

A scenic view of Priest Lake with a red crane on a hillside and buildings on the shore. The crane is positioned on a steep, forested hillside, extending its long lattice boom over the lake. In the foreground, the calm water of the lake reflects the sky and the surrounding landscape. Along the shoreline, there are several buildings, including a prominent white structure with a covered porch. The background is dominated by a dense forest of evergreen trees covering the hillside.

IDAHO

Department of Water
Resources

Priest Lake Outlet Dam - Update

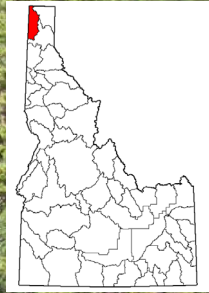
Presented to the Lakes Commission

February 26, 2024

Michelle Richman (IDWR – Coeur d' Alene)

Purpose

- Construction Goals
- Construction Operations
- Construction Completion
- Lake Conditions
- Forecast
- Gate Operation Planning



Previous Work: 2020-2021



Rock Armor

Concrete
Apron

South Side Work to be Completed



North Side Flume Preparation



North Side Flume in Use



South Side Preparation



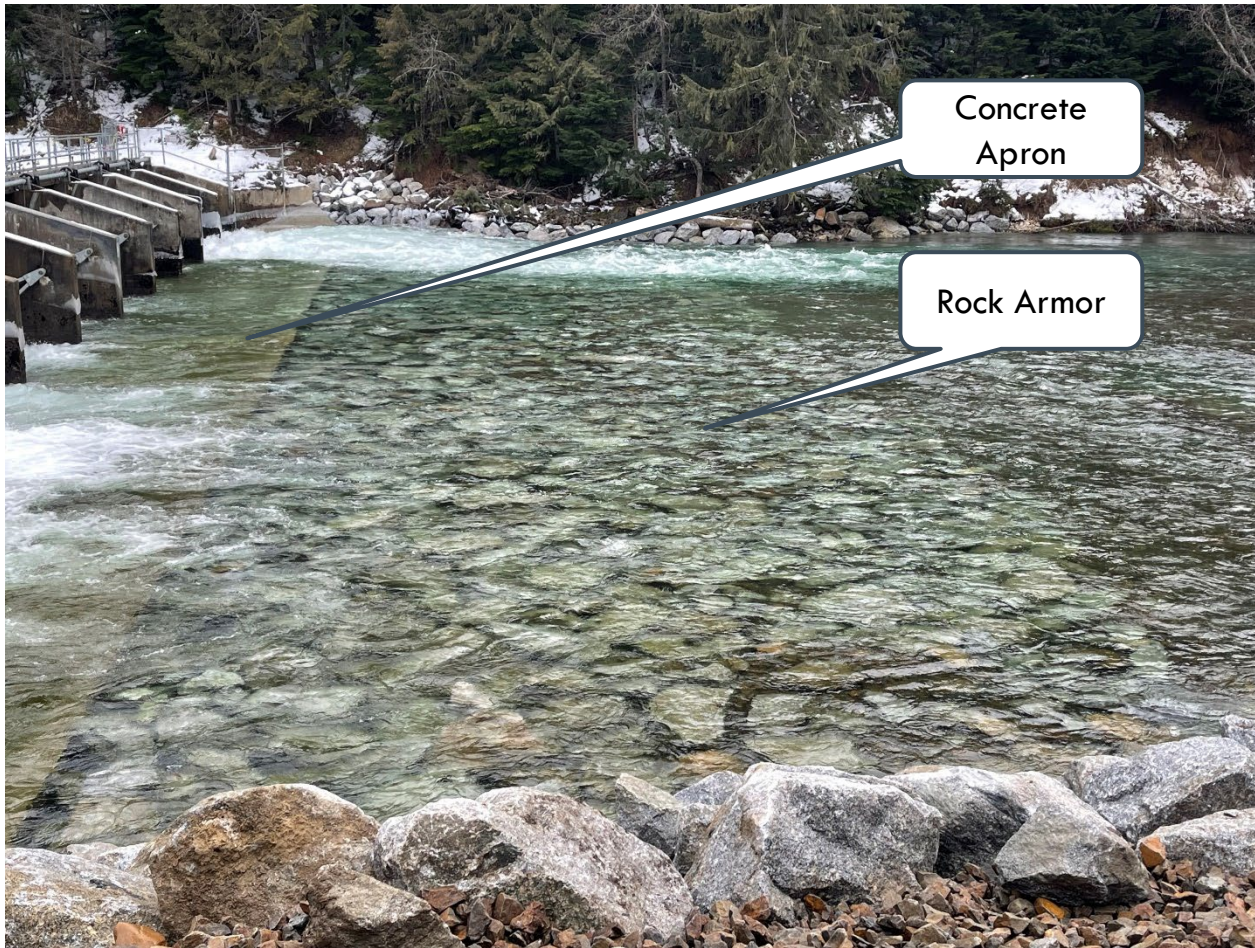
South Side Preparation – Continued



South Side Concrete Poured



Work Completed



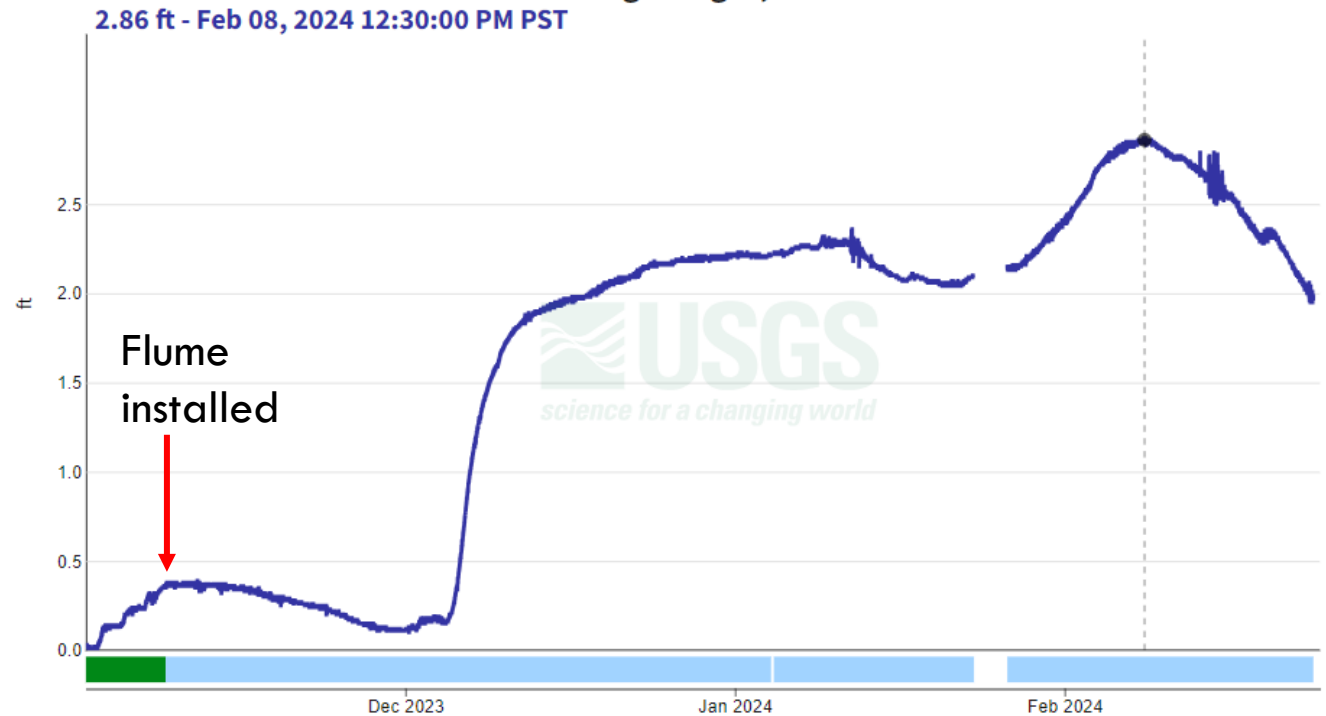
Lake Level - Conditions

- Oct1 – Nov1
Winter pool
- Flume – max
flow 800 cfs
- Snow, then
warm
temperatures
- Rain-on-snow

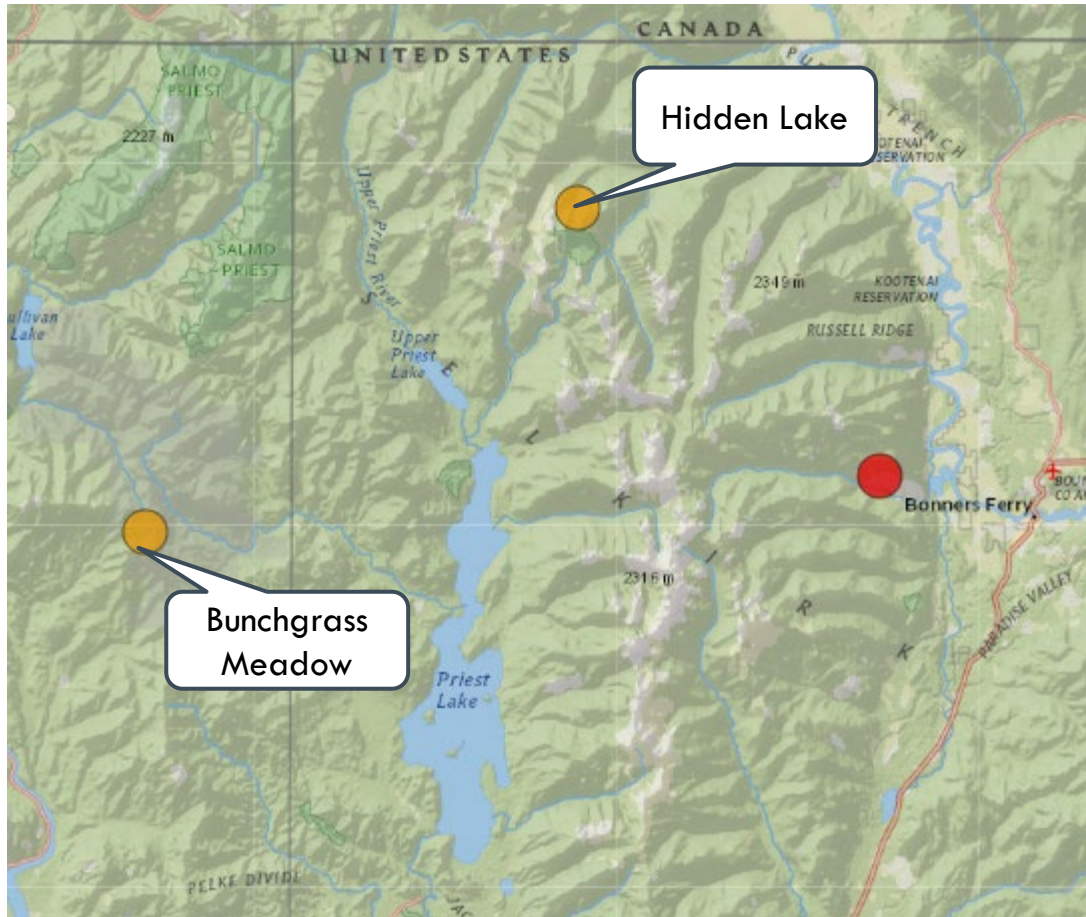
Priest Lake at Outlet NR Coolin ID - 12393000

November 1, 2023 - February 24, 2024

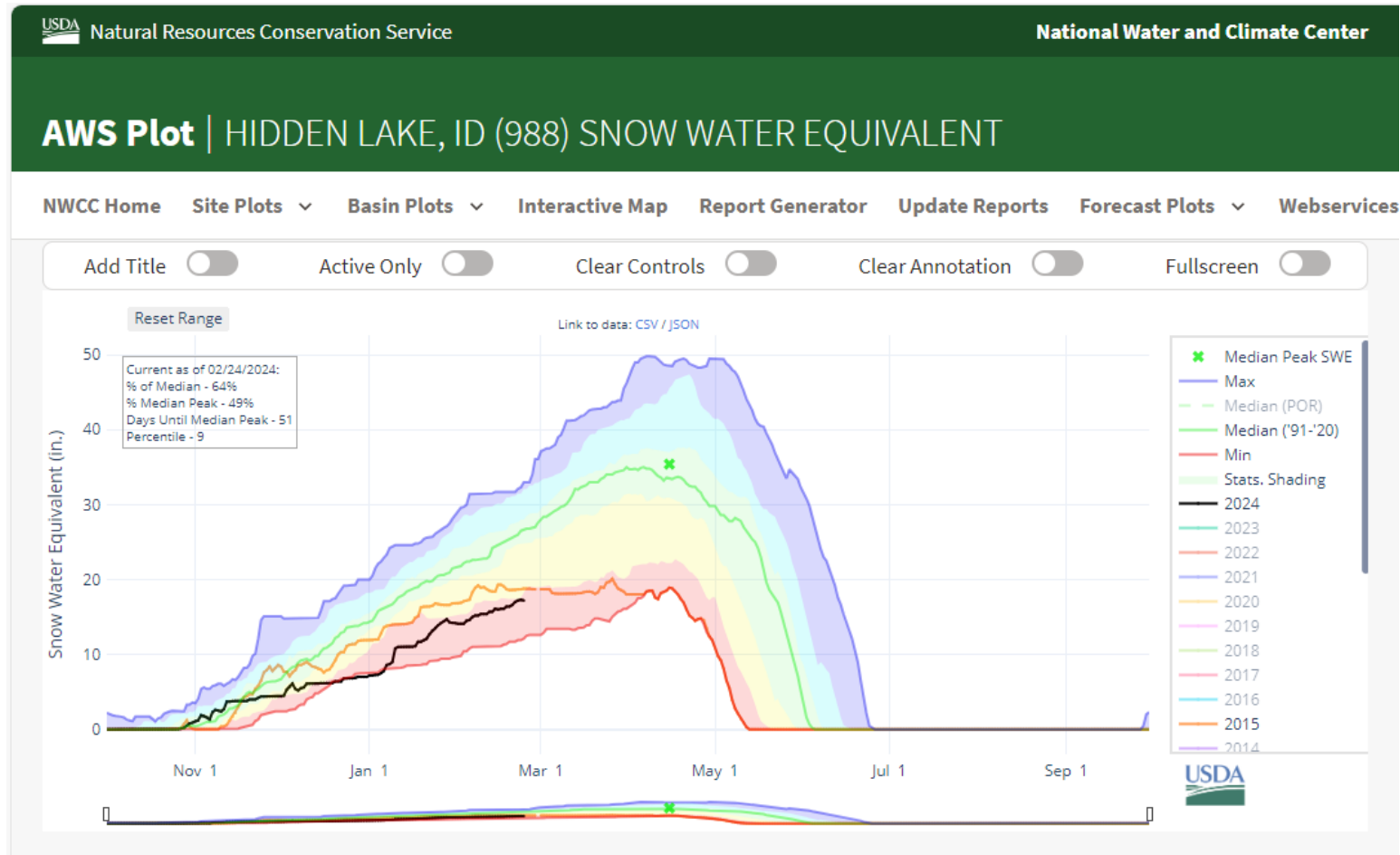
Gage height, feet



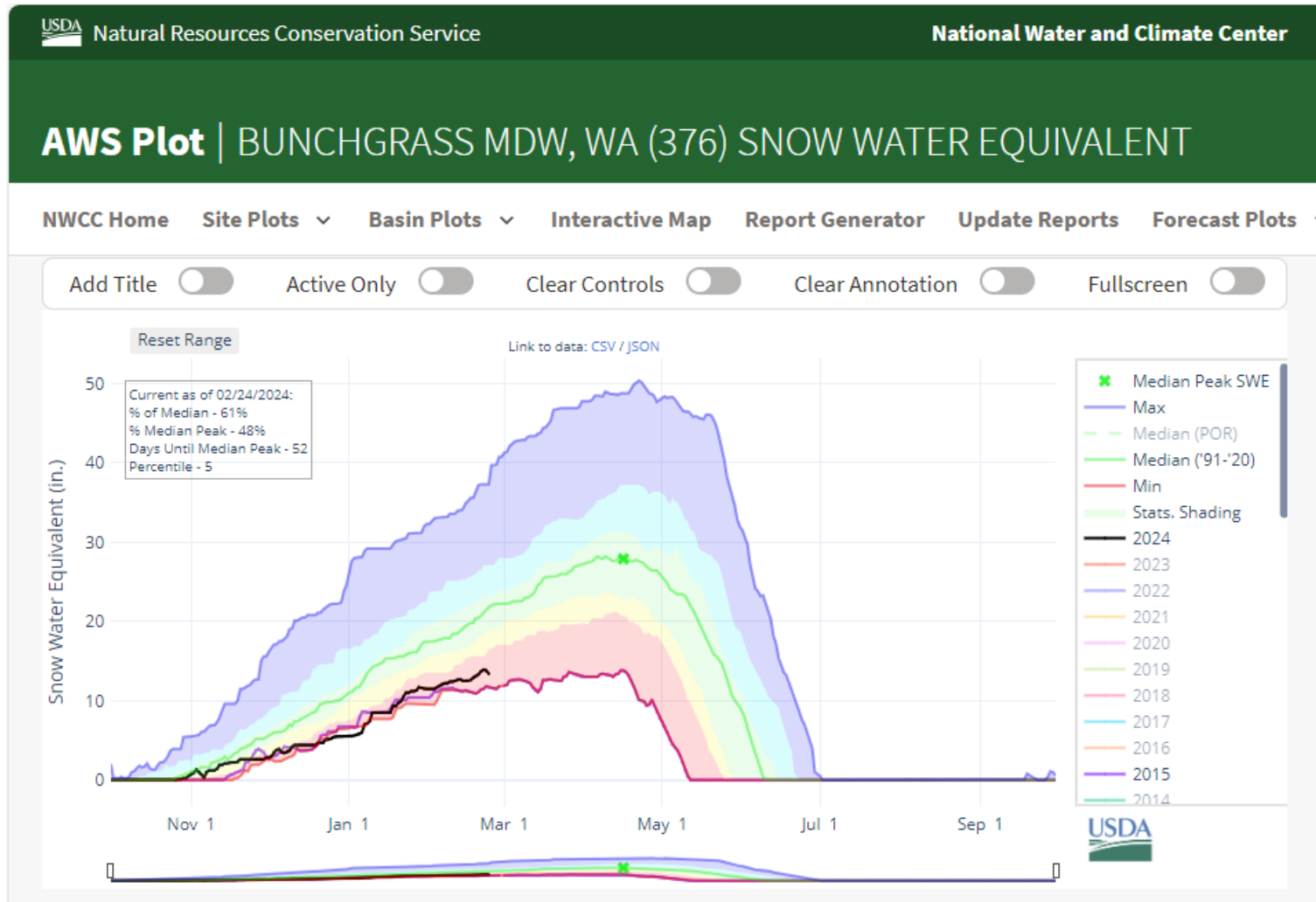
NRCS SNOTEL Sites



SNOTEL Site – Hidden Lake



Snotel Site – Bunchgrass Meadow



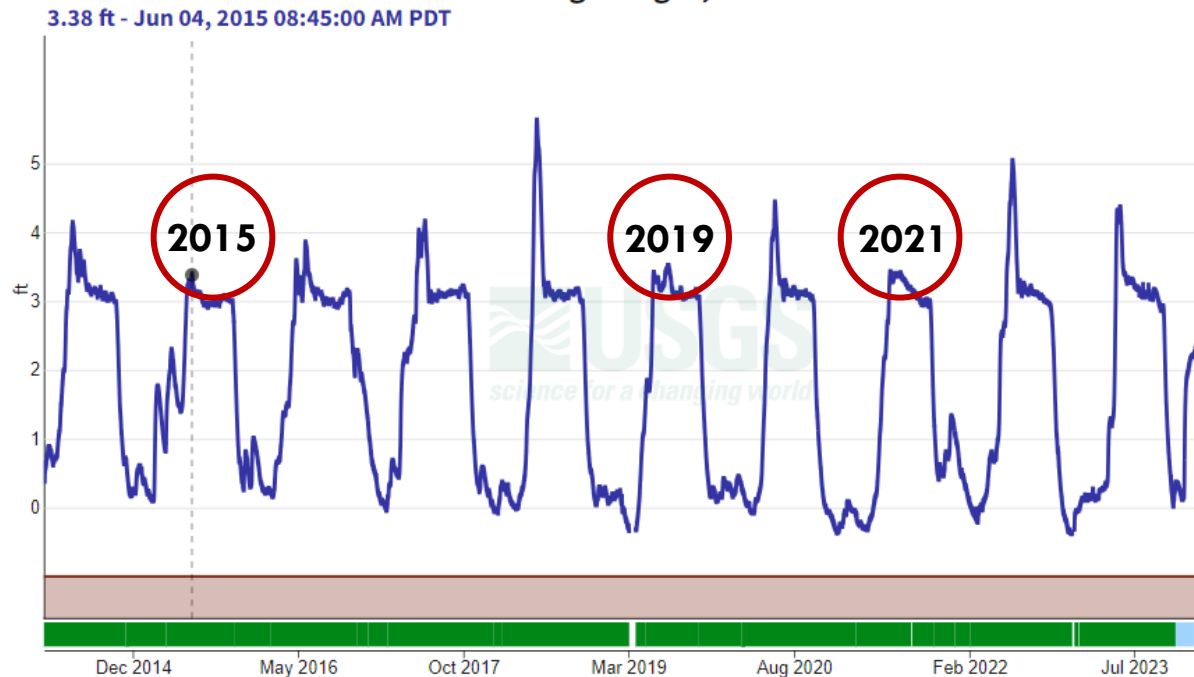
Limited Spring Runoff

- Current snow drought
- Likely will need to bring lake level up by Memorial Day

Priest Lake at Outlet NR Coolin ID - 12393000

February 26, 2014 - February 24, 2024

Gage height, feet



Closer Look at 2015

- Lake level just below 1.5 feet on May 1st
- Gate operations brought the lake level up

Priest Lake at Outlet NR Coolin ID - 12393000

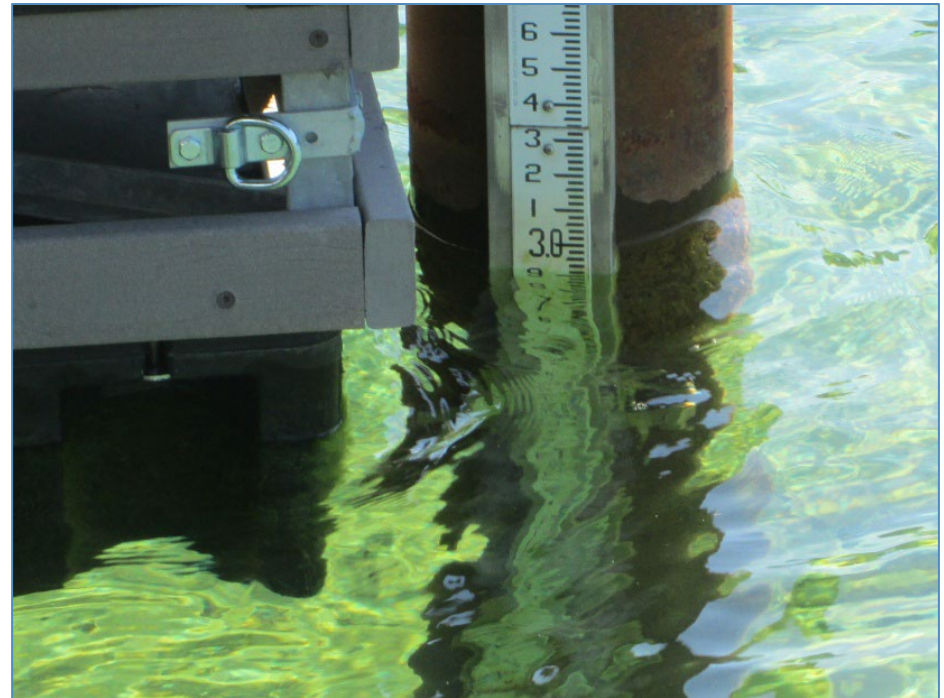
January 1, 2015 - December 31, 2015

Gage height, feet



Effects of 2015 Drought

- Northern Idaho experienced one of the most severe droughts on record.
- Level held at 3.0 ft on Outlet Gage in compliance with IC through August 30, 2015
- USGS measurements determined discharge at dam was reduced to roughly 42.5 cfs on July 28, 2015 to maintain 3.0 ft lake level
- Board study led to dam modifications
- Hydrology section involvement



Previous Gate Changes - 2022



2024 Lake Level Planning

- Build up to 3.0 feet by Memorial Day
- Aim for 3.3-3.5 feet by Early Summer
- Through Summer, allow evaporation to drop the lake level while preserving river flow





Questions?

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