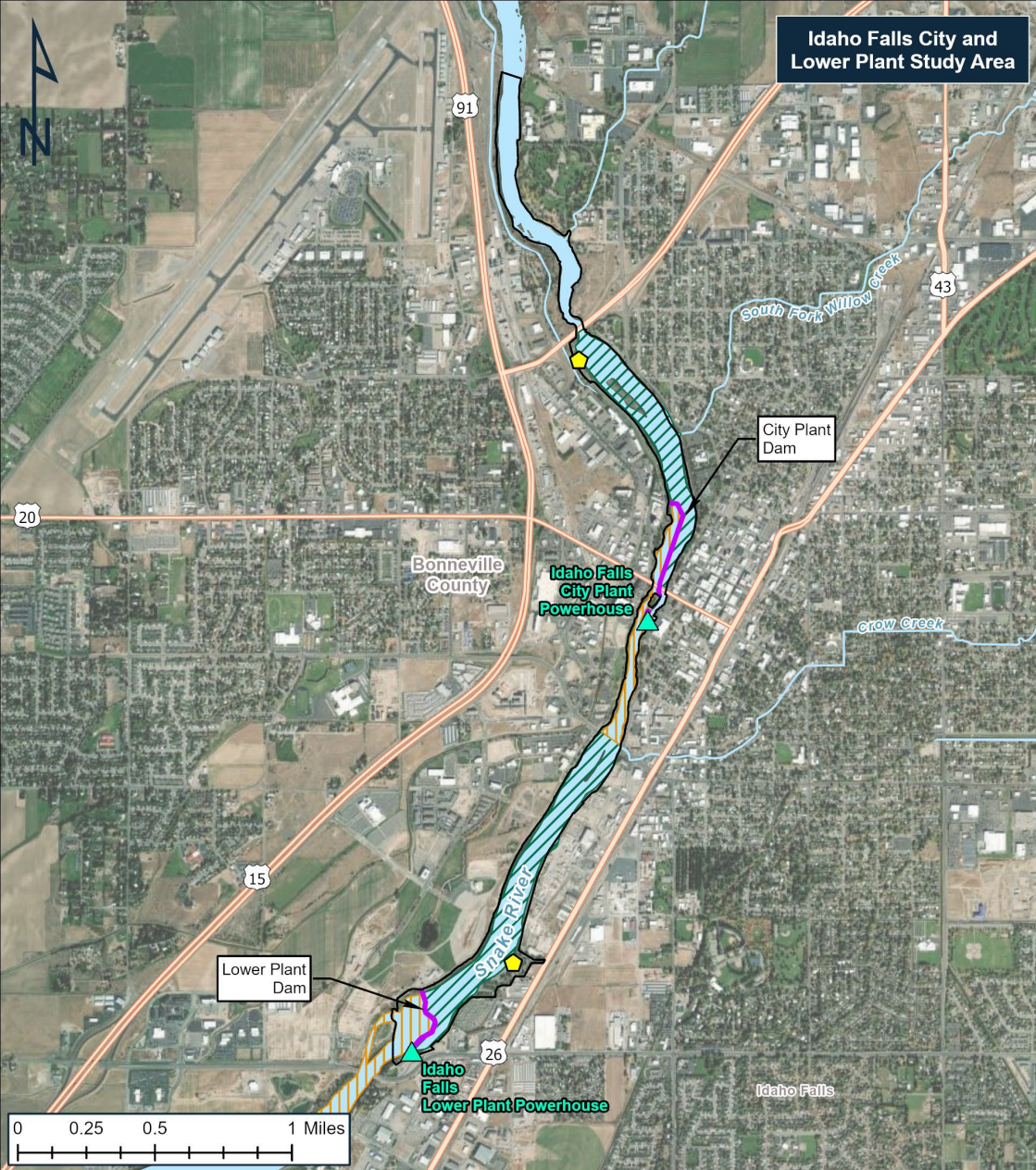
- |  |                              |  |             |
|--|------------------------------|--|-------------|
|  | Boat Launch/Access Site      |  | Hydrography |
|  | Powerhouse                   |  | County      |
|  | Highway                      |  | Study Area  |
|  | Idaho Falls Project Boundary |  | Reservoir   |
|  | Project Dam                  |  | Tailrace    |

**IDAHO FALLS & GEM STATE  
HYDROELECTRIC PROJECTS  
FERC NOS. 2842 & 2952**

|  |                    |                             |
|--|--------------------|-----------------------------|
|  | Drawn By:<br>HUG   | Date Drawn:<br>05-11-2025   |
|  | Checked By:<br>KPH | Date Checked:<br>05-11-2025 |

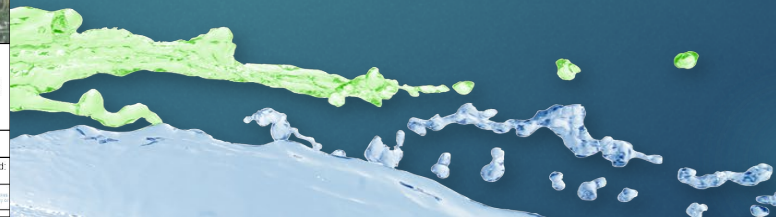






# Fish Assemblage (AQ-1)

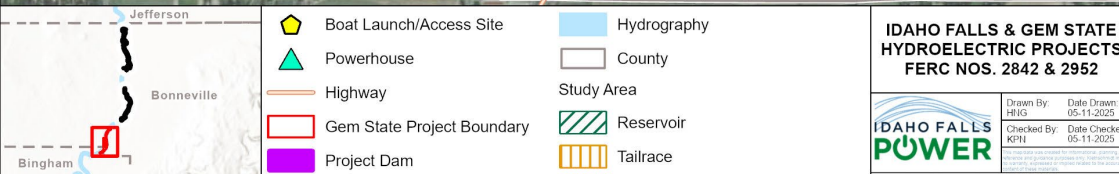
## City & Lower Plant Study Area







# Fish Assemblage (AQ-1) Gem State Study Area





# Fish Assemblage Study (AQ-1)

## Native and Introduced Fish Species:

- ▶ Yellowstone Cutthroat Trout (N)
- ▶ Mountain Whitefish (N)
- ▶ White Sturgeon (I)
- ▶ Rainbow Trout (I)
- ▶ Brown Trout (I)
- ▶ Bluegill (I)
- ▶ Sucker (N)
- ▶ Bass (I)
- ▶ Chub (N)

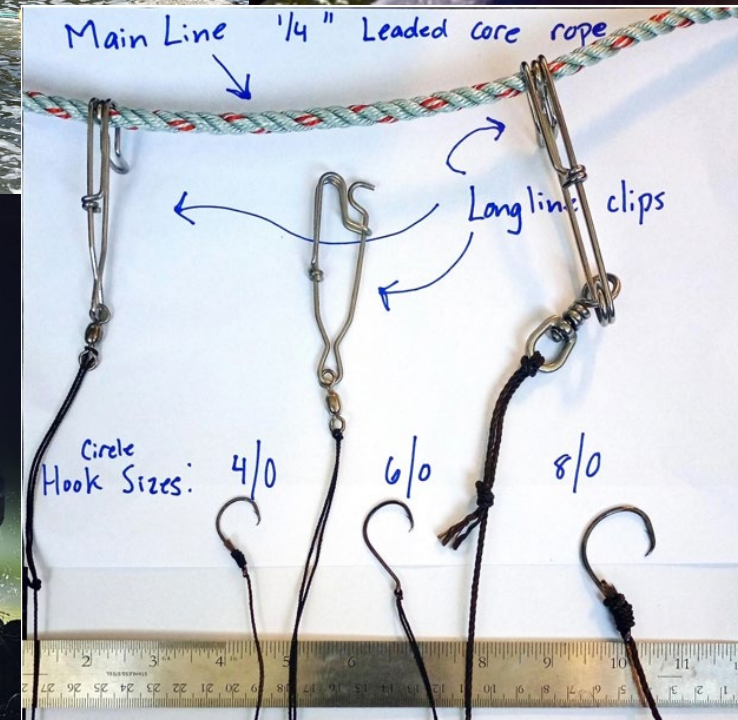




# Fish Assemblage Study (AQ-1)

## Methods:

- ▶ Reservoirs
  - ▶ Electrofishing (Day and Night)
  - ▶ Gill Net Sampling
  - ▶ Setlines
- ▶ Tailrace
  - ▶ Electrofishing
  - ▶ Fyke Net Sampling
  - ▶ Setlines





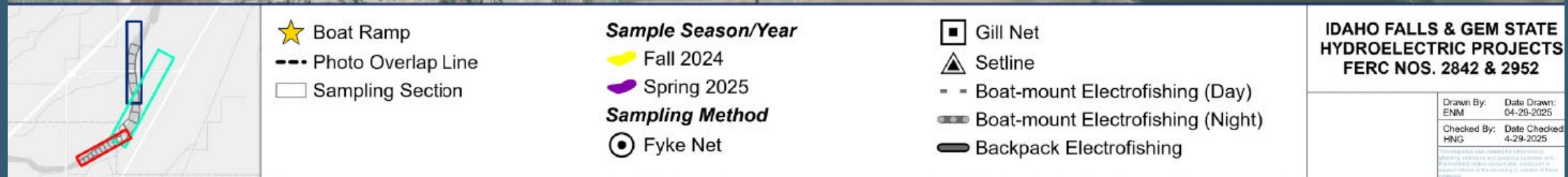
# Fish Assemblage Study (AQ-1)

## ► Completed to Date:

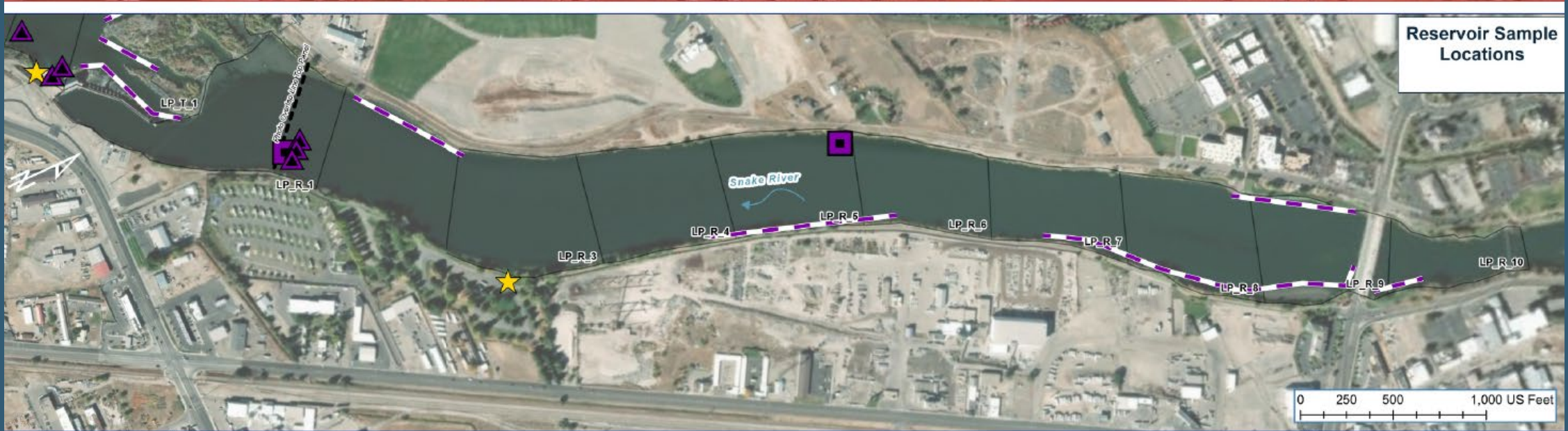
- Fall 2024 – Pilot/Reconnaissance Survey
  - Gem State Plant
- Spring 2025
  - Formal and informal agency consultation (IDFG)
  - Sampled all Projects/plants
  - Added nighttime reservoir electrofishing
    - Gem State and Upper Plant
  - Collected fish tissue samples d/s of Gem State Plant
- Summary results presented in ISR











- ★ Boat Ramp
- Photo Overlap Line
- Sampling Section

- Sample Season/Year**
- Spring 2025
- Sampling Method**
- Fyke Net
  - Gill Net

- ▲ Setline
- - Boat-mount Electrofishing (Day)
- ▬ Boat-mount Electrofishing (Night)
- ▬ Backpack Electrofishing

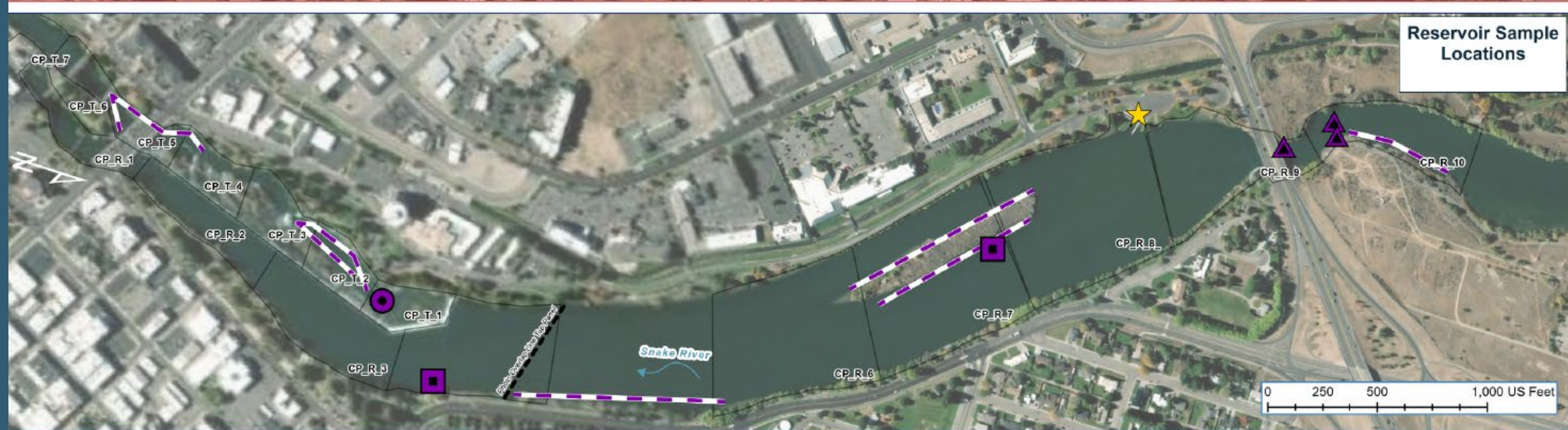
**IDAHO FALLS & GEM STATE  
HYDROELECTRIC PROJECTS  
FERC NOS. 2842 & 2952**



|                    |                            |
|--------------------|----------------------------|
| Drawn By:<br>ENM   | Date Drawn:<br>04-29-2025  |
| Checked By:<br>HNG | Date Checked:<br>4-29-2025 |

This project was created for informational purposes only. It is not intended to be used for any other purpose without the express written consent of Idaho Falls Power.





- ★ Boat Ramp
- Photo Overlap Line
- Sampling Section

**Sample Season/Year**

- Spring 2025

**Sampling Method**

- Fyke Net
- Gill Net

- ▲ Setline
- - Boat-mount Electrofishing (Day)
- ▬ Boat-mount Electrofishing (Night)
- ▬ Backpack Electrofishing

**IDAHO FALLS & GEM STATE  
HYDROELECTRIC PROJECTS  
FERC NOS. 2842 & 2952**



Drawn By: ENM Date Drawn: 04-29-2025  
Checked By: HNG Date Checked: 4-29-2025

This map was prepared for informational purposes only. It is not intended to be used for legal or regulatory purposes. The user assumes all responsibility for the accuracy and completeness of the information presented on this map.





- ★ Boat Ramp
- Photo Overlap Line
- Sampling Section

- Sample Season/Year**
- Spring 2025
- Sampling Method**
- Fyke Net
  - Gill Net

- ▲ Setline
- - Boat-mount Electrofishing (Day)
- ▬ Boat-mount Electrofishing (Night)
- ▬ Backpack Electrofishing

**IDAHO FALLS & GEM STATE  
HYDROELECTRIC PROJECTS  
FERC NOS. 2842 & 2952**



Drawn By: ENM Date Drawn: 04-29-2025  
Checked By: HNG Date Checked: 4-29-2025

This map was created for administrative planning purposes only. It is not intended for use in any legal proceeding or as a basis for any other action.



# Fish Assemblage Study (AQ-1) Data Summary – Level of Effort

| Project/<br>Development | Year | Season | Sampling Method                           |       |  |                    |                     |                    |
|-------------------------|------|--------|---|-------|--|--------------------|---------------------|--------------------|
|                         |      |        | Boat Mount<br>Electrofishing<br>(minutes) |       | Backpack<br>Electro-<br>fishing<br>(minutes) | Gillnet<br>(hours) | Fyke Net<br>(hours) | Setline<br>(hours) |
|                         |      |        | Day                                       | Night |  |                    |                     |                    |
| Gem State               | 2024 | Fall   |   |       |  |                    |                     |                    |
| Tailrace                |      |        | 17.8                                      | N/A   | 13.4   | N/A                | 36.5                | 36.0               |
| Reservoir               |      |        | 24.9                                      | N/A   | N/A  | 34.9               | N/A                 | 33.8               |
| Gem State               | 2025 | Spring |   |       |  |                    |                     |                    |
| Tailrace                |      |        | 54.2                                      | N/A   | 12.4   | 5.5                | 42.8                | 56.6               |
| Reservoir               |      |        | N/A                                       | 35.3  | N/A  | 2.5                | N/A                 | 55.3               |
| Lower Plant             | 2025 | Spring |   |       |  |                    |                     |                    |
| Tailrace                |      |        | 45.1                                      | N/A   | N/A  | N/A                | N/A                 | 53.4               |
| Reservoir               |      |        | 43.6                                      | N/A   | N/A  | 9.4                | N/A                 | 50.3               |
| City Plant              | 2025 | Spring |   |       |  |                    |                     |                    |
| Tailrace                |      |        | 36.8                                      | N/A   | N/A  | N/A                | 22.3                | 55.3               |
| Reservoir               |      |        | 51.3                                      | N/A   | N/A  | 2.9                | N/A                 | 52.2               |
| Upper Plant             | 2025 | Spring |   |       |  |                    |                     |                    |
| Tailrace                |      |        | 57.2                                      | N/A   | 24.0   | N/A                | N/A                 | 39.5               |
| Reservoir               |      |        | 26.0                                      | 51.0  | N/A  | 4.3                | N/A                 | N/A                |



# Fish Assemblage Study (AQ-1)

## Data Summary – Gem State Project

| Fall 2024 Gem State |                                |                 |           | Spring 2025 Gem State |                                |                 |                        |
|---------------------|--------------------------------|-----------------|-----------|-----------------------|--------------------------------|-----------------|------------------------|
| Common Name         | Scientific Name                | Number Captured |           | Common Name           | Scientific Name                | Number Captured |                        |
|                     |                                | Tailrace        | Reservoir |                       |                                | Tailrace        | Reservoir <sup>1</sup> |
| Brown Trout         | <i>Salmo trutta</i>            | 4               | 2         | Brown Trout           | <i>Salmo trutta</i>            | 3               | 2                      |
| Rainbow Trout       | <i>Oncorhynchus mykiss</i>     | 0               | 1         | Green Sunfish         | <i>Lepomis cyanellus</i>       | 0               | 1                      |
| Common Carp         | <i>Cyprinus carpio</i>         | 3               | 20        | Longnose Dace         | <i>Rhinichthys cataractae</i>  | 1               | 0                      |
| Largemouth Bass     | <i>Micropterus nigricans</i>   | 29              | 0         | Mountain Sucker       | <i>C. platyrhynchus</i>        | 2               | 6                      |
| Smallmouth Bass     | <i>Micropterus dolomieu</i>    | 62              | 52        | Rainbow Trout         | <i>Oncorhynchus mykiss</i>     | 13              | 6                      |
| Sculpin             | <i>Cottus spp.</i>             | 5               | 56        | Redside Shiner        | <i>Richardsonius balteatus</i> | 332             | 15                     |
| Mountain Whitefish  | <i>Prosopium williamsoni</i>   | 2               | 0         | Sculpin <sup>2</sup>  | <i>Cottus spp.</i>             | 1               | 101                    |
| Redside Shiner      | <i>Richardsonius balteatus</i> | 54              | 84        | Smallmouth Bass       | <i>Micropterus dolomieu</i>    | 1               | 8                      |
| Speckled Dace       | <i>Rhinichthys osculus</i>     | 5               | 0         | Speckled Dace         | <i>Rhinichthys osculus</i>     | 0               | 1                      |
| Utah Sucker         | <i>Catostomus ardens</i>       | 14              | 167       | Utah Chub             | <i>Gila atraria</i>            | 1               | 0                      |
| Utah Chub           | <i>Gila atraria</i>            | 4               | 0         | Utah Sucker           | <i>Catostomus ardens</i>       | 17              | 85                     |
| Total Captured      |                                | 182             | 382       | White Sturgeon        | <i>A. transmontanus</i>        | 4               | 0                      |
|                     |                                |                 |           | Yellowstone Cutthroat | <i>O. virginalis bouvieri</i>  | 1               | 0                      |
|                     |                                |                 |           | Total Captured        |                                | 376             | 225                    |



# Fish Assemblage Study

## Data Summary – Idaho Falls Project

| Spring 2025 – Lower Plant |                                |                 |           |
|---------------------------|--------------------------------|-----------------|-----------|
| Common Name               | Scientific Name                | Number Captured |           |
|                           |                                | Tailrace        | Reservoir |
| Brown Trout               | <i>Salmo trutta</i>            | 4               | 2         |
| Longnose Dace             | <i>Rhinichthys cataractae</i>  | 2               | 1         |
| Sculpin                   | <i>Cottus sp.</i>              | 15              | 1         |
| Rainbow Trout             | <i>Oncorhynchus mykiss</i>     | 8               | 1         |
| Redside Shiner            | <i>Richardsonius balteatus</i> | 1               | 0         |
| Speckled Dace             | <i>Rhinichthys osculus</i>     | 4               | 4         |
| Utah Sucker               | <i>Catostomus ardens</i>       | 11              | 40        |
| White Sturgeon            | <i>Acipenser transmontanus</i> | 0               | 2         |
| Yellowstone Cutthroat     | <i>O. virginalis bouvieri</i>  | 1               | 0         |
| Total Captured            |                                | 45              | 51        |

| Spring 2025 – City Plant |                                |                 |           |
|--------------------------|--------------------------------|-----------------|-----------|
| Common Name              | Scientific Name                | Number Captured |           |
|                          |                                | Tailrace        | Reservoir |
| Brown Trout              | <i>Salmo trutta</i>            | 6               | 1         |
| Longnose Dace            | <i>Rhinichthys cataractae</i>  | 1               | 8         |
| Sculpin                  | <i>Cottus sp.</i>              | 1               | 6         |
| Mountain Whitefish       | <i>Prosopium williamsoni</i>   | 5               | 0         |
| Rainbow Trout            | <i>Oncorhynchus mykiss</i>     | 3               | 1         |
| Redside Shiner           | <i>Richardsonius balteatus</i> | 3               | 30        |
| Utah Sucker              | <i>Catostomus ardens</i>       | 28              | 11        |
| Yellowstone Cutthroat    | <i>O. virginalis bouvieri</i>  | 1               | 0         |
| White Sturgeon           | <i>Acipenser transmontanus</i> | 0               | 3         |
| Total Captured           |                                | 48              | 60        |

| Spring 2025 – Upper Plant |                                |                 |                        |
|---------------------------|--------------------------------|-----------------|------------------------|
| Common Name               | Scientific Name                | Number Captured |                        |
|                           |                                | Tailrace        | Reservoir <sup>1</sup> |
| Brown Trout               | <i>Salmo trutta</i>            | 8               | 20                     |
| Longnose Dace             | <i>Rhinichthys cataractae</i>  | 8               | 6                      |
| Sculpin                   | <i>Cottus sp.</i>              | 12              | 1                      |
| Mountain Whitefish        | <i>Prosopium williamsoni</i>   | 5               | 19                     |
| Rainbow Trout             | <i>Oncorhynchus mykiss</i>     | 5               | 3                      |
| Redside Shiner            | <i>Richardsonius balteatus</i> | 442             | 123                    |
| Speckled Dace             | <i>Rhinichthys osculus</i>     | 18              | 2                      |
| Utah Chub                 | <i>Gila atraria</i>            | 2               | 0                      |
| Utah Sucker               | <i>Catostomus ardens</i>       | 34              | 69                     |
| Yellowstone Cutthroat     | <i>O. virginalis bouvieri</i>  | 1               | 3                      |
| White Sturgeon            | <i>Acipenser transmontanus</i> | 7               | 0                      |
| Total Captured            |                                | 542             | 246                    |



# Fish Assemblage Study (AQ-1)

## Data Summary – Idaho Falls Project (Fall 2024)

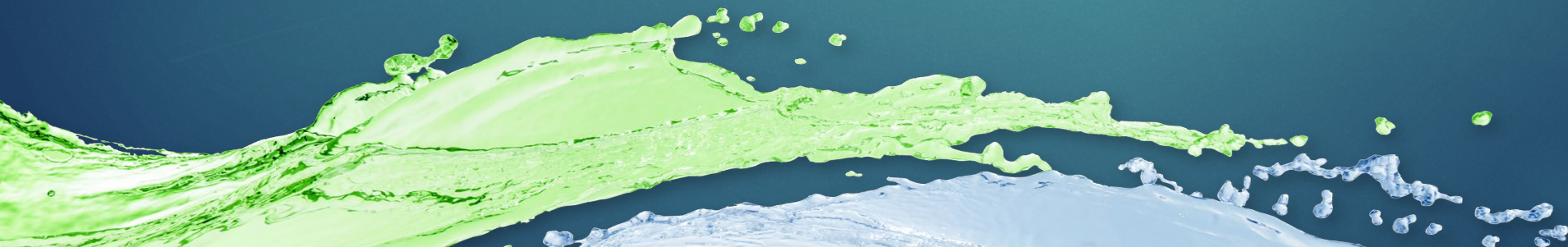
| Sample Location and Method       | Effort (min) | Habitat Type | Substrate | Cover      | Average Depth (ft) | Average Velocity (ft/sec) | pH  | Cond. (mS/cm) | DO (mg/L) | Water Temp. (°C) |
|----------------------------------|--------------|--------------|-----------|------------|--------------------|---------------------------|-----|---------------|-----------|------------------|
| GS_T_2_Setline                   | 1080         | Run          | Cobble    | Boulders   | 17.0               | 0.0                       | 8.5 | 362.3         | 8.6       | 16.0             |
| GS_T_6_Setline                   | 1080         | Run          | Fines     | Boulders   | 17.0               | 1.2                       | 8.6 | 359.8         | 9.0       | 16.6             |
| GS_T_4_Backpack Electrofishing   | 13.4         | Run          | Cobble    | Vegetation | 1.5                | 1.5                       | 8.7 | 353.5         | 9.9       | 16.2             |
| GS_T_7_Boat-mount Electrofishing | 12.8         | Run          | Cobble    | Boulders   | 4.0                | 0.5                       | 8.5 | 362.0         | 8.8       | 15.5             |
| GS_T_6_Boat-mount Electrofishing | 5.0          | Run          | Fines     | Boulders   | 4.0                | 0.3                       | 8.6 | 357.9         | 9.6       | 16.6             |
| GS_T_3_Fyke net                  | 1155         | Run          | Boulders  | Boulders   | 1.5                | 0.2                       | 8.6 | 345.5         | 9.3       | 15.6             |
| GS_T_4_Fyke net                  | 1035         | Pool         | Cobble    | Depth      | 3.5                | 0.4                       | 8.6 | 345.5         | 9.7       | 15.8             |



# Fish Assemblage Study (AQ-1)

## Variances and Modifications

| Status             | Variances  | Modifications  |
|--------------------|--|--|
| Spring 2025        | Survey area altered in response to low water levels, impeded boat access downstream of Upper Plant, electrofishing/setlines downstream of delineated tailrace. |  |
| Summer – Fall 2025 |  | To reduce fish injury/mortality, gillnet deployment shifted to daytime sampling (rather than nighttime) with soak times reduced to <8 hrs per set. |





# Fish Assemblage Study (AQ-1)

## Study Variance





# Fish Assemblage Study (AQ-1)

## General Observations

### ➤ Fall 2024 vs. Spring 2025

- Shift from warm/cool to cold-water species
- Water temp decrease from 15-16°C to 6-8°C
- No White Sturgeon in fall to 16 in spring
- Added nighttime electrofishing
- Increased number of setlines
- Reduced soak time for gillnets

### ➤ Spring 2025

- Capture totals dominated by Cyprinids and Catostomids
- Game fish species captured in all Projects
  - Juvenile Brown and Rainbow T., but no Cutthroat
- Large number and size range of sturgeon (70-155 cm)
- Night electrofishing appears to increase catch of predatory species





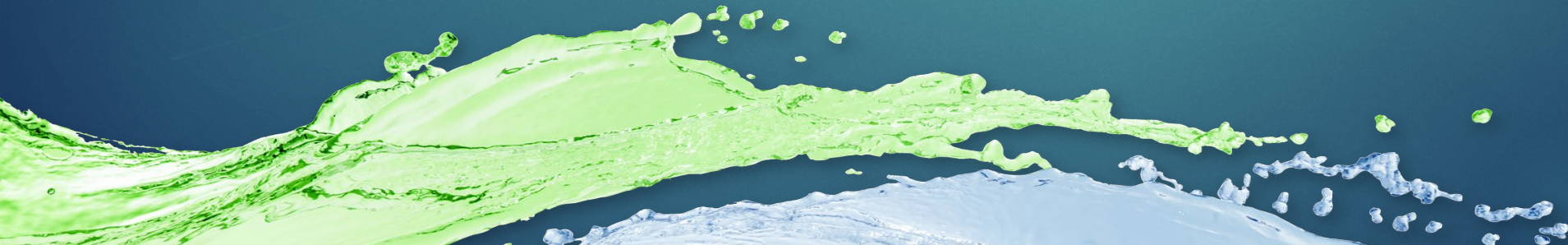
# Fish Assemblage Study (AQ-1)

## Proposed Schedule

| Date             | Activity   |
|------------------|--|
| Summer/Fall 2025 | Compile study data and conduct analyses                          |
| June 2025        | Distribute ISR technical memo and meeting with stakeholders      |
| July 2025        | Summer field surveys and data collection                         |
| September 2025   | Fall field surveys and data collection                           |
| Fall/Winter 2025 | Resolve comments and prepare Draft Study Report                  |
| June 2026        | File Updated Study Report (USR) and meeting with stakeholders    |
| September 2026   | Distribute Final Study Report in Draft License Application (DLA) |
| January 2027     | File Final License Application (FLA)                             |



Questions?





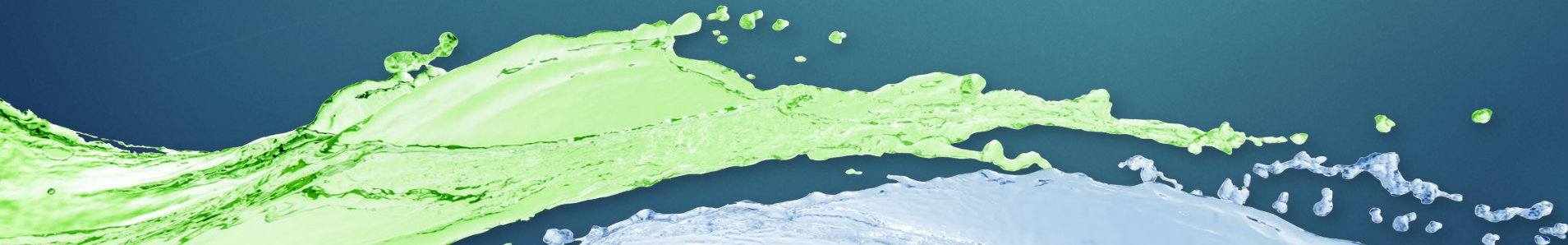


# Desktop Fish Entrainment (AQ-2)



# Desktop Fish Entrainment Study (AQ-2)

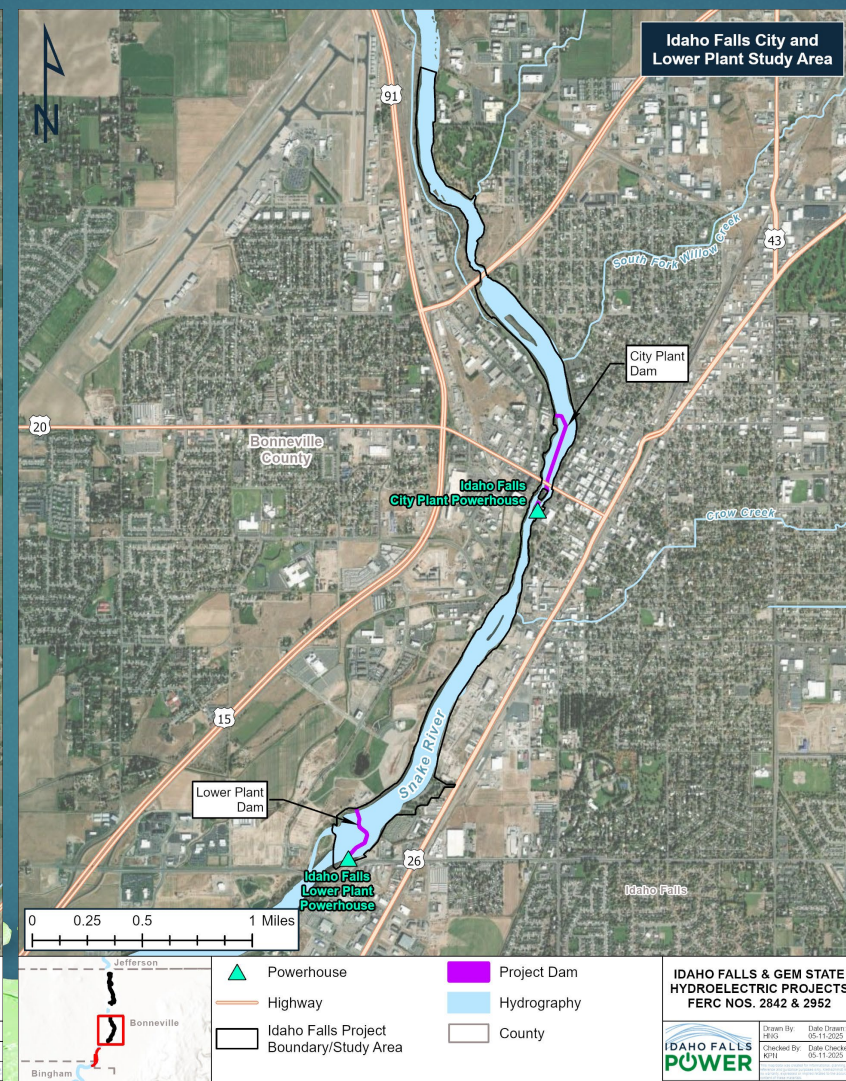
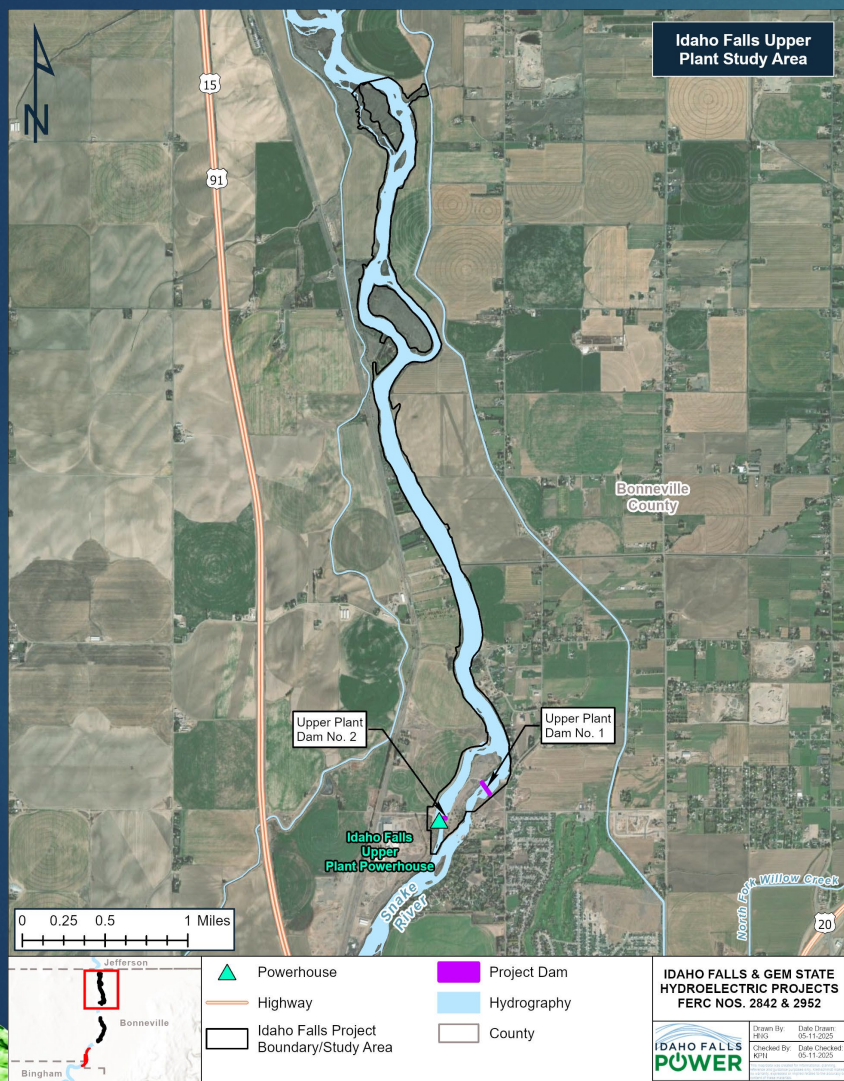
- ▶ **Goal:**
  - ▶ Assess how the operation of the Projects may affect the ability to achieve management objectives of resource agencies, with regard to fish species actively managed in Project reservoirs (i.e., stocked salmonids and stocked adult White Sturgeon).
- ▶ **Objectives:**
  - ▶ Identify and describe the features and characteristics of each turbine at each of the Idaho Falls and Gem State developments that may influence entrainment and turbine passage survival of stocked adult White Sturgeon and stocked salmonids.
  - ▶ Review and describe aquatic habitat near intake areas at the Projects.
  - ▶ Review and describe the biological and behavioral characteristics of stocked salmonids and adult White Sturgeon.
  - ▶ Characterize the potential risk of entrainment for stocked species and calculate turbine passage survival for at-risk species.





# Desktop Fish Entrainment Study (AQ-2)

## Study Area





# Desktop Entrainment Study (AQ-2)

## Preliminary Data Summary

| Project              | Turbine Type   | Number of Turbines | Unit Effic. (%) | Bar Spacing (Trash Rack) | Rated Capacity (MW) | Rated Head (ft) | Rated Runner Speed (rpm) | Max. Net Head (ft) | Min. Net Head (ft) | Runner Diameter (ft) | Max Intake Flow (cfs)<br>* Calculated value |
|----------------------|--|--------------------|-----------------|--------------------------|---------------------|-----------------|--------------------------|--------------------|--------------------|----------------------|---|
| IFP- Upper Plant     | Axial-flow, horizontal bulb, Kaplan runner and adjustable wicket gates | 1                  | 93              | 6 in                     | 8.3                 | 18              | 94.7                     | 20.1               | 13.3               | 15.91                | 6,000                                       |
| IFP- City Plant      | Axial-flow, horizontal bulb, Kaplan runner and adjustable wicket gates | 1                  | 93              | 6 in                     | 8.3                 | 18              | 94.7                     | 20.1               | 13.3               | 15.91                | 6,000                                       |
| IFP - Lower          | Axial-flow, horizontal bulb, Kaplan runner and adjustable wicket gates | 1                  | 93              | 6 in                     | 8.3                 | 18              | 94.7                     | 20.1               | 13.3               | 15.91                | 6,000                                       |
| IFP - Lower Historic | Standby Morgan Smith turbines with axial-flow                          | 2                  | 93              | 6 in                     | 1.5                 | 18              | 138.5                    | 20.1               | 13.3               | 10                   | 1,200*                                      |
| Gem State            | Single Kaplan Vertical with adjustable-blade runner with wicket gates. | 1                  | 95              | 6 in                     | 22.3                | 42              | 100                      | 46.9               | 32.5               | 18.37                | 7,000                                       |



# Desktop Fish Entrainment Study (AQ-2)

## Status

| Status  | Variances | Modifications  |
|---|-----------|--|
| <p>Spring 2025 – data collected, analysis to be conducted and summarized in Spring 2026 Draft Study Report</p> <p>AQ-1 and AQ-3 data to inform report</p> | -         | <p>If quantitative data are insufficient to execute Stryke program, qualitative information will be used to assess risk.</p> <p>Brown Trout, Mountain Whitefish, and Smallmouth Bass were added to the species list.</p> |



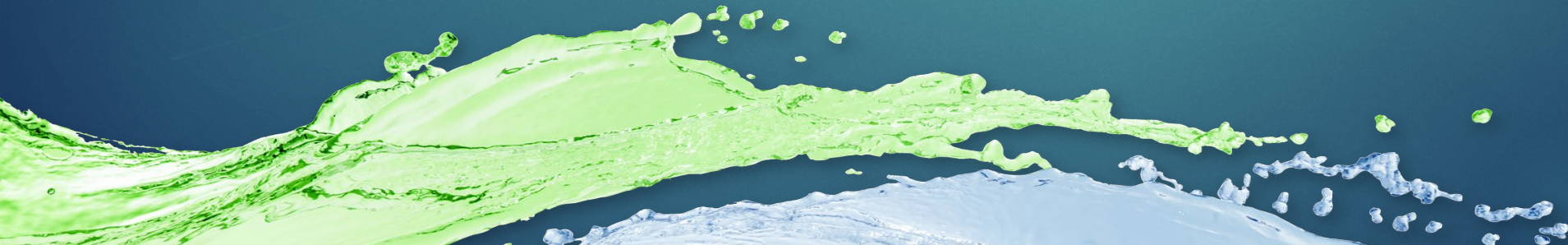
# Desktop Fish Entrainment Study (AQ-2)

## Schedule

| Date           | Activity   |
|----------------|--|
| Fall 2025      | Data collection  |
| November 2025  | Data from AQ-1 and AQ-2 studies available                        |
| February 2026  | Analysis of data, results summarized in Draft Study Report       |
| June 2026      | File Updated Study Report (USR) and meeting with stakeholders    |
| September 2026 | Distribute Final Study Report in Draft License Application (DLA) |
| January 2027   | File Final License Application (FLA)                             |



Questions?







# Aquatic Habitat & Sediment Characterization (AQ-3)



# Aquatic Habitat & Sediment Characterization Study (AQ-3)

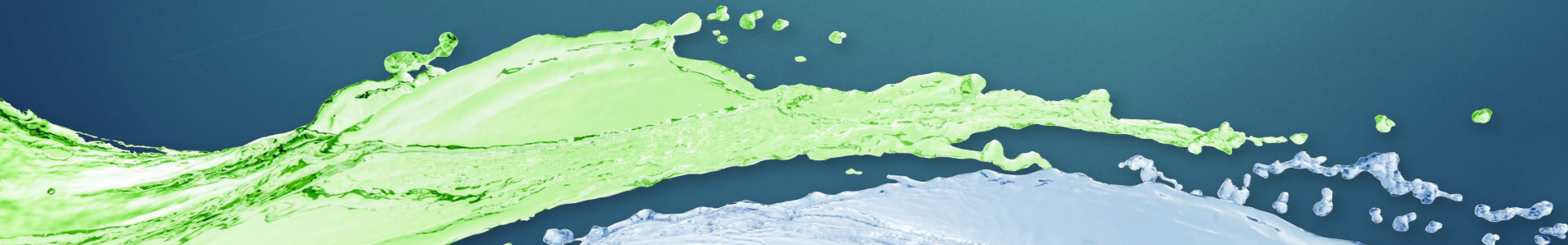
## Goals and Objectives

### ► Goal:

- Inventory free-flowing aquatic habitats within the Project areas and determine how operations at each Project interact with existing aquatic habitats.

### ► Objectives:

- Characterize and map aquatic habitat within the free-flowing sections of the Snake River located in the Project areas.
- Identify potential spawning habitat for salmonids, characterize substrates, and definitive features (e.g., water velocity, substrates) within those areas.

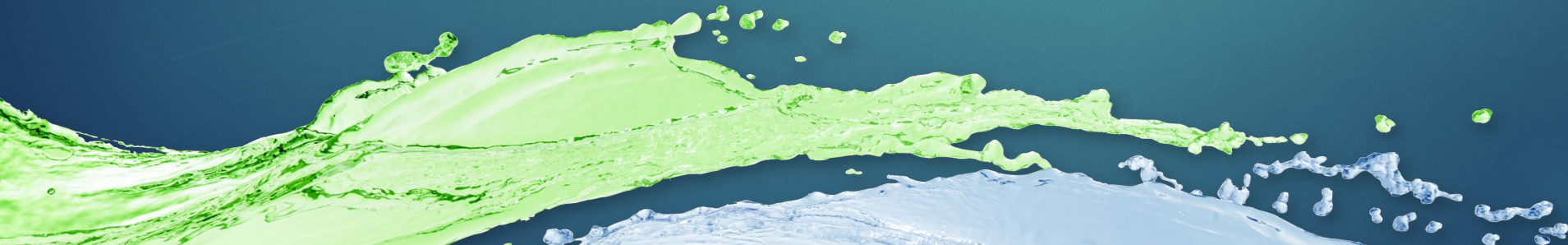




# Aquatic Habitat & Sediment Characterization Study (AQ-3)

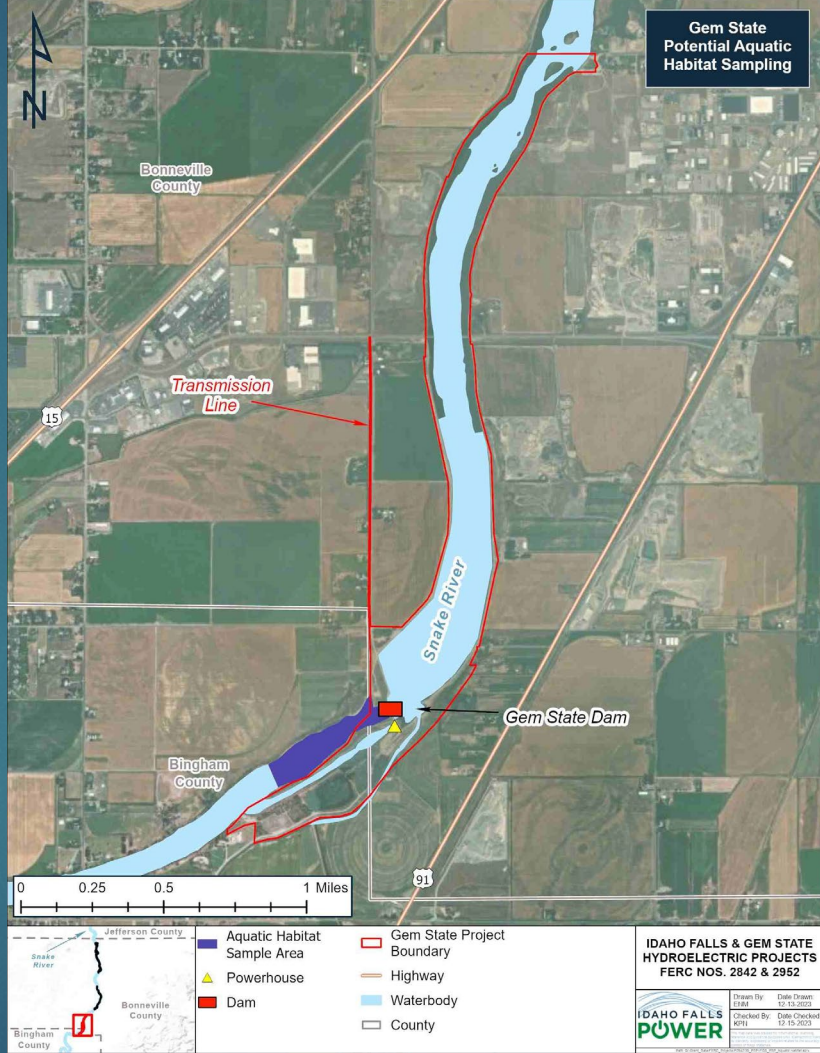
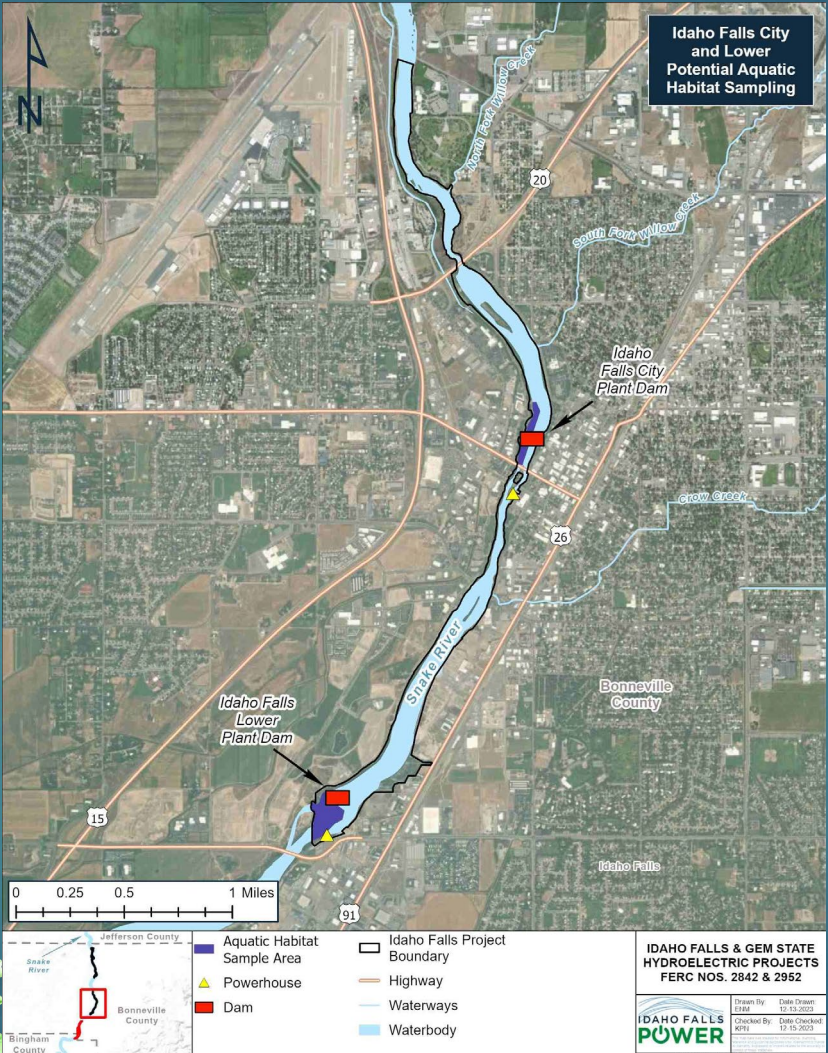
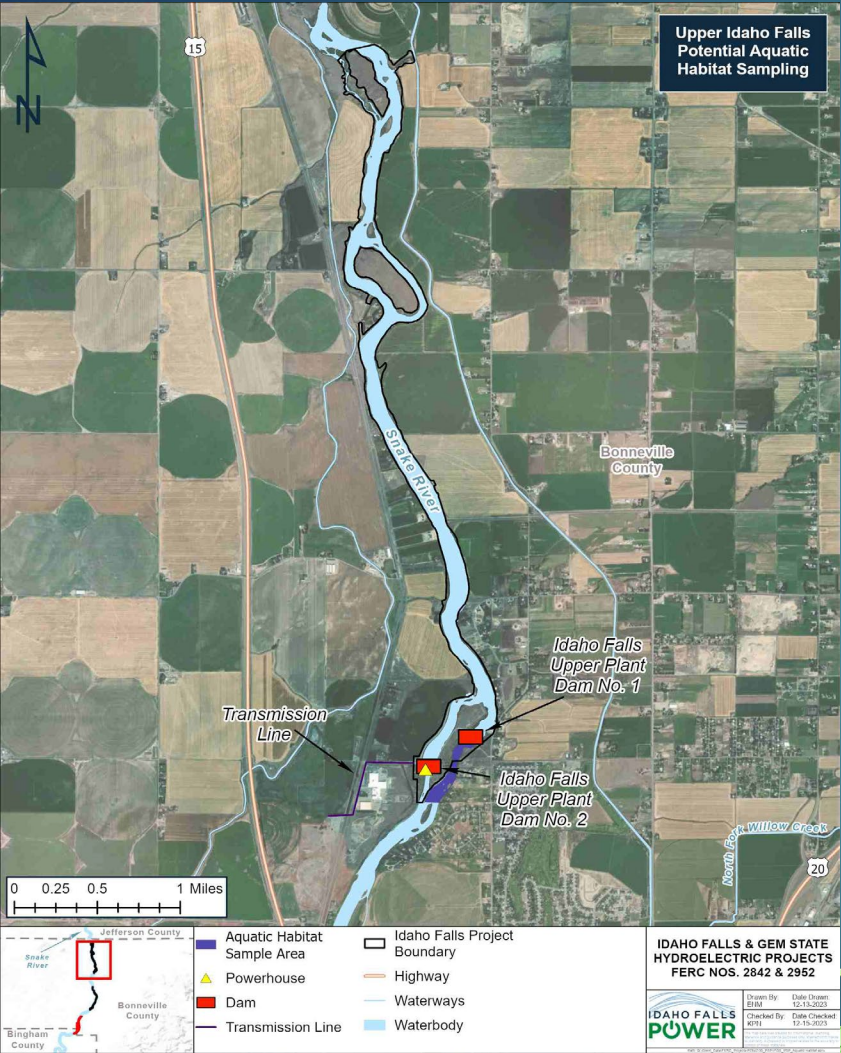
## ► Methods:

- Classify mesohabitat (e.g., riffles, runs, pools)
- Identify potential salmonid spawning areas
- Identify dominant substrate types (Wentworth Scale)
- Water depth and velocity measurements
- Assess instream cover (e.g., undercut banks, depth, woody debris, boulders)
- Primarily wading (unless boating is necessary for access)





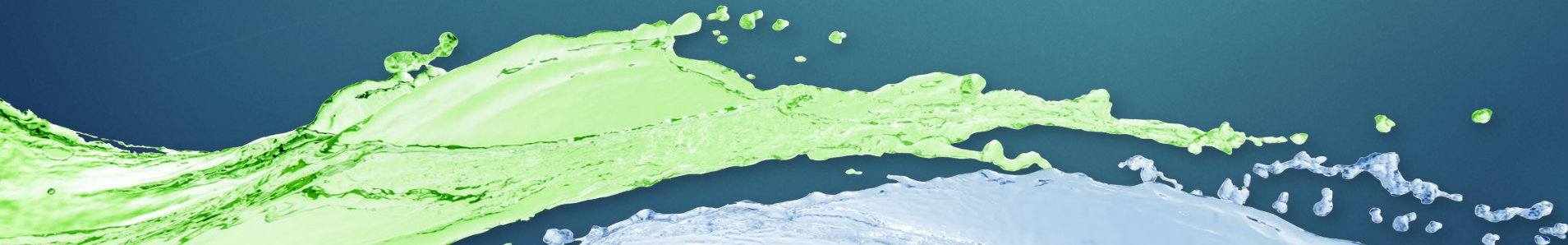
# Aquatic Habitat & Sediment Characterization Study (AQ-3)





# Site Selection

- ▶ On **Wednesday July 23, 2025, from 9:00 a.m. to 4:00 p.m.** Idaho Falls Power is inviting any interested relicensing participants to join a site selection visit
- ▶ Purpose of site visit:
  - ▶ Identify suitable sampling locations
  - ▶ Review site accessibility (shoreline, boat launches, wading access, etc.) and safety issues
  - ▶ Note channel structure, instream habitat, and riparian conditions
  - ▶ Photograph and map suggested sampling sites
  - ▶ Assess any special concerns (e.g., landowner access, steep banks, debris)
- ▶ Please let us know if you are interested in participating; agenda to follow for those interested in participating





# Aquatic Habitat & Sediment Characterization Study

## (AQ-3)

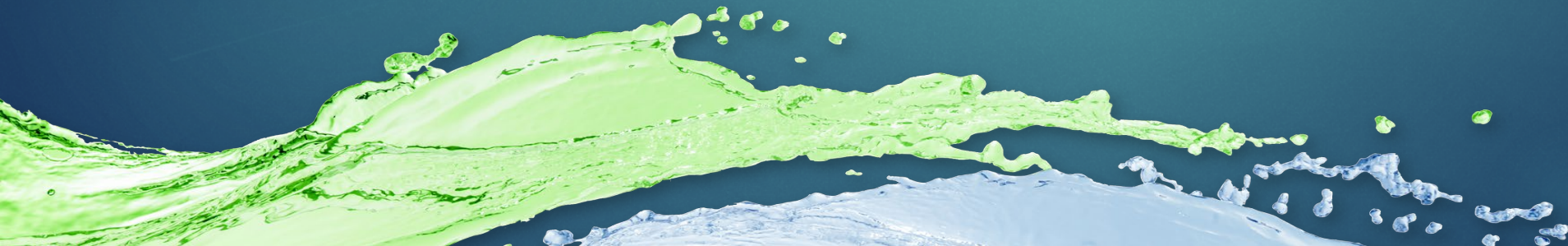
### Status

| Status      | Variances   | Modifications   |
|-------------|---|---|
| Summer 2025 | Summer 2025 sampling shifted to fall 2025 to occur alongside AQ-1, with July site selection trip. |   |
| Fall 2025   |   | <p>Sampling locations potentially shifted following July site selection trip.</p> <p>Water velocity and depth measurements will be taken opportunistically with emphasis on suitable spawning habitats.</p> <p>Water temperature and dissolved oxygen measurements will not be taken because these data are being collected in AQ-1 and WQ-1.</p> |



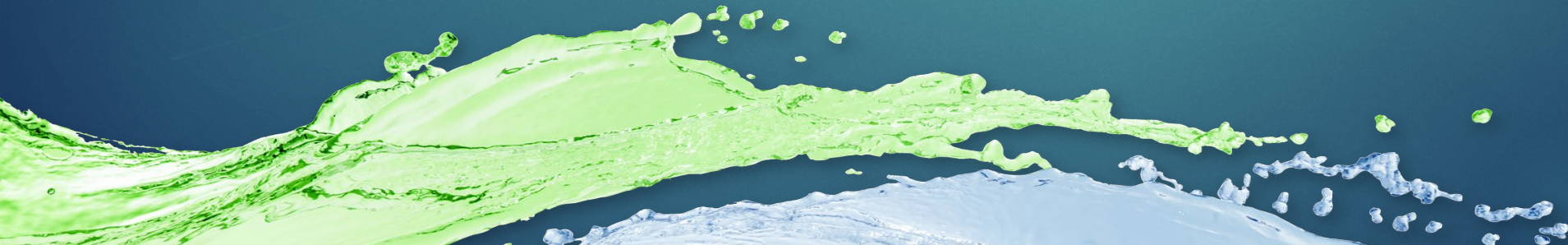
# Aquatic Habitat & Sediment Characterization Study (AQ-3) Schedule

| Date           | Activity  |
|----------------|---|
| Spring 2025    | Literature review – species spawning habitat requirements                             |
| Summer 2025    | Reconnaissance/site selection meeting – July 23, 2025                                 |
| Fall 2025      | Field work completion to align with AQ-1 Fish Assemblage fieldwork                    |
| June 2026      | File Draft Study Report with Updated Study Report (USR) and meeting with stakeholders |
| September 2026 | Distribute Final Study Report in Draft License Application (DLA)                      |
| January 2027   | File Final License Application (FLA)  |





Questions?







# Break

▶ Please return at 1:00 p.m. (MST)





# Wildlife and Rare, Threatened, and Endangered (RTE) Species (TERR-2)



# Wildlife & Rare, Threatened, & Endangered (RTE) Species (TERR-2)

## Goal, Objectives, & Methods

### ► Goal:

- Document existing wildlife and RTE species and identify the potential effects of the Project on these resources.

### ► Objectives:

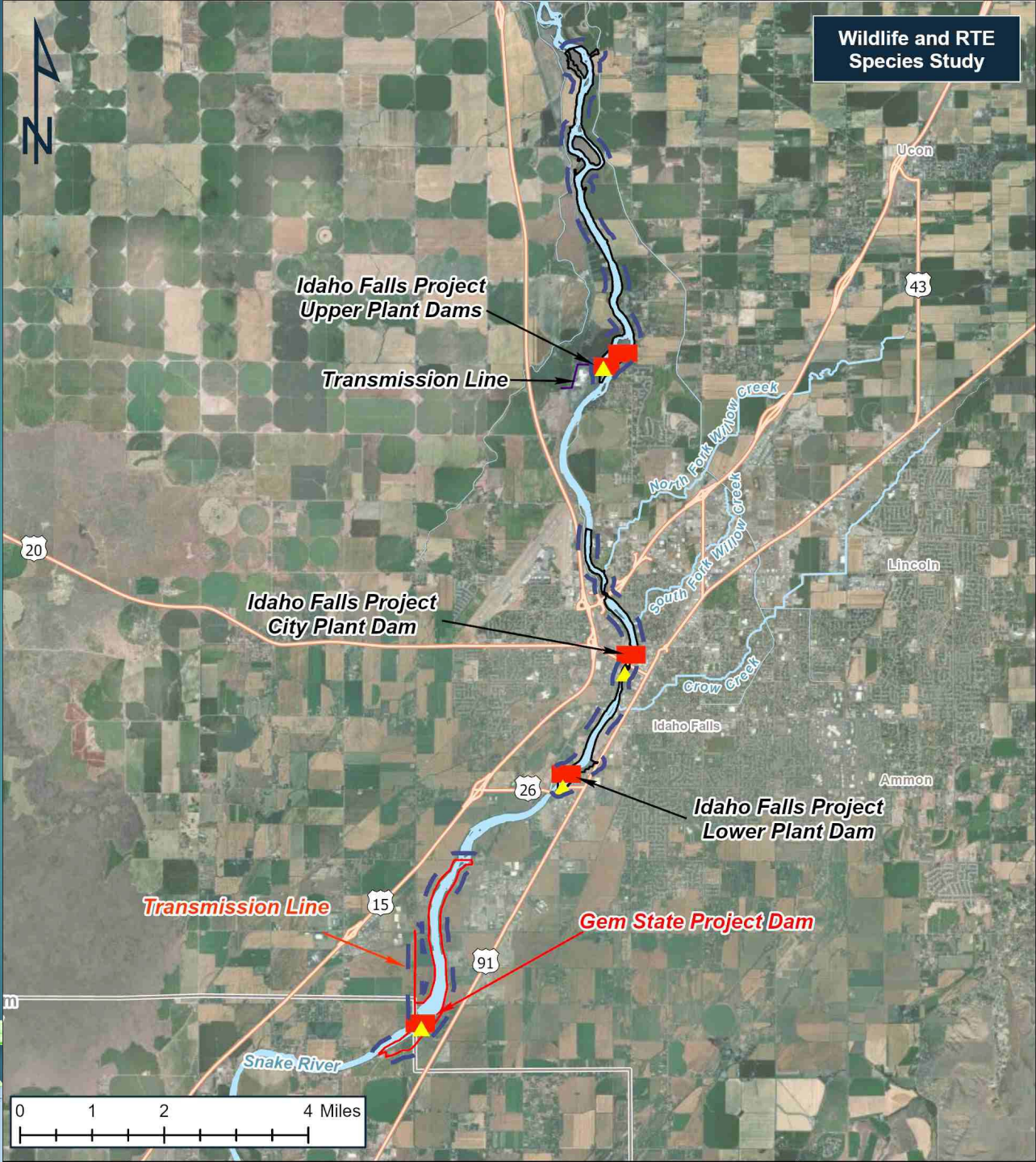
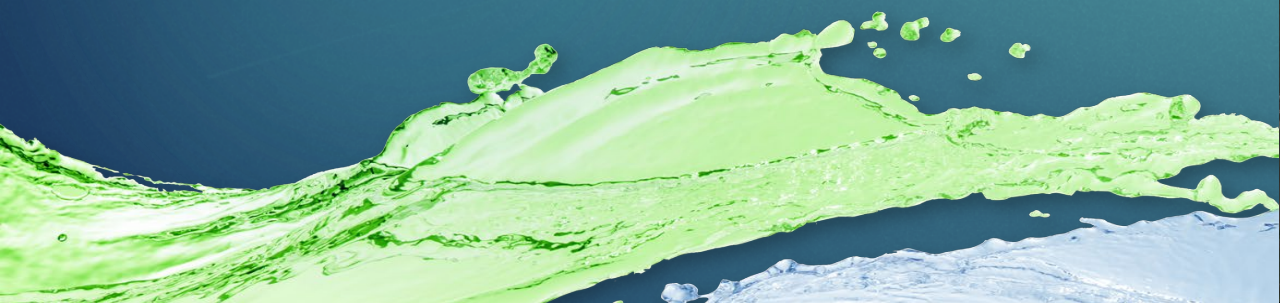
- Assess the abundance and general distribution of wildlife species in the study area.
- Determine the potential presence of special-status wildlife during the breeding season, including yellow-billed cuckoo.
- For those special-status species with high presence potential or those that have been determined to be present, assess the potential impact of the Projects.
- Identify the potential effects of Projects' continued operations on habitats and associated wildlife within the study area.
- Evaluate bird mortality from Project-specific power line strikes in the study area, with emphasis on the trumpeter swan.

### ► Methods:

- Literature Review
- Field Surveys
- General Wildlife
- RTE Species
- Avian Carcasses



Wildlife and Rare,  
Threatened, and  
Endangered (RTE) Species  
(TERR-2)  
Study Area





# Wildlife & Rare, Threatened, & Endangered (RTE) Species (TERR-2)

## Preliminary Data

- Based on the desktop assessment of potential yellow-billed cuckoo (YBCU) (*Coccyzus americanus*) suitable habitat within the Project Boundaries and prior field surveys (TERR-1 Year 1), no suitable habitat for YBCU is expected. SWCA consulted with U.S. Fish and Wildlife Service (USFWS) regarding this assessment and, on April 16, 2025, USFWS concurred. Thus, although suitable habitat is unlikely to be found within the Project Boundaries, TERR-2 field surveys will field-verify this assumption.
- Desktop analysis identified the following species with potential to occur in the study area:
  - 1 federally listed endangered species – Snake River physa (*Physella natricina*)
  - 1 proposed threatened species – monarch butterfly (*Danaus plexippus*)
  - 1 proposed endangered species – Suckley's cuckoo bumble bee (*Bombus suckleyi*)
- Additionally, the desktop analysis identified 4 species under review, including little brown bat (*Myotis lucifugus*), pinyon jay (*Gymnorhinus cyanocephalus*), western bumble bee (*Bombus occidentalis*), and western ridged mussel (*Gonidea angulata*)
- The Suckley's cuckoo bumble bee, Snake River physa, and all four species under review are new RTE species not previously noted in the TERR-2 study plan
  - Tables of RTE species with potential to occur in the study area (and ESA status information) and state-listed species and species with other conservation status that may occur in the study area are included in the Wildlife & RTE Species (TERR-2) technical memo



# Wildlife & Rare, Threatened, & Endangered (RTE) Species (TERR-2) Status

| Status    | Variances   | Modifications |
|-----------|---|---------------|
| Fall 2024 | Avian carcass surveys delayed from fall 2024 to fall 2025 following refinement of transmission lines and easement coordination. | -             |



# Wildlife & Rare, Threatened, & Endangered (RTE) Species (TERR-2) Schedule

| Date                    | Study Plan Development Milestones                                |
|-------------------------|--|
| April 2025              | Literature Review  |
| June 2025               | File ISR and general wildlife and RTE species field surveys      |
| Fall 2025 – Spring 2026 | Avian Carcass Surveys  |
| June 2026               | File Updated Study Report (USR) and meeting                      |
| September 2026          | Distribute Final Study Report in Draft License Application (DLA) |
| January 2027            | File Final License Application (FLA)                             |





Trumpeter swan and  
Western yellow-billed  
cuckoo, USFWS



# Questions?





# Botanical Resources (TERR-1)





# Botanical Resources (TERR-1)

## Goals, Objective, & Methods

### ► Goals:

- Identify if there is suitable habitat for special status, ESA-listed, and invasive plant species in the Idaho Falls Project and Gem State Project Boundaries (if suitable habitat is present, evaluate extent of species distribution and associated habitat).
- Assess and evaluate the extent of cottonwood and willow wetland habitat within the Project Boundaries.

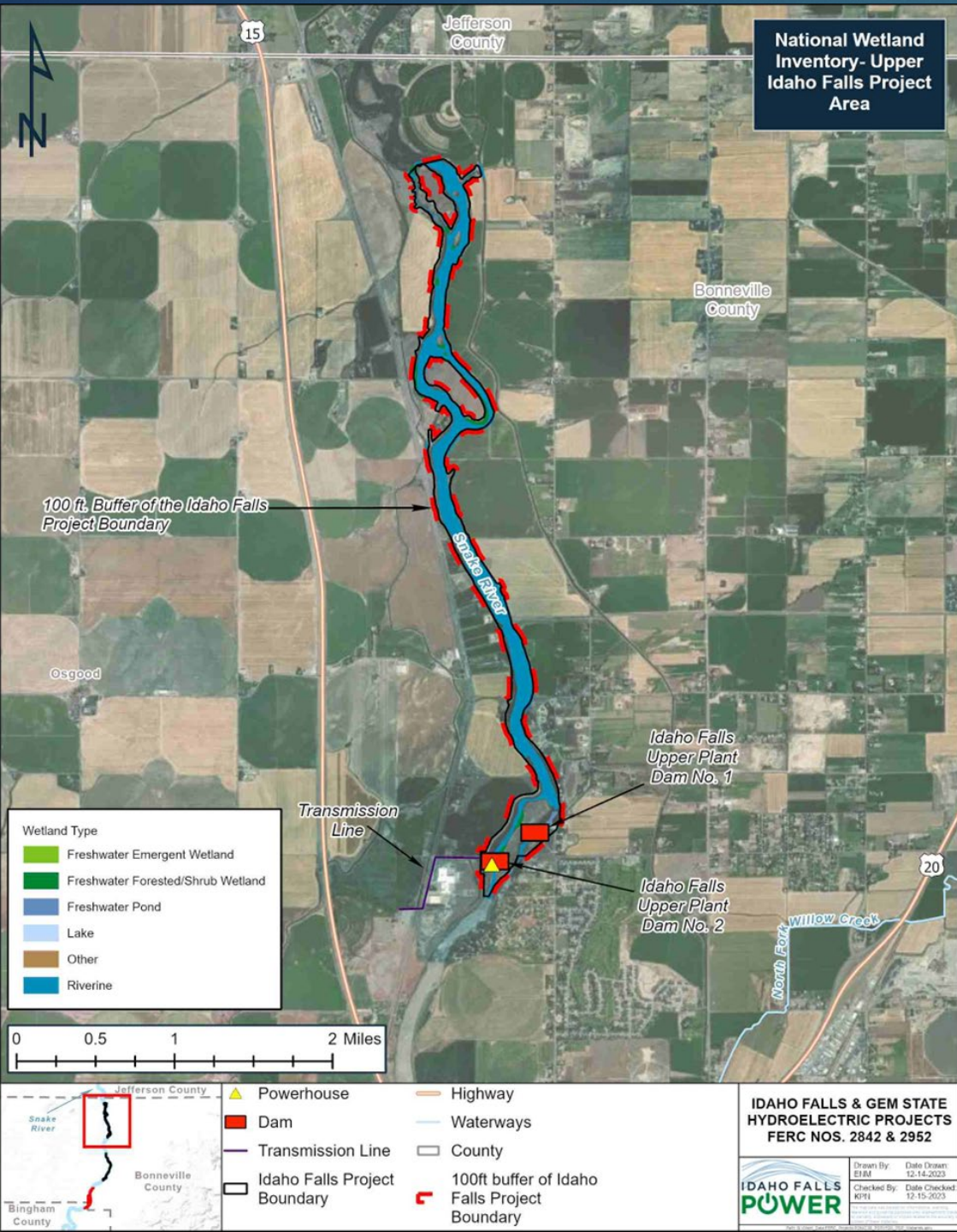
### ► Objective:

- Gather sufficient data necessary to fill gaps in existing information.

### ► Methods:

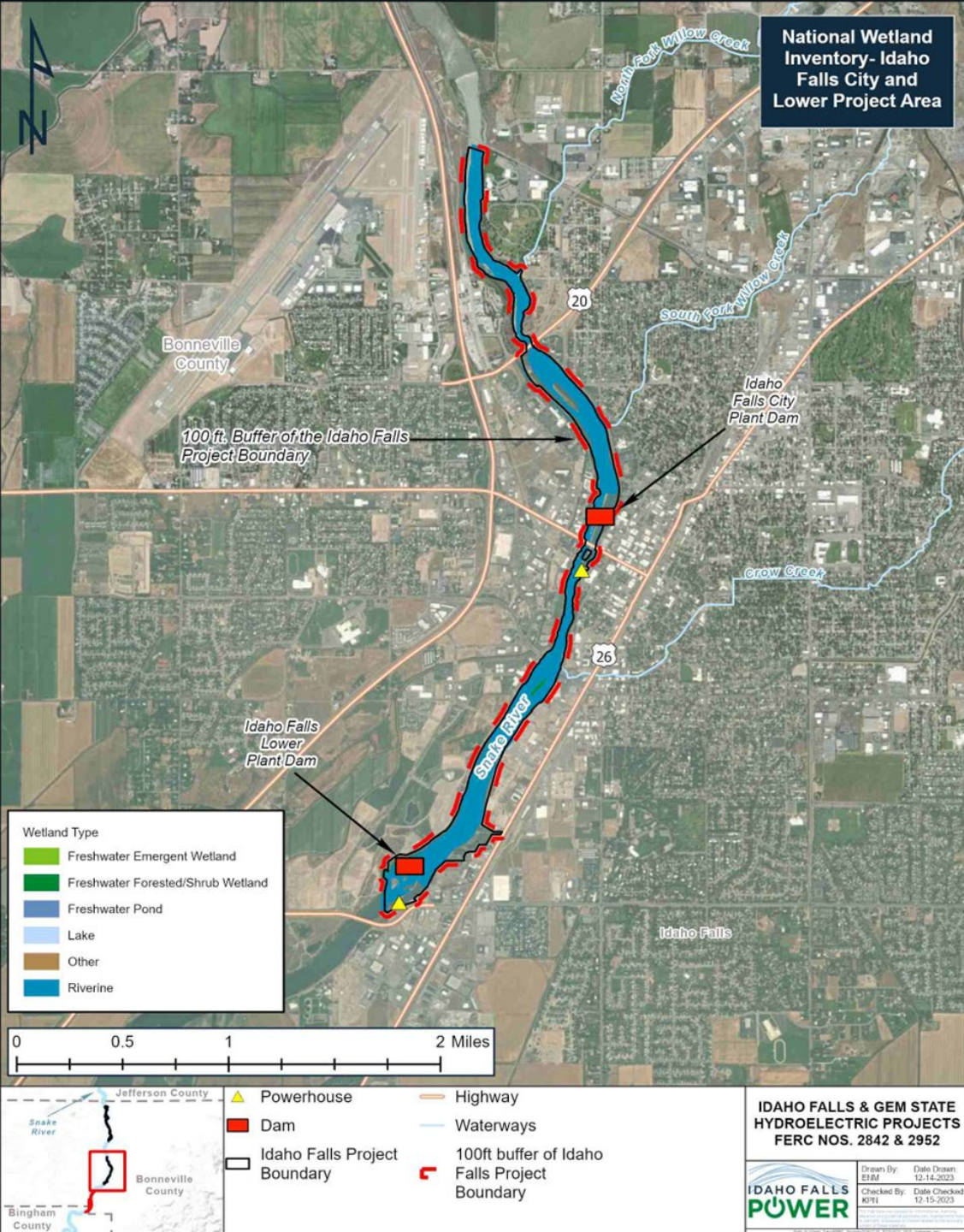
- Desktop Analysis
- Habitat Assessment
- Field Surveys
- Agency Coordination





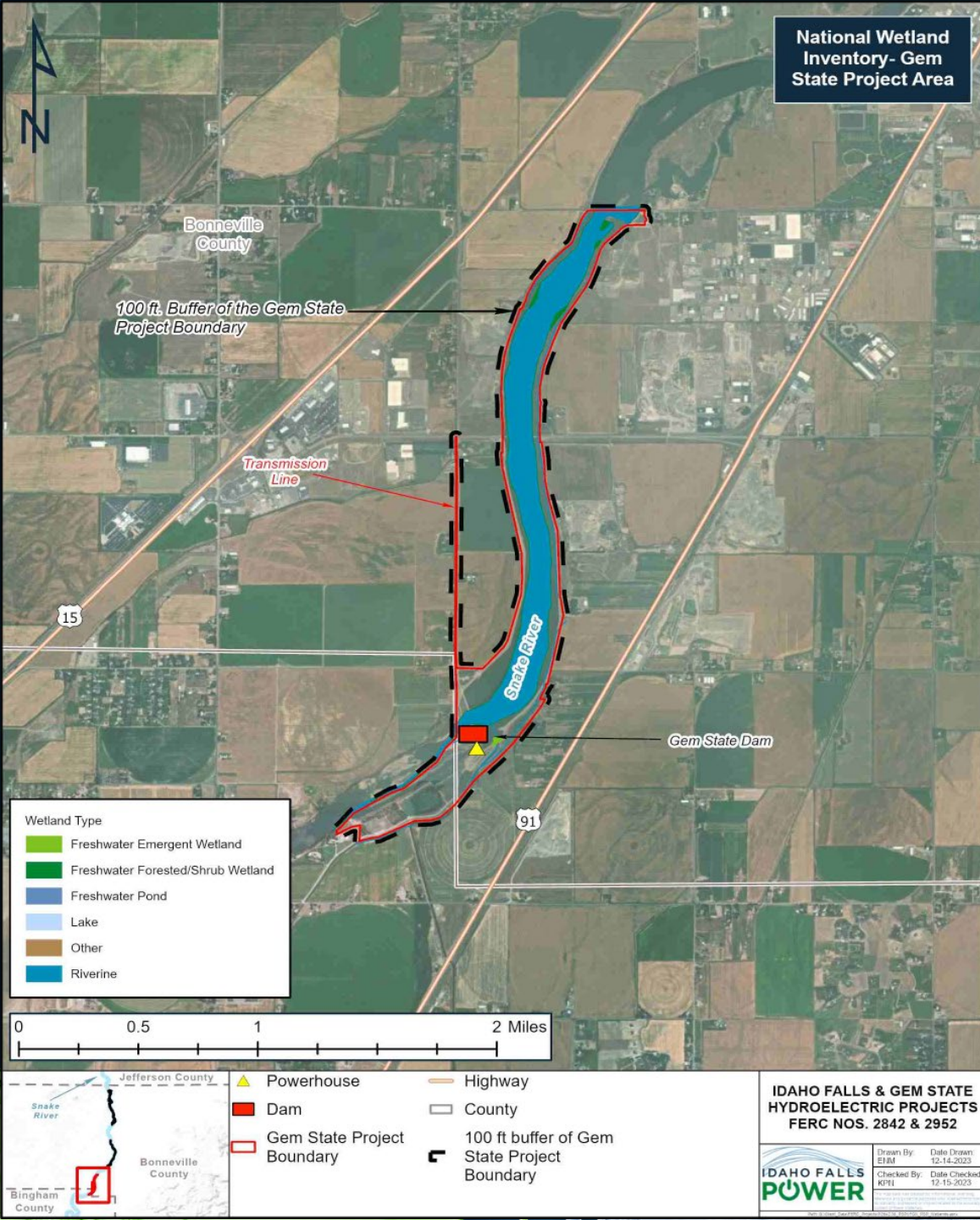
# Botanical Resources (TERR-1) Study Area (1)



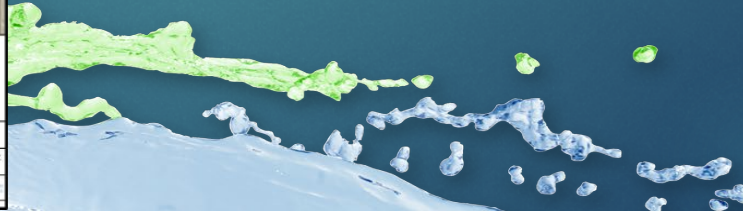


# Botanical Resources (TERR-1) Study Area (2)





# Botanical Resources (TERR-1) Study Area (3)





# Botanical Resources (TERR-1)

## Preliminary Data Summary

- ▶ 378 acres of high potential suitable habitat.
- ▶ Although no occurrences of Ute ladies'-tresses (ULT) were found within the study area, approximately 0.76 acres of suitable habitat was mapped during the initial habitat assessment in 2024.
- ▶ ~34.35 acres of cottonwood and willow habitat and 57.97 acres of flowering or budding noxious or invasive plant species were mapped.

### Special status plant species identified in the study area

| U.S. Department of Agriculture Plant Code | Scientific Name               | Common Name                               | Status   |
|---|-------------------------------|---|----------|
| ACNE2                                     | <i>Acer negundo</i>           | boxelder                                  | SNR, G5  |
| ACSA2                                     | <i>Acer saccharinum</i>       | silver maple                              | G5       |
| AGCR                                      | <i>Agropyron cristatum</i>    | crested wheatgrass                        | SNA, G5  |
| ASSP                                      | <i>Asclepias speciosa</i>     | showy milkweed                            | SNR, G5  |
| BRIN2                                     | <i>Bromus inermis</i>         | smooth brome or awnless brome             | SNR, G5  |
| BRTE                                      | <i>Bromus tectorum</i>        | cheatgrass                                | SNA, GNR |
| CAREX                                     | <i>Carex sp.</i>              | sedge                                     | --       |
| ELAN                                      | <i>Elaeagnus angustifolia</i> | Russian olive                             | SNA, GNR |
| EPCA3                                     | <i>Epilobium canum</i>        | hummingbird trumpet                       | SNR, G5  |
| EQHY                                      | <i>Equisetum hyemale</i>      | scouringrush horsetail or rough horsetail | SNR, G5  |
| FRVE2                                     | <i>Fraxinus velutina</i>      | velvet ash                                | --       |
| MEOF                                      | <i>Melilotus officinalis</i>  | sweetclover                               | SNA, GNR |
| MESA                                      | <i>Medicago sativa</i>        | alfalfa                                   | SNA, GNR |
| POAN3                                     | <i>Populus angustifolia</i>   | narrowleaf cottonwood                     | SNR, G5  |
| SAEX                                      | <i>Salix exigua</i>           | narrowleaf willow                         | SNR, G5  |
| SCAC                                      | <i>Schoenoplectus acutus</i>  | hardstem bulrush                          | SNR, G5  |
| TAVU                                      | <i>Tanacetum vulgare</i>      | common tansy                              | SNA, GNR |
| TYLA                                      | <i>Typha latifolia</i>        | broadleaf cattail                         | SNR, G5  |
| ULMUS                                     | <i>Ulmus sp.</i>              | elm                                       | --       |

### Noxious weeds identified in the study area

| U.S. Department of Agriculture Plant Code | Scientific Name             | Common Name                               | Status  |
|---|-----------------------------|---|---|
| ACRE3                                     | <i>Acroptilon repens</i>    | Russian knapweed or hardheads             | SNA, GNR, Statewide Control List <sup>1</sup>     |
| CANU4                                     | <i>Carduus nutans</i>       | nodding plumeless thistle or musk thistle | SNA, GNR, Statewide Control List <sup>1</sup>     |
| CEST8                                     | <i>Centaurea stoebe</i>     | spotted knapweed                          | GNR, Statewide Containment List <sup>2</sup>      |
| COAR4                                     | <i>Convolvulus arvensis</i> | field bindweed                            | SNA, GNR, Statewide Containment List <sup>2</sup> |

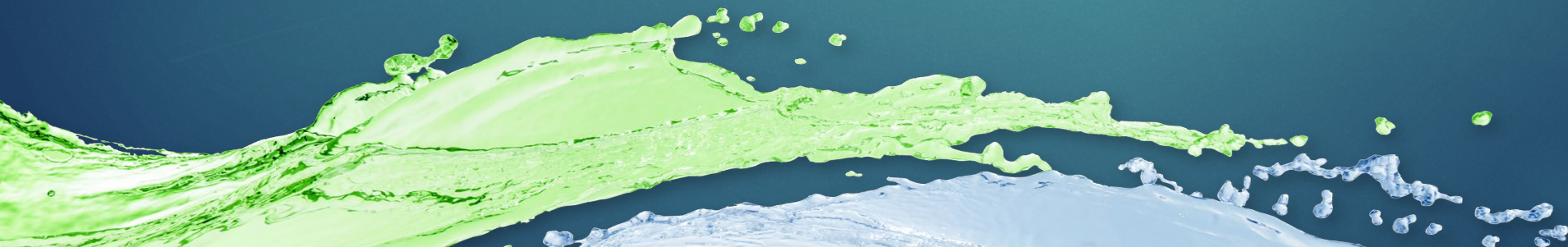


# Botanical Resources (TERR-1)

## Preliminary Data Summary

### Idaho Falls Project

- ▶ 12 discrete locations determined to comprise suitable habitat for ULT
  - ▶ Upper Plant – 0.57 acres
  - ▶ City Plant – 0.15 acres
  - ▶ Lower Plant – 0.03 acres
  - ▶ Total = 0.76 acres
- ▶ **No ULT occurrences found**
- ▶ ~13.66 acres of cottonwood and willow habitat mapped
- ▶ ~1.12 acres of flowering or budding noxious or invasive plant species mapped (including spotted knapweed and musk thistle)
- ▶ No incidental observations of saltcedar



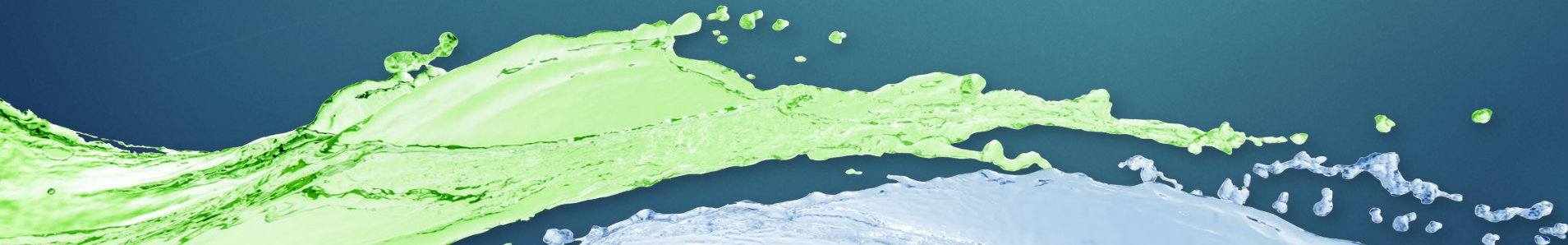


# Botanical Resources (TERR-1)

## Preliminary Data Summary

### Gem State Project

- ▶ ~20.69 acres of cottonwood and willow habitat were mapped
- ▶ No suitable habitat for ULT found and no ULT occurrences
- ▶ ~56.86 acres of flowering or budding noxious or invasive plant species mapped (including spotted knapweed, musk thistle, and field bindweed)
- ▶ No incidental observations of saltcedar

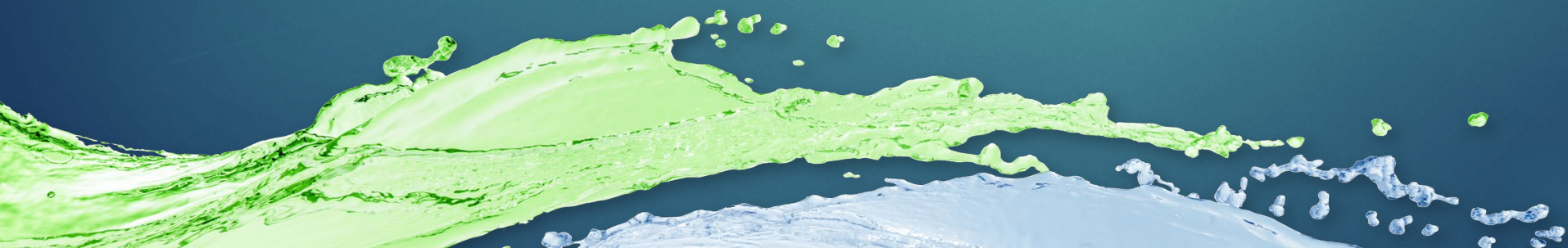




# Botanical Resources (TERR-1)

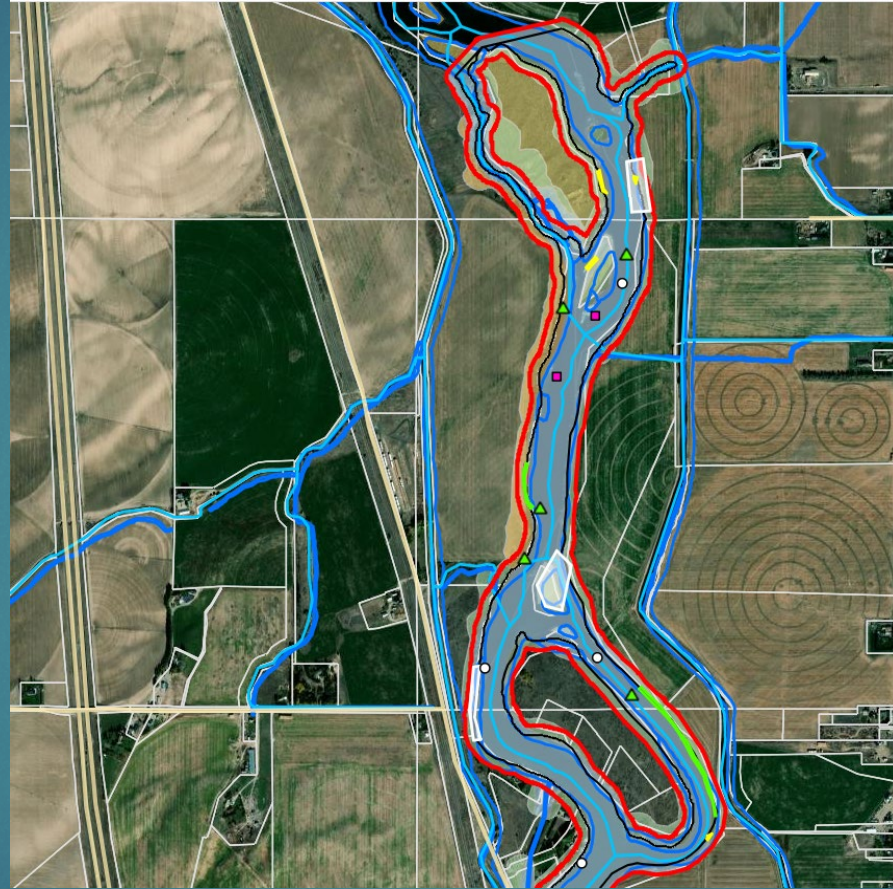
## Status

| Status      | Variances  | Modifications |
|-------------|--|---------------|
| Summer 2024 | <p>Survey area extent changed in response to field conditions. Private parcels (within buffer) surrounding the northernmost portion of Upper Plant prohibited access by foot, requiring the team to access the reach by boat. Upon boating up the reach, various islands within that segment were determined to be inaccessible due to dense vegetation and low water levels, which prohibited the team from safely disembarking from the boat.</p> <p>The field crew will attempt to access this area in summer 2025.</p> | -             |





# Botanical Resources (TERR-1) Status





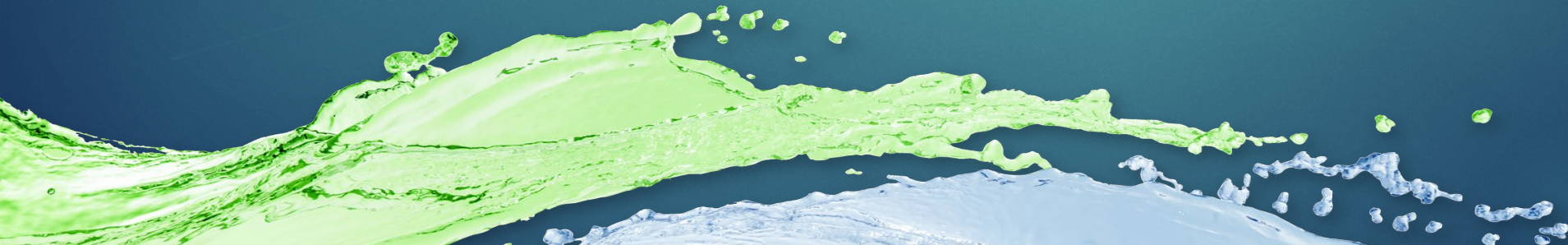
# Botanical Resources (TERR-1)

## Schedule

| Date             | Activity   |
|------------------|--|
| June 2025        | Distribute ISR technical memo and meeting with stakeholders                        |
| Summer 2025      | Conduct followup field surveys (i.e., Year 2 of ULT presence/absence surveys)      |
| Fall/Winter 2025 | Resolve comments received on the ISR technical memo and prepare Final Study Report |
| June 2026        | File Updated Study Report (USR) and meeting with stakeholders                      |
| September 2026   | Distribute Final Study Report in Draft License Application (DLA)                   |
| January 2027     | File Final License Application (FLA)   |



Questions?







# Cultural Resources (CR-1)



# Cultural Resources (CR-1)

## Goals & Objectives

### ► Goals:

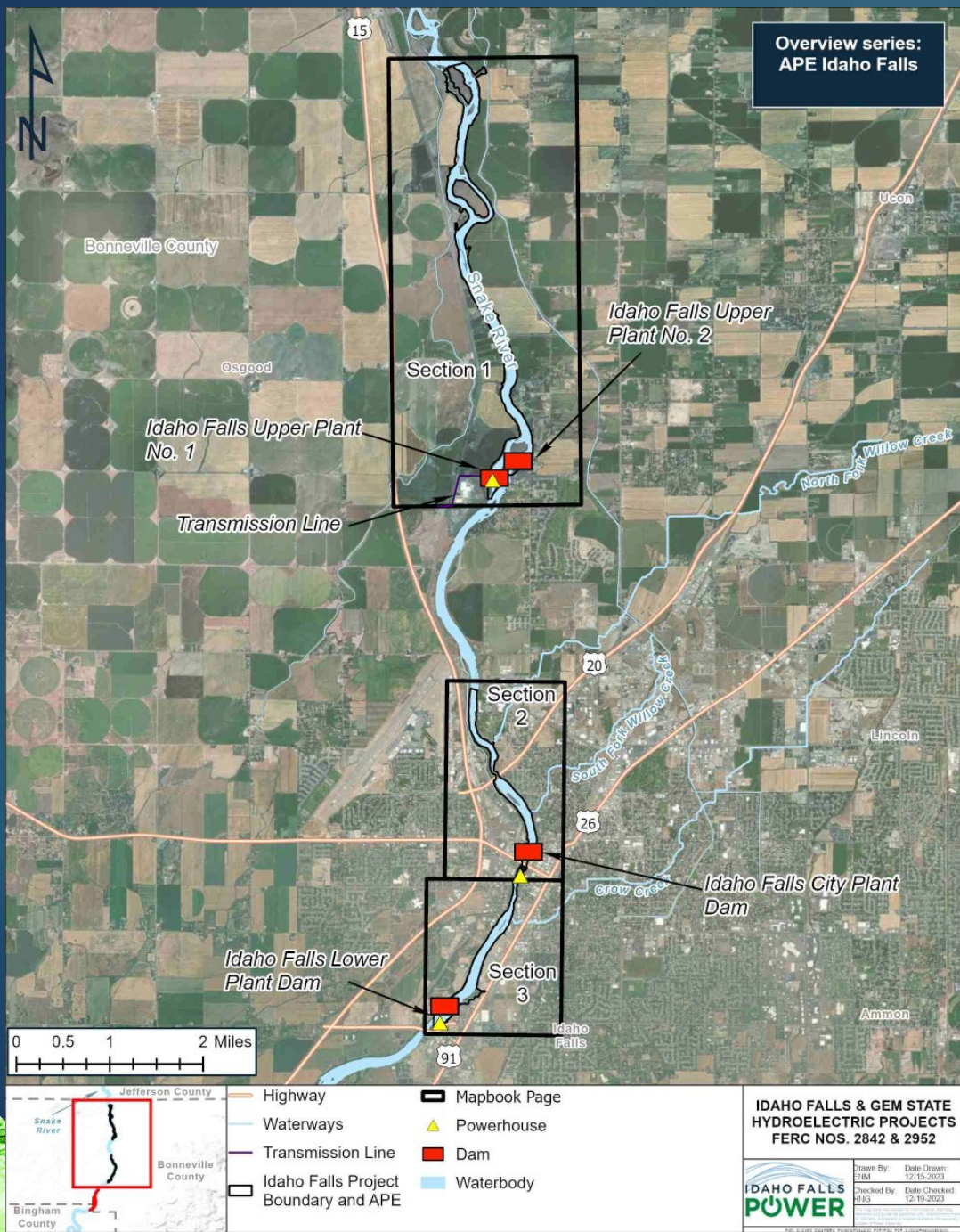
- Assess potential impacts to historic properties associated with O&M activities at both Projects.
- Ensure future Project facilities and operations are consistent with the cultural resources management goals of land-holding agencies, interested historic parties, and Tribal cultural entities.

### ► Objectives:

- Identify and document archaeological and historic-era properties within the Area of Potential Effects (APE).
- Evaluate National Register of Historic Places (NRHP) eligibility for properties identified within the Project APE.
- Determine potential Project effects on NRHP-eligible or listed archaeological and historic-era properties within the APE.







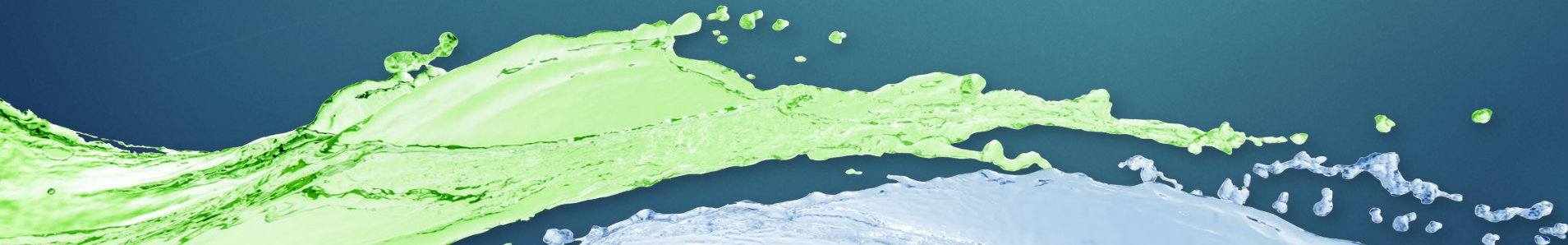
# Cultural Resources (CR-1) Study Area



# Cultural Resources (CR-1)

## Preliminary Data

- Field surveys for archeology and historic architecture were completed in June 2025.
- Architectural surveys documented 43 locations including the Upper Plant, City Plant, Lower Plant, and Gem State Dam.
- Archaeological surveys documented five locations.
- A large, precontact archaeological site plotted within the cultural resources study area that was originally recorded in 1977 and then subject to archaeological excavation was not relocated and no cultural materials were observed at its plotted location.
- The Eagle Rock Ferry site was nominated for the National Register of Historic Places in 1972 and is plotted within the cultural resources study area. No physical evidence for the site was observed during archaeological field surveys.

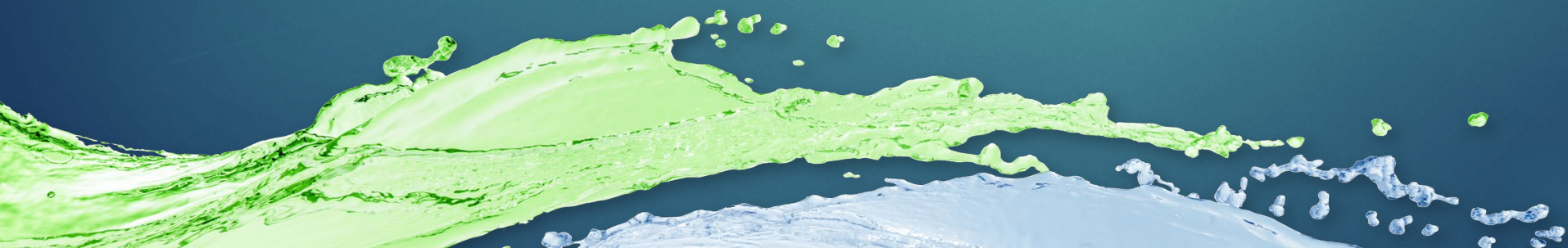




# Cultural Resources (CR-1)

## Status

| Status    | Variances  | Modifications |
|-----------|--|---------------|
| Fall 2024 | Field crews were unable to access portions of the survey area due to dense vegetation and were not subject to archaeological investigation. Water levels prohibited safe access by boat to small island at north end of Gem State; revisited and observed erosion precluding presence of archaeological resources. |               |



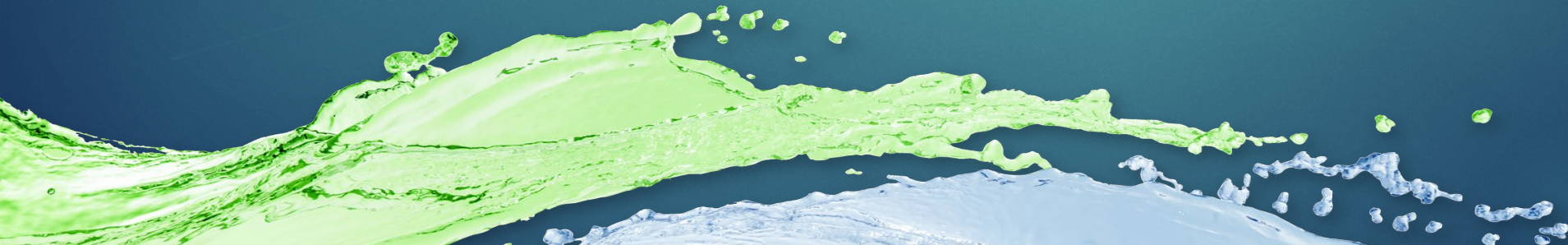


# Cultural Resources (CR-1) Schedule

| Date           | Activity  |
|----------------|---|
| Summer 2025    | Conduct additional archaeological and architecture surveys                      |
|                | File Archaeological and Architectural Technical Reports with Idaho SHPO         |
| June 2026      | File Updated Study Report (USR) and meeting with stakeholders                   |
| September 2026 | Distribute Final Study Report (confidential) in Draft License Application (DLA) |
| January 2027   | File Final License Application (FLA)  |



Questions?







# Tribal Resources (TR-1)





# Tribal Resources (TR-1)

## Goals & Objectives

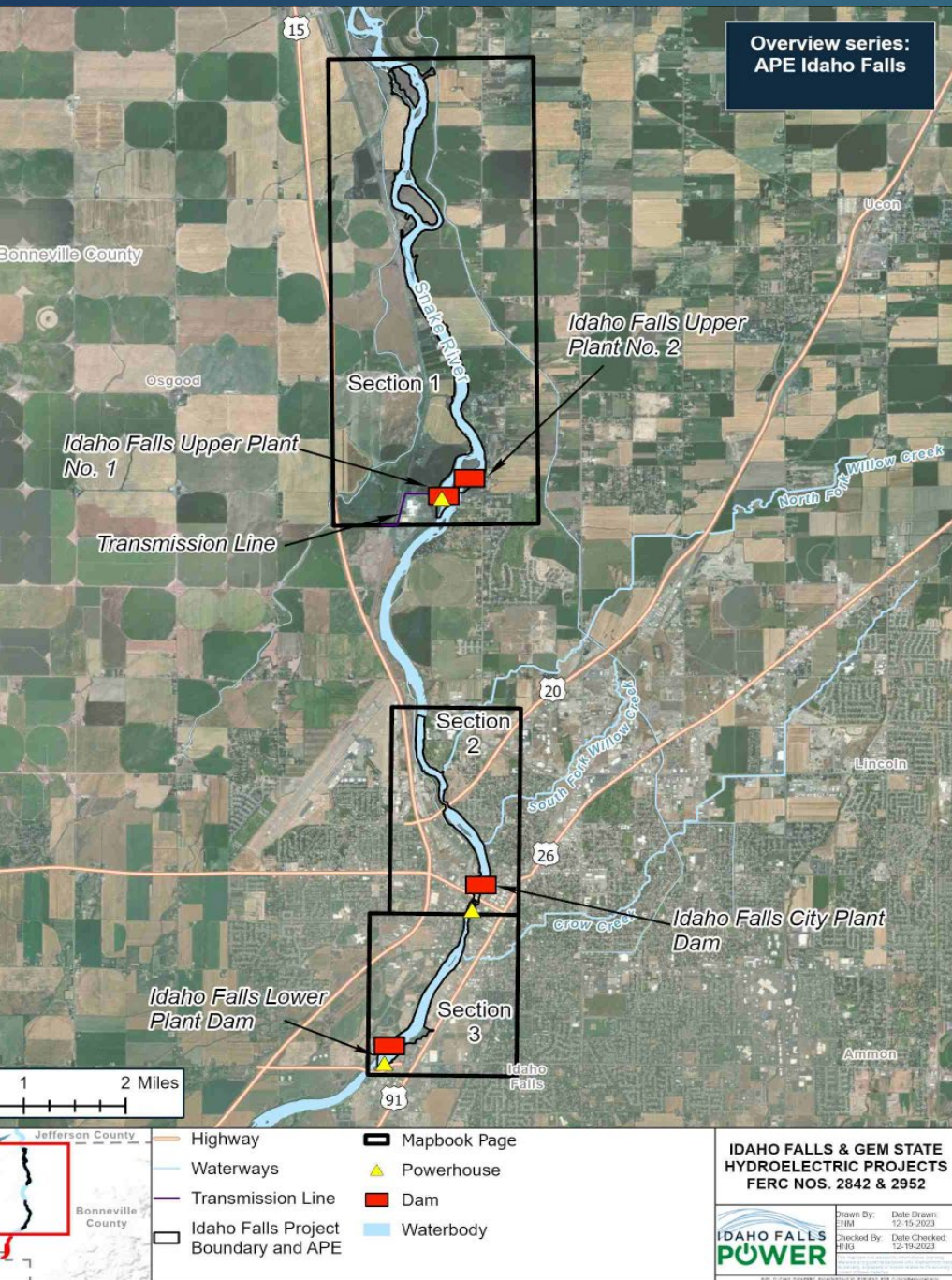
### ▶ Goals:

- ▶ Identify Tribal resources that may be affected by the undertaking through archival research, oral interviews, field inspections, and targeted site visits to ensure that O&M of the Projects does not impact such places.

### ▶ Objectives:

- ▶ Research, identify, and document known Indian Trust Assets, Traditional Cultural Properties, Tribal economic ventures, relevant Tribal agreements, and other resources of traditional, cultural, or religious importance to the Native American community that may potentially be affected by the Projects within or immediately adjacent to the proposed Area of Potential Effects (APE).
- ▶ Conduct outreach and interviews with Tribal governments and their representatives.
- ▶ Evaluate each identified Tribal resource for eligibility and inclusion in the NRHP.
- ▶ Identify and describe potential impacts to Tribal resources from existing and proposed future O&M of the Projects .





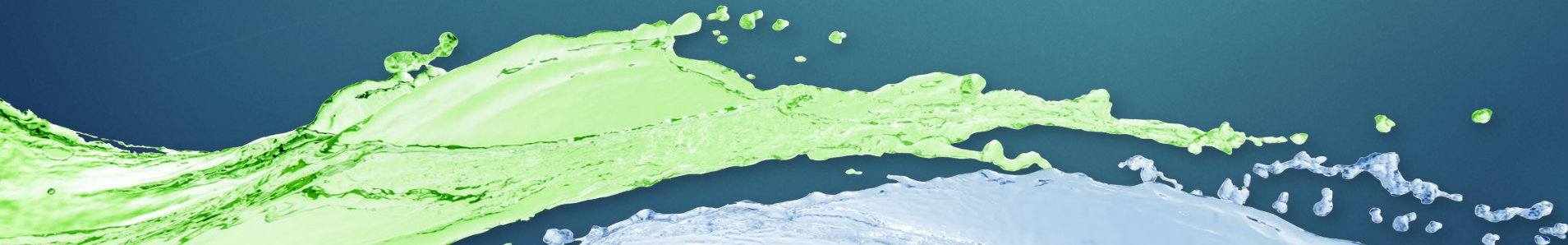
# Tribal Resources (TR-1) Study Area



# Tribal Resources (TR-1)

## Preliminary Data

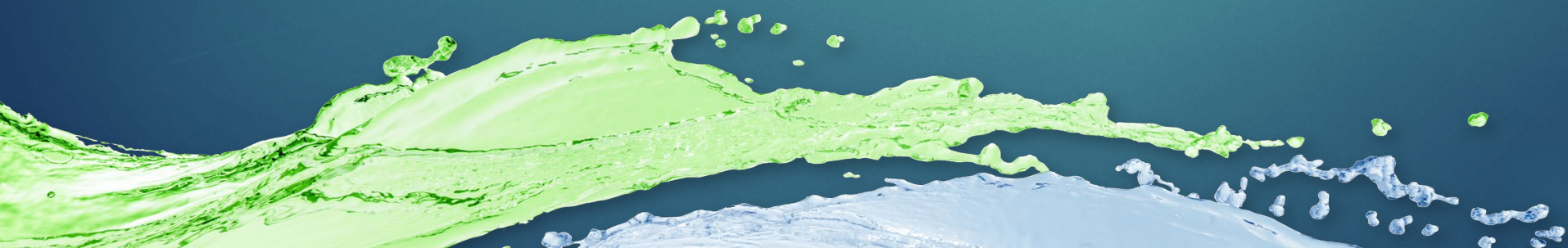
- ▶ October 2024 – Archival research began and is ongoing
- ▶ Archaeologists revisited mapped locations of three previously recorded sites; no cultural materials visible at any locations
- ▶ November 2024 – Following survey, oral interviews and site visit offered with interested Tribal representatives. The Tribal Resources (TRI-1) technical memo to be filed as confidential on the FERC docket
- ▶ May 2025 – The Shoshoni-Paiute Tribes of the Duck Valley Indian Reservation expressed their interest in participating with oral interviews. Coordination with the Tribe to conduct those interviews is ongoing





# Tribal Resources (TR-1) Status

| Status                          | Variances   | Modifications |
|---------------------------------|---|---------------|
| TR-1 delayed due to CR-1 delays | Due to CR-1 fieldwork delay (administrative/boat access), TR-1 research, oral interviews, and site visit did not begin until May/June 2025 after the Class III survey was completed. If any Tribal resources are identified, IFP will conduct an NRHP evaluation and include it in an interim report for SHPO review. |               |





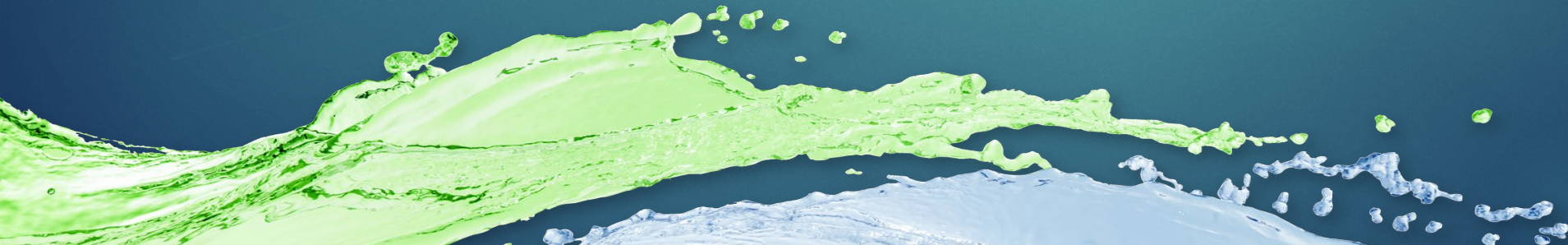
# Tribal Resources (TR-1)

## Schedule

| Date                  | Activity   |
|-----------------------|--|
| Winter 2024           | Compile study data and conduct analyses (if applicable to study)             |
| May/June 2025         | Conduct oral interviews  |
| August/September 2025 | Host site visit, if requested by Tribal participants                         |
| October 2025          | Conduct NRHP evaluation (if required)  |
| November 2025         | Finalize interim report for SHPO review                                      |
| March 2026            | Develop Historic Properties Management Plan (HPMP) if necessary              |
| June 2026             | File Updated Study Report (USR) (confidential) and meeting with stakeholders |
| September 2026        | Distribute Final Study Report in Draft License Application (DLA)             |
| January 2027          | File Final License Application (FLA)   |



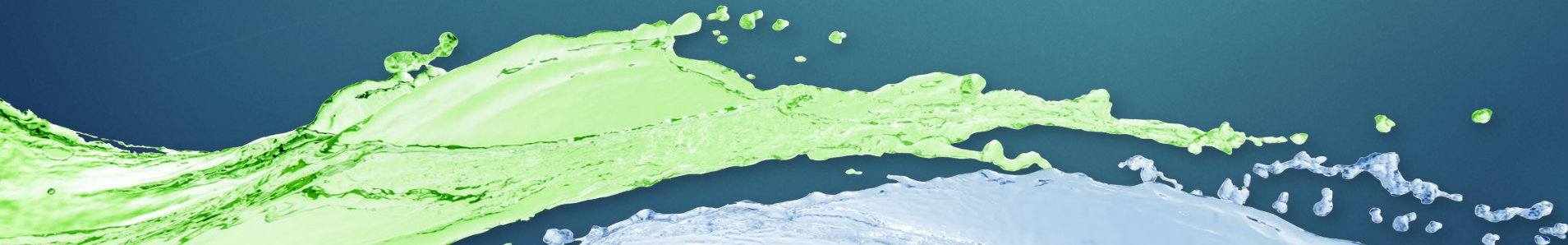
Questions?





# Next Steps

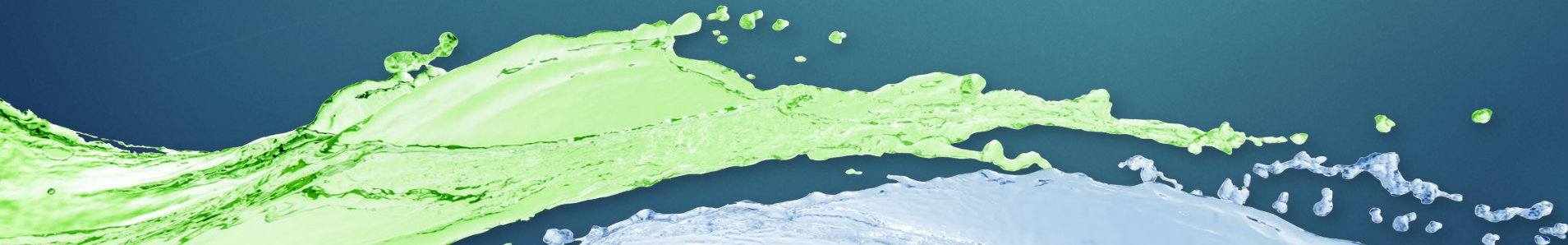
- ▶ IFP to post meeting presentation on website and distribute meeting summary within by July 12, 2025
- ▶ Relicensing participants file Disagreements/Requests to amend Study Plan due to FERC by August 11, 2025
- ▶ Response to Disagreements/Amendment Requests by September 10, 2025
- ▶ FERC issue's Director's/Determination on Disagreements/Amendments by October 10, 2025
- ▶ IFP files Draft Study Reports with the USR in June 2026





# Stay Involved

- ▶ Check the Project website for updates/news at: <https://www.ifpower.org/about-us/relicensing>
- ▶ Sign up for FERC's e-subscription (docket numbers "P-2842" and "P-2952") at [www.ferc.gov](http://www.ferc.gov)
- ▶ Email Olivia Smith with questions: [olivia.smith@kleinschmidtgroup.com](mailto:olivia.smith@kleinschmidtgroup.com)







Thank you!

IDAHO FALLS  
**POWER**