# Apr 9, 2012 RESERVOIR LEVEL AND SNOW UPDATE

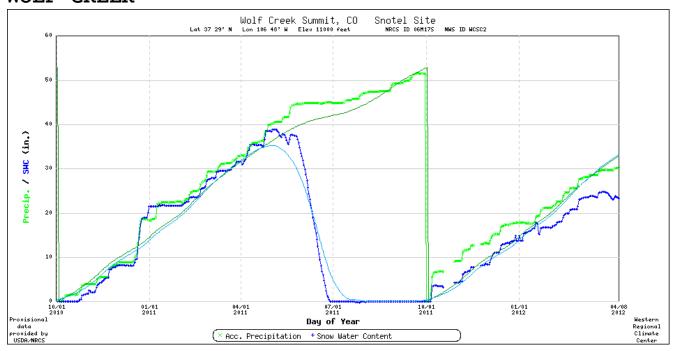
This snowpack continues to melt, with about 50% of average or less remaining in all three basins. There is a 20-30% chance of precipitation from Friday to Sunday, but temperatures are forecast at well above freezing, so the snowpack will likely continue melting rapidly. There has been a recent peak in the flow of the Rio Grande, with flows at Otowi Bridge and San Marcial above average, but flow has now dropped back to close to average. The NRCS forecast for runoff at San Marcial from April to July has been recently released, with flows much below average. The forecast runoff at the 50% exceedance level is only 127,000 ac-ft compared to the average of 515,000 ac-ft. The rate of storage in Elephant Butte/Caballo has slowed significantly as release has recently begun from Caballo (13,000 ac-ft during the first week of April.

# COMBINED STORAGE Elephant Butte and Caballo April 6, 2012 412,427 acre-feet

SNOW - PRECIPITATION UPDATE
Based on Mountain Data from NRCS SNOTEL Sites
As of Monday April 9, 2012

BASIN Data Site Name	ELEV. SNOW	WATER	EQUIVALENT %	TOTAL	PRECIPITATION %
			Avg		Avg
UPPER RIO GRANDE BASIN					
	de percent c	f avera	age 52		89
RIO CHAMA BASIN					
Basin wi	de percent c	f avera	age 32		75
SANGRE DE CRISTO MOUNTAIN RANGE BASINS					
Basin wi	de percent c	f avera	age 53		103

## WOLF CREEK



### FORECAST

UPPER RIO GRANDE VALLEY/EASTERN SAN JUAN MOUNTAINS BELOW 10000 FT-INCLUDING...CREEDE...SOUTH FORK 351 AM MDT MON APR 9 2012

#### TODAY

MOSTLY SUNNY. HIGHS 48 TO 62. SOUTHWEST WINDS UP TO 10 MPH INCREASING TO 10 TO 15 MPH IN THE AFTERNOON.

#### TONIGHT

PARTLY CLOUDY. LOWS 28 TO 36. SOUTHWEST WINDS AROUND 10 MPH UNTIL MIDNIGHT BECOMING LIGHT.

## TUESDAY

MOSTLY SUNNY. HIGHS 52 TO 65. LIGHT WINDS BECOMING SOUTHWEST AROUND 10 MPH IN THE AFTERNOON.

## TUESDAY NIGHT

PARTLY CLOUDY. LOWS 27 TO 38. SOUTHWEST WINDS UP TO 10 MPH.

#### WEDNESDAY

MOSTLY SUNNY. HIGHS 50 TO 64. SOUTHWEST WINDS AROUND 10 MPH INCREASING TO 15 TO 25 MPH IN THE AFTERNOON.

## WEDNESDAY NIGHT

MOSTLY CLOUDY. LOWS 24 TO 34.

## THURSDAY AND THURSDAY NIGHT

PARTLY CLOUDY. HIGHS 43 TO 54. LOWS 23 TO 32.

#### FRIDAY

PARTLY SUNNY WITH A 20 PERCENT CHANCE OF RAIN AND SNOW SHOWERS. HIGHS 41 TO 51.

#### FRIDAY NIGHT AND SATURDAY

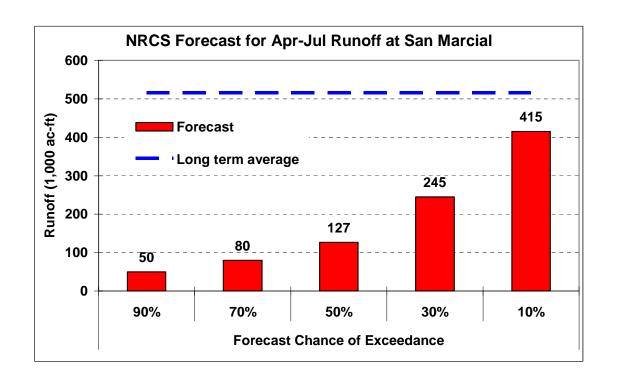
MOSTLY CLOUDY. A 30 PERCENT CHANCE OF RAIN AND SNOW SHOWERS. LOWS 21 TO 31. HIGHS 38 TO 48.

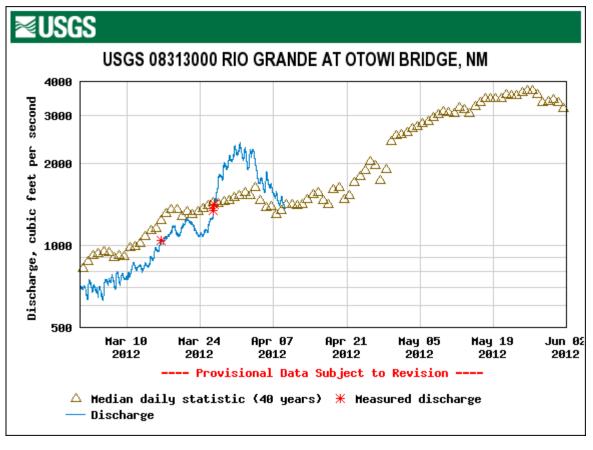
## SATURDAY NIGHT

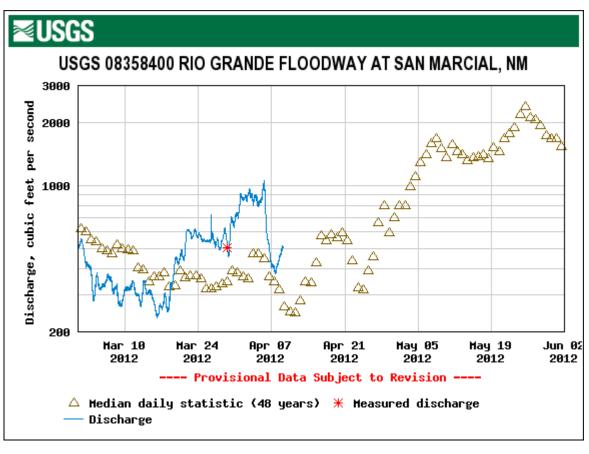
MOSTLY CLOUDY WITH A 20 PERCENT CHANCE OF SNOW SHOWERS. LOWS 17 TO 25.

## SUNDAY

MOSTLY CLOUDY WITH A 30 PERCENT CHANCE OF RAIN AND SNOW SHOWERS. HIGHS 42 TO 51.







New Mexico remained dry and somewhat warm through most of March, with the majority of the state seeing well below average snowfall and precipitation in general. Warm and windy conditions dominated for the latter half of the month, intensifying the already dry conditions and leading to significant dust-on-snow events in many areas. Unfortunately, the below average snowpack which was in place when March began was significantly reduced by these factors as well; with a combination of sublimation and early melting occurring. Following up on one of the driest years on record last year, runoff levels from the melt-out are also being reduced due to infiltration into the soil profile. Some basins have already melted out the majority of the snowpack, with only small peaks registering at stream gauging stations. Overall, it would appear that New Mexico is set up for another very dry spring. This will not only affect runoff and water users; it will also contribute to another year of high fire danger for residents around the state. With the snow season basically over, hopes for a recovery this spring are basically non-existent.

#### SNOWPACK

The warm, dry weather pattern which has dominated most of this snow season continued in March, with much of the state receiving well below average snowfall and precipitation. A few storms brushed the northern half of the state dropping some snow, but it was generally short-lived. Basically all of the snowpack in the southern mountains is already gone, and the central and northern mountains are seeing significant daily decreases as well. Warm temperatures and wind have dominated through the last half of March, and the snowpack statewide is showing the effects. Due to the dry conditions in place, the potential for a well below average runoff season is virtually guaranteed. There is basically no area of the state that can expect near-average runoff. Also, unlike last year, southern Colorado is seeing similar conditions, so New Mexico rivers originating in Colorado will not see much of a boost from there. In addition to reduced runoff numbers, the dry conditions and low snowpack totals this winter are going to impact the fire season. Residents around the state should again be prepared for an early and active fire season, with several fires already springing up around the state. There is not much indication that we will see a substantial shift in the storm track in the near future, so the dry conditions may continue into coming months.

## **PRECIPITATION**

March precipitation was significantly below average for most of the New Mexico, with no basin in the state receiving more than 60 percent of average for the month. The Animas/San Juan and San Francisco/Upper Gila Basins both received just over 30 percent of normal precipitation for March. For the water year, New Mexico as a whole is closer to average, ranging from 76 to 111 percent of normal. Much of this precipitation was received early in the water year as rain, and is therefore not serving to boost runoff now. As it currently stands, the probability seems fairly high for below average precipitation to continue into coming months.

### RESERVOIRS

With another month of well below average snowfall for New Mexico in March, the prospects for runoff levels to be anywhere near normal this year are pretty well gone. The southern basins are already mostly melted out and are expected to see well below average runoff, and with no reservoir storage in these basins, the impacts will be immediately evident. The northern basins, which provide most of the reservoir storage in the state, are also forecast to be significantly below average overall, so the potential for building any reservoir storage during this runoff season is poor. In addition to the very low runoff forecasts for the year, reservoir storage in New Mexico remains below average for most of the state. It is highly unlikely we will see any improvement in these storage levels this year.

Water managers need to be planning on a well below average runoff and reservoir storage for the most part.

#### STREAMFLOW

Streamflow conditions in New Mexico are near normal for the most part. Most gauging stations in the state are currently recording in the 25th to 74th percentile which is considered normal. A few have even recorded somewhat above normal flows for recent weeks. While this sounds promising, it is important to remember that much of the snowpack which was in place has either melted already or is actively melting. This is generally about 4 to 6 weeks ahead of schedule, which does not bode well for our runoff season. With a below average snowpack remaining, along with warm winds and dry ground conditions going into the snow season, the potential to see well below normal streamflow conditions is only going to worsen.

## RIO GRANDE BASIN

April to July streamflow forecasts for the Rio Grande Basin range from 62 percent of average for Tesuque Creek above diversions and 60 percent of normal for the Santa Fe River near Santa Fe, to 25 percent of average for the Rio Grande at San Marcial. Flows for the Rio Grande at Otowi Bridge are forecast to be 39 percent of average or 260,000 acre-feet, while the Rio Grande at San Marcial is forecast at 127,000 acre-feet. Precipitation for March was well below average, at 42 percent, similar to 43 percent last year. Year-to-date precipitation is also below average at 88 percent, somewhat better than last year's 69 percent. Snowpack in the basin is significantly below average at 44 percent, in line with the 39 percent recorded last year at this time. It should also be noted that much of the low to mid elevation snowpack is already melted out this year, much earlier than average. Total reservoir storage in the basin is 974,400 acre-feet, down somewhat from last year's 1,075,900 acre-feet. This is roughly half of the 30 year average of 1,923,000 acre-feet. Abiquiu is the only reservoirs in the basin which remains above average for March, leaving very little reserve given the potential for another low runoff season. Elephant Butte storage remains down this year, with storage of 385,800 acre-feet as opposed to 466,400 acre-feet at this time last year. Similar to last year, water users should be prepared for well below average water availability this season, and crops should be planned accordingly whenever possible.