

## JUNE 2008 DROUGHT UPDATE

### Water Availability Task Force Co-Chairs

Veva Deheza, CWCB - 303-866-3441 ext 3226  
Email - veva.deheza@state.co.us

Kevin Rein, DWR - 303-866-3581 ext 8239  
Email – kevin.rein@state.co.us

### Executive Summary

The 2007-08 La Niña\* event appears to be winding down and will have little effect for the rest of the summer. Forecasters predictions are mixed between a renewed La Niña\* conditions to weak El Niño by the fall. Colorado has experienced a sixth consecutive month of below average temperatures which has not happened since the early 1990s. Statewide streamflow remains average to above average which means the runoff has been above average or normal in every basin with a few exceptions. High snowpack has helped keep temperatures cool in the mountains which have delayed the snowmelt into June, which has not been seen in many years.

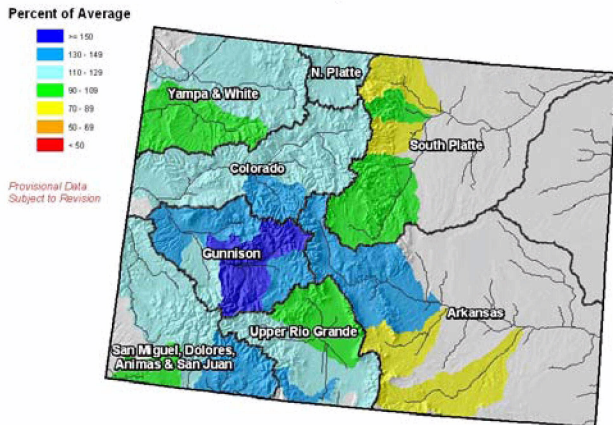
- Statewide, June has been a dry month in terms of precipitation. The Eastern Plains have been especially dry. The Southeastern part of the state has been experiencing Agricultural drought and Baca County has been experiencing both Agricultural and Hydrological drought. The Governor has asked for a declaration for Drought Disaster to get federal loans for ranchers and farmers and may wait until July 14<sup>th</sup> for assistance.
- Statewide, Colorado's streamflow is between 70-150% of average. The Arkansas, Rio Grande and Gunnison basins experienced cool temperatures that delayed normal runoff. The Gunnison basin experienced ideal runoff conditions which kept flooding issues to a minimum in critical areas.
- Gov. Bill Ritter asked the federal government for drought relief for farmers and ranchers in four southeast Colorado counties. Despite the above-average snowfall in the Colorado mountains this past winter, some parts of southeast Colorado have seen only 19 percent of normal precipitation. Specifically, Gov. Ritter is seeking permission for immediate haying and grazing on federal Conservation Reserve Program acres for farmers and ranchers in Baca, Bent, Kiowa and Prowers counties.
- Statewide, reservoir storage ranges from 84%-111% of average. Denver and Aurora Water have reported full reservoirs. Centennial Water & Sanitation District, in Douglas County, has had a new reservoir built but has not been filled due to water leaving because of calls on existing senior water rights. Reservoir storage in the Gunnison basin will improve due to above average runoff.
- Because of the above average snowpack, municipal users and other irrigators have relied on natural runoff and streamflow rather than using reservoir supplies for irrigation needs. This is not necessarily the case in the South Plate basin where it is questionable how high the runoff will be without significant rainfall.
- According to the Colorado Water Supply Index (SWSI)\*\*, the values range from a high value of +2.4 in the Gunnison basin to a low value of +0.8 in the Rio Grande basin. The Yampa/White basin's SWSI value was the biggest change in value, +1.1. The Rio Grande basin experienced the largest drop in SWSI value, -1.6.

\* *Sea surface temperatures at the Equator in the Pacific Ocean impact global climate patterns. Depending on these patterns, Colorado could be experiencing El Niño or La Niña conditions.*

\*\* *SWSI values are based on streamflow, reservoir storage and precipitation for the summer period (May-Oct).*

# JUNE 2008 DROUGHT UPDATE

Colorado Streamflow Forecast Map

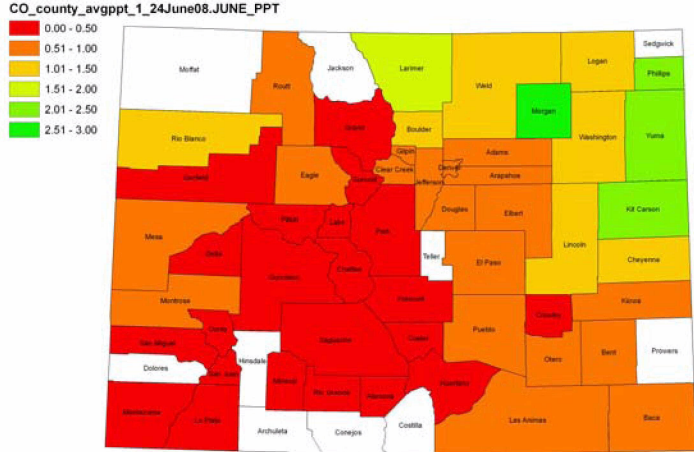


Current as of June 1, 2008

The NRCS Streamflow Forecast map shows statewide streamflow ranges between 70-150% of average. The Gunnison basin has experienced the best runoff in the state with ranges between 126-156% of average. Runoff has been delayed in some basins due to cooler temperatures or erratic temperatures in May and early June. Those conditions have helped lessen flood concerns.

The adjacent map shows the precipitation totals collected from various CoCoRaHS (Community Collaborative Rain, Hail, & Snow Network) sites around Colorado. Statewide, June has been a very dry month. The North American monsoon season is to begin in the next week which should benefit Southwestern and Central Colorado.

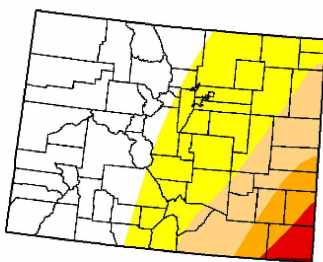
Average CoCoRaHS June 1- June 24 2008 Precipitation by County



## U.S. Drought Monitor Colorado

June 17, 2008  
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D1	D1-D4	D2-D4	D3-D4	D4
Current	47.4	52.6	21.8	7.6	2.5	0.2
Last Week (06/10/2008 map)	62.3	37.7	12.9	3.7	1.4	0.0
3 Months Ago (03/25/2008 map)	61.2	38.8	6.3	0.0	0.0	0.0
Start of Calendar Year (01/01/2008 map)	59.3	40.7	2.0	0.0	0.0	0.0
Start of Water Year (10/01/2007 map)	80.4	19.6	0.4	0.0	0.0	0.0
One Year Ago (06/19/2007 map)	67.7	32.3	17.7	2.0	0.0	0.0



**Intensity:**  
 D0 Abnormally Dry  
 D1 Drought - Moderate  
 D2 Drought - Severe  
 D3 Drought - Extreme  
 D4 Drought - Exceptional

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

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

USDA  
 National Drought Program Center  
 Released Thursday, June 19, 2008  
 Author: Rich Tinker, CPC/NOAA

The U.S. Drought Monitor map shows the eastern part of Colorado to be abnormally dry and continues to intensify east. Southeastern Colorado is categorized as experiencing exceptional drought conditions agriculturally and hydrologically. This has negatively impacted the wheat crop and cattle farms. Besides the lack of precipitation, wind and heat have contributed to the drought conditions.

## Long Term Forecast Summary

Over the next 8-14 days, forecasters predict increased odds for the states' southern mountains. While La Niña is not as strong as before, it will still be evident in July and through September which will result in warmer than normal conditions over much of Colorado. The precipitation forecasts indicates increased odds of drier than normal conditions for the Front Range and increased odds of wetter than normal conditions for the rest of eastern Colorado.

**NOTE:** The maps and graphics depicted in this report were those presented at the June 26, 2008 meeting and may have been updated since the meeting.