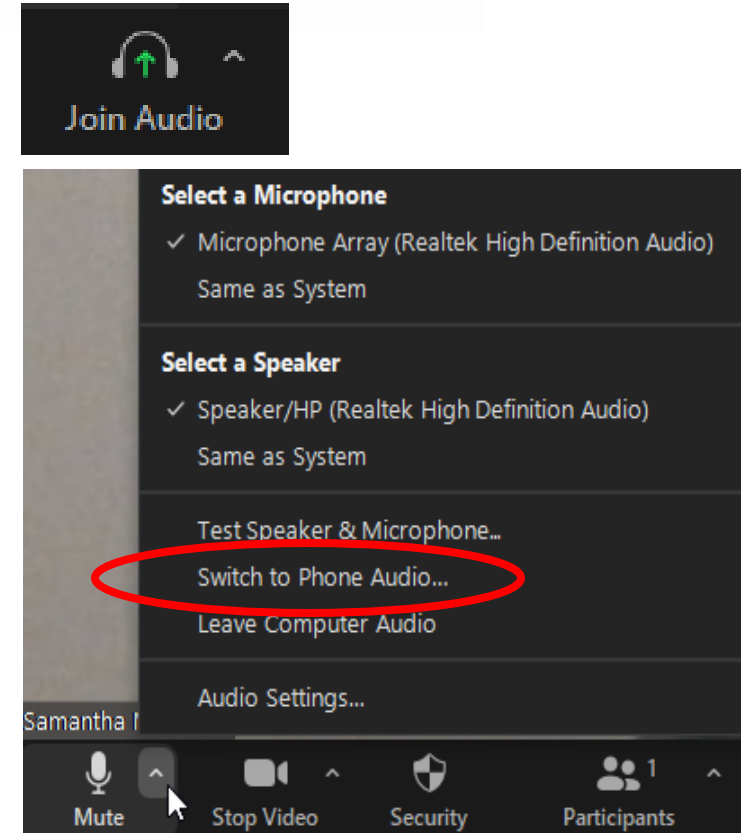


Columbia Basin Collaborative Blocked Areas Work Group

**November 7, 2023
12:00-2:00pm PT/1:00-3:00pm MT**

Zoom Webinar Features

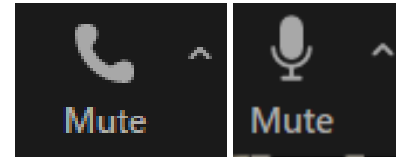
- If you have not **connected your audio**, click on the “Join Audio” at the bottom left of your screen.
- To **switch to phone**, click the arrow next to the microphone icon and select “Switch to Phone Audio”.
- If you have joined by browser, please click “Audio Settings”



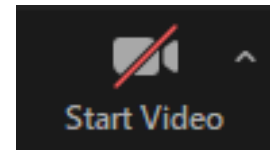
For technical support, please contact Angela Hassenius

Zoom Webinar Features – Work Group Members

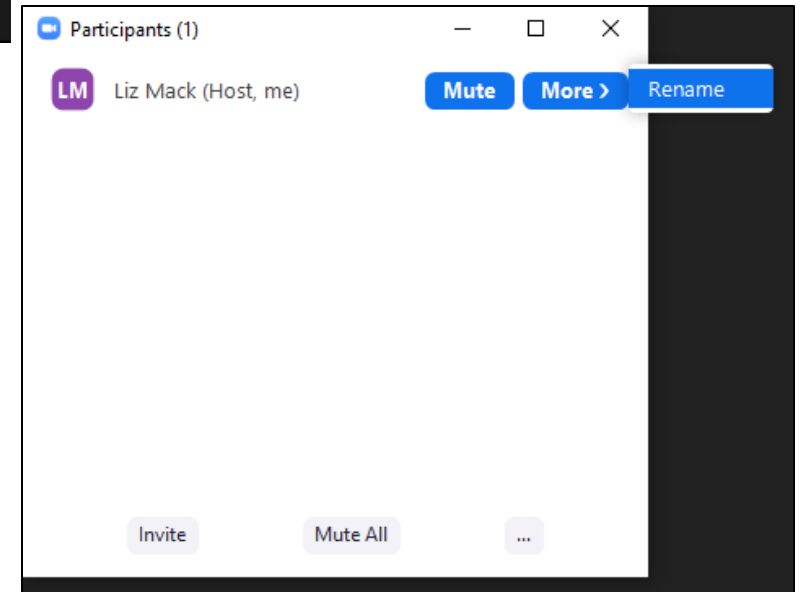
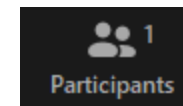
Keep yourself on mute when not speaking.



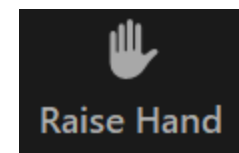
Use video, if possible, to promote face to face communication.



If needed rename yourself in the participant panel.



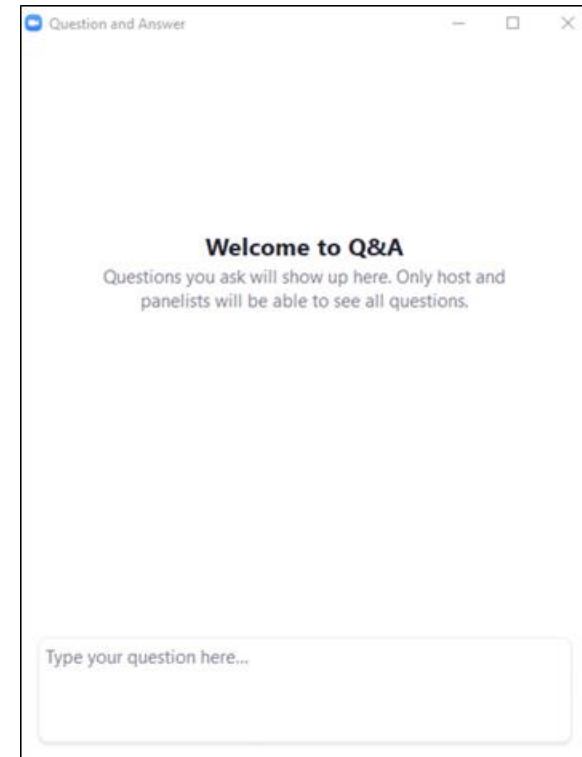
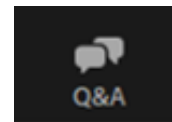
Find your raise hand function at the bottom of your screen



Zoom Webinar Features – Audience Members

Audience members will remain muted.

If you have technology issues, please use the Q&A feature to reach our team



Welcome, Agenda Review, and Updates

Meeting Guidelines

- Honor the agenda
- Listen to understand and ask questions to clarify
- Balance speaking time
- Don't pile on
- Be hard on the problems, soft on the people
- Seek alignment and common ground wherever possible
- Be present



Agenda Review

| Time (PT) | Topic |
|------------------|---|
| 12:00 – 12:10 pm | Welcome, Agenda Review, and Updates |
| 12:10 – 12:50 pm | Blocked Areas – Upper Snake River |
| 12:50 – 1:30 pm | Blocked Areas – Upper Columbia River |
| 1:30 – 1:50 pm | Preparations for the Integration/Recommendation Group Meeting |
| 1:50 – 2:00 pm | Confirm Next Steps, Upcoming Meeting Topics, and Summary |

Blocked Areas –Upper Snake River

A Chronological History of Dam Blockage in the Upper Snake Basin



The Upper Snake River Tribes Foundation

Dennis Daw

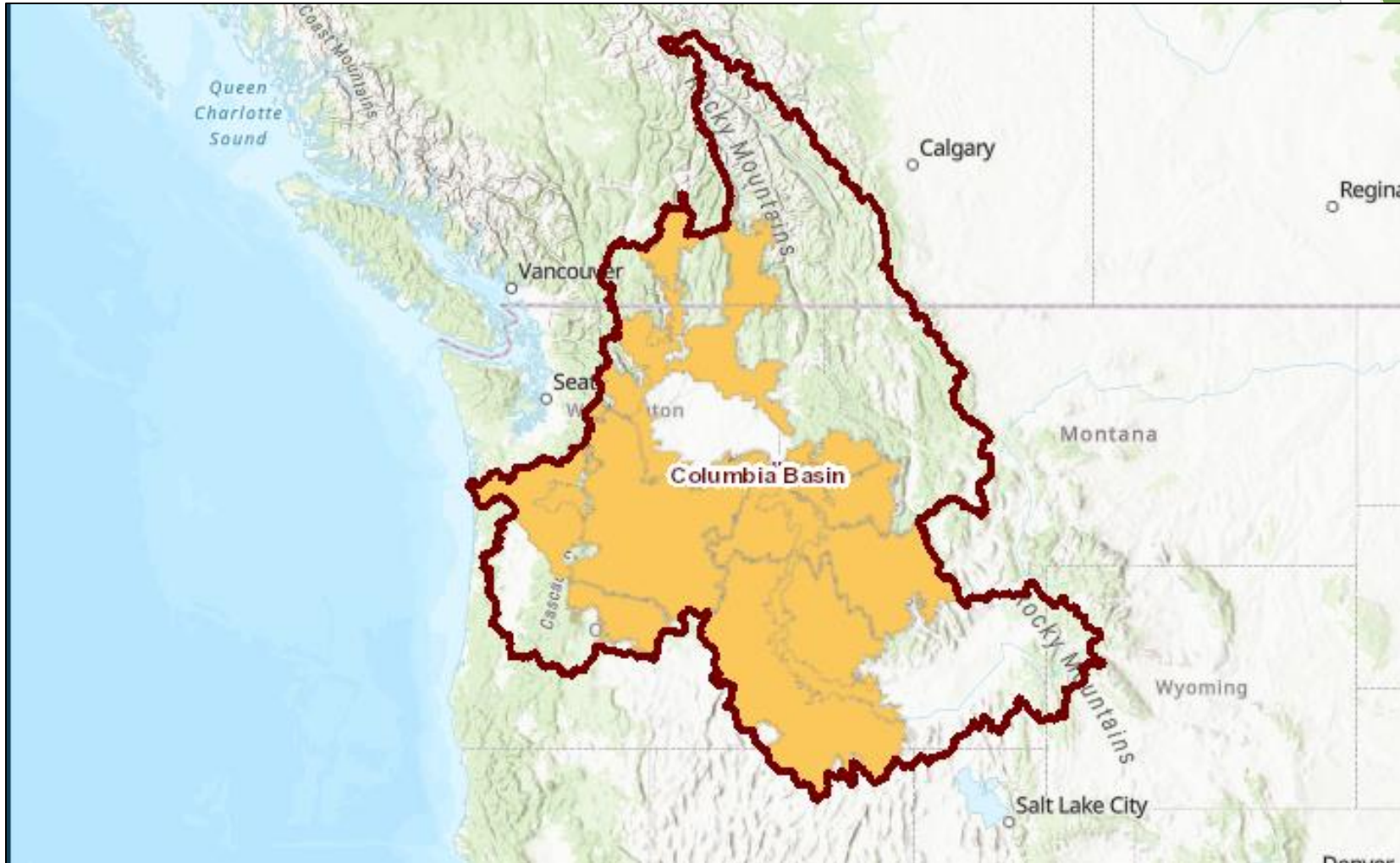
Scott Hauser



Outline

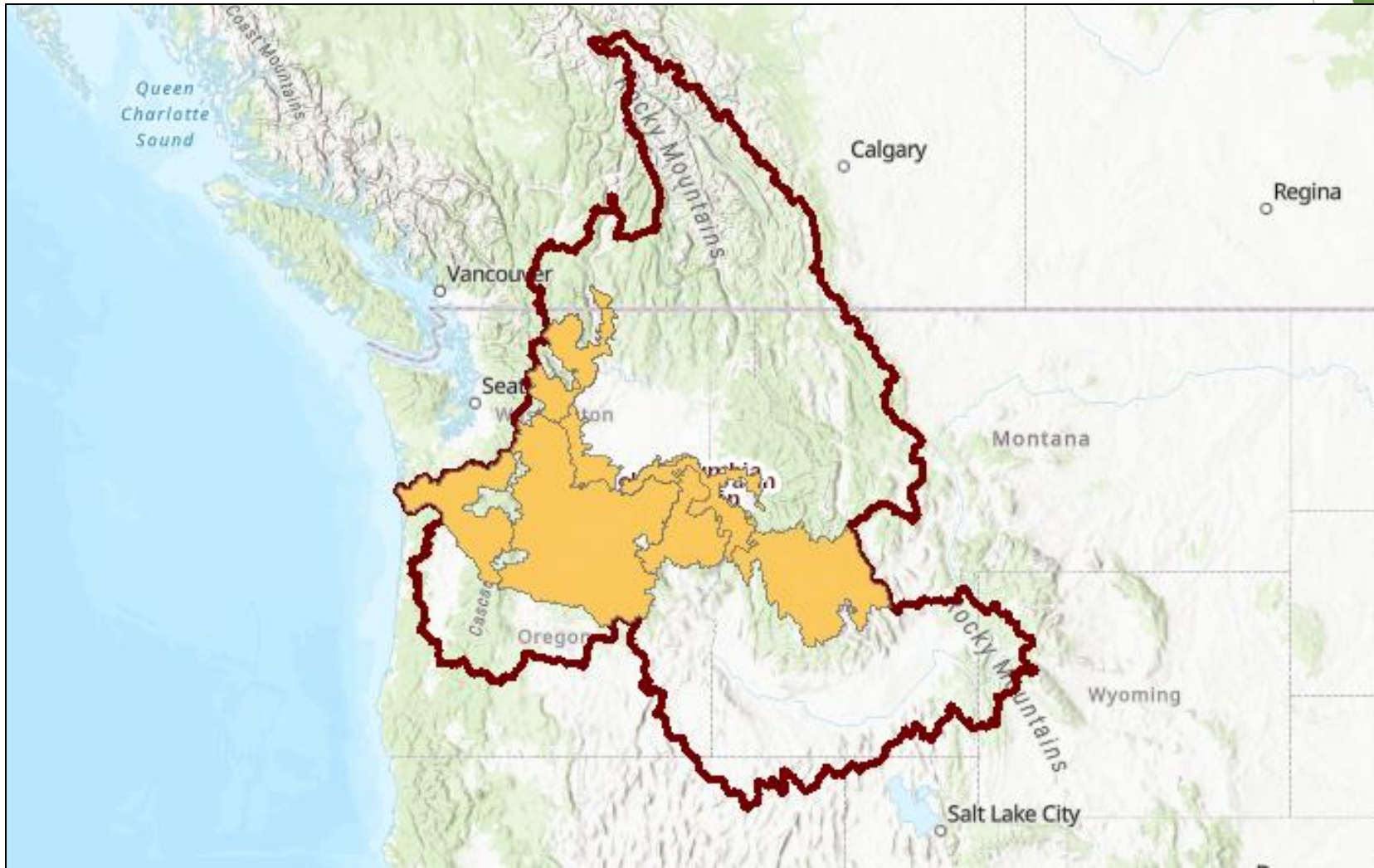
- What Existed Pre-development
- What is Currently Blocked
- Swan Falls
- Upper Snake River Tributaries
- Main Stem - Snake River
- Cold Water Refuges

Prior to European colonization, 10-16 million anadromous fish returned, annually, to the Columbia River Basin.
(Columbia River Basin Fish and Wildlife Program NPCC 2014)

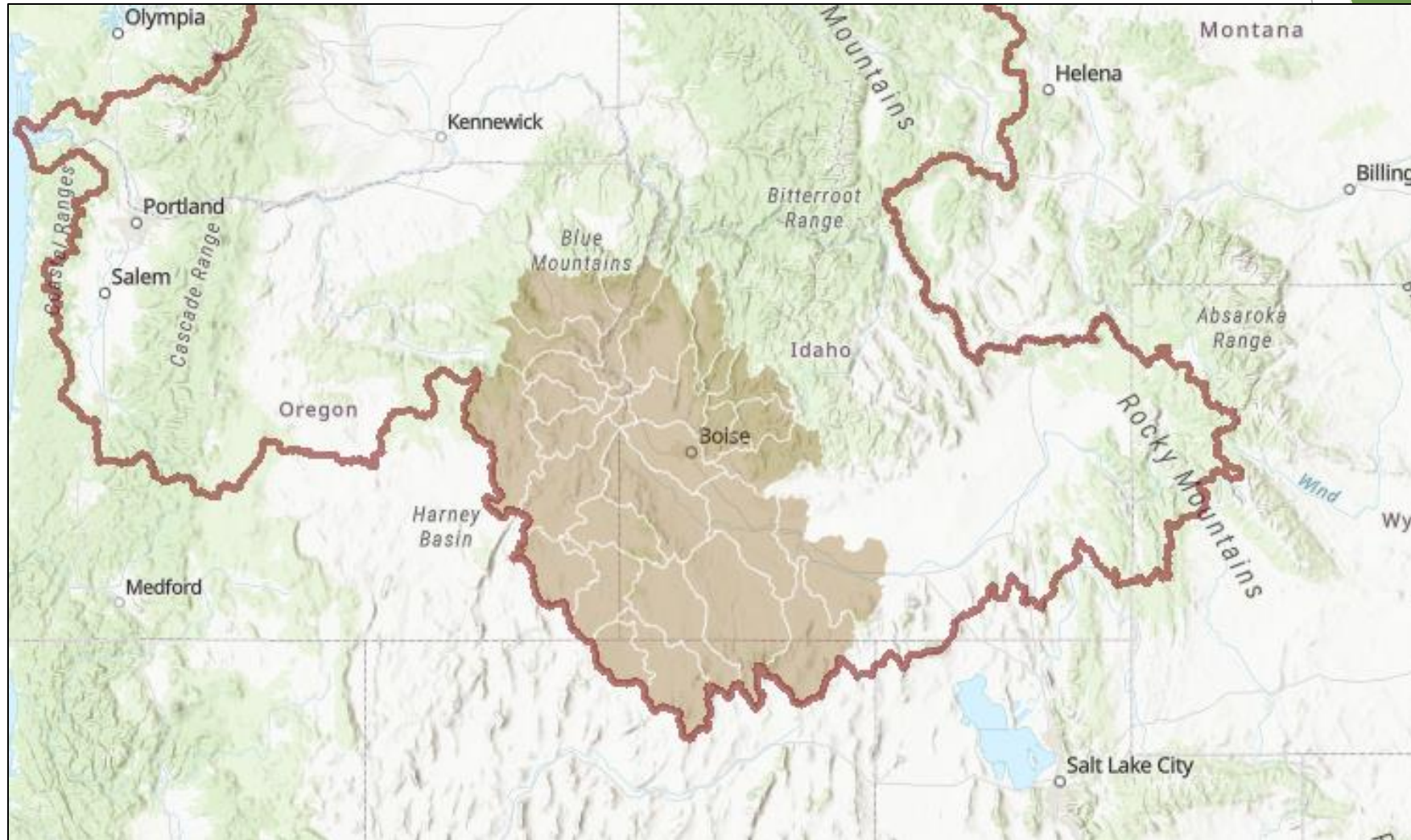


*Salmon distribution data downloaded from Pacific States Marine Fisheries Commission

Due to anthropogenic changes, such as overfishing and dam building, the salmon and steelhead runs are a fraction of what they were historically.



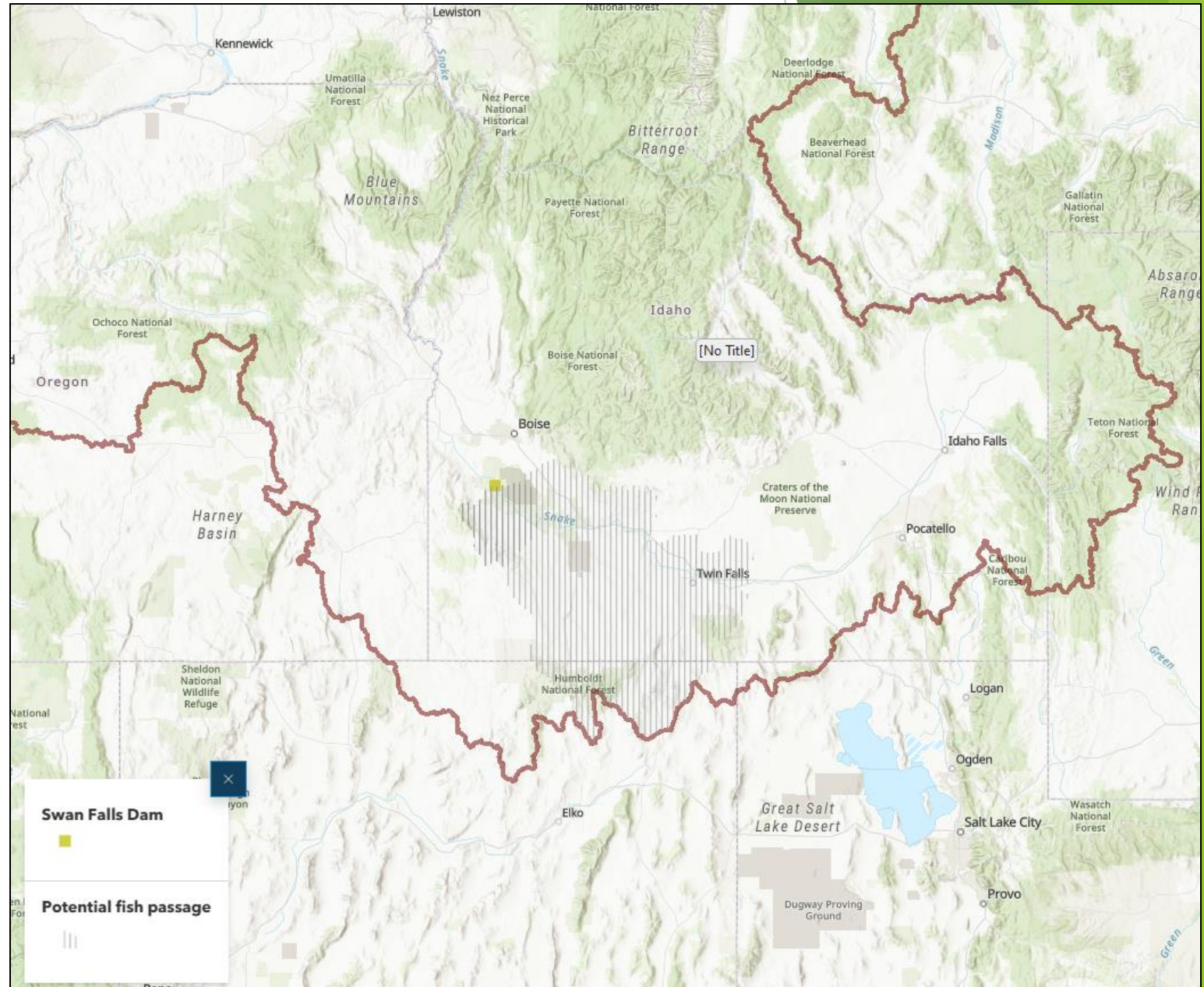
Prior to European colonization, the Snake River above Hells Canyon Dam had an estimated annual return of 1.7 million salmon and steelhead. (Chapman and Chandler, 2003)



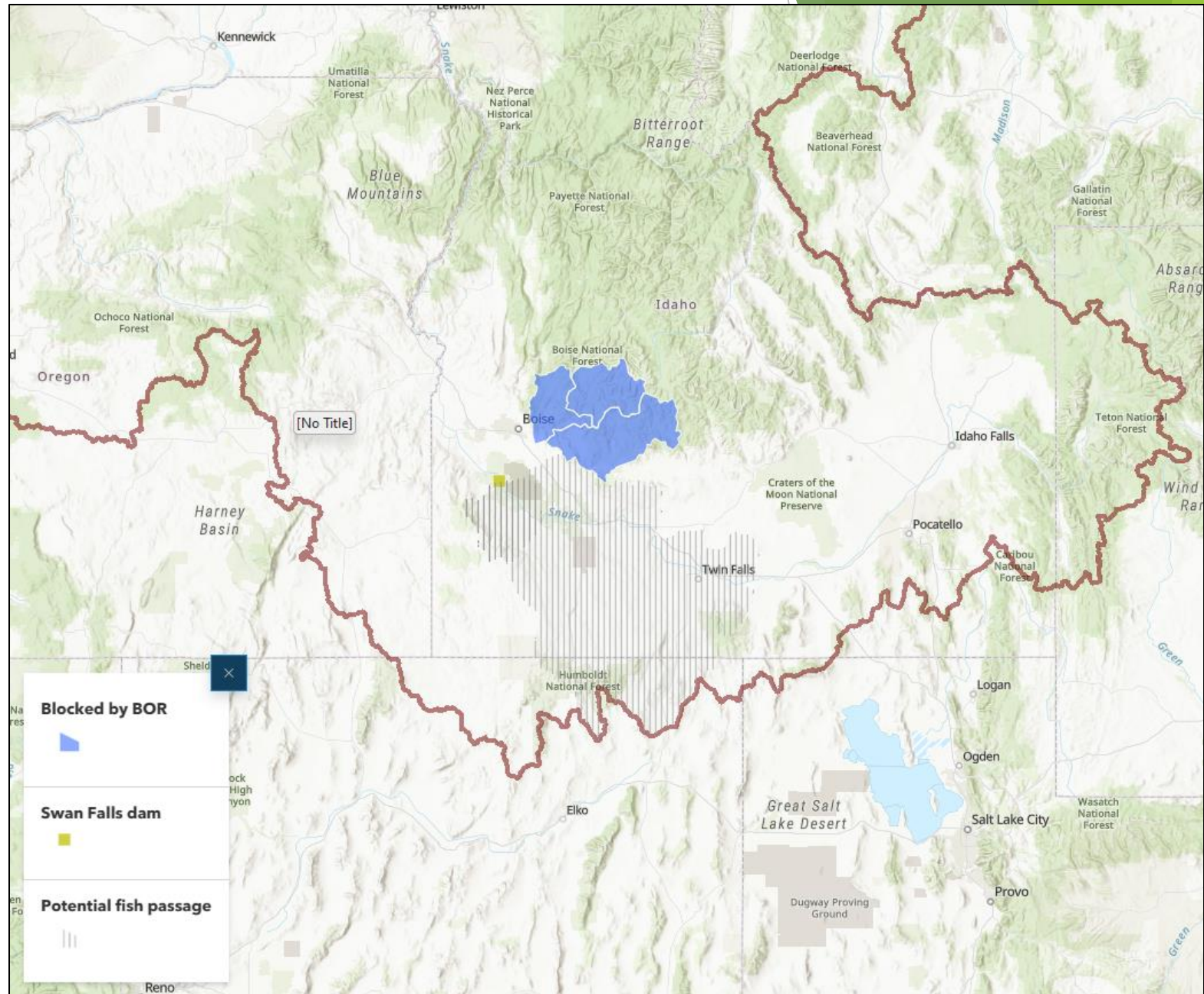
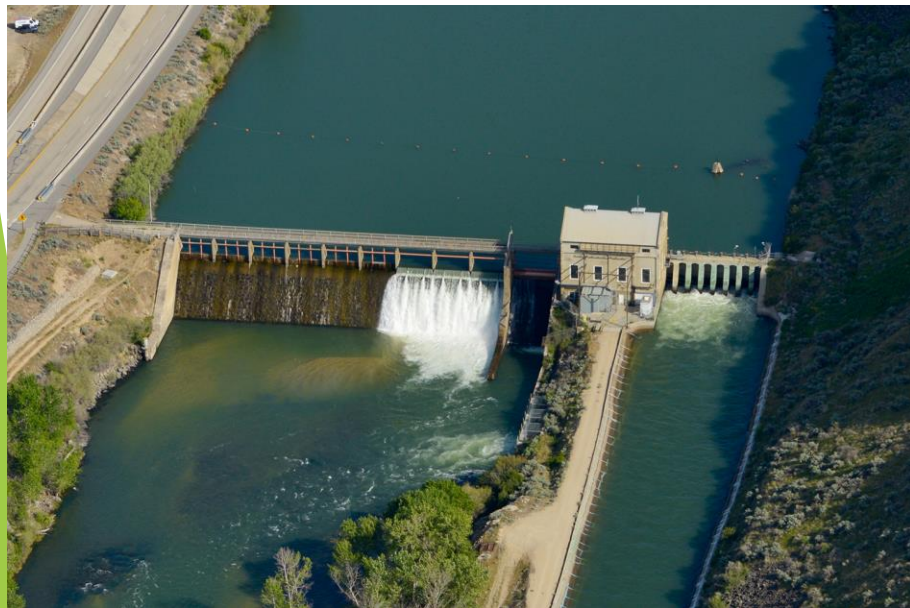
Disclaimer

This is NOT a comprehensive list of blockages or barriers in the Upper Snake River Basin. This is the first major high head dam built in each tributary.

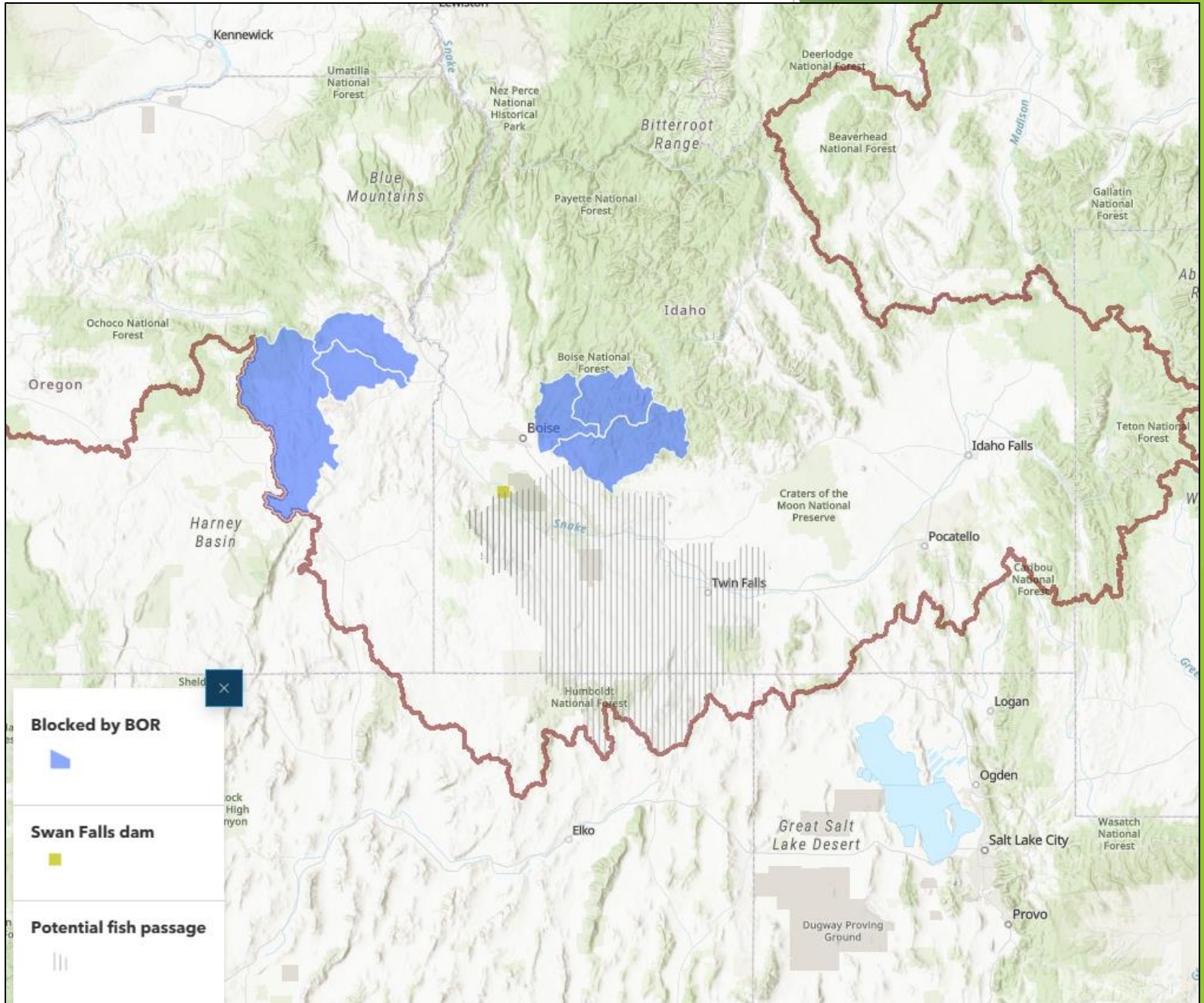
Swan Falls Dam was built to provide electricity to the mines in Silver City, Idaho. The dam was completed in 1901 and was constructed with fish passage. Fish passage was rebuilt with new ownership, though it never effectively passed salmon. Idaho Power Company (IPC) purchased Swan Falls Dam in 1916. A new powerhouse was constructed in 1994, at which time the original powerhouse became a museum.



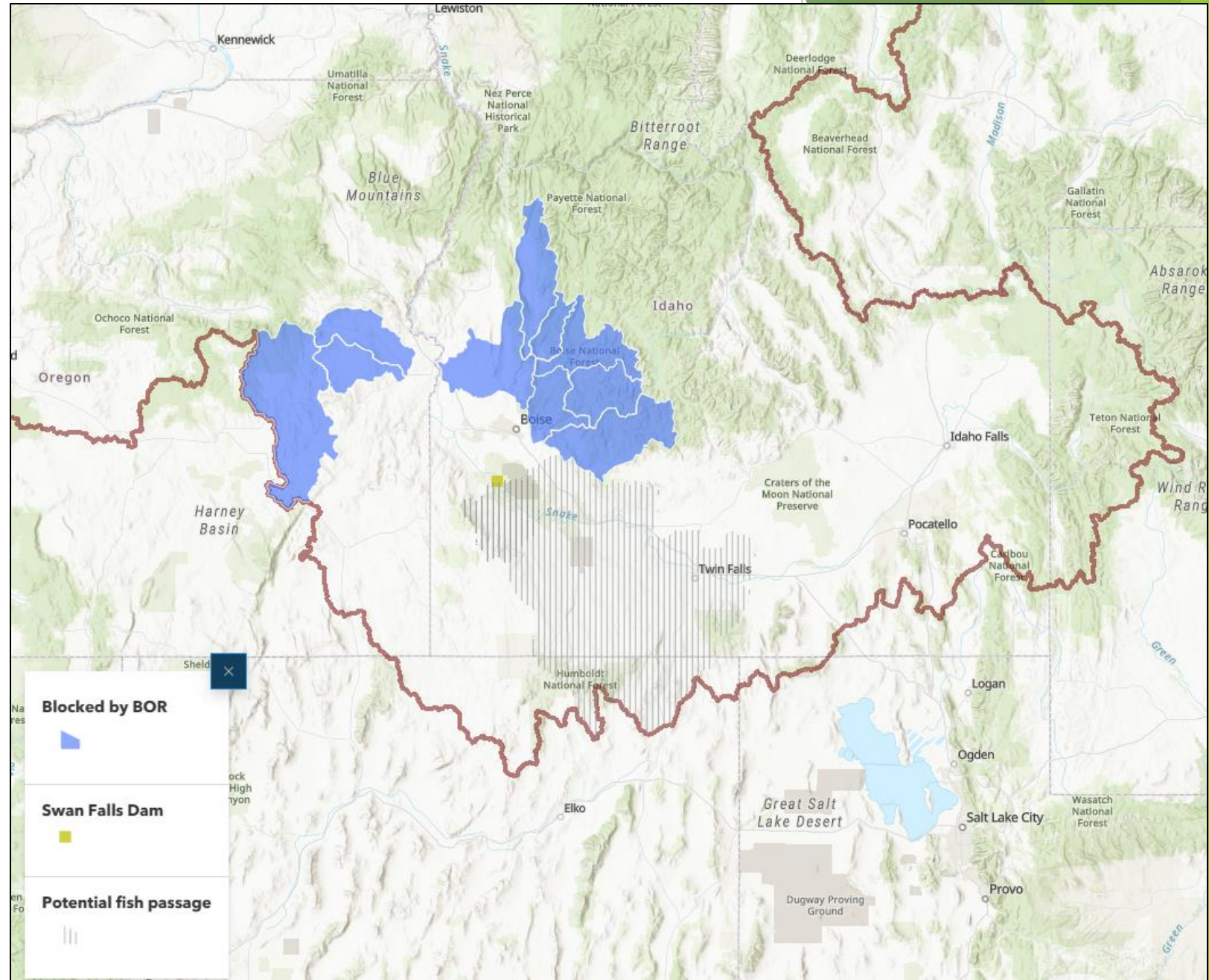
The Boise River was initially blocked by the Bureau of Reclamation's (BOR) construction of the Boise Diversion Dam (1912) and Arrowrock Dam (1915). These two dams were followed by two more dams in the 1950's, Anderson Ranch Dam was constructed upstream by BOR, and Lucky Peak Dam was constructed downstream by the US Army Corps of Engineers.



The upstream portions of the Malheur River were blocked by two dams constructed by BOR. The Middle Fork - Malheur was blocked by the Warm Springs Dam in 1919. The North Fork - Malheur was blocked by the construction of Agency Dam in 1935.

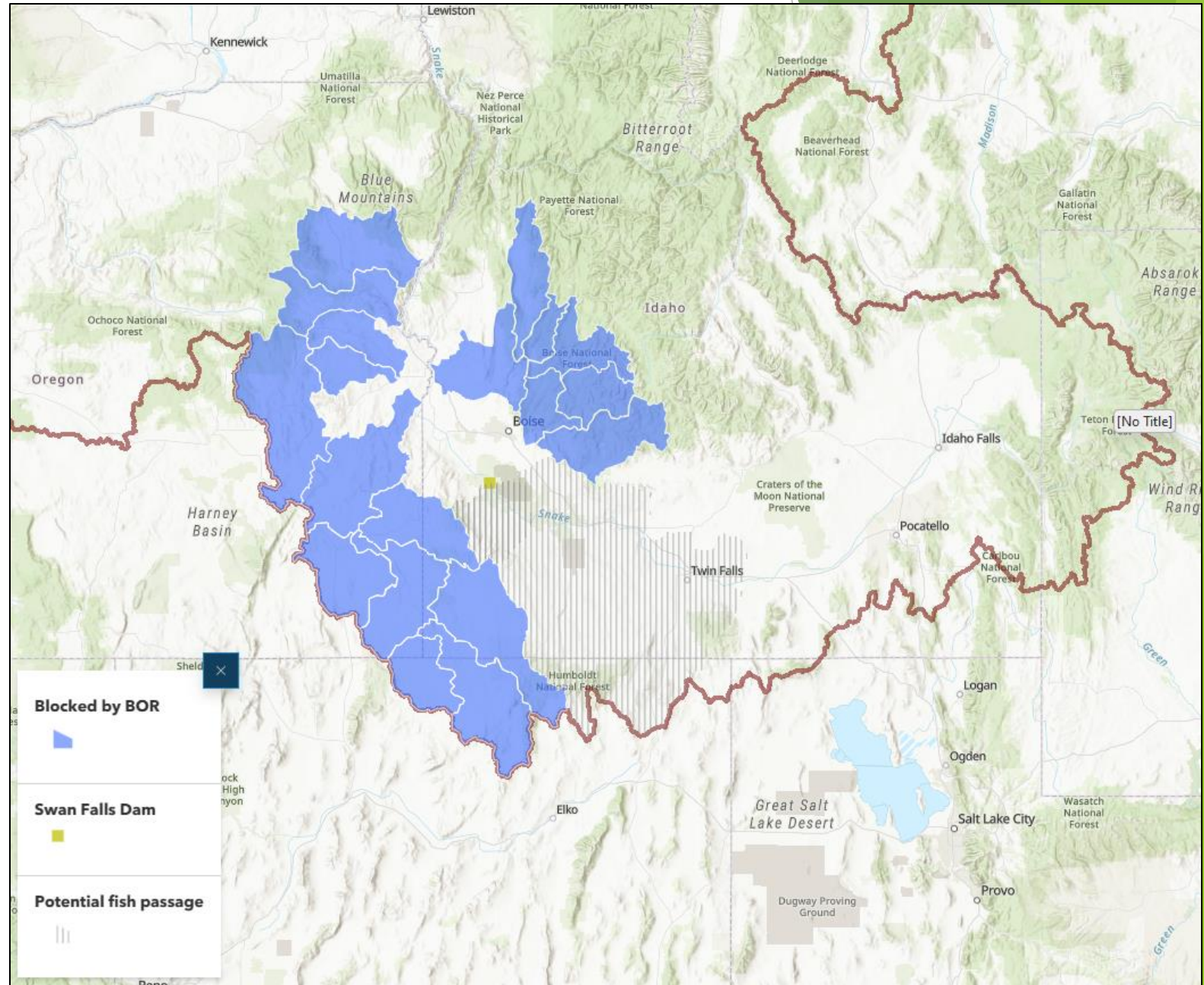


The Payette River was initially blocked by the BOR's construction of Black Canyon Dam in 1924. This was followed by the Deadwood Dam (1931) on the Deadwood River, a major tributary to the Payette River, and Cascade Dam in 1948. Both were constructed by the BOR.



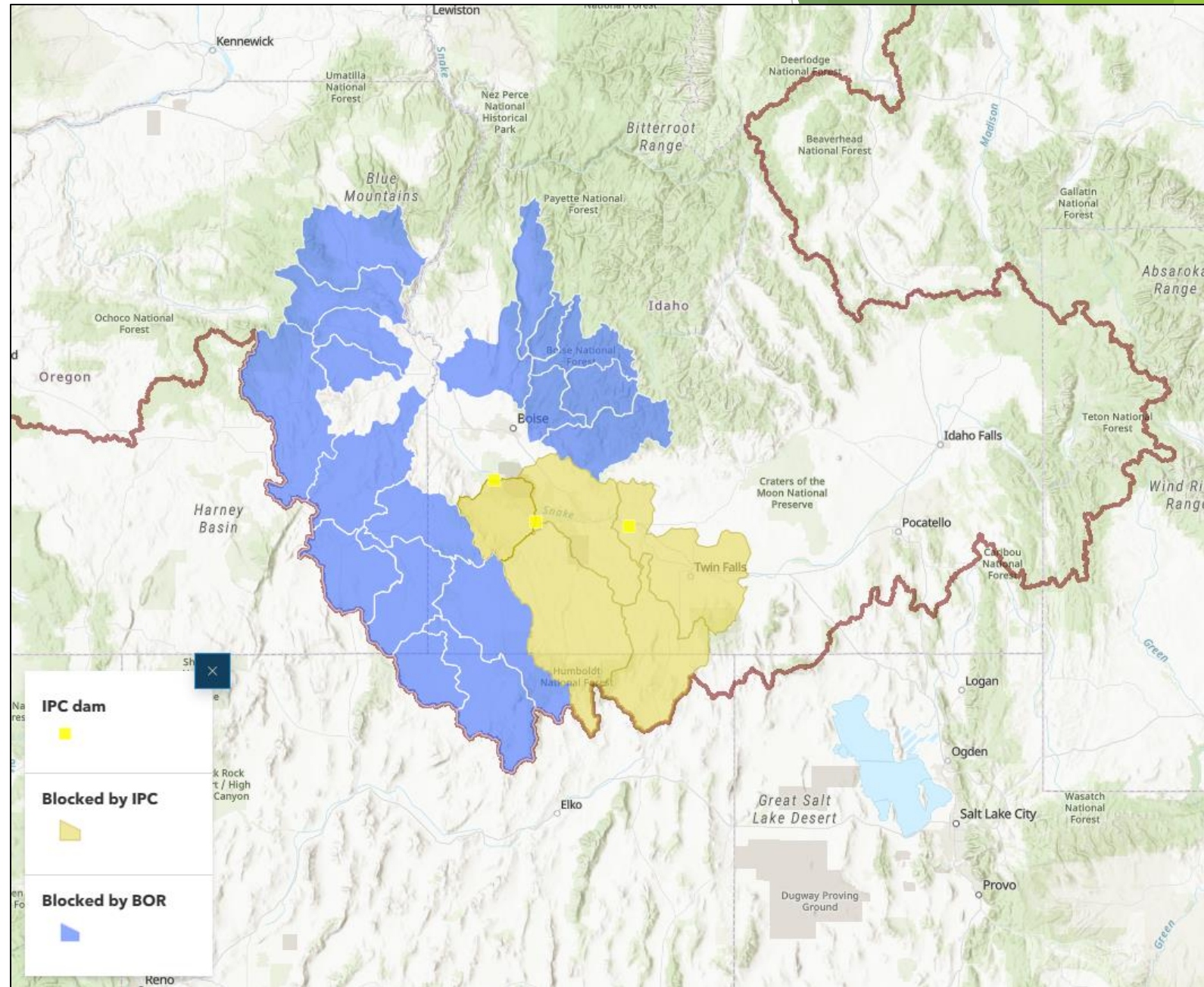
The Powder and Burnt rivers were blocked by BOR's construction of Thief Valley Dam (1932) and Unity Dam (1938), respectively.

By the late 1930's construction of dams by BOR had blocked all the tributaries in the Snake River except the lower Malheur, Weiser, and Bruneau rivers.

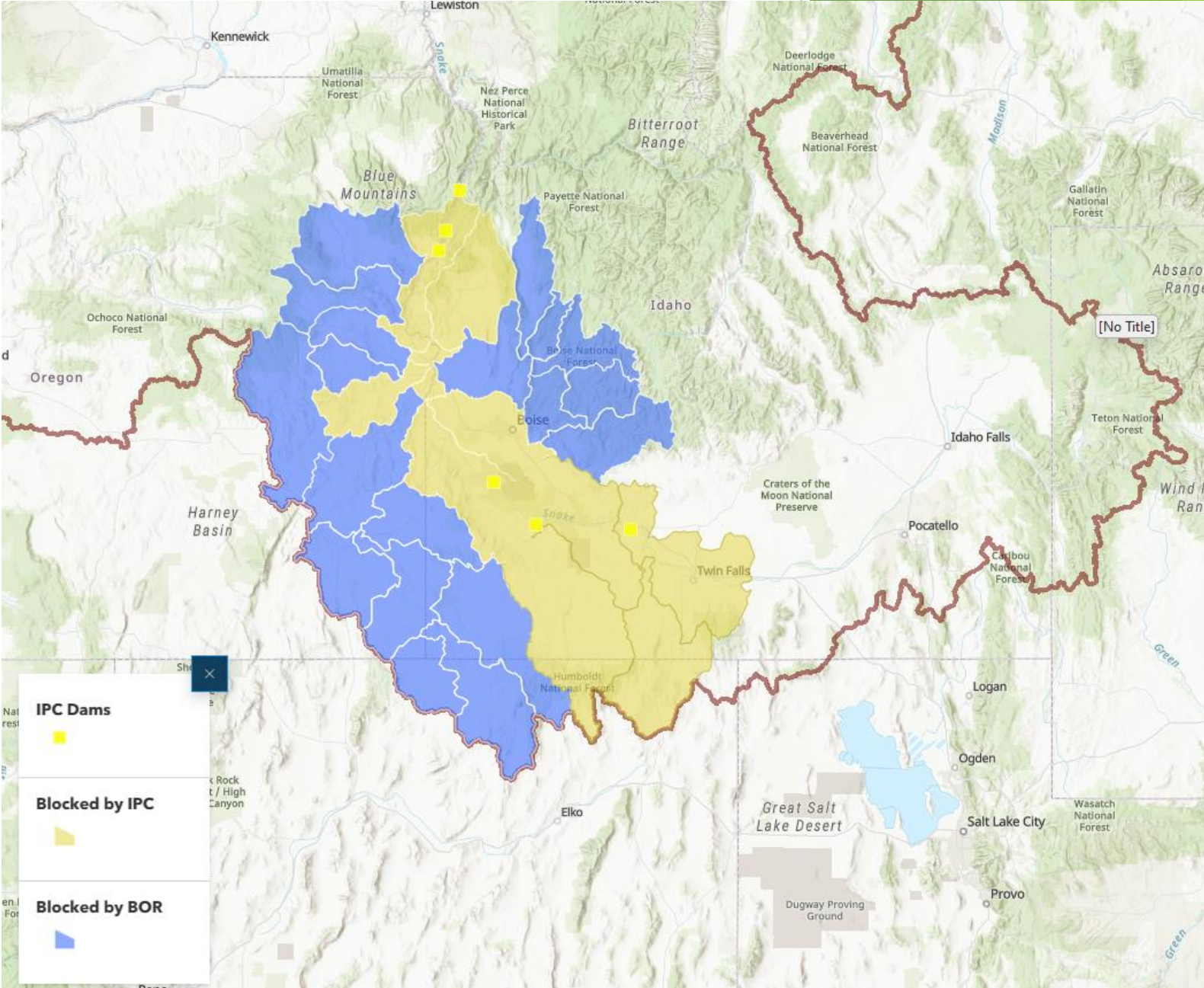


IPC constructed Bliss and C.J Strike dams just upstream of Swan Falls Dam in 1950 and 1952, respectively.

Due to inefficient fish passage at Swan Falls Dam, both dams were constructed without fish passage. C.J. Strike Dam is the first dam to completely block salmon and steelhead from migrating to the Bruneau River.



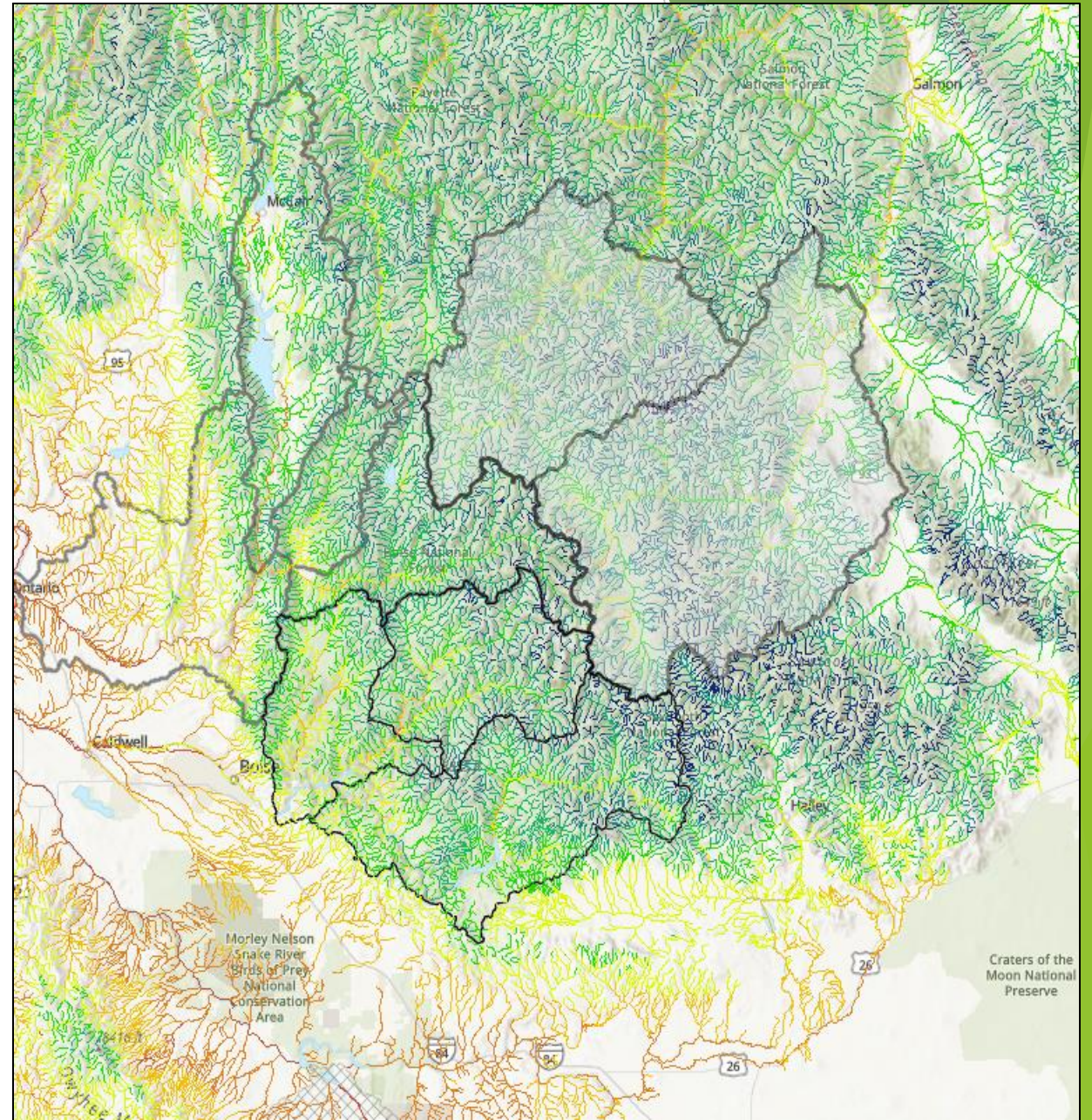
The Construction of the Hells Canyon Complex in the 1950's and 1960's was the nail in the coffin that extirpated salmon and steelhead from the Upper Snake River Basin. The Hells Canyon Complex consists of three dams, starting with the most upriver dam: Brownlee Dam (completed in 1958), Oxbow Dam (completed in 1961), and Hells Canyon Dam (completed in 1967).



All the remaining salmon and steelhead populations in the Snake River Basin are listed as threatened or endangered under the Endangered Species Act. Climate change and warming water temperatures will make recovery even more difficult. The Salmon River drainage contains some of the most promising habitat for cold water refugia for the future of salmon and steelhead.

Tributaries in the Upper Snake Basin also contains some of the most promising habitat for cold water refugia for the future of salmon and steelhead.

*Stream temperature data is downloaded from the NorWeST Stream Temperature website:
www.fs.usda.gov/ccrc/tool/norwest-stream-temperature



Work that Needs to be Completed

- ✓ Historic Loss Assessment has been completed.
 - Intrinsic potential of current habitat conditions.
 - Inventory of all blockages in the tributaries of the Upper Snake Basin.
 - Assessment of which stock could be used and could safely be out planted in the Upper Snake.
 - Assessment of cost and needs for a trap and haul fish transport program.
 - Assessment of existing hatcheries for short term and long-term use for production for Upper Snake Basin.
 - Assessment of release sites in the tributaries of the Upper Snake Basin for ceremonial fisheries and long-term reintroductions.

Questions

QR code for
USRT's
storymap



Blocked Areas – Upper Columbia River

Preparations for the Integration/Recommendation Group Meeting

Updates from the Work Group to the I/RG

- Work Group activities and key messages
- Recommendations:
 - Reach survival - SAR Data
 - Upper Snake Hatchery



Confirm Next Steps, Upcoming Meeting Topics, and Summary

Blocked Areas – Work Plan

| | April | May | Aug | Sep | Nov | Jan 2024 | Feb |
|---------------------|--------------|--------------|-------------------------|-------------------------|---|--------------------|---|
| Blocked Area | Trib. the CR | Trib. the CR | Trib. to the Willamette | Trib. to the Willamette | <ul style="list-style-type: none"> Upper Snake Upper CR | Trib. to the Snake | Brainstorm actions to address blocked areas |

- What are the blockages in this area (including non-hydro dams/ dams with less than 5MW)?
- Which entities and organizations are involved in managing this area?
- What policies govern this blockage/area?
- What are the social dynamics around this blockage?
- What actions could be taken to improve passage at this blockage (capturing associated costs and timing)?

Next Steps

- KW: revise the blocked areas survey and share with presenters to check for accuracy
- All: Plan for the next BA Meeting in January 2024



Thank you ~



Photo credit: Russ Rickets