April 2025
Water Supply Briefing

Colorado Basin
River Forecast Center
National Weather Service

Briefing Overview

Soil Moisture Conditions

Observed Precipitation

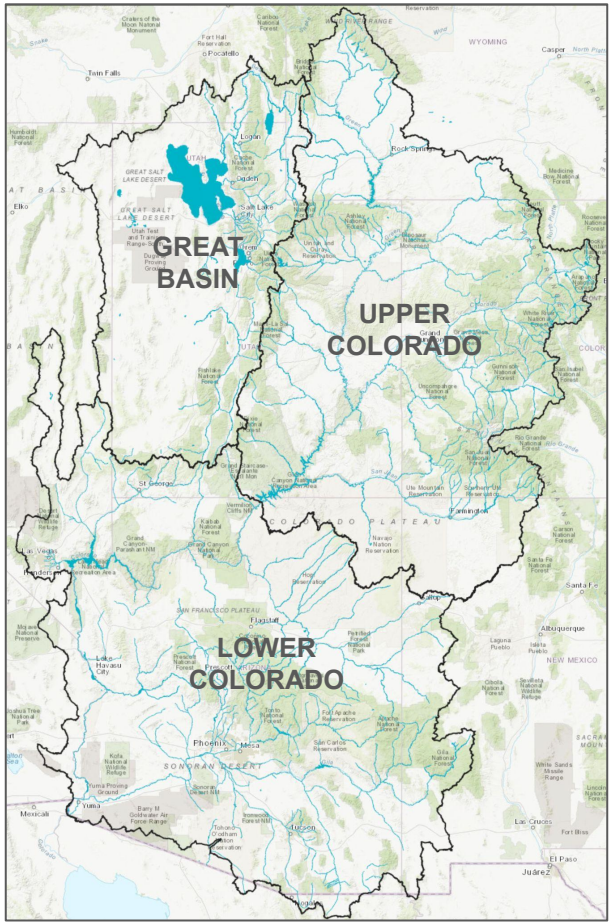
Snowpack Conditions

Water Supply Forecasts

April Forecast Error

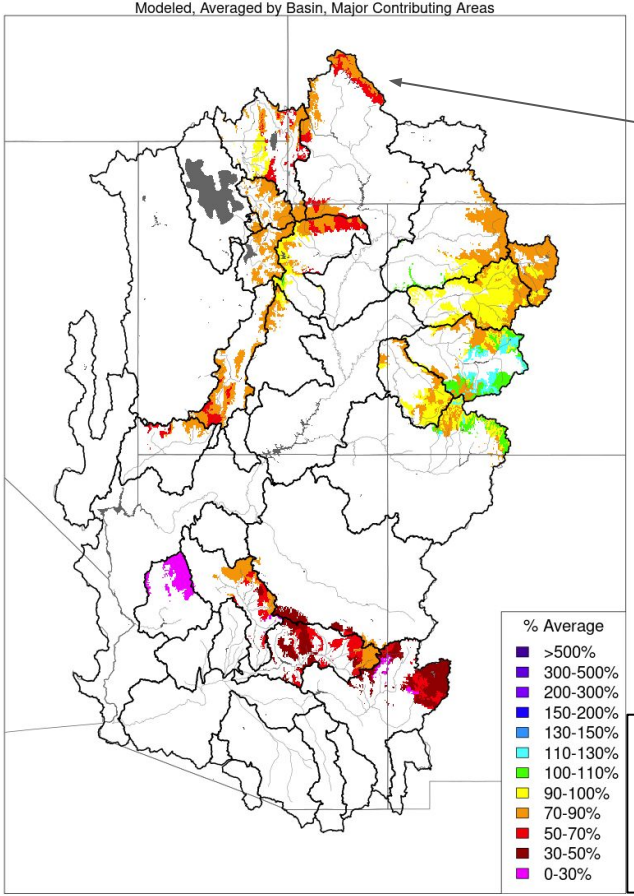
Upcoming Weather

Contacts & Questions



CBRFC Hydrologic Model Soil Moisture Conditions

Soil Moisture - Fall - 2024 (November 15)
Modeled, Averaged by Basin, Major Contributing Areas



Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov

Below Normal + Worse
Upper Green, Utah

Near/Below Normal + Similar
White/Yampa, Colorado River Headwaters

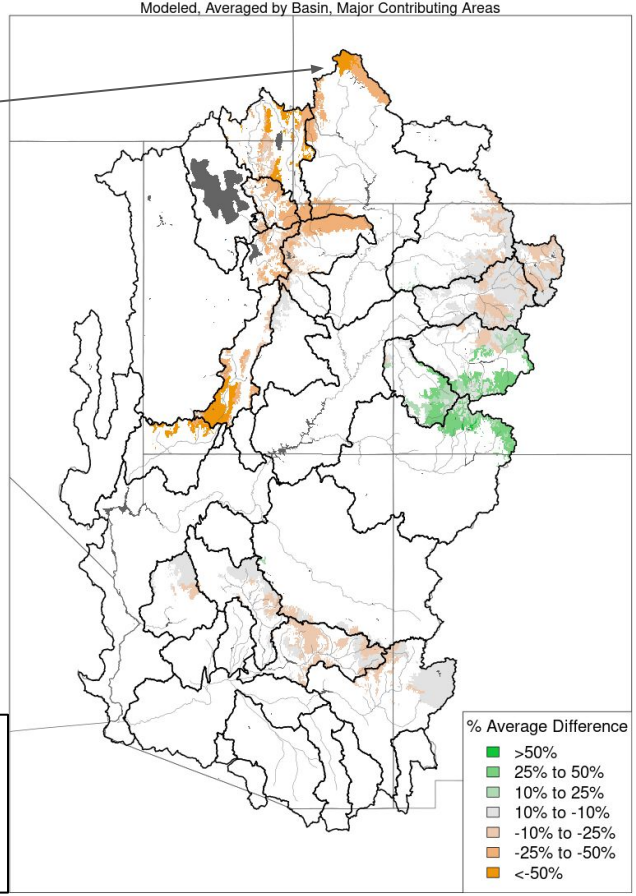
Near/Above Normal + Better
Gunnison, Dolores, San Juan

Below Normal + Similar
Lower Colorado

Soil Moisture Impacts on Water Supply / Runoff
Above normal → positive impact (increased runoff efficiency)
Below normal → negative impact (decreased runoff efficiency)

Spring runoff timing and magnitude factors:
snowpack conditions, spring weather, soil moisture conditions

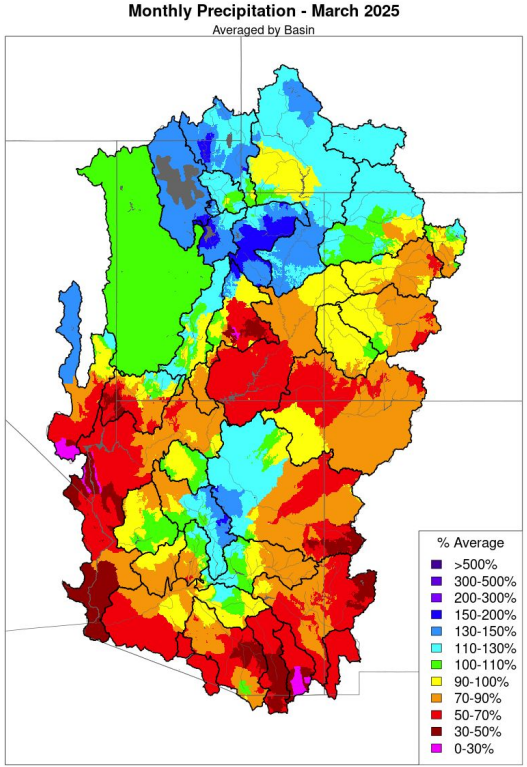
Soil Moisture - Fall - 2024 vs 2023
Modeled, Averaged by Basin, Major Contributing Areas

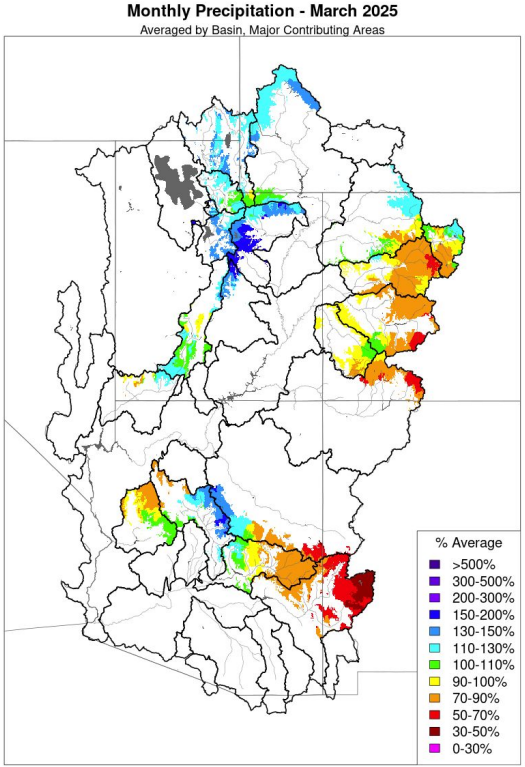


Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov

March 2025 Precipitation

March brought stretches of both active and quiet weather.
Most of the significant runoff areas ended the month within 30% of average March precipitation.





Water Year 2025 CBRFC Precipitation (Major Contributing Areas) Percent of 1991-2020 Average		
UPPER COLORADO RIVER BASIN		
	Mar	Oct-Mar
Above Lake Powell	99	91
Green River Basin		
Above Fontenelle	126	106
Above Flaming Gorge	123	105
Yampa/White	106	101
Duchesne	131	91
Price/San Rafael/Dirty Devil	153	105
Colorado River Headwaters		
Above Kremmling	97	102
Eagle	78	98
Roaring Fork	89	87
Above Cameo	89	95
Southwest Colorado		
Gunnison	88	88
Dolores	94	83
San Juan	73	70
LOWER COLORADO RIVER BASIN		
Virgin	95	58
Little Colorado	104	45
Verde	133	47
Salt	90	33
Upper Gila	66	26
GREAT BASIN		
Bear	123	100
Weber	116	94
Six Creeks	132	98
Provo/Utah Lake	137	96
Sevier	113	78

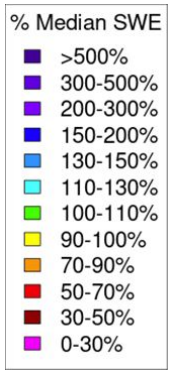
Snowpack Conditions

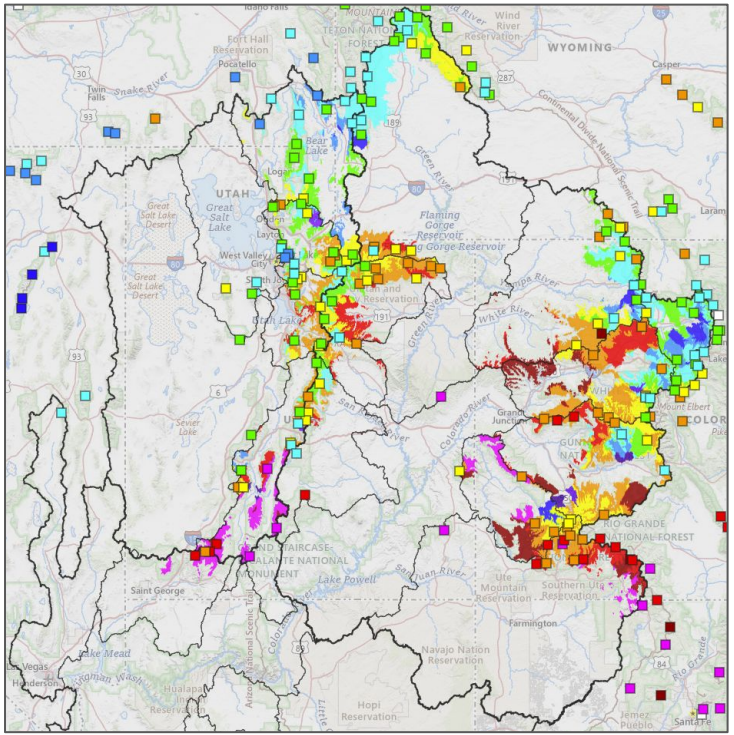
April 6 SWE Conditions

NRCS SNOTEL Observed (Squares)
CBRFC Model (Significant Areas)

SWE = Snow Water Equivalent
The amount of water in snow.

Better Conditions - North
Worse Conditions - South





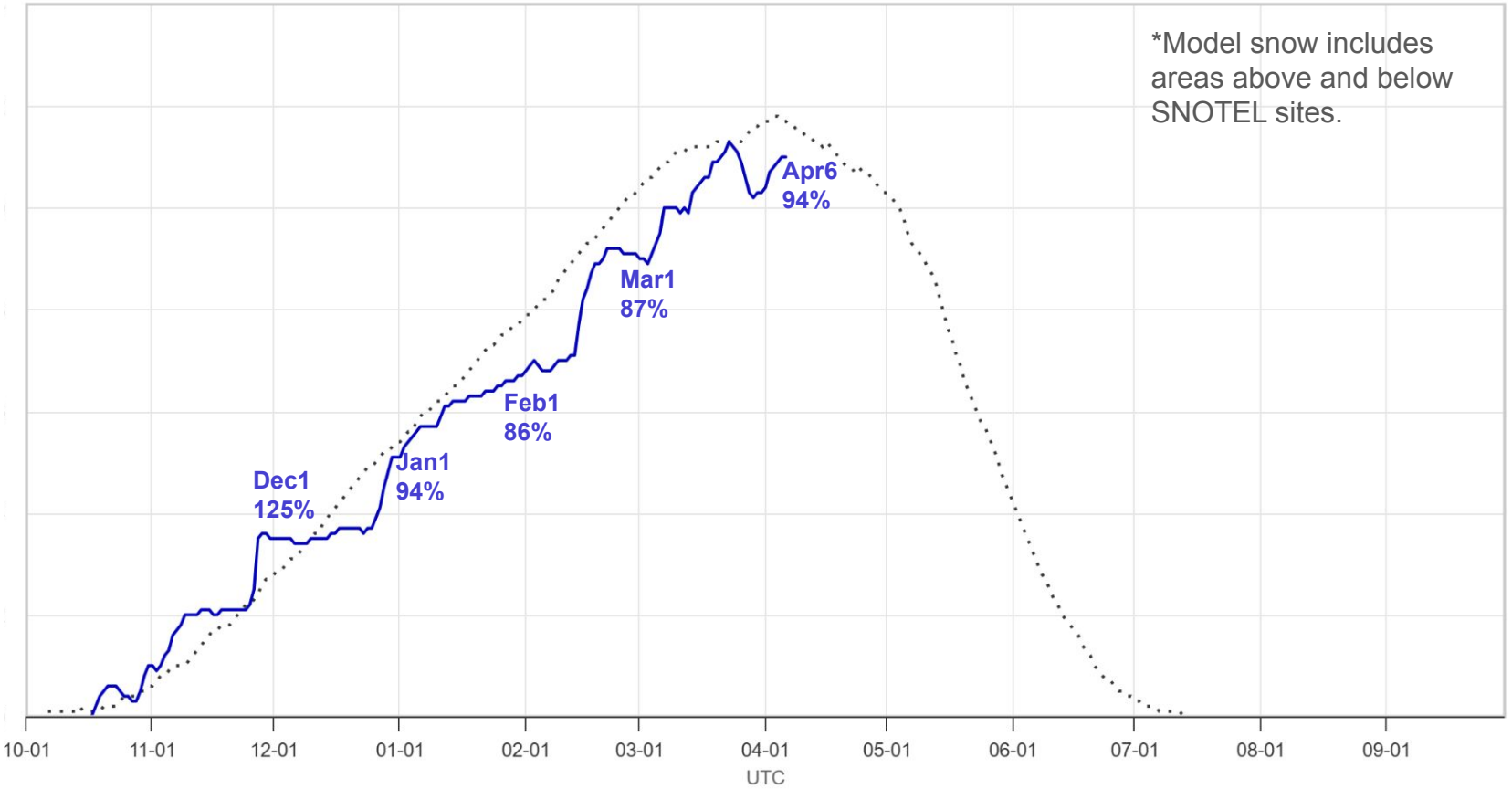
Water Year 2025 CBRFC Model SWE (Major Contributing Areas) Percent of 1991-2020 Median			
UPPER COLORADO RIVER BASIN			
	Mar1	Apr1	Change
Above Lake Powell	87	89	2
Green River Basin			
Above Fontenelle	101	106	5
Above Flaming Gorge	97	100	3
Yampa/White	102	102	0
Duchesne	79	91	12
Price/San Rafael/Dirty Devil	77	89	12
Colorado River Headwaters			
Above Kremmling	115	111	-4
Eagle	110	100	-10
Roaring Fork	90	91	1
Above Cameo	103	99	-4
Southwest Colorado			
Gunnison	88	86	-2
Dolores	59	66	7
San Juan	53	59	6
GREAT BASIN / UTAH			
Bear	105	104	-1
Weber	92	97	5
Six Creeks	89	99	10
Provo/Utah Lake	86	93	7
Sevier	40	47	7
Virgin	10	14	4

UCRB 60-110%

GB 45-105%

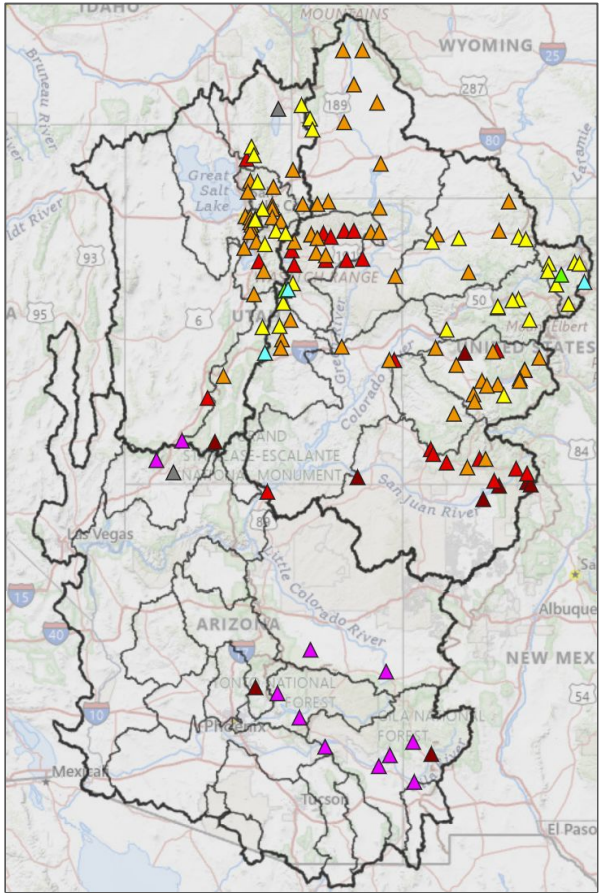
Water Year 2025 UCRB Snowpack Evolution

CBRFC Hydrologic Model SWE Above Lake Powell (Major Contributing Areas)



April 1 Water Supply Forecasts

% Normal
- < 30%
- 30-50%
- 50-70%
- 70-90%
- 90-100%
- 100-110%
- 110-130%
- 130-150%
- 150-200%
- 200-300%
- 300-500
- >500%
- Regulated



Colorado Basin River Forecast Center Water Supply Forecasts
April 1, 2025

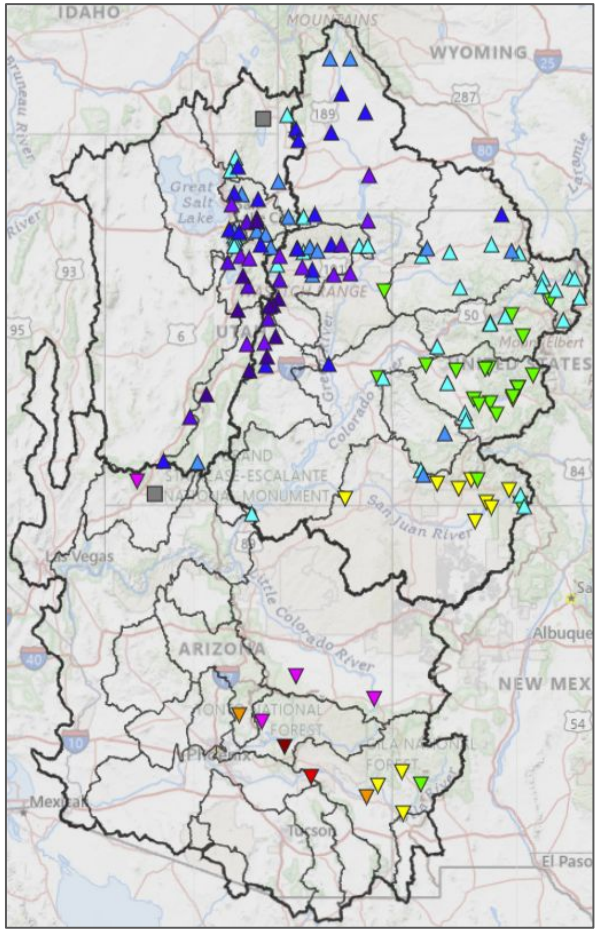
Basin	Volume (KAF)	%Normal (1991-2020)	Period
UPPER COLORADO RIVER BASIN			
Lake Powell	4300	67	Apr-Jul
Green River Basin			
Green-Flaming Gorge Reservoir	770	80	Apr-Jul
Yampa-Deerlodge	1120	94	Apr-Jul
Duchesne-Tabiona	83	81	Apr-Jul
Colorado River Headwaters			
Colorado-Kremmling	870	100	Apr-Jul
Eagle-Gypsum	310	93	Apr-Jul
Roaring Fork-Glenwood Springs	540	82	Apr-Jul
Colorado-Cameo	2050	90	Apr-Jul
Southwest Colorado			
Gunnison-Blue Mesa Reservoir	540	85	Apr-Jul
Dolores-McPhee Reservoir	141	55	Apr-Jul
San Juan-Navajo Reservoir	300	48	Apr-Jul
Animas-Durango	270	70	Apr-Jul
LOWER COLORADO RIVER BASIN			
Virgin-Virgin (*Regulated)	22	39	Apr-Jul
Little Colorado-Chevelon Creek	0.14	1	Jan-May
Verde-Above Horseshoe Dam	51	33	Jan-May
Salt-Roosevelt	38	15	Jan-May
Upper Gila-San Carlos Reservoir	11.1	15	Jan-May
GREAT BASIN			
Bear-UT/WY State Line	91	83	Apr-Jul
Weber-Oakley	88	79	Apr-Jul
Big Cottonwood Creek	29	85	Apr-Jul
Provo-Woodland	87	91	Apr-Jul
Sevier-Hatch	16.0	30	Apr-Jul

Apr-Jul runoff volumes as a percent of the 1991-2020 average.
Jan-May runoff volumes as a percent of the 1991-2020 median.

Water supply forecasts are generally below to well below normal.

Forecasts more favorable in areas with:
-better soil moisture conditions
-better snowpack conditions

Mar 1 → Apr 1 Trend in the Water Supply Outlook



CBRFC web map layer shows trend in the water supply outlook:

-increases in eastern/northern basins

-decreases in southern basins

Water Supply Forecasts

Official | Model | Compare | Observed

Enable | Disable Other

Forecast Difference ?

03/01/2025 Start

Official

Model

04/01/2025 End

Official

Model

Label

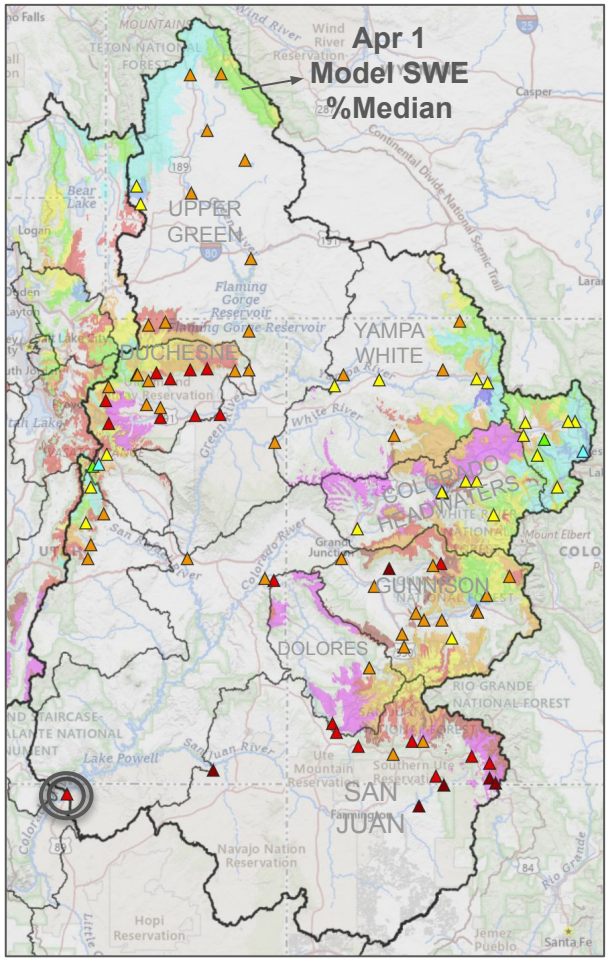
Percent Difference

Official 2025-03-01 vs

Official 2025-04-01

- <-25%
- -20% to -25%
- -15% to -20%
- -10% to -15%
- -5% to -10%
- 0% to -5%
- 0% to 5%
- 5% to 10%
- 10% to 15%
- 15% to 20%
- 20% to 25%
- >25%%
- Regulated
- No Forecast

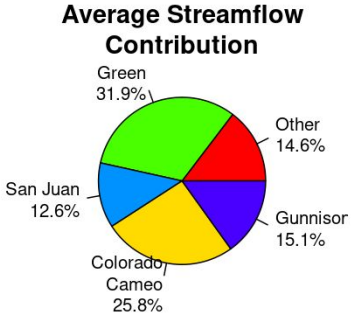
Upper Colorado River Basin Water Supply Summary

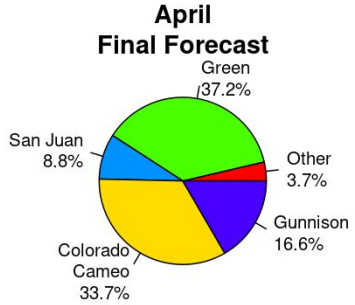


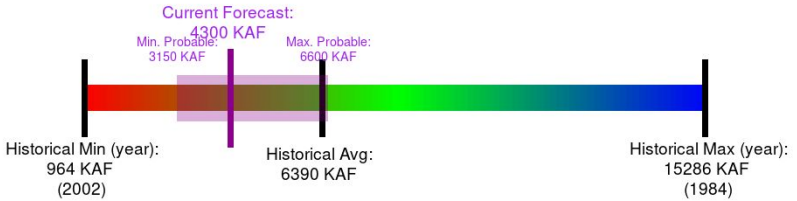
Lake Powell summarizes the hydrologic conditions throughout the Upper Colorado River Basin.

April - July Unregulated Inflow into Lake Powell

As of 2025-04-01

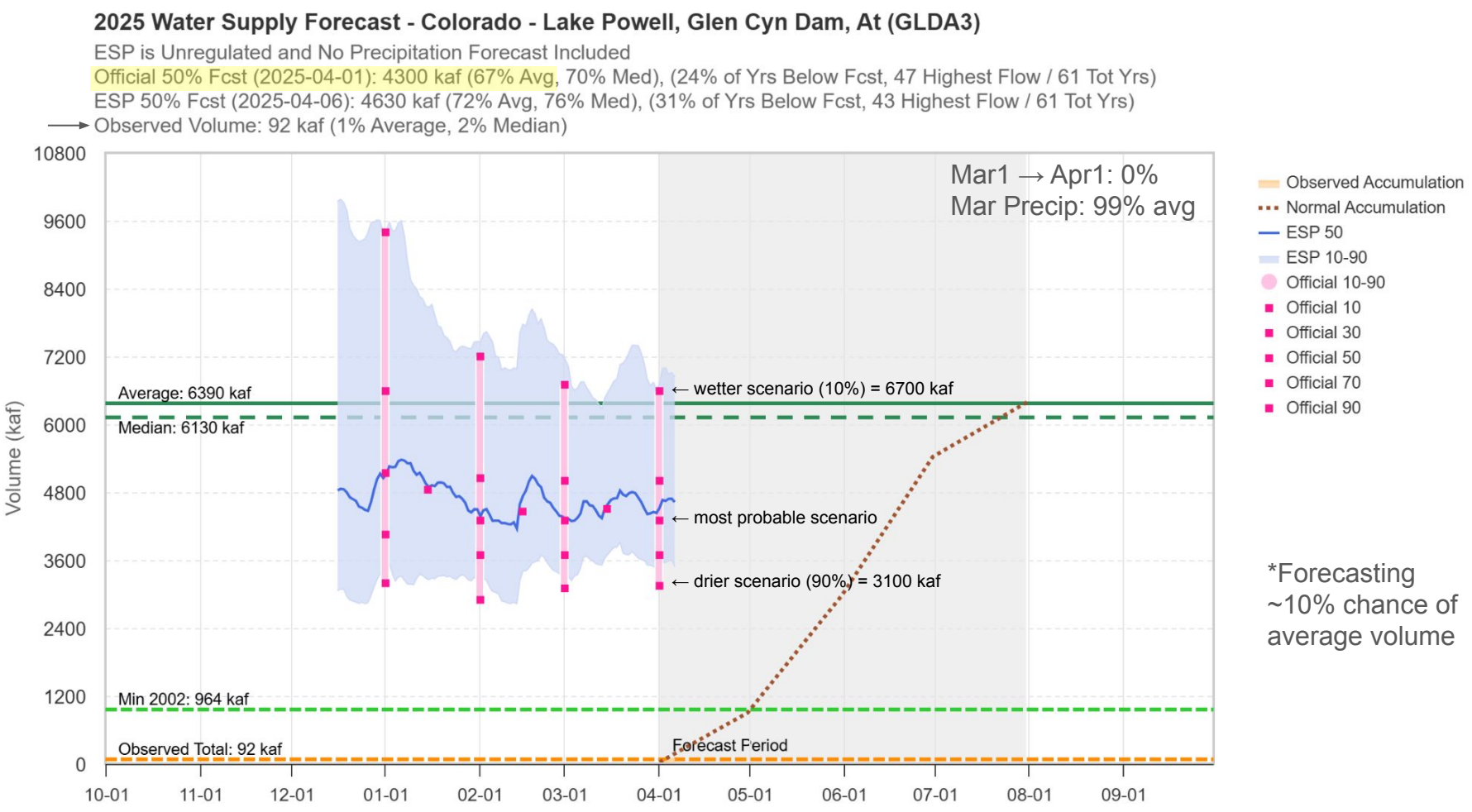






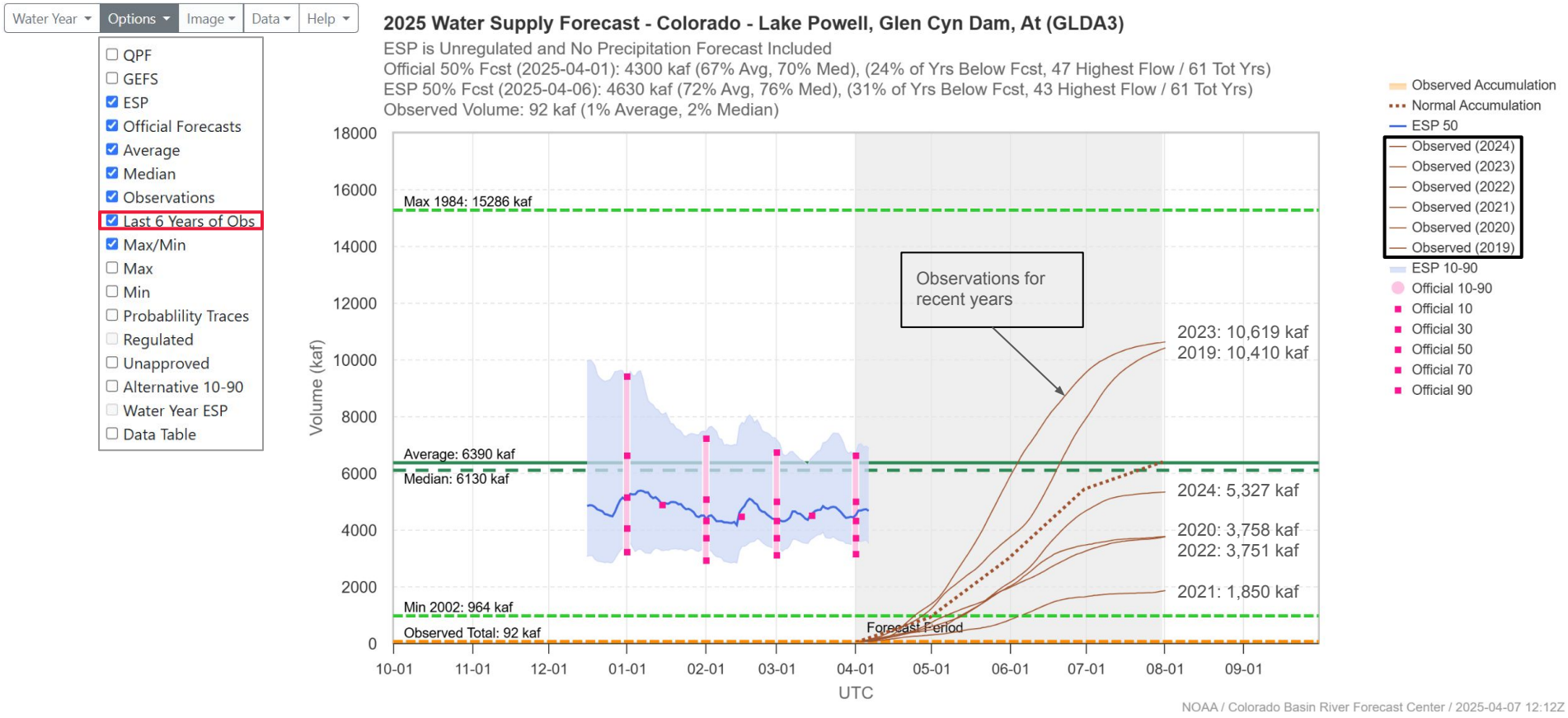
Averages are over the 1991 - 2020 period

Lake Powell Water Supply Forecast



*Forecasting ~10% chance of average volume

New Water Supply Plot Option: Observations for Recent Years

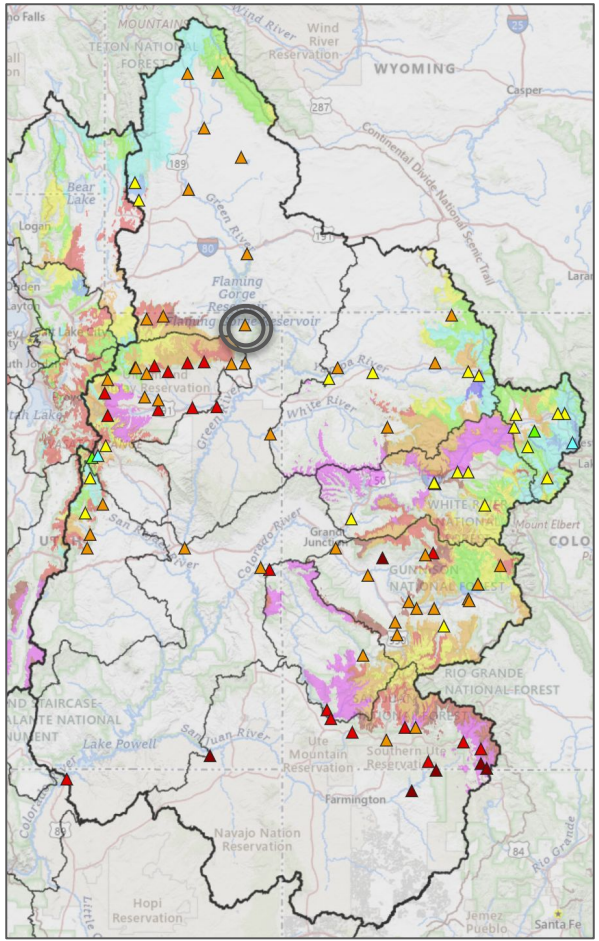


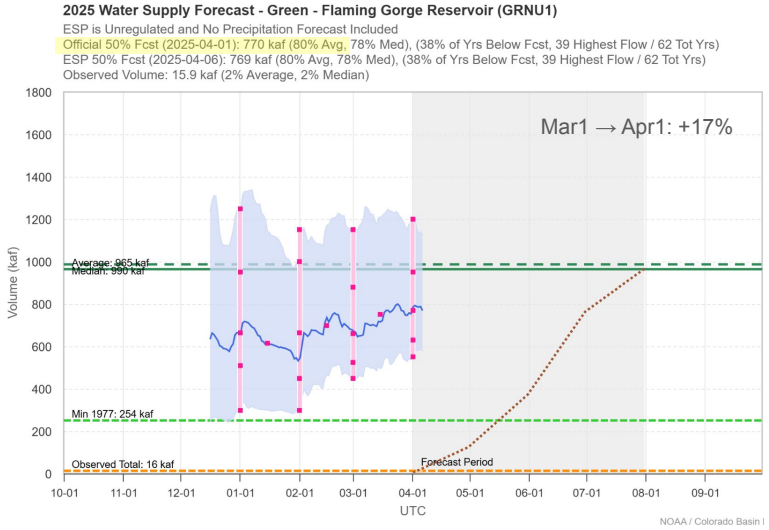
Upper Green River Basin - Flaming Gorge Reservoir

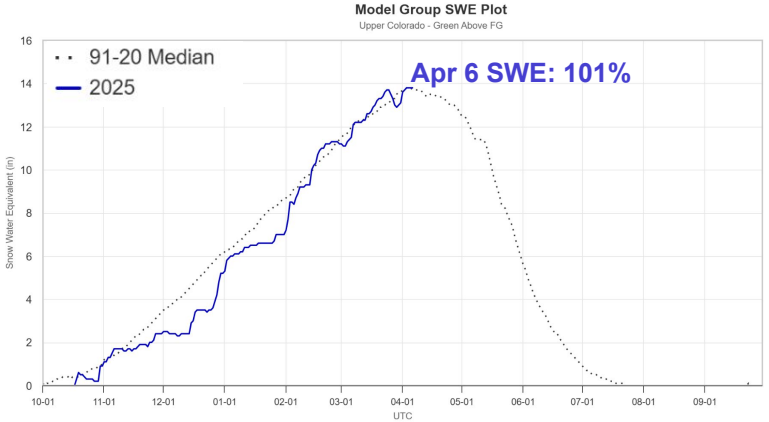
△ Water Supply Forecast

Model Snow

- >500%
- 300-500%
- 200-300%
- 150-200%
- 130-150%
- 110-130%
- 100-110%
- 90-100%
- 70-90%
- 50-70%
- 30-50%
- 0-30%





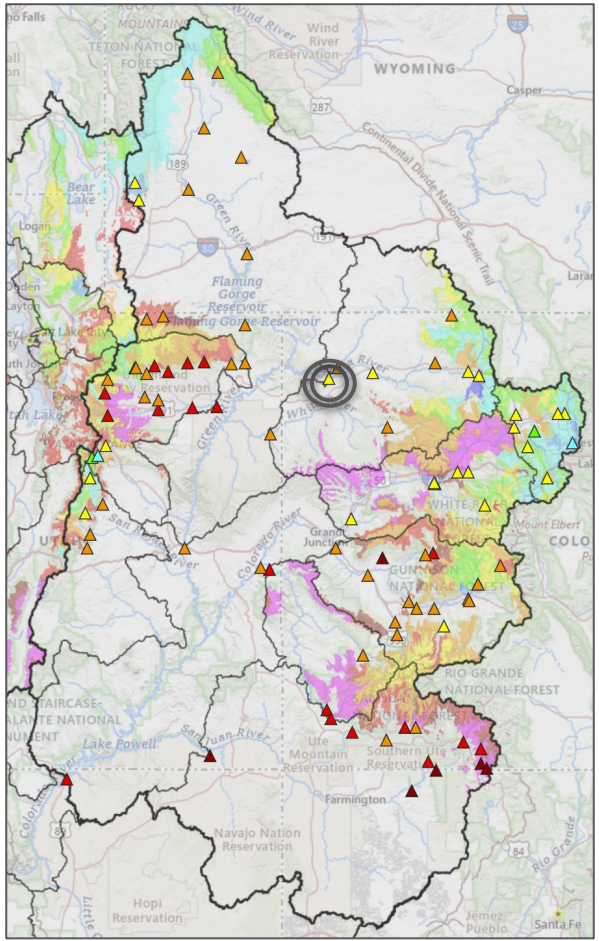


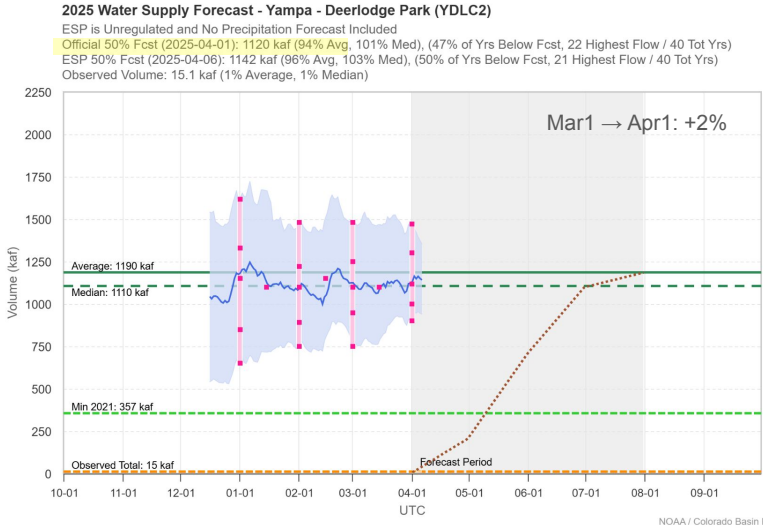
White/Yampa River Basin - Yampa-Deerlodge

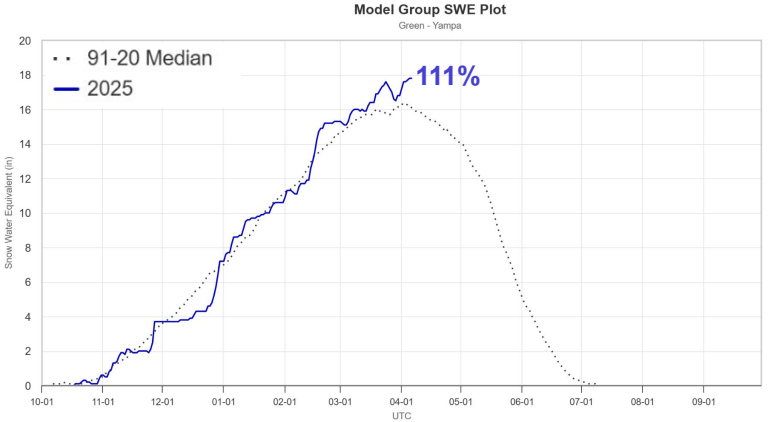
△ Water Supply Forecast

Model Snow

- >500%
- 300-500%
- 200-300%
- 150-200%
- 130-150%
- 110-130%
- 100-110%
- 90-100%
- 70-90%
- 50-70%
- 30-50%
- 0-30%





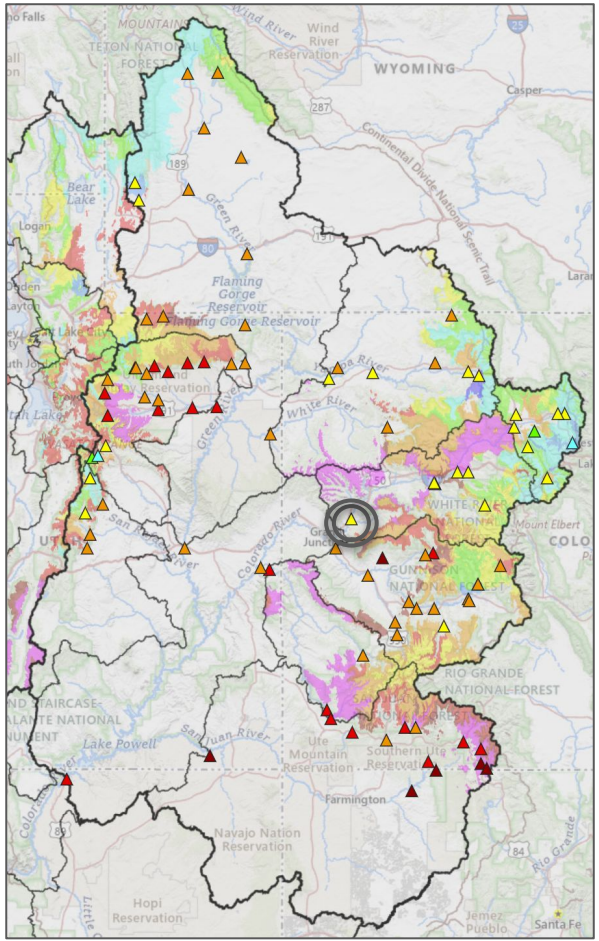


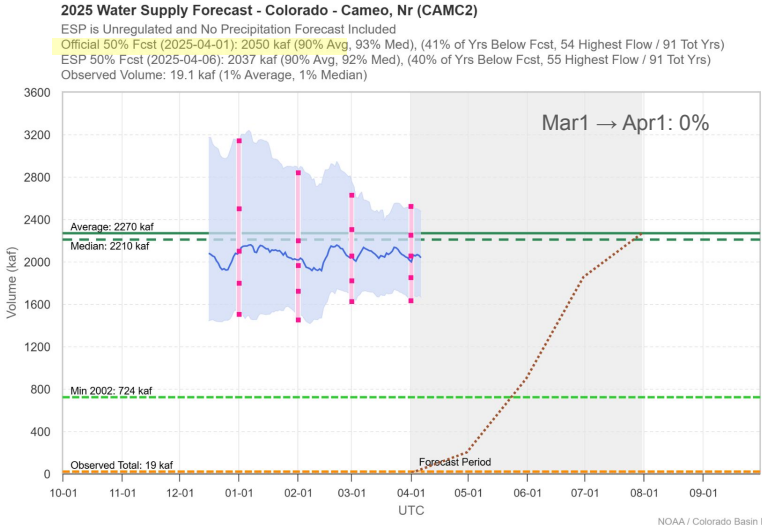
Colorado River Headwaters - Cameo

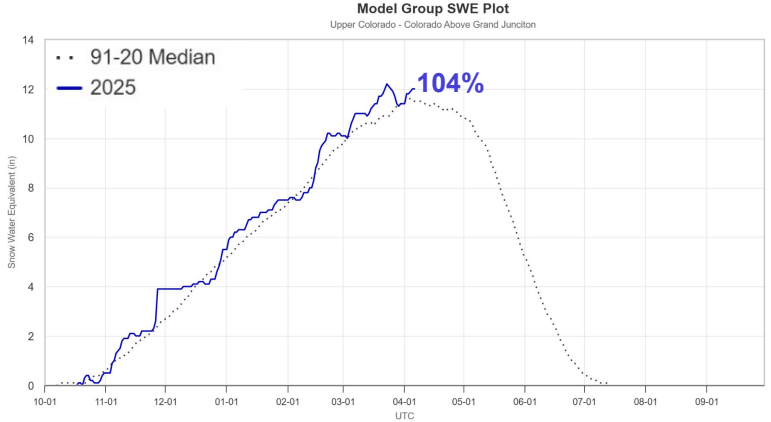
△ Water Supply Forecast

Model Snow

- >500%
- 300-500%
- 200-300%
- 150-200%
- 130-150%
- 110-130%
- 100-110%
- 90-100%
- 70-90%
- 50-70%
- 30-50%
- 0-30%





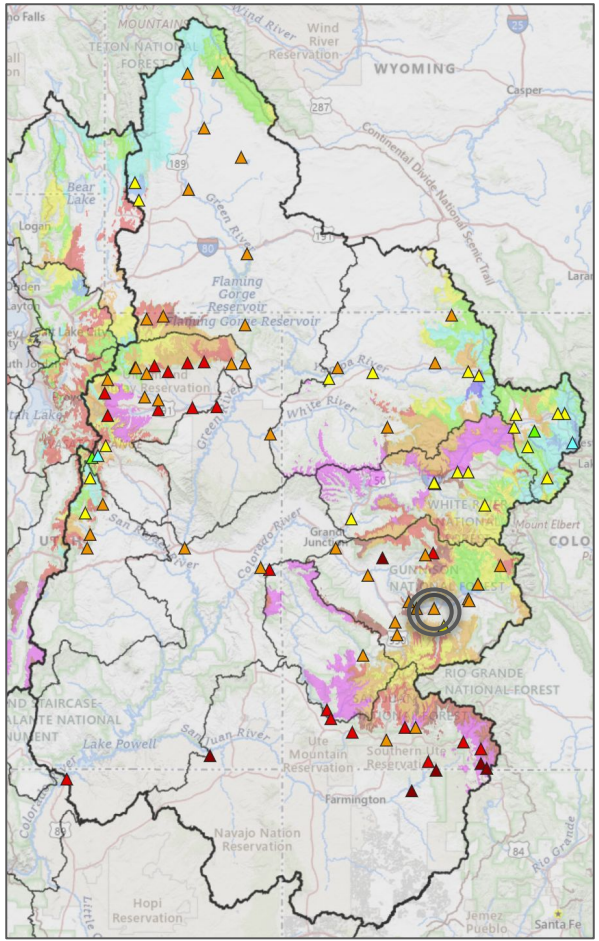


Gunnison River Basin - Blue Mesa Reservoir

△ Water Supply Forecast

Model Snow

- >500%
- 300-500%
- 200-300%
- 150-200%
- 130-150%
- 110-130%
- 100-110%
- 90-100%
- 70-90%
- 50-70%
- 30-50%
- 0-30%



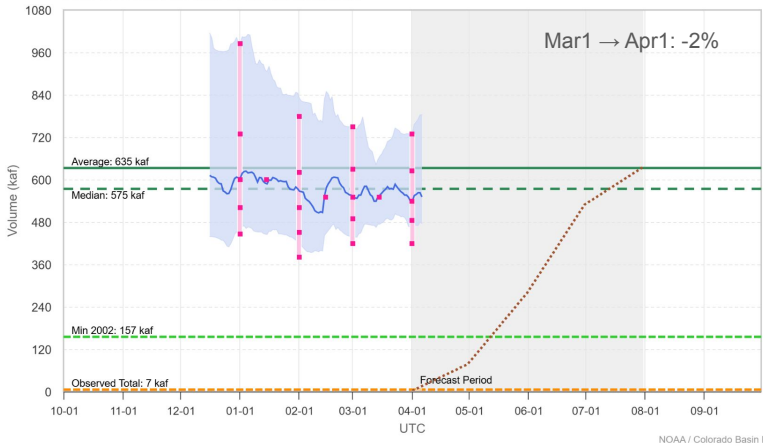
2025 Water Supply Forecast - Gunnison - Blue Mesa Reservoir (BMDC2)

ESP is Unregulated and No Precipitation Forecast Included

Official 50% Fcst (2025-04-01): 540 kaf (85% Avg, 94% Med), (39% of Yrs Below Fcst, 35 Highest Flow / 56 Tot Yrs)

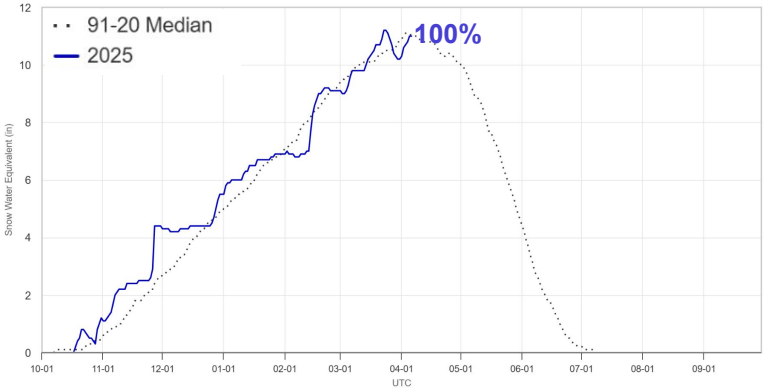
ESP 50% Fcst (2025-04-06): 551 kaf (87% Avg, 96% Med), (39% of Yrs Below Fcst, 35 Highest Flow / 56 Tot Yrs)

Observed Volume: 7.5 kaf (1% Average, 1% Median)



Model Group SWE Plot

Gunnison - Above Blue Mesa

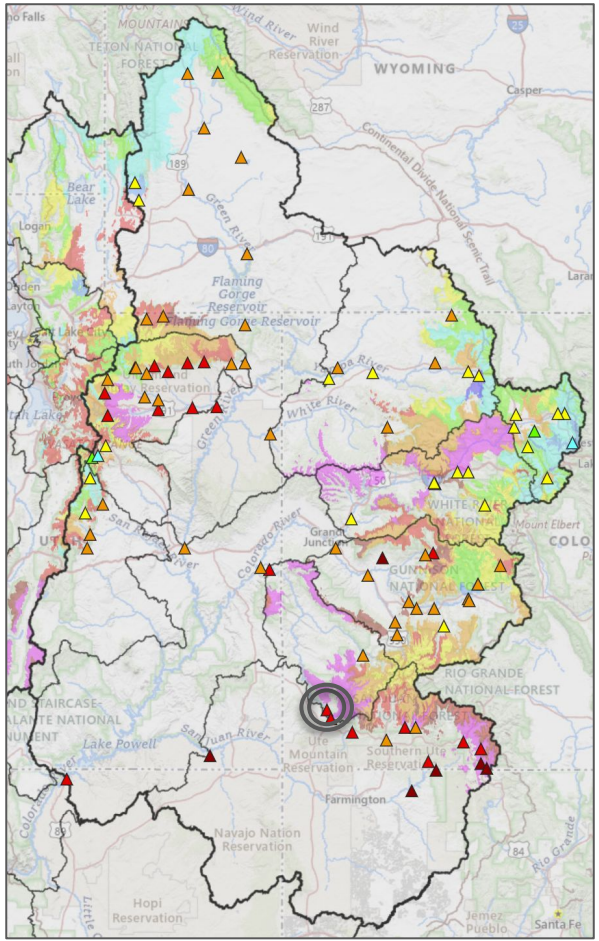


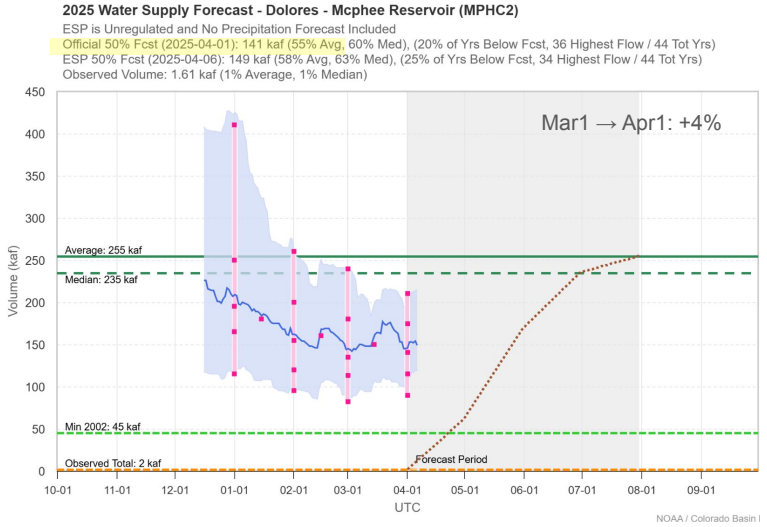
Dolores River Basin - McPhee Reservoir

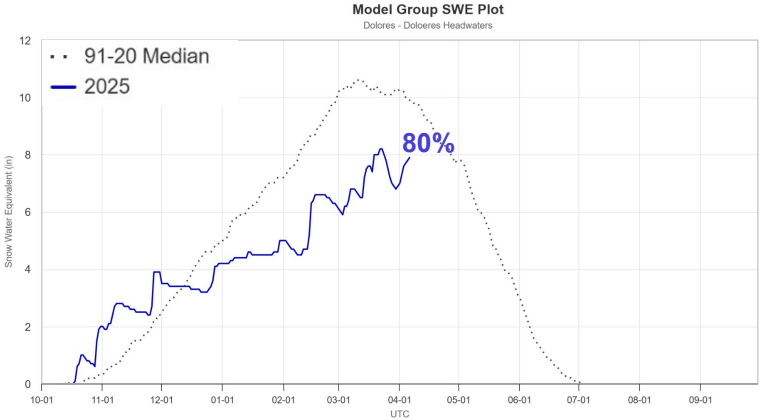
△ Water Supply Forecast

Model Snow

- >500%
- 300-500%
- 200-300%
- 150-200%
- 130-150%
- 110-130%
- 100-110%
- 90-100%
- 70-90%
- 50-70%
- 30-50%
- 0-30%





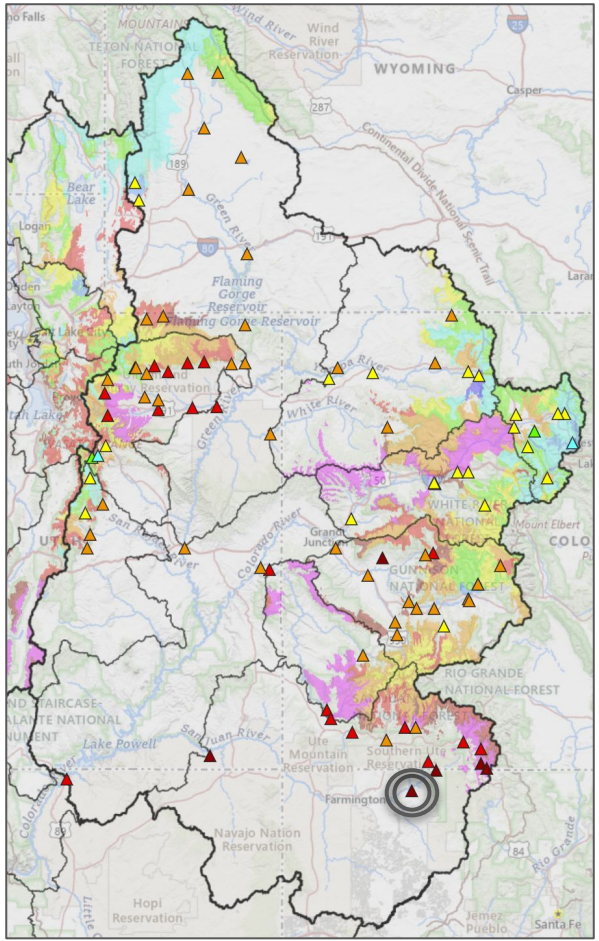


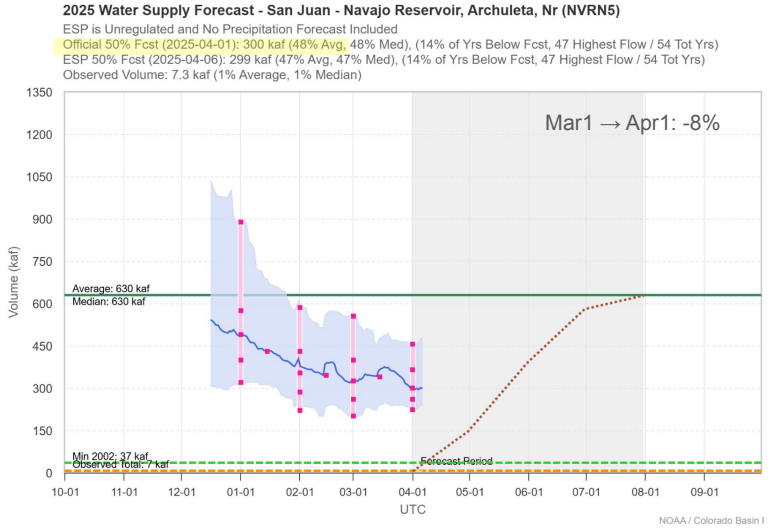
San Juan River Basin - Navajo Reservoir

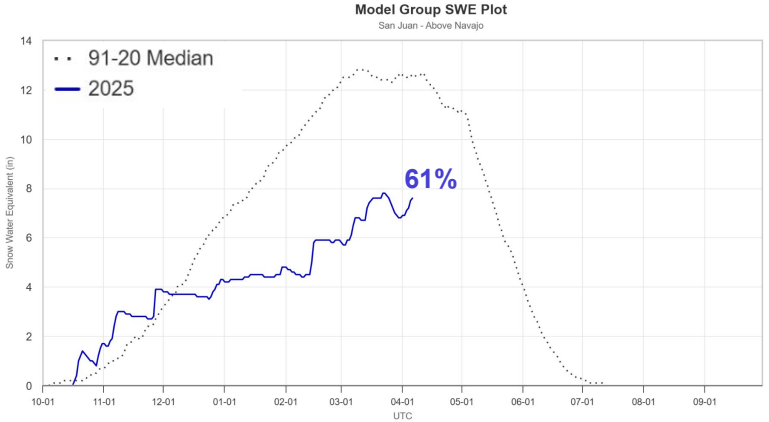
△ Water Supply Forecast

Model Snow

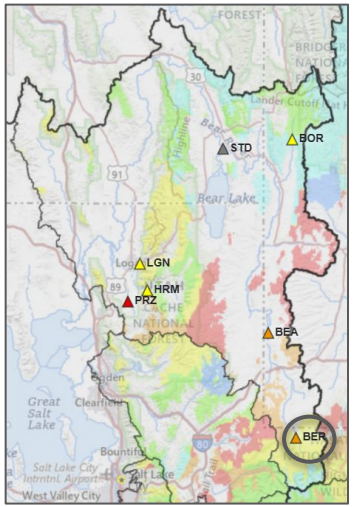
- >500%
- 300-500%
- 200-300%
- 150-200%
- 130-150%
- 110-130%
- 100-110%
- 90-100%
- 70-90%
- 50-70%
- 30-50%
- 0-30%

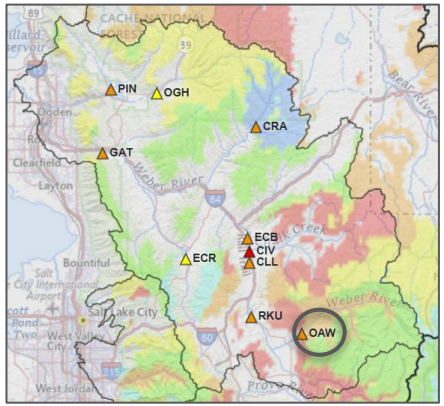


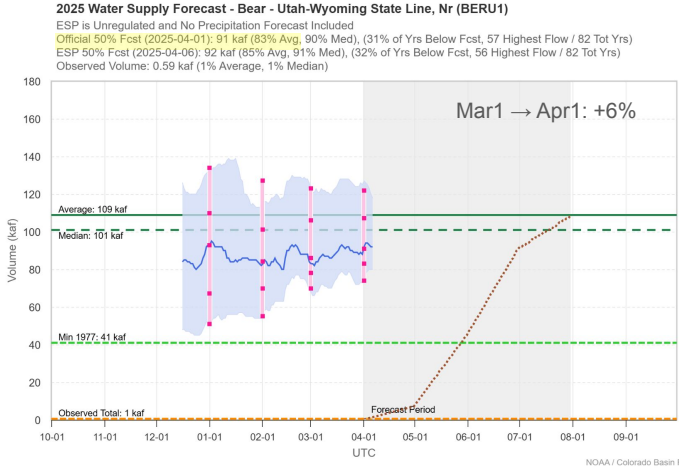


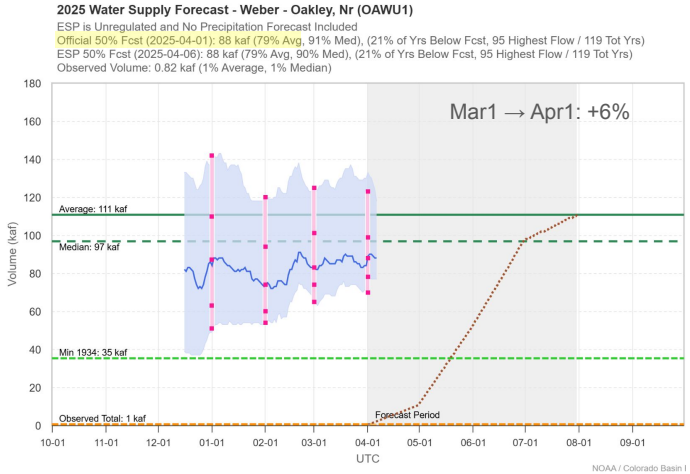


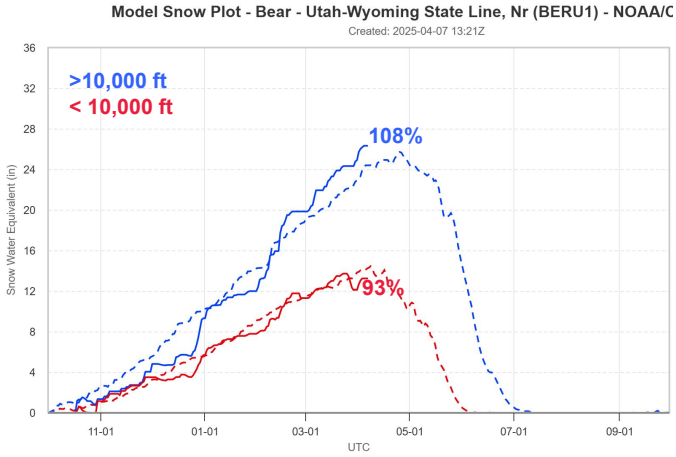
Great Basin: Bear & Weber River Basins

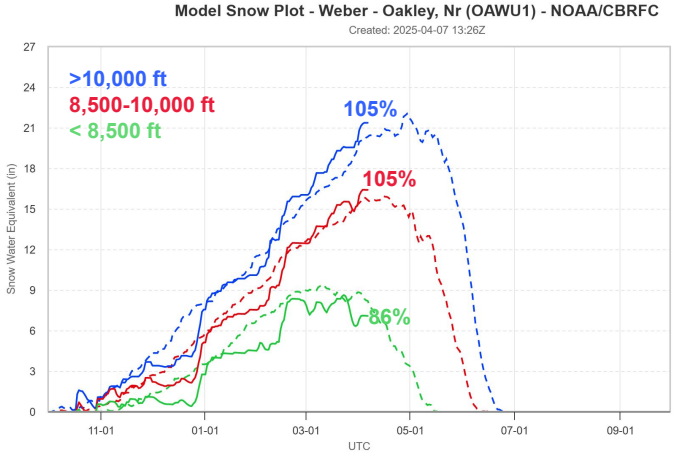




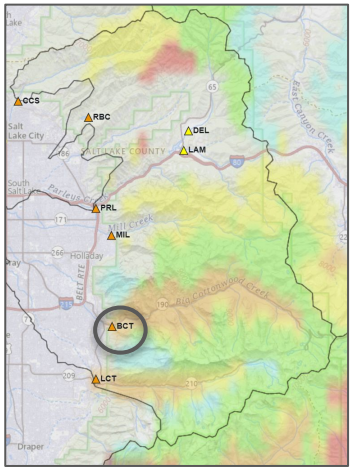


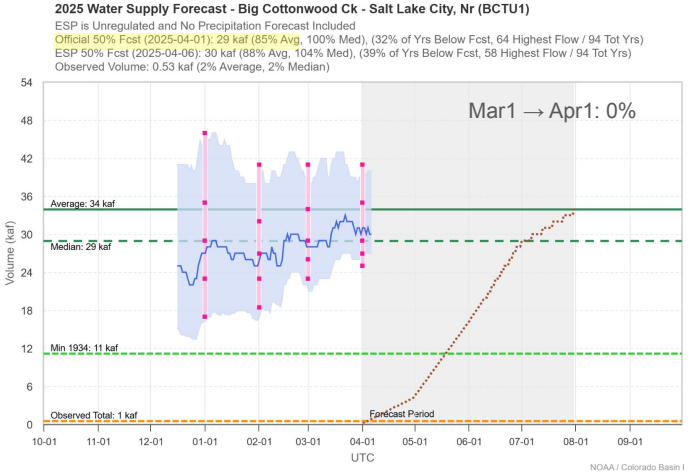


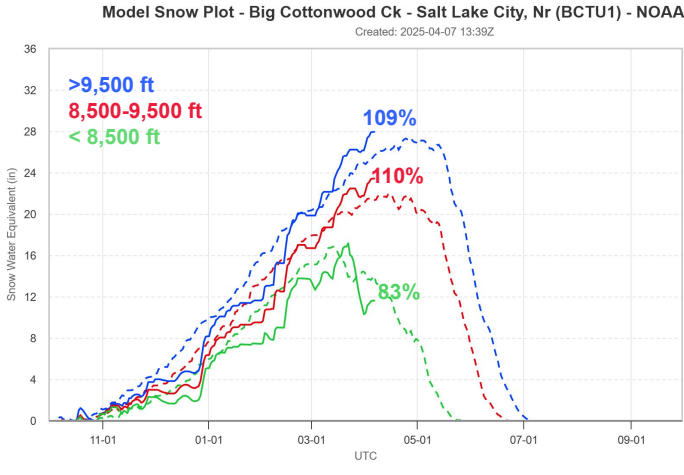


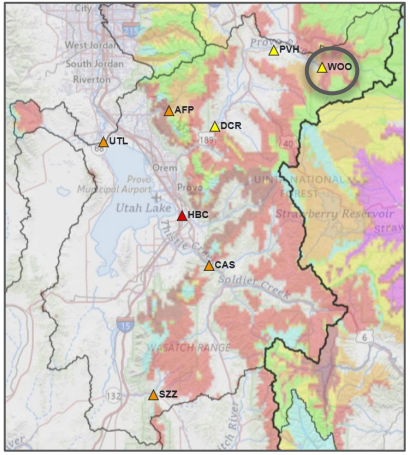


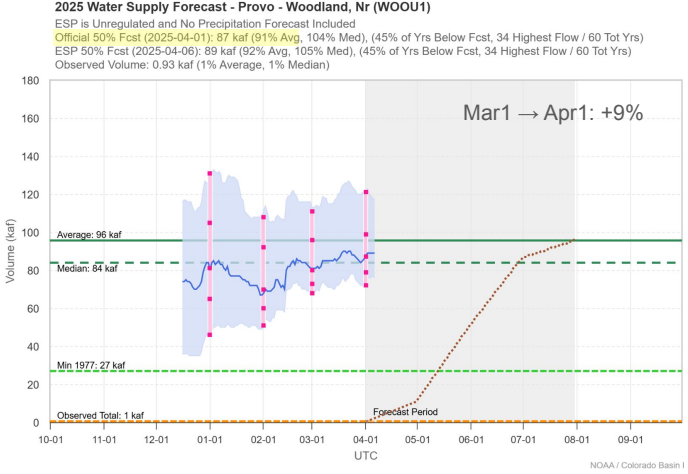
Great Basin: Big Cottonwood Creek & Provo River Basin

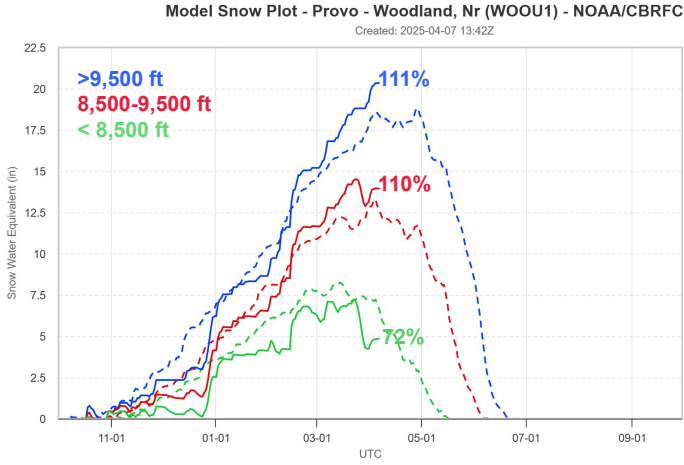






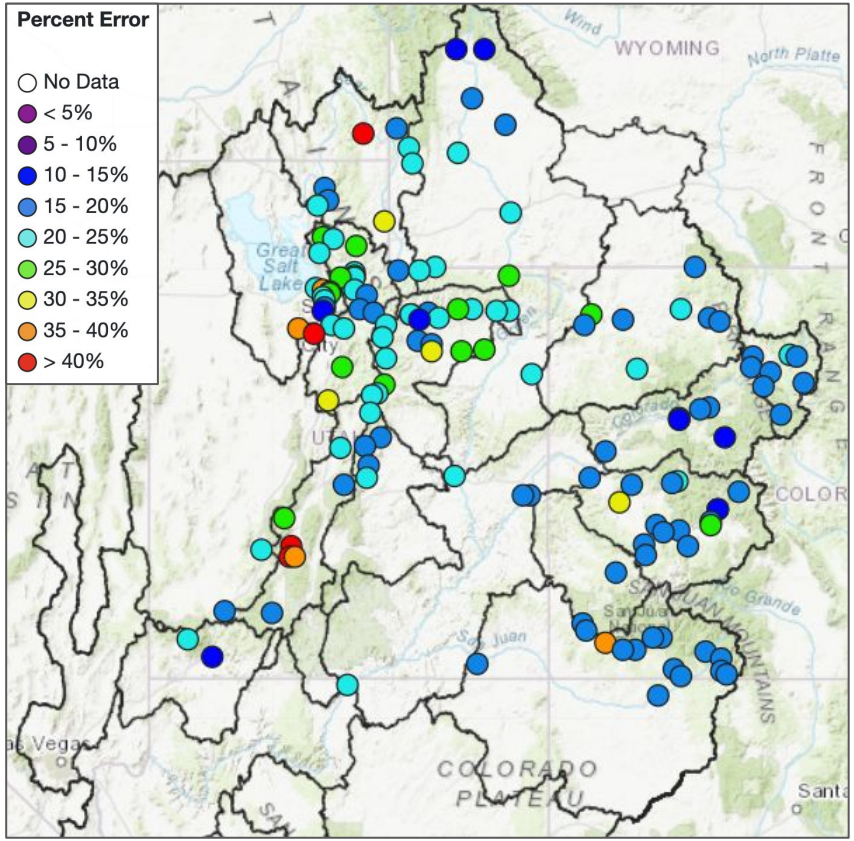






Historical Forecast Verification

April Forecast Error: April-July Volume



Location	Avg April Forecast Error
Green River - Warren Bridge	10%
Fontenelle Reservoir	21%
Yampa River - Deerlodge	19%
Blue River - Dillon Reservoir	15%
Colorado River - Cameo	17%
Blue Mesa Reservoir (Gunnison)	17%
McPhee Reservoir (Dolores)	17%
Navajo Reservoir (San Juan)	19%
Lake Powell	20%
Virgin River at Virgin	14%

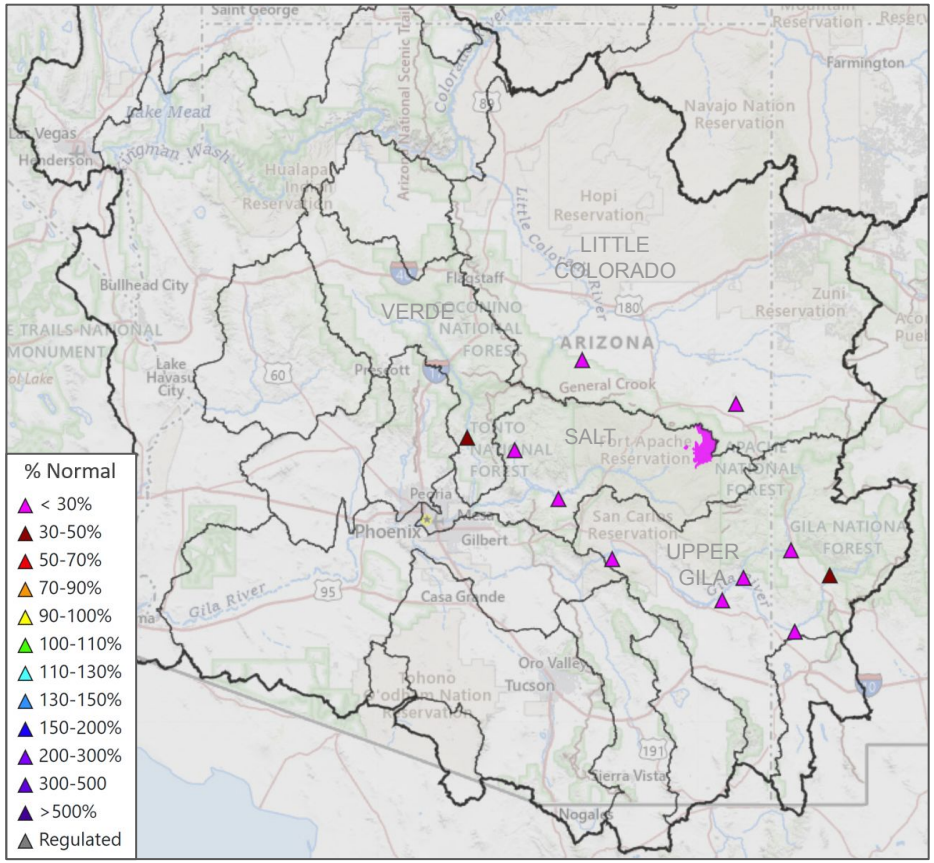
Error tends to decrease each month into the spring

Where Forecasts are Better:
- -Headwaters
- -Primarily snow melt basins
- -Known diversions / demands

Where Forecasts are Worse:
- -Lower elevations (rain or early melt)
- -Downstream of diversions / irrigation
- -Little is known about diversions / demands

LCRB: Jan-May Water Supply forecasts

Forecast Range: 0-35%

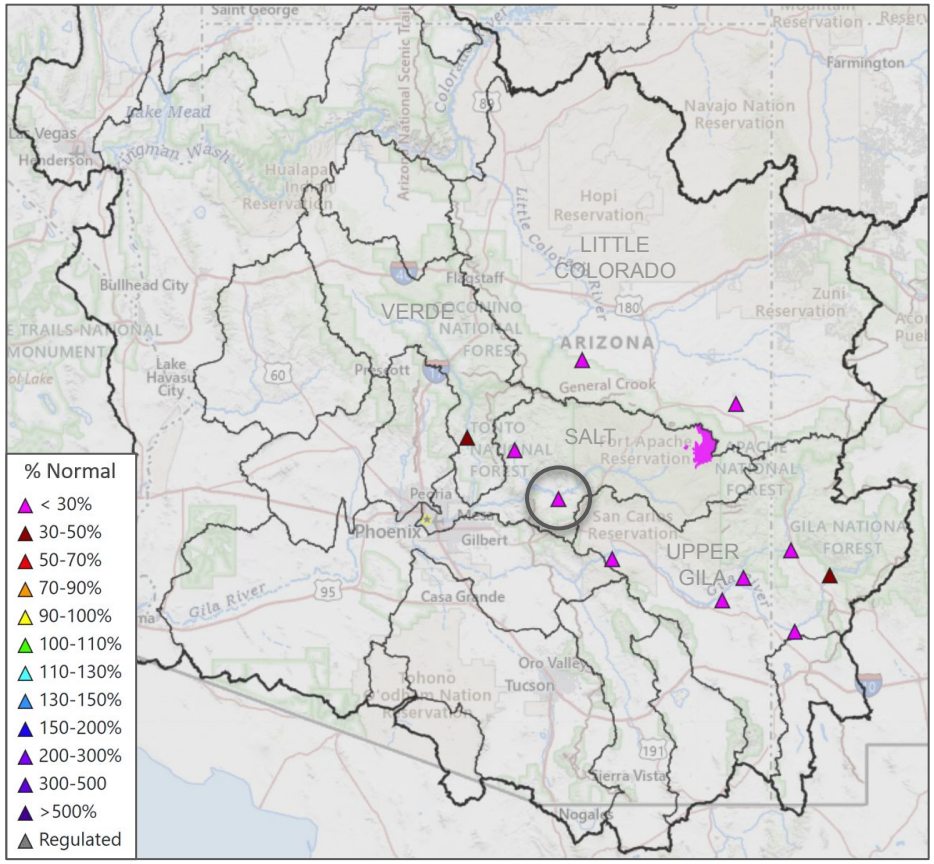


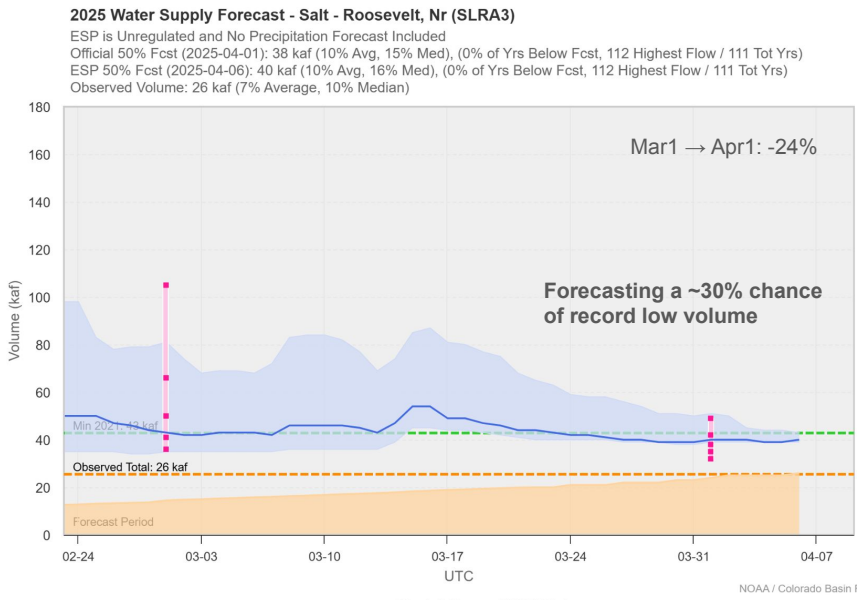
Many locations in the LCRB experienced one of their driest winters on record.

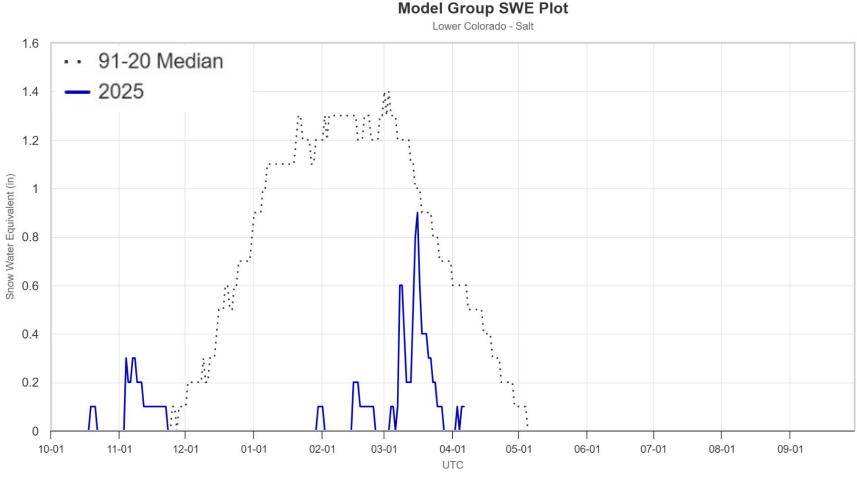
LCRB January-May volume forecasts are well below normal; some forecasts are record low.

	ID	Vol	%Avg	%Med	%ile	Description
▲	CHWA3	0.14	1	1	9	Chevelon Ck - Winslow Nr Wildcat Cyn Blo
▲	CLDA3	11.1	6	15	13	Gila - San Carlos Reservoir Coolidge Dam At
▲	GILN5	15.8	22	30	2	Gila - Gila Nr
▲	GLHA3	26	12	25	1	Gila - Solomon Nr Head Of Safford Vly
▲	GSFN5	5.3	14	29	5	San Francisco - Glenwood Nr
▲	GVRN5	16.2	15	25	4	Gila - Virden Nr Blue Ck Blo
▲	LCLA3	0.89	11	15	5	Little Colorado - Lyman Lk Abv St. Johns Nr
▲	SFCA3	12.1	13	27	1	San Francisco - Clifton
▲	SLRA3	38	10	15		Salt - Roosevelt Nr
▲	TNRA3	2.6	3	7	2	Tonto Ck - Roosevelt Nr Gun Ck Abv
▲	VDTA3	51	19	33		Verde - Tangle Ck Blo Horseshoe Dam Abv

Salt River Basin







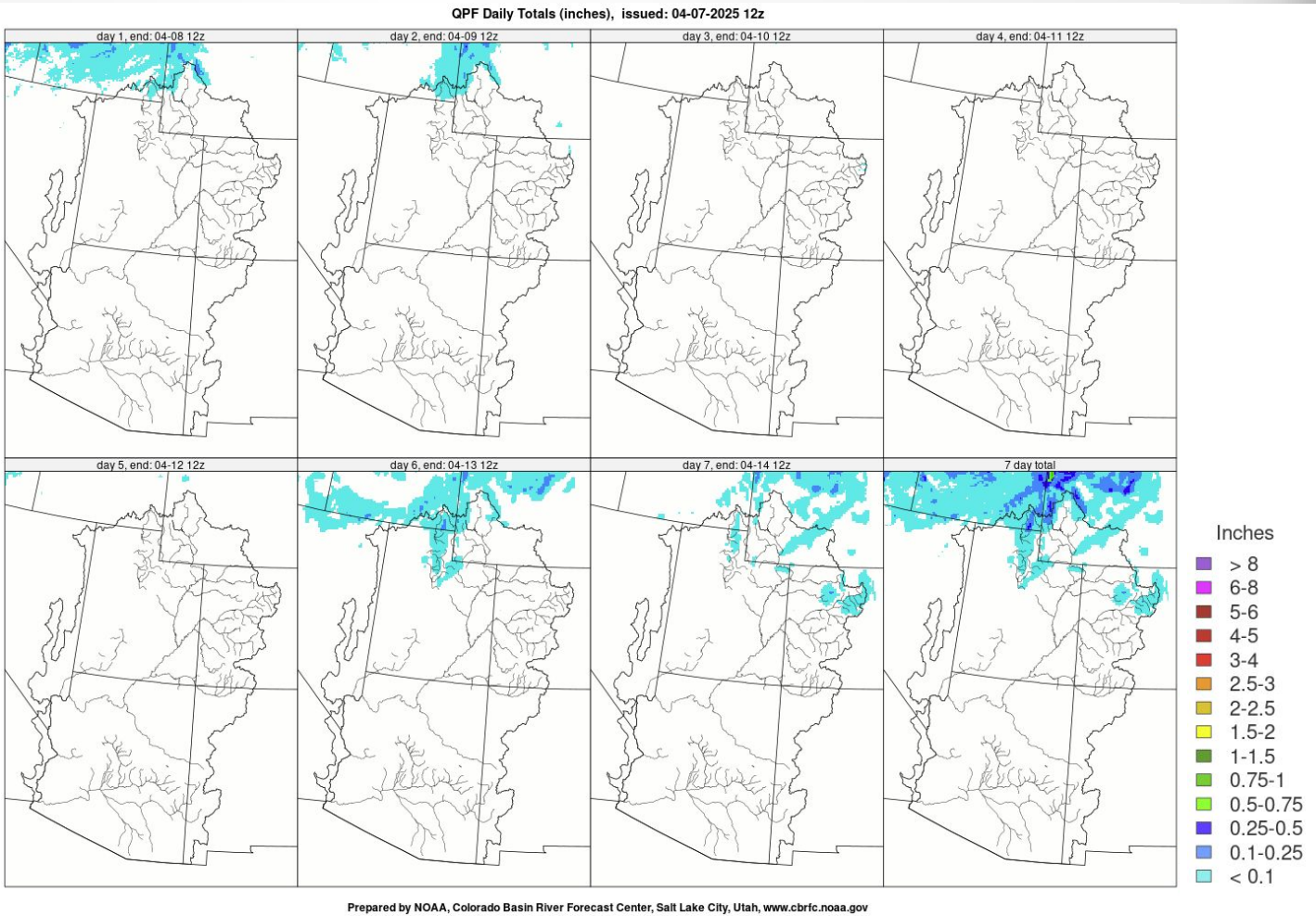
Upcoming Weather: 7-Day Precipitation Forecast (April 7-13)

Mostly dry weather is expected for the next 7 days.

Best chances for precipitation is across northern areas.

Temperatures will continue to warm and be well above average later this week.

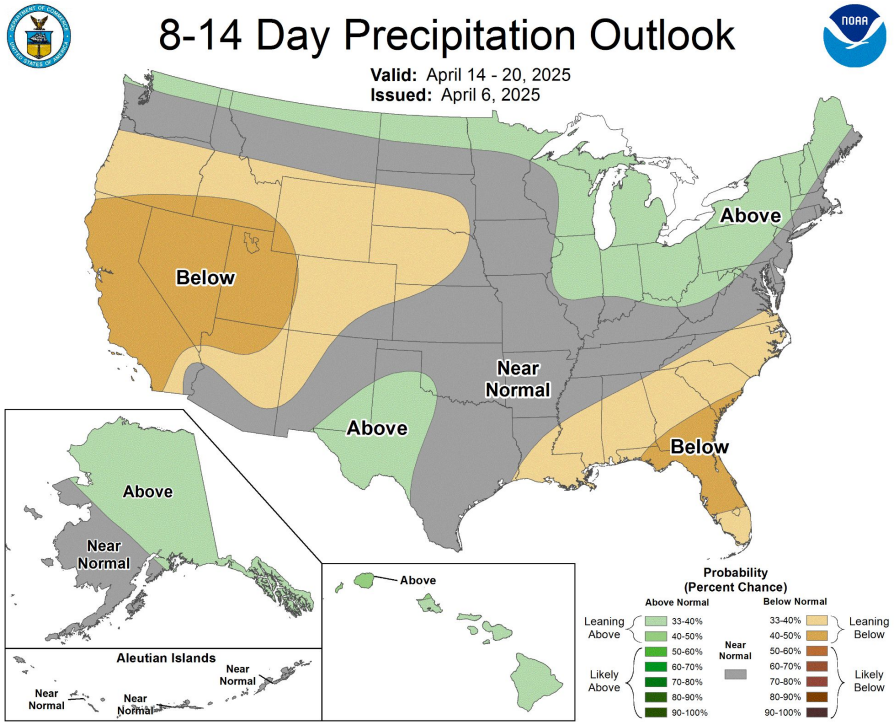
The return of cooler/wetter weather is possible late weekend/early next week - currently large uncertainty in weather models.

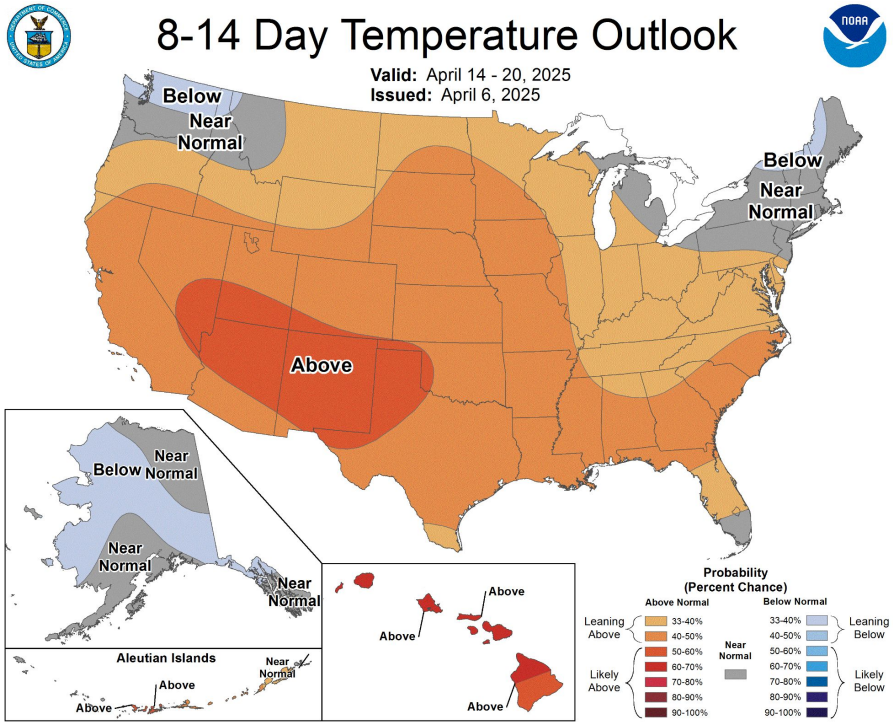


Upcoming Weather: 8–14 Day Outlook (April 14–20)

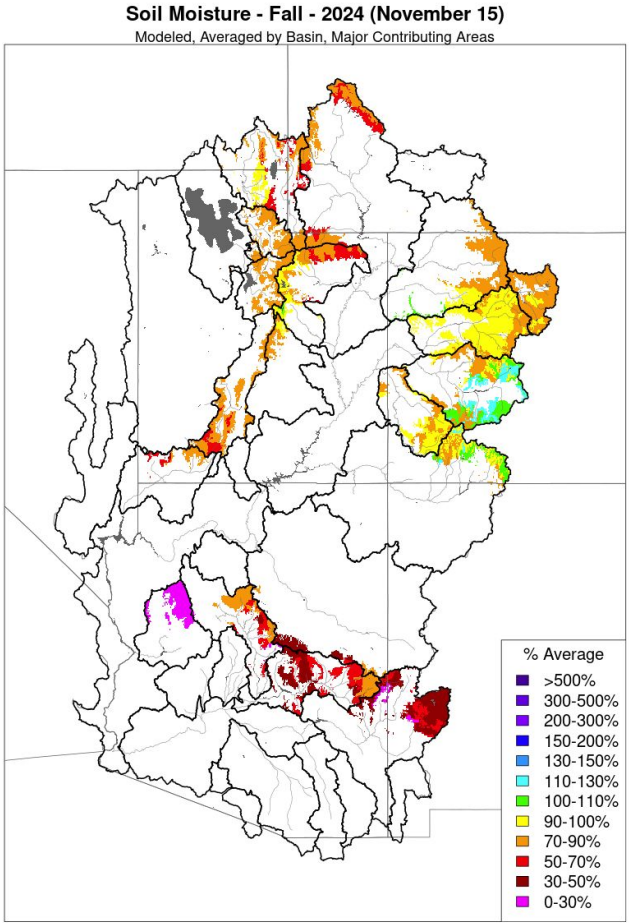
Below normal precipitation favored

Above normal temperatures favored

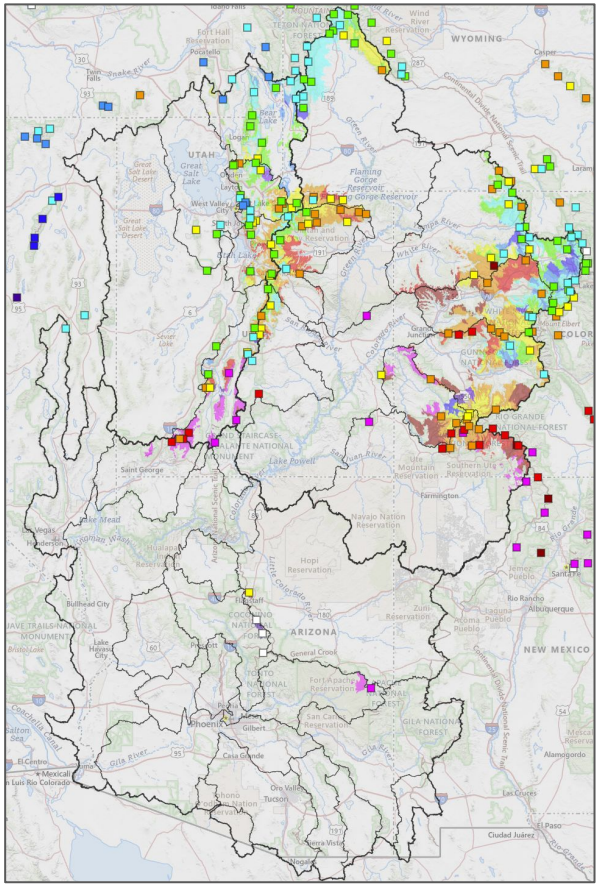




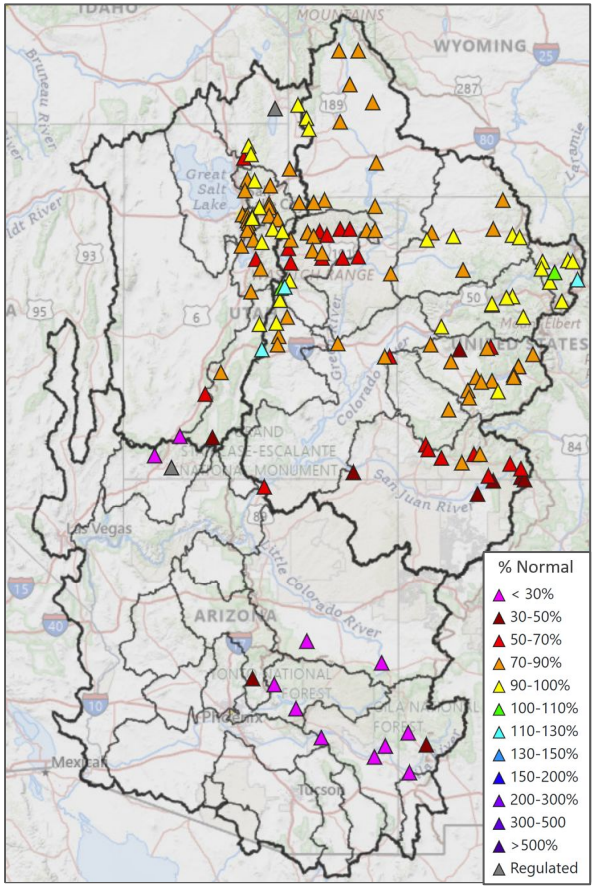
Summary



April 6 SWE Conditions

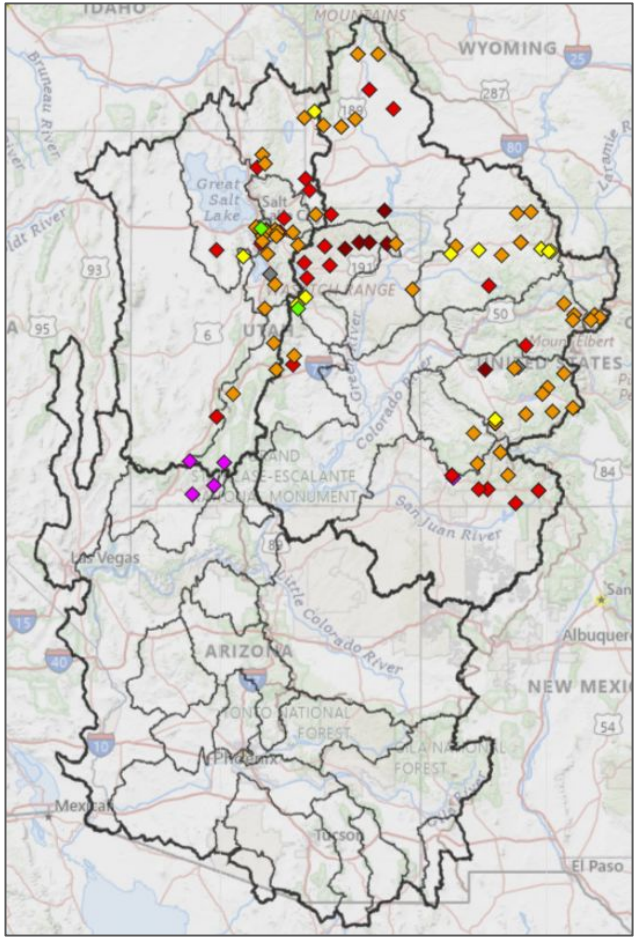


April 1 Water Supply Forecasts



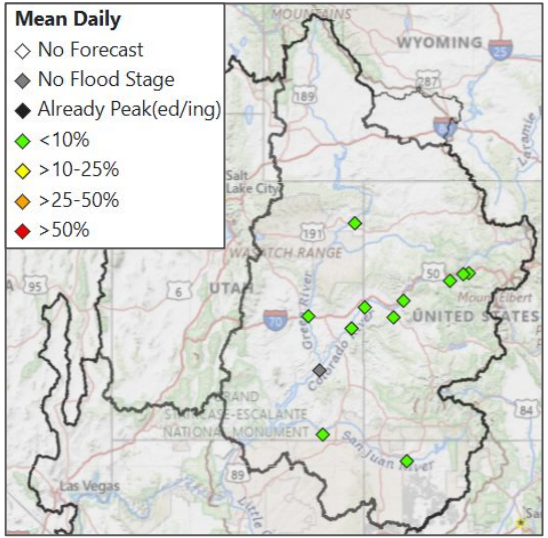
CBRFC Peak Flow Forecasts

Peak flow forecasts at locations with minimal/no upstream regulation.



Peak flow forecasts on mainstem rivers downstream of significant regulation.

Green River
Colorado River
Gunnison River
San Juan River



2025 Water Supply Briefings

Colorado Basin River Forecast Center
National Weather Service

cbrfc.noaa.gov

Rivers | Snow | Water Supply | Peak Flow | Reservoirs | Weather | Climate | Help | About | News

Friday, January 10, 2025: CBRFC Water Supply Briefing Webinar Registration

Webinars
Email Updates

CBRFC Water Supply Briefings - Webinar Schedule & Registration - Water Year 2025

The Colorado Basin River Forecast Center (CBRFC) produces water supply forecasts for the Colorado River Basin and eastern Great Basin. CBRFC briefings provide information on water supply forecasts and current hydrologic conditions.

Register for a webinar using the links below.

Colorado River & Great Basin Water Supply Briefing Webinars @ 10:00 am MT

- Friday January 10
- Friday February 7
- Friday March 7
- Monday April 7
- Wednesday May 7

Spring Peak Flow Briefing Webinar @ 10:00 am MT

- Wednesday March 19

Briefing material is available on the CBRFC presentations page.
A notification email will be sent if a date or time change occurs. Additional webinars are scheduled as needed.

CBRFC Contacts & Water Year 2025 Basin Focal Points

Basin Focal Points (Forecasters)

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CBRFC Webpage
https://www.cbrfc.noaa.gov/

CBRFC Water Supply Presentations
https://www.cbrfc.noaa.gov/present/present.html

QUESTIONS?