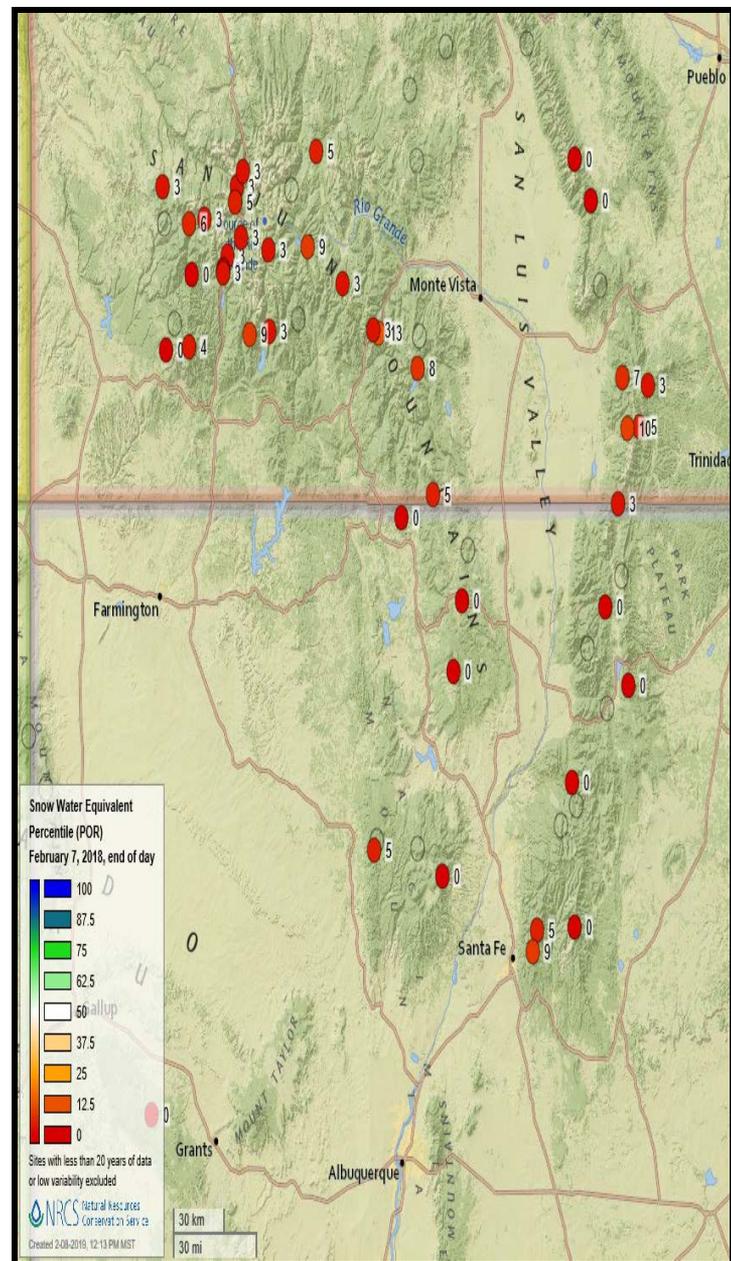
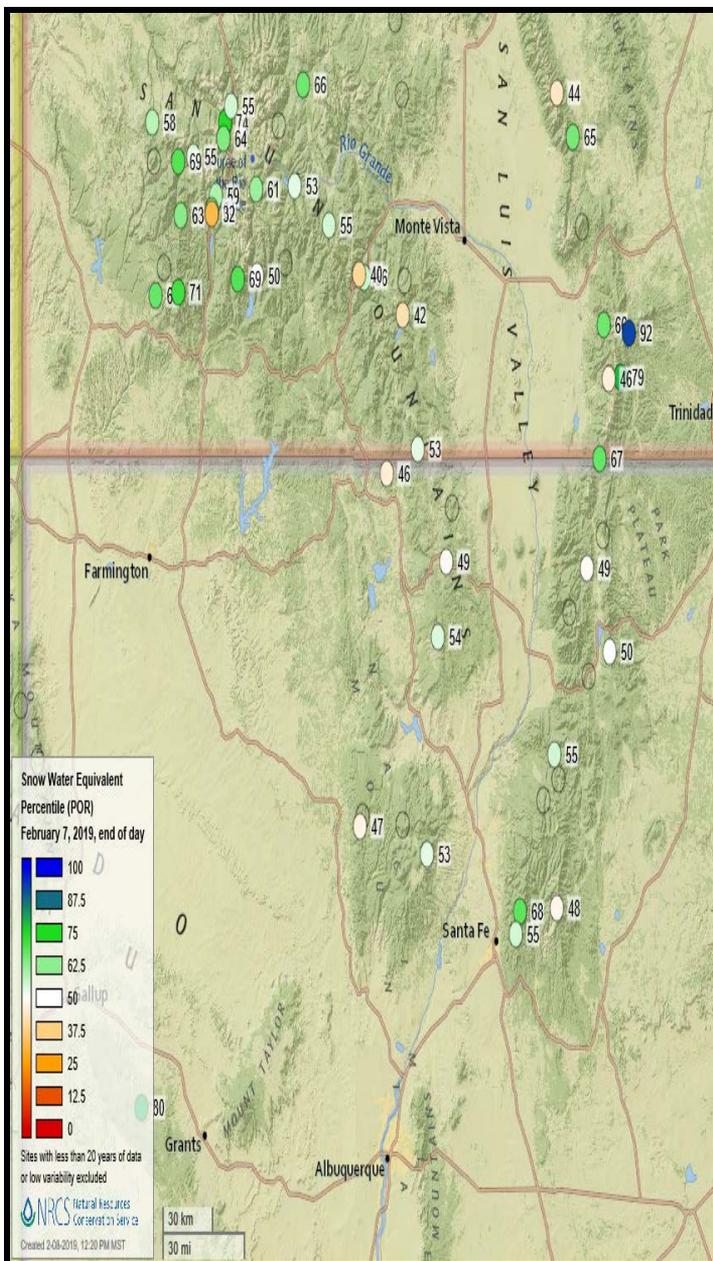


New Mexico Basin Outlook Report February 1, 2019



What a difference a year makes! This year's SWE percentiles (left) versus last year (right). Big take away, green is good and red is bad!

Basin Outlook Reports

and

Federal - State - Private

Cooperative Snow Surveys

For more water supply and resource management information, contact:

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<http://www.nrcs.usda.gov/wps/portal/nrcs/main/nm/snow/>

How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

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To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C., 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

Summary

January brought with it a mixed bag of conditions across New Mexico. From above to below average temperatures, as well as localized rain and snowfall the state as has begun a slow march out from under long-term drought conditions. Statewide precipitation was 102 percent of the average as compared to 26 percent at this time last year. In addition, snowpack totals are vastly improved over last year with the statewide total at 90 percent of the median versus 14 percent last year. Streamflow forecasts currently look better than they have in years with some points just slightly above the average. This is promising when you take into consideration how depleted many of the state's reservoirs are. Water users and managers should continue to monitor conditions to determine the extent of water supply conditions across the state.

Snowpack

A series of storms made their way across New Mexico throughout January delivering a nice refresh to what is currently a slightly below average snowpack. This beneficial high elevation snow continues to prompt minor improvements to the drought status across the state. This has ultimately led to a slight decrease in severe drought across the southern Sangre de Cristo Mountains of northern New Mexico. Yet, the middle of January saw increased temperatures across eastern New Mexico with just light snowfall in the higher elevations of northern New Mexico. The remainder of January was a mixed bag of temperatures and precipitation which offered several small fast-moving storms which tracked across the state once again refreshing old snowpack in the higher elevations. Knowing that in the past several years we have received a majority of our mountain snowpack in December and January followed by a warming trend and early runoff raises some concerns as to whether we will continue to add to our current snowpack throughout the remaining water year. Water users and managers should continue to monitor conditions to determine runoff timing and volumes.

NEW MEXICO STATEWIDE SNOWPACK	Percent of Median	Last Year Percent of Median
CANADIAN RIVER BASIN	98	11
PECOS RIVER BASIN	97	11
RIO GRANDE BASIN	93	21
MIMBRES RIVER BASIN	11	0
SAN FRANCISCO-UPPER GILA RIVER BASIN	54	9
ZUNI-BLUEWATER BASINS	101	16
SAN JUAN RIVER BASIN	85	36
CHUSKA MOUNTAINS	114	19
RIO HONDO BASIN	37	3
Statewide Snowpack Total	90	14
# of sites	28	28

Precipitation

January provided localized rain throughout much of New Mexico. Southern and eastern New Mexico experienced up to 3 inches of precipitation allowing for small reductions to the D0 and D1 areas throughout the region. Additionally, this offered slight improvements in the D1-D4 drought status in north-central New Mexico and the Albuquerque/Santa Fe area. Throughout the month beneficial rain continued to prompt minor improvements to the state's overall drought status with moderate drought being reduced in both Grant and Hidalgo counties. The Four Corners area has been impacted the most with prolonged long-term drought conditions in the D3-D4 range for well over six months, however the end of January brought wide spread improvements to the region. The true extent of improvements due to high elevation snowpack is still uncertain until melt-off begins. Water users and managers should continue to monitor the evolution of the forecast to help determine their water supply needs as the water-year progresses.

Reservoirs

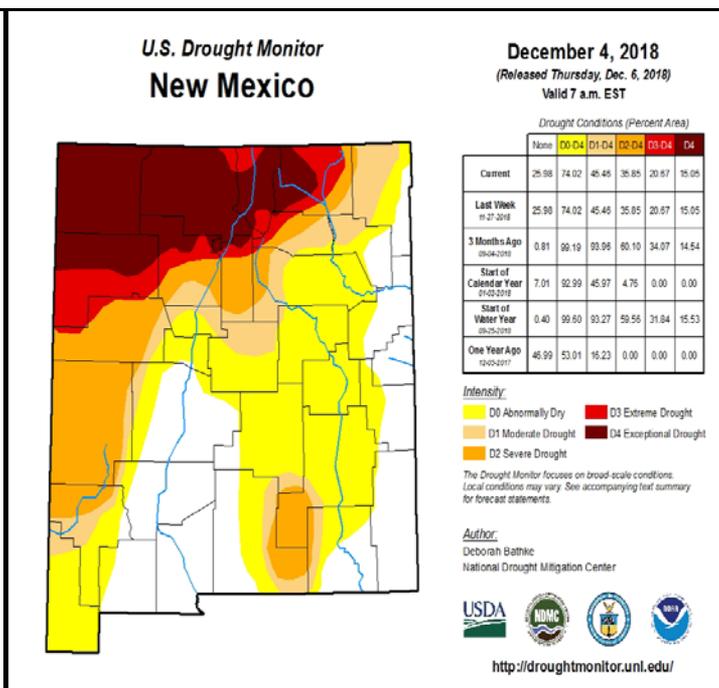
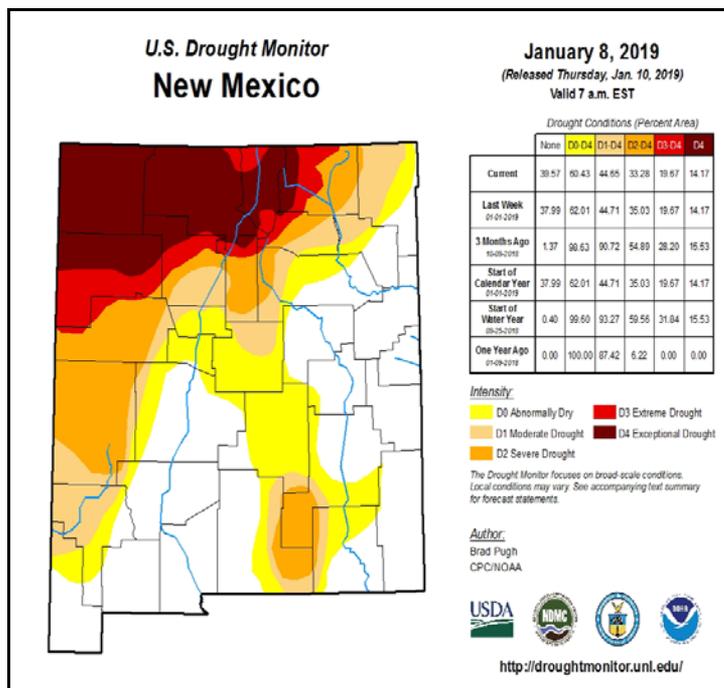
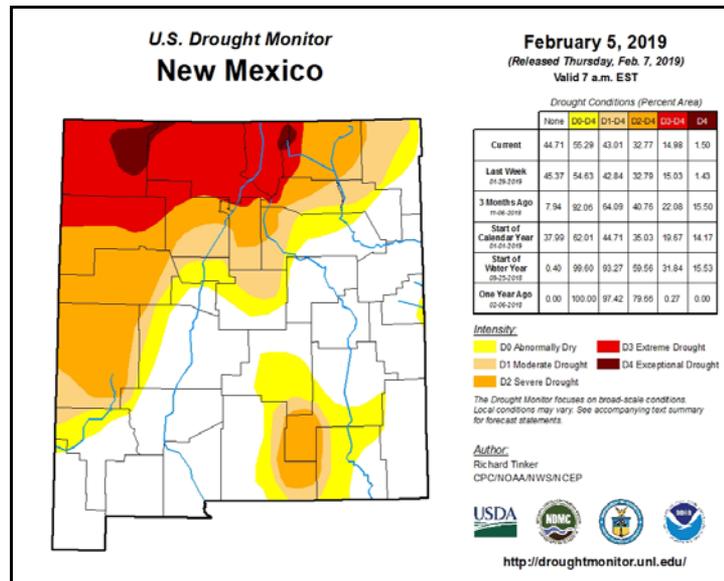
As of February 1st, most of New Mexico's major reservoirs are storing well below average amounts of water. Abiquiu is at 47 percent of the average storage and Elephant Butte is at just 11 percent of the average! With high-elevation snowpack vastly improved from last year I am confident that at a minimum the spring runoff will aid these depleted reservoirs. Water-users should continue to monitor weather conditions to evaluate their water needs as the winter progresses.

NEW MEXICO STATEWIDE	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Abiquiu Reservoir	72.2	121.0	154.6	1192.8	6%	10%	13%	47%	78%
Bluewater Lake	3.1	6.4	5.9	38.5	8%	17%	15%	53%	108%
Brantley Lake nr Carlsbad	30.6	43.3	19.8	1008.2	3%	4%	2%	155%	219%
Caballo Reservoir	27.4	37.7	78.1	332.0	8%	11%	24%	35%	48%
Cochiti Lake	45.1	48.0	60.9	491.0	9%	10%	12%	74%	79%
Conchas Lake	129.5	213.6	199.9	254.2	51%	84%	79%	65%	107%
Costilla Reservoir	3.0	11.1	6.5	16.0	19%	69%	41%	47%	170%
Eagle Nest Lake nr Eagle Nest, NM	33.4	42.7	53.5	79.0	42%	54%	68%	62%	80%
El Vado Reservoir	14.0	67.6	100.9	190.3	7%	36%	53%	14%	67%
Elephant Butte Reservoir	143.4	458.0	1299.0	2195.0	7%	21%	59%	11%	35%
Heron Reservoir	56.1	145.9	303.0	400.0	14%	36%	76%	19%	48%
Lake Avalon	1.1		2.3	4.0	28%		58%	48%	
Lake Sumner	31.8	41.7	30.8	102.0	31%	41%	30%	103%	136%
Navajo Reservoir	869.1	1254.9	1310.0	1696.0	51%	74%	77%	66%	96%
Santa Rosa Reservoir	53.3	94.3	54.7	438.3	12%	22%	12%	97%	172%
Basin-wide Total	1512.1	2586.1	3677.6	8433.3	18%	31%	44%	41%	70%
# of reservoirs	14	14	14	14	14	14	14	14	14

Streamflow

The February 1st streamflow values look positive and range from average to slightly above average for much of the state. The Rio Grande Basin forecasts range from 84 percent of the average near the headwaters to 69 percent at San Marcial with forecast points in between near or above the average. The San Juan Basin is slightly lower due to reduced snowpack but is still promising with values between 77-87 percent of the average. The Pecos Basin has benefitted from copious amounts of snow this winter and is currently forecast to be slightly above average! The Canadian Basin is also approaching the average mark and is currently forecast between 67-77 percent. Basins south of Albuquerque have markedly improved over last year yet remain victim to storms tracks either missing the region or increased temperatures reducing available snowpack. Still several months of snow accumulation left in the water year so please continue to monitor forecasts as they evolve.

New Mexico Drought Monitor, real versus perceived conditions?

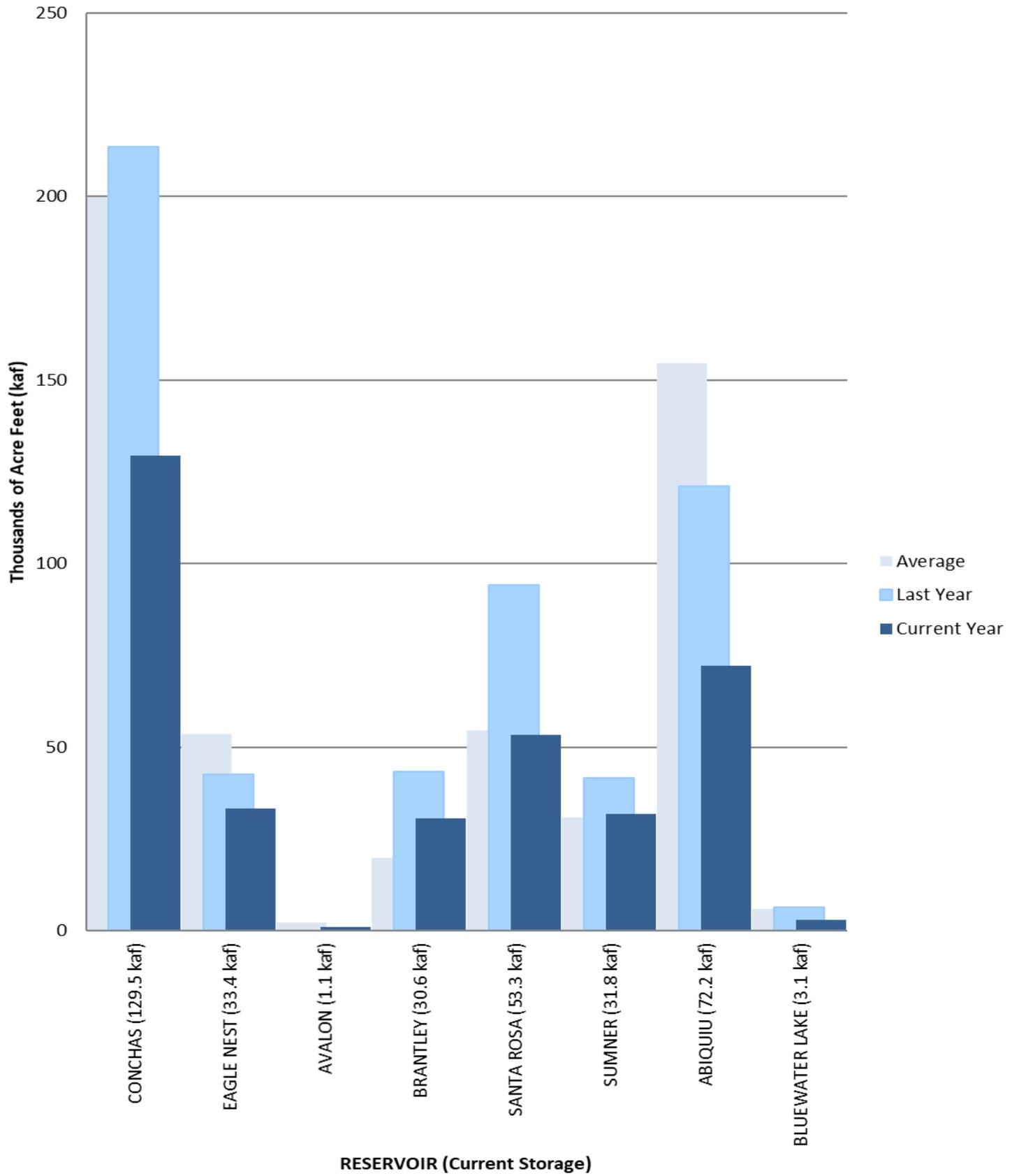


Every week, The U.S. Drought Monitor is produced in partnership between the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration. This useful tool uses multiple inputs, including precipitation received, to give an indication of the extent and severity of drought conditions nationwide.

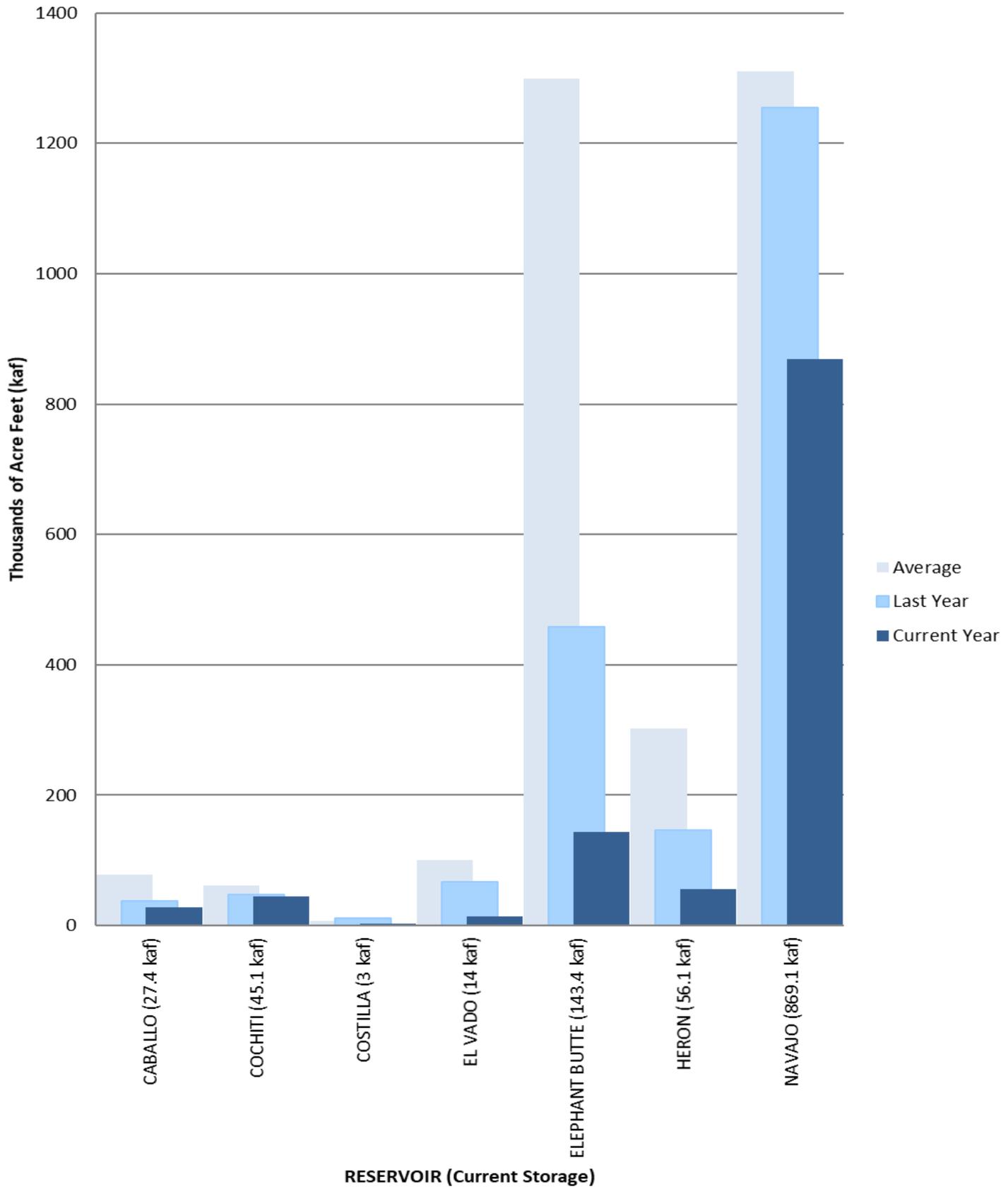
Drought conditions have improved over the hardest hit areas of New Mexico during January with the majority of the Four Corners seeing improvements on the US Drought Monitor. Recent weather systems have brought enough snowfall to improve conditions to warrant removal of most of the D4 drought in New Mexico. Portions of northern New Mexico remain in D4 due to long term deficits that have not improved despite recent weather systems. Temperatures over New Mexico for Winter 2019 have trended towards normal to below normal, which allows for lower moisture demand from the environment for most of the state. In the shorter term, however, this trend does not hold with drier and warmer conditions developing over portions of southeastern NM as well as the Gila Mountains. Various evapotranspiration related drought indices are showing an increase in water demand over these areas and trends will have to be monitored for any change in drought conditions. Sustained above normal precipitation events through the spring and summer will be required to show significant improvement in the hardest hit areas on the USDM in NM.

Courtesy of: Royce Fontenot, Senior Service Hydrologist, National Weather Service, Albuquerque, NM

Statewide Reservoir Storage



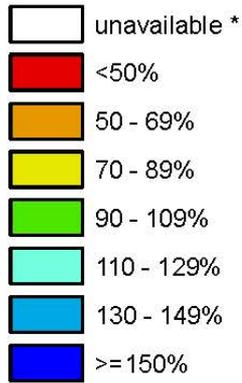
Statewide Reservoir Storage



New Mexico SNOTEL Current Snow Water Equivalent (SWE) % of Normal

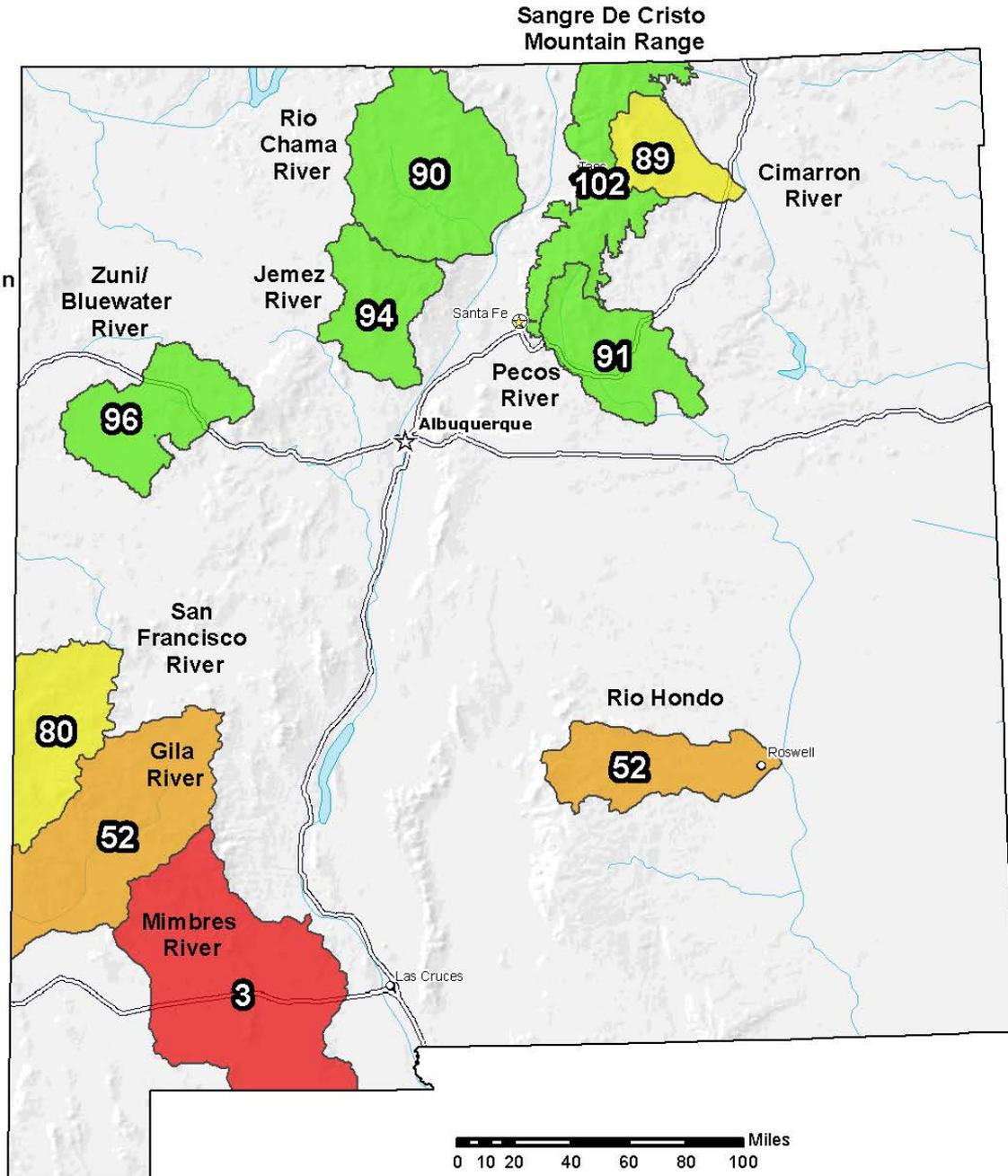
Feb 06, 2019

Current Snow Water Equivalent (SWE) Basin-wide Percent % of 1981-2010 Median



* Data unavailable at time of posting or measurement is not representative at this time of year

**Provisional Data
Subject to Revision**



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

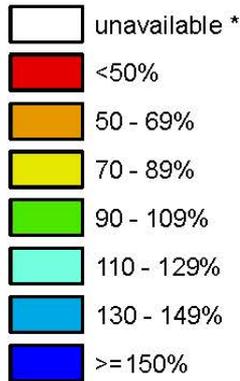
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

New Mexico

SNOTEL Water Year (Oct 1) to Date Precipitation % of Normal

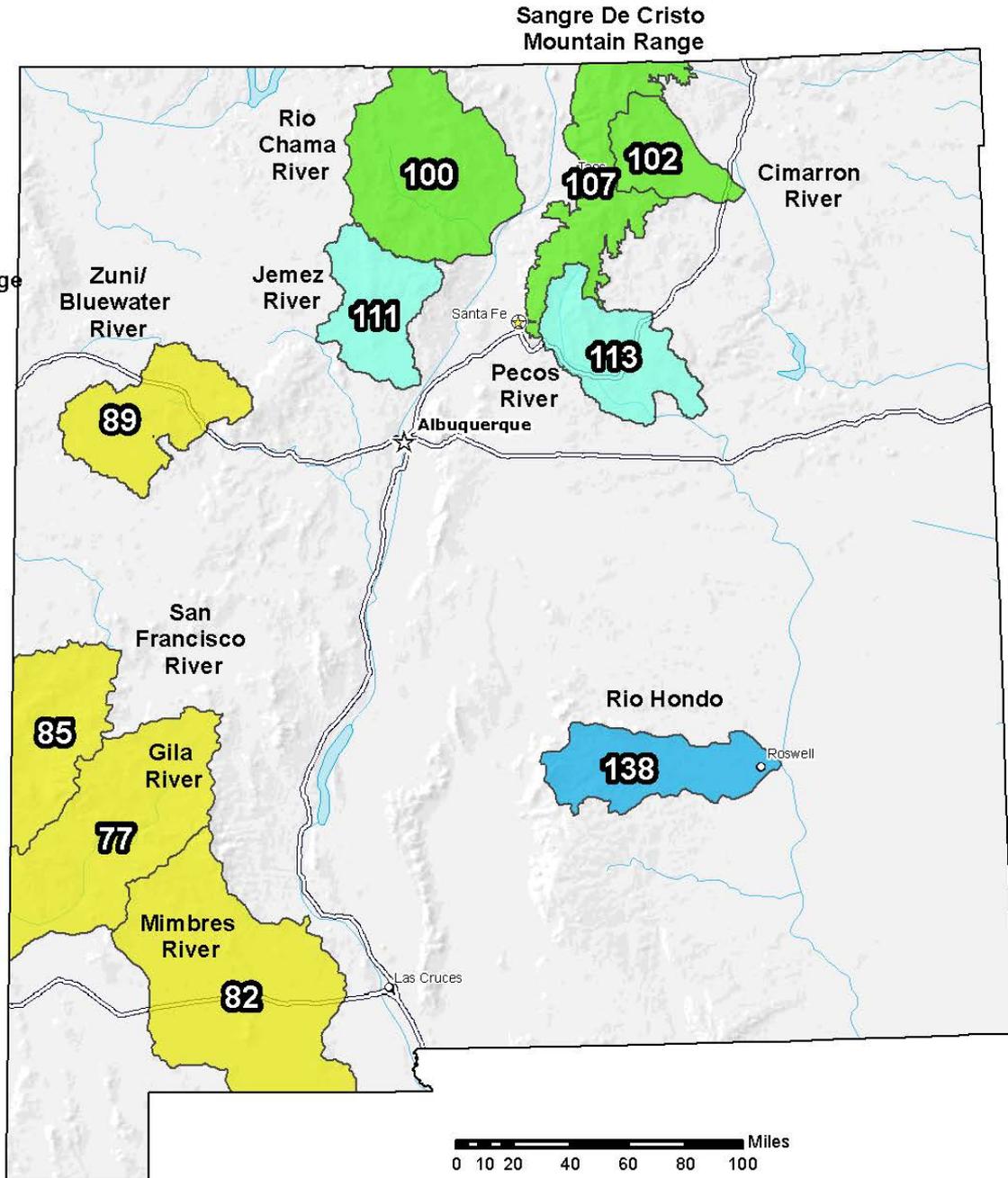
Feb 06, 2019

Water Year (Oct 1) to Date Precipitation Basin-wide Percent % of 1981-2010 Average



* Data unavailable at time of posting or measurement is not representative at this time of year

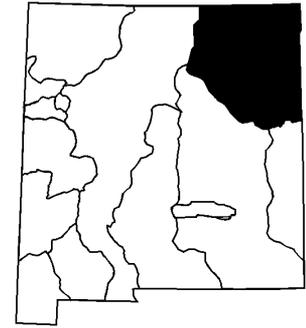
**Provisional Data
Subject to Revision**



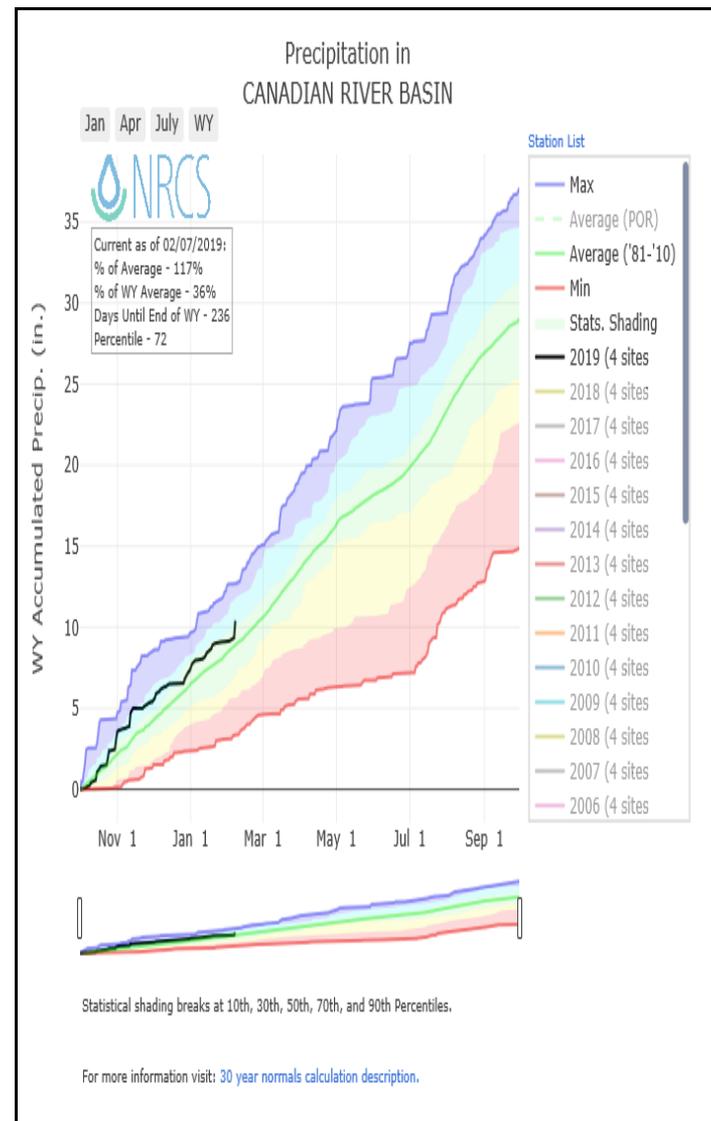
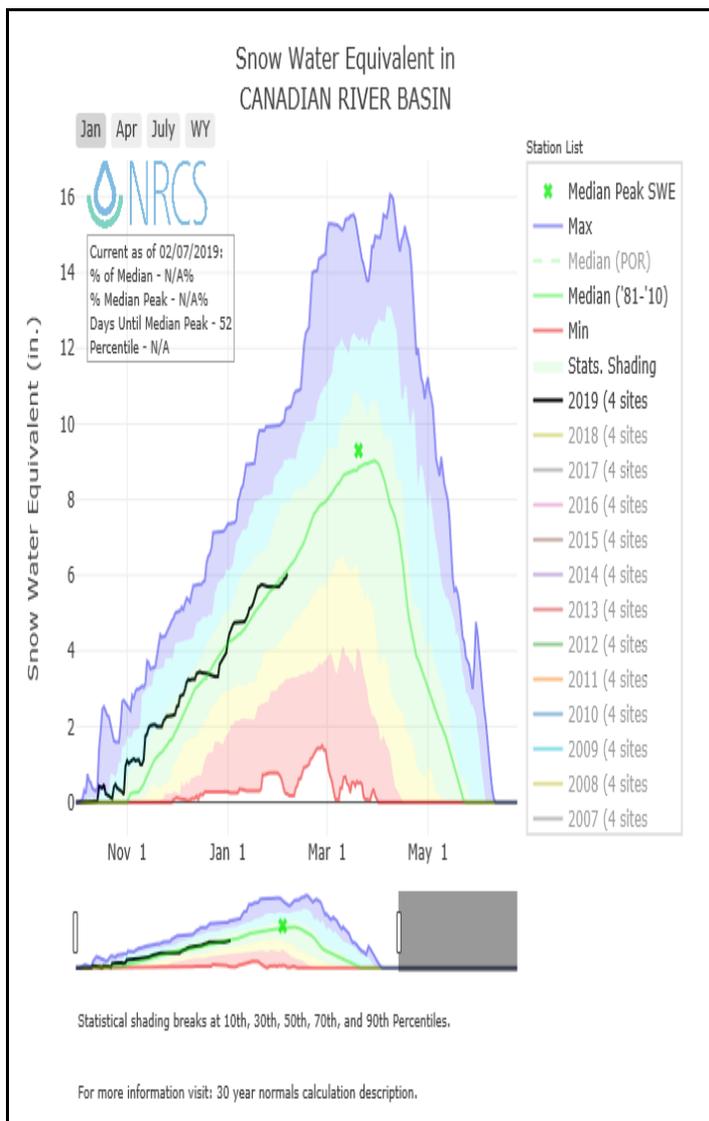
The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

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

Canadian River Basin Water Supply Outlook Report as of February 1, 2019



Forecasts range from 76 percent of the average for the Vermejo River near Dawson to 67 percent at the Conchas Reservoir Inflow. The month of January received 77 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 107 percent as compared to 36 percent last year at this time! Snowpack in the basin is at 98 percent of the median. This is a big increase from 11 percent last year at this time! Reservoirs are currently holding 162,900 acre-feet of storage, which is a decrease of 93,400 acre-feet from this time last year. This equates to 76 percent of the average capacity and 64 percent of the average stored water for the basin at the end of January.



Data Current as of: 2/6/2019 11:39:14 AM

**Canadian River Basin
Streamflow Forecasts - February 1, 2019**

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

CANADIAN RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Vermejo R nr Dawson	MAR-JUN	2.3	4.2	5.9	76%	8.1	12.1	7.8
Eagle Nest Reservoir Inflow	MAR-JUN	4.2	6.3	8	71%	10	13.6	11.2
Cimarron R nr Cimarron ²	MAR-JUN	0.5	5.7	11.2	71%	16.7	25	15.8
Ponil Ck nr Cimarron	MAR-JUN	2.2	3.9	5.4	75%	7.3	10.8	7.2
Rayado Ck nr Cimarron	MAR-JUN	1.66	3.4	5.2	74%	7.5	11.9	7
Conchas Reservoir Inflow ³	MAR-JUN	3.2	10.8	20	67%	33	62	30

1) 90% and 10% exceedance probabilities are actually 95% and 5%

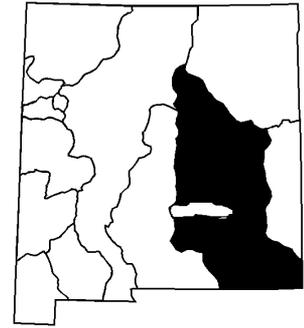
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

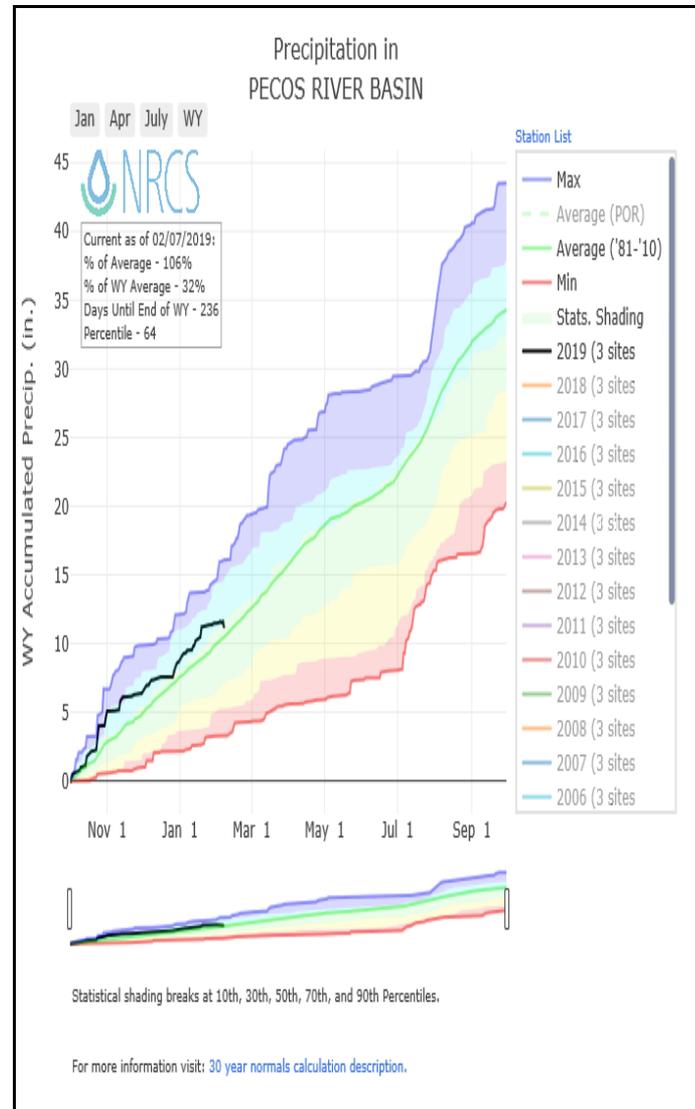
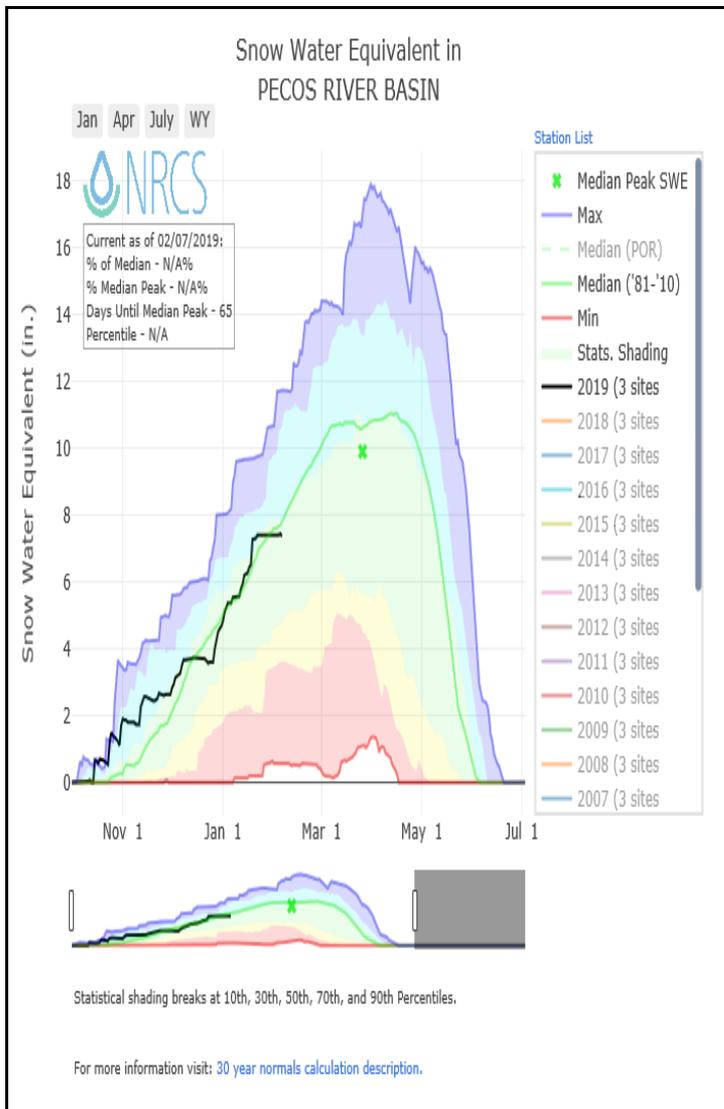
Reservoir Storage End of January, 2019	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Conchas Lake	129.5	213.6	199.9	254.4
Eagle Nest Lake nr Eagle Nest, NM	33.4	42.7	53.5	79.0
Basin-wide Total	162.9	256.3	253.4	333.4
# of reservoirs	2	2	2	2

Watershed Snowpack Analysis February 1, 2019	# of Sites	% Median	Last Year % Median
CANADIAN RIVER BASIN	5	98%	11%

Pecos River Basin Water Supply Outlook Report as of February 1, 2019



The January forecasts for the Pecos range from 102 percent of average near the headwaters to 93 percent above Santa Rosa! January received 110 percent of the average precipitation for the month, putting the basin at 115 percent of average for the water year-to-date. This is 82 percent above last year's average of 33 percent! Snowpack in the Pecos River Basin is at 97 percent of the median! Last year at this time the basin had just 11 percent of the median. As of February 1st, reservoir storage in the basin is at 115,800 acre-feet. This is just 7 percent of the average capacity and 110 percent of the average stored water. Last year at this time reservoir storage was 170 percent of the average.



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**Pecos River Basin
Streamflow Forecasts - February 1, 2019**

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

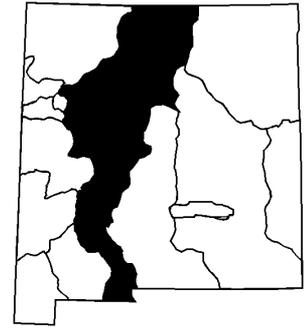
PECOS RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Pecos R nr Pecos	MAR-JUL	33	47	58	102%	69	89	57
Pecos R nr Anton Chico	MAR-JUL	21	42	60	95%	82	120	63
Gallinas Ck nr Montezuma	MAR-JUL	3.1	6.7	9.9	101%	13.8	21	9.8
Pecos R ab Santa Rosa Lk	MAR-JUL	18.3	36	52	93%	70	103	56

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
- 2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
- 3) Median value used in place of average

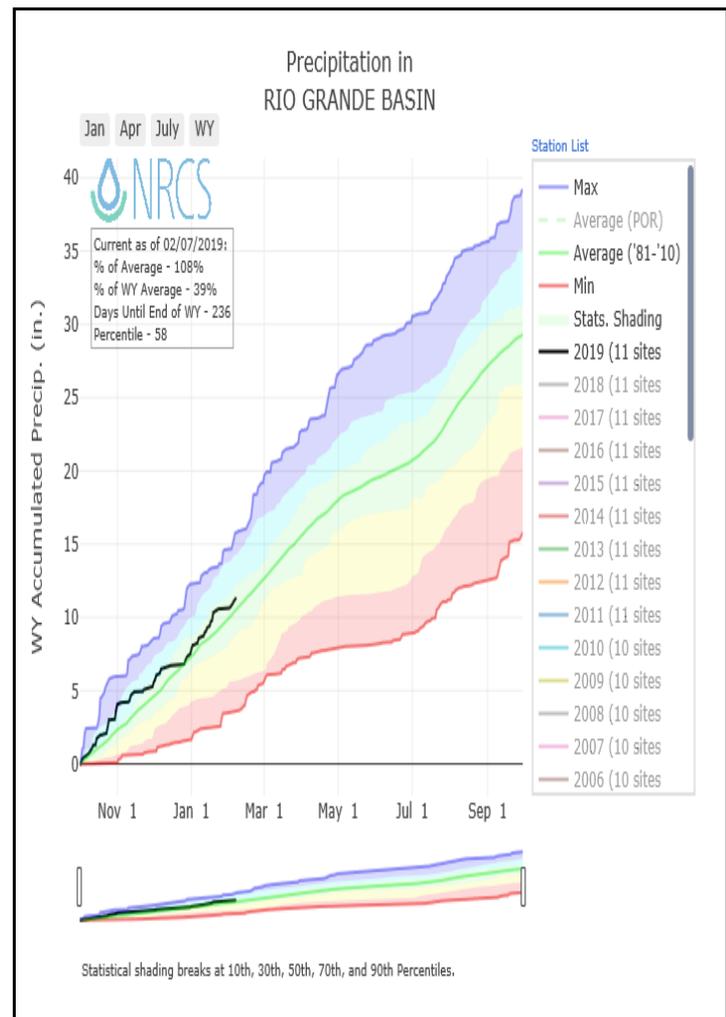
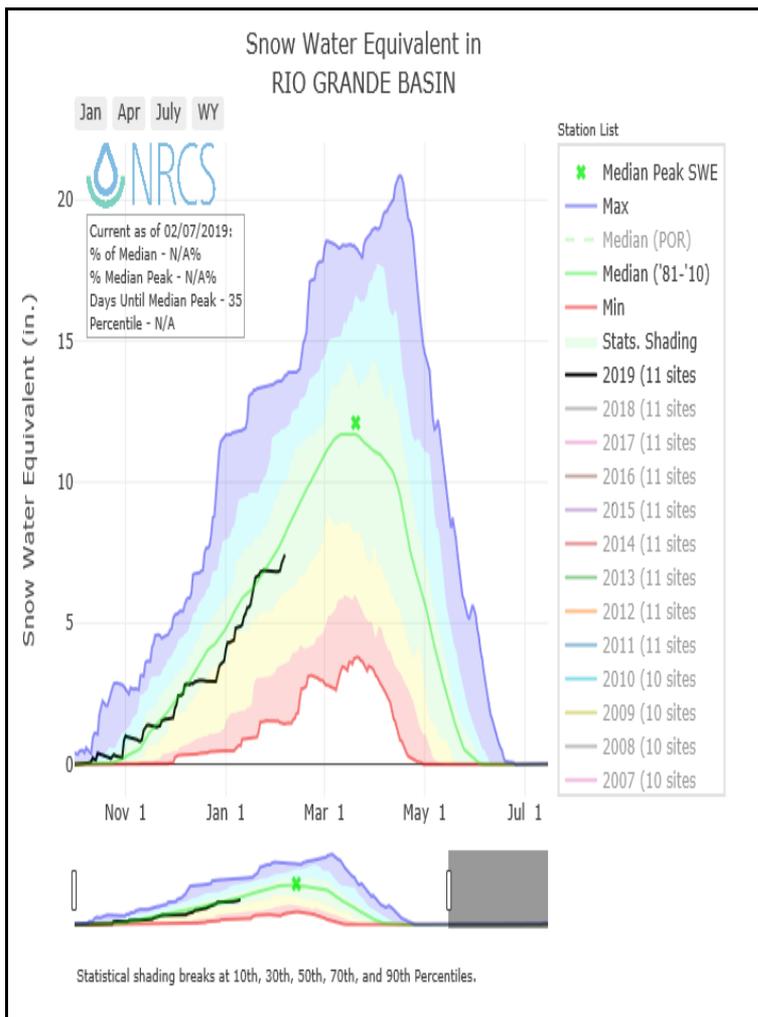
Reservoir Storage End of January, 2019	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Lake Avalon	1.1		2.3	4.0
Brantley Lake nr Carlsbad	30.6	43.3	19.8	1008.2
Santa Rosa Reservoir	53.3	94.3	54.7	432.2
Lake Sumner	31.8	41.7	30.8	102.0
Basin-wide Total	115.8	179.4	105.3	1542.4
# of reservoirs	3	3	3	3

Watershed Snowpack Analysis February 1, 2019	# of Sites	% Median	Last Year % Median
PECOS RIVER BASIN	3	97%	11%

Rio Grande Basin Water Supply Outlook Report as of February 1, 2019



The February forecasts for the Rio Grande range from average to slightly above average. Near the head waters forecasts are 84 percent of the average with some has high as 107 percent further south near Otowi bridge. As expected the lowest forecast point is near San Marcial at 69 percent of the average. January was a good month for precipitation as well accumulating 113 percent of the average rainfall for the month which equates to 106 percent for the water year-to-date total. Snowpack in the basin looks great at 93 percent of the median! This is 72 percent above last year's median! Snowpack in southern Colorado near the headwaters of the Rio Grande is 81 percent of the median as compared to 34 percent last year at this time. Current reservoir storage in the basin is very low at 364,400 acre-feet which is a decrease of 531,200 acre-feet from this time last year! This remains 41 percent of the average capacity in the basin and 18 percent of the average stored water.



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**Rio Grande Basin
Streamflow Forecasts - February 1, 2019**

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

RIO GRANDE BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Rio Grande nr Del Norte ²	APR-SEP	265	360	435	84%	515	645	515
Platoro Reservoir Inflow	APR-JUL	31	39	45	80%	52	62	56
	APR-SEP	34	43	50	81%	57	69	62
Conejos R nr Mogote ²	APR-SEP	100	131	154	79%	178	220	194
Costilla Reservoir Inflow	MAR-JUL	7.1	9.6	11.4	103%	13.4	16.7	11.1
Costilla Ck nr Costilla ²	MAR-JUL	14.8	21	26	100%	31	40	26
Red R bl Fish Hatchery nr Questa	MAR-JUL	18.3	25	29	85%	34	43	34
Rio Hondo nr Valdez	MAR-JUL	7.3	11	14.1	77%	17.5	23	18.4
Rio Pueblo de Taos nr Taos	MAR-JUL	6.7	10.9	14.2	84%	18	24	17
Rio Lucero nr Arroyo Seco	MAR-JUL	4.3	6.7	8.6	79%	10.7	14.2	10.9
Rio Pueblo de Taos bl Los Cordovas	MAR-JUL	7.2	17.1	26	72%	37	57	36
Embudo Ck at Dixon	MAR-JUL	16.9	30	41	85%	54	77	48
El Vado Reservoir Inflow ²	MAR-JUL	88	138	178	79%	225	300	225
	APR-JUL	78	124	161	79%	205	275	205
Santa Cruz R at Cundiyo	MAR-JUL	11.4	15.2	18.2	99%	21	26	18.3
Nambe Falls Reservoir Inflow	MAR-JUL	3.7	5	6	92%	7.1	8.8	6.5
Tesuque Ck ab diversions	MAR-JUL	0.7	1.1	1.43	107%	1.79	2.4	1.34
Rio Grande at Otowi Bridge ²	MAR-JUL	295	425	525	73%	640	825	720
Santa Fe R nr Santa Fe ²	MAR-JUL	2.4	3.4	4.3	100%	5.2	6.6	4.3
Jemez R nr Jemez	MAR-JUL	24	34	41	98%	49	63	42
Jemez R bl Jemez Canyon Dam	MAR-JUL	17.1	26	33	97%	41	54	34
Rio Grande at San Marcial ²	MAR-JUL	50	230	350	69%	470	650	510

1) 90% and 10% exceedance probabilities are actually 95% and 5%

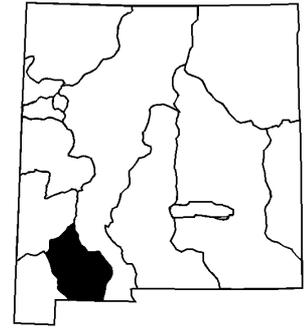
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2019	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Abiquiu Reservoir	72.2	121.0	154.6	1198.5
Bluewater Lake	3.1	6.4	5.9	38.5
Caballo Reservoir	27.4	37.7	78.1	332.0
Cochiti Lake	45.1	48.0	60.9	491.0
Costilla Reservoir	3.0	11.1	6.5	16.0
El Vado Reservoir	14.0	67.6	100.9	184.8
Elephant Butte Reservoir	143.4	458.0	1299.0	2195.0
Heron Reservoir	56.1	145.9	303.0	400.0
Basin-wide Total	364.4	895.6	2008.9	4855.8
# of reservoirs	8	8	8	8

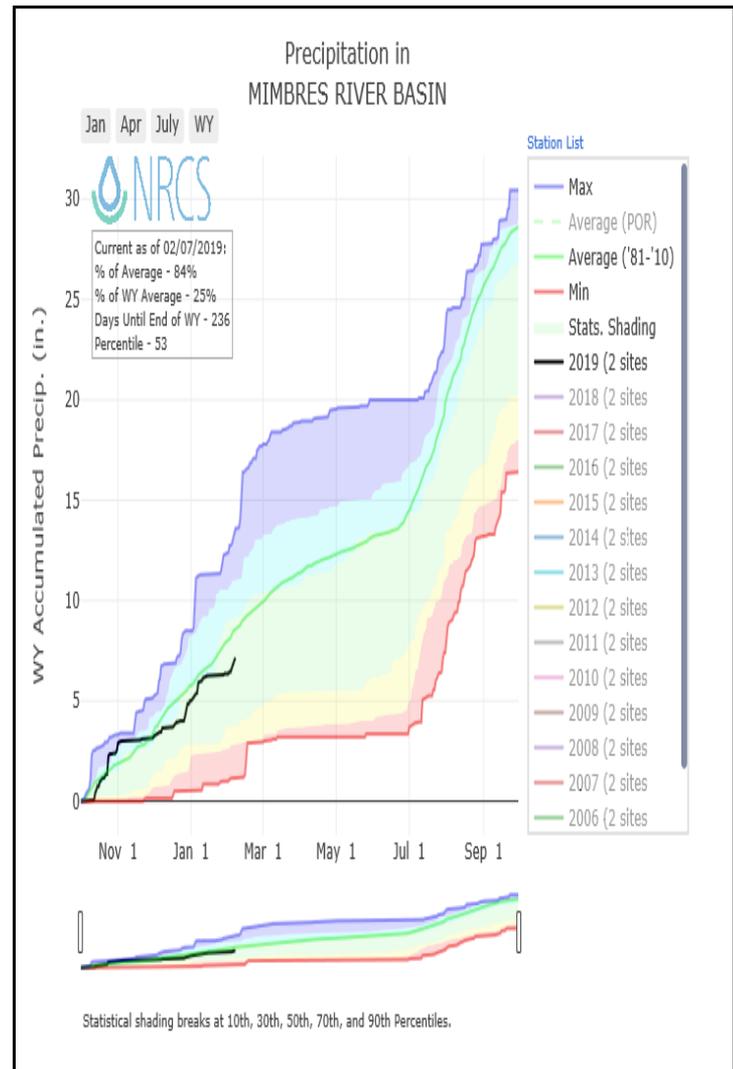
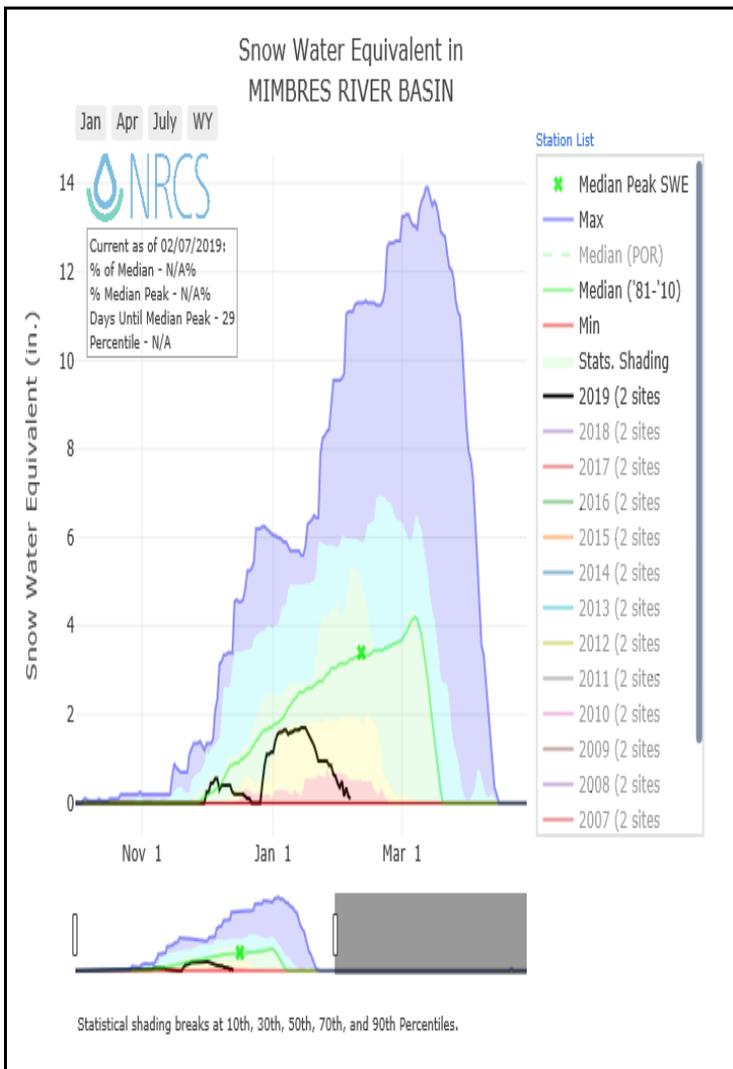
Watershed Snowpack Analysis February 1, 2019	# of Sites	% Median	Last Year % Median
RIO GRANDE BASIN	12	93%	21%

Mimbres River Basin Water Supply Outlook Report as of February 1, 2019



The February 1st forecasts for the Mimbres River at Mimbres at just 52 percent of the average. January received 60 percent of the average monthly precipitation bringing the water year-to-date total to 79 percent of the average. Snowpack in the basin is currently at just 11 percent of the median as compared to 0 percent last year at this time.

Users of NRCS Snow Survey data should be aware, due to reduced budget allocations; the manual snow courses at McKnight Cabin and Emory Pass #2 have been discontinued. Data is still being recorded at the automated SNOTEL sites in the basin.



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**Mimbres River Basin
Streamflow Forecasts - February 1, 2019**

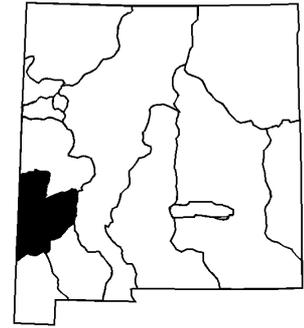
Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

MIMBRES RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Mimbres R at Mimbres ³	FEB-MAY	0.16	0.52	0.94	52%	1.54	2.8	1.82

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
- 2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
- 3) Median value used in place of average

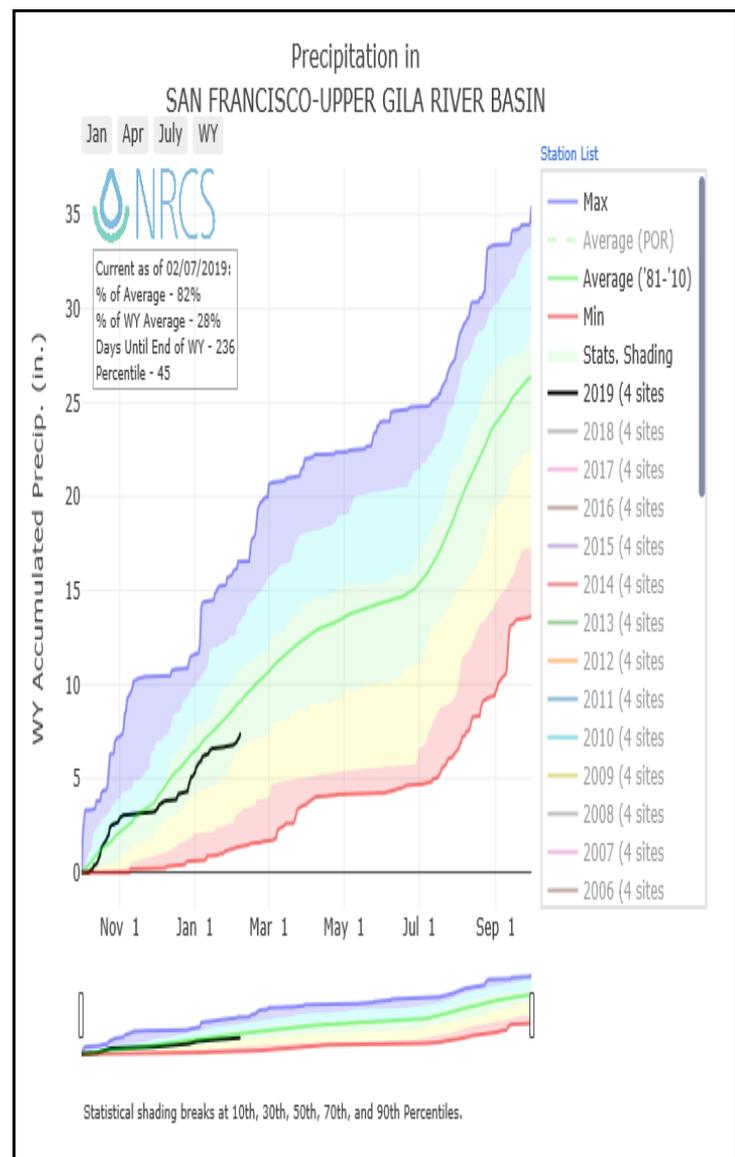
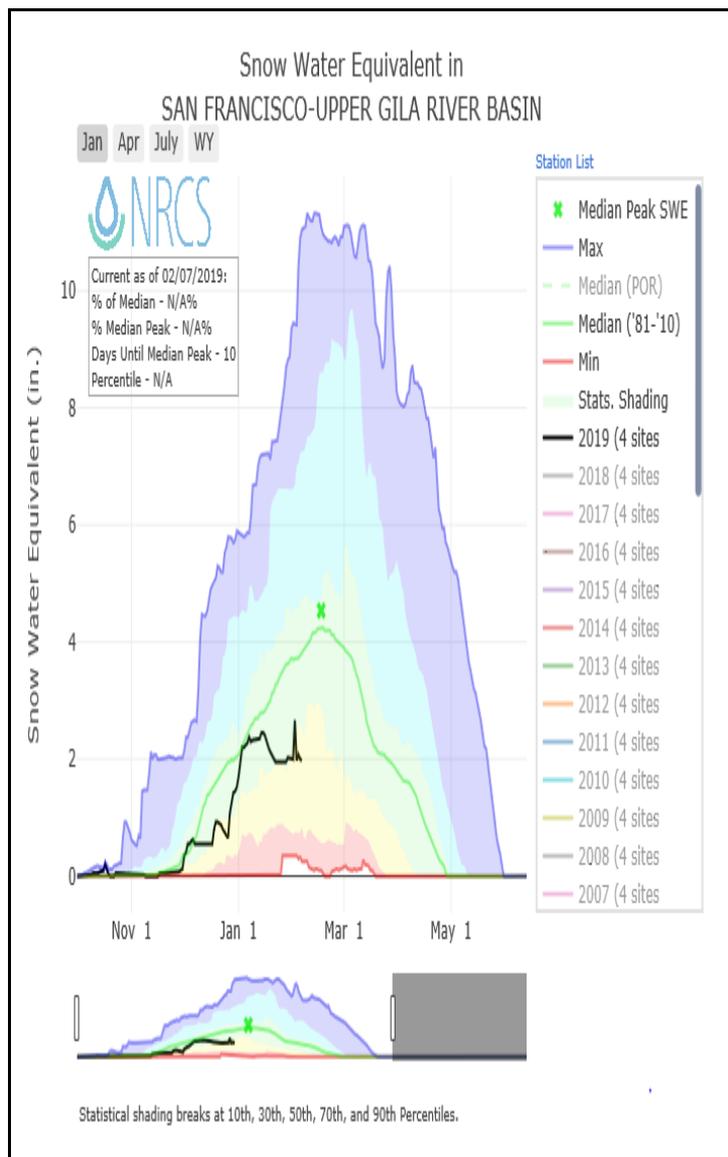
Watershed Snowpack Analysis February 1, 2019	# of Sites	% Median	Last Year % Median
MIMBRES RIVER BASIN	2	11%	0%

San Francisco / Upper Gila River Basin Water Supply Outlook Report as of February 1, 2019



The February 1st forecasts for the San Francisco and Upper Gila are 65 percent of the average. Water year-to-date precipitation is at 78 percent of the average with January receiving 68 percent of the average monthly precipitation. Snowpack in the basin is currently at 54 percent of the median as compared to 9 percent at this time last year.

Due to budget and contracting issues, the aerial markers at Hummingbird Saddle and Whitewater Baldy are not currently being measured. Plans are in effect to automate these sites with depth sensors which will transmit out data daily as soon as possible.



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**San Francisco-Upper Gila River Basin
Streamflow Forecasts - February 1, 2019**

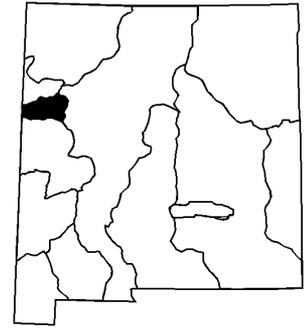
Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

SAN FRANCISCO-UPPER GILA RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Gila R at Gila ³	FEB-MAY	13.3	23	32	64%	43	63	50
Gila R bl Blue Ck nr Virden ³	FEB-MAY	9.2	25	41	65%	60	95	63
San Francisco R at Glenwood ³	FEB-MAY	3.4	7.7	12	66%	17.7	29	18.2
San Francisco R at Clifton ³	FEB-MAY	7.3	20	33	65%	49	77	51

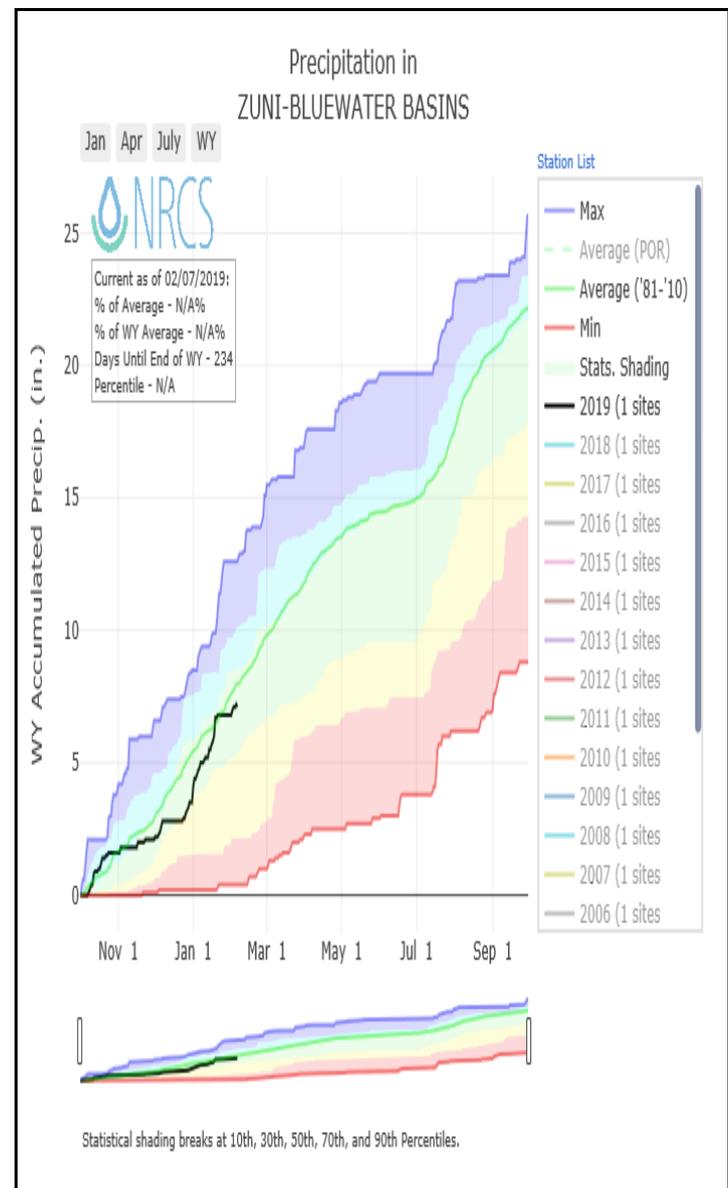
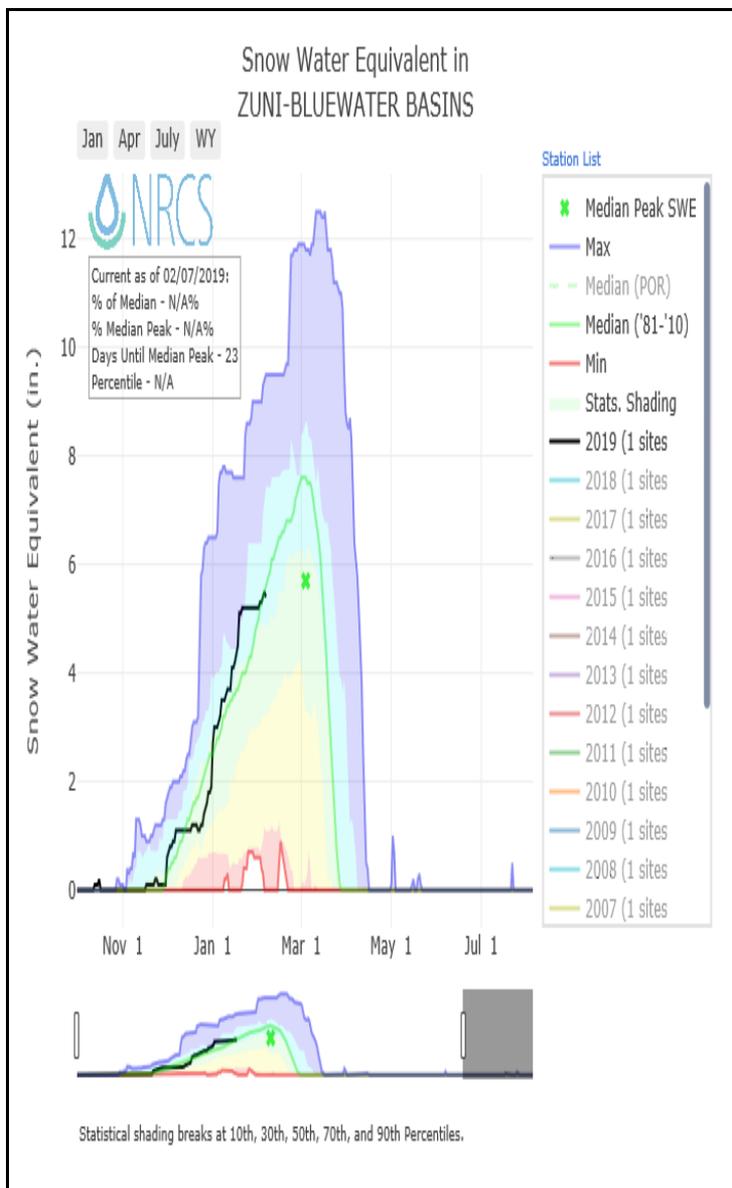
- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
- 2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
- 3) Median value used in place of average

Watershed Snowpack Analysis February 1, 2019	# of Sites	% Median	Last Year % Median
SAN FRANCISCO-UPPER GILA RIVER BASIN	4	54%	9%

Zuni / Bluewater Basins Water Supply Outlook Report as of February 1, 2019



Forecasts for the Zuni/Bluewater area are currently at 79 percent of the average. Snowpack in the basin is at 101 percent of the median as compared to 16 percent at this time last year! January once again saw gains in precipitation as well having received 123 percent of the average. This puts the water year-to-date total at 89 percent of the average. Bluewater Lake currently holds 3,100 acre-feet of water versus 6,400 acre-feet at this time last year. This is 53 percent of the average water stored as compared to 108 percent last year at this time.



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**Zuni-Bluewater Basins
Streamflow Forecasts - February 1, 2019**

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

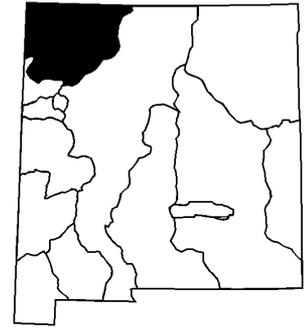
ZUNI-BLUEWATER BASINS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Rio Nutria nr Ramah ³	FEB-MAY	0.1	0.51	1.1	79%	2	4.1	1.4
Zuni R ab Black Rock Reservoir ³	FEB-MAY	0	0.03	0.3	79%	1.04	3.5	0.38

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
- 2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
- 3) Median value used in place of average

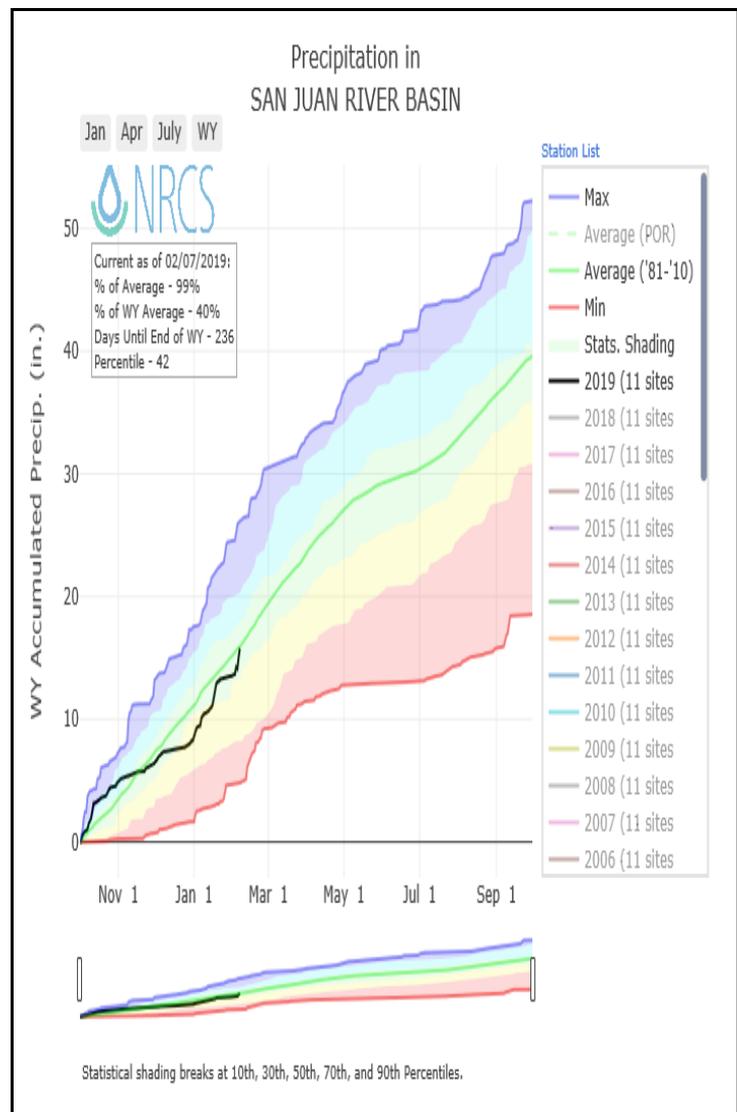
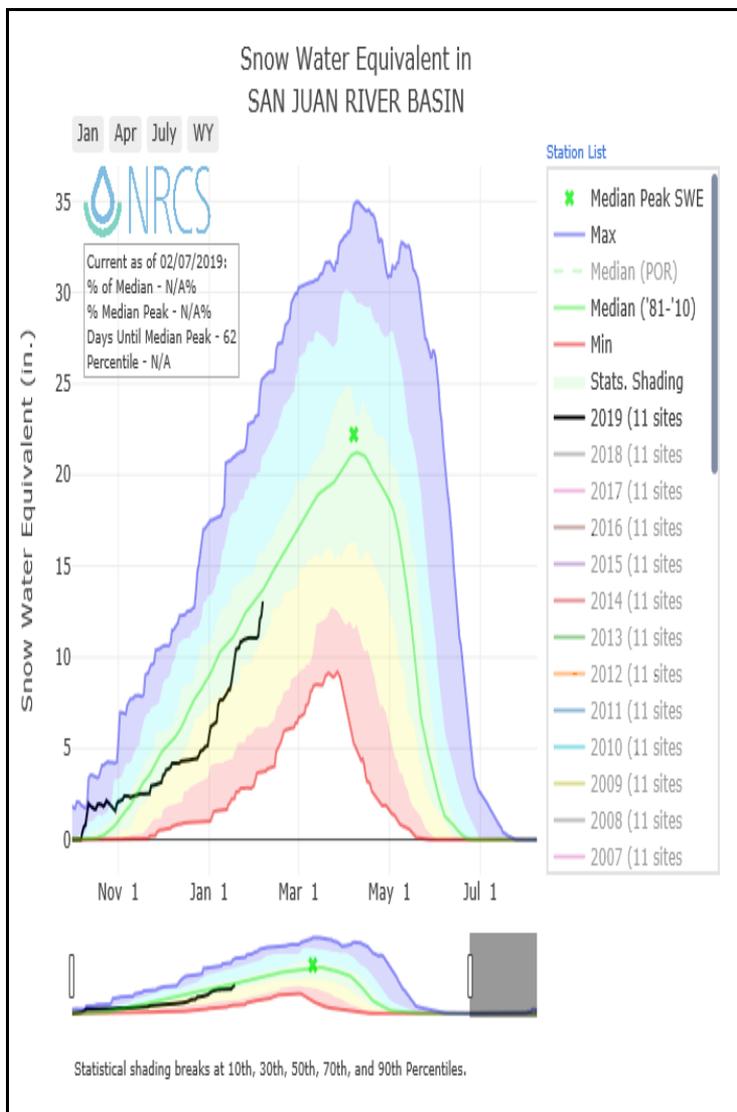
Reservoir Storage End of January, 2019	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Bluewater Lake	3.1	6.4	5.9	38.5
Basin-wide Total	3.1	6.4	5.9	38.5
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis February 1, 2019	# of Sites	% Median	Last Year % Median
ZUNI-BLUEWATER BASINS	4	101%	16%

San Juan River Basin Water Supply Outlook Report as of February 1, 2019



The February 1st forecasts for the San Juan range 87-77 percent of the average. December received 120 percent of the average monthly precipitation bringing the water year-to-date total to 89 percent of the average. Snowpack in the basin remains below the median at just 85 percent, however this is an increase from just 36 percent at this time last year! Navajo reservoir storage contains 869,100 acre-feet or 66 percent of the average water stored at the end of January. This equates to 77 percent of the average capacity for the reservoir.



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**San Juan River Basin
Streamflow Forecasts - February 1, 2019**

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

SAN JUAN RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Rio Blanco at Blanco Diversion ²	APR-JUL	25	35	43	80%	51	65	54
Navajo R at Oso Diversion ²	APR-JUL	29	41	50	77%	60	77	65
Navajo Reservoir Inflow ²	APR-JUL	350	480	575	78%	680	850	735
Animas R at Durango	APR-JUL	245	310	360	87%	415	505	415
La Plata R at Hesperus	APR-JUL	11	14.9	18	78%	21	27	23

1) 90% and 10% exceedance probabilities are actually 95% and 5%

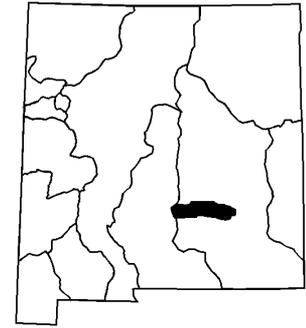
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of January, 2019	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Navajo Reservoir	869.1	1254.9	1310.0	1696.0
Basin-wide Total	869.1	1254.9	1310.0	1696.0
# of reservoirs	1	1	1	1

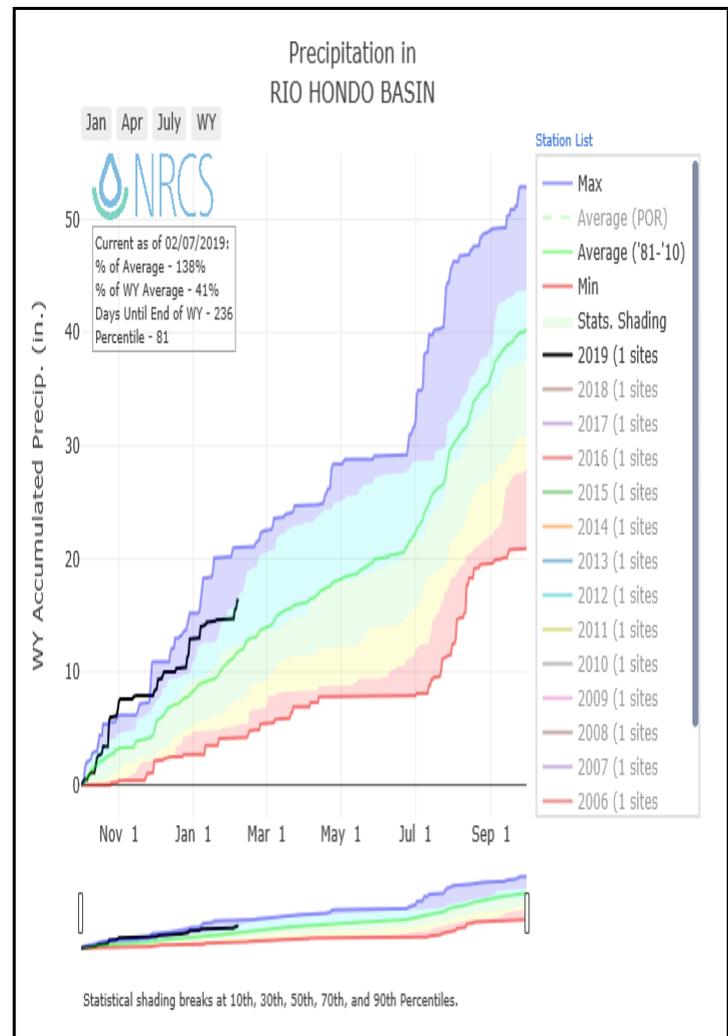
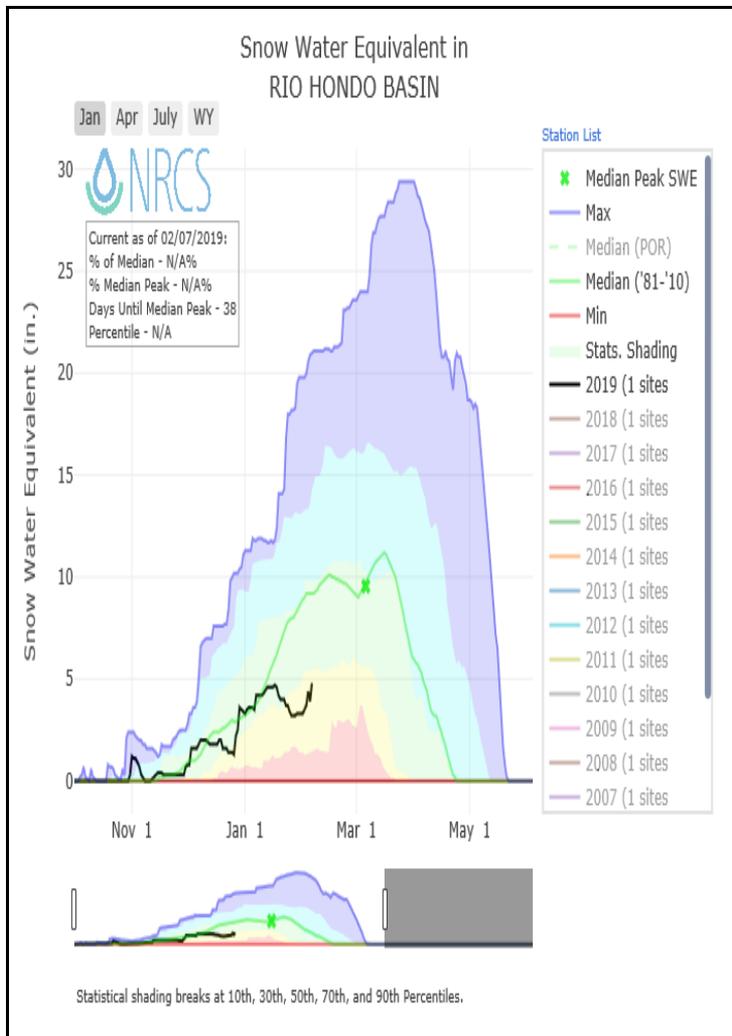
Watershed Snowpack Analysis February 1, 2019	# of Sites	% Median	Last Year % Median
SAN JUAN RIVER BASIN	12	85%	36%

Rio Hondo Basin Water Supply Outlook Report as of February 1, 2019



February 1st forecasts for the Rio Ruidoso at Hollywood are just 28 percent of the average. January saw below average amounts of precipitation at just 69 percent of the average for the month. This puts the water year-to-date total at 134 percent of the average however it is best to keep in mind that a majority of this moisture was received the previous month. Snowpack in the basin is currently at just 37 percent of the median as compared to 3 percent at this time last year! This measurement however should be used with caution as the Sierra Blanca SNOTEL site was impacted by the Little Bear Fire four years ago.

It should be noted that the switch to using median snowpack values four years ago has had a significant influence on the “average” calculations for the Rio Hondo Basin. Using the old system of computing averages based on the 1971-2000 period, 6.7 inches of SWE was considered normal for January 1. Using the new median calculations based on the 1981-2010 period, 3.2 inches of SWE is now normal. For this reason, comparisons of “percent of average” from year to year will be limited in this basin to minimize confusion.



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**Rio Hondo Basin
Streamflow Forecasts - February 1, 2019**

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

RIO HONDO BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Rio Ruidoso at Hollywood	MAR-JUN	0.22	1.01	1.87	28%	3	5.1	6.7

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
- 2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
- 3) Median value used in place of average

Watershed Snowpack Analysis February 1, 2019	# of Sites	% Median	Last Year % Median
RIO HONDO BASIN	1	37%	3%

NEW MEXICO STATEWIDE	Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
Alamitos	SC	9320			4.4		0.0	0%
Aztec #2	SC	9880	12	2.6	2.3	113%	0.0	0%
Bateman	SNOTEL	9300	29	6.7	6.9	97%	1.6	23%
Boon	SC	8140	16	4.6	4.6	100%	0.6	13%
Bowl Canyon	SC	8980	26	7.0	5.8	121%	1.2	21%
Chamita	SNOTEL	8400	25	5.8	6.5	89%	1.2	18%
Dan Valley	SC	7640	12	3.2	3.1	103%	0.4	13%
Elk Cabin	SNOTEL	8210	7	3.1	3.8	82%	0.4	11%
Frisco Divide	SNOTEL	8000	5	2.0	2.5	80%	0.0	0%
Gallegos Peak	SNOTEL	9800	31	6.8	6.1	111%	1.4	23%
Hematite Park	SC	9500			3.4		0.3	9%
Hidden Valley	SC	8480	23	6.1			1.0	
Hopewell	SNOTEL	10000	35	8.5	11.0	77%	2.1	19%
Lookout Mountain	SNOTEL	8500	1	0.2	2.3	9%	0.0	0%
McGaffey	SC	8120	8	2.6	2.7	96%	0.6	22%
Mcknight Cabin	SNOTEL	9240	2	0.7	2.4	29%	0.0	0%
Missionary Spring	SC	7940	16	4.6	3.6	128%	0.0	0%
Navajo Whiskey Ck	SNOTEL	9050	26	7.9			0.0	
North Costilla	SNOTEL	10600	18	5.0	3.6	139%	0.6	17%
Ojo Redondo	SC	8200			3.4		0.0	0%
Palo	SNOTEL	9350	18	4.5			0.4	
Palo	SC	9300			4.6		0.6	13%
PanchueLa	SC	8400					0.0	
Quemazon	SNOTEL	9500	22	6.5	6.7	97%	0.0	0%
Red River Pass #2	SNOTEL	9850	20	4.3	5.0	86%	1.1	22%
Rice Park	SNOTEL	8460	21	5.2	5.0	104%	0.8	16%
Rio En Medio	SC	10300			6.2		1.0	16%
Rio Santa Barbara	SNOTEL	10664	38	9.5			1.5	
San Antonio Sink	SNOTEL	9100	23	5.0			0.8	
San Antonio Sink	SC	9200	20	3.4	5.2	65%	0.2	4%
Santa Fe	SNOTEL	11445	39	10.3	9.5	108%	1.5	16%
Senorita Divide #2	SNOTEL	8600	20	5.2	5.6	93%	1.4	25%
Shuree	SNOTEL	10100	21	4.8			0.2	
Shuree	SC	10097			2.2		0.0	0%
Sierra Blanca	SNOTEL	10280	14	3.3	8.9	37%	0.3	3%
Signal Peak	SNOTEL	8360	0	0.0	3.9	0%	0.0	0%
Silver Creek Divide	SNOTEL	9000	20	5.8	6.1	95%	1.4	23%
State Line	SC	8000			1.8		0.0	0%
Taos Canyon	SC	9100			4.0		0.5	13%
Taos Powderhorn	SNOTEL	11057	35	9.8			2.0	
Taos Powderhorn	SC	11250			14.2		1.6	11%
Tolby	SNOTEL	10180	24	4.8	5.5	87%	0.7	13%
Tres Ritos	SNOTEL	8600	8	2.8			0.0	
Tres Ritos	SC	8600			4.0		0.5	13%
Vacas Locas	SNOTEL	9306	29	7.8	7.9	99%	2.2	28%
Wesner Springs	SNOTEL	11120	33	8.7	9.5	92%	0.5	5%
Whiskey Creek	SC	9050	27	7.9	6.3	125%	1.4	22%
						90%		14%
	# of sites					28		28

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New Mexico
Basin Outlook Report
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