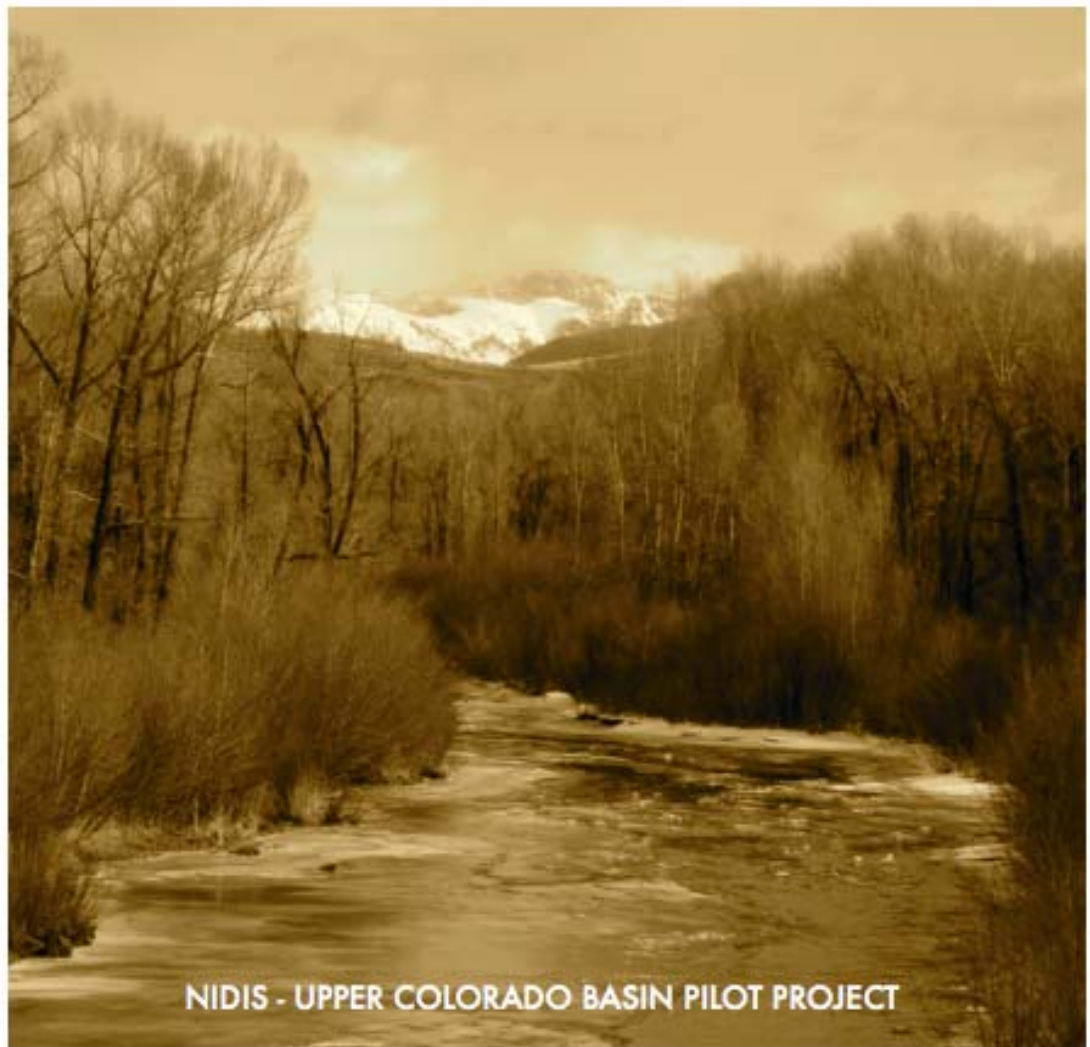


Winter 2010



NIDIS - UPPER COLORADO BASIN PILOT PROJECT

Weekly Climate, Water & Drought Assessment

Today's Agenda

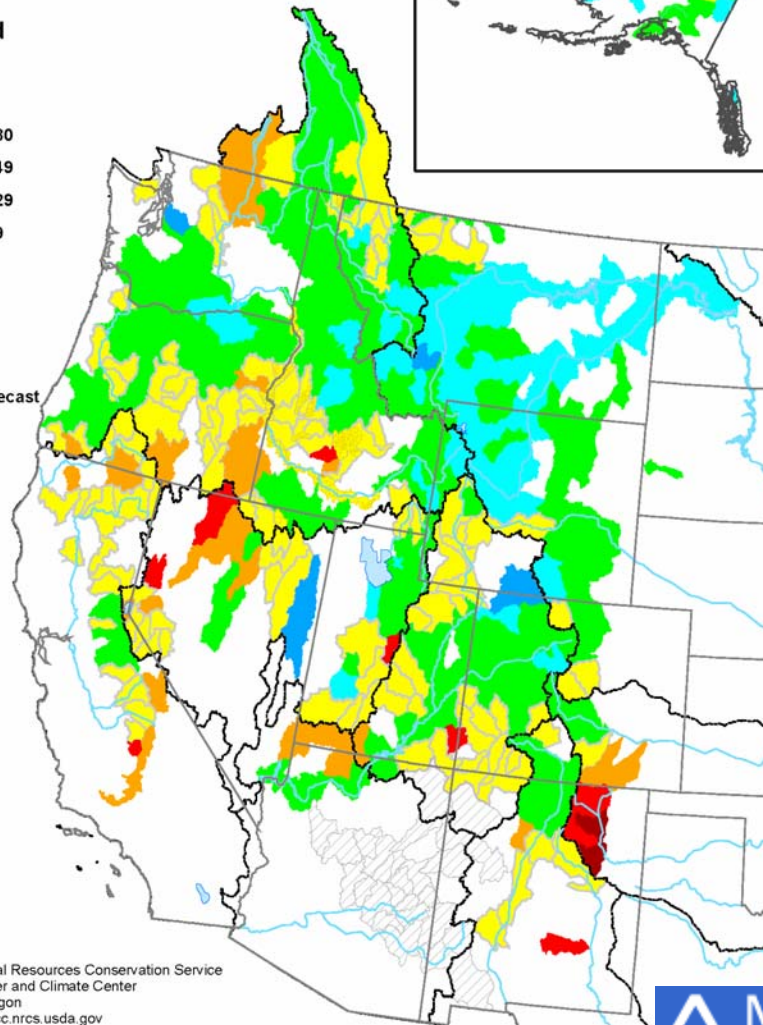
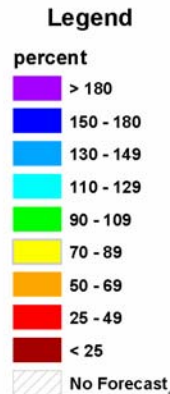
- Background
- Assessment of current water conditions
- Precipitation Forecast
- Recommendations for Drought Monitor

B a c k g r o u n d



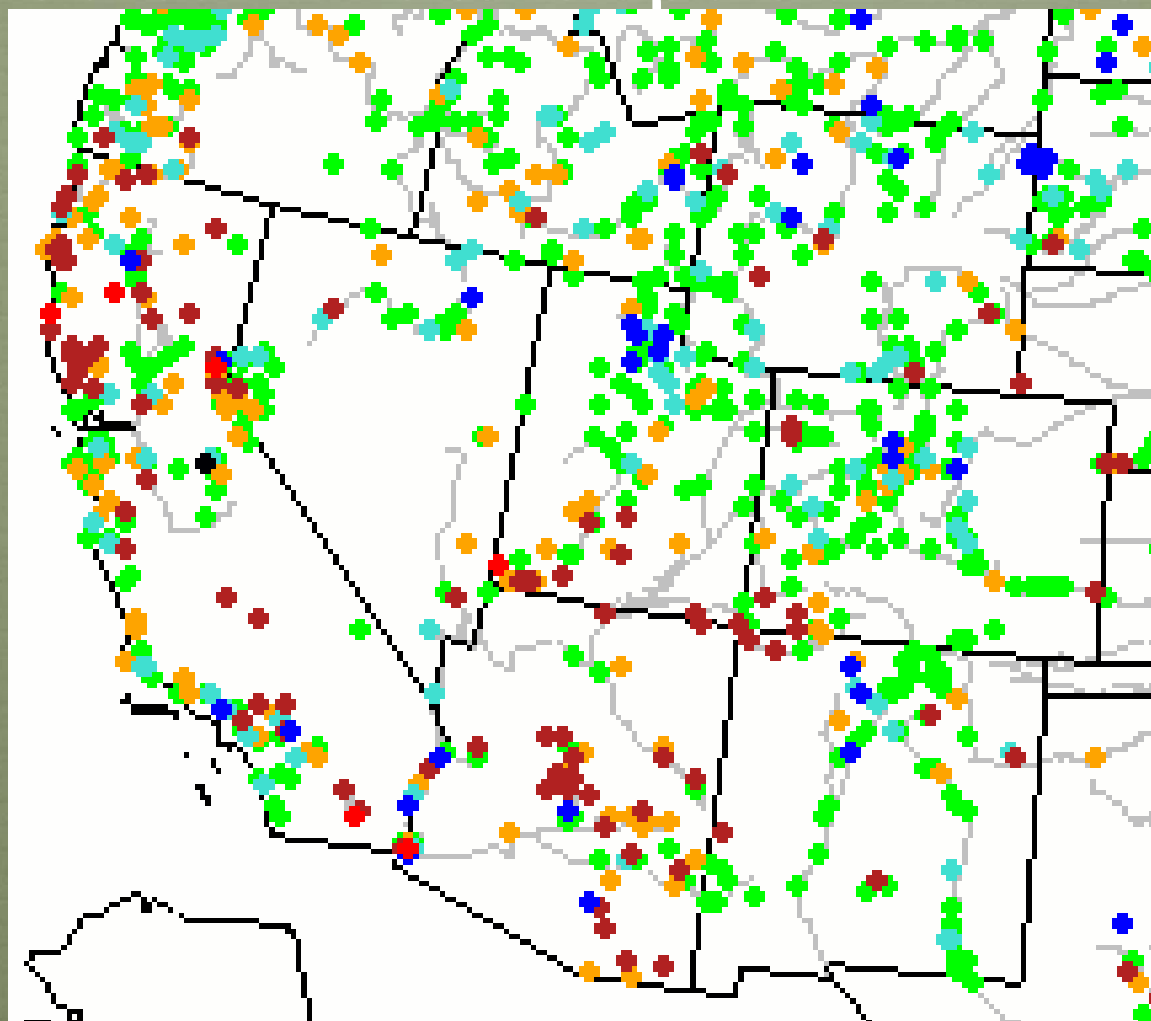
Streamflow Forecast May 1, 2009

Spring and Summer Streamflow Forecasts as of May 1, 2009



Prepared by
USDA, Natural Resources Conservation Service
National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

Streamflow Sept 30th 2009



Explanation - Percentile classes

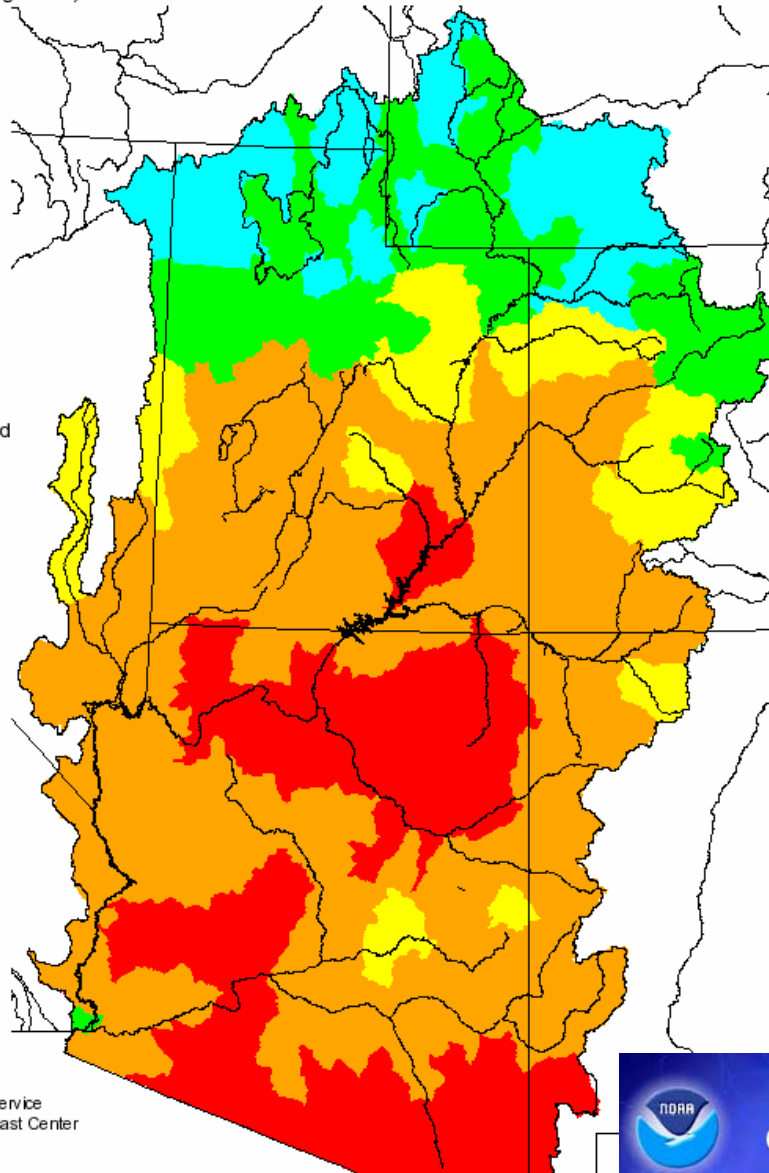
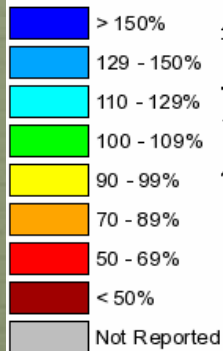
						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

WY 2009 Precipitation

Seasonal Precipitation, October 2008 - September 2009

(Averaged by Hydrologic Unit)

% Average



Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbifc.noaa.gov



NATIONAL WEATHER SERVICE

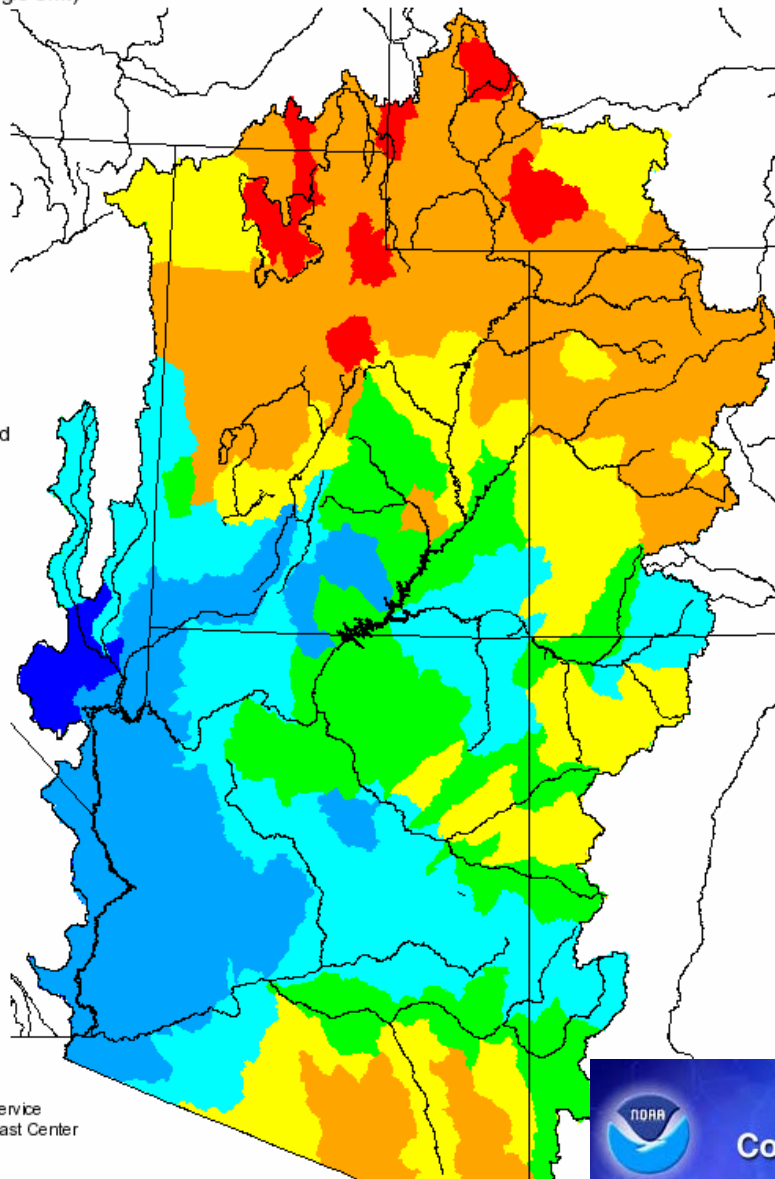
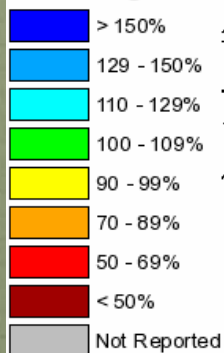
Colorado Basin River Forecast Center

WY 2010 Precipitation

Seasonal Precipitation, October 2009 - January 2010

(Averaged by Hydrologic Unit)

% Average



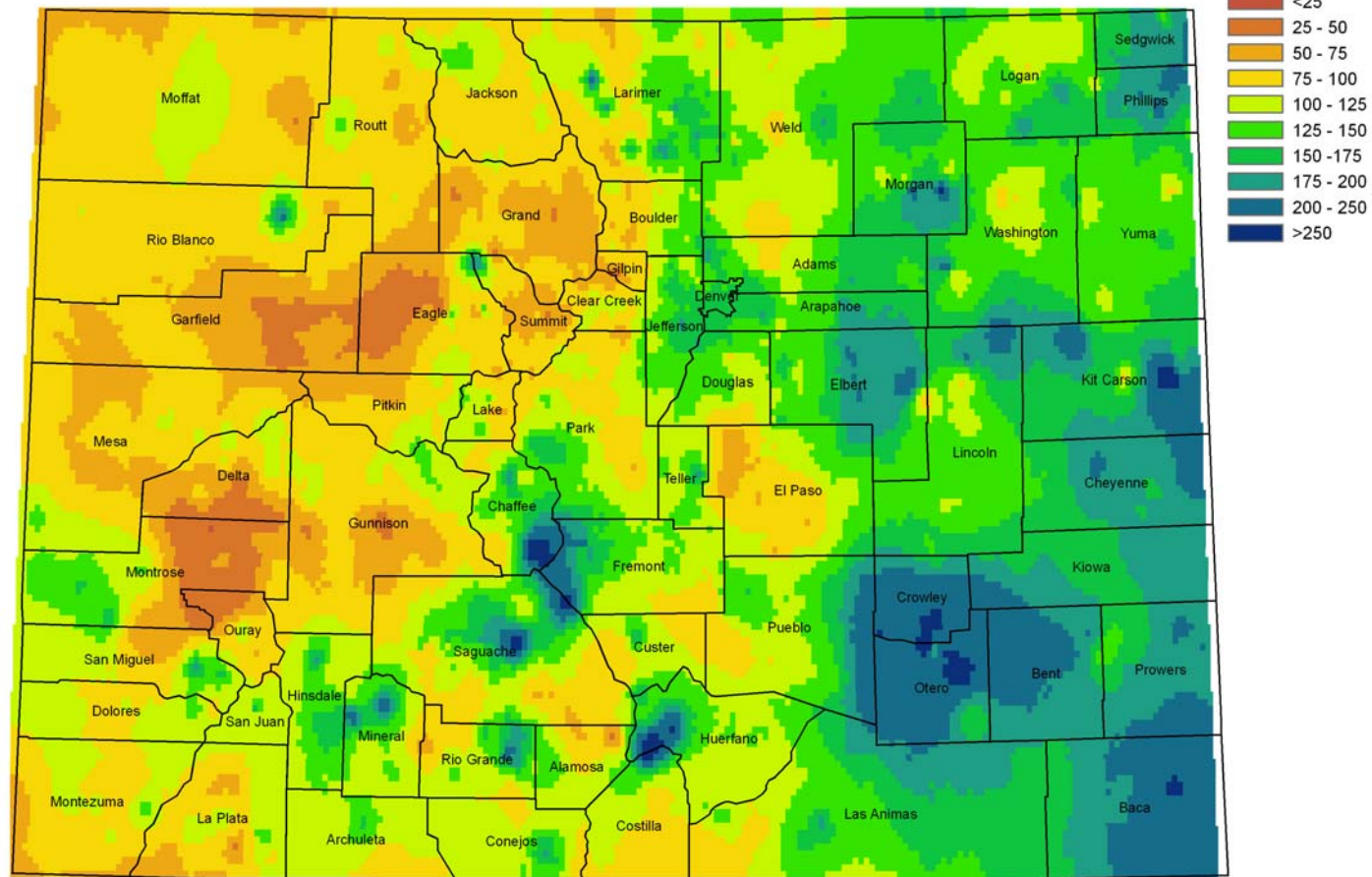
Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbafc.noaa.gov



NATIONAL WEATHER SERVICE
Colorado Basin River Forecast Center

WY 2010 Precipitation As Percent of Normal Through Jan 2010

Water Year 2010 Precipitation as Percent of Normal
October 2009 - January 2010

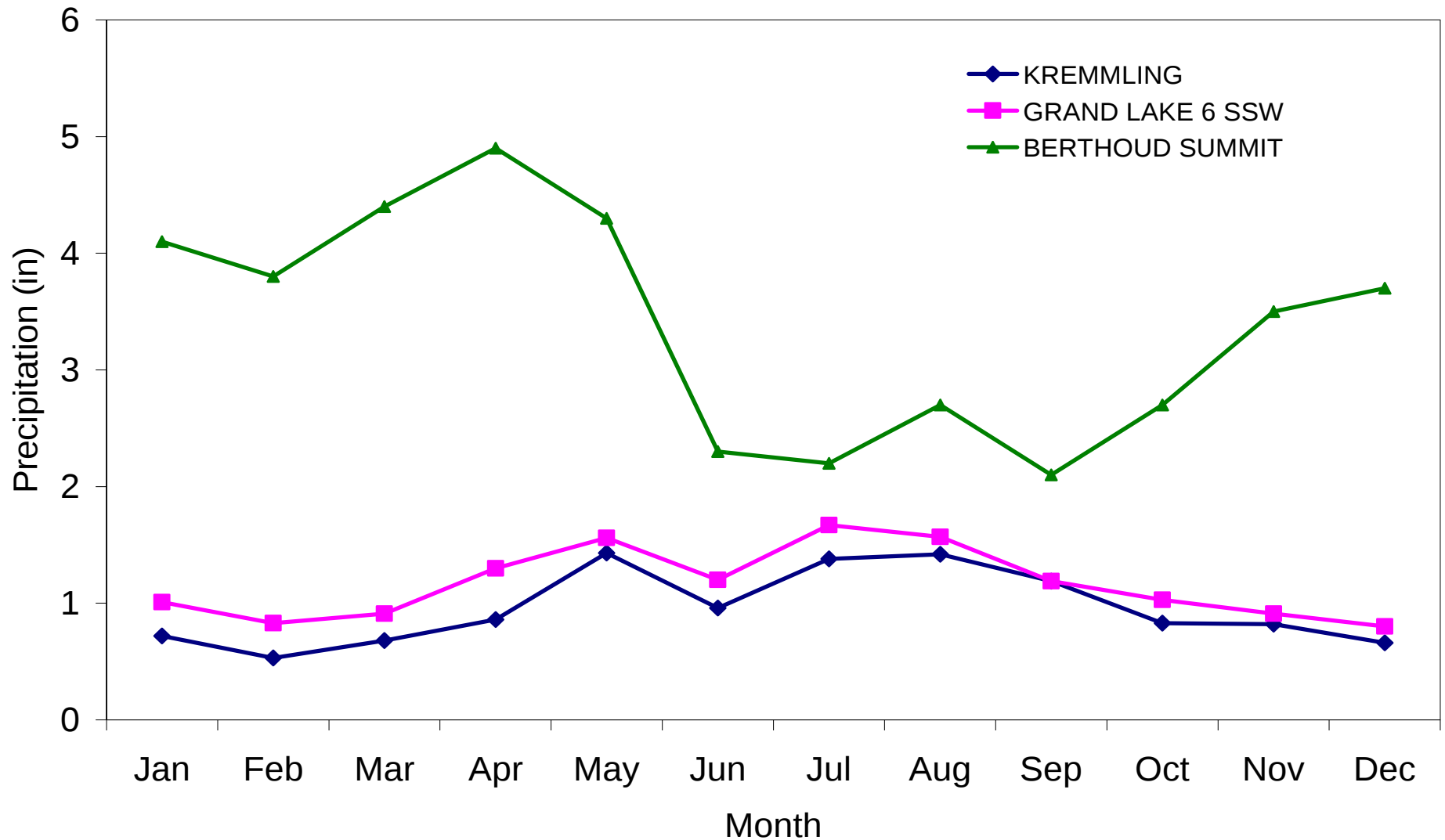


Precipitation/Snowpack Update



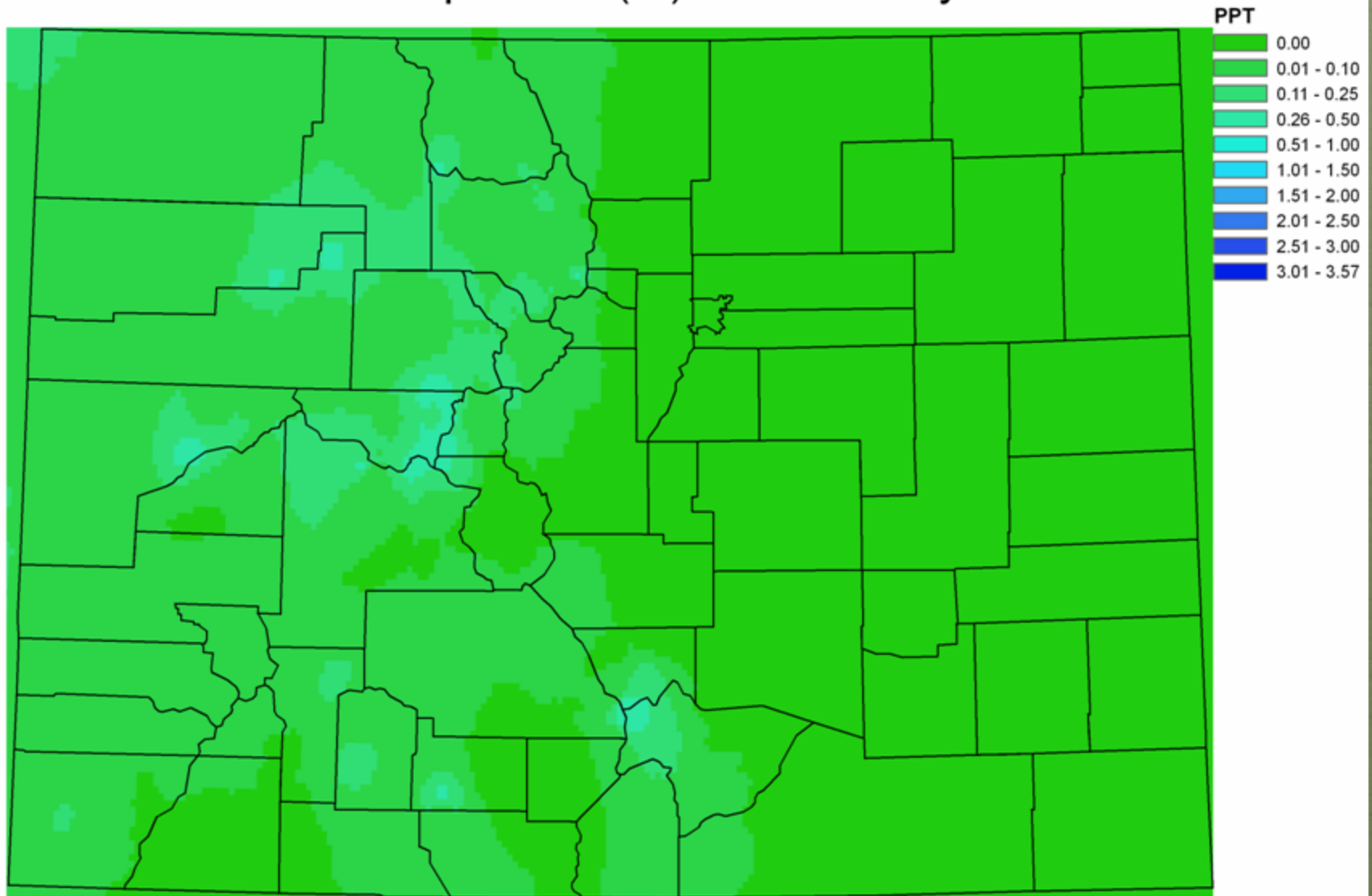
Upper Colorado Normal Precipitation

Upper Colorado River Basin Normal Monthly Precipitation



7 Day Precipitation Animation 15-21 February 2010

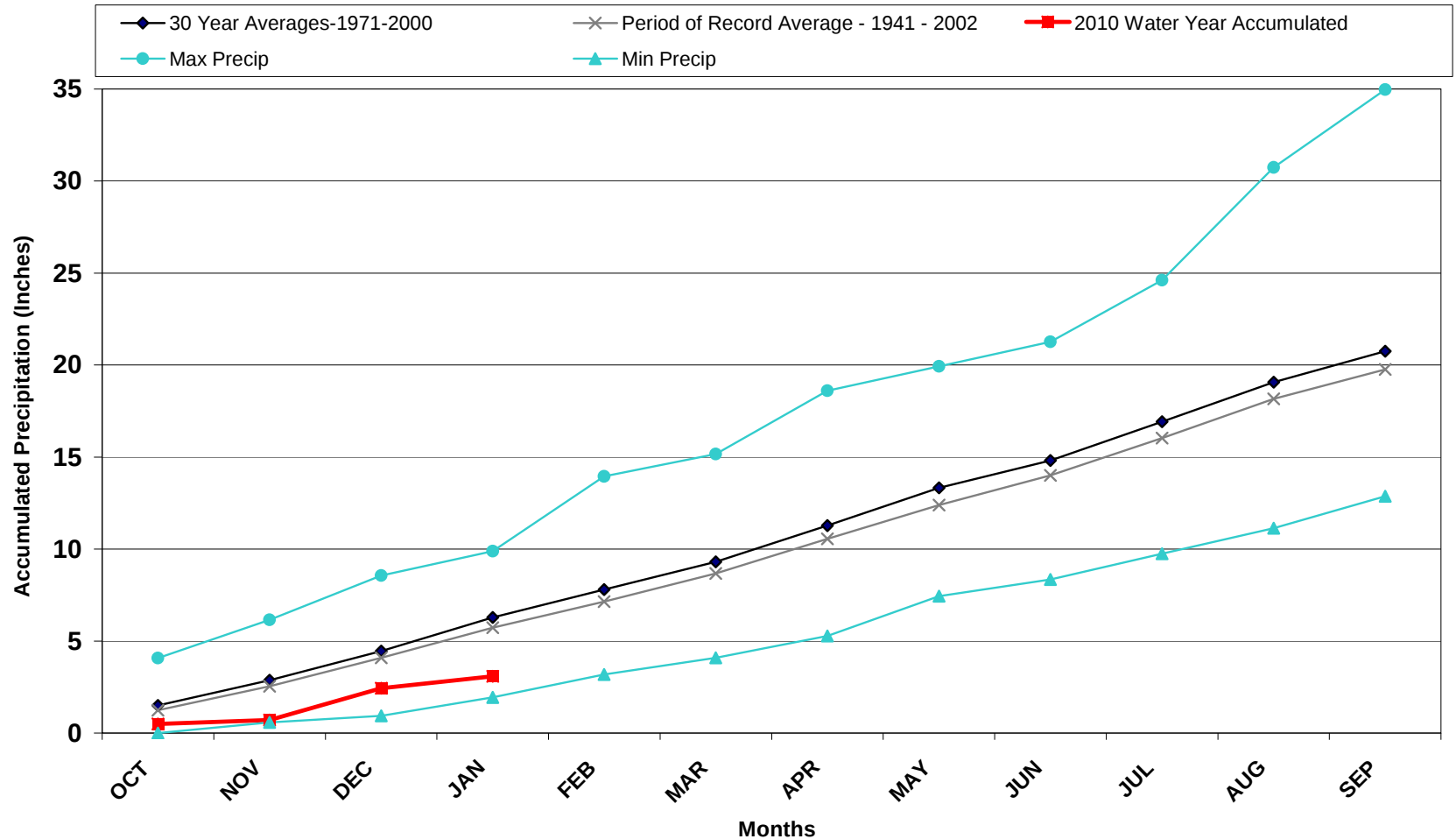
Colorado Precipitation (in) 15 February 2010

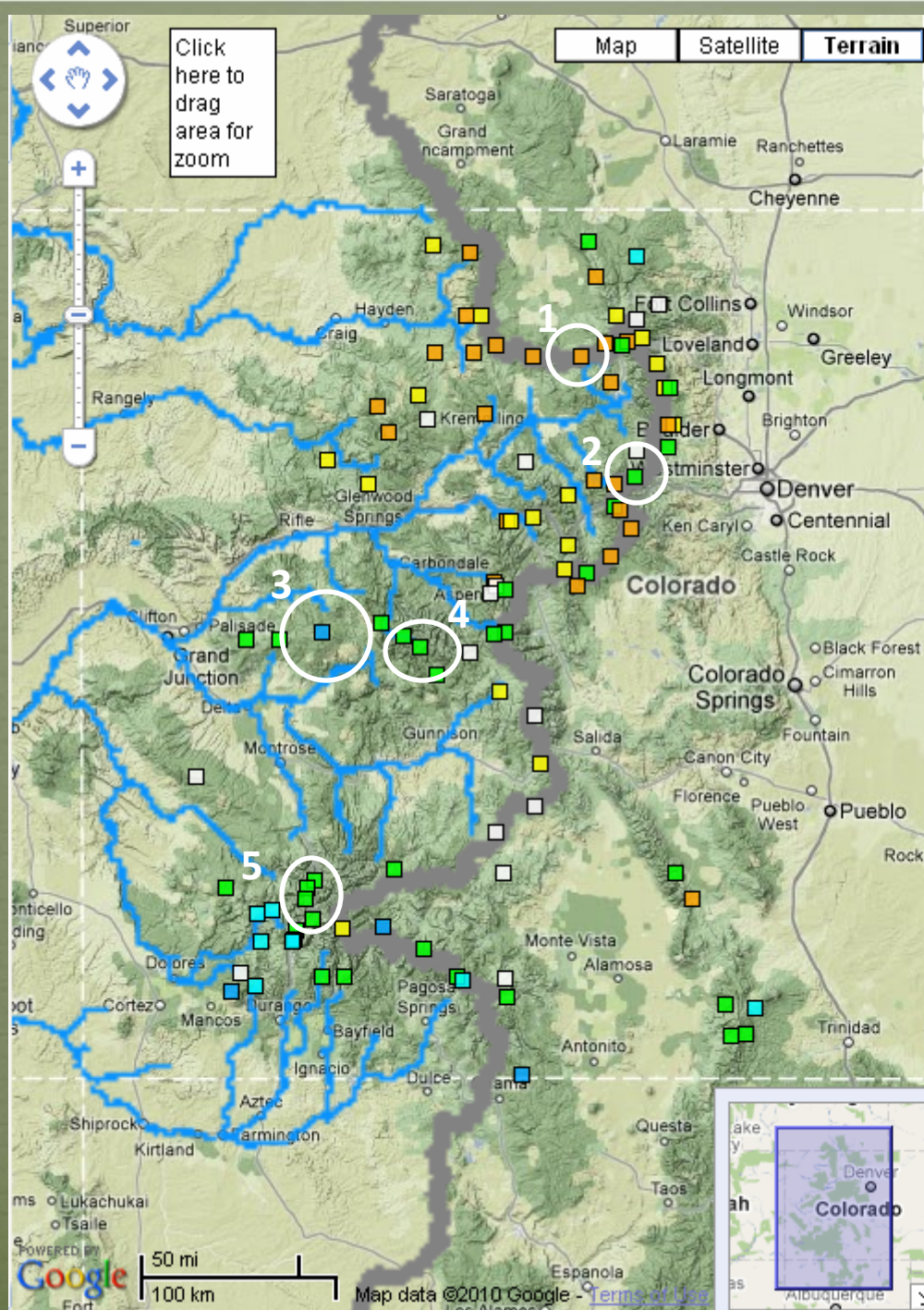


Produced by the Colorado Climate Center utilizing Snotel, NWS, CoCoRaHS and CoAgMet* Preliminary Precipitation Data
Analysis: Inverse Distance Weighting
*Summer only

Grand Lake 1NW

Grand Lake 1 NW 2010 Water Year





Overlays

- ☒ Rivers
- ☒ RFC
- ☐ Basins
- ☒ Active Basins
- ☐ Grids (Precip etc.)

Display Options

- ☐ Show NWS ID
- ☐ Show Data

Snow Point %Avg SWE

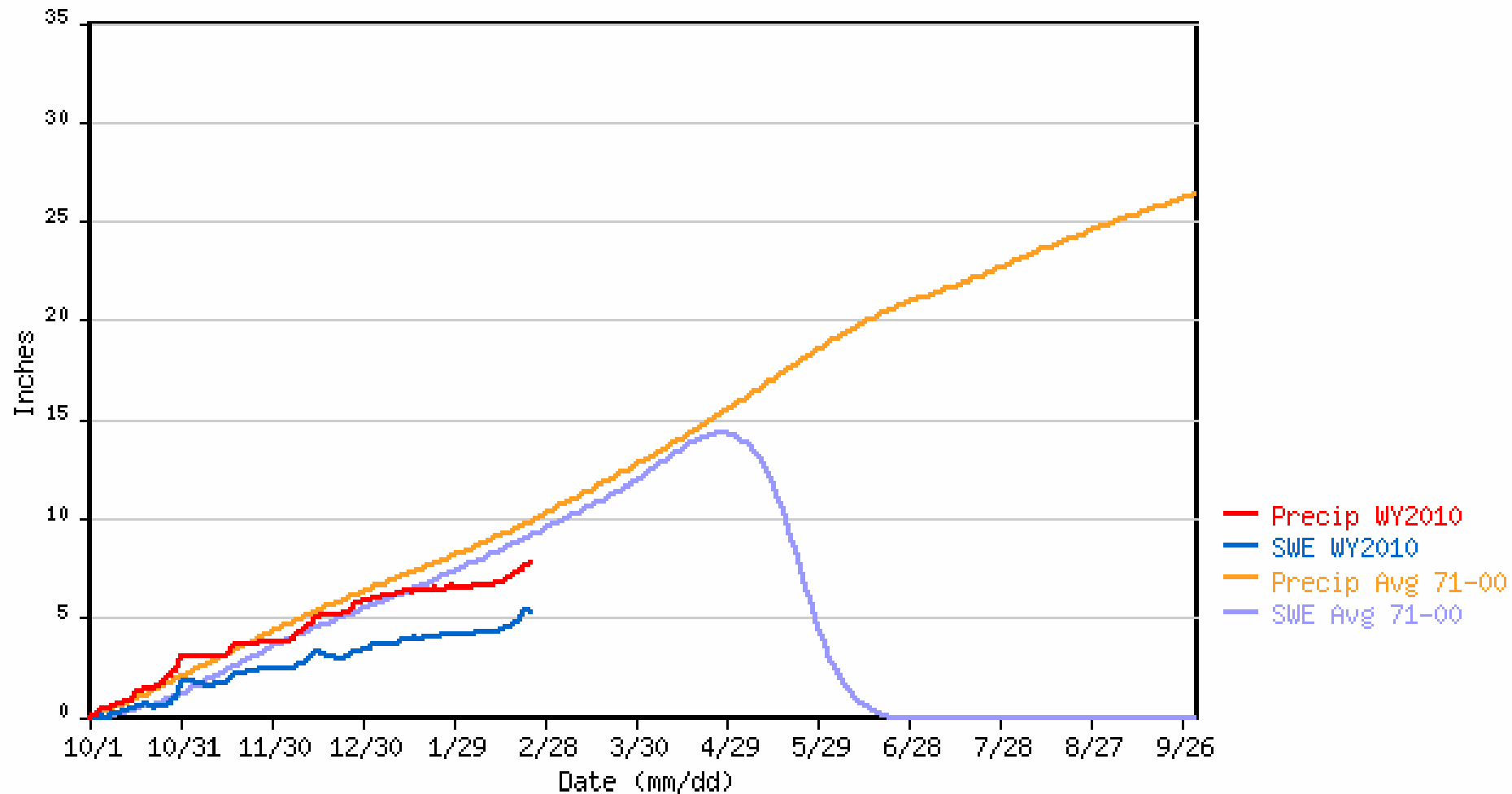
- ☐ No Data
- ☒ < 25
- ☒ 25-50
- ☒ 50-75
- ☒ 75-90
- ☒ 90-110
- ☒ 110-125
- ☒ 125-150
- ☒ 150-175
- ☒ >175

Snow Point Options

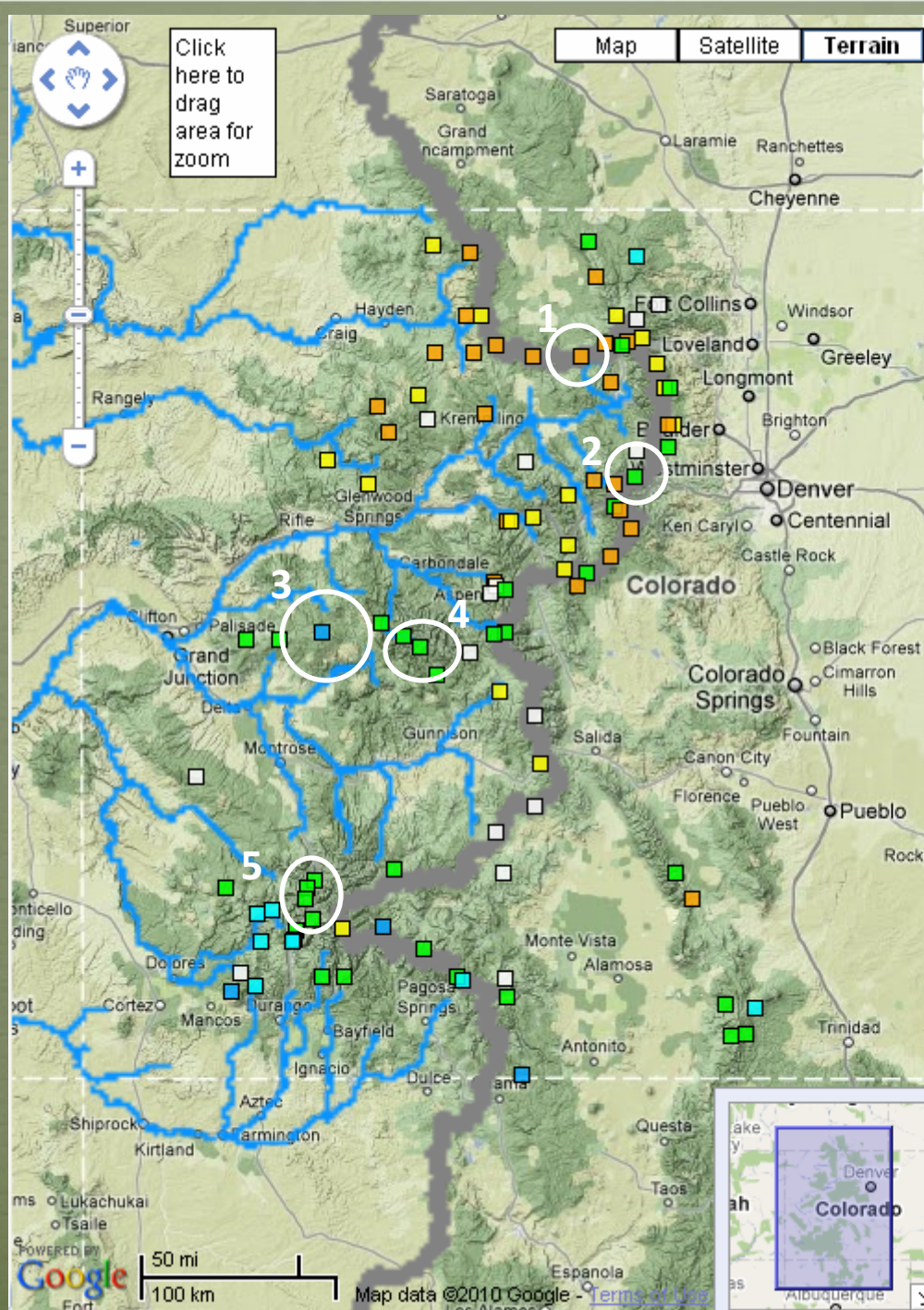
- ☐ All
- ☒ < 7000
- ☒ 7000-8000
- ☒ 8000-9000
- ☒ 9000-10000
- ☒ > 10000

WILLOW CREEK PASS SNOTEL for Water Year 2010

*** Provisional Data, Subject to Change ***



Snowpack: 58%
Elevation: 9,540 ft



Overlays

- ☒ Rivers
- ☒ RFC
- ☐ Basins
- ☒ Active Basins
- ☐ Grids (Precip etc.)

Display Options

- ☐ Show NWS ID
- ☐ Show Data

Snow Point %Avg SWE

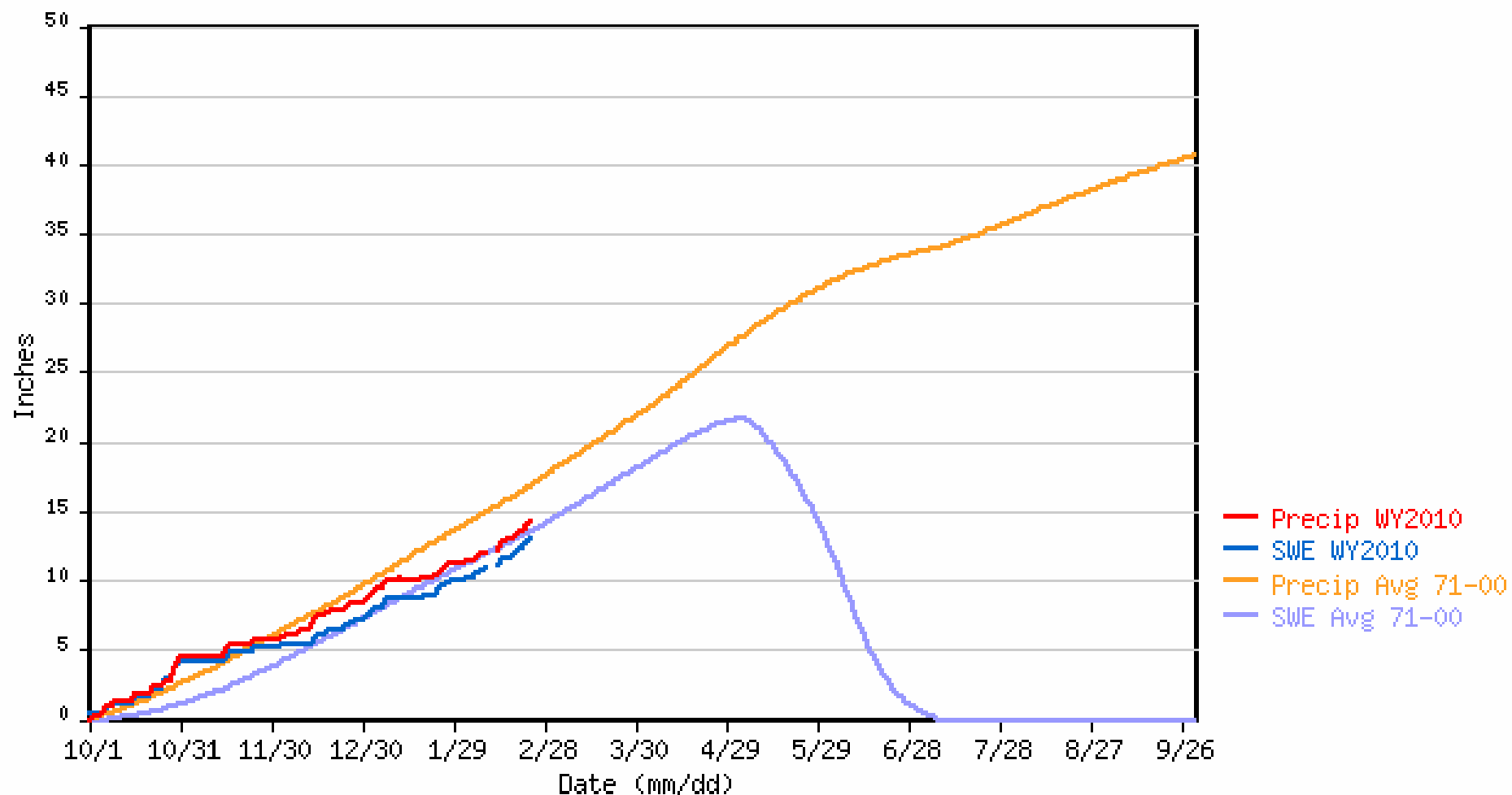
- ☐ No Data
- ☒ < 25
- ☒ 25-50
- ☒ 50-75
- ☒ 75-90
- ☒ 90-110
- ☒ 110-125
- ☒ 125-150
- ☒ 150-175
- ☒ >175

Snow Point Options

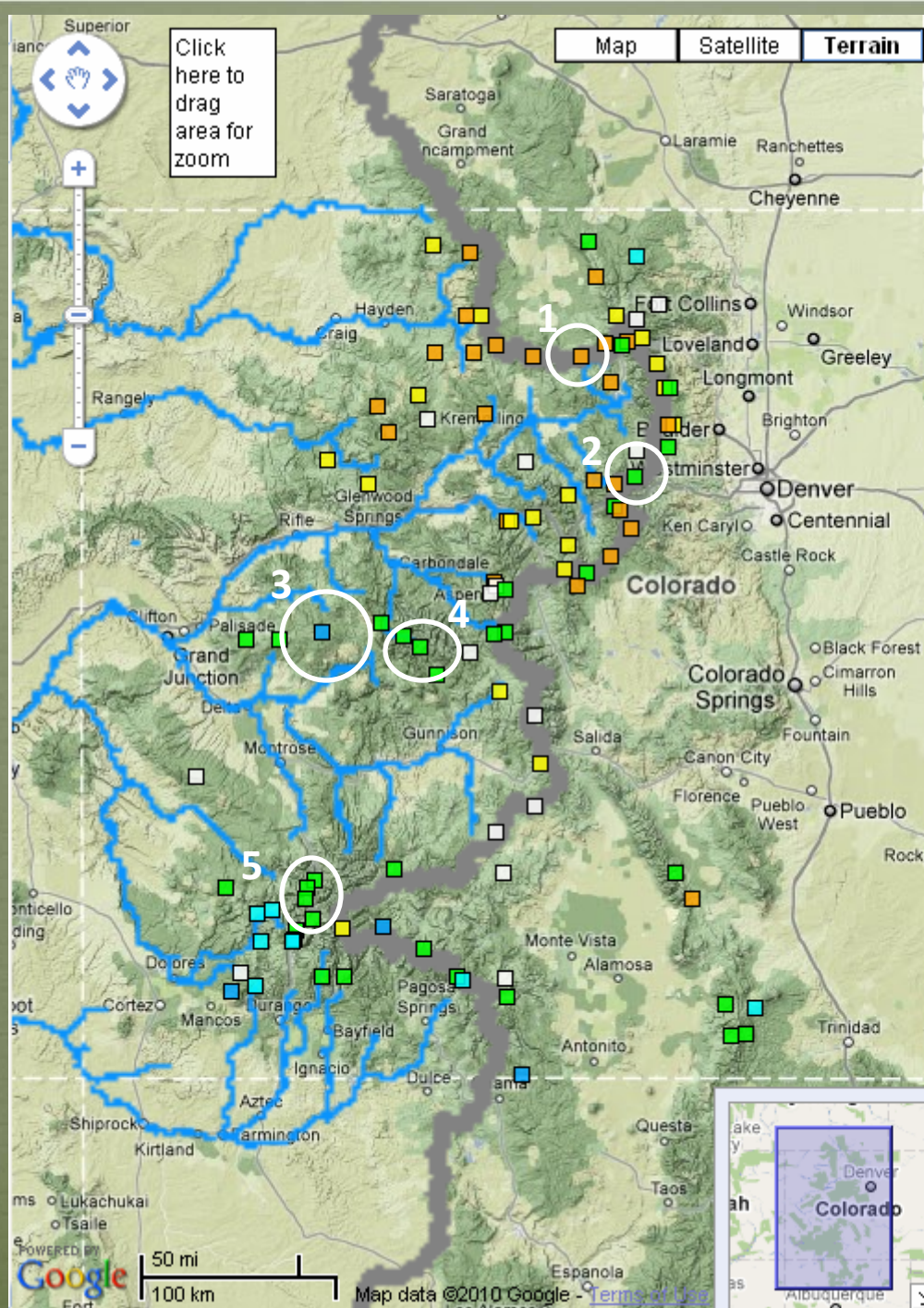
- ☐ All
- ☒ < 7000
- ☒ 7000-8000
- ☒ 8000-9000
- ☒ 9000-10000
- ☒ > 10000

BERTHOUD SUMMIT SNOTEL for Water Year 2010

*** Provisional Data, Subject to Change ***

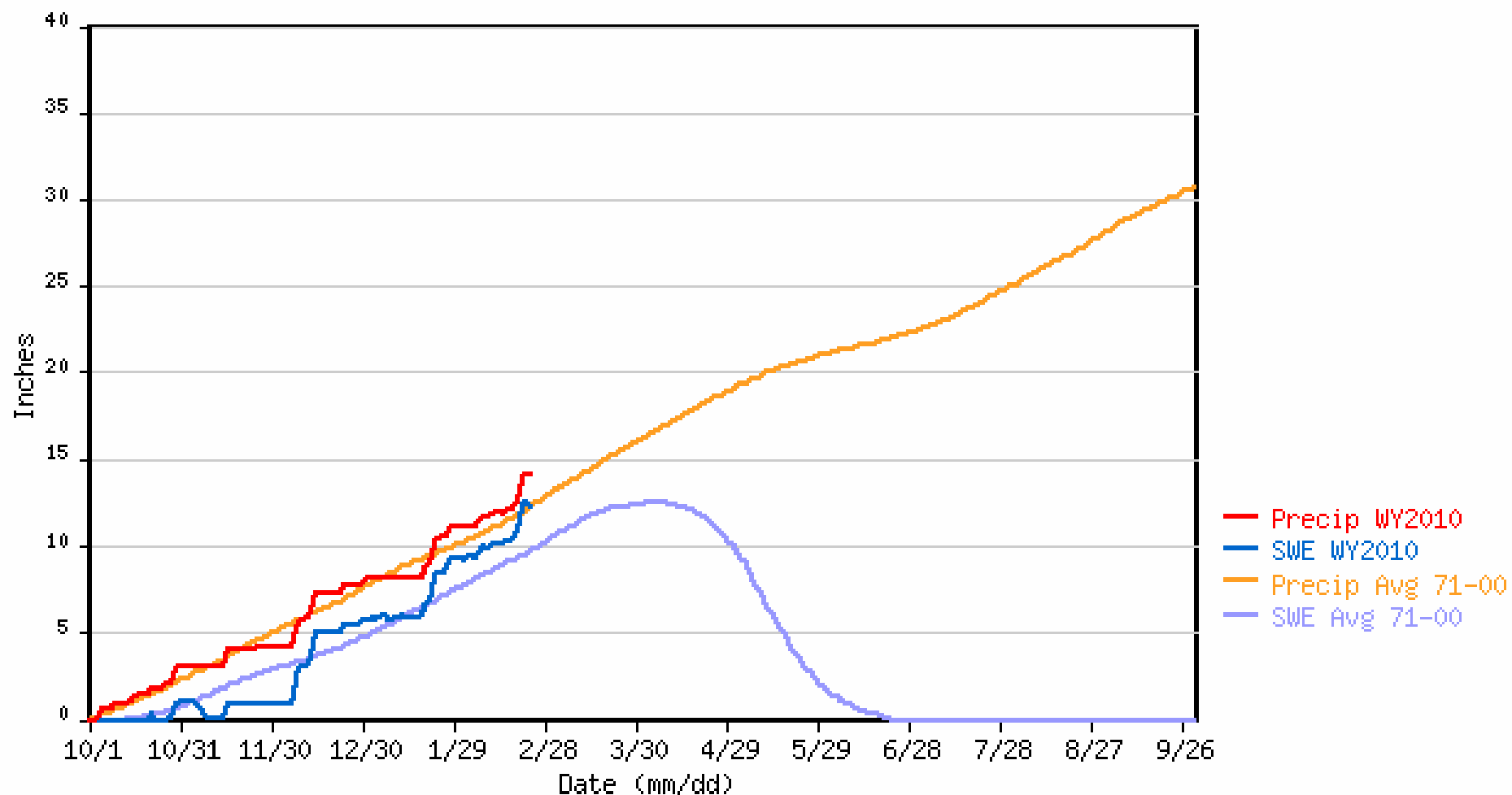


Snowpack: 97%
Elevation: 11,300 ft

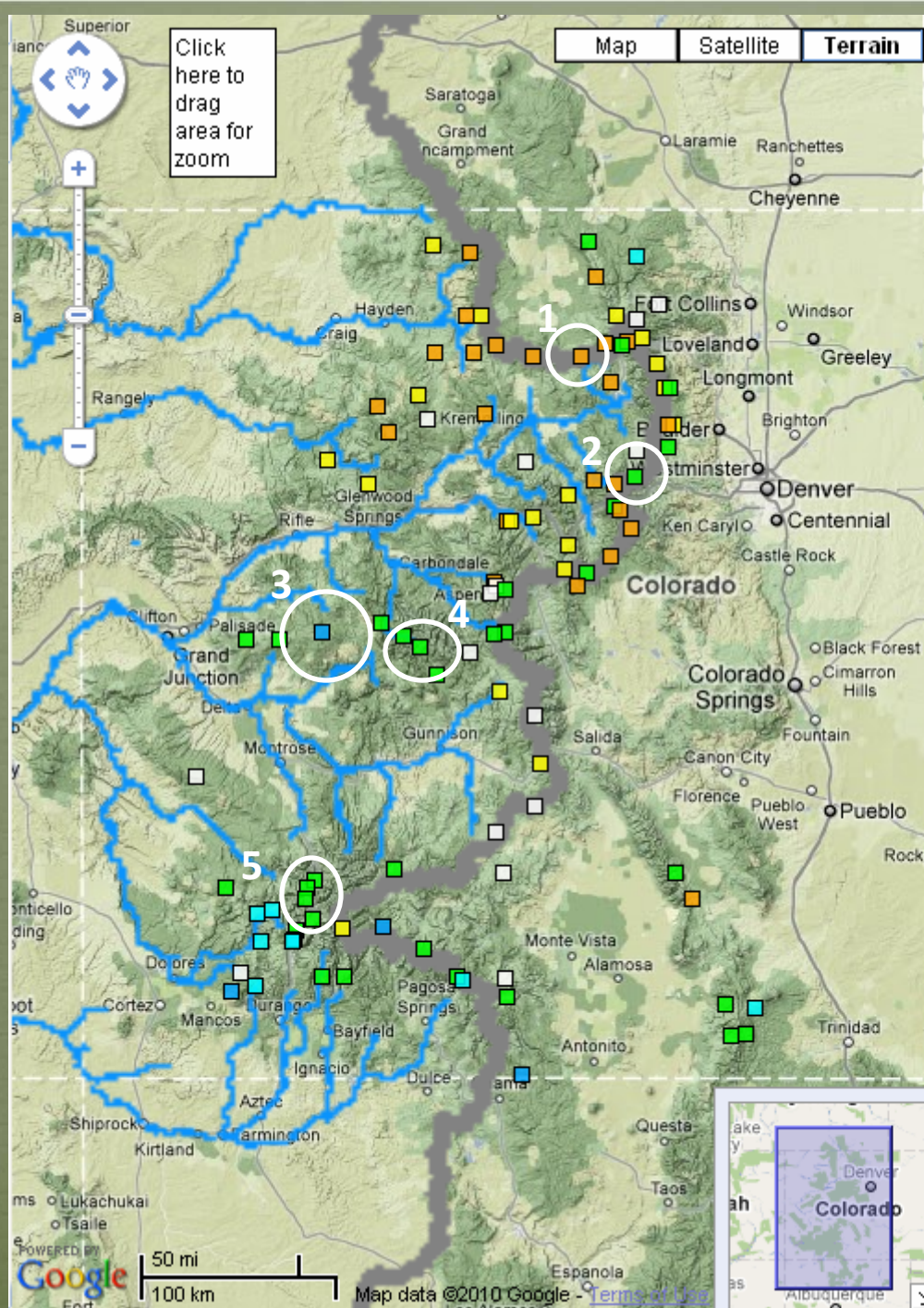


OVERLAND RES. SNOTEL for Water Year 2010

*** Provisional Data, Subject to Change ***

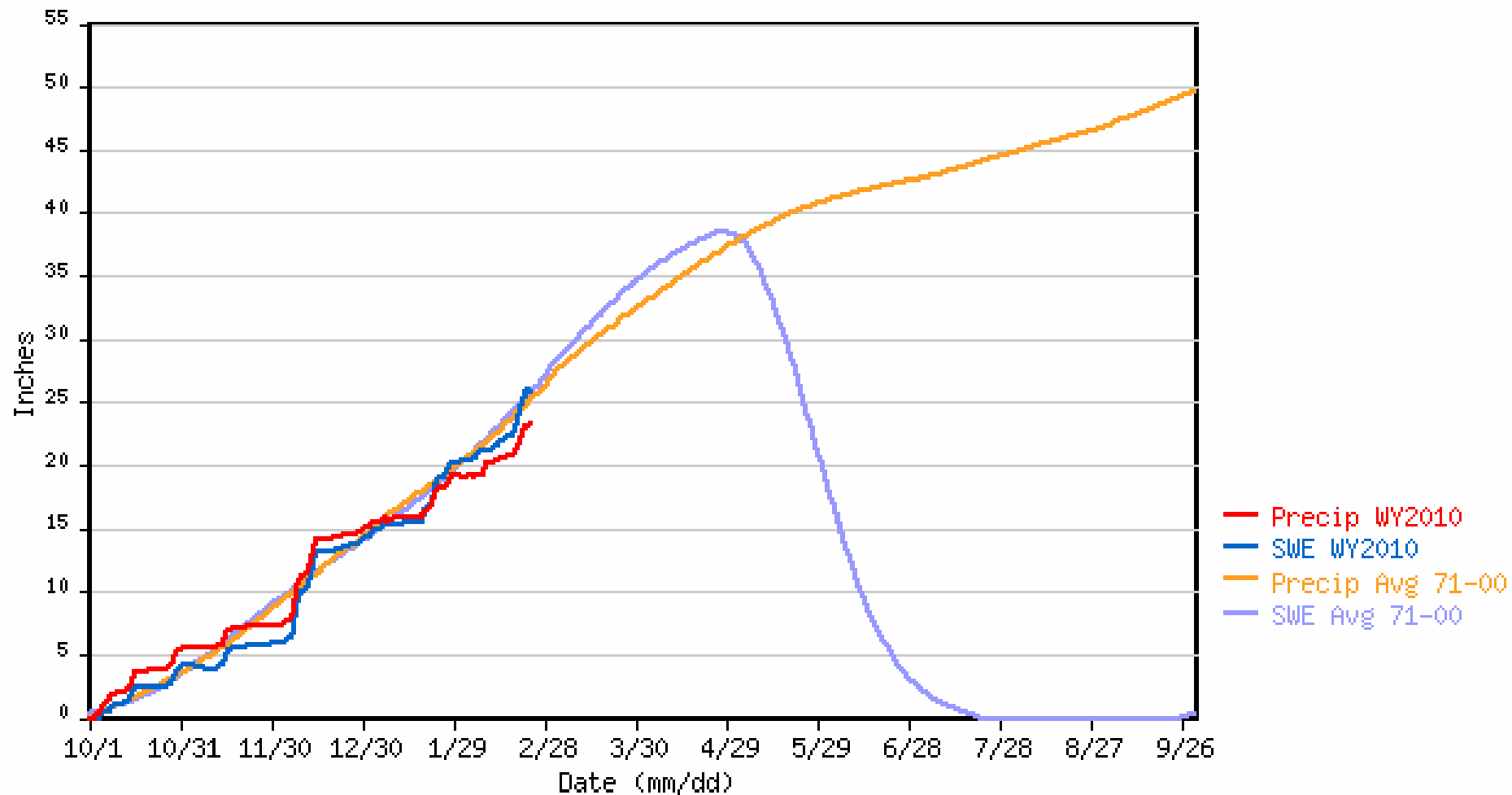


Snowpack: 127%
Elevation: 9,880 ft

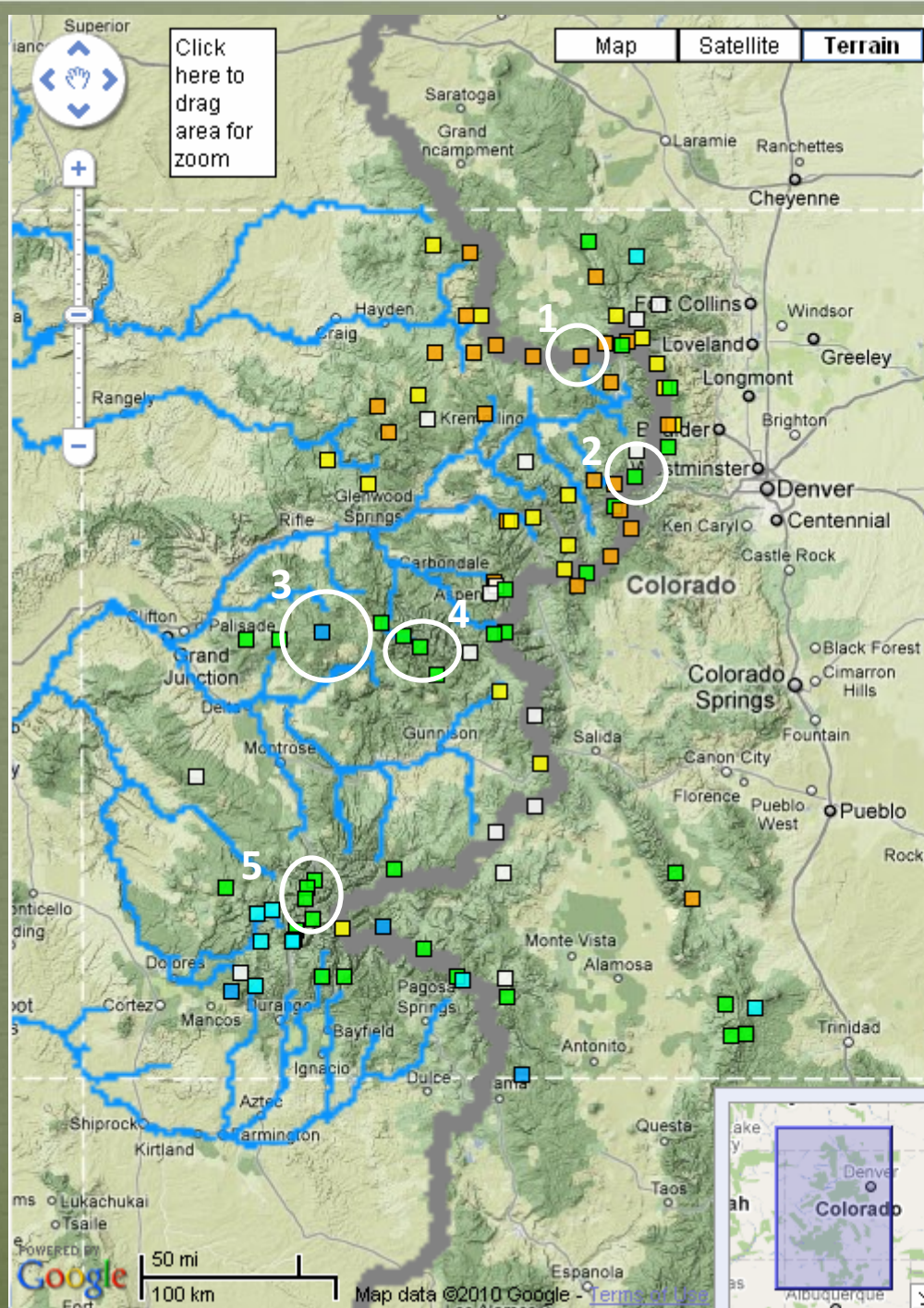


SCHOFIELD PASS SNOTEL for Water Year 2010

*** Provisional Data, Subject to Change ***

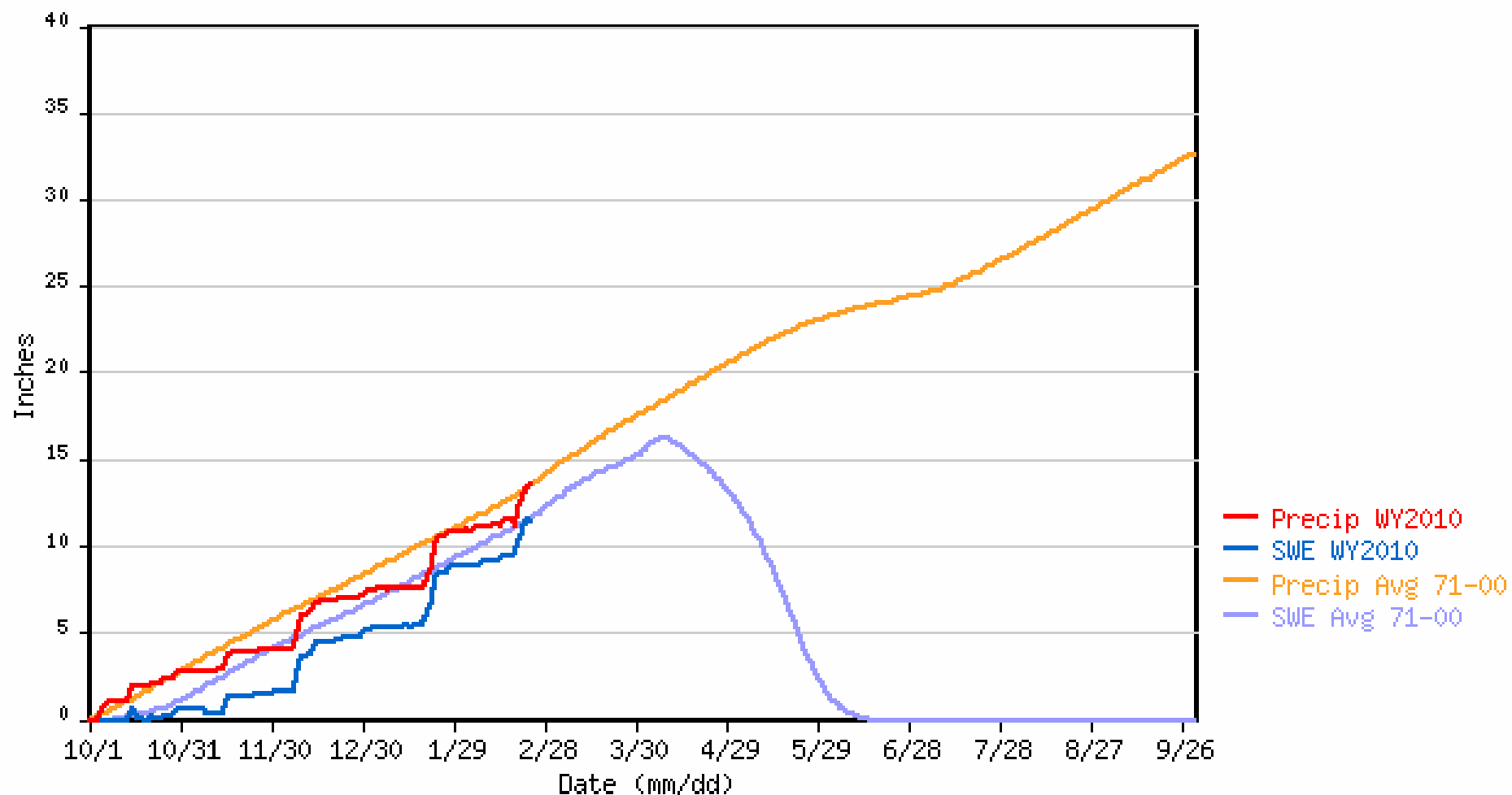


Snowpack: 101%
Elevation: 10,707 ft

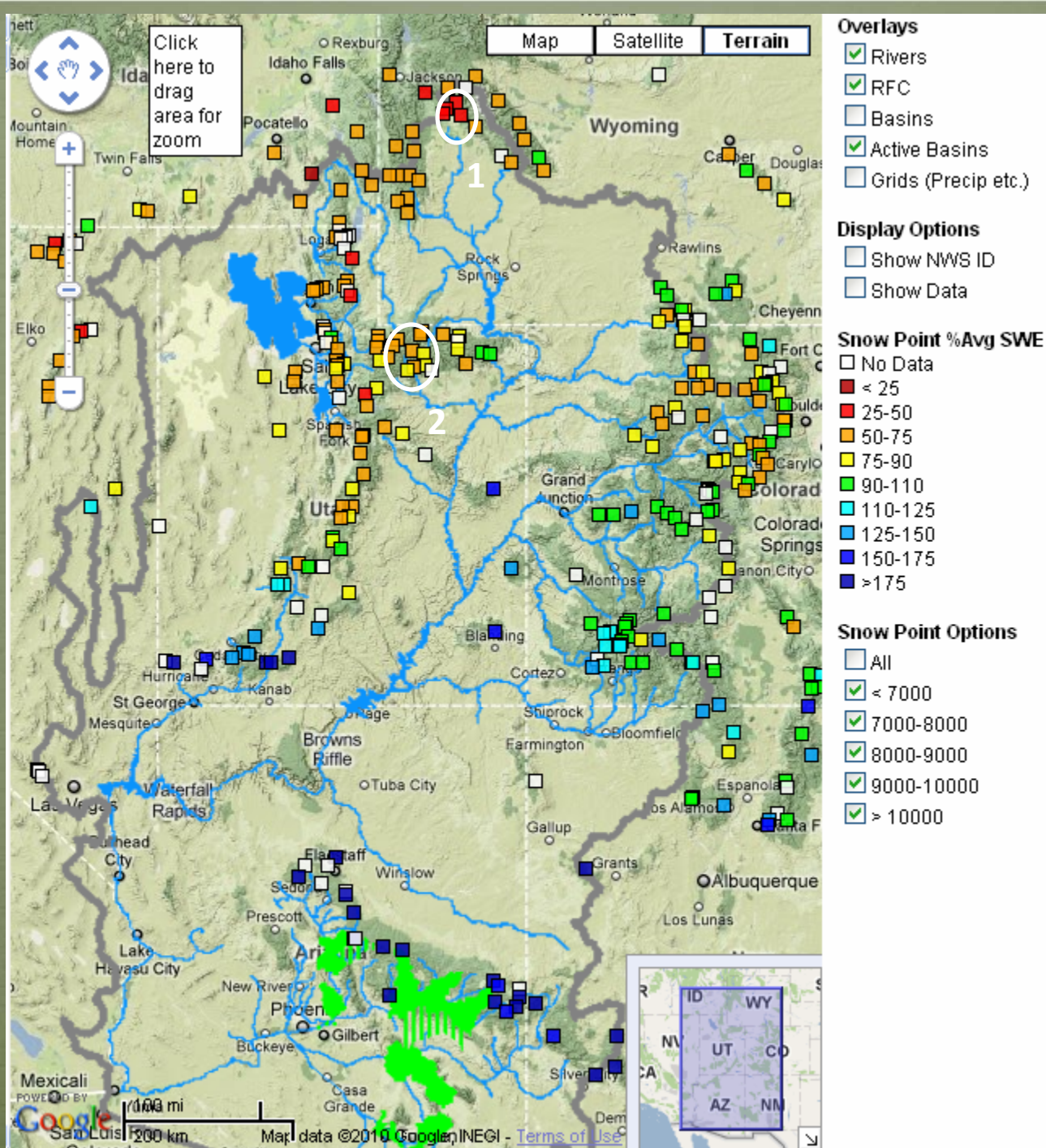


MINERAL CREEK SNOTEL for Water Year 2010

*** Provisional Data, Subject to Change ***

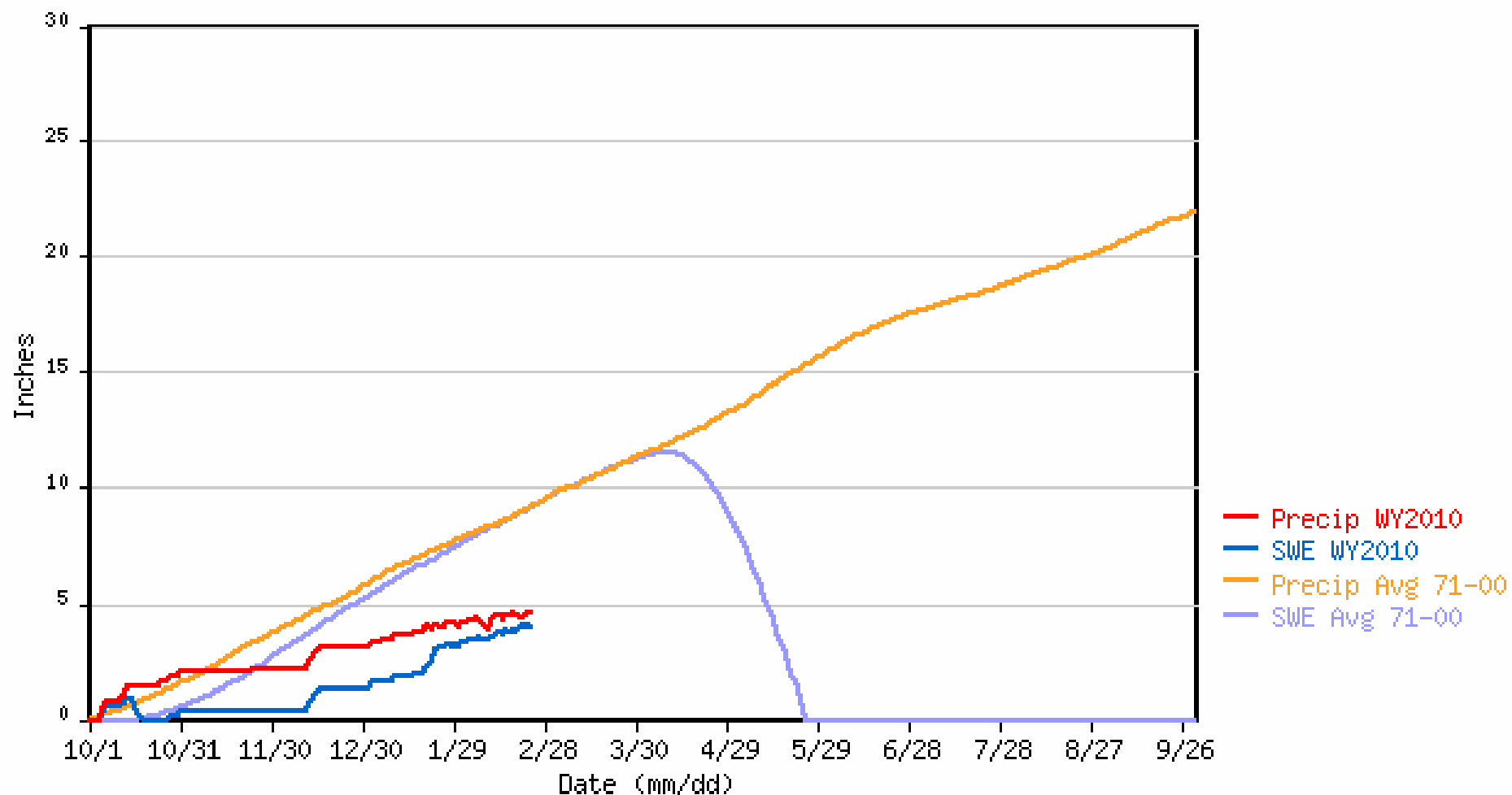


Snowpack: 98%
Elevation: 10,040 ft

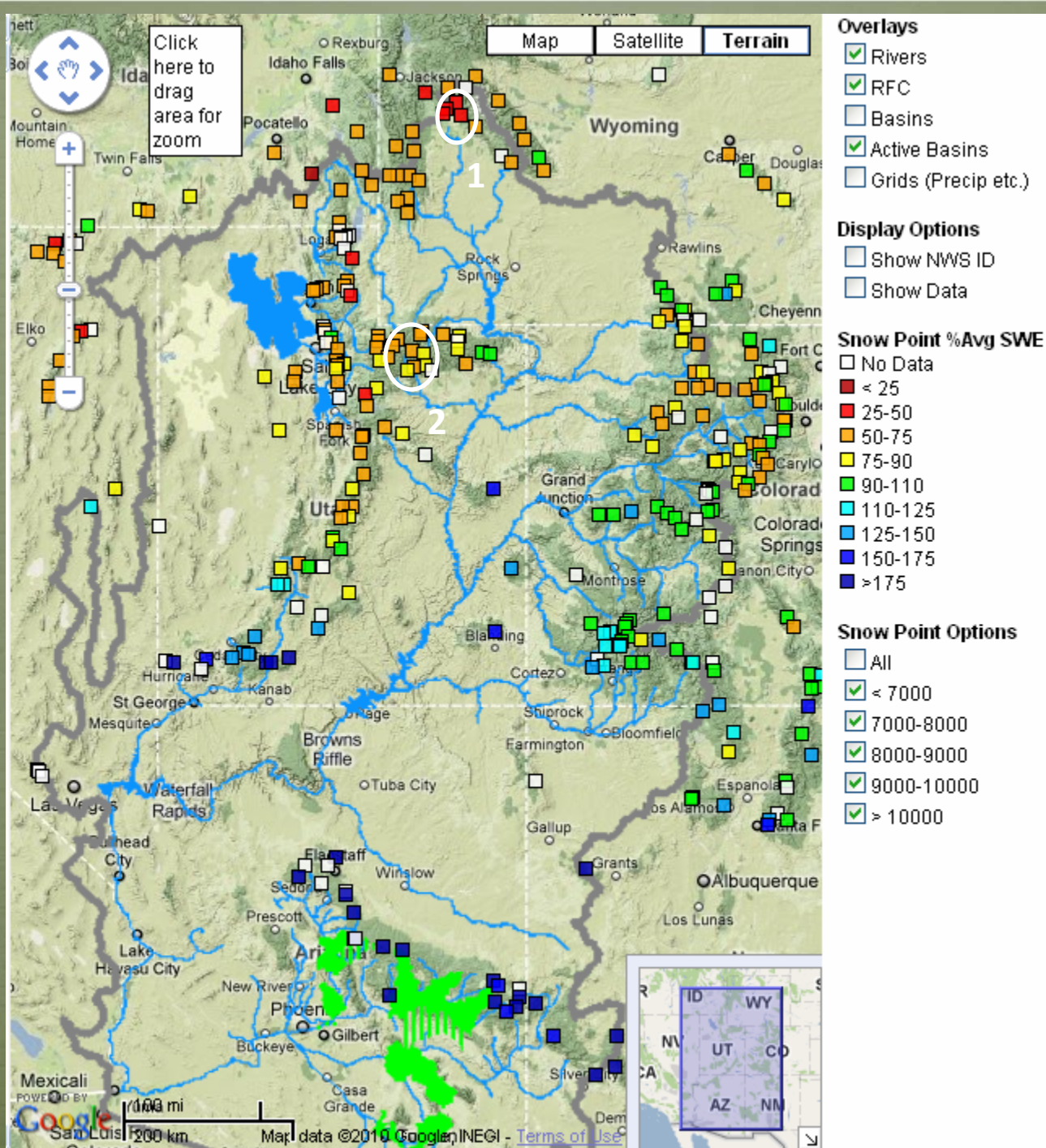


NEW FORK LAKE SNOTEL for Water Year 2010

*** Provisional Data, Subject to Change ***

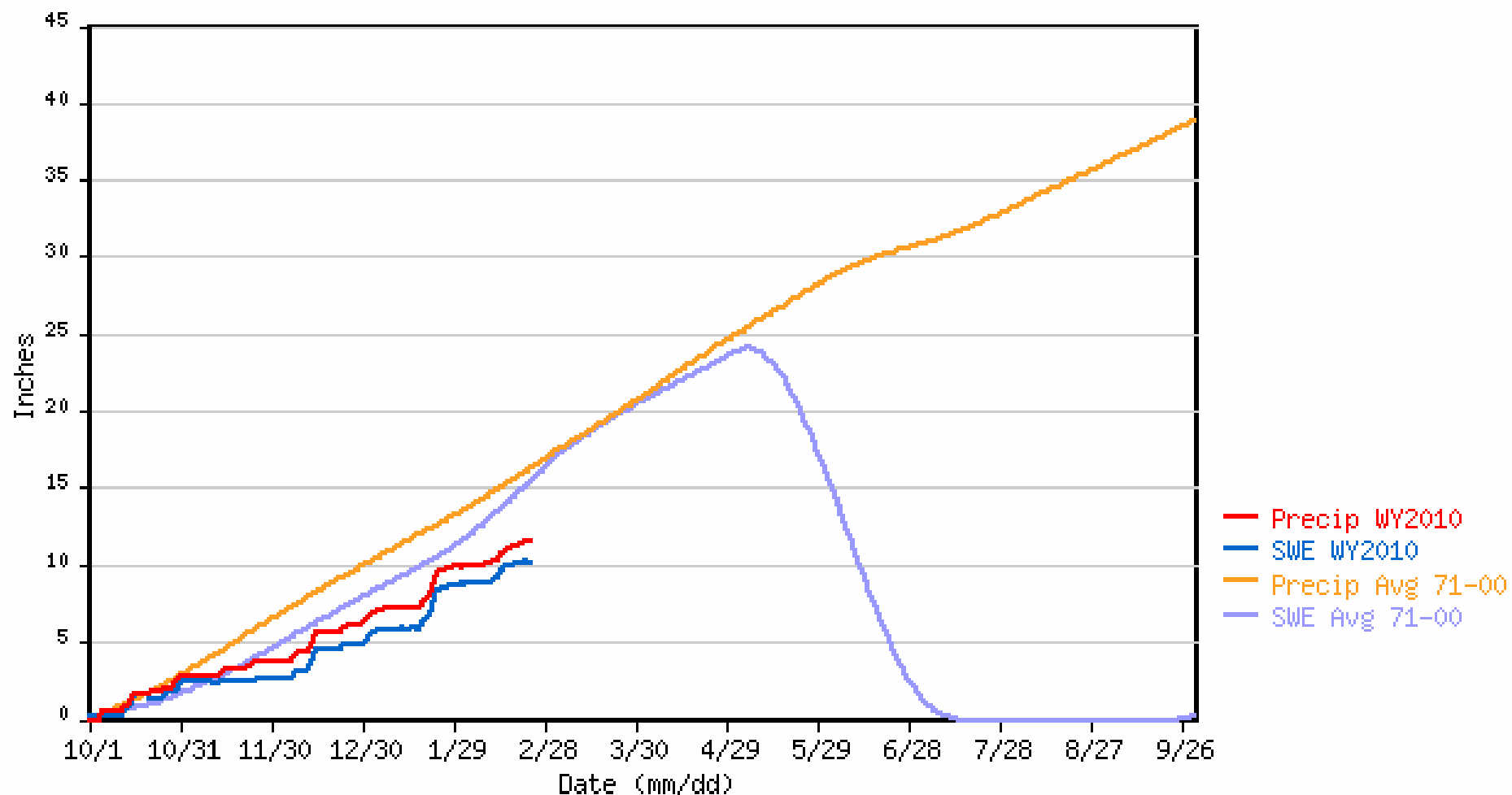


Snowpack: 44%
Elevation: 8,340 ft



LAKEFORK BASIN SNOTEL for Water Year 2010

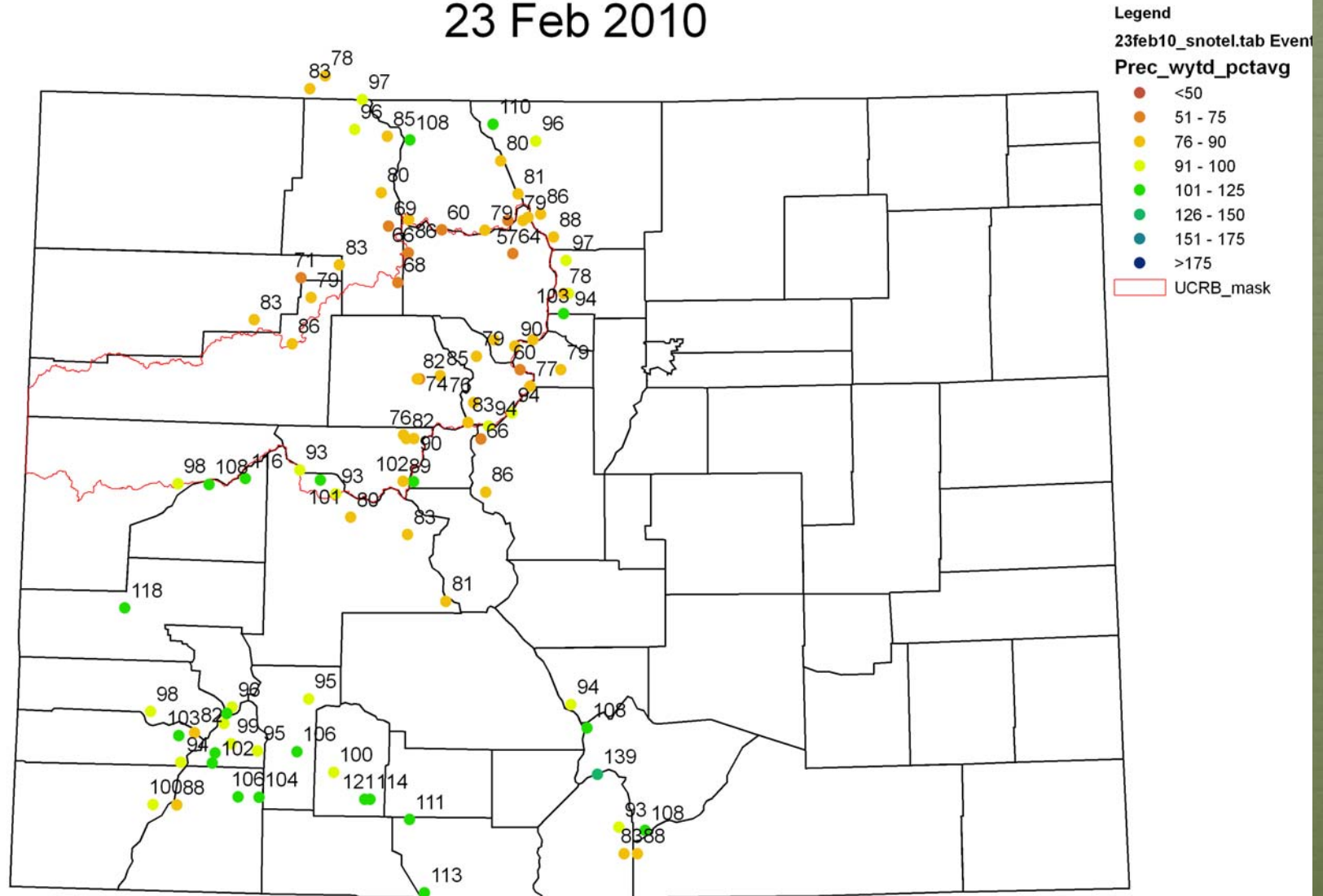
*** Provisional Data, Subject to Change ***



Snowpack: 66%
Elevation: 10,900 ft

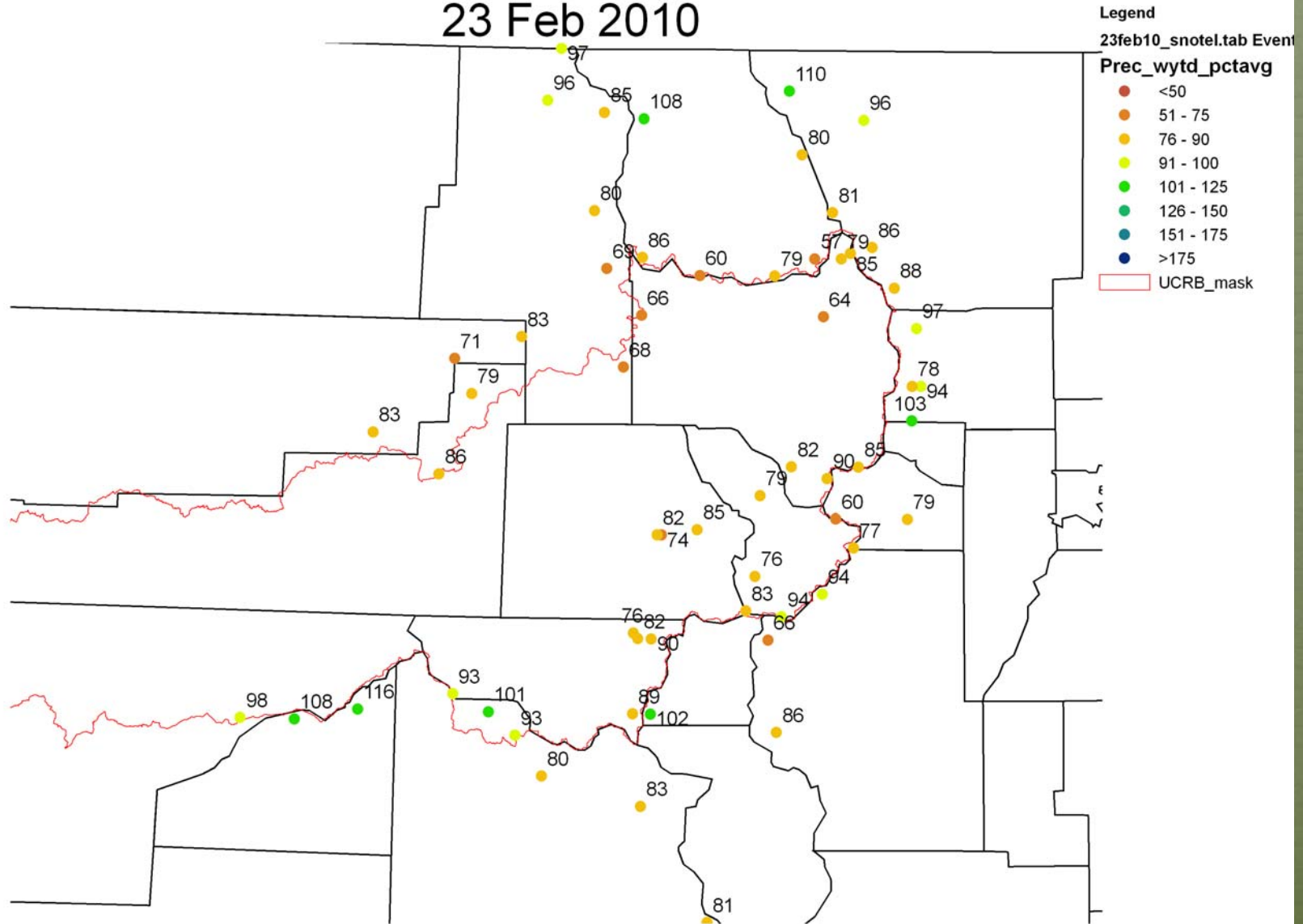
Snotel WYTD Precipitation % Average

Snotel WYTD Precipitation as Percent of Average 23 Feb 2010



Snotel WYTD Precipitation % Average

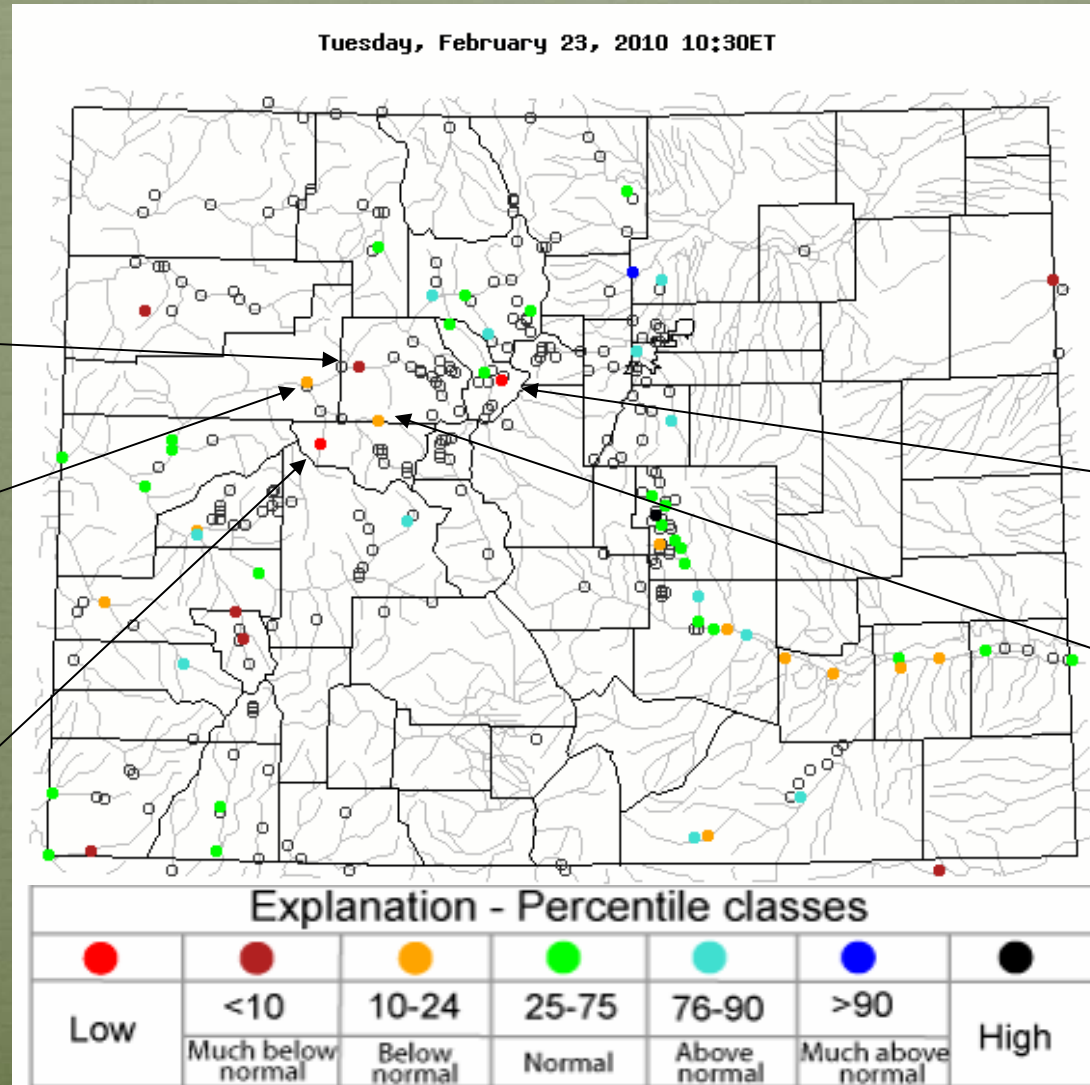
Snotel WYTD Precipitation as Percent of Average 23 Feb 2010



Streamflow Update



Streamflow 23 February 2010



Eagle R, below
Gypsum: 78%
Normal

Colorado R,
below Glenwood
Springs: 82%
Normal

Crystal River
above Avalanche
Crk, near
Redstone: 44%
Normal

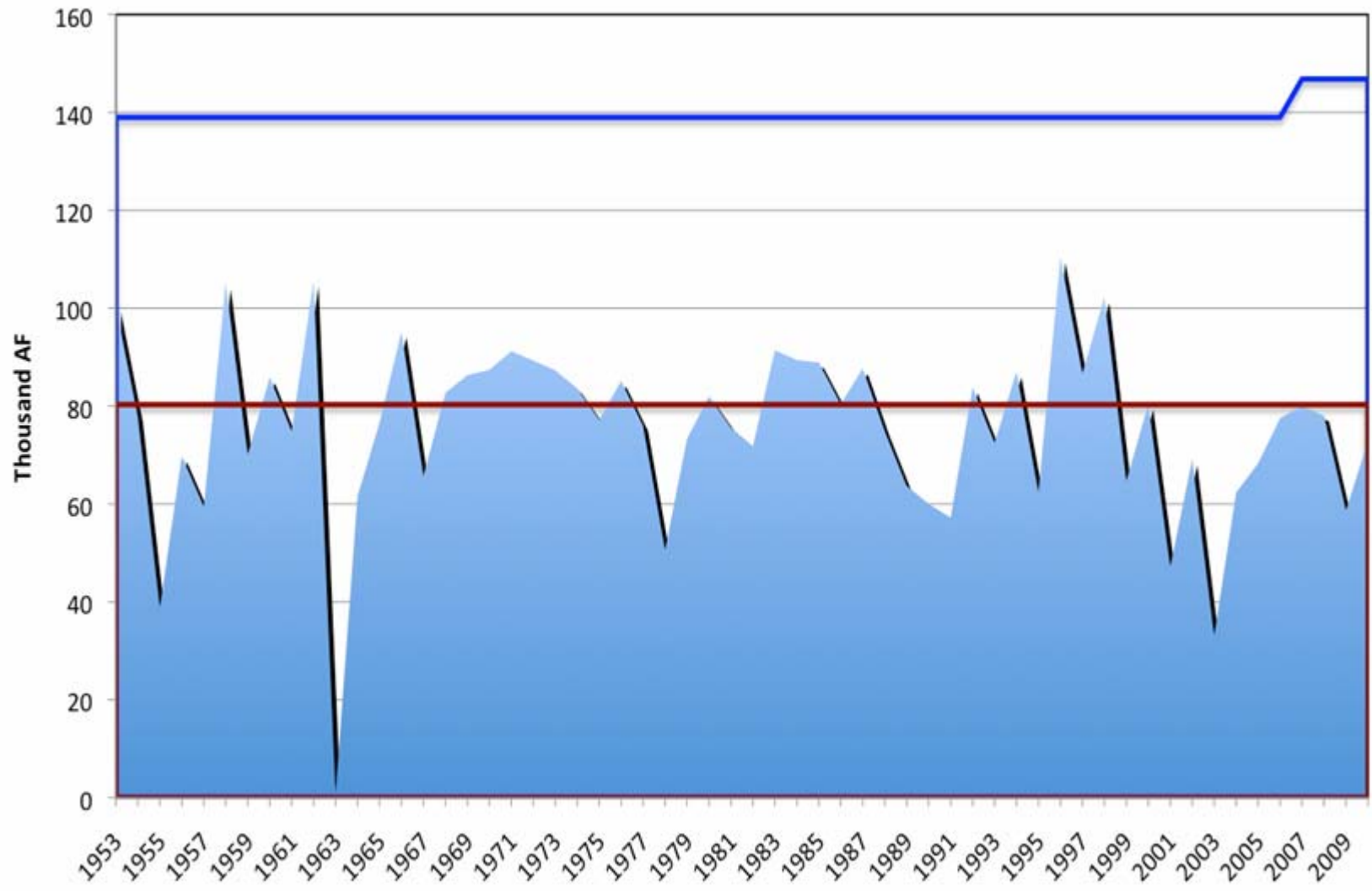
Keystone Gulch,
near Dillon: 63%
Normal

Fryingpan R.,
below Ruedi:
54% Normal

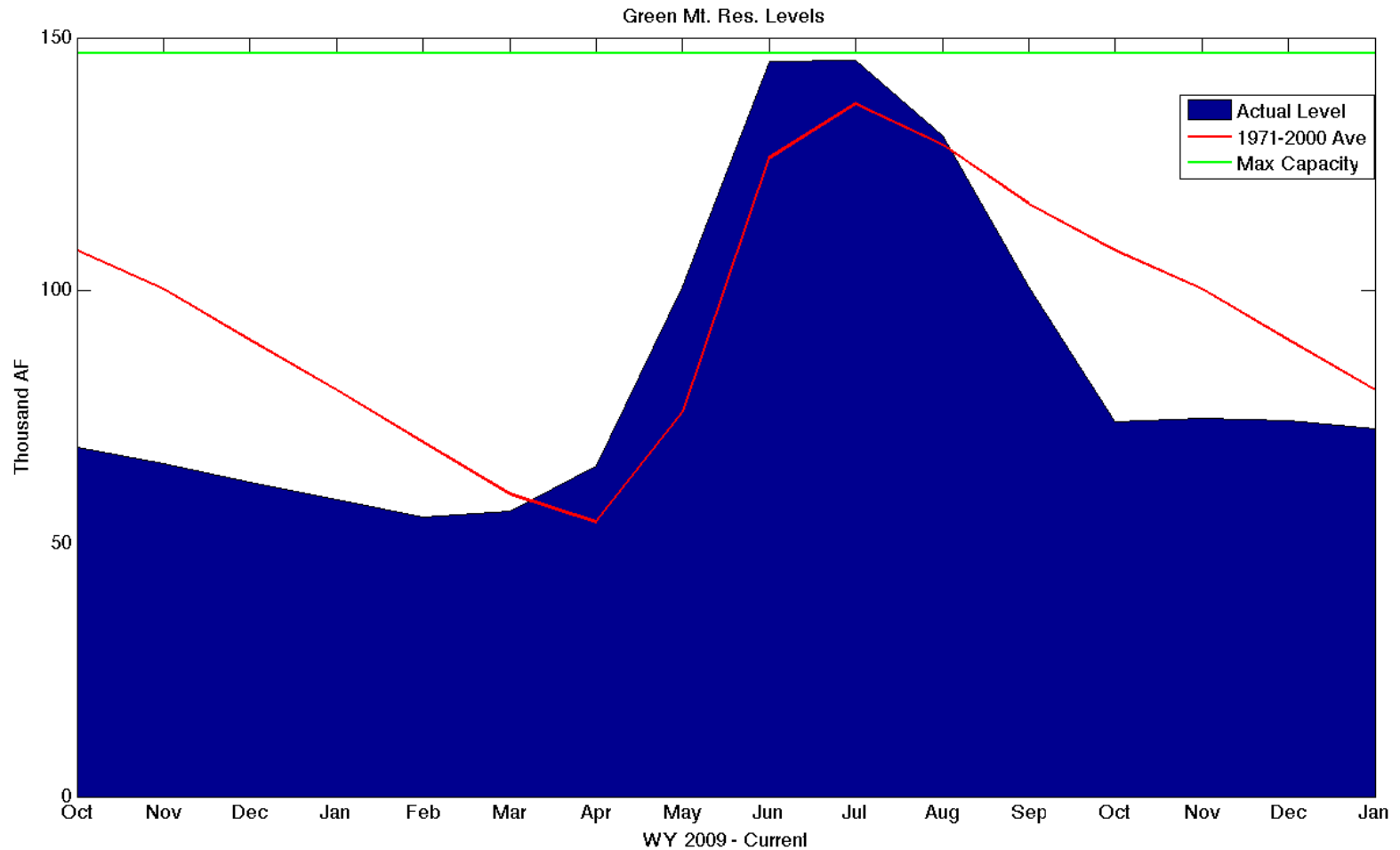
Reservoir Update



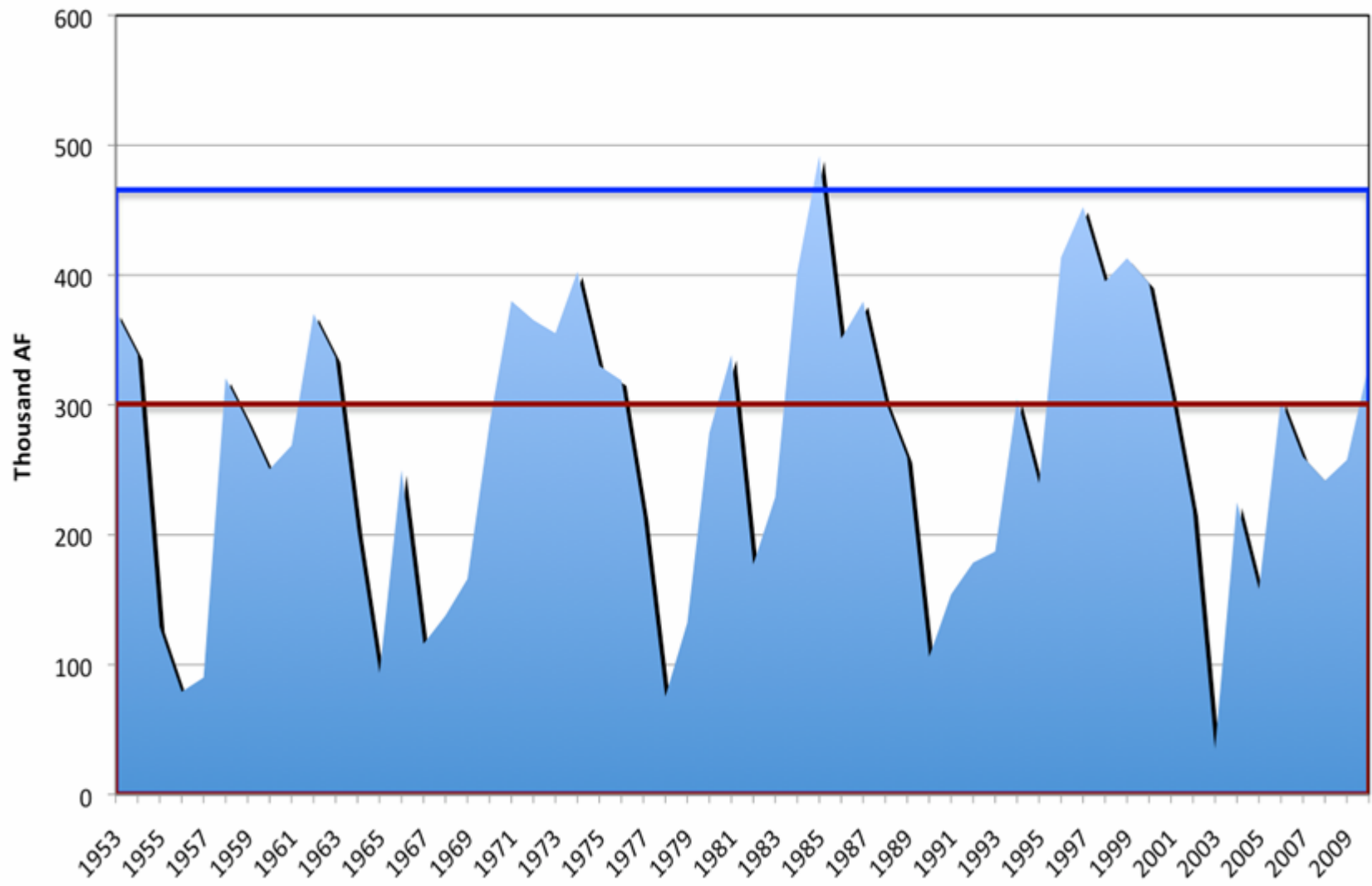
Green Mountain January Reservoir Storage



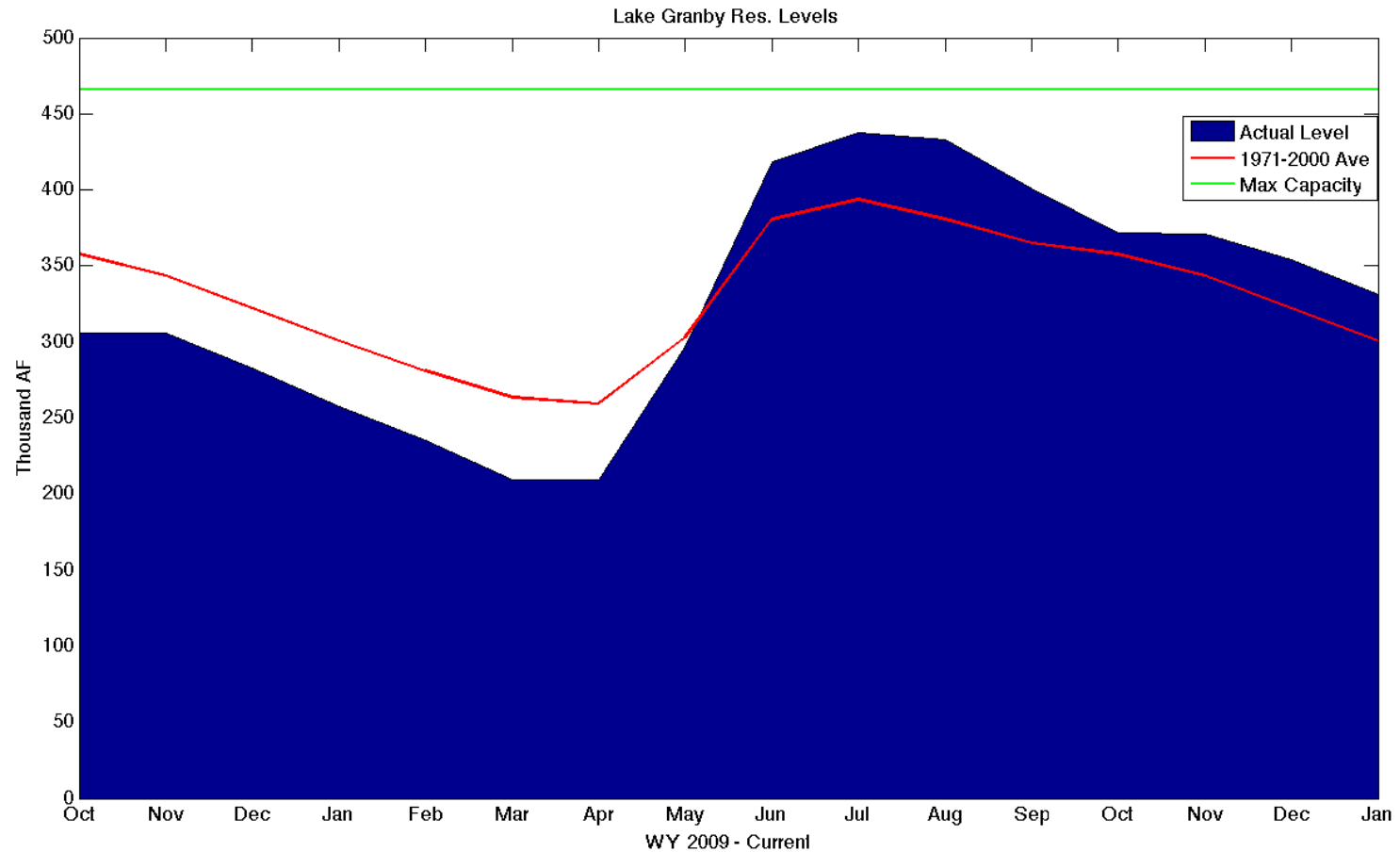
Green Mountain



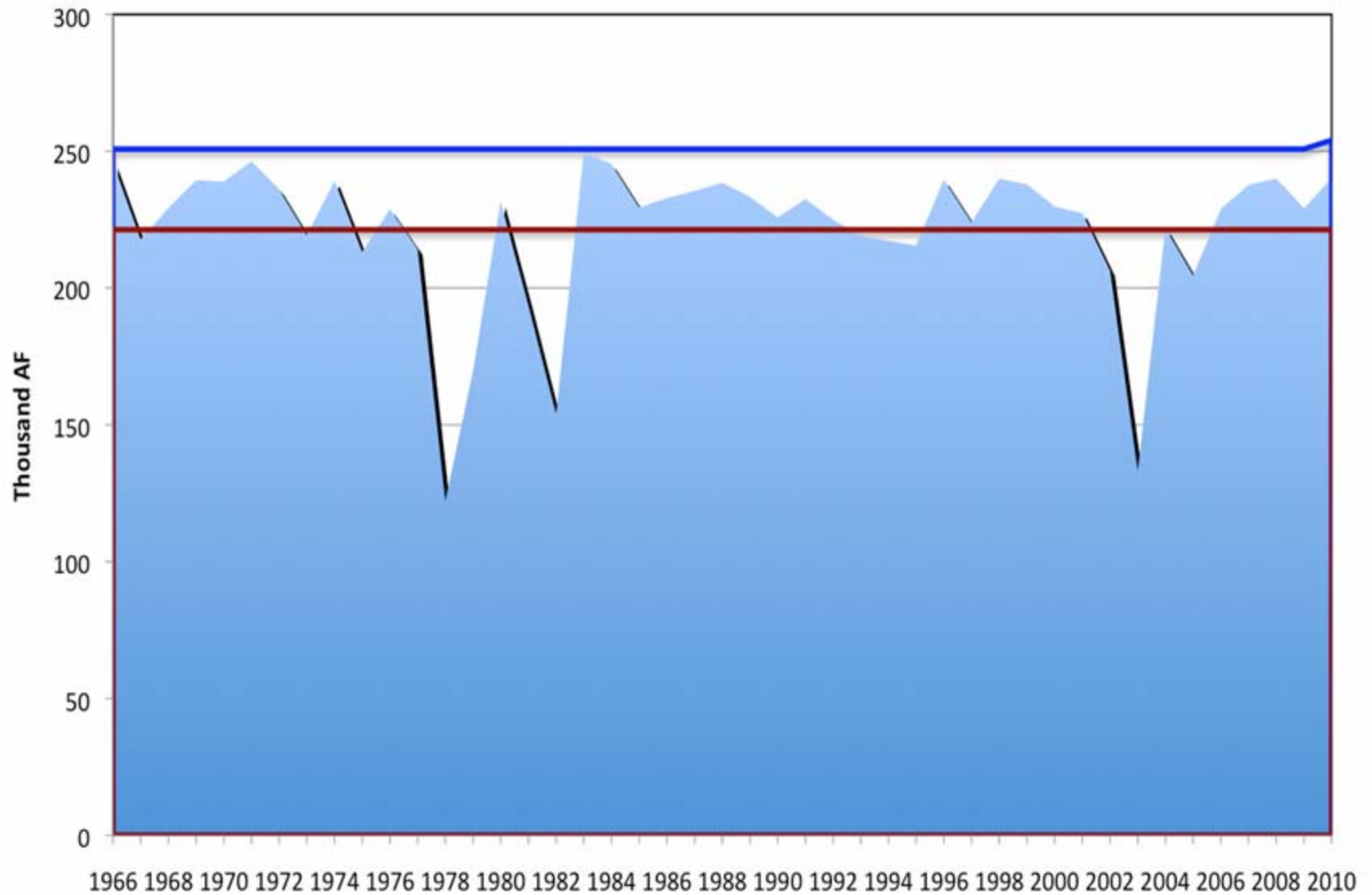
Lake Granby January Reservoir Storage



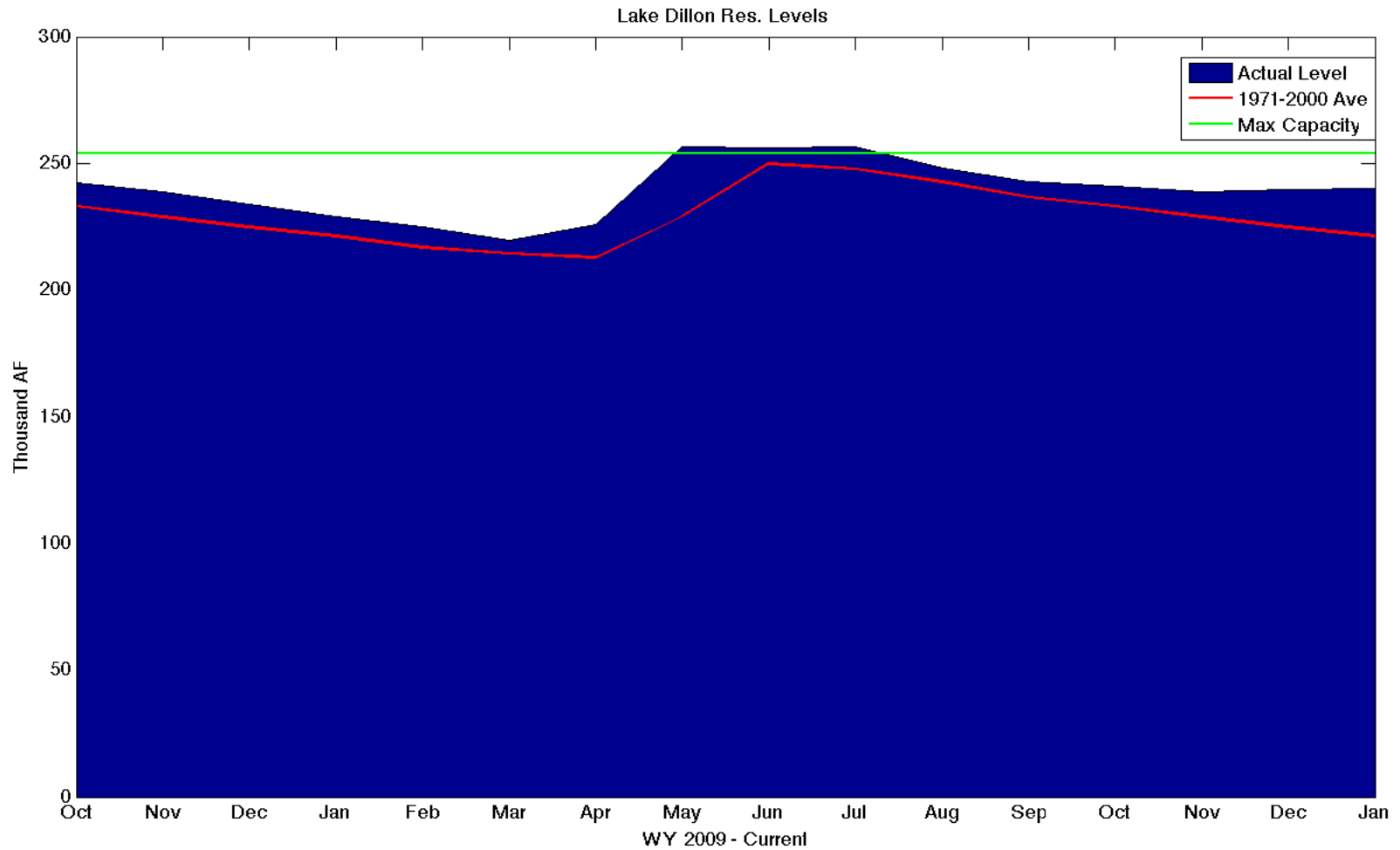
Lake Granby



Lake Dillon January Reservoir Storage



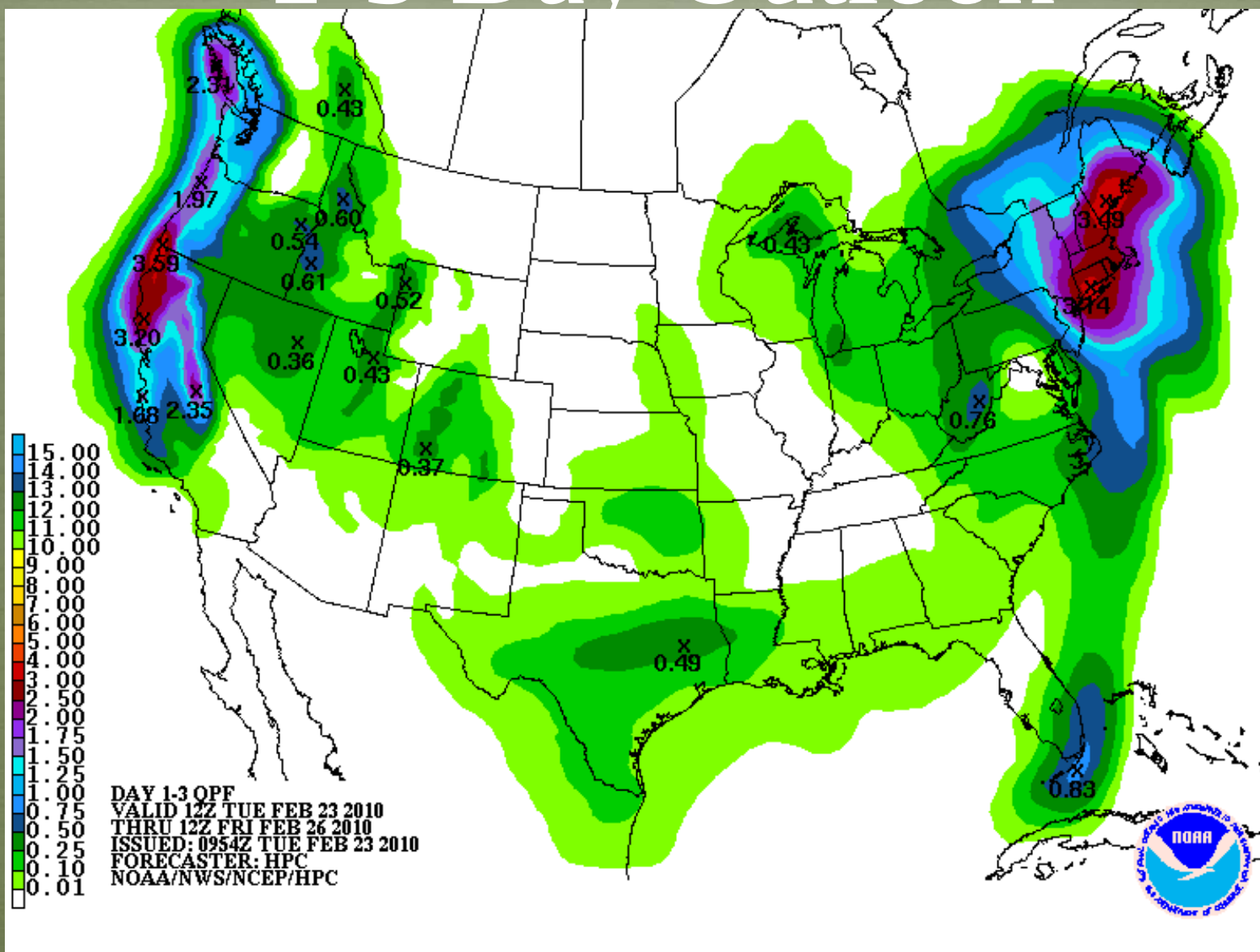
Lake Dillon



Precipitation Forecast

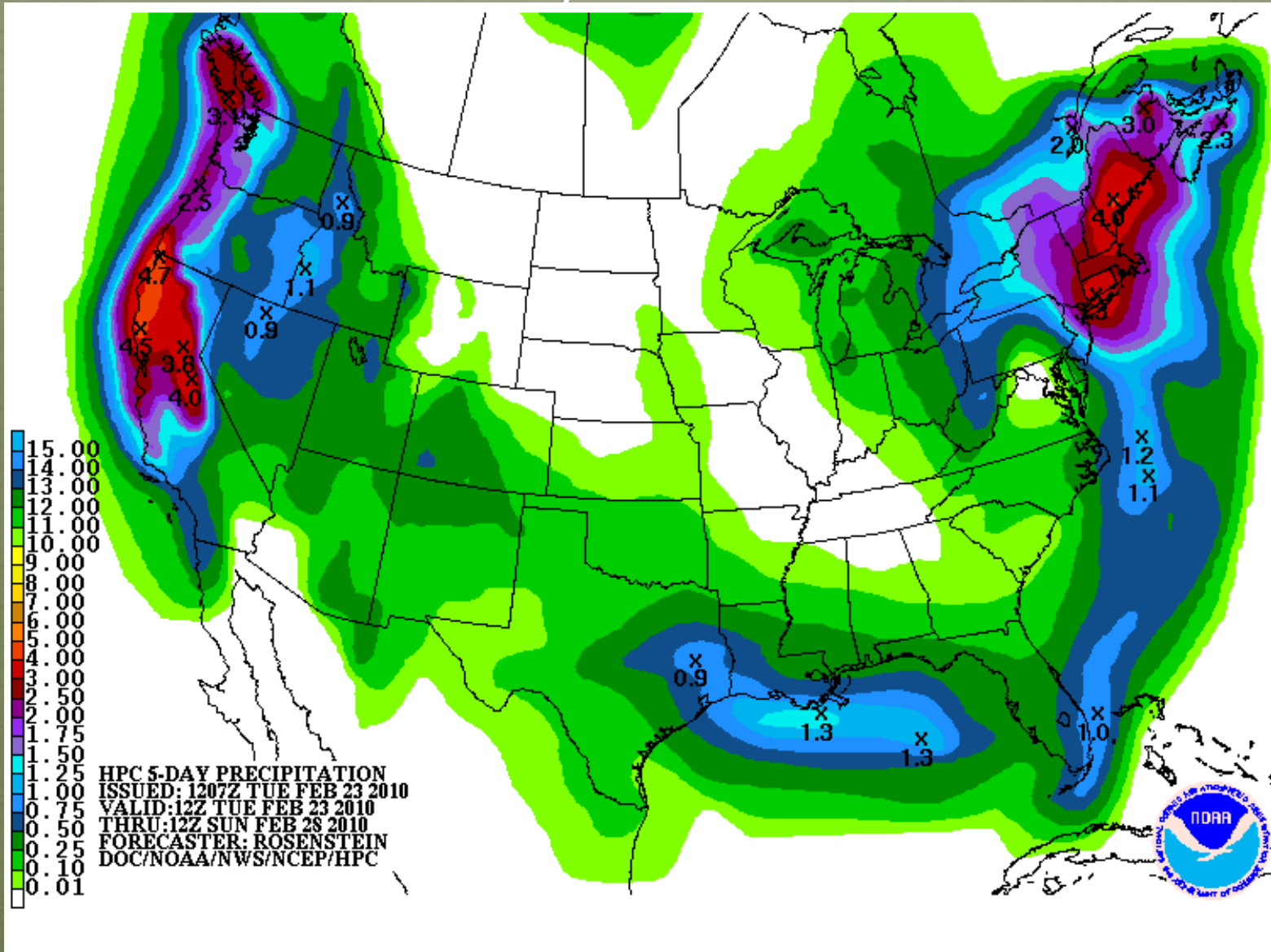


1-3 Day Outlook



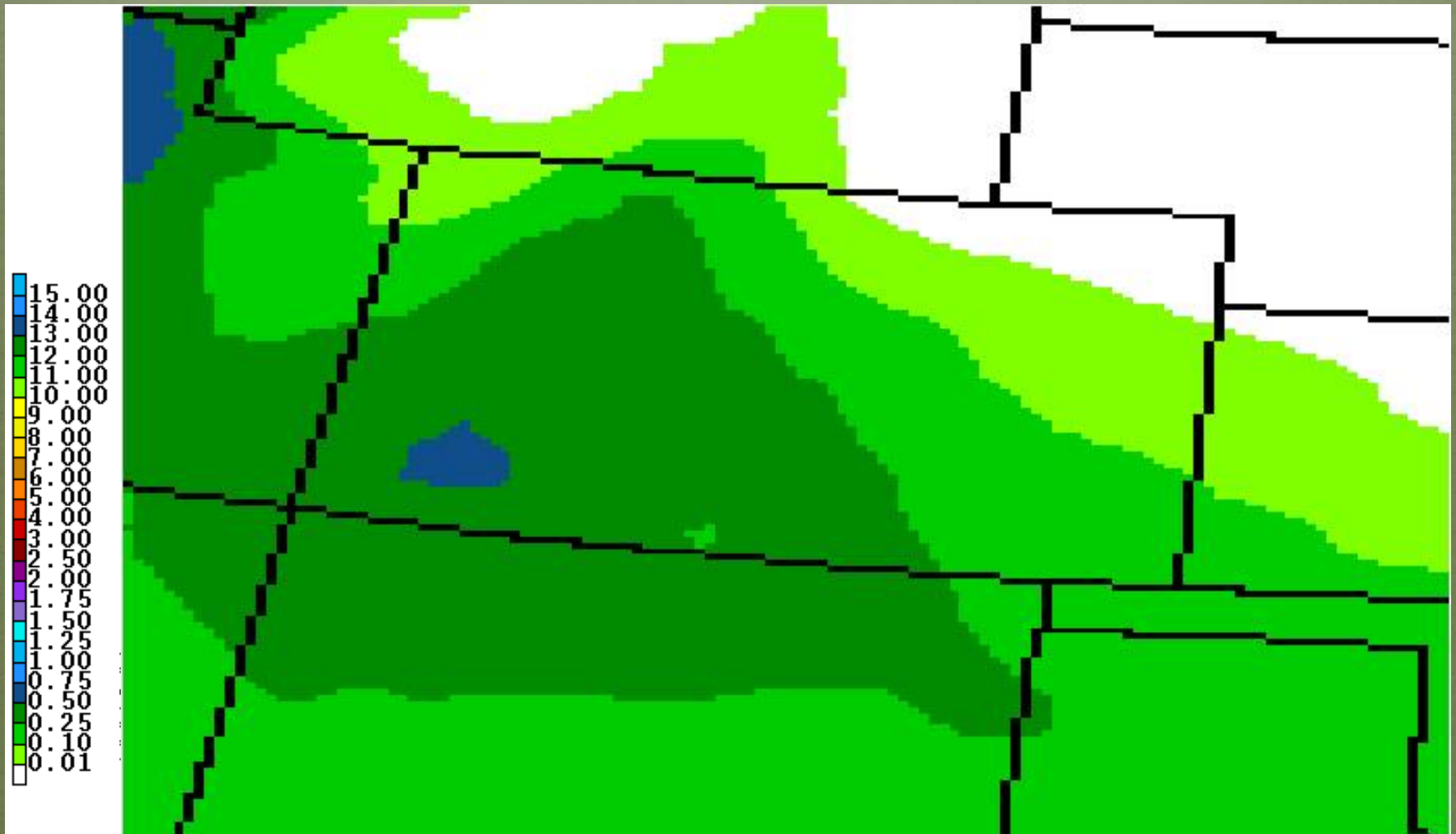
<http://www.hpc.ncep.noaa.gov/>

5 Day Outlook



<http://www.hpc.ncep.noaa.gov/>

5 Day Outlook Colorado

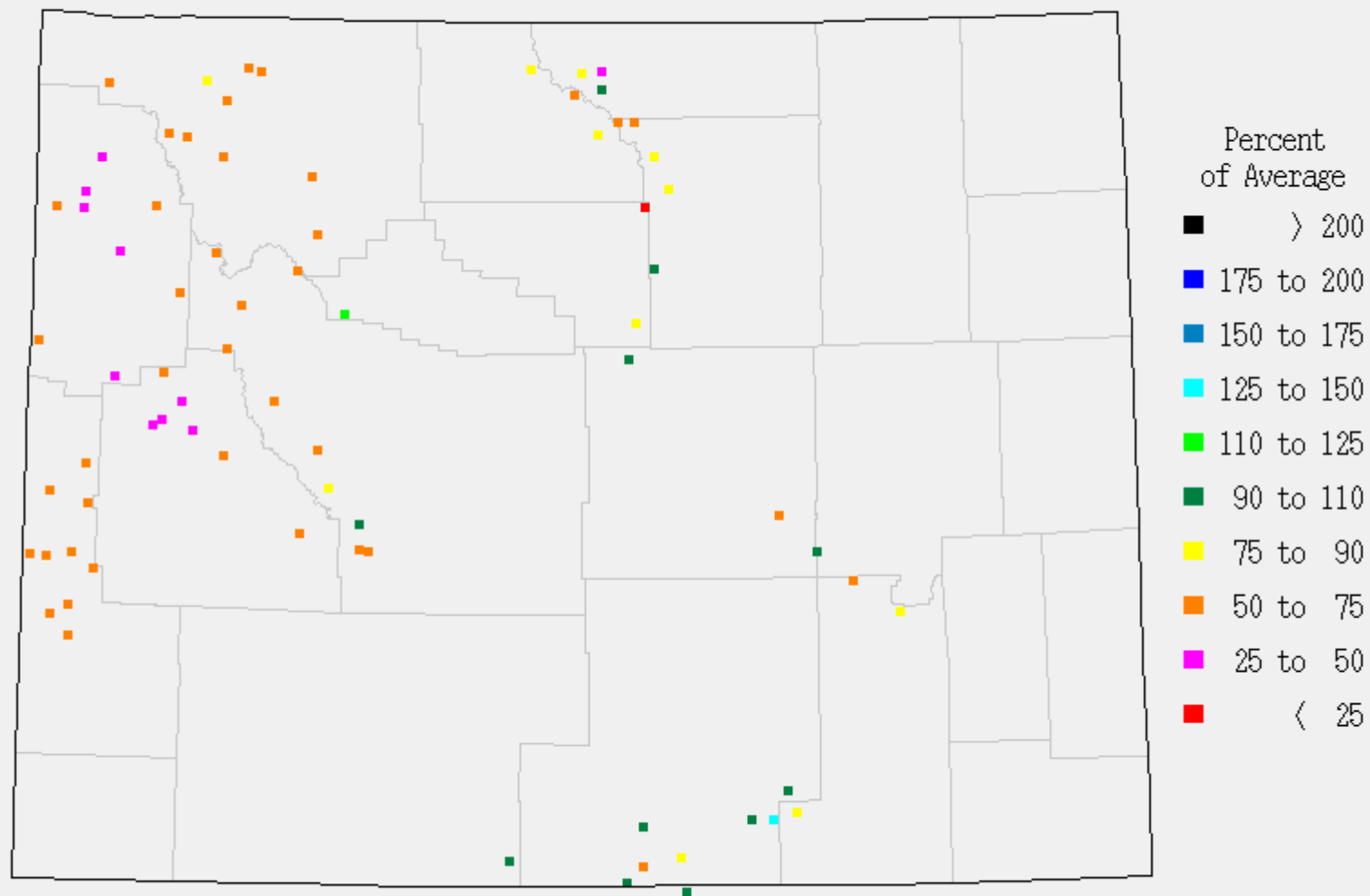


<http://www.hpc.ncep.noaa.gov/>

Wyoming Update



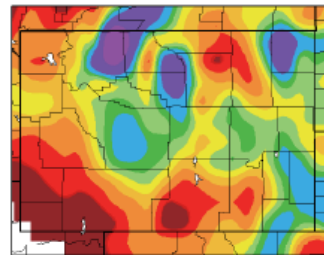
% Average Snow Water Equivalent
Tuesday, 23 February 2010



Provisional Data Based on Mountain Data from NRCS SNOTEL Sites
Plot Courtesy of the Water Resources Data System for the State of Wyoming

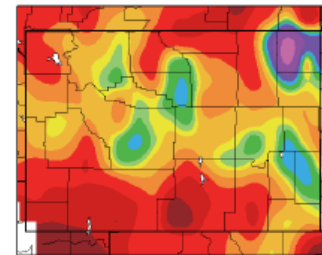
Wyoming Precipitation: Departures from Normal

Percent of Normal Precipitation (%)
1/23/2010 - 2/21/2010



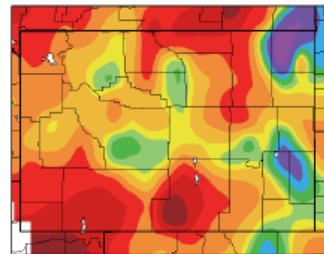
Past 30 days

Percent of Normal Precipitation (%)
12/24/2009 - 2/21/2010



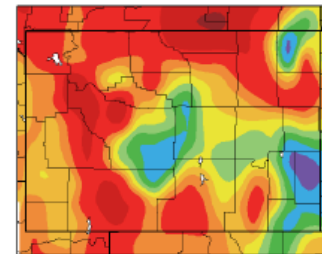
Past 60 days

Percent of Normal Precipitation (%)
11/24/2009 - 2/21/2010



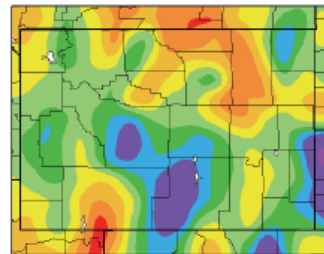
Past 90 days

Percent of Normal Precipitation (%)
8/22/2009 - 2/21/2010



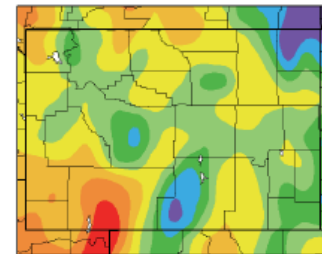
Past 6 months

Percent of Normal Precipitation (%)
2/22/2009 - 2/21/2010



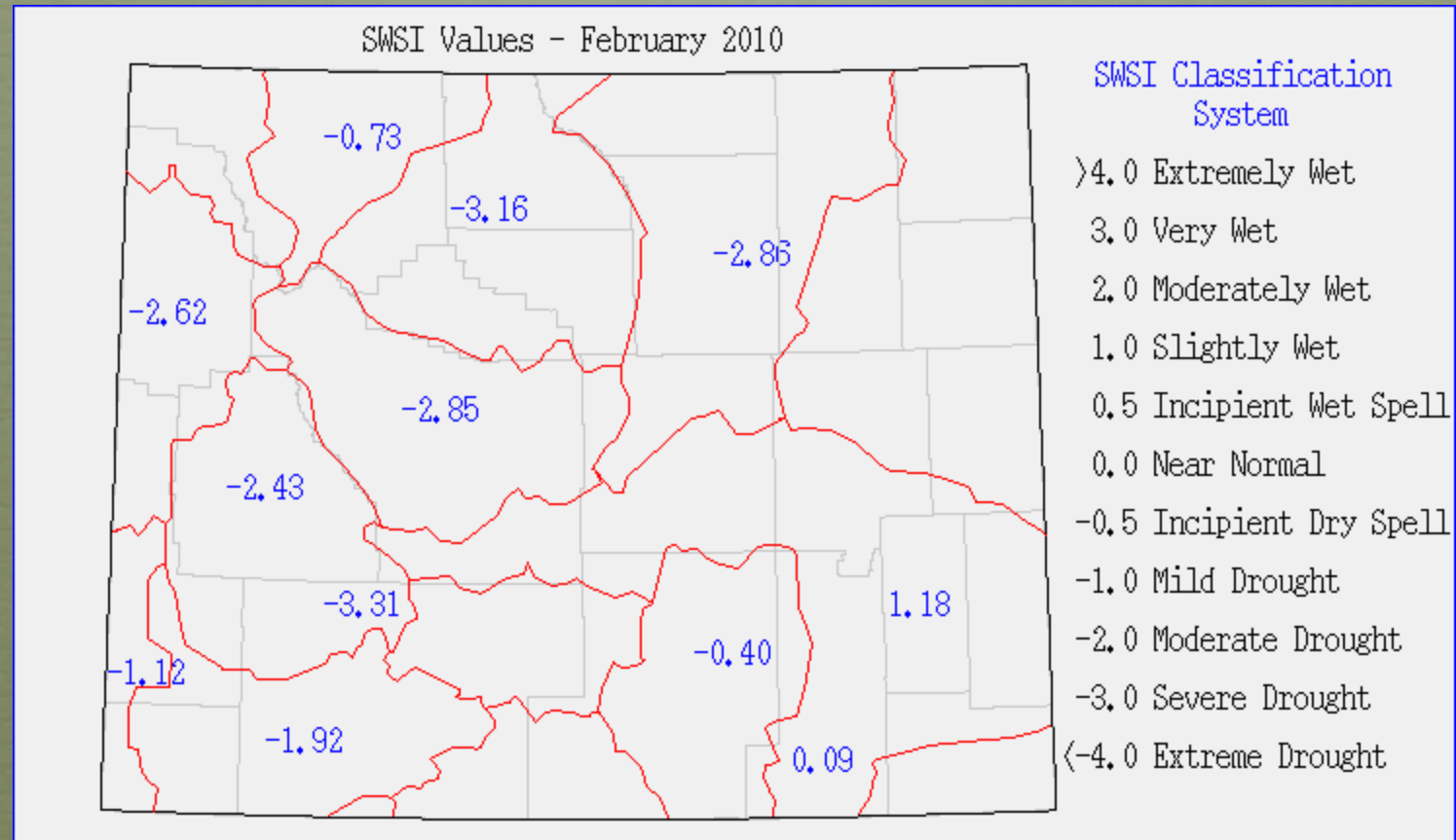
Past 12 months

Percent of Normal Precipitation (%)
2/22/2008 - 2/21/2010

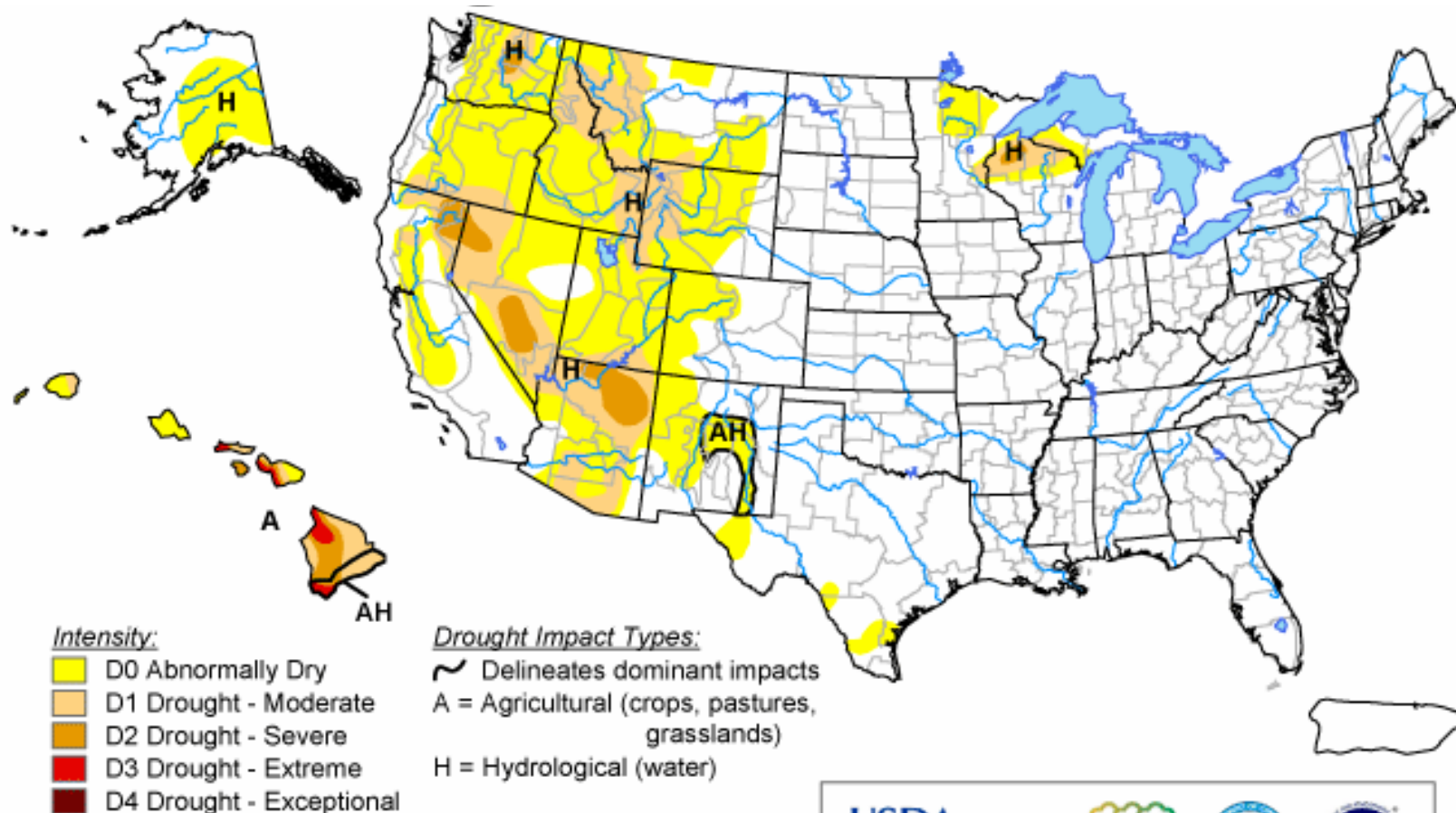


Past 24 months

Wyoming SWSI as of February 8



Recommendations



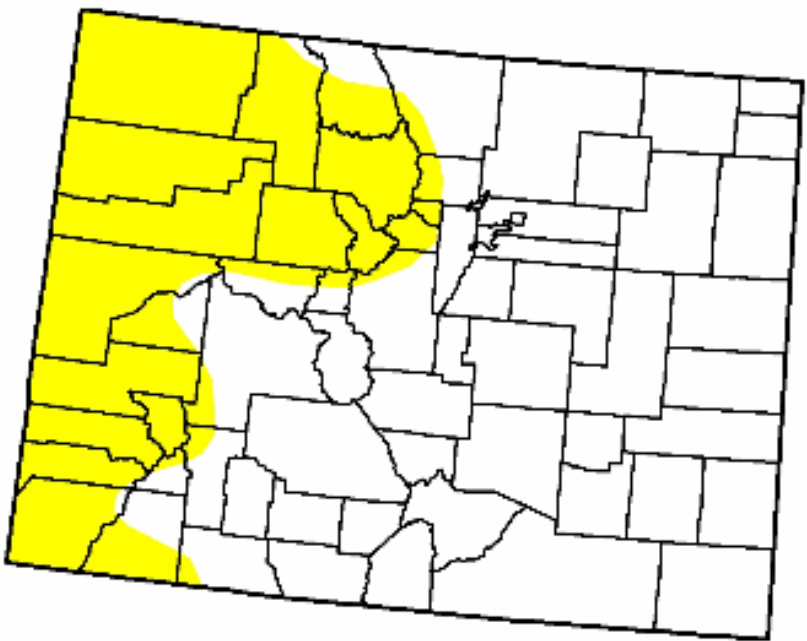
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Thursday, February 18, 2010

Author: Brian Fuchs, National Drought Mitigation Center



Bryon Lawrence: WFO GJT

- With this last storm, much of southeastern Utah and southwestern Colorado are running excesses in SWE, typically 2.5 inches above normal in the San Juans and upwards of 5 inches above normal in the mountains of southeastern Utah. **I think some of these areas need to be dropped from DO.**
- Significant snows fell in the Uncompahgre Valley as well as the mid-high elevations in and around the West Elks, Elks, Grand Mesa, Battlement Mesa, and Uncompahgre Plateau. This should be beneficial for range land in these areas.
- It looks like we are in an active weather pattern for western Colorado this week, with one system coming through Thursday/Friday and another for the weekend. The weekend system will be the stronger of the two and looks to favor the central and southern mountains.

OPEN



CONTACT:

COLORADO CLIMATE CENTER

COLORADO STATE UNIVERSITY

FORT COLLINS, CO 80523

970 - 491 - 8545

NIDIS - UPPER COLORADO BASIN PILOT PROJECT

For more information

Summary

- ❖ Generous precipitation fell again this week over southern and central Colorado with lesser amounts extending northward into the Green River Basin in Wyoming and northeastern Utah. More storms are on tap for the coming 2-week period, most likely continuing the southern storm track of recent weeks. However, there is considerable uncertainty regarding the magnitude and track of these near future storms

Last week our consensus opinion was for no change in the USDM in Colorado and some minor expansion in western Wyoming. This week, as conditions have continued to trend wetter and wetter later into the snow accumulation season in southwestern Colorado and adjacent areas of southeast Utah, we recommend pulling back D0 out of much of this area from approximately the Colorado River southward. Extreme southwest Colorado (Montezuma County) may still need to hold a little D0. Changes in southeast Utah should be coordinated with other Utah contributors, but some areas there are now very wet.

Meanwhile in the mainstream of the Upper Colorado, conditions remain below average but with some beneficial snow this past week. We recommend leaving this area unchanged for now although there is justification for a small area of D1 in the lower elevations of western Grand County. A northward advancement of the D0 line farther north across Jackson County is recommended based on input from the Boulder WFO. The Green River Basin in western Wyoming remains troublesome and has not yet seen improvement. Upper portions of that basin are on watch for potential introduction of D2 at some time. We will leave any changes there up to the USDM author and the local contributors. It may be time to introduce D1 into portions of southwestern Wyoming clipping the northwest corner of Moffat County, Colorado. The Utah portion of this introduction will need local coordination.