

Seattle City Light Navigating the 2023 Water Year

OR-WA Water Year 2023 Recap

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Nov. 1, 2023

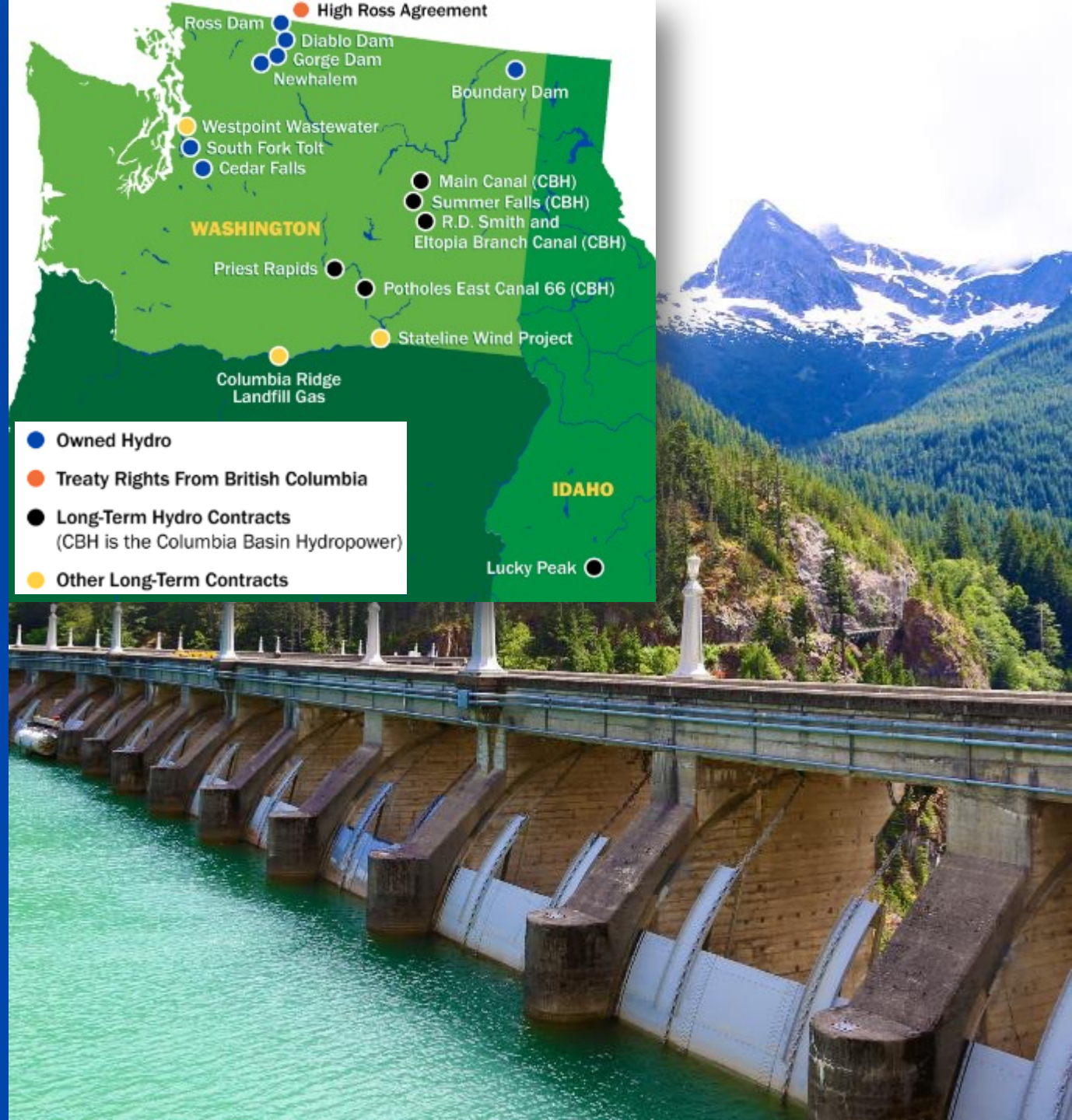


Seattle City Light

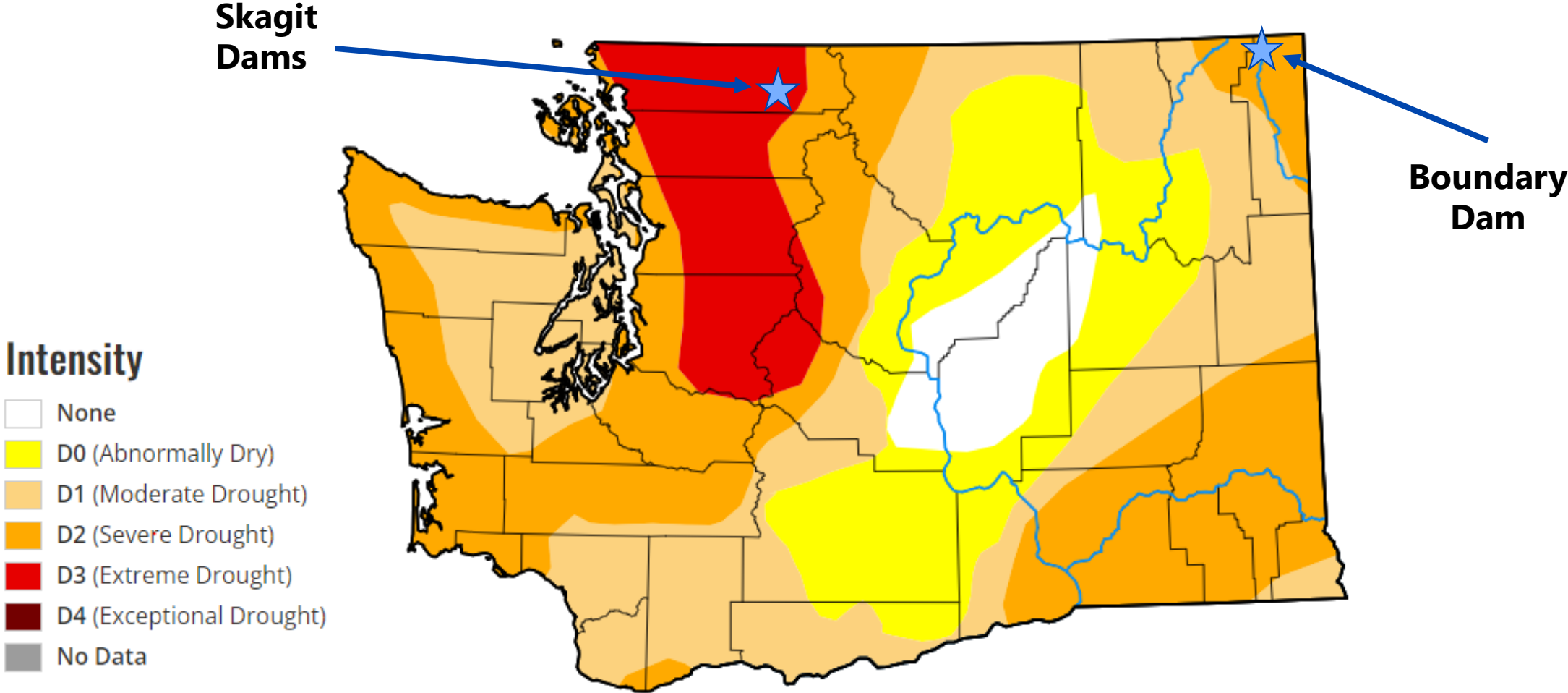
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City Light

- Municipal Electrical Utility (Public)
- ~1,700 employees
- Generation, transmission, and distribution
- 80-90% hydropower (50% owned)
- 7 dams, 16 substations, 656 mi of transmission, 2,335 mi distribution
- Service area population ~950,000
- Service area ~131 mi² (339 km²): Seattle Area and adjacent franchise cities
- Greenhouse-gas neutral since 2005

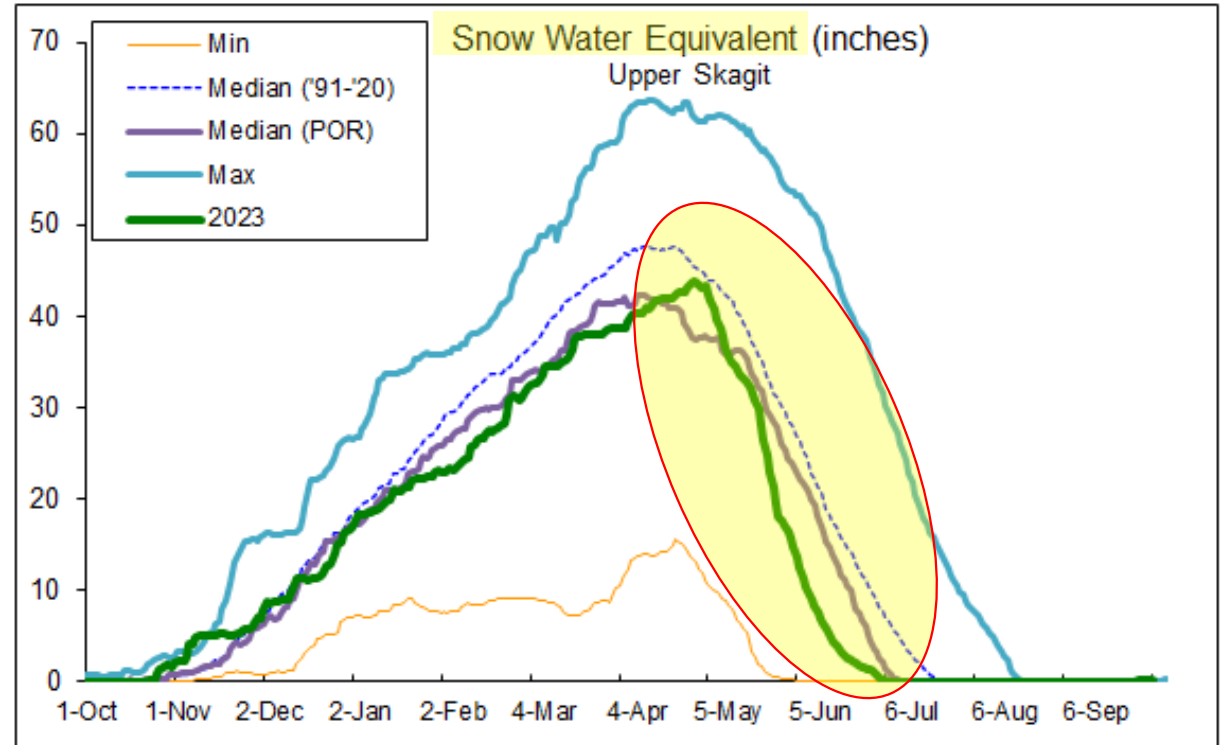
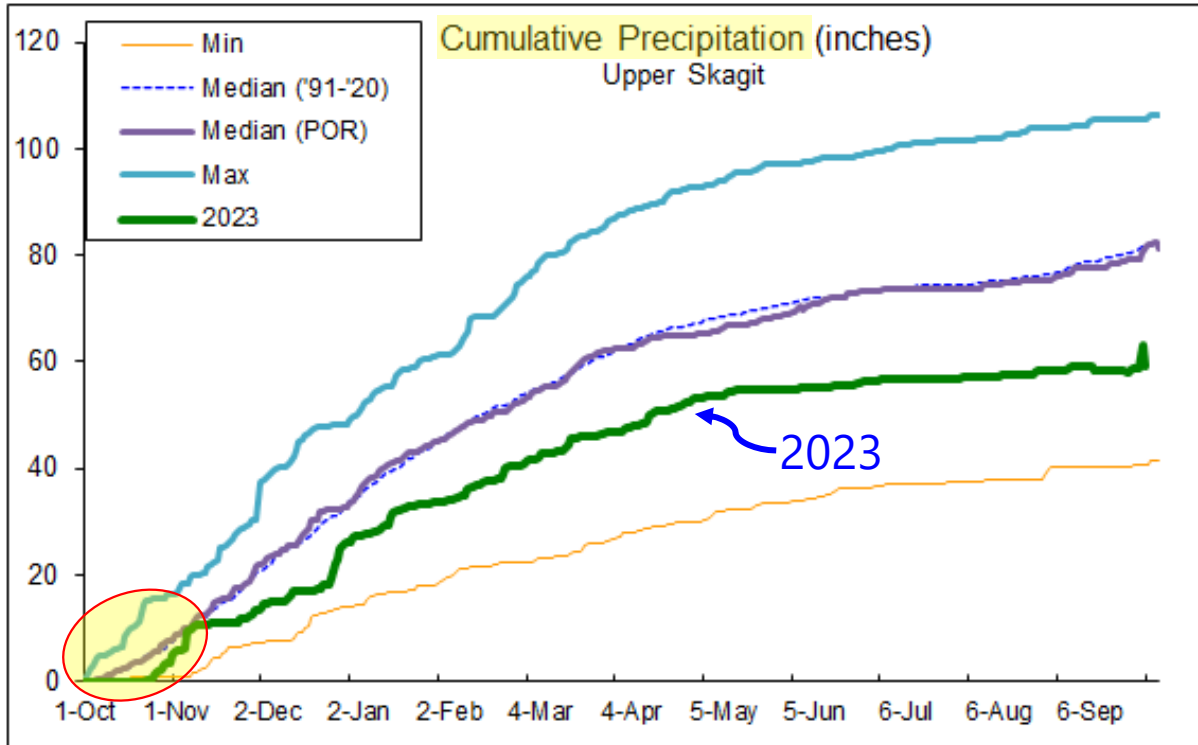


Severe to Extreme Drought



Source: U.S. Drought Monitor - Sept. 2023

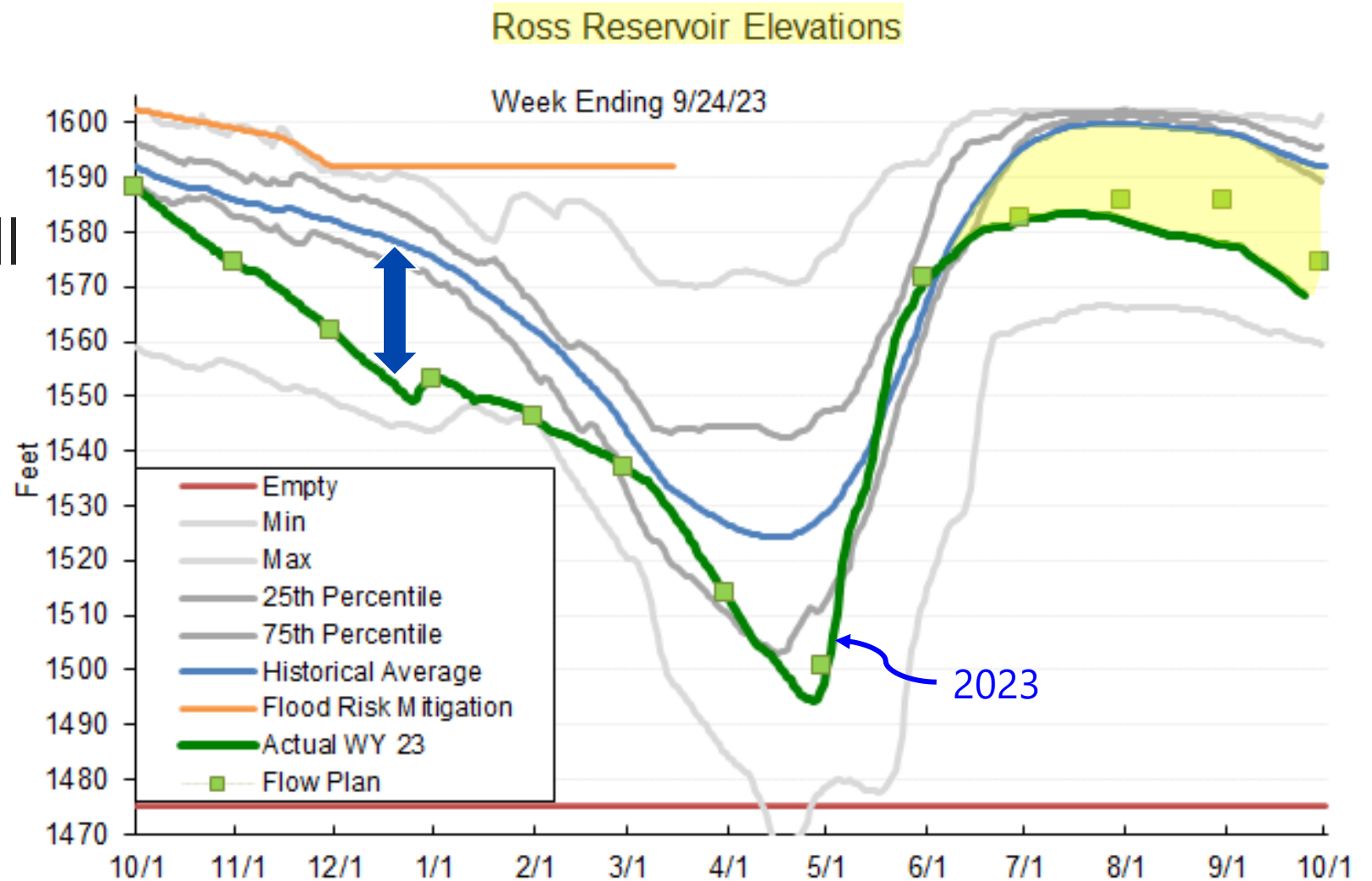
Water Year Comparison in Upper Skagit



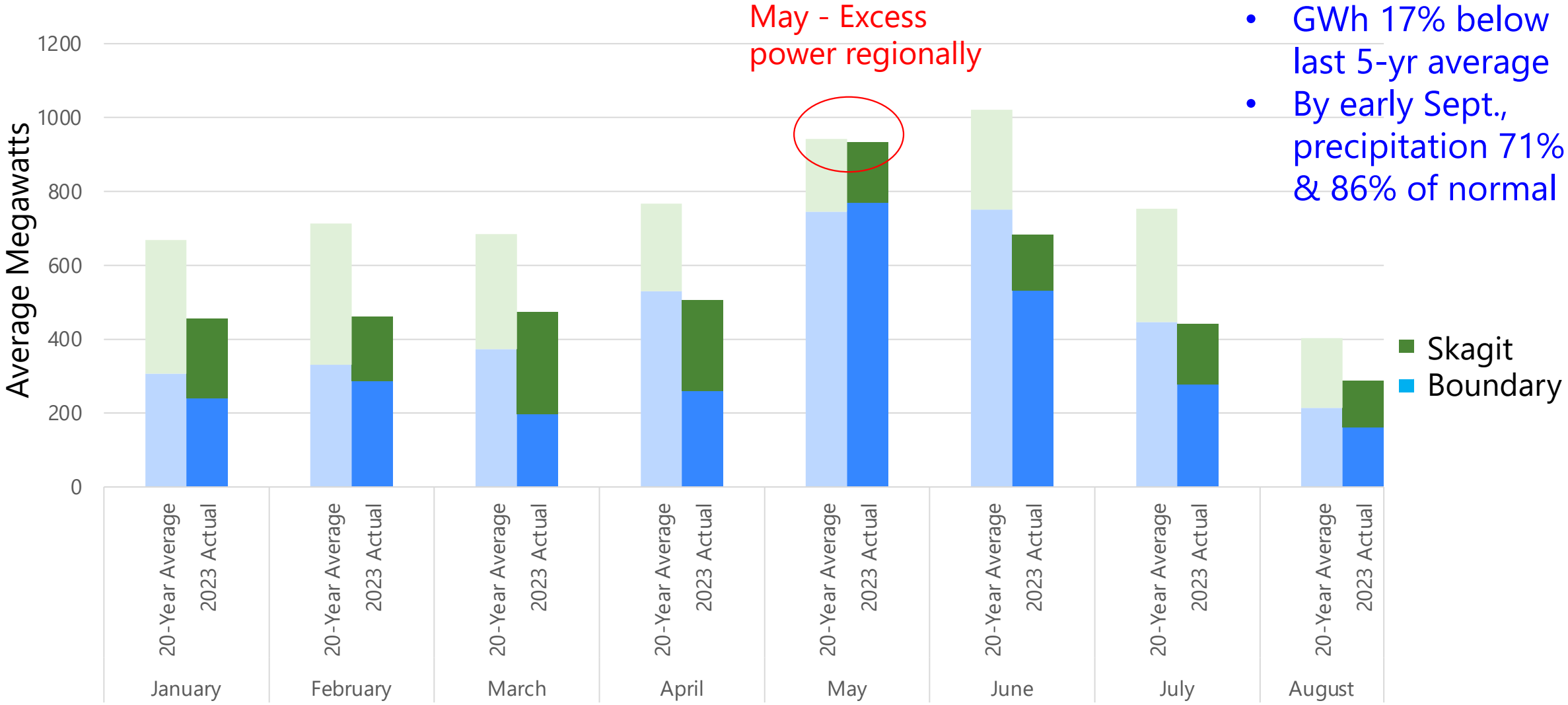
- Started out dry and lower than median precipitation over the remainder of the year.
- Snow water equivalent was a bit lower than median but melted off rapidly early April - May.

Impacts on Reservoir Elevation

- + Low winter inflows (Cold temperatures)
- + Snowmelt didn't refill to target elevation
- + Low summer inflows

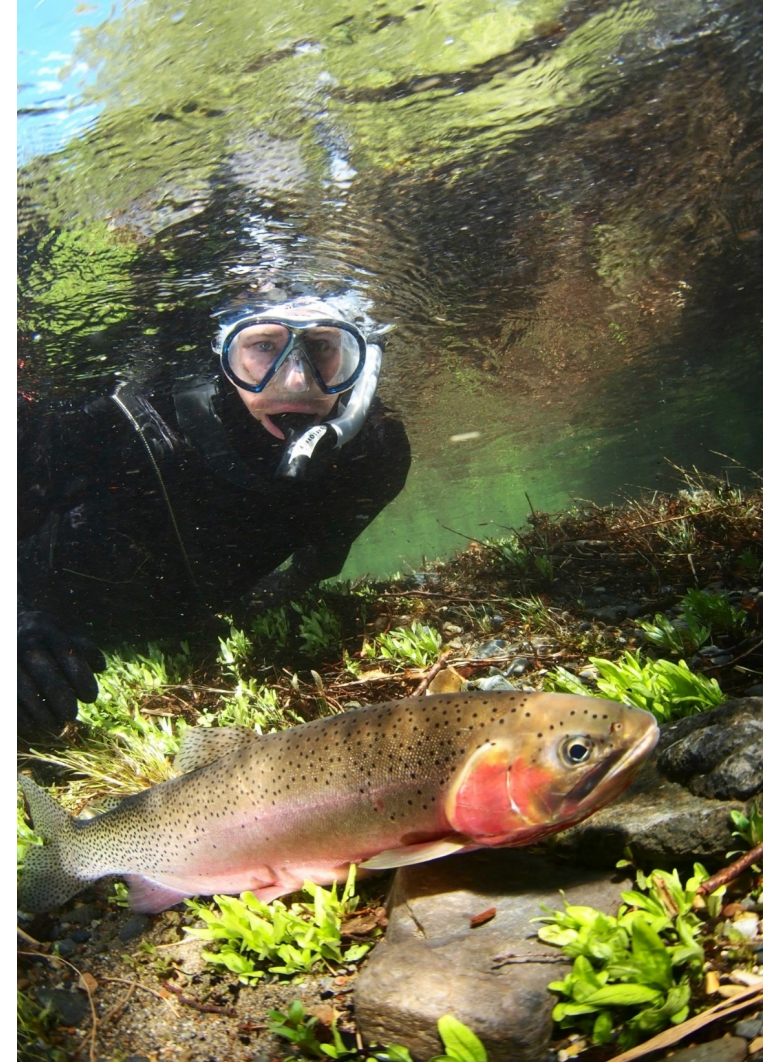


Below Normal Hydroelectric Generation



Aquatic Resources

- + Draw down of the reservoir reduces fish passage into the tributaries
- + Low reservoir has hampered fish and water quality monitoring



Recreation

- + Minimal impacts
- + Informed NPS won't refill
- + NPS adjusted operations
- + Campgrounds open



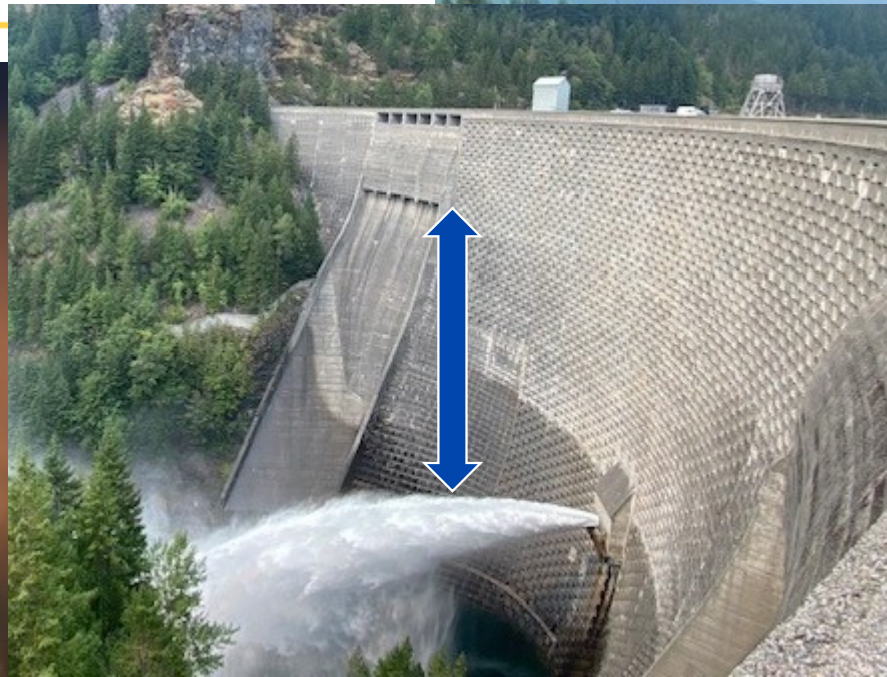
NOT 2023

NPS = National Park Service

Wildfire & Water Release



Diablo Dam
Sourdough Fire
Aug. 2023



No Generation

Adaptation – what do we do?

- + Assess Readiness – winter/summer
- + Improve streamflow forecasts
- + Shape internal generation
- + Market purchases
- + “Rainy-day” fund
- + Energy diversity
- + Communicate frequently and clearly
- + Regional collaboration



Questions?



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