



COLORADO
Division of Water Resources
Department of Natural Resources

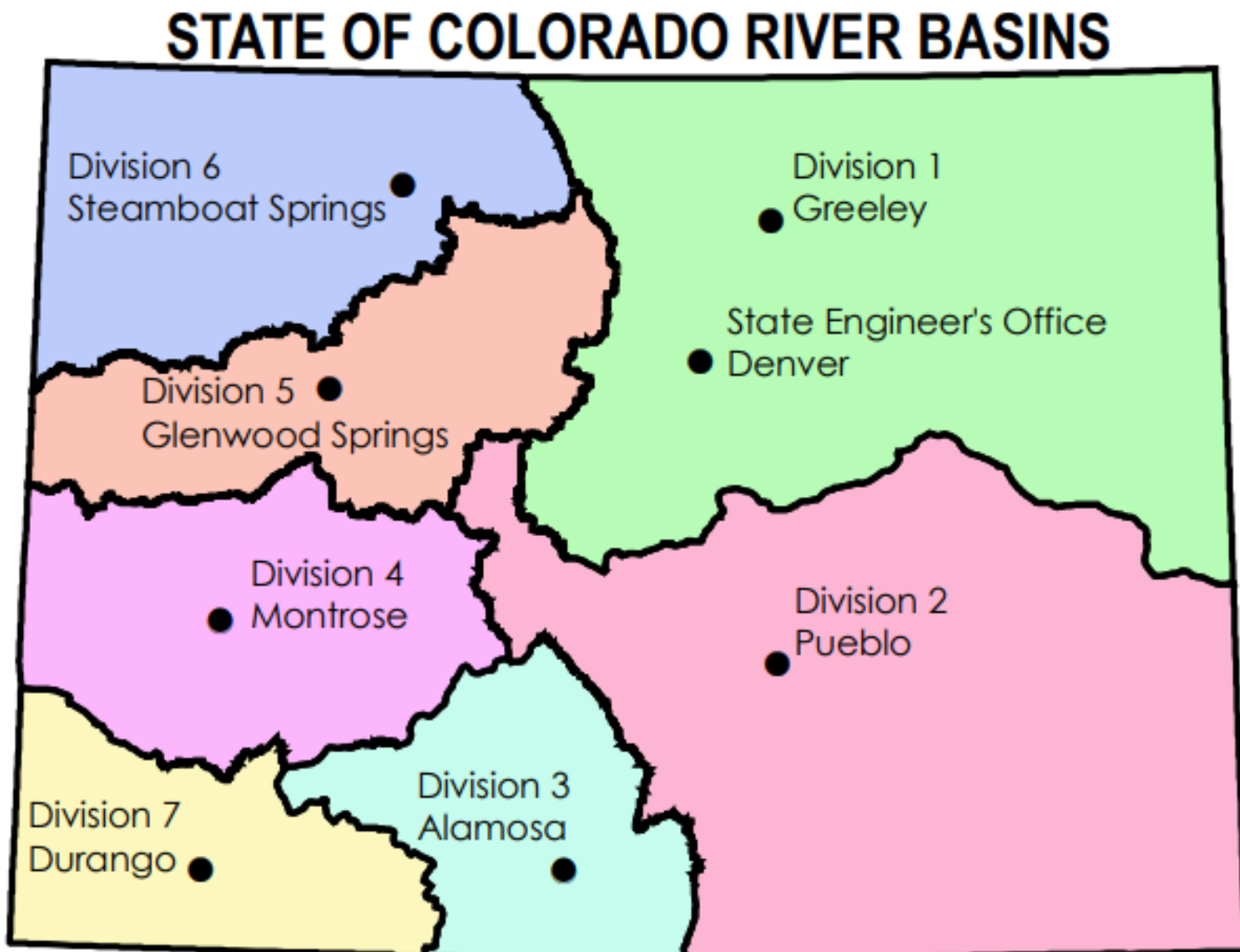
***Division Engineer Water Supply Report
Gunnison State of the River Meeting
June 10, 2021***

**Bob W. Hurford, P.E.
Division Engineer**

Presentation Outline

- Introduction – Lay of the Land and Sub-Basins of the Gunnison
- Water Supply and Snowpack
- Walk through the Sub-Basins
 - Upper Gunnison and Blue Mesa Reservoir
 - The Uncompahgre River and Ridgway Reservoir
 - The North Fork Gunnison River (Including the Grand Mesa)
- A Look Ahead

Water Supply



Snowpack -The Main Source



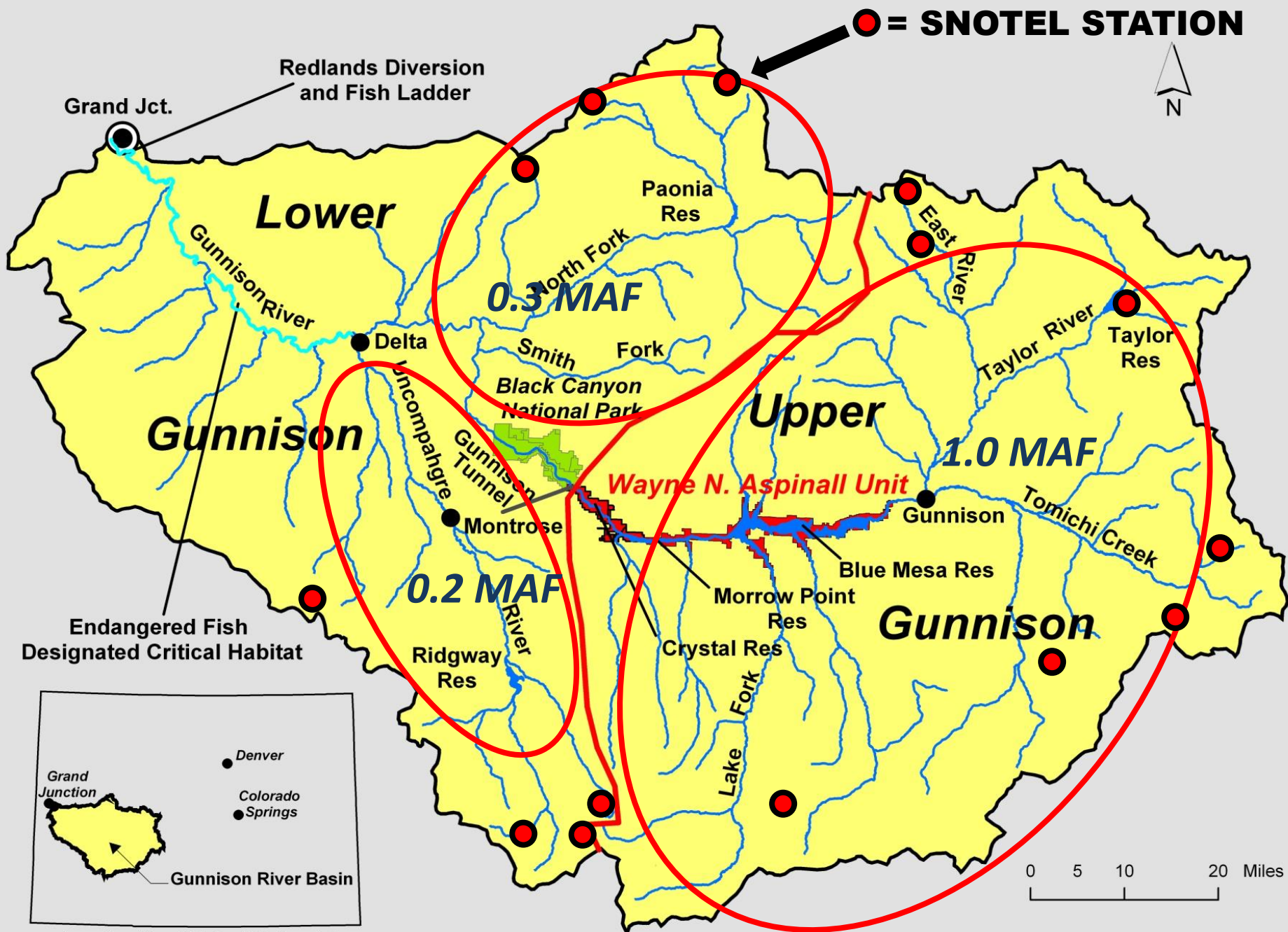


Figure 1. Gunnison River Basin

Typical SNOTEL Site



ANTENNA

SOLAR PANELS

TEMPERATURE SENSOR

SNOWDEPTH SENSOR

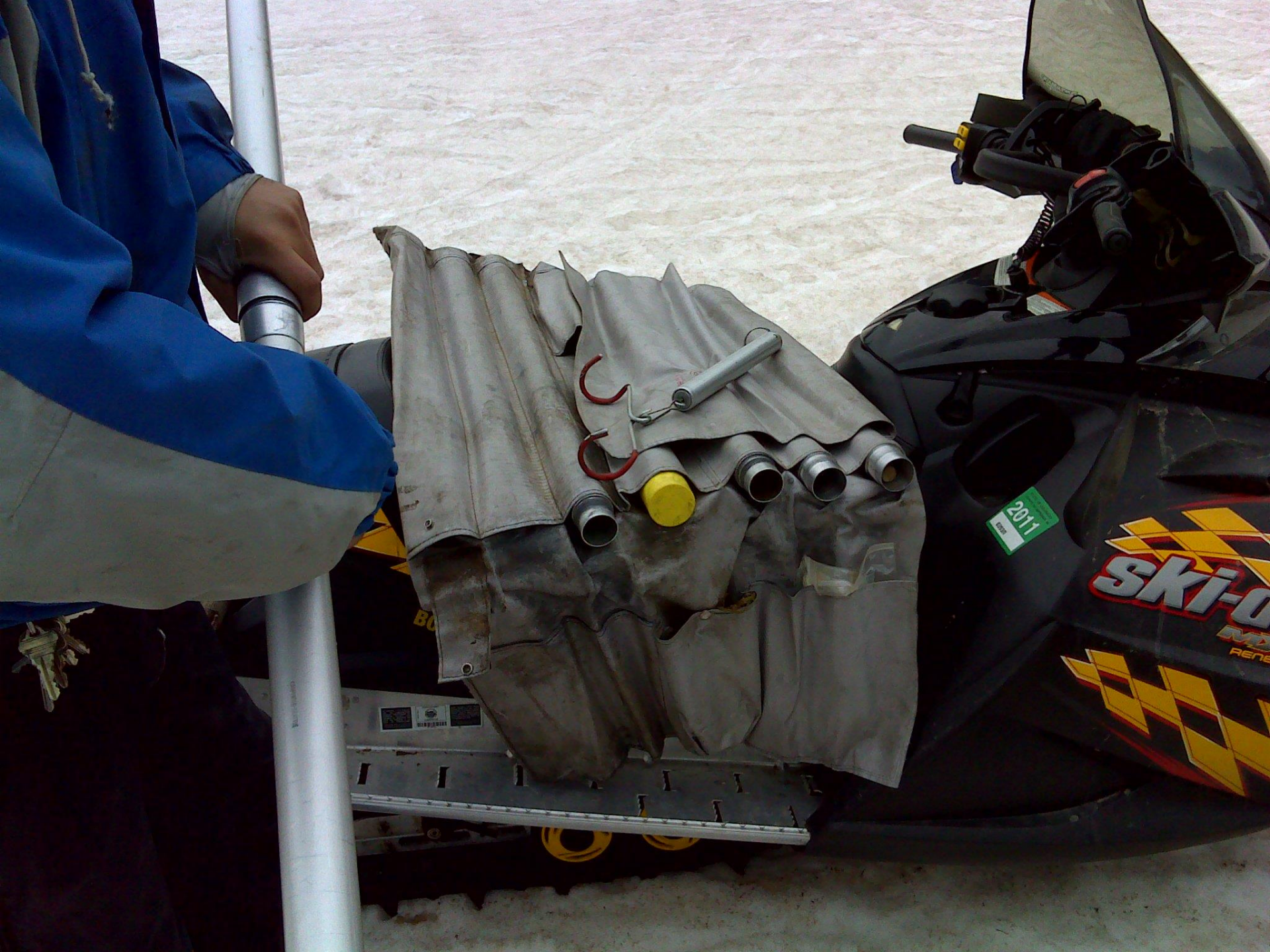
PRECIPITATION GAUGE

SNOTEL SHELTER

GROUND TRUTH MARKER

SNOW PILLOW



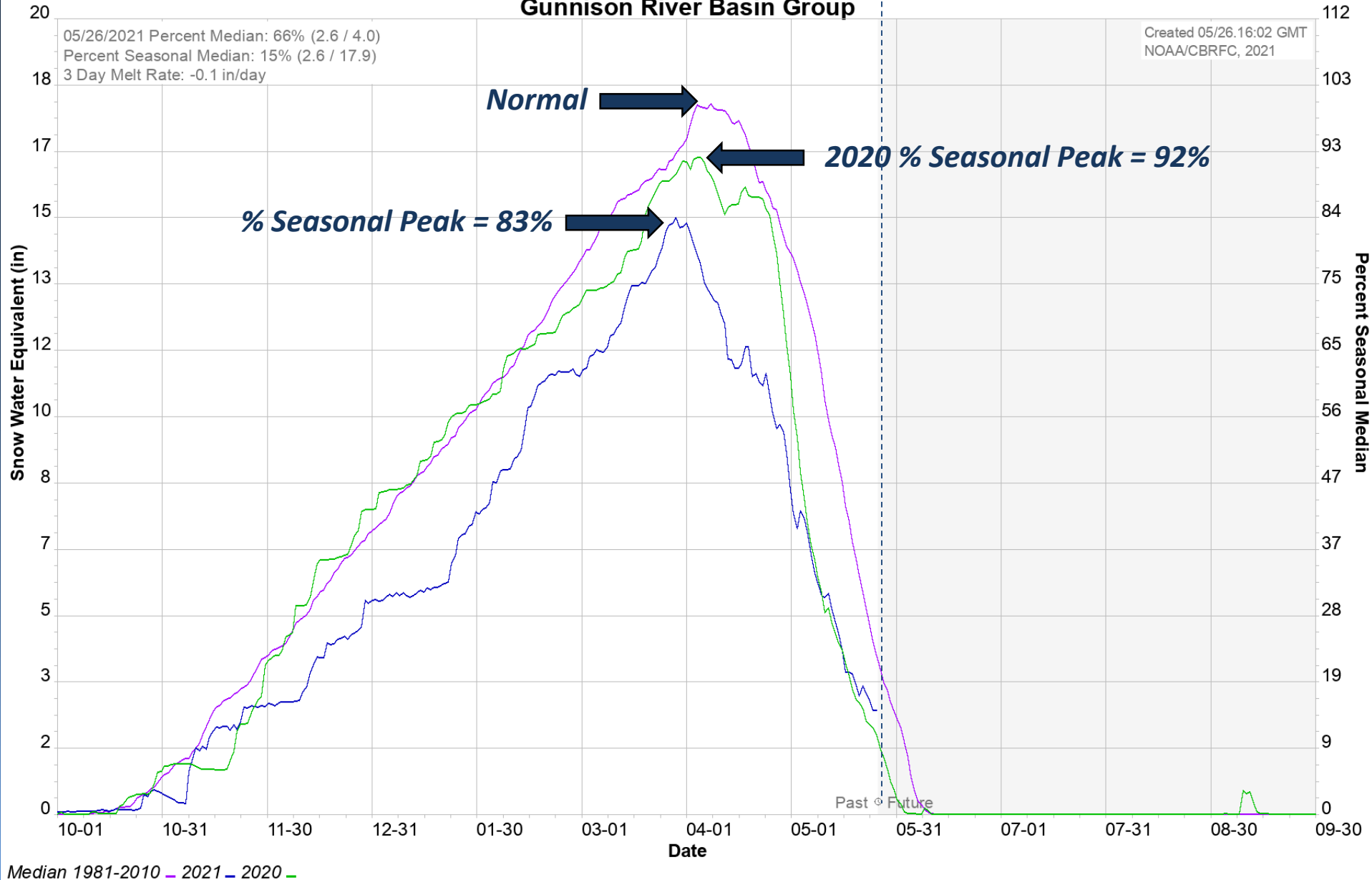






Gunnison River Basin Snowpack 2021

Colorado Basin River Forecast Center Gunnison River Basin Group



Blue Mesa 2007



Blue Mesa 2002



The Upper Gunnison River Basin

2021 April –July Runoff Forecast into Blue Mesa Res



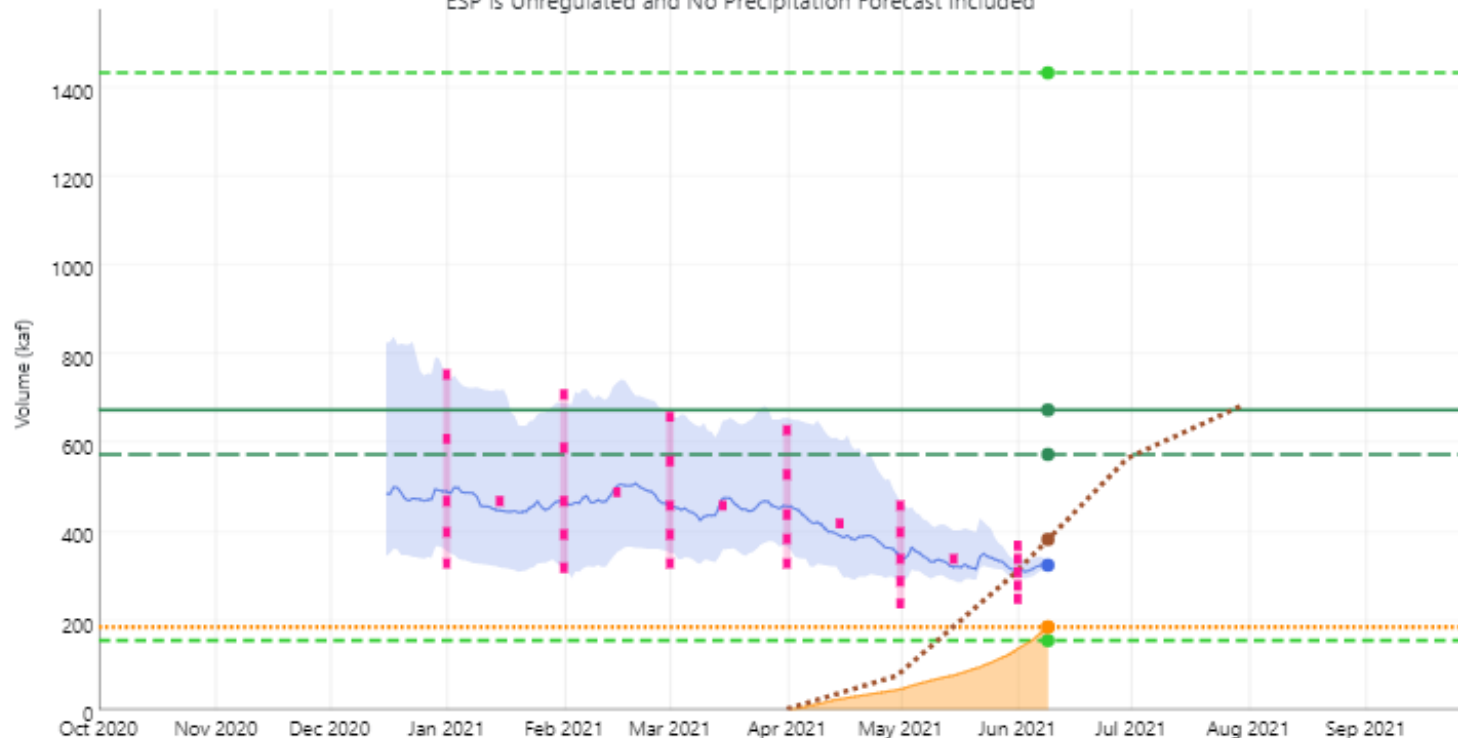
Colorado Basin
River Forecast Center
National Weather Service

Last Year (2020) Apr-July Actual Runoff =
387,000 AF

Home Rivers ▾ Snow ▾ Water Supply ▾ Reservoirs ▾ Weather ▾

Water Supply Forecast

Gunnison - Blue Mesa Reservoir (BMDC2)
Period: Apr-Jul, Official 50% Forecast (2021-06-01): 310 kaf (46% Average, 54% Median)
ESP is Unregulated and No Precipitation Forecast Included



2021/06/09:

Max 1984: 1433.01

Min 2002: 156.55

Average: 675

Median: 575

Observed Accumulation: 187

Observed Total: 187

Normal Accumulation: 384

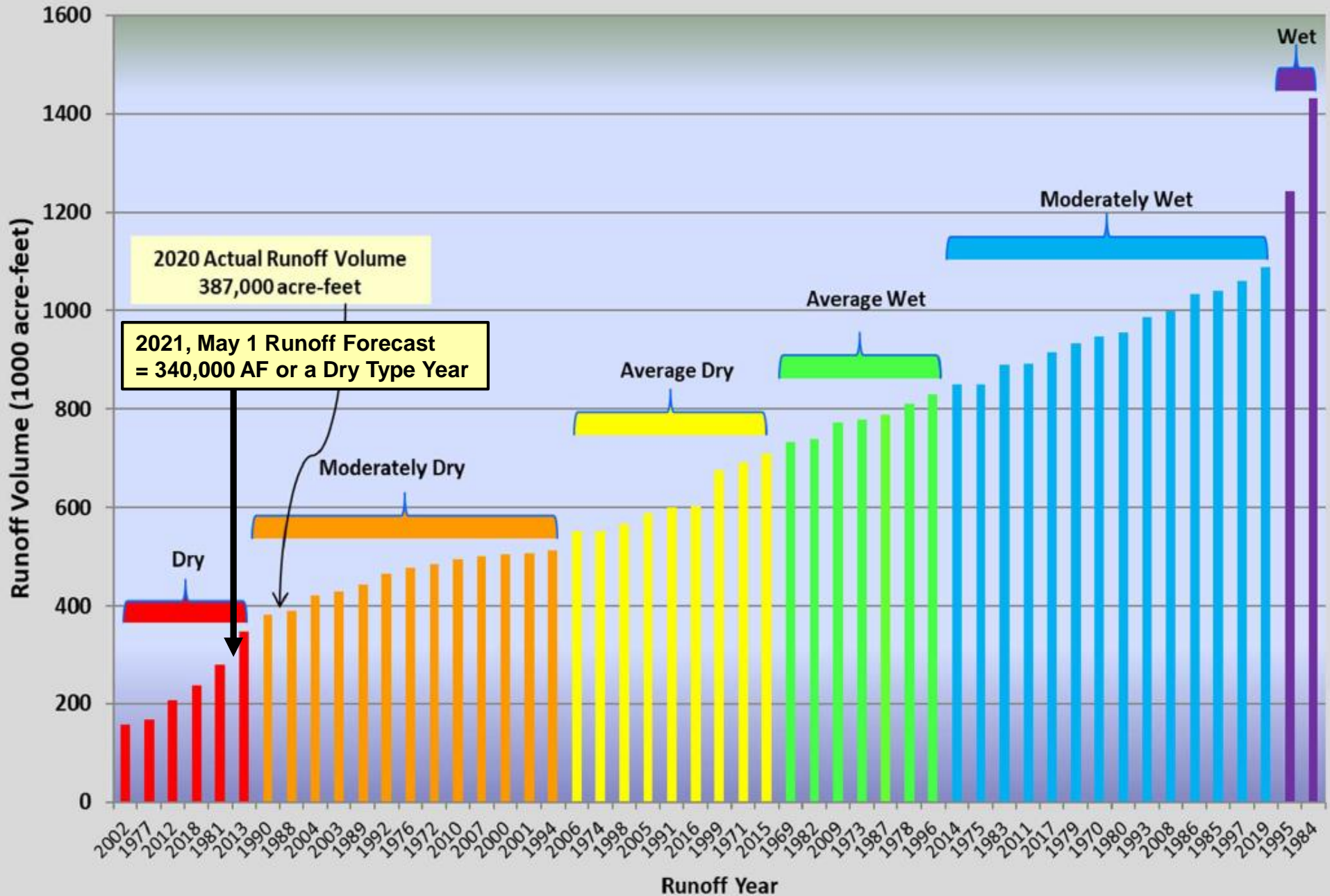
ESP: 326

Spring Peak & Duration Targets Based on Hydrologic Year Type

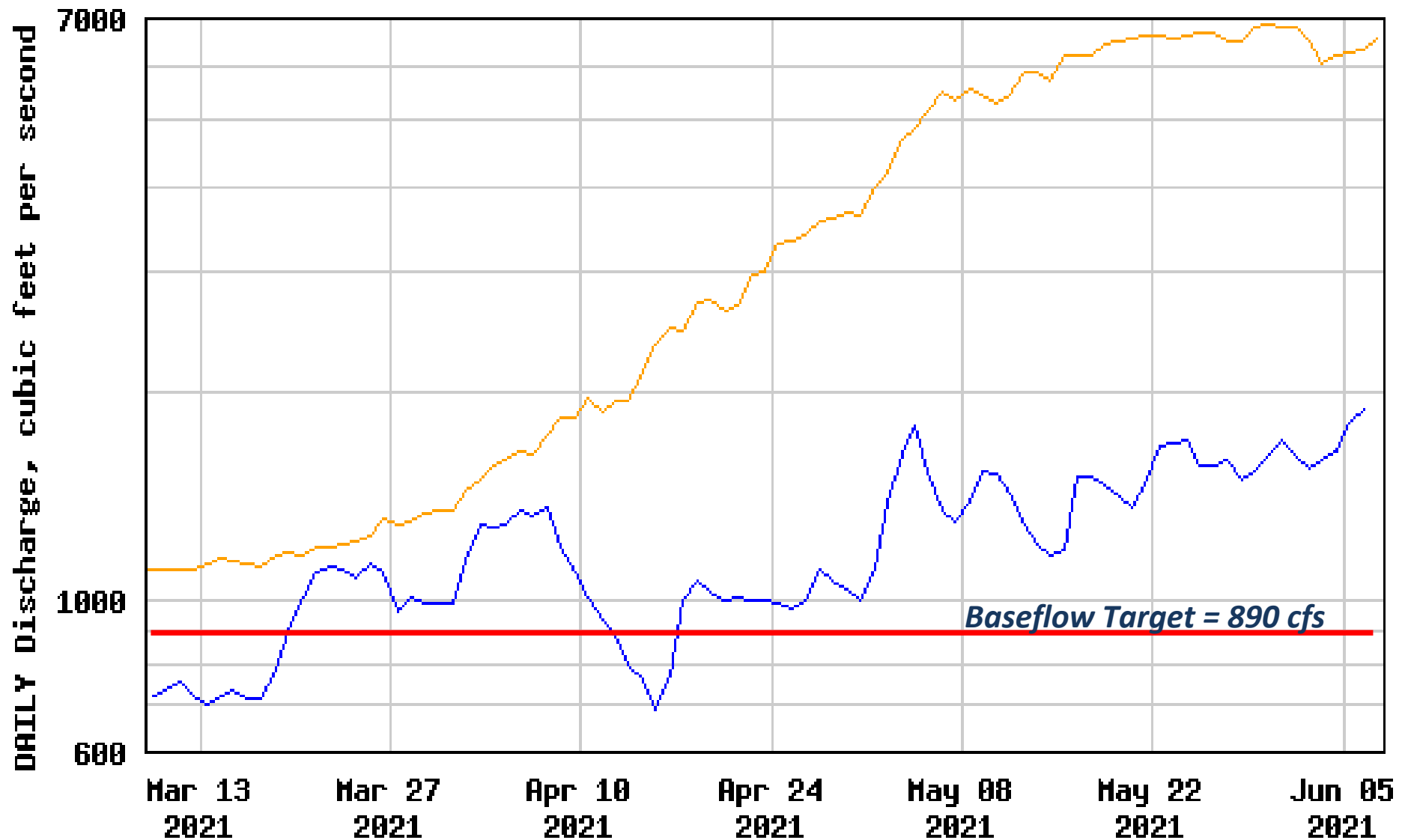
Year Type	Blue Mesa Forecasted	Desired Peak at Whitewater	Duration of Half Bank (8,070 cfs)	Duration of Peak Flow (up to 14,350 cfs)
	April-July Inflow			
	Af	cfs	Days	Days
DRY	May 1 Runoff Forecast = 340,000 AF or a Dry Type Year < 381,000	900	0	0
MOD DRY	381,000 to 516,000	2,600 to 8,070	0	0
AVG DRY	516,001 to 709,000	8,070	10	0
AVG WET	709,001 to 831,000	8,070 to 14,350	20	2
MOD WET	831,001 to 1,123,000	14,350	40	10
WET	>1,123,000	14,350	60	15

Blue Mesa Reservoir

Historic Apr-July Unregulated Inflow Volume Ranking (1969-2019)



USGS 09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO.



---- Provisional Data Subject to Revision ----

— Median daily statistic (112 years) — Daily mean discharge

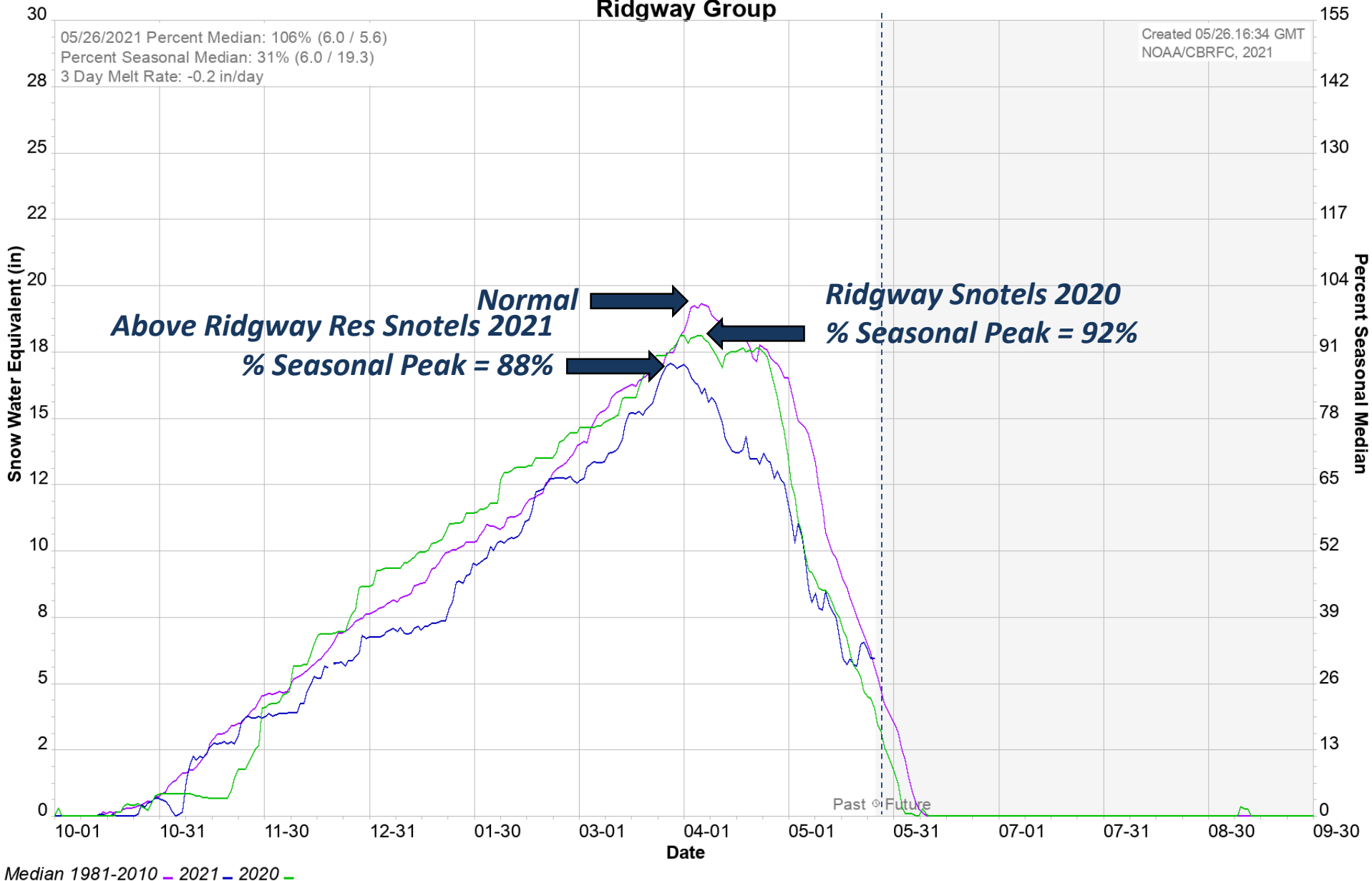
The Uncompahgre River Basin

Ridgway Reservoir



Snowpack Above Ridgway Res 2021

Colorado Basin River Forecast Center
Ridgway Group



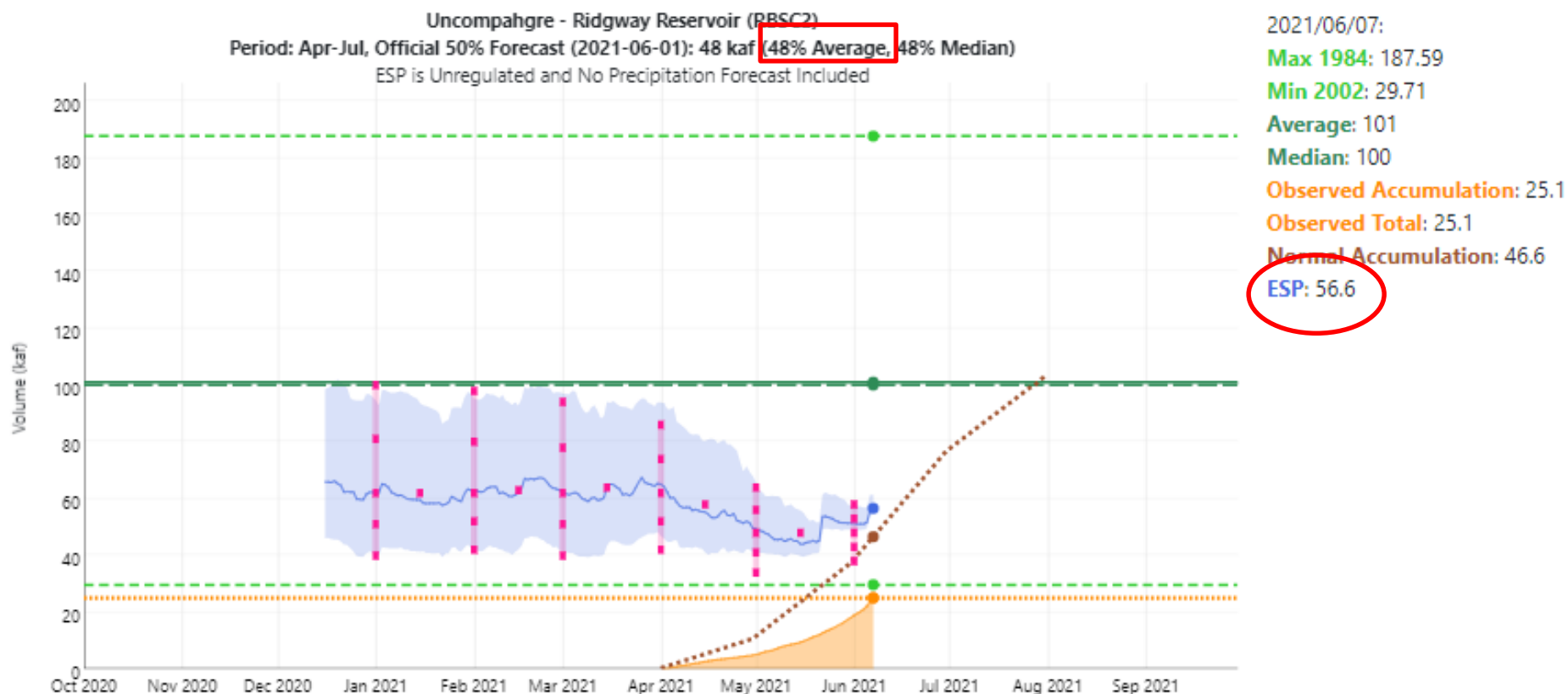
2021 April–July Runoff Forecast into Ridgway Res



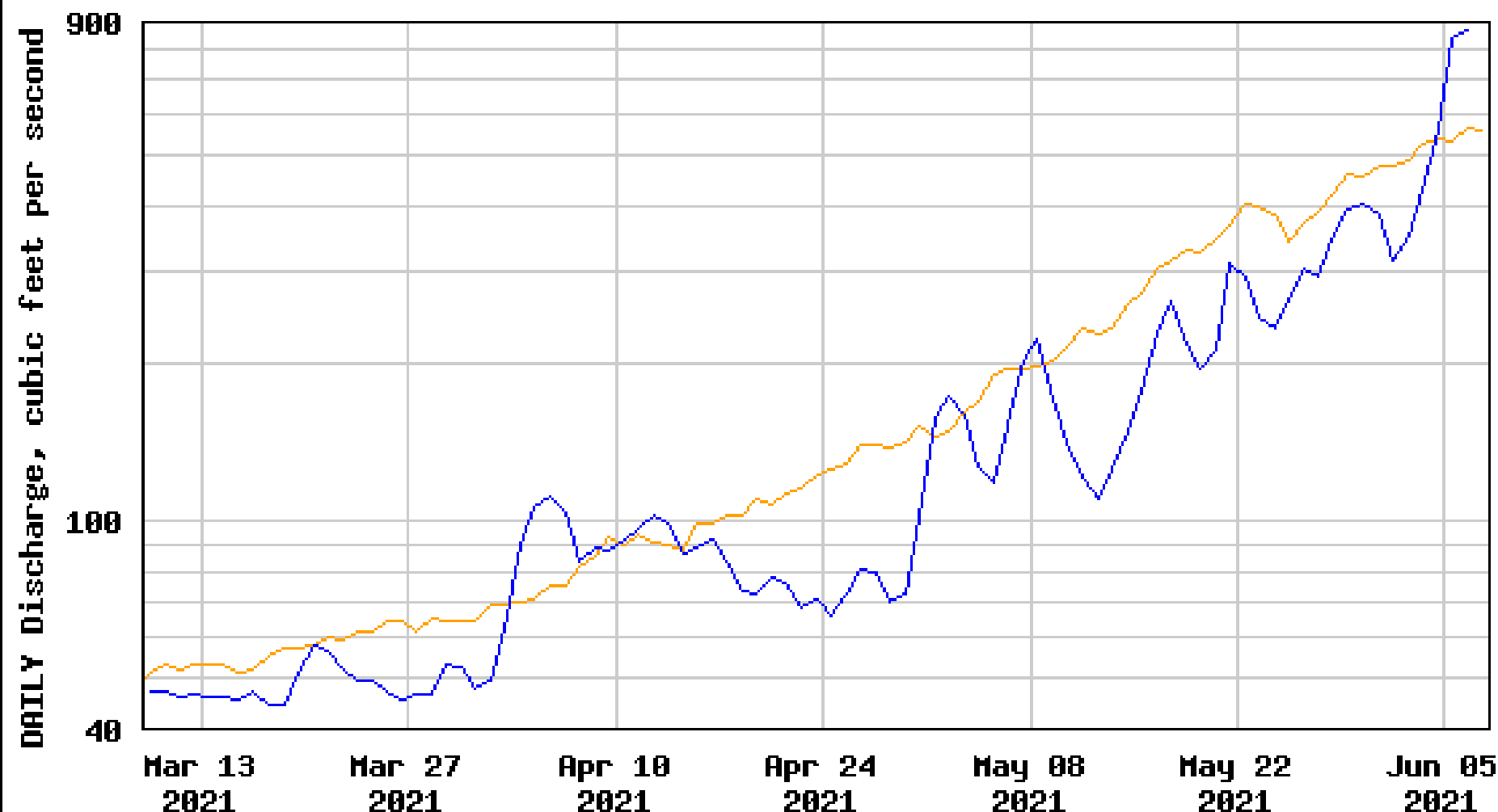
Colorado Basin
River Forecast Center

National Oceanic and Atmospheric Administration

Water Supply Forecast



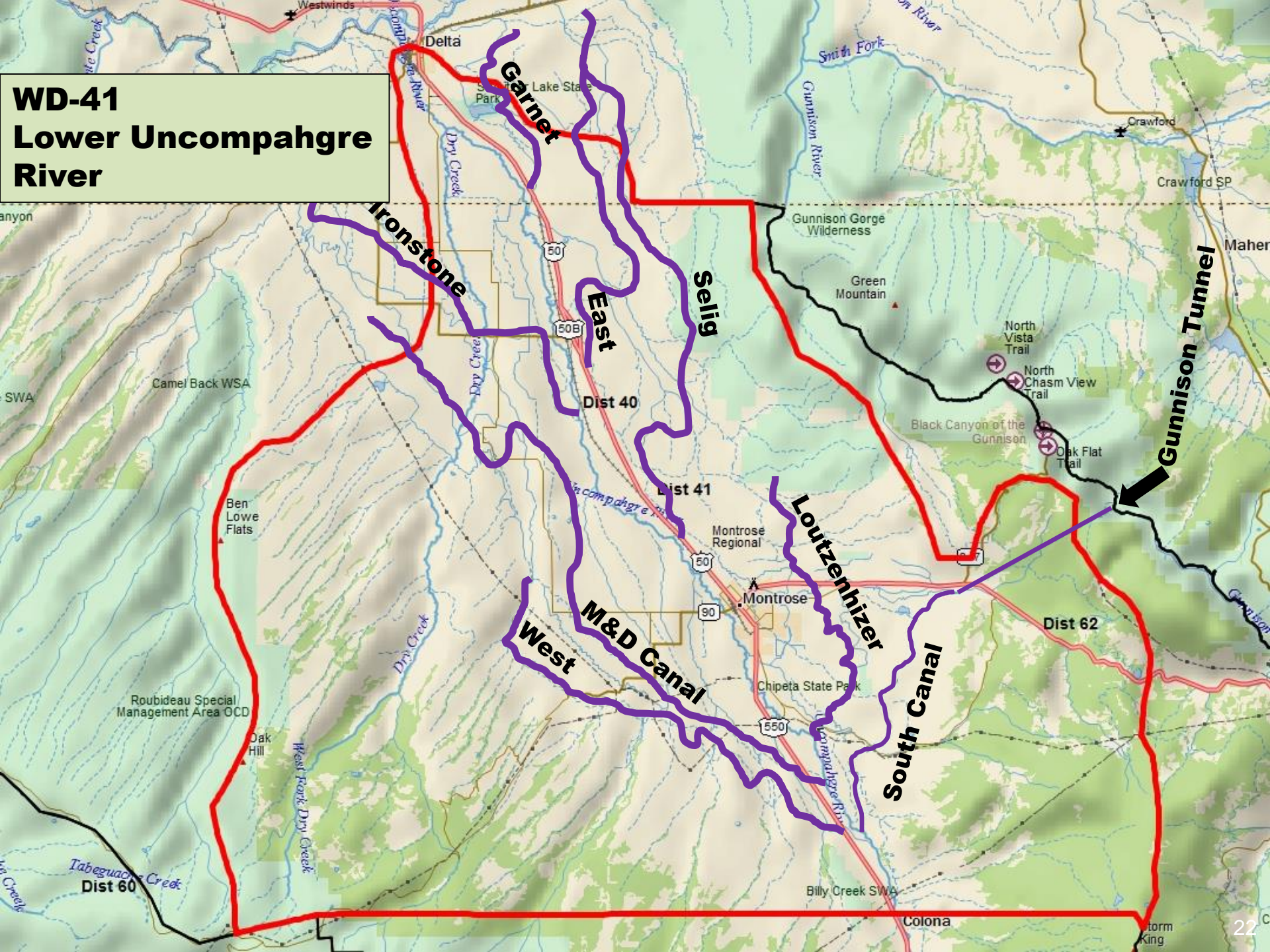
USGS 09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, CO.



----- Provisional Data Subject to Revision -----

— Median daily statistic (62 years) — Daily mean discharge

WD-41
Lower Uncompahgre
River



Gunnison Tunnel

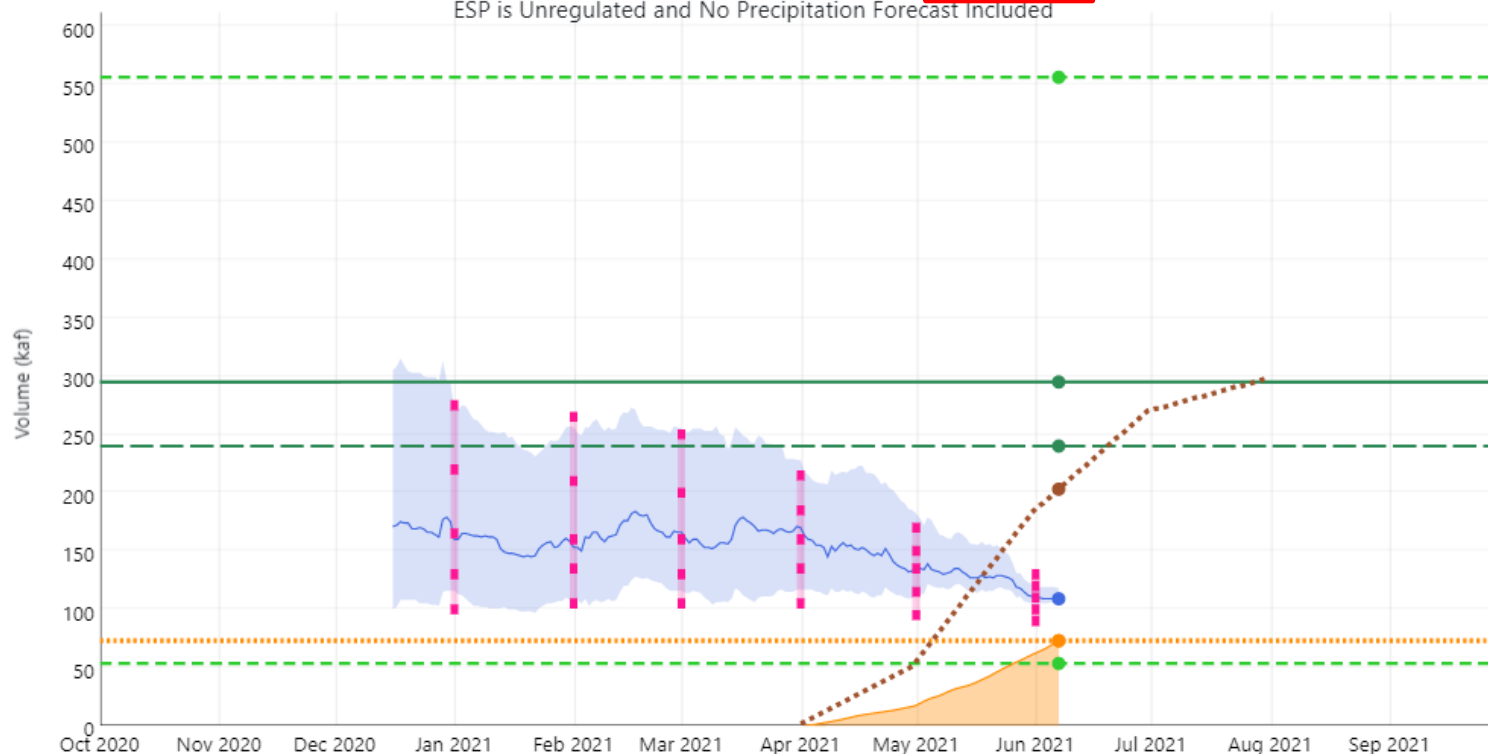
2021 April–July Runoff Forecast North Fork Gunnison River



Colorado Basin
River Forecast Center
National Oceanic and Atmospheric Administration

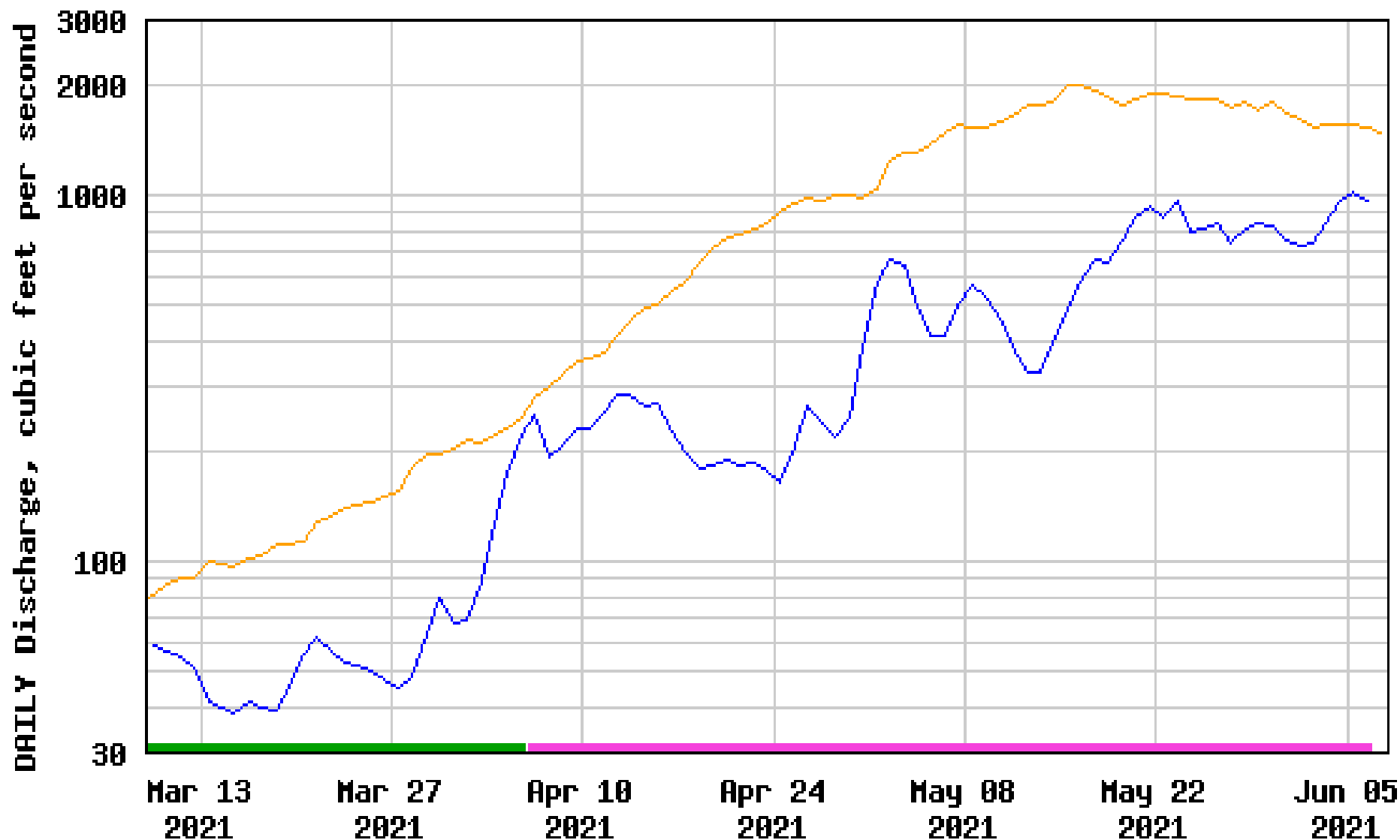
Water Supply Forecast

Nf Gunnison - Somerset, Nr (SOMC2)
Period: Apr-Jul, Official 50% Forecast (2021-06-01): 110 kaf (37% Average, 46% Median)
ESP is Unregulated and No Precipitation Forecast Included



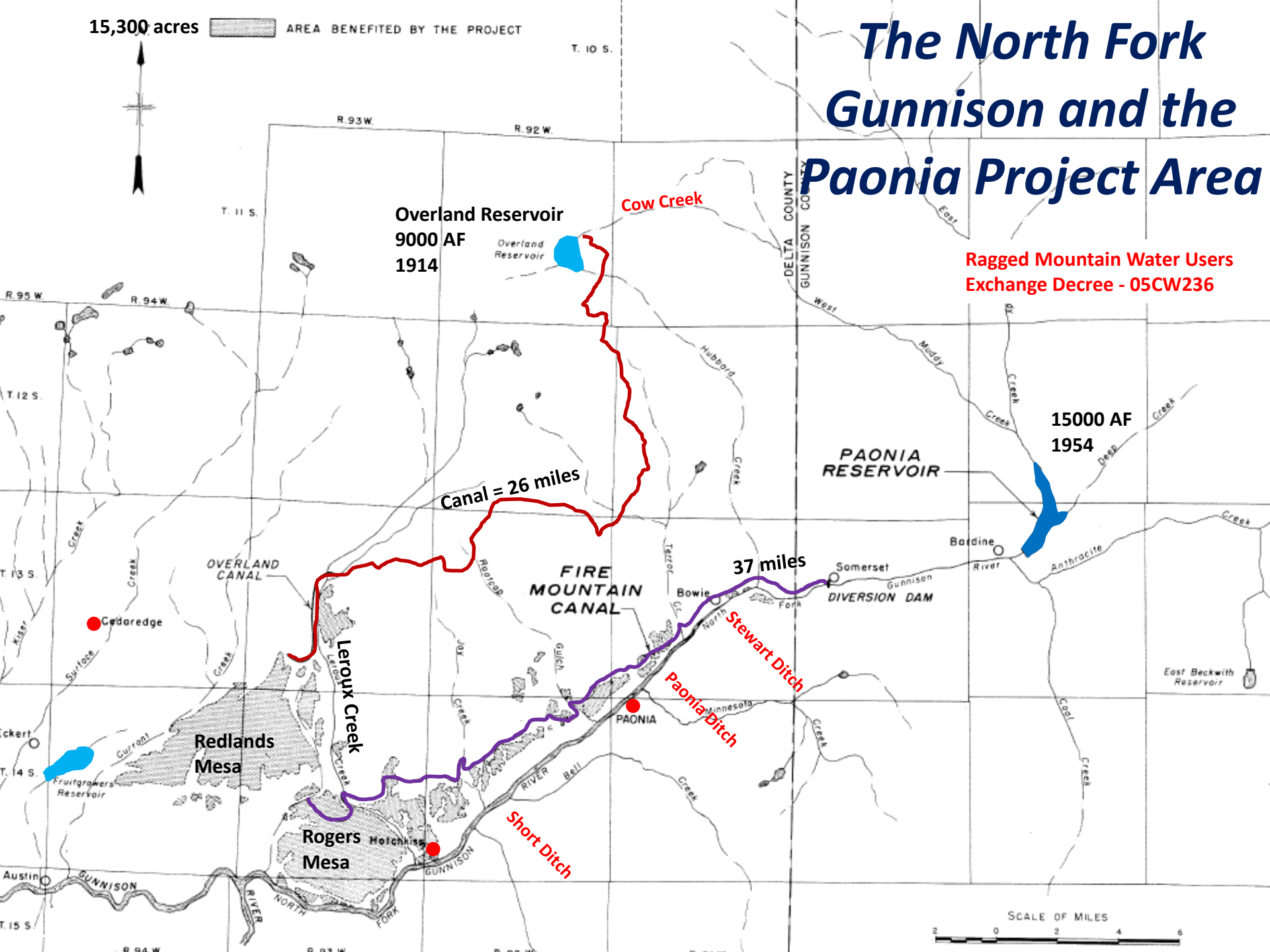
2021/06/07:
Max 1984: 556.33
Min 1977: 53.5
Average: 295
Median: 240
Observed Accumulation: 73
Observed Total: 73
Normal Accumulation: 203
ESP: 109

USGS 09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO.

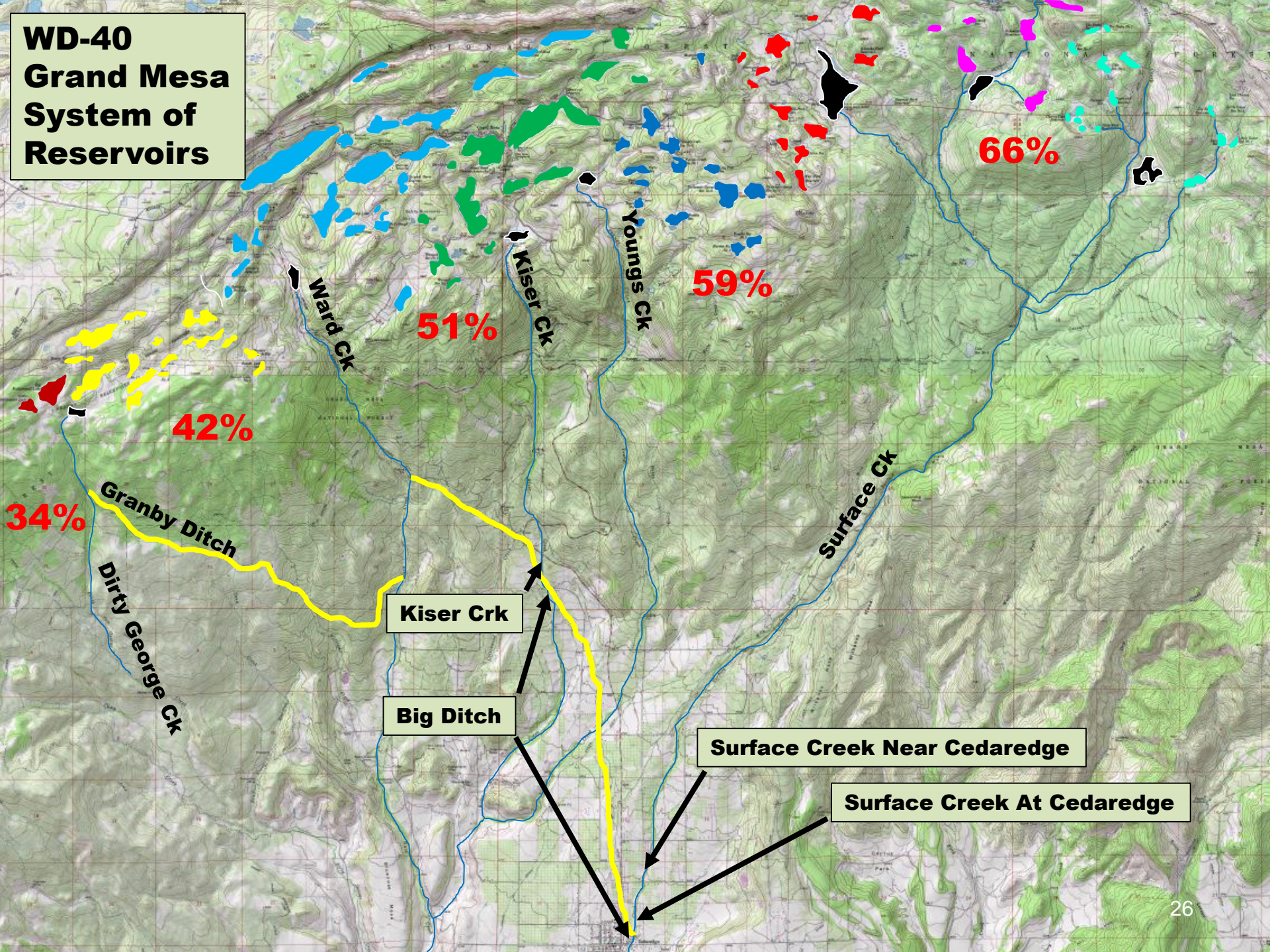


The North Fork Gunnison and the Paonia Project Area

Ragged Mountain Water Users
Exchange Decree - 05CW236



**WD-40
Grand Mesa
System of
Reservoirs**



Current Colorado Statewide Drought Conditions 2021

U.S. Drought Monitor Colorado

June 1, 2021

(Released Thursday, Jun. 3, 2021)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	51.10	38.90	43.36	35.53	29.15	16.39
Last Week 05-25-2021	33.83	66.17	46.22	35.53	29.15	16.39
3 Months Ago 03-02-2021	0.00	100.00	98.57	88.76	56.66	15.89
Start of Calendar Year 12-29-2020	0.00	100.00	100.00	93.73	76.17	27.60
Start of Water Year 09-29-2020	0.00	100.00	99.29	89.35	52.88	2.64
One Year Ago 06-02-2020	23.22	76.78	63.50	47.08	19.46	0.00

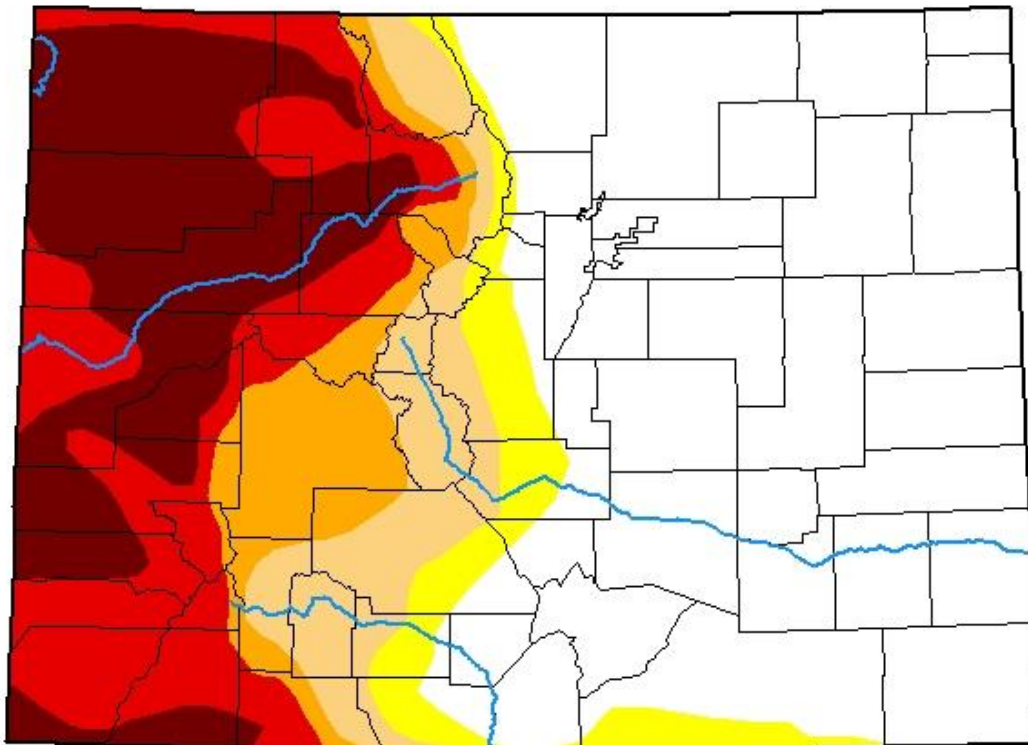
Intensity:

 None	 D2 Severe Drought
 D0 Abnormally Dry	 D3 Extreme Drought
 D1 Moderate Drought	 D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brian Fuchs
National Drought Mitigation Center



30-Day Weather Outlook

