



BUREAU OF
RECLAMATION

Lahontan Basin Area Office Water Supply Outlook

March 16, 2022

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Topics

- **Water Year 2022 Outlook**
 - **NRCS Forecasted Data**
 - **Forecasted Lahontan Storage**
 - **Projected Operations**
- **Airborne Snow Observatory Data in the Truckee-Carson Basins**

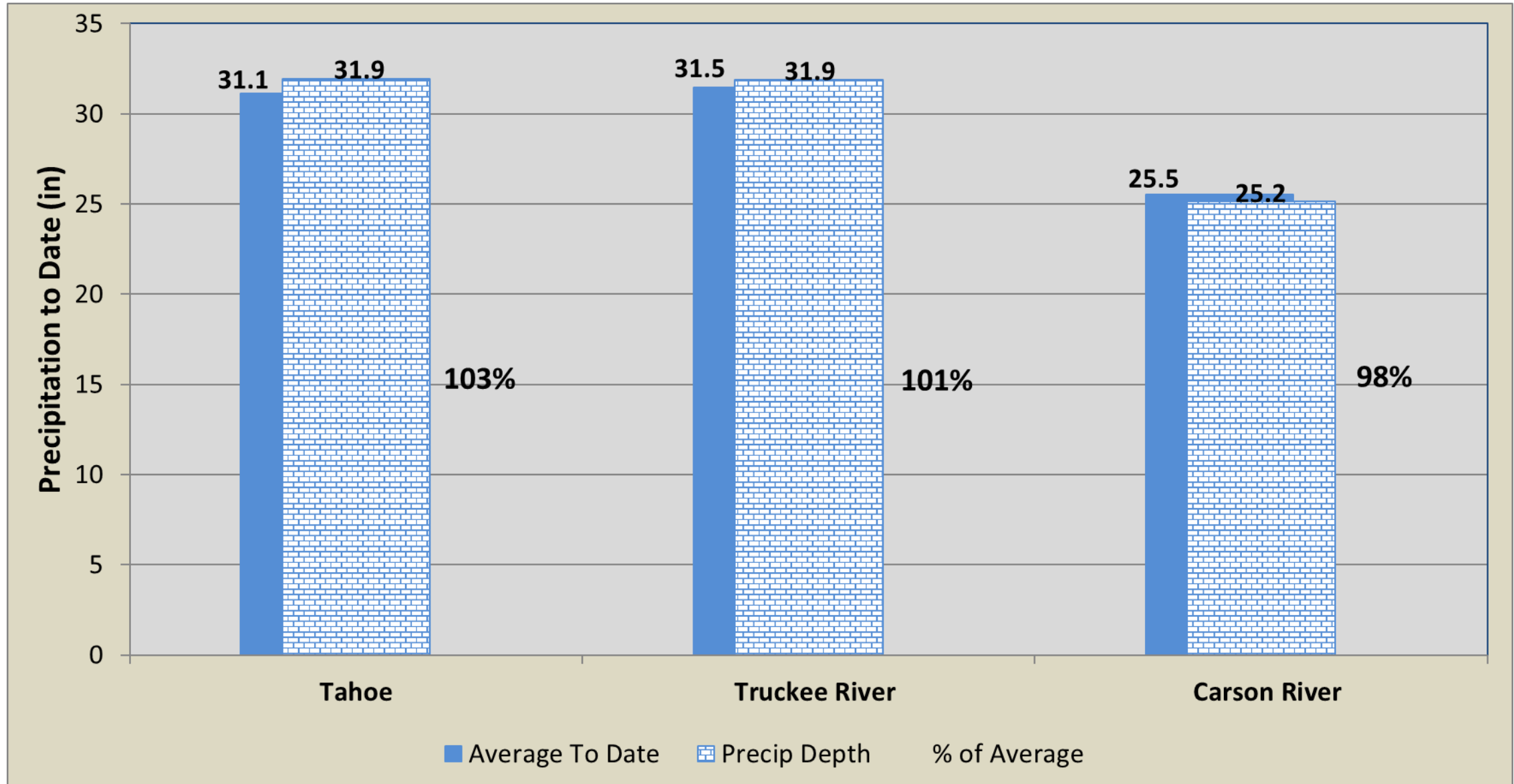




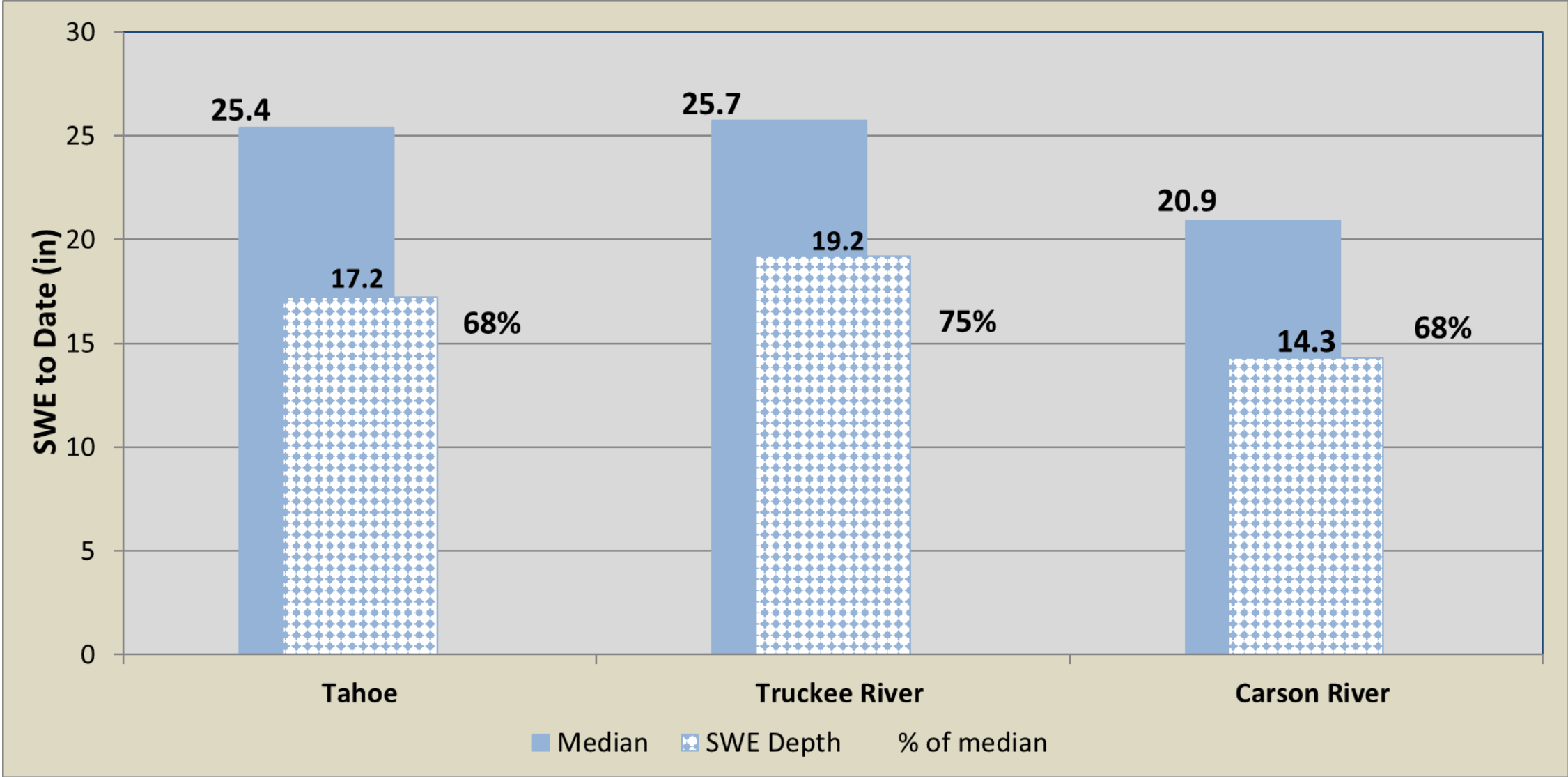
WY 2022 Outlook



Current WY Precipitation To Date

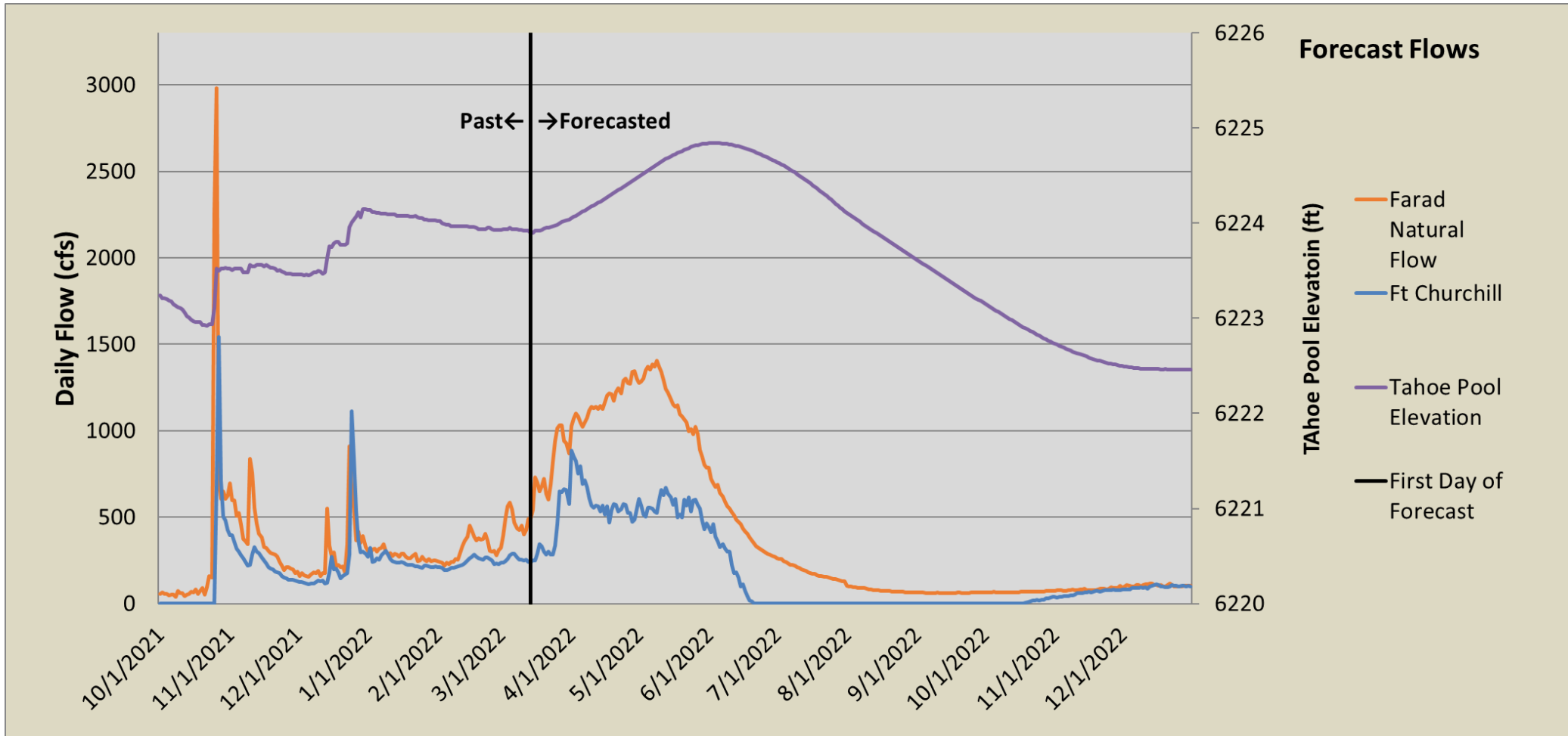


Current Snowpack

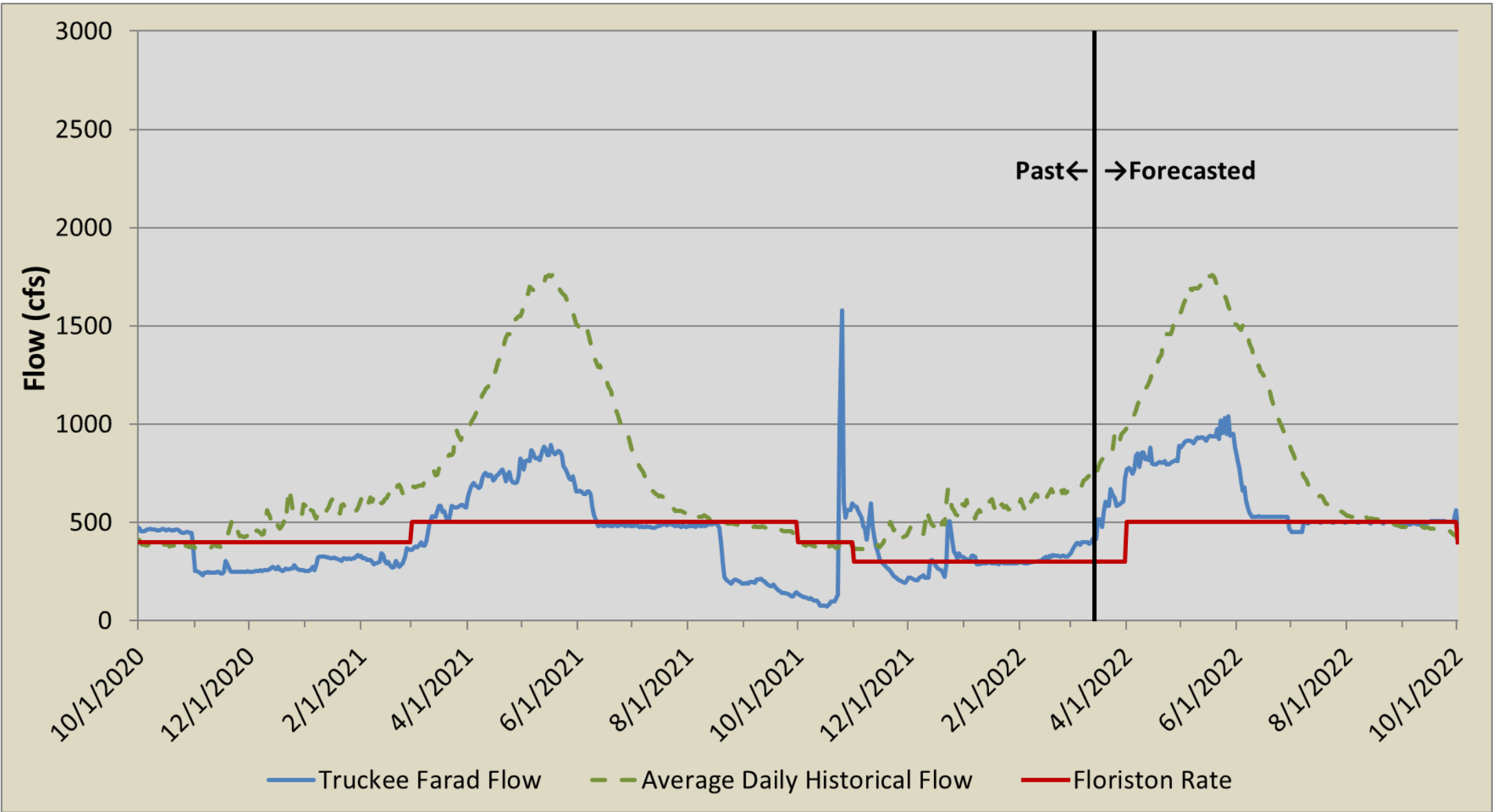


WY 2022 Mar 1 NRCS Forecast - Hydrograph

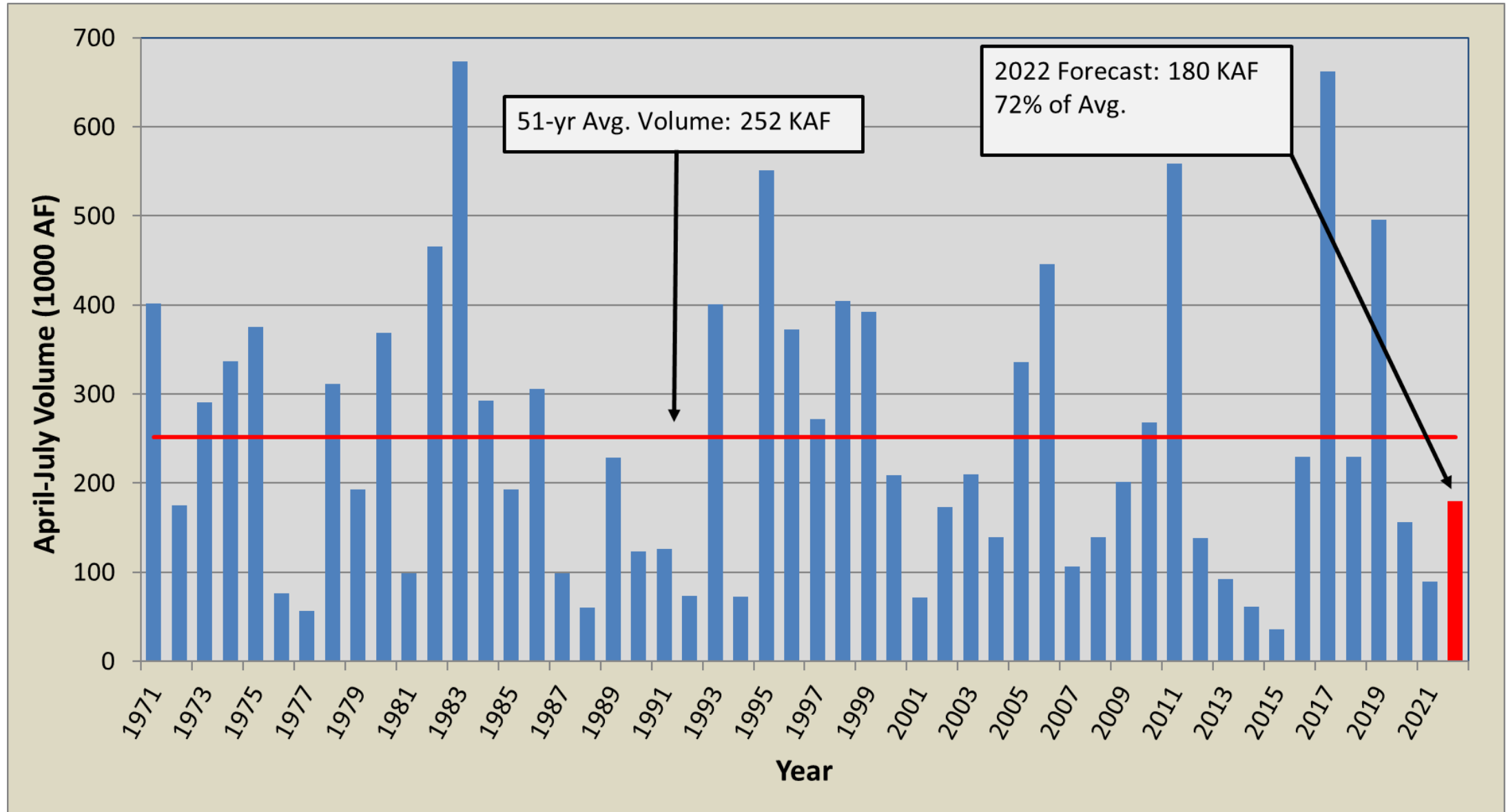
	Farad AJ Vol (KAF)	Carson AJ Vol (KAF)	Tahoe Gate Closed Rise (ft.)
30% (W)	210	110	1.20
50% (M)	180	80	0.90
70% (D)	130	39	0.61



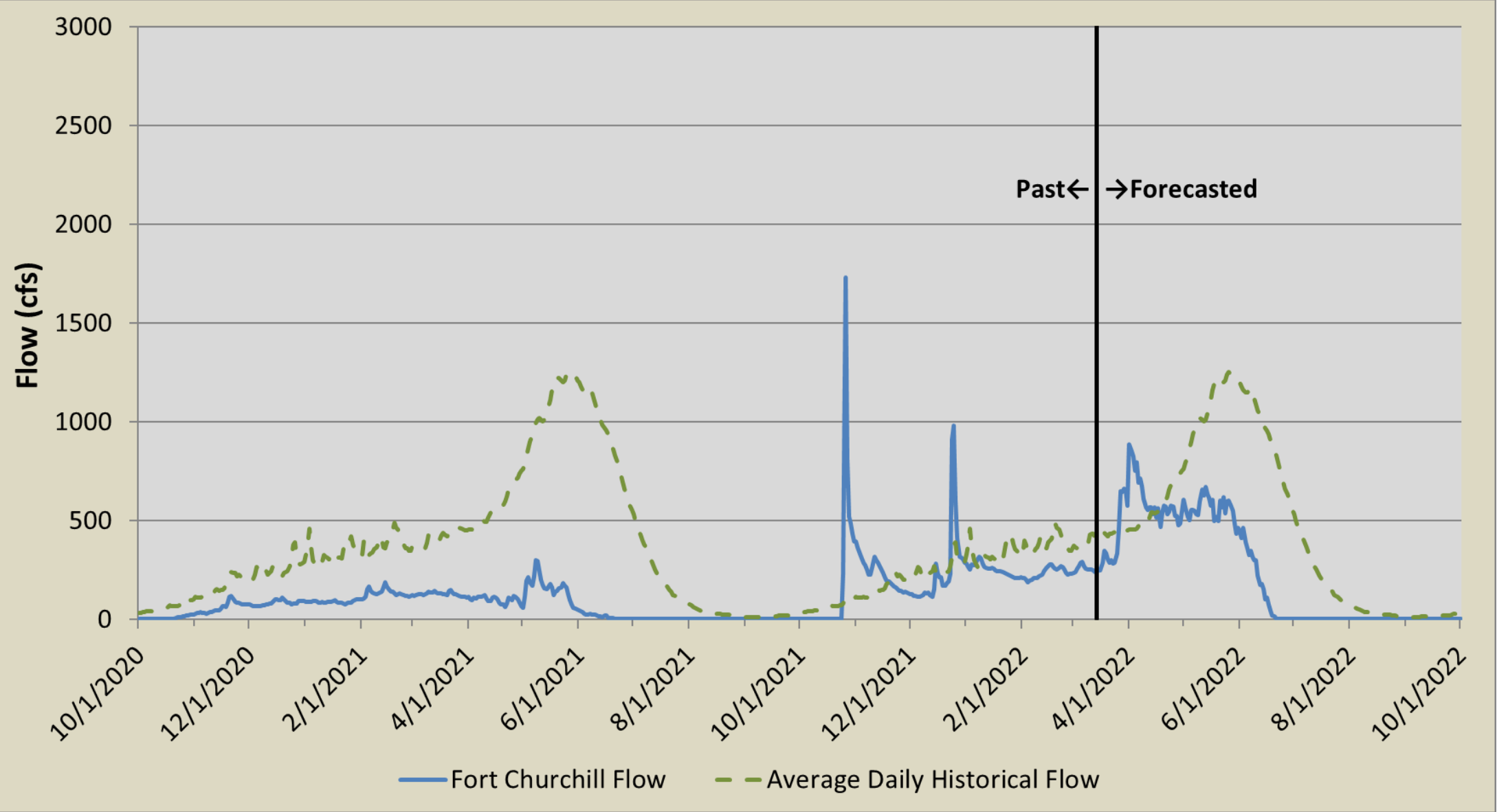
Average, Historic & Forecasted Farad Flow



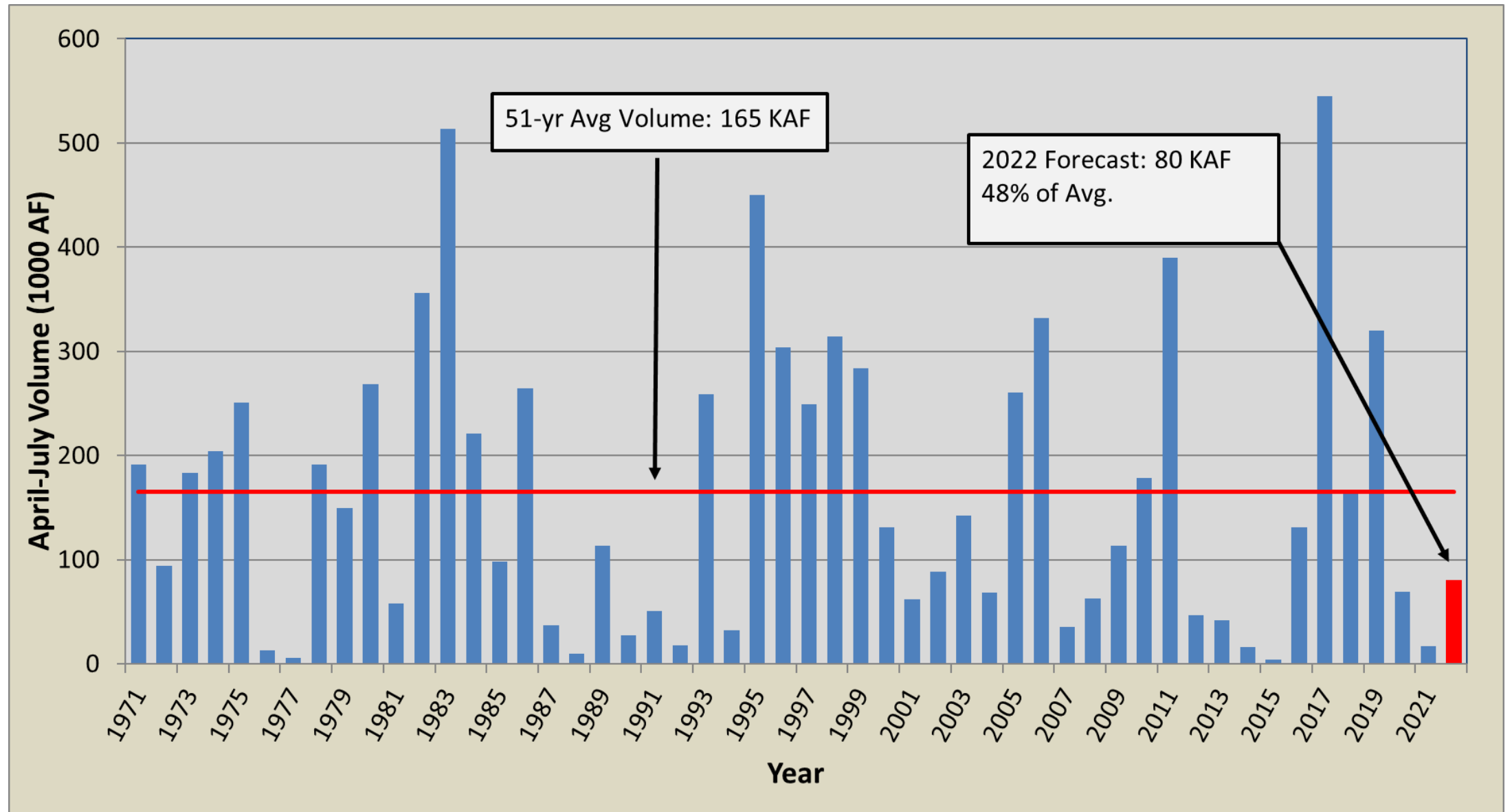
Historical & Forecasted A-J Runoff – Farad



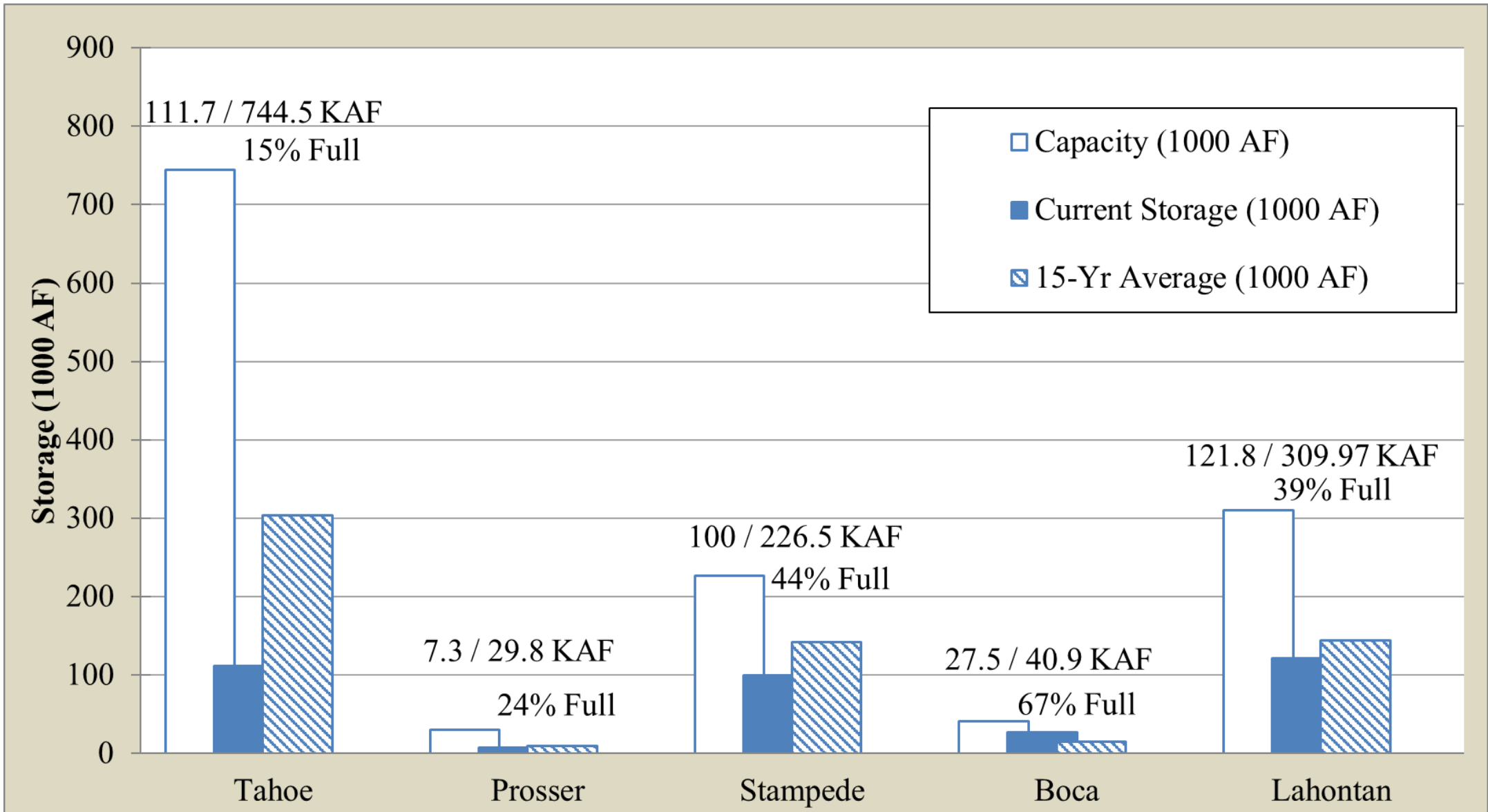
Average & Forecasted Ft. Churchill Flow



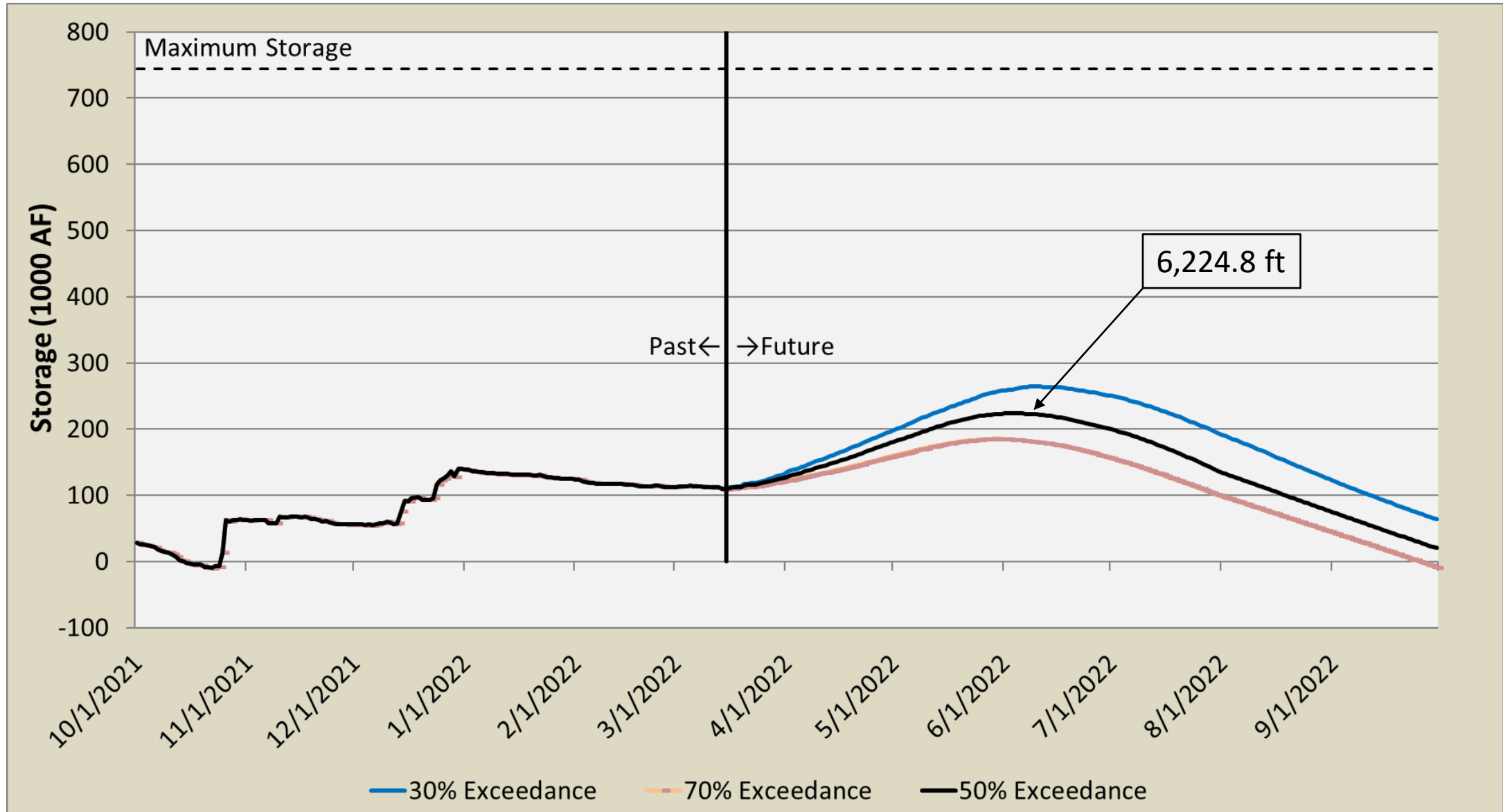
Historical & Forecasted A-J Runoff–Ft Churchill



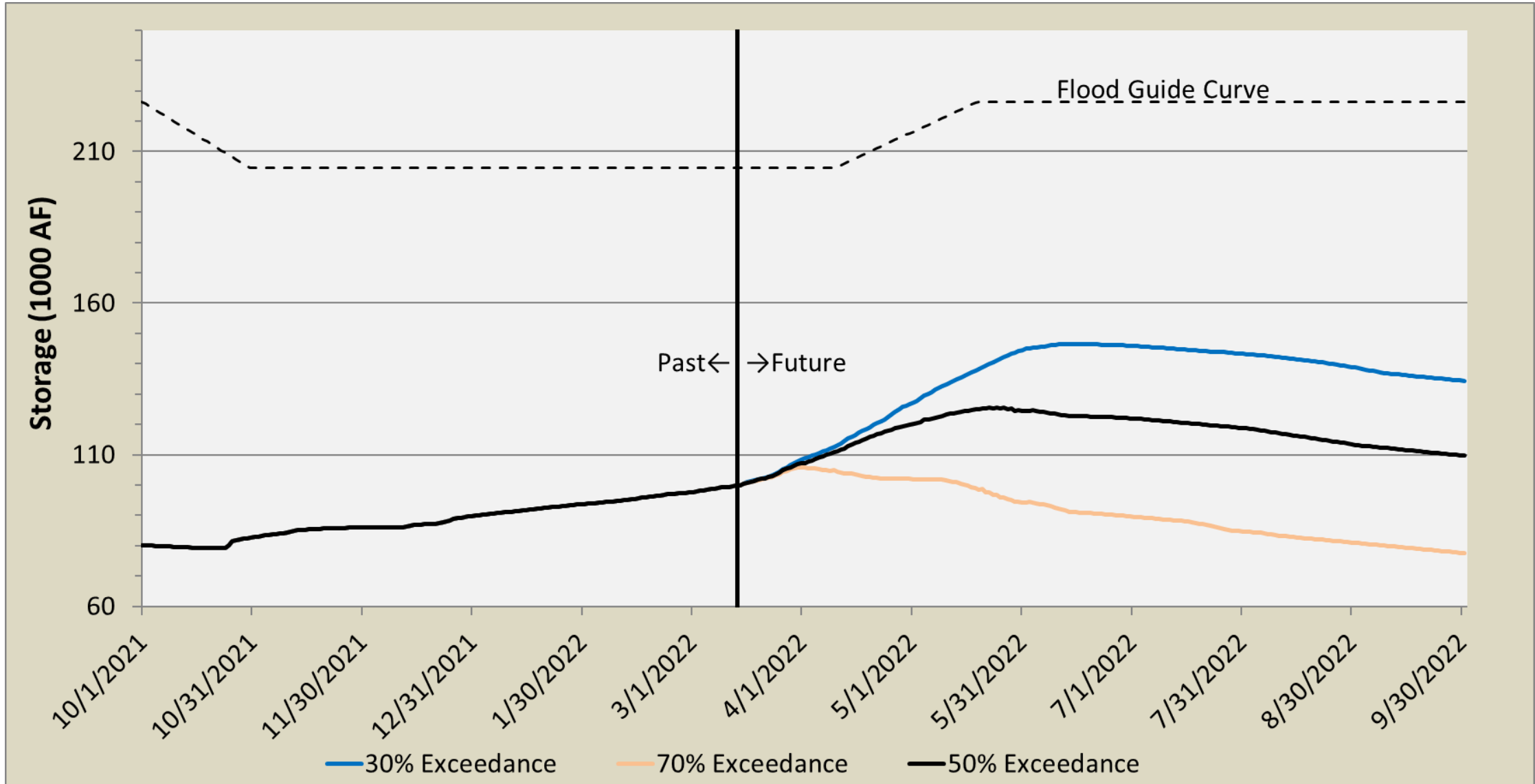
Current Reservoir Storage



Lake Tahoe Storage Forecast



Stampede Reservoir Storage Forecast

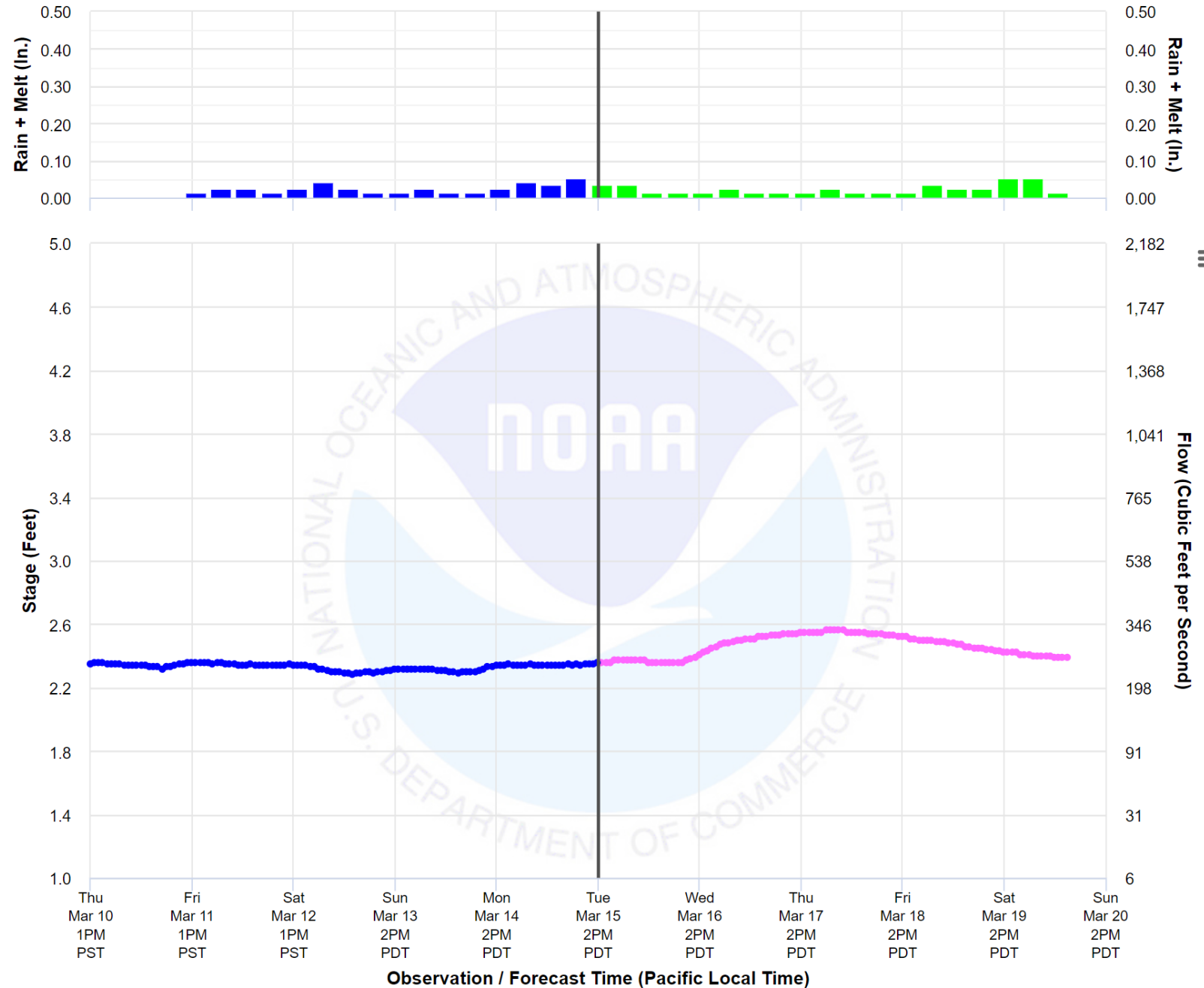


Forecasted Lahontan Inflows

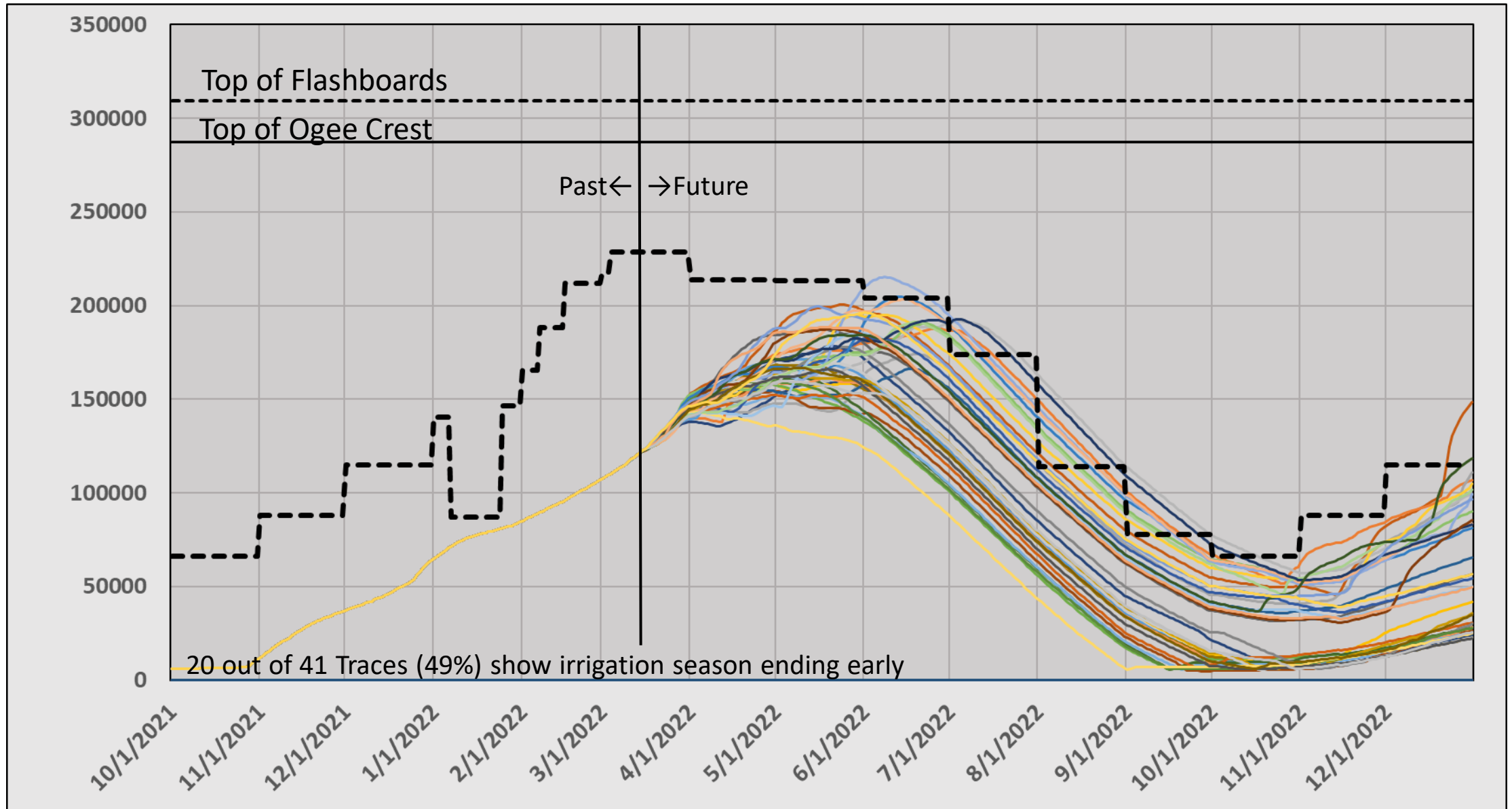
Ft. Churchill Inflows = 260 cfs
 Lahontan Reservoir = 122,500 AF

Carson River - Fort Churchill (FTCN2) River Forecast Plot

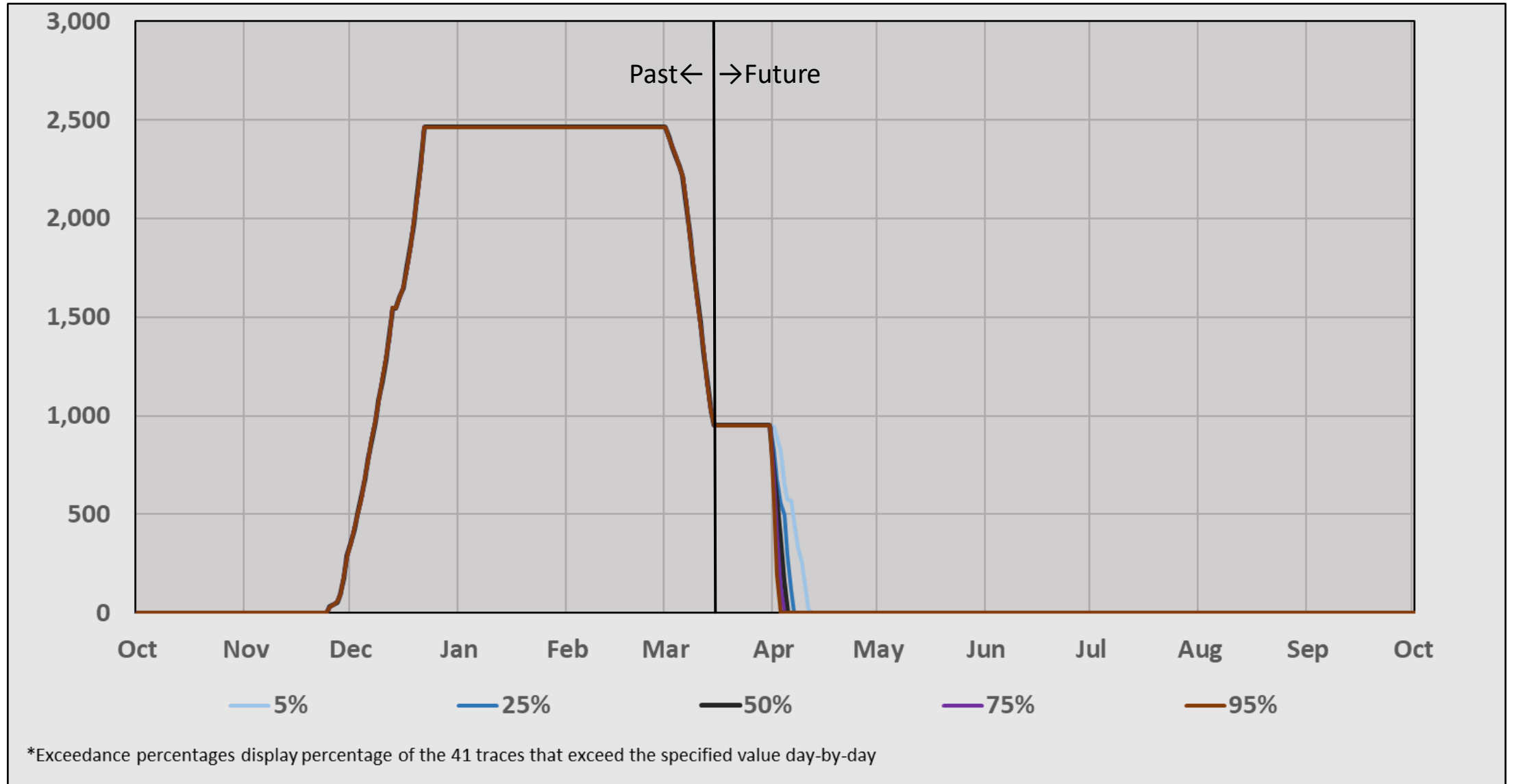
Forecast Posted: 03/15/2022 at 2:03 PM PDT • Graphic Created: 03/15/2022 at 2:12 PM PDT



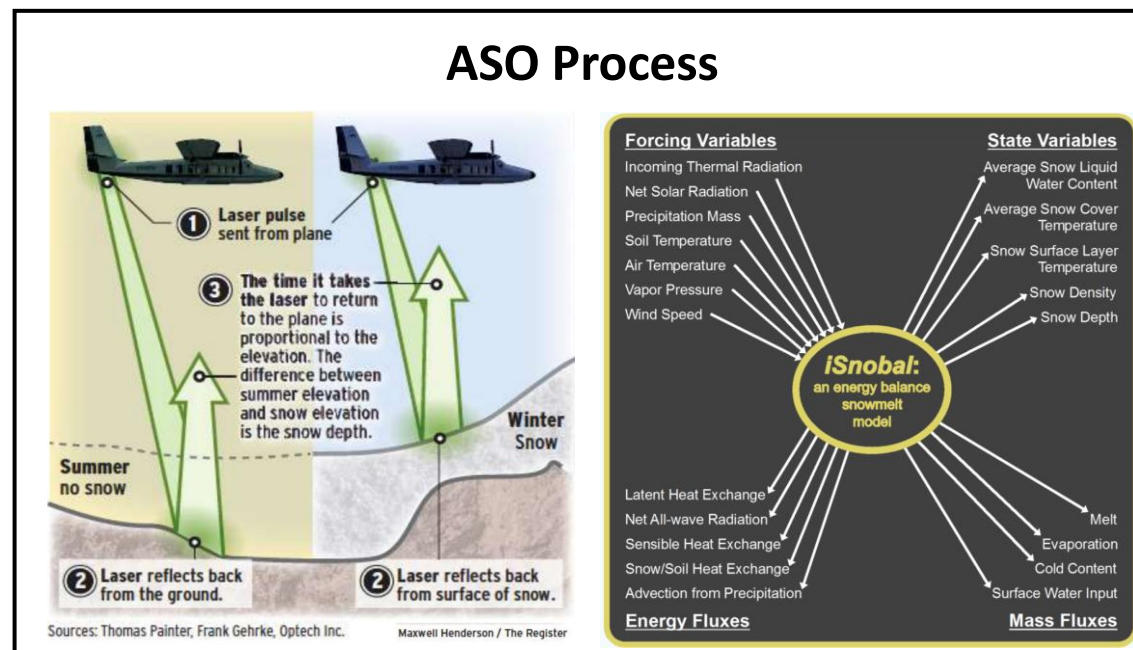
Lahontan Reservoir Storage Forecast



NPCW Storage Forecast (af)



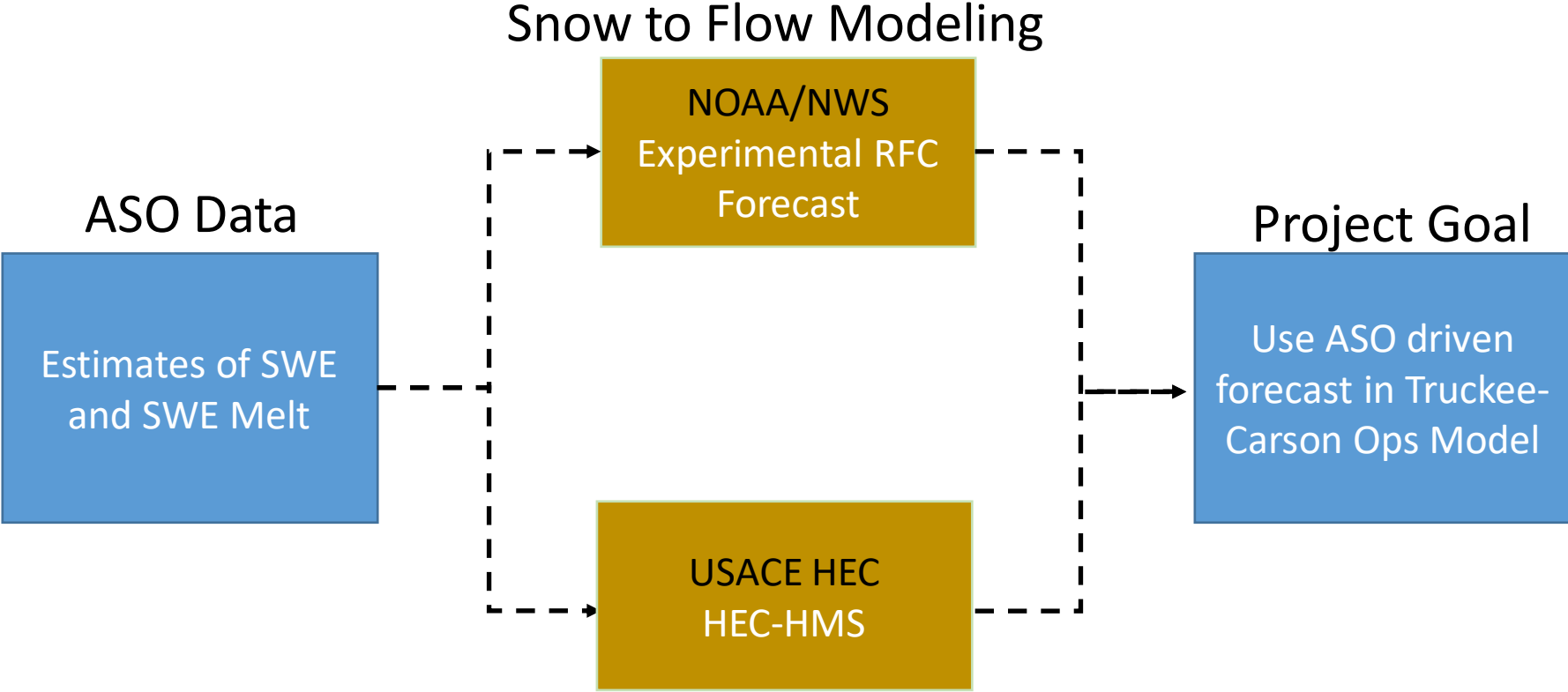
ASO in the Truckee-Carson Basins



- Received \$450,000 to collect 2 snow-on flights
- Flights/Modeling will provide spatial distributed estimates of SWE
- Partnered with CA DWR, who doubled our investment (purchases two more flights)



ASO to River Forecasts



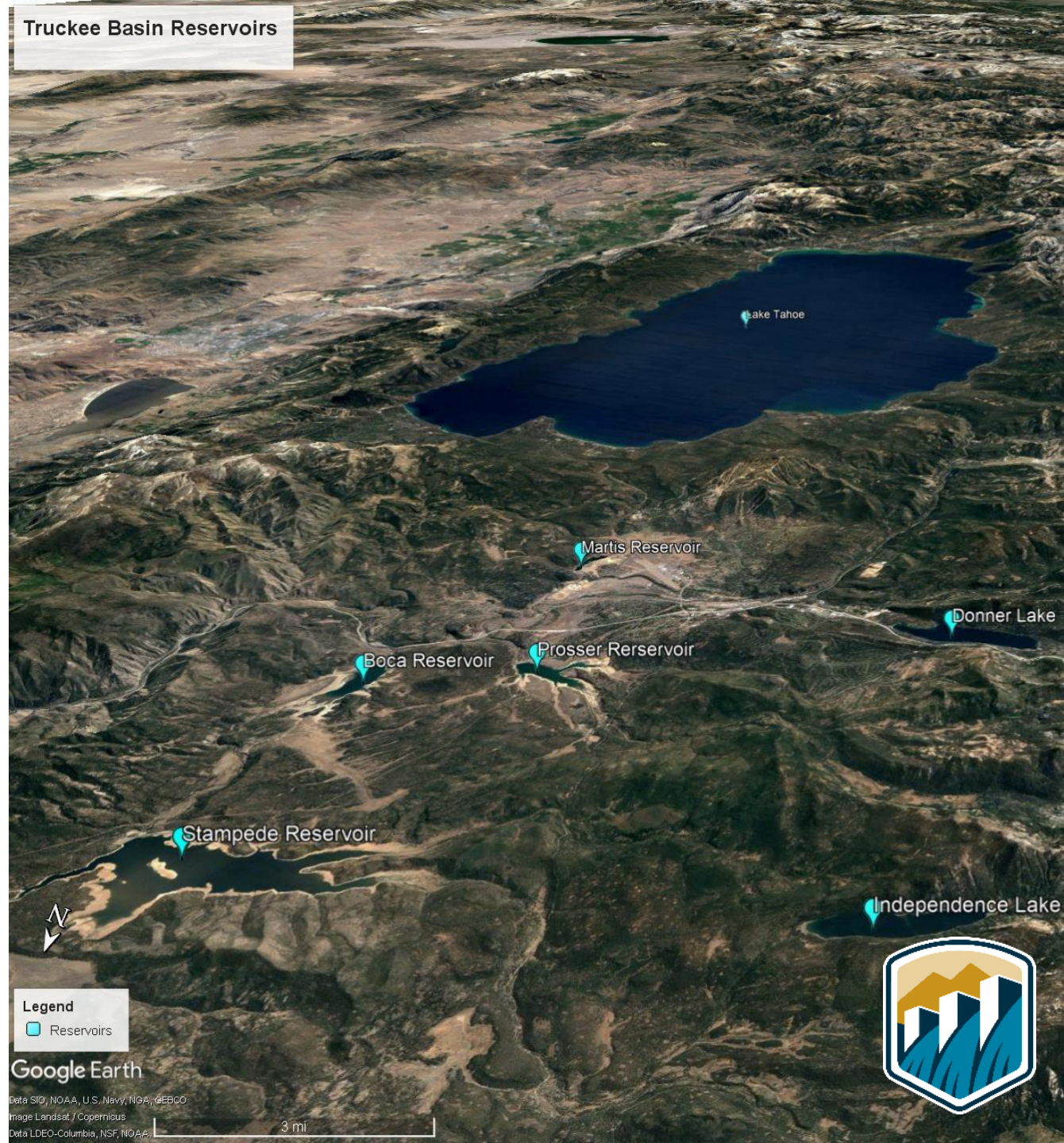
Additional Project Benefits

Snow-Off LiDAR

- Update reservoir curves
- Identify forest stress and fire potential

Snow-On LiDAR

- Test drive new forecasting methods
- Improve reservoir evaporation estimates
- Identify future SNOTEL sites



WY2022 Summary

- Diversions from the Truckee River to Lahontan are expected all year when water is available
- Lahontan does not fill in any of the 41 RFC traces
- Water supply is less than demand in 49% of the RFC traces
- ASO data will provide new insight into the Truckee-Carson Snowpack





End!

Comments or Questions?

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