2027 Hydropower Generation Forecast

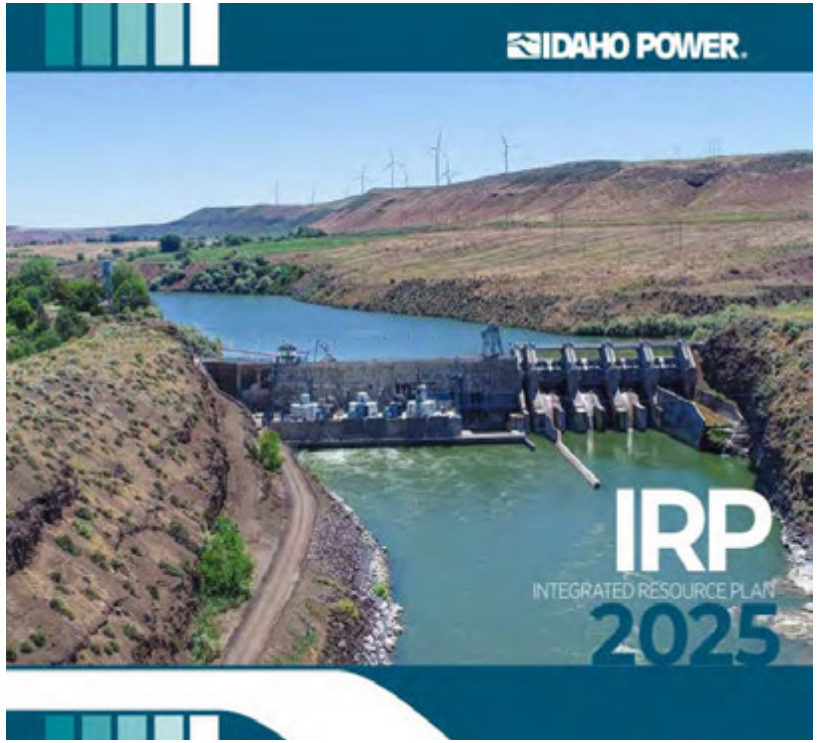


John Hildreth
Principal Engineer

November 12, 2026

Acronyms and Terms

aMW:	Average megawatt
kaf:	Thousand acre-feet
maf:	Million acre-feet
cfs:	Cubic feet per second
CADSWES:	Center for Advanced Decision Support for Water and Environmental Systems
IDWR:	Idaho Department of Water Resources
IWRB:	Idaho Water Resource Board
ESPA:	Eastern Snake River Plain Aquifer
ESPAM:	Enhanced Snake Plain Aquifer Model
HCC:	Hells Canyon Complex
ROR:	Run-of-river
USBR:	United States Bureau of Reclamation



Link to Idaho Power Acronyms List Used in the Integrated Resource Plan Process

More Educational Material

Idaho Power has compiled various educational resources to help those participating in our Integrated Resource Plan process or anyone who wants to know more about how their energy is generated and delivered.

Link to Idaho Power videos:

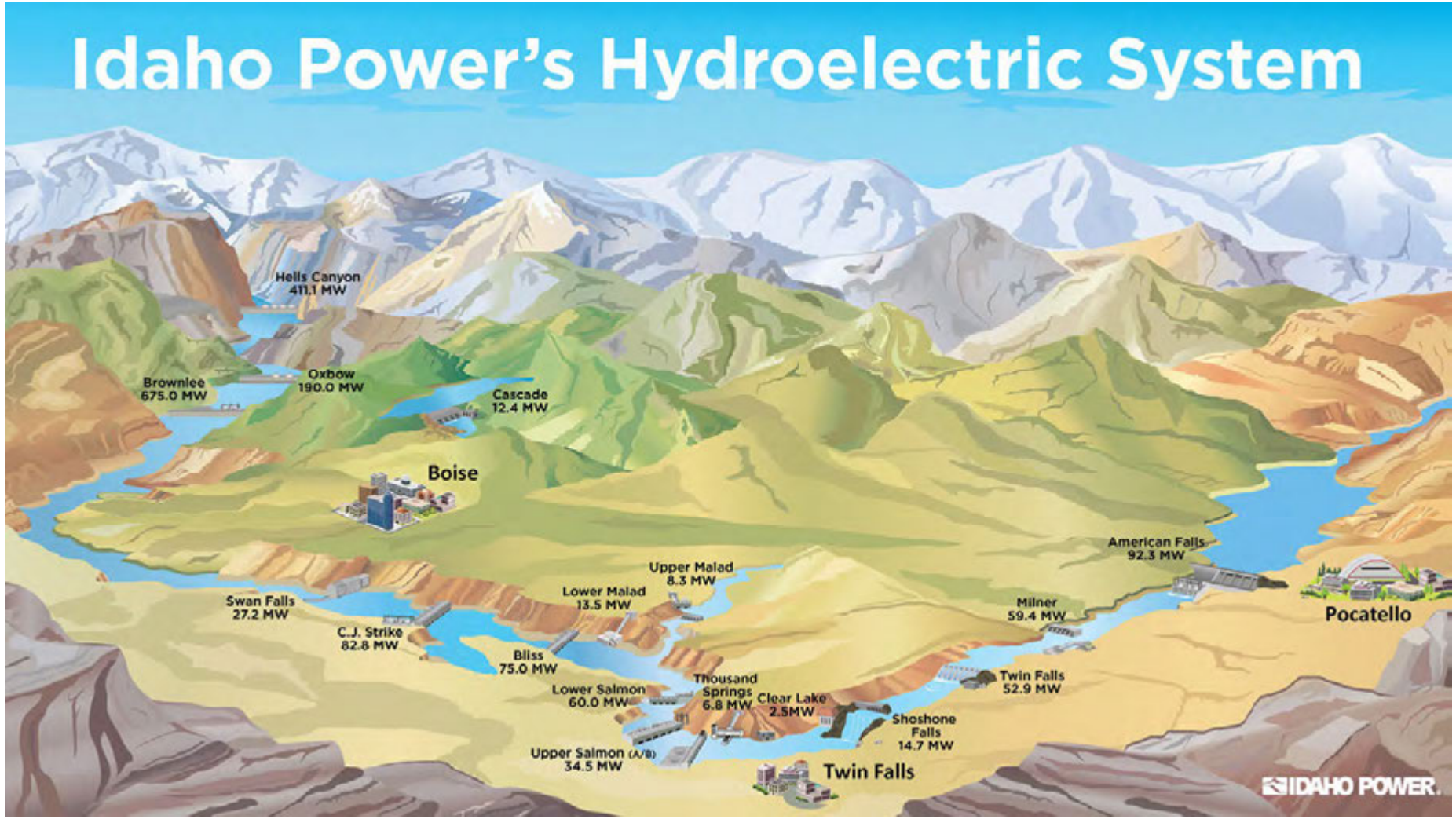
- idahopower.com/about-us/energy/planning-and-electrical-projects/our-twenty-year-plan/educational-resources/
- Or go to idahopower.com/irp and use the "Educational Resources" link there.







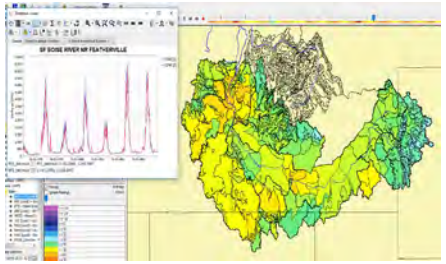
Snake River & Hydro Generation Overview



Link to this presentation

Hydro Resource Modeling

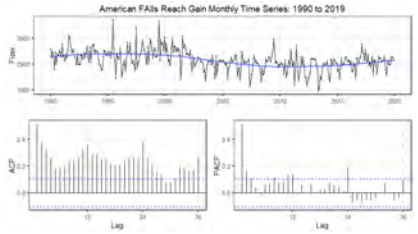
EFS Cloud Seeding SA



ESPAM 2.2

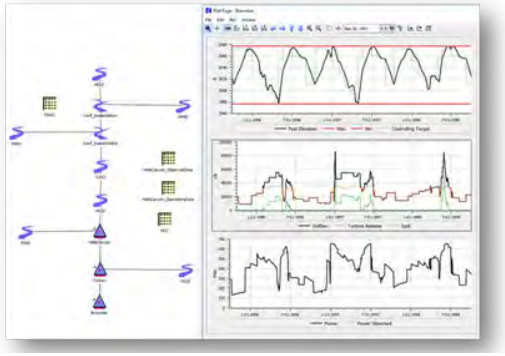


Statistical Trend Modeling



RiverWare

Center for Advanced Decision Support for Water and Environmental Systems



Monthly Exceedance Plant Hydro Generation (aMW)

AURORA

BY ENERGY EXEMPLAR



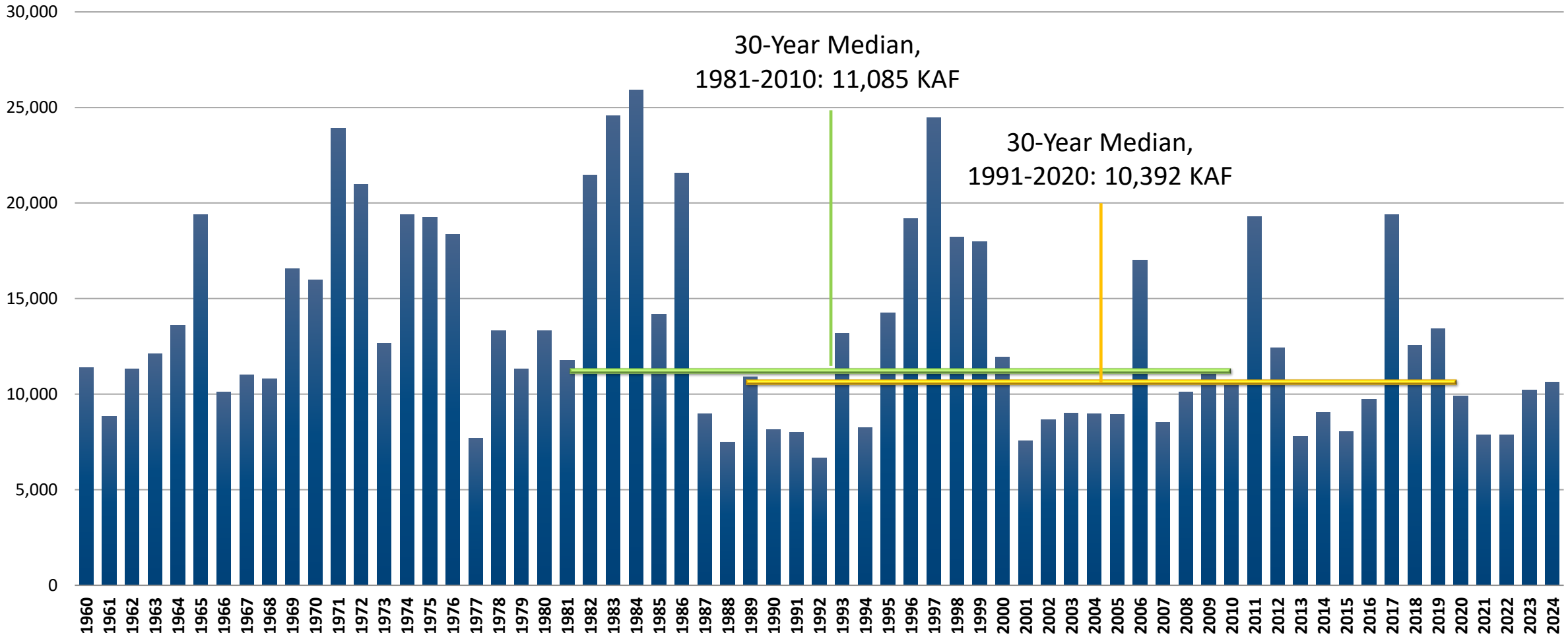
Link to this presentation

Hydro Generation Planning



Objective:
To model exceedance probabilities of hydro generation in each of the next 20 years

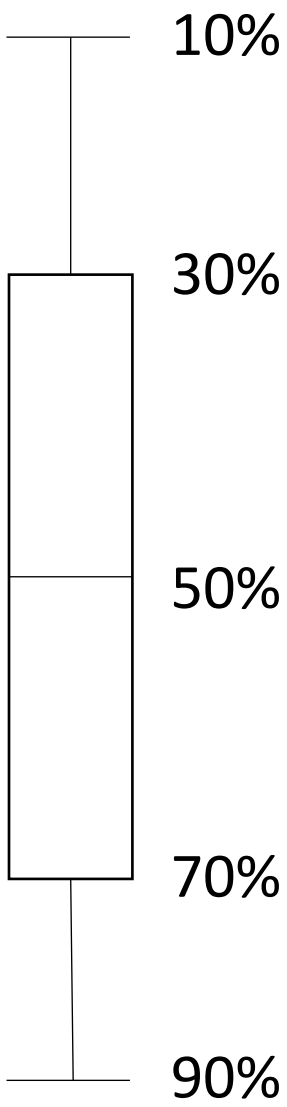
Brownlee Reservoir Inflow Volume
In Thousands of Acre-Feet



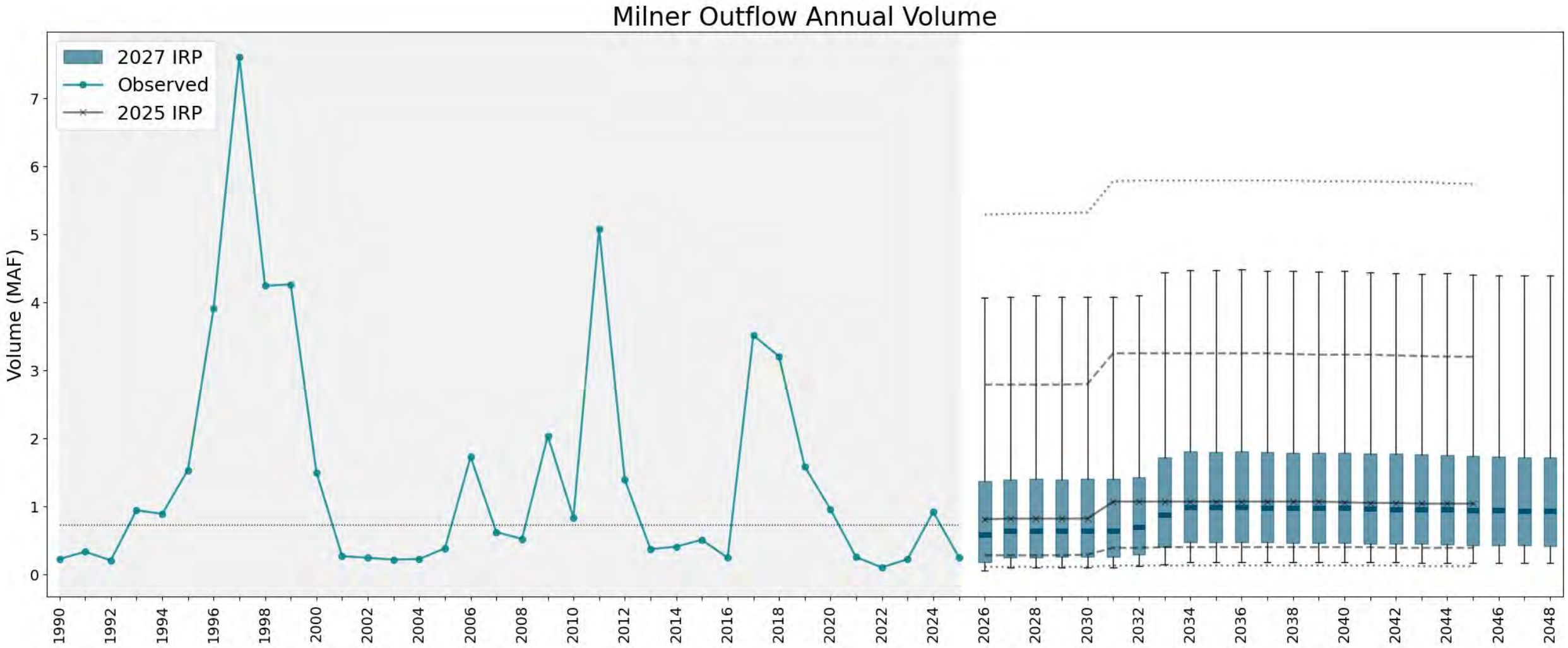
Planning Flow Results



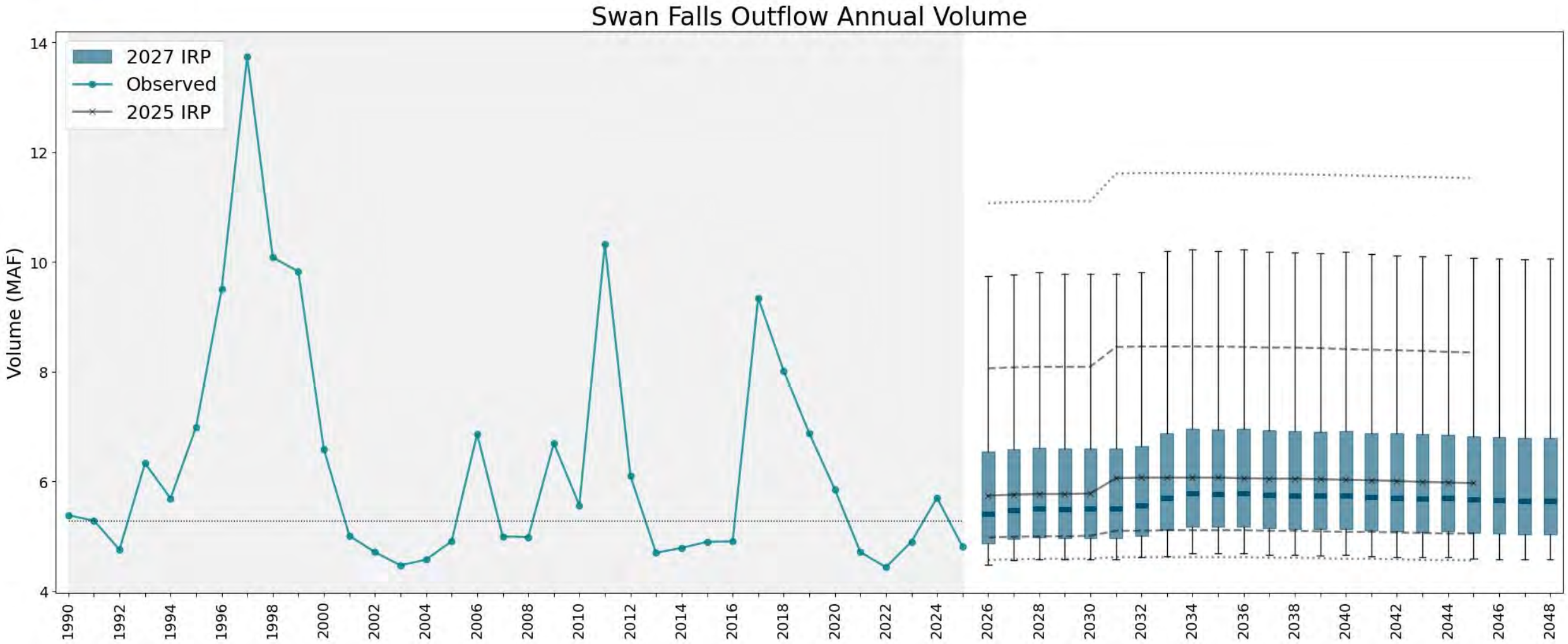
Exceedance Plot Interpretation



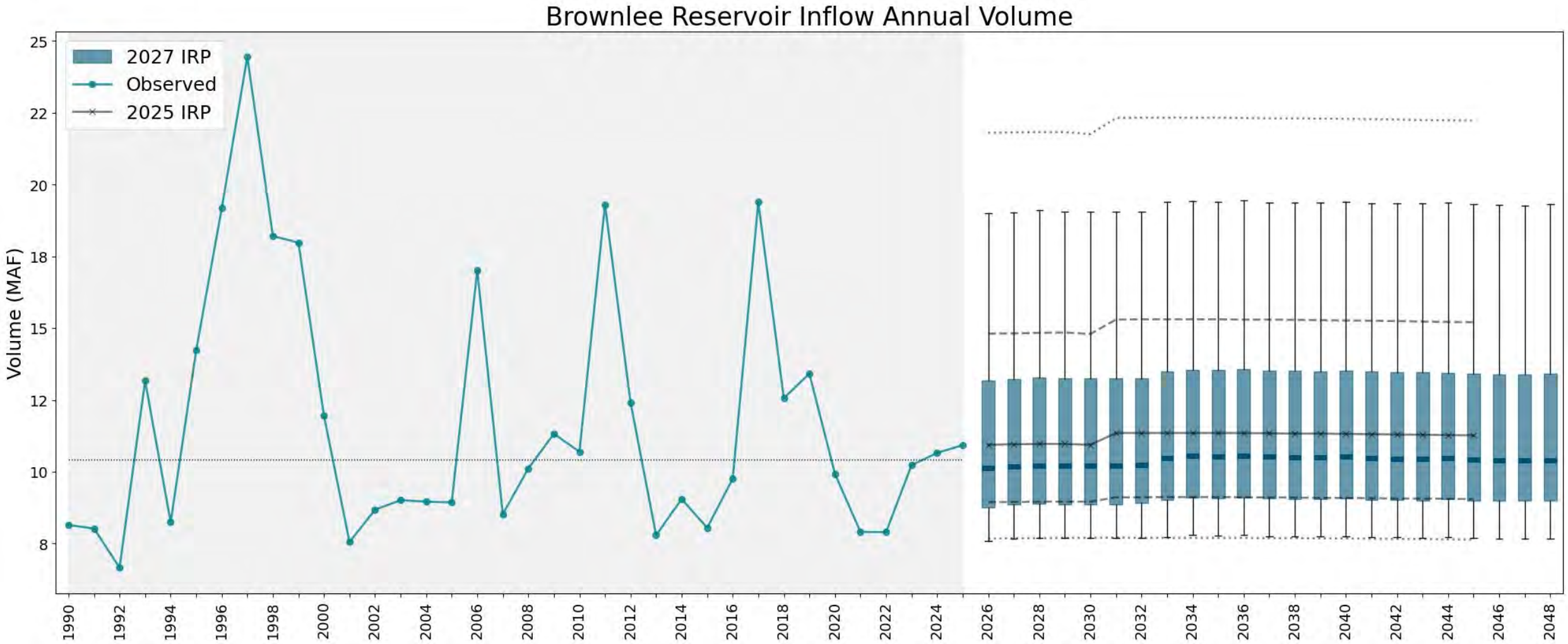
Milner Results



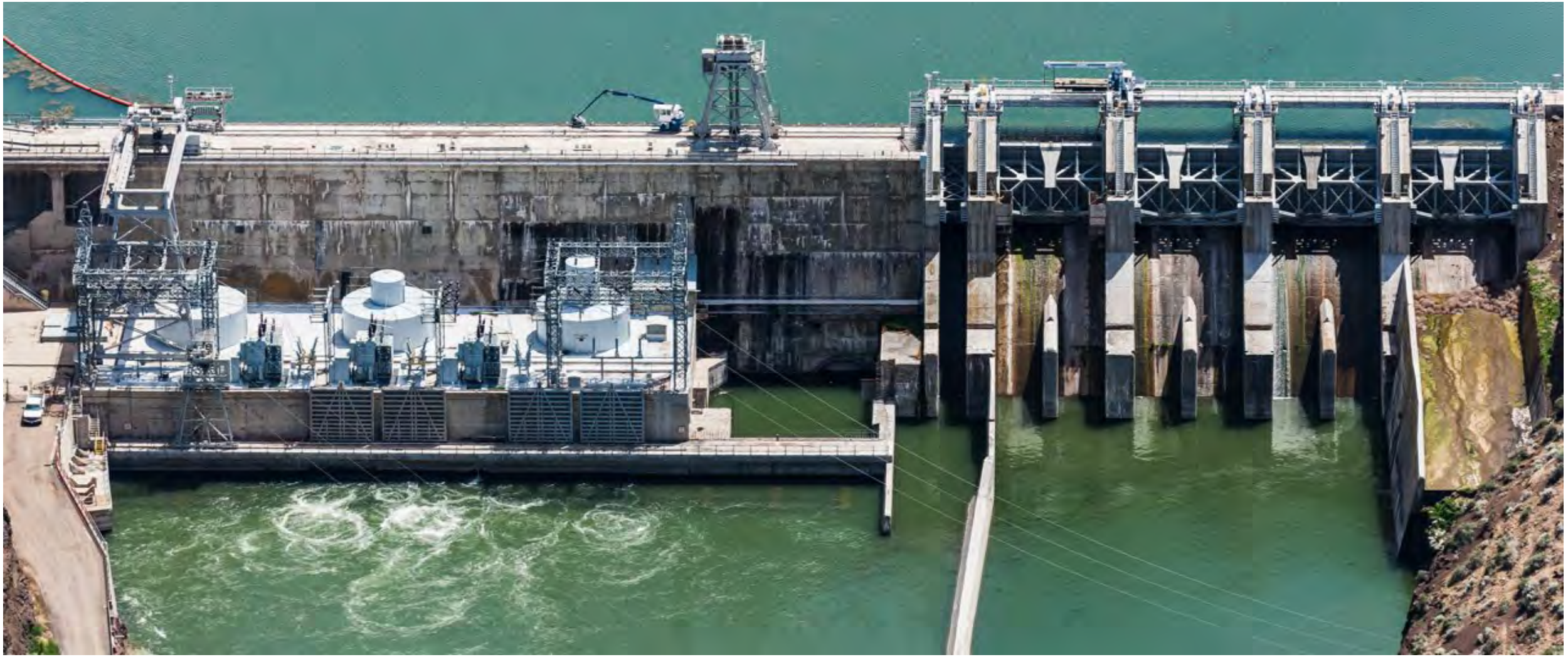
Swan Falls Results



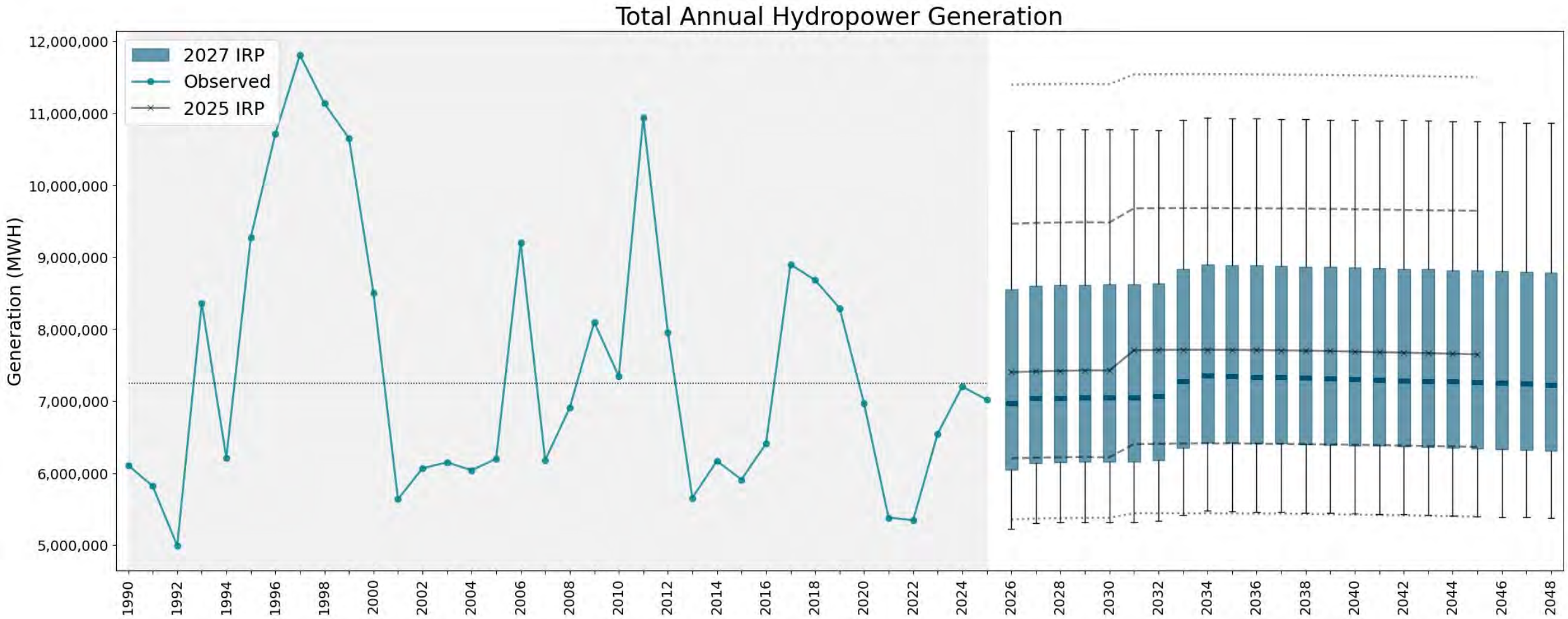
Brownlee Inflow Results



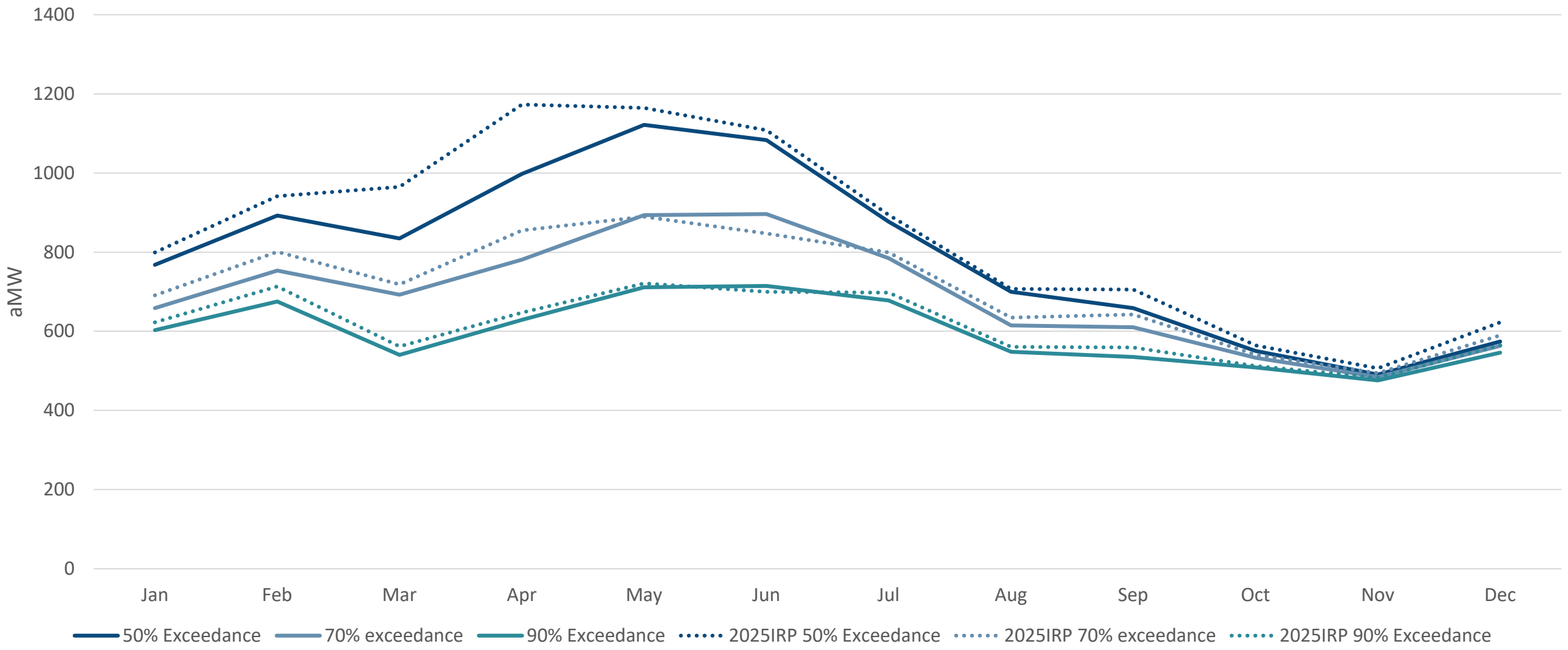
Planning Generation Results



Annual Hydro Generation Results



Monthly Hydro Generation Results



Questions?

