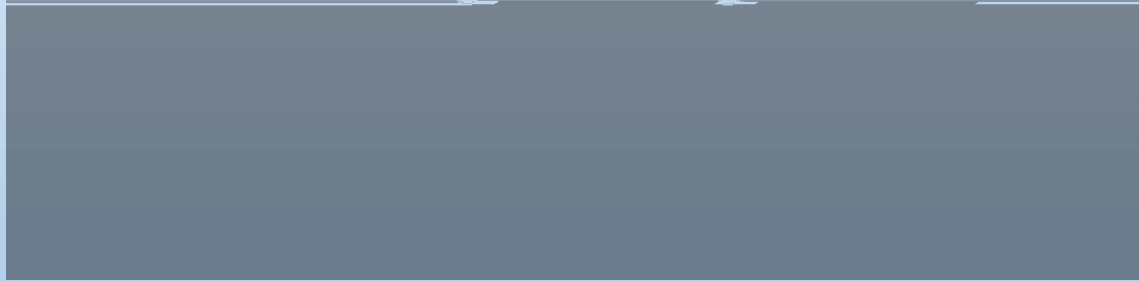




# CNRFC Changes (WY 2025)





# Threshold Changes



- **Align CNRFC color scheme and thresholds with NWPS**
- **Color-coded dots on the homepage include monitor (action), minor, moderate, major**
  - Old thresholds were monitor, minor, and danger
  - Monitor changes from orange to yellow
  - Flood (minor) changes from red to orange
  - Moderate becomes red
  - Major becomes purple
- **Additional thresholds included on individual plots & bulletins**
- **Implementation date Oct 29th, 2024**

# Front Map Threshold Changes

CURRENT EXAMPLE



NEW EXAMPLE



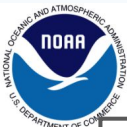
## Why are these changes being made?

New terminology will conform to national standards, so river flood stages in California will align with the terms and definitions used across the country.

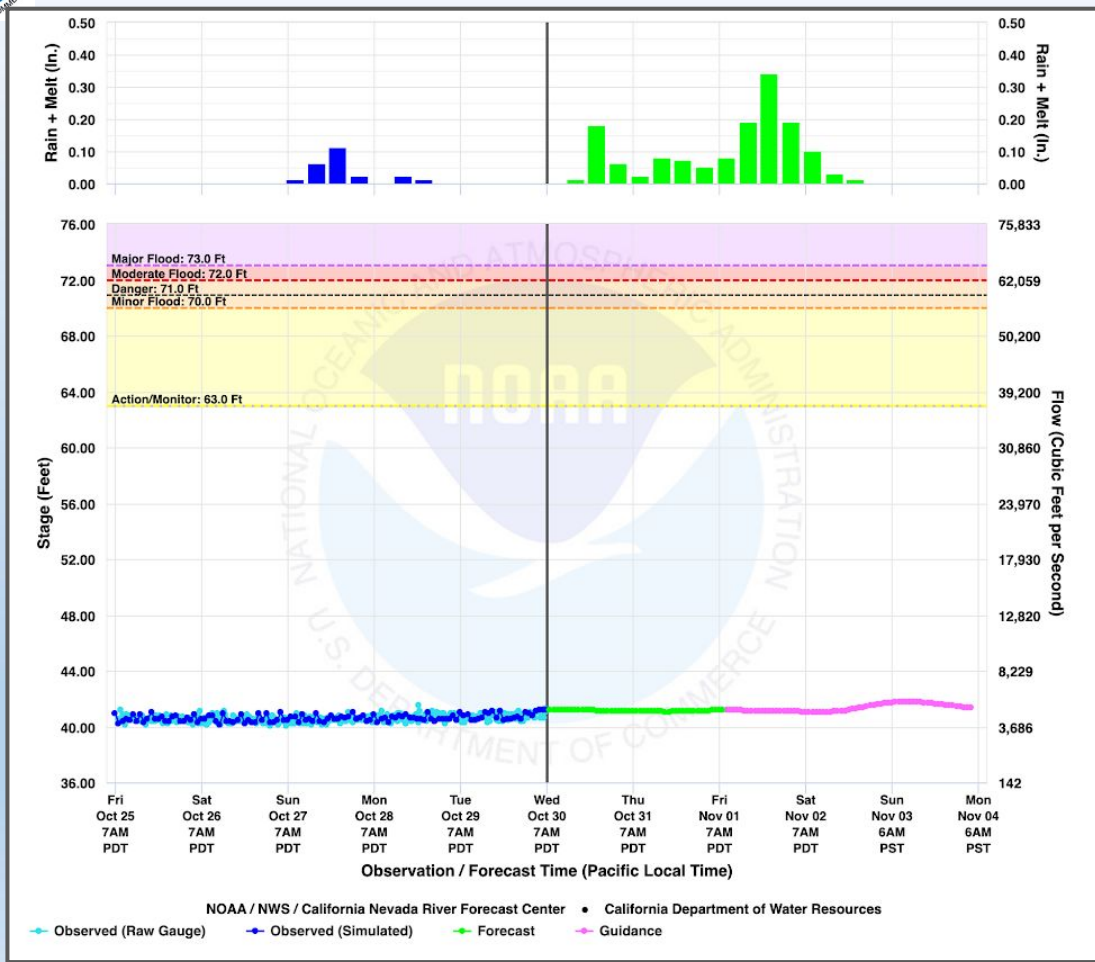
## What is not changing?

- The stage that triggers Flood Stage (starting with Minor Flood Stage) will stay the same.
- Flood impacts listed on CNRFC page

**Note** - Danger stage is removed from the front page map color scheme.



# Individual Plot Threshold Changes



- Monitor/minor/moderate/major shading added to individual plots
- Danger stage is added as a dashed black line (only for some Central Valley locations)



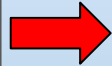
# New Basins & Calibrations



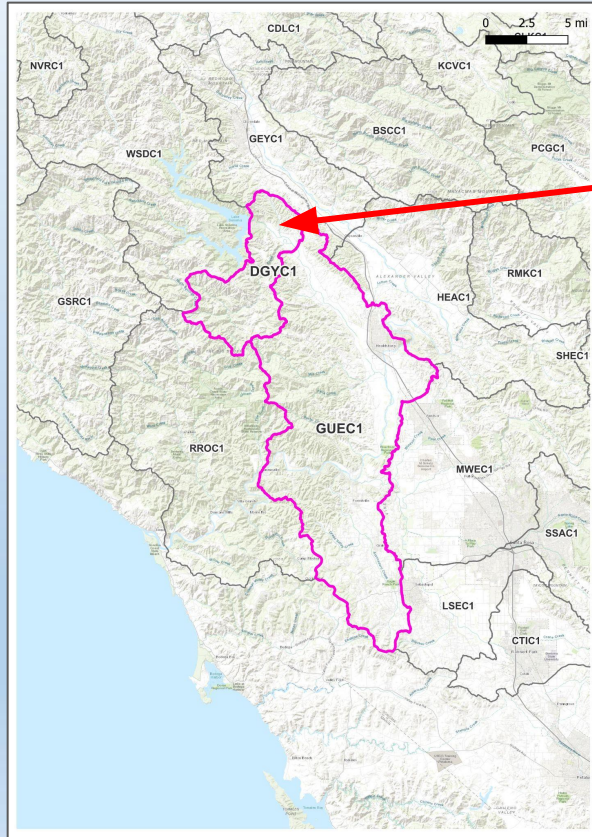
- 6 new basins this year
  - One on Dry Cr (Russian River)
  - One on Deer Cr (Cosumnes River)
  - Four in the Arroyo De La Laguna watershed
- Recalibration of the East Sierra (Truckee, Carson, Walker, Susan) & the Humboldt River
- Feather River @ Yuba City (YUBC1/YWPC1) forecast point moved further upstream

# Russian River Basin

OLD



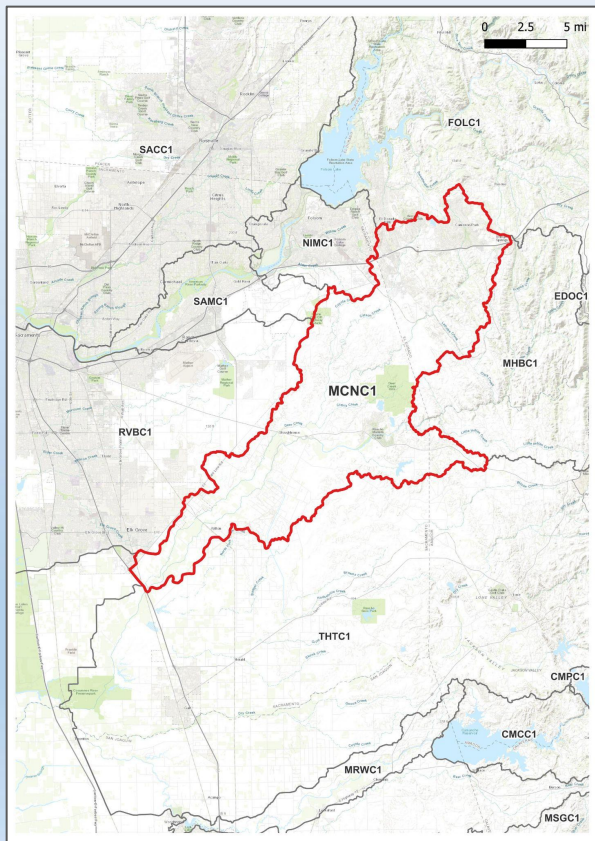
NEW



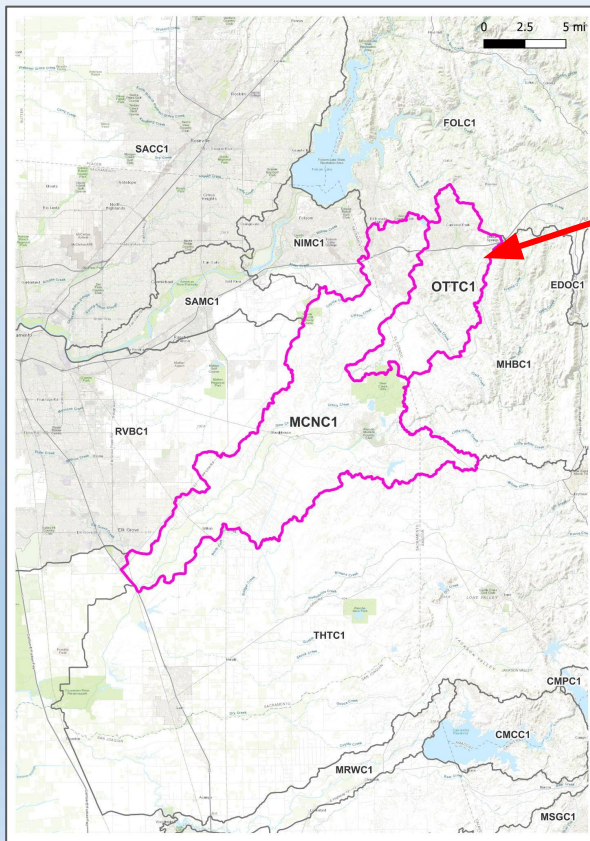
Added DGYC1 to support USACE operations at Lake Sonoma & the ongoing FIRO study

# Cosumnes River Basin

OLD



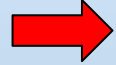
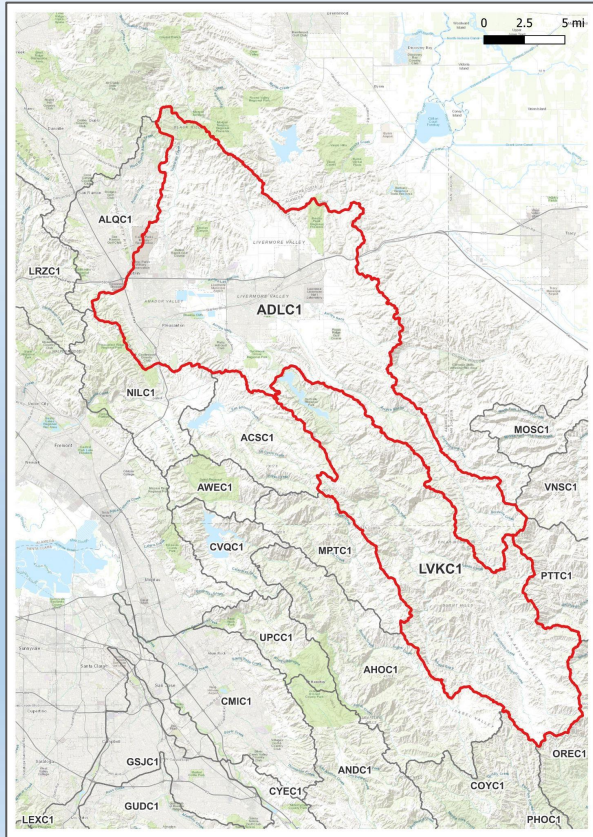
NEW



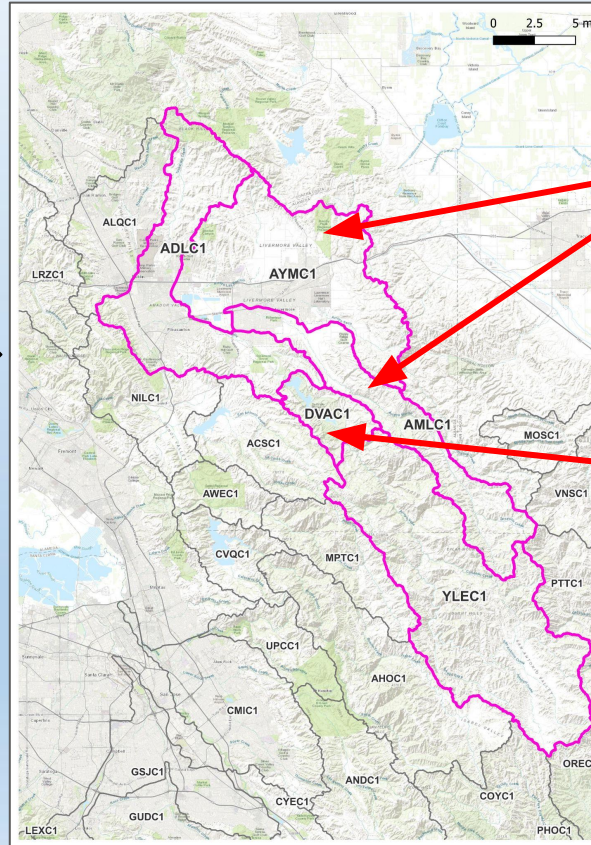
Added OTTC1 to support  
DWR HEC-RAS real-time  
inundation mapping/  
modeling

# Arroyo Valle & Arroyo Mocho

OLD



NEW



AYMC1 and AMLC1 added for Zone 7 Water Agency

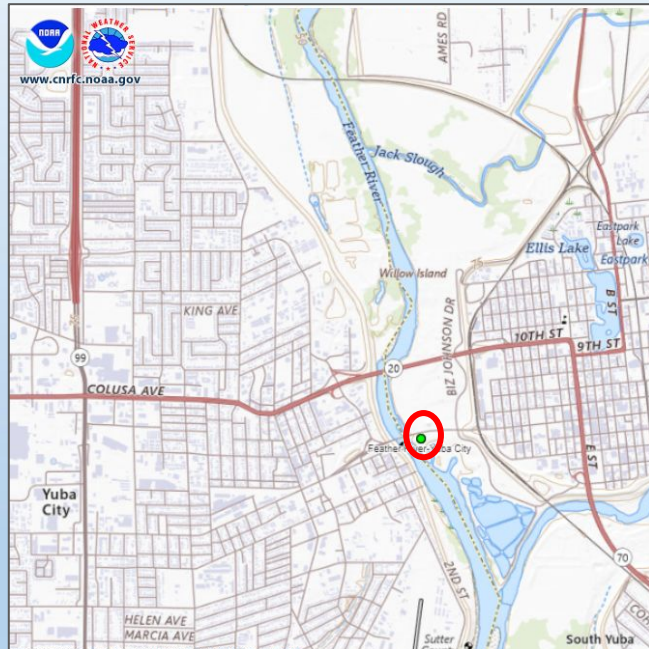
DVAC1 added for better inflow modeling to Del Valle

NOTE - LVKC1 is now DVAC1

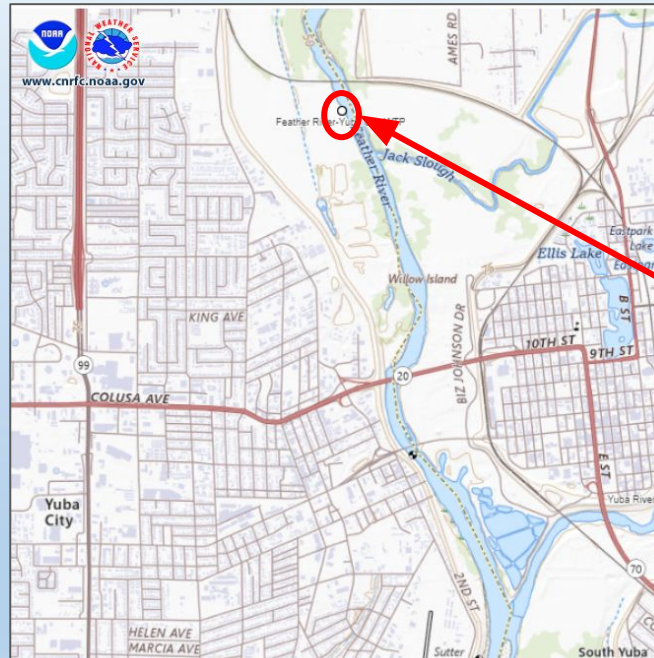


# Feather River

OLD



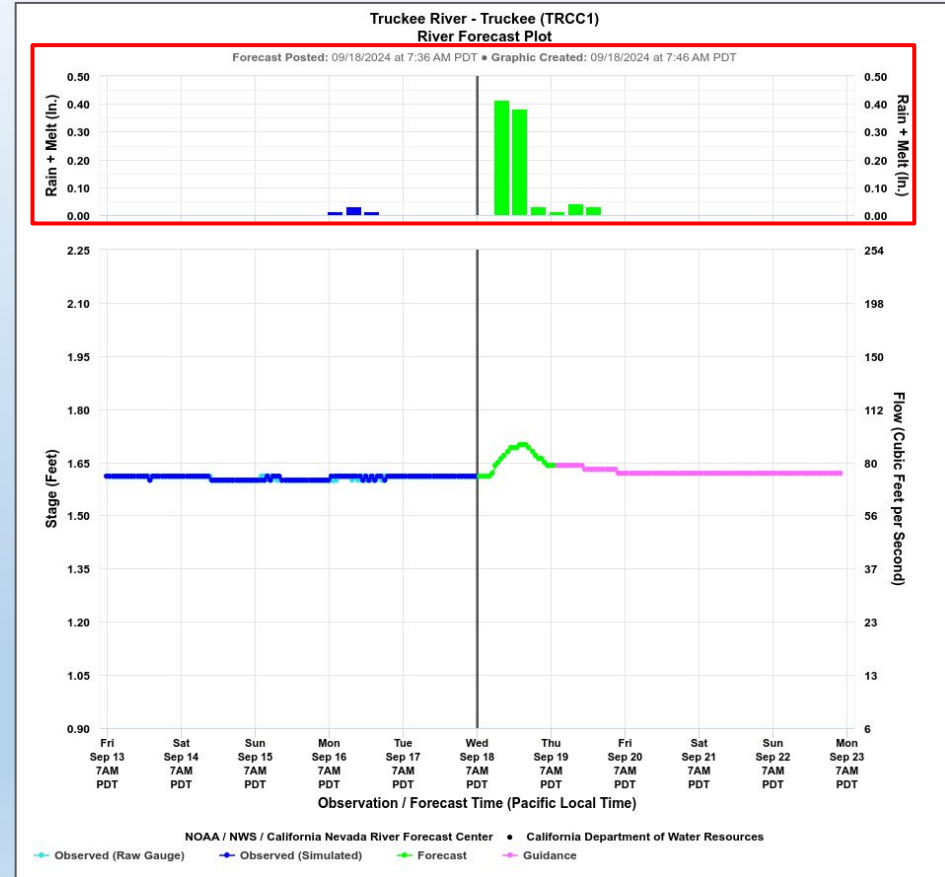
NEW



The gauge moved 3 miles upstream. YUBC1 is now YWPC1. HEC-RAS simulations helped improve the modeling of the complex backwater situation for this forecast point.

# MAPs replacing Rain + Melt

- Updating gRVFs to display MAPs rather than Rain + Melt
  - MAPs will be the local basin only, not a weighted average
  - Will add clarity to hydrograph verification plots
- Implementation target date is Nov 1st, 2024





# Hourly QPE/QPF Modeling

- For some of our flashier basins, we've been experimenting with adding hourly forcings (observed and forecast precipitation)
- Method uses MRMS to time distribute our 6-hr quality-controlled observed precipitation grids and the NBM to time distribute our 6-hr CNRFC issued QPF (out to 48 hours)
- Last year we implemented this method for
  - BTEC1 (San Lorenzo River)
  - SFCC1 (San Francisquito Creek)
- This year we added this technique at 28 additional locations



Group	Basin
Salinas	BSRC1
	BTEC1
SoCal	SLUC1
	VRVC1
	CLLC1
SanDiego	MUTC1
	SMHC1
	YDRC1
	FSNC1
East Sierra	TRCC1
	SCRN2
	VISN2

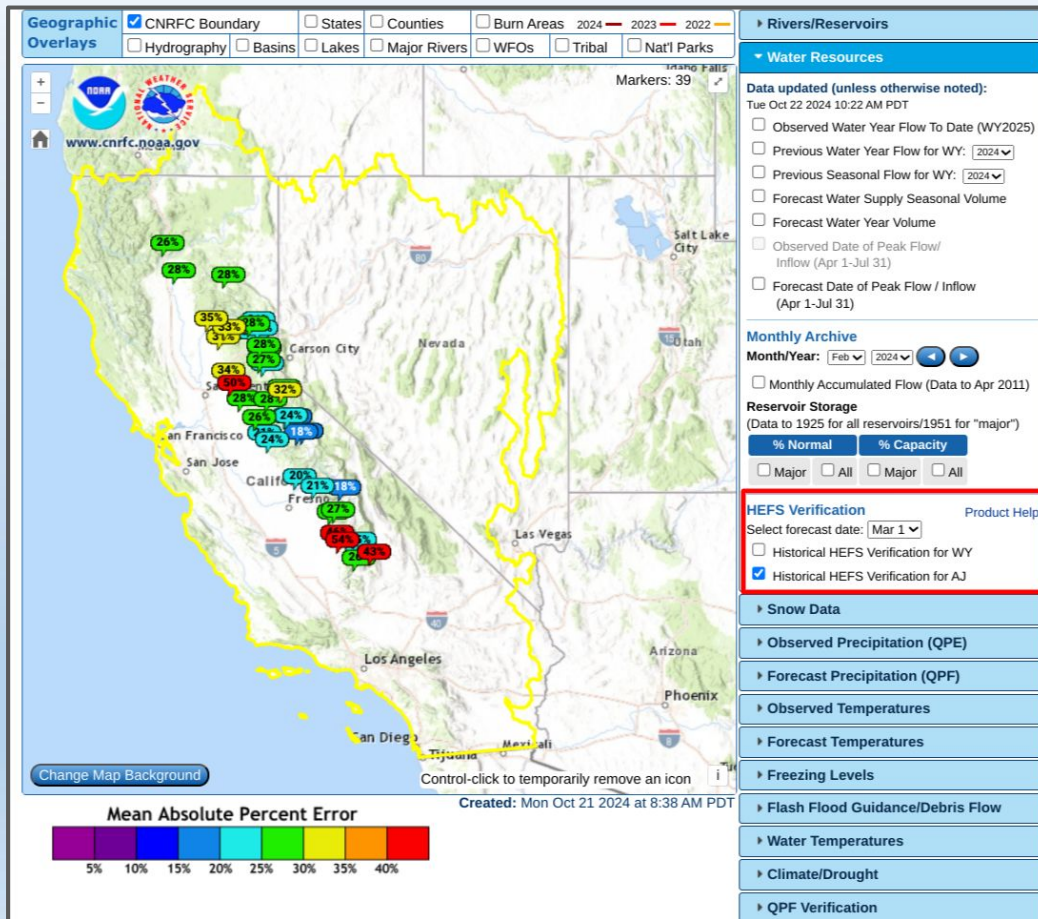
Group	Basin
CachePutah	HCHC1
	RMSC1
Russian	UKAC1
	HOPC1
	CTIC1
	SSAC1
	SHEC1
South Bay	GUDC1
	GSJC1
	MPTC1
	AWEC1
	ALQC1
	ADLC1
	NILC1
	LRZC1
	AMLC1
	AYMC1
SFCC1	



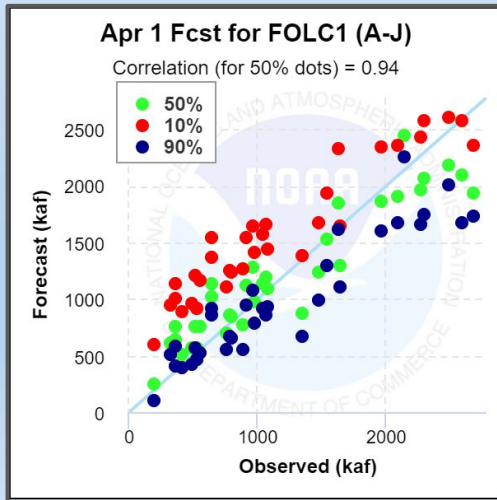
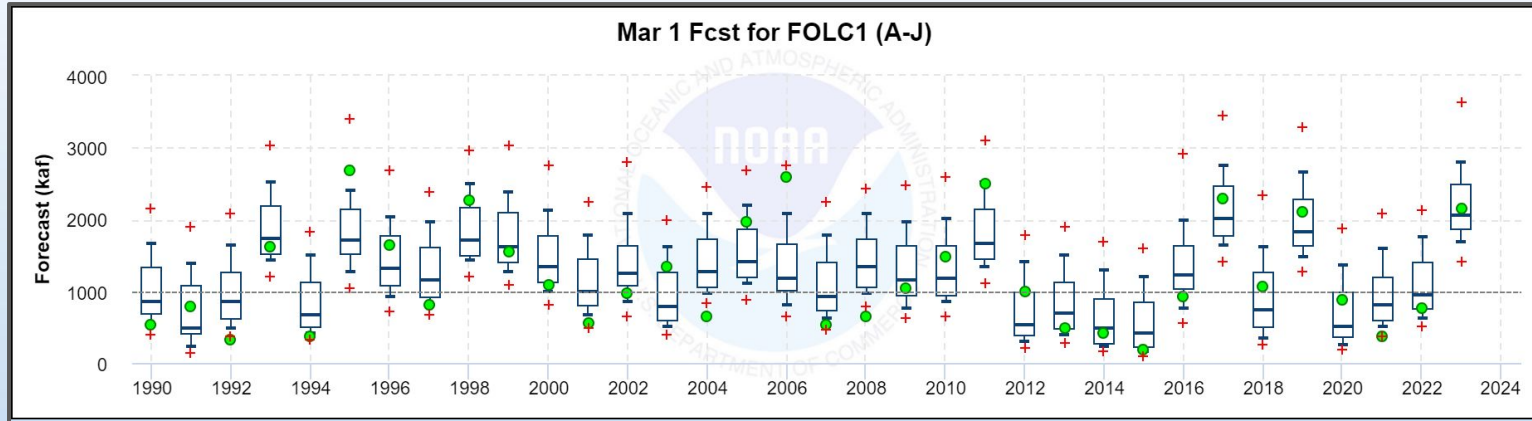
# CNRFC Water Supply Hindcast Verification



<https://www.cnrfc.noaa.gov/?product=hefsHindcastVerificationseas>



# Water Supply Hindcasting



- Water year and seasonal water supply verification graphics updated with new hindcast data sets (*overall improvement over the 1985-2010 verification period previously completed in 2016*)
- Hindcasts were run for reservoirs where long-range water supply forecast services are provided
- Period spans 1990 through 2023 (old period was 1986-2010)