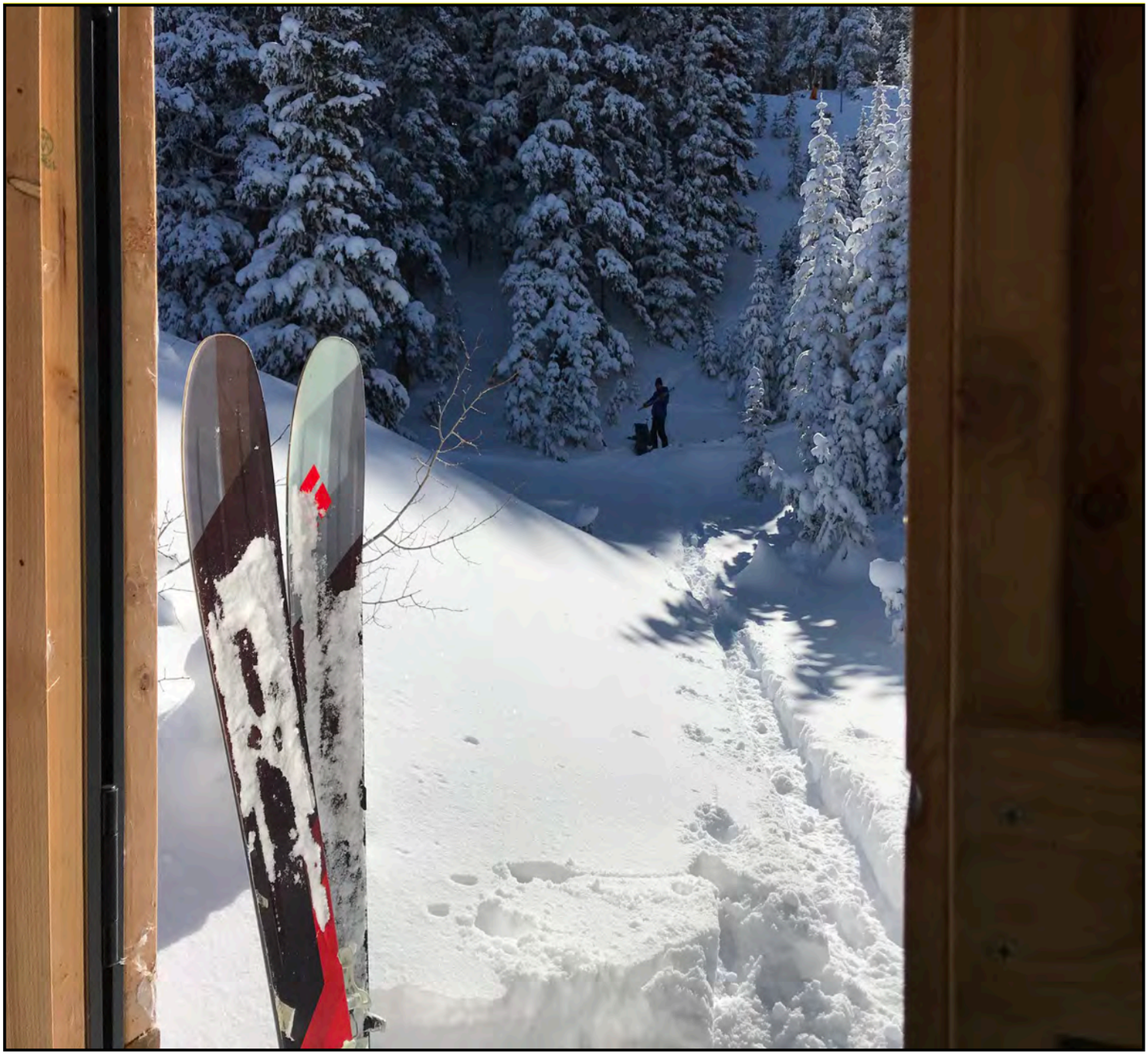
New Mexico
Basin Outlook Report
February 1, 2020



Ski resorts such as Taos are enjoying a spectacular season with all the early fresh powder on the slopes. Picture looking out from the Taos Powderhorn SNOTEL site. Photo courtesy of Aaron Miller, NRCS

Basin Outlook Reports
and
Federal - State - Private
Cooperative Snow Surveys

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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.

Summary

Early January saw cooler than normal temperatures throughout much of the state. The Four Corners region benefitted from recent precipitation leading to improvements in top-soil conditions, ultimately resulting in severe drought in the region being replaced by moderate drought status. However, the lower elevation regions within the Four Corners are still suffering from long term drought deficits. Additionally, moderate to large snow accumulations within the San Juan and Sangre de Cristo Ranges aided in the removal of severe drought within the high country. The middle of January turned warm in the eastern and southeastern plains of New Mexico which is reflective in dwindling snowpack values and has exacerbated an already high evaporative demand situation due to the lack of precipitation in the region. Moving further into the month a Pacific weather system migrated across the U.S. while tapping moisture from the Gulf and delivering a healthy round of snow and precipitation to the state. However, the areas in need of moisture the most fell somewhat short with ranchers in the Southeast declaring impacts related to poor grass growth due to hot, dry, and windy conditions. These conditions are the result of the lack of rain from spring 2019 and the failure of both the summer and fall monsoon seasons. January wrapped up with another system of moisture which moved across the West, however upon reaching New Mexico it had lost most of its moisture and delivered only small amounts statewide. Overall the state is just about on par with what would be considered a more normal winter. New Mexico has been experiencing storms every week to two weeks which have provided a consistent refresh to our upper elevation snowpack. This pattern is what we are hoping for which makes the end of January such a pivotal month for snow accumulation. One would hope this trend will continue for several more months to help retain already existing snowpack as well as accumulate enough that it doesn't begin melting off early. Water users and managers should continue to monitor conditions to see how the forecasts develop as we progress into the water year.

Snowpack

The February 1st snowpack shows a significant drop in percentages as the winter snows slow down slightly following early season storm tracks. All northern basins are currently above the median, however one must take into account that in some areas this could be the result of early season snows. Those basins located in the southern half of the state saw significant drops in snowpack throughout January. Ranging from a high of 123 percent of median in the Canadian River Basin to a low of 10 percent in the Mimbres Basin there is a significant water supply difference between the northern and southern portions of the state. Statewide snowpack average is currently at 99 percent of the median as compared to 90 percent at this time last year.

NEW MEXICO STATEWIDE SNOWPACK	Percent of Median	Last Year Percent of Median
CANADIAN RIVER BASIN	123	98
PECOS RIVER BASIN	115	97
RIO GRANDE BASIN	110	93
MIMBRES RIVER BASIN	10	11
SAN FRANCISCO-UPPER GILA RIVER BASIN	76	54
ZUNI-BLUEWATER BASINS	73	100
SAN JUAN RIVER BASIN	103	85
CHUSKA MOUNTAINS	112	114
RIO HONDO BASIN	37	37
Statewide Snowpack Total	**99**	**90**
# of sites	28	28

Precipitation

Water year precipitation starting October 1 through January is currently at 99 percent of average. All basins in New Mexico saw below average monthly precipitation values. The San Juan Basin received just 48 percent of the average precipitation in January with the Rio Grande Basin just behind at 67 percent. The lowest amount of precipitation fell in the Mimbres River Basin at just 24 percent. 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

Reservoir storage across New Mexico currently looks significantly improved over last year at this time. Elephant Butte is currently at 557,400 acre-feet as compared to last year's 143,400. Navajo Reservoir is holding 1,307,800 acre-feet in comparison to 869,100 last year Statewide reservoir storage is currently at 65 percent of the average as compared to 41 percent last year at this time. Total reservoir storage is 2,400,000 acre-feet as compared to 1,507,100 acre-feet last year. This equates to 44 percent of the average capacity and 29 percent of the actual capacity. Water-users should continue to monitor weather conditions to evaluate their water needs as the winter progresses.

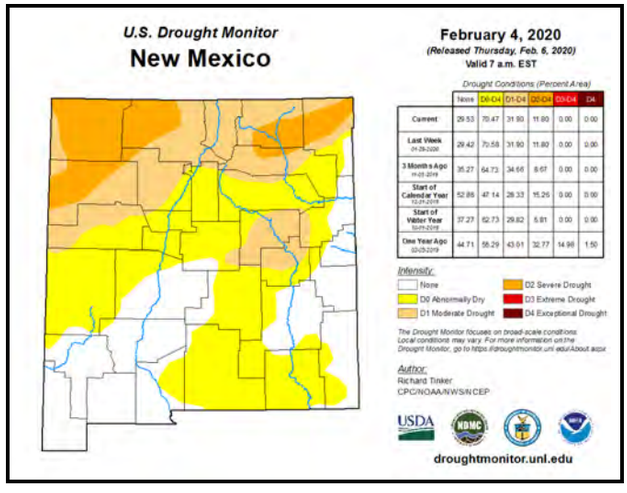
NEW MEXICO STATEWIDE	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Abiquiu Reservoir	84.3	72.2	154.6	1198.5	7%	6%	13%	55%	47%
Bluewater Lake		3.1	5.9	38.5		8%	15%		52%
Brantley Lake nr Carlsbad	42.4	30.6	19.8	1008.2	4%	3%	2%	214%	155%
Caballo Reservoir	34.3	27.4	78.1	332.0	10%	8%	24%	44%	35%
Cochiti Lake	48.0	45.1	60.9	491.0	10%	9%	12%	79%	74%
Conchas Lake	73.9	129.5	199.9	254.4	29%	51%	79%	37%	65%
Costilla Reservoir		3.2	6.5	16.0		20%	41%		50%
Eagle Nest Lake nr Eagle Nest, NM	45.3	33.4	53.5	79.0	57%	42%	68%	85%	62%
El Vado Reservoir	28.7	14.0	100.9	184.8	16%	8%	55%	28%	14%
Elephant Butte Reservoir	577.4	143.4	1299.0	2195.0	26%	7%	59%	44%	11%
Heron Reservoir	105.7	56.1	303.0	400.0	26%	14%	76%	35%	19%
Lake Avalon	1.4	1.1	2.3	4.0	35%	28%	58%	61%	48%
Lake Sumner	24.6	31.8	30.8	102.0	24%	31%	30%	80%	103%
Navajo Reservoir	1307.8	869.1	1310.0	1696.0	77%	51%	77%	100%	66%
Santa Rosa Reservoir	26.1	53.3	54.7	432.2	6%	12%	13%	48%	97%
Basin-wide Total	2400.0	1507.1	3667.5	8377.1	29%	18%	44%	65%	41%
# of reservoirs	13	13	13	13	13	13	13	13	13

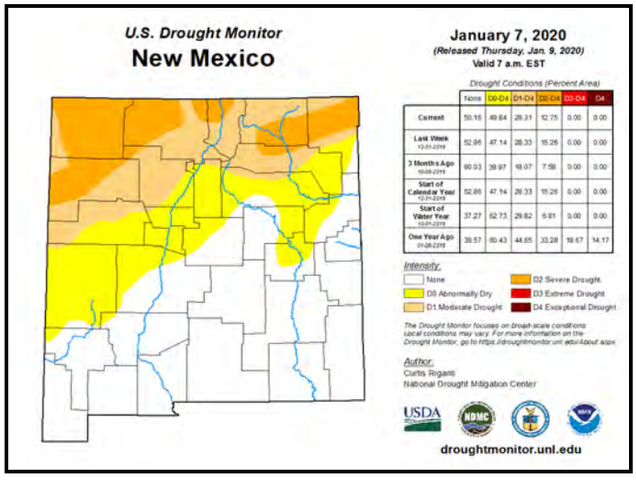
* Costilla Reservoir and Bluewater Lake gauge data is currently unavailable

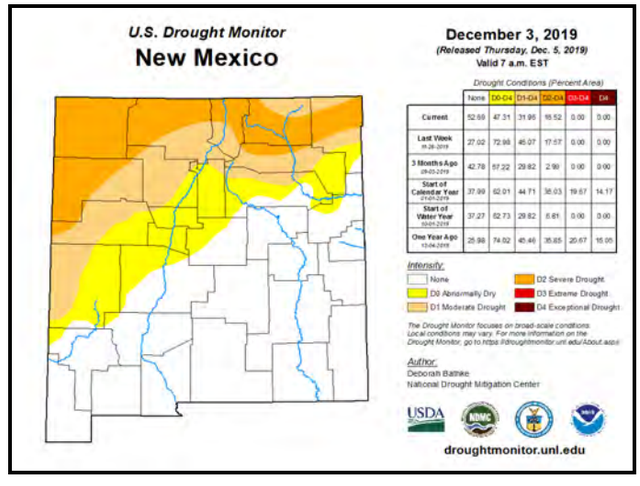
Streamflow

Forecasts across the state look mostly average for the northern basins and below to well below average for the southern basins. The beginning of the water year experienced slightly skewed forecasts due to early season snows. These same forecasts have begun to drop into the more average to below average range as the snowfall across the state has tapered off slightly throughout February. Water users and managers should continue to watch the forecasts as water supply conditions evolve across the state.

New Mexico Drought Monitor, real versus perceived conditions?



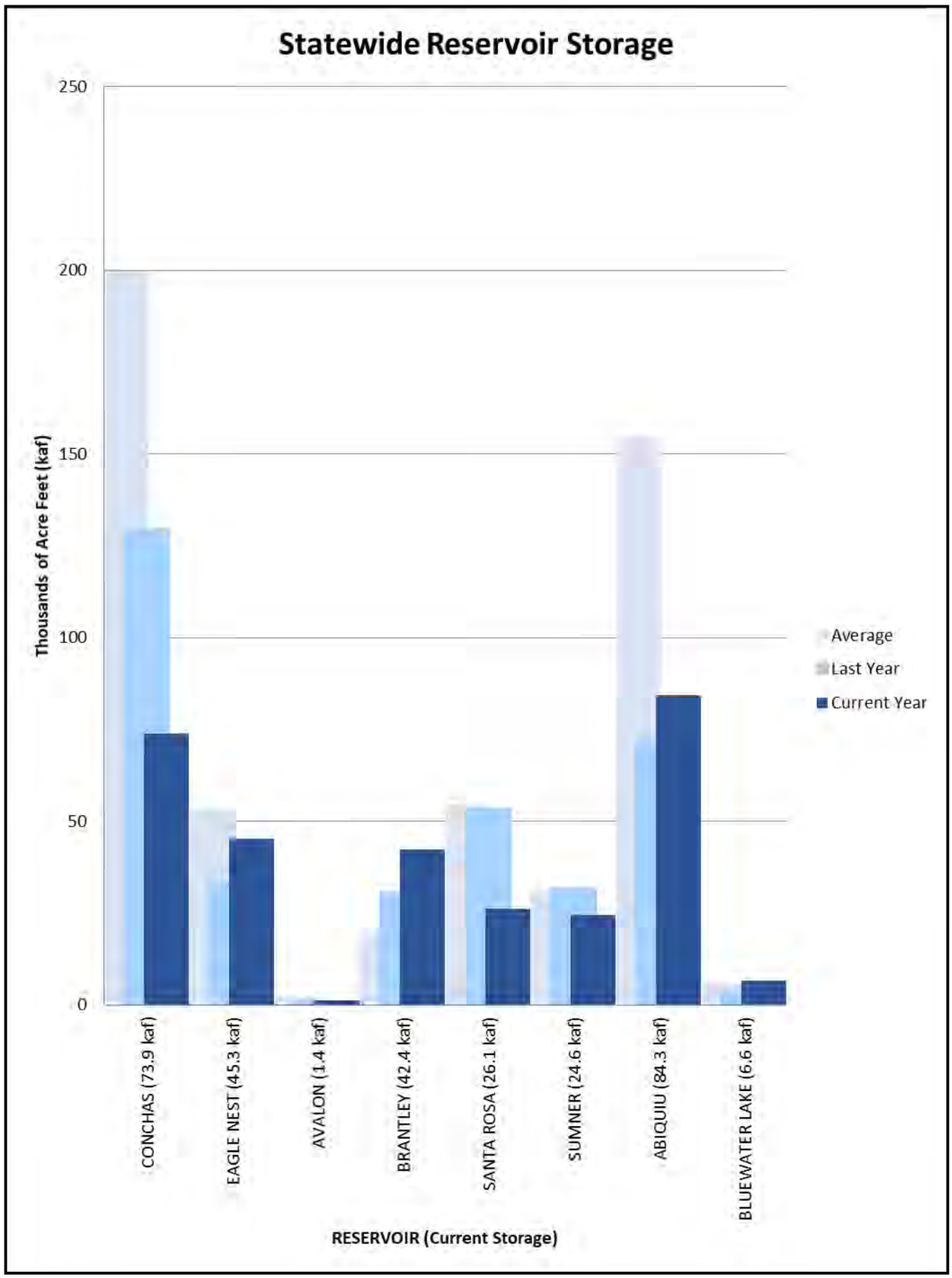


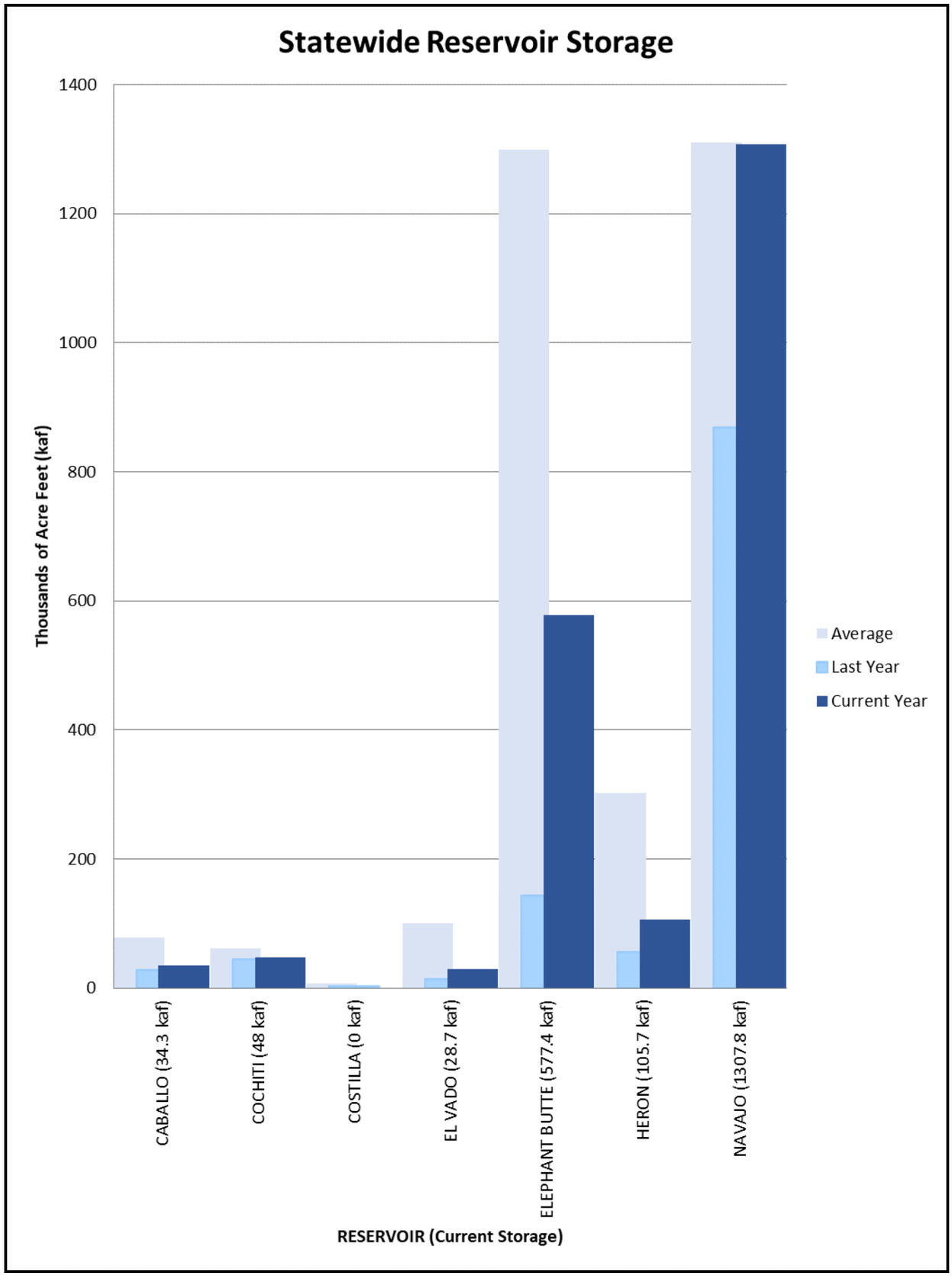


Every week**,** The U.S. Drought Monitor is produced in partnership between the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration. This useful tool uses multiple inputs, including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

At of the end of January, drought remains firmly in place over much of northern New Mexico and a small portion of the Pecos River Valley. Precipitation over much of New Mexico was below normal for the month of January with above normal amounts over portions of the upper Rio Grande Valley, the Chuska Mountains, and some areas along the Canadian River in eastern New Mexico. Temperatures over much of the Land of Enchantment were also well above normal with only a few small areas seeing average temperatures below normal.

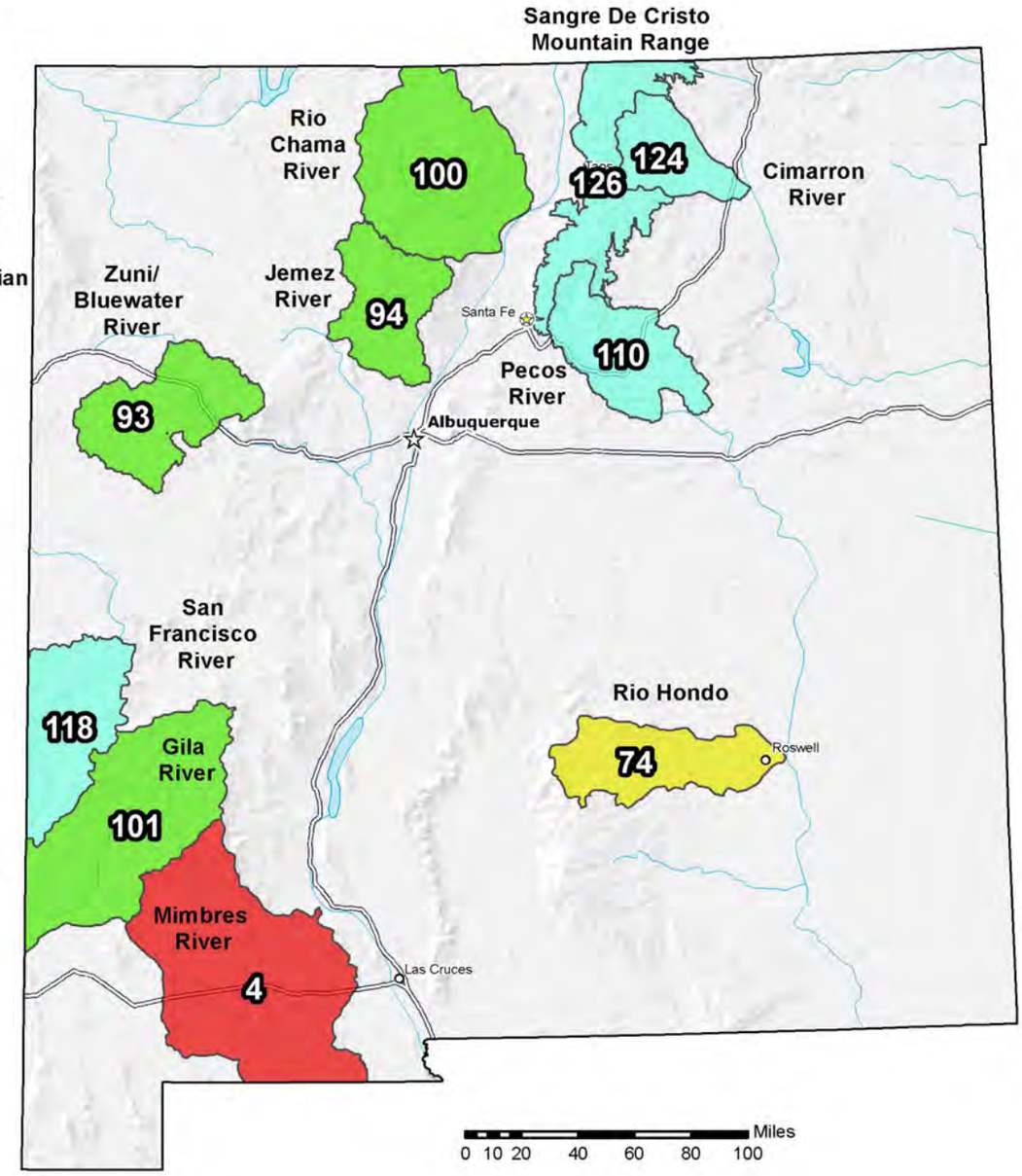
Concerns remain for most of eastern New Mexico as springtime precipitation and the monsoon were well below normal with the exception of several large events with periods of flash drought between these events. Further deterioration is possible if average or above springtime precipitation does not develop over the region.


Statewide Reservoir Storage
250
200
150
100
50
0
Thousands of Acre Feet (kaf)
CONCHAS (73.9 kaf)
EAGLE NEST (45.3 kaf)
AVALON (1.4 kaf)
BRANTLEY (42.4 kaf)
SANTA ROSA (26.1 kaf)
SUMNER (24.6 kaf)
ABIQUIU (84.3 kaf)
BLUEWATER LAKE (6.6 kaf)
RESERVOIR (Current Storage)
Average
Last Year
Current Year


Statewide Reservoir Storage
1400
1200
1000
800
600
400
200
0
Thousands of Acre Feet (kaf)
CABALLO (34.3 kaf)
COCHITI (48 kaf)
COSTILLA (0 kaf)
EL VADO (28.7 kaf)
ELEPHANT BUTTE (577.4 kaf)
HERON (105.7 kaf)
NAVAJO (1307.8 kaf)
RESERVOIR (Current Storage)
Average
Last Year
Current Year

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

Feb 06, 2020



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

- unavailable *
- <50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- >=150%

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

Provisional Data Subject to Revision

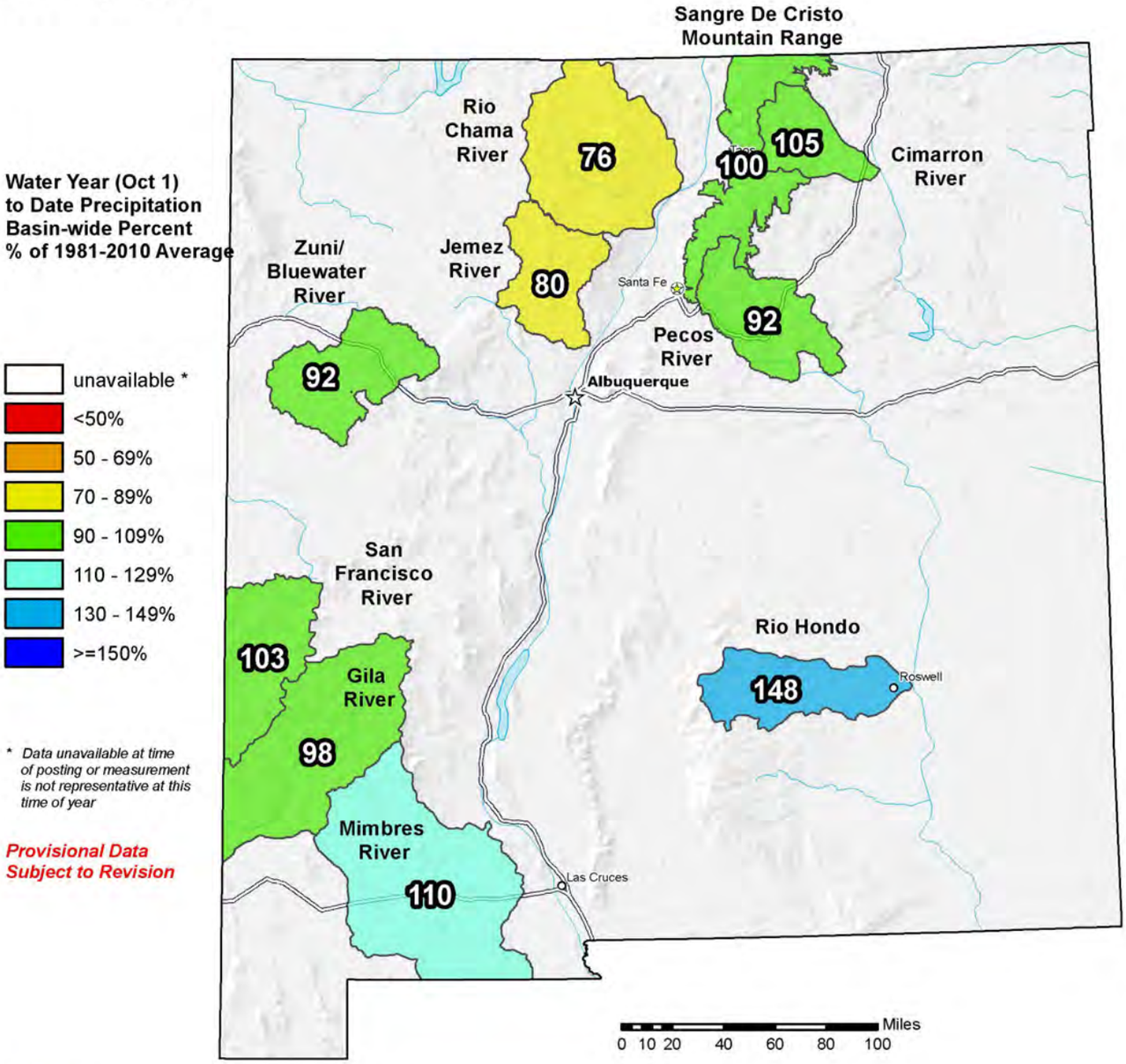
USDA NRCS

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, 2020



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

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- <50%
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- 90 - 109%
- 110 - 129%
- 130 - 149%
- >=150%

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

Provisional Data Subject to Revision

USDA NRCS

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
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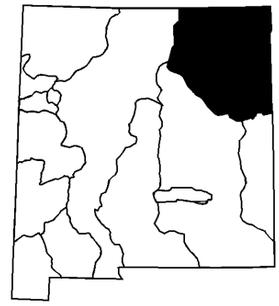
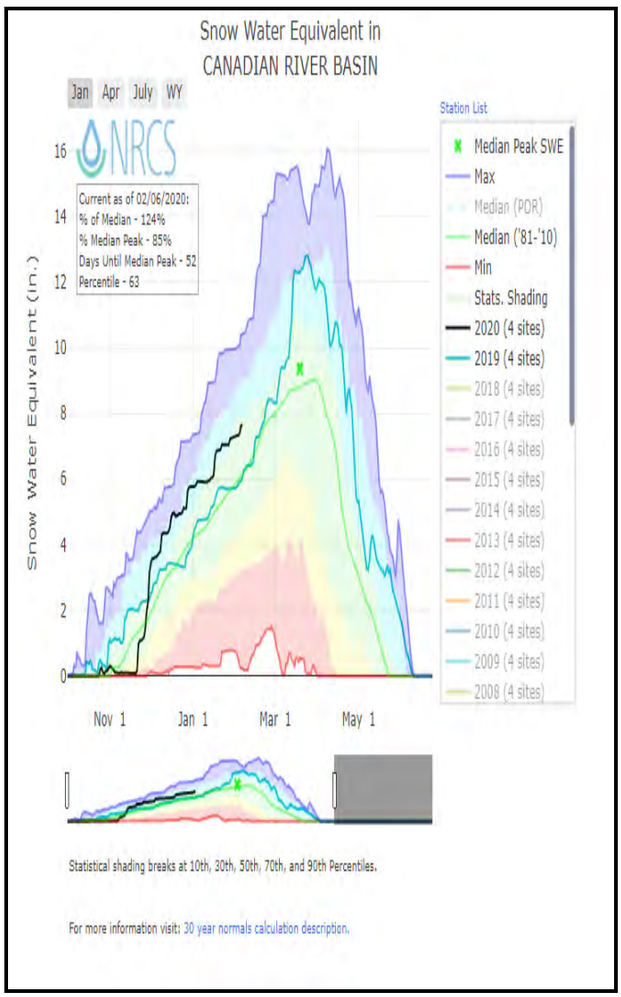
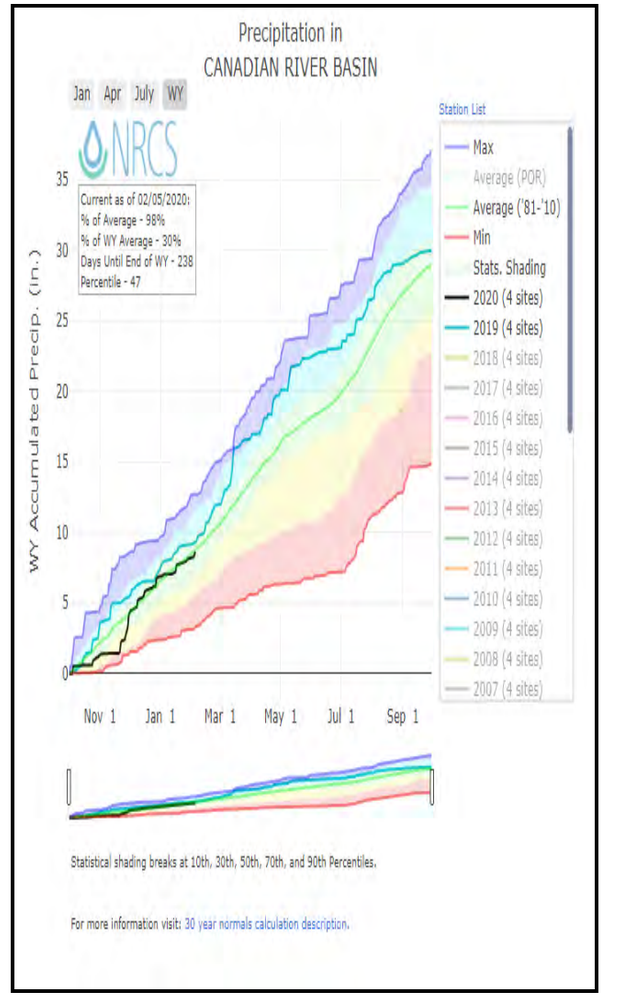
Canadian River Basin
Water Supply Outlook Report
as of February 1, 2020



The month of January received 69 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 96 percent as compared to 107 percent last year at this time. Snowpack in the basin is at 123 percent of the median. This is an increase from 98 percent at this time last year. Forecasts remain close to or slightly above the average with the highest being 100 percent of average at Ponil Creek near Cimarron. Reservoirs are currently holding 1189,200 acre-feet of storage, which is a decrease of 43,700 acre-feet from last year at this time. This equates to 47 percent of the average stored water, as compared to 64 percent for the basin at the end of January last year.





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Canadian River Basin
Streamflow Forecasts - February 1, 2020

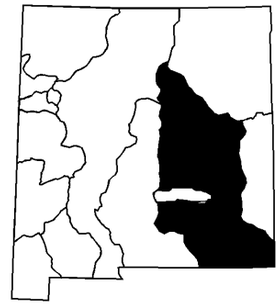
CANADIAN RIVER BASIN	Forecast Period	Forecast Exceedance Probabilities for Risk Assessment: Chance that actual volume will exceed forecast — 90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Vermejo R nr Dawson	MAR-JUN	3	5.2	7.2	92%	9.7	14.2	7.8
Eagle Nest Reservoir Inflow	MAR-JUN	5.7	8.1	10.2	91%	12.6	16.7	11.2
Cimarron R nr Cimarron[2]	MAR-JUN	0.95	9	14.5	92%	20	28	15.8
Ponil Ck nr Cimarron	MAR-JUN	3.2	5.3	7.2	100%	9.5	13.6	7.2
Rayado Ck nr Cimarron	MAR-JUN	2.4	4.6	6.7	96%	9.4	14.4	7
Conchas Reservoir Inflow[3]	MAR-JUN	5.4	15.5	27	90%	43	77	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

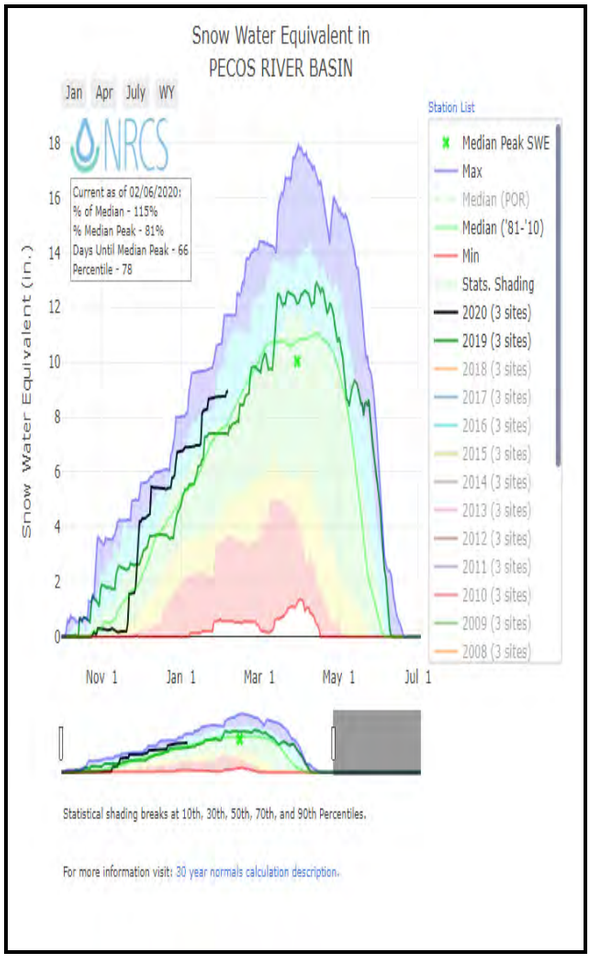
Reservoir Storage End of January, 2020	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Conchas Lake	73.9	129.5	199.9	254.4
Eagle Nest Lake nr Eagle Nest, NM	45.3	33.4	53.5	79.0
Basin-wide Total	119.2	162.9	253.4	333.4
# of reservoirs	2	2	2	2

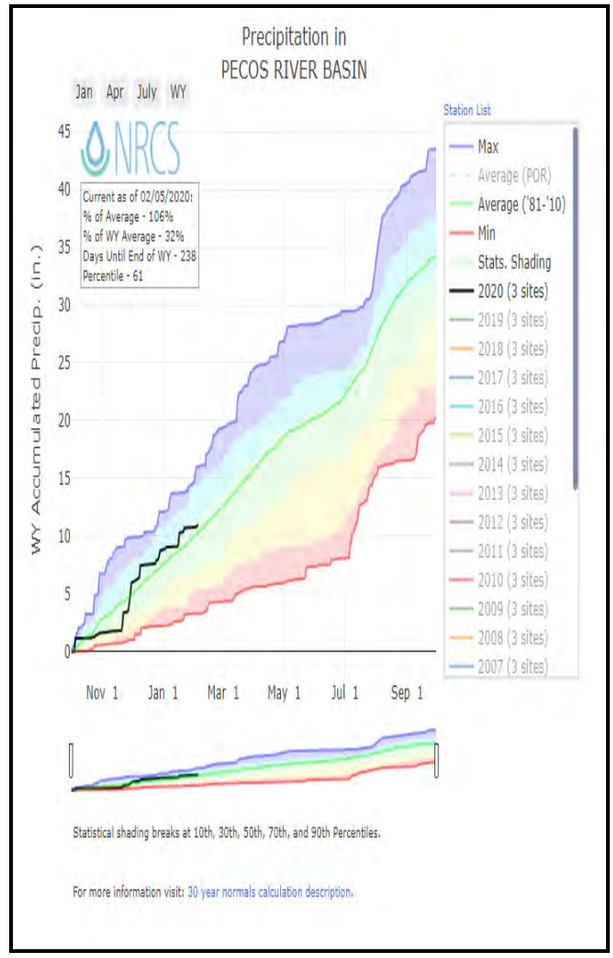
Watershed Snowpack Analysis February 1, 2020	# of Sites	% Median	Last Year % Median
CANADIAN RIVER BASIN	5	123%	98%

Pecos River Basin
Water Supply Outlook Report
as of February 1, 2020



January received 82 percent of the average precipitation for the month, putting the basin at 96 percent of average for the water year-to-date. Snowpack in the Pecos River Basin is at 115 percent of the median. Last year at this time the basin had 97 percent of the median snowpack. Forecasts in the Pecos Basin are all slightly above average with the highest near the headwaters at 107 percent. As of February 1st, reservoir storage in the basin is at 94,500 acre-feet. This 88 percent of the average stored water. Last year at this time reservoir storage was 109 percent of the average.





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Pecos River Basin
Streamflow Forecasts - February 1, 2020

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

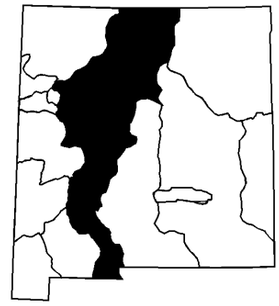
PECOS RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Pecos R nr Pecos	MAR-JUL	36	50	61	107%	74	94	57
Pecos R nr Anton Chico	MAR-JUL	23	44	63	100%	85	124	63
Gallinas Ck nr Montezuma	MAR-JUL	3.1	6.7	10	102%	13.9	21	9.8
Pecos R ab Santa Rosa Lk	MAR-JUL	21	40	56	100%	75	108	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

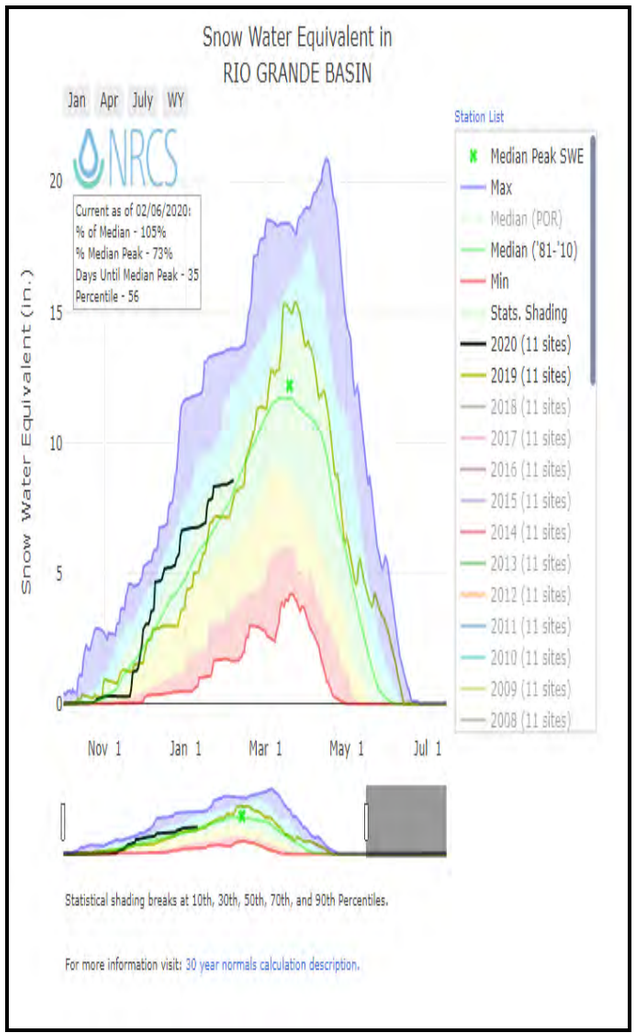
Reservoir Storage End of January, 2020	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Lake Avalon	1.4	1.1	2.3	4.0
Brantley Lake nr Carlsbad	42.4	30.6	19.8	1008.2
Santa Rosa Reservoir	26.1	53.3	54.7	432.2
Lake Sumner	24.6	31.8	30.8	102.0
Basin-wide Total	94.5	116.9	107.6	1546.4
# of reservoirs	4	4	4	4

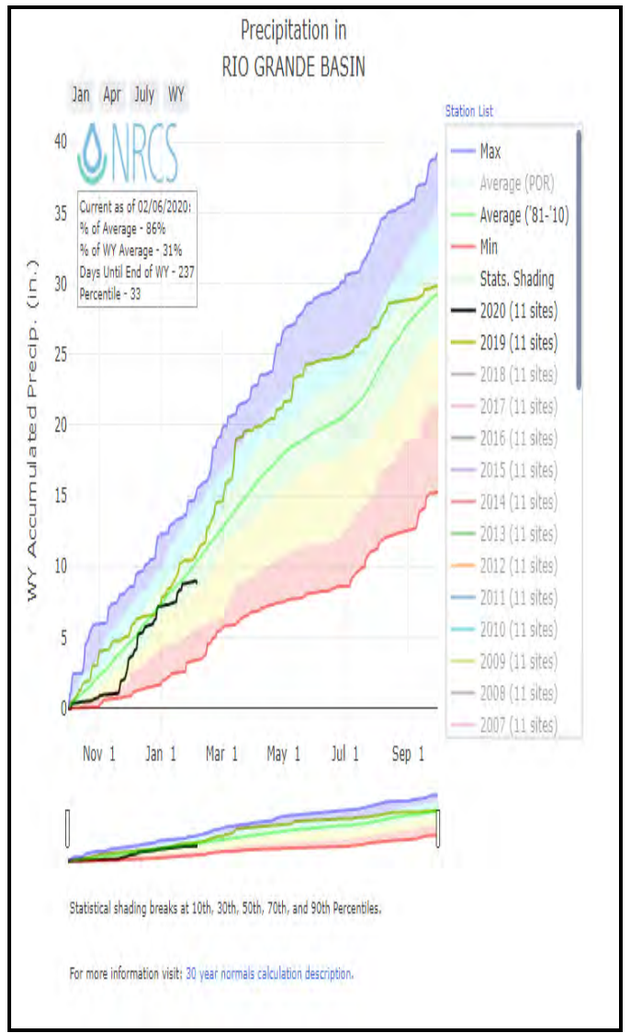
Watershed Snowpack Analysis February 1, 2020	# of Sites	% Median	Last Year % Median
PECOS RIVER BASIN	3	115%	97%

Rio Grande Basin
Water Supply Outlook Report
as of February 1, 2020



January was a below average month for precipitation in the basin accumulating just 67 percent of the average leaving the water year-to-date precipitation at 106 percent of the average. Snowpack in the basin is also above the median at 110 percent. This is just 17 percent above last year's median. Snowpack in southern Colorado near the headwaters of the Rio Grande is 103 percent of the median as compared to 81 percent last year at this time. Forecasts for the Rio Grande Basin currently range from 77 to 102 percent of average. Current reservoir storage in the basin remains well above last year's values. Current storage in the basin is 878,400 acre-feet as compared to 358,200 acre-feet from this time last year! This is 44 percent of the average stored water for the basin.





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Rio Grande Basin
Streamflow Forecasts - February 1, 2020

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

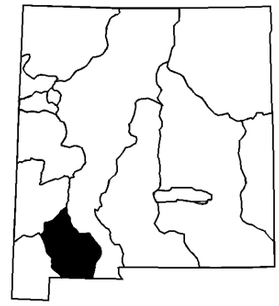
RIO GRANDE BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Rio Grande nr Del Norte [2]	APR-SEP	230	320	390	76%	465	590	515
Platoro Reservoir Inflow	APR-JUL	31	39	45	80%	51	62	56
	APR-SEP	33	42	49	79%	56	68	62
Conejos R nr Mogote [2]	APR-SEP	97	127	150	77%	174	215	194
Costilla Reservoir Inflow	MAR-JUL	5.3	7.4	9	81%	10.8	13.7	11.1
Costilla Ck nr Costilla [2]	MAR-JUL	11.2	16.7	21	81%	26	34	26
Red R bl Fish Hatchery nr Questa	MAR-JUL	22	29	34	100%	39	48	34
Rio Hondo nr Valdez	MAR-JUL	10.7	15.2	18.7	102%	23	29	18.4
Rio Pueblo de Taos nr Taos	MAR-JUL	8.1	12.5	16.1	95%	20	27	17
Rio Lucero nr Arroyo Seco	MAR-JUL	6.1	8.8	10.9	100%	13.3	17.2	10.9
Rio Pueblo de Taos bl Los Cordovas	MAR-JUL	8.7	19.4	29	81%	41	61	36
Embudo Ck at Dixon	MAR-JUL	16.8	30	41	85%	54	77	48
El Vado Reservoir Inflow [2]	MAR-JUL	87	135	175	78%	220	295	225
	APR-JUL	77	123	160	78%	200	275	205
Santa Cruz R at Cundiyo	MAR-JUL	11.7	15.6	18.5	101%	22	27	18.3
Nambe Falls Reservoir Inflow	MAR-JUL	4.2	5.6	6.6	102%	7.7	9.6	6.5
Tesuque Ck ab diversions	MAR-JUL	0.85	1.29	1.64	122%	2	2.7	1.34
Rio Grande at Otowi Bridge [2]	MAR-JUL	320	455	560	78%	675	865	720
Santa Fe R nr Santa Fe [2]	MAR-JUL	3	4.1	5	116%	6	7.6	4.3
Jemez R nr Jemez	MAR-JUL	14.5	22	28	67%	35	46	42
Jemez R bl Jemez Canyon Dam	MAR-JUL	8.8	15.5	21	62%	27	38	34
Rio Grande at San Marcial [2]	MAR-JUL	47	225	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, 2020	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Abiquiu Reservoir	84.3	72.2	154.6	1198.5
Bluewater Lake		3.1	5.9	38.5
Caballo Reservoir	34.3	27.4	78.1	332.0
Cochiti Lake	48.0	45.1	60.9	491.0
Costilla Reservoir		3.2	6.5	16.0
El Vado Reservoir	28.7	14.0	100.9	184.8
Elephant Butte Reservoir	577.4	143.4	1299.0	2195.0
Heron Reservoir	105.7	56.1	303.0	400.0
Basin-wide Total	878.4	358.2	1996.5	4801.3
# of reservoirs	6	6	6	6

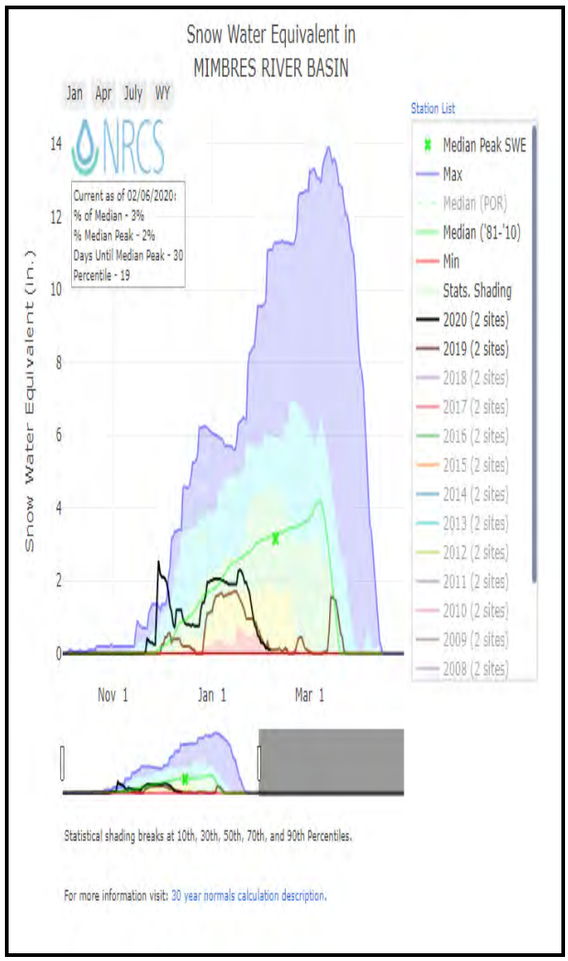
Watershed Snowpack Analysis February 1, 2020	# of Sites	% Median	Last Year % Median
RIO GRANDE BASIN	12	110%	93%

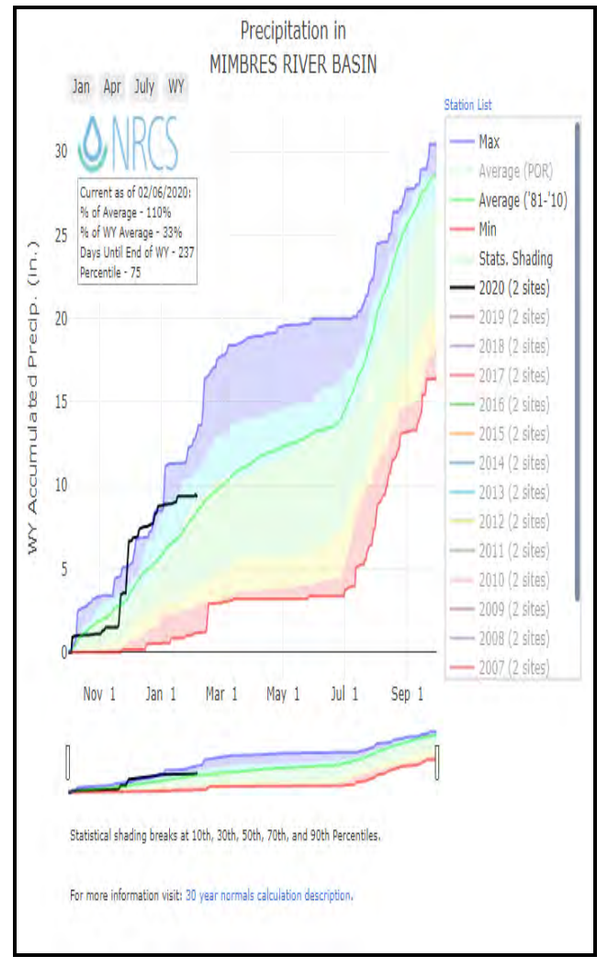
Mimbres River Basin
Water Supply Outlook Report
as of February 1, 2020



January was a dry month for the basin after only receiving 24 percent of the average monthly precipitation which brings the water year-to-date total up to 117 percent of the average. Snowpack in the basin has dropped significantly to just 10 percent of the median! Forecasts for the Mimbres River have also dropped since last month and are now at 89 percent of the average.

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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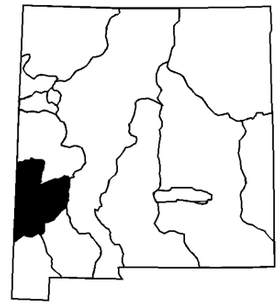
Mimbres River Basin
Streamflow Forecasts - February 1, 2020

		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	0.66	1	1.62	89%	2.5	4	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

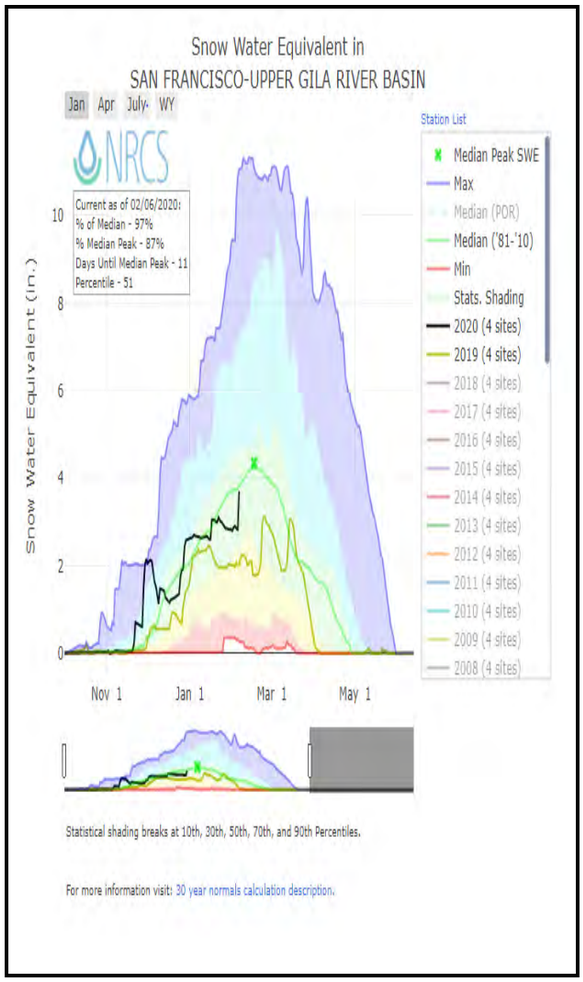
Watershed Snowpack Analysis February 1, 2020	# of Sites	% Median	Last Year % Median
MIMBRES RIVER BASIN	2	10%	11%

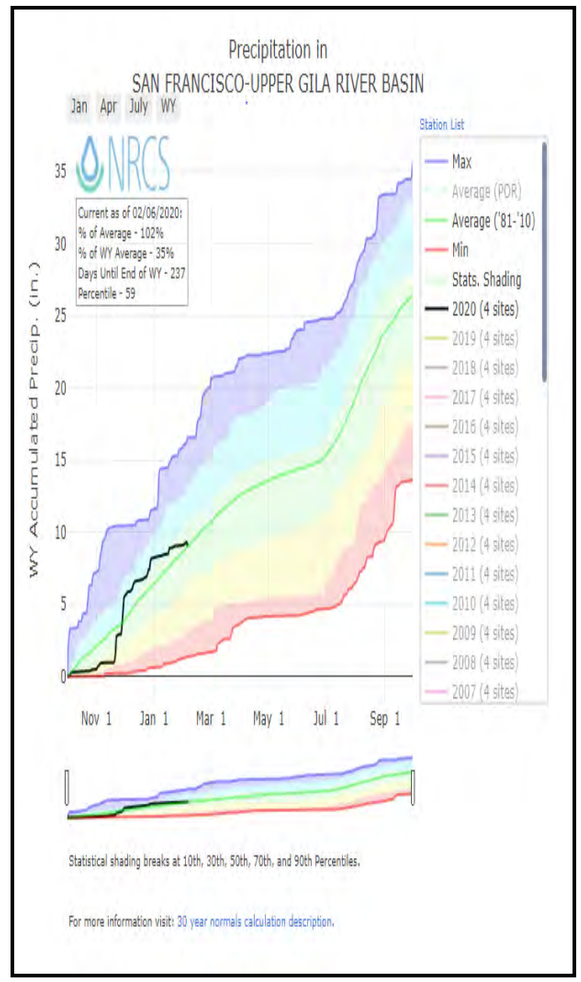
San Francisco / Upper Gila River Basin
Water Supply Outlook Report
as of February 1, 2020



Water year-to-date precipitation is at just 68 percent of the average with January receiving only 40 percent of the average monthly precipitation. Snowpack in the basin is currently at 76 percent of the median as compared to 54 percent at this time last year. Forecasts for the basin currently range from 74 to 137 percent of the average.

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, 2020

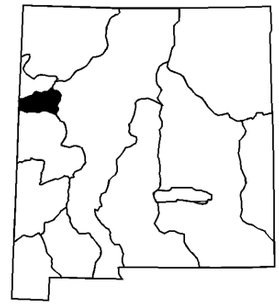
Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

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	16	27	37	74%	48	70	50
Gila R bl Blue Ck nr Virden[3]	FEB-MAY	13.8	33	50	79%	71	109	63
San Francisco R at Glenwood[3]	FEB-MAY	9.7	17.7	25	137%	34	51	18.2
San Francisco R at Clifton[3]	FEB-MAY	26	47	66	129%	87	125	51

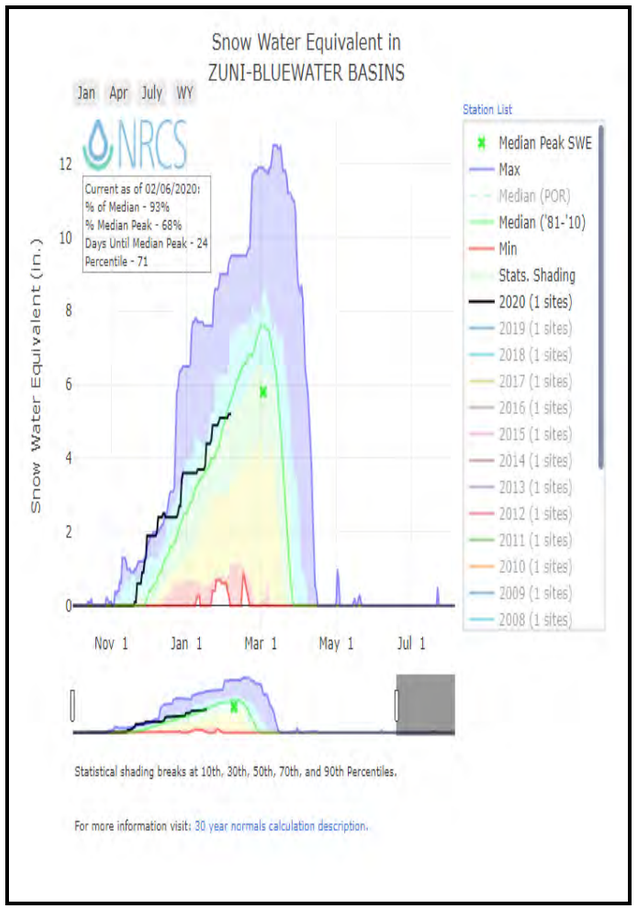
1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

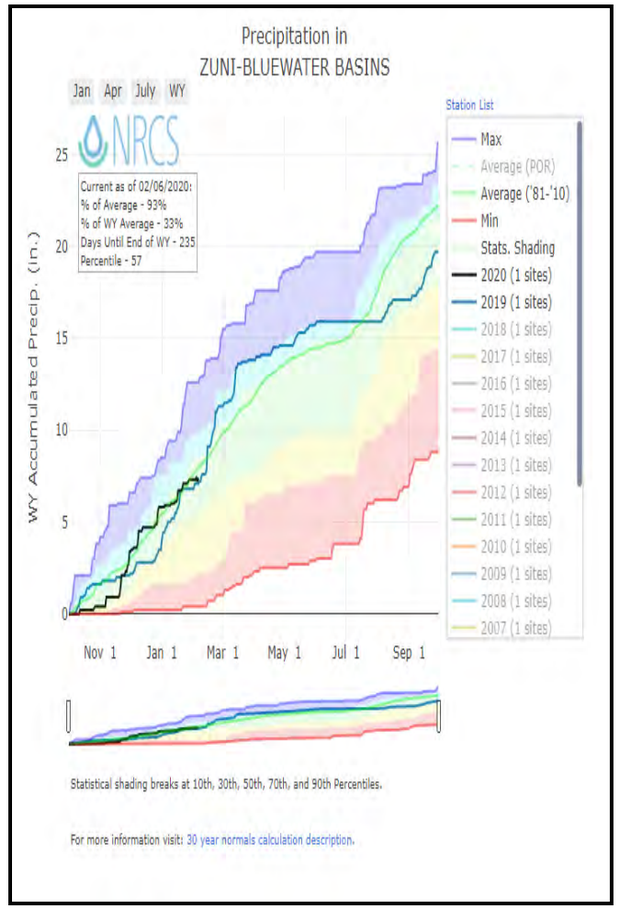
Watershed Snowpack Analysis February 1, 2020	# of Sites	% Median	Last Year % Median
SAN FRANCISCO-UPPER GILA RIVER BASIN	4	76%	54%

Zuni / Bluewater Basins
Water Supply Outlook Report
as of February 1, 2020



Snowpack in the basin is at 73 percent of the median as compared to 100 percent at this time last year! December saw just 68 percent of the average precipitation. This puts the water year-to-date total at 96 percent of the average. Forecasts for the Rio Nutriah and Zuni River are above the average at 129 to 132 percent. Bluewater Lake is currently having difficulties with their gauge reporting. The reservoir was last at 6,600 acre-feet of water versus 3,100 acre-feet at this time last year.





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Zuni-Bluewater Basins
Streamflow Forecasts - February 1, 2020

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

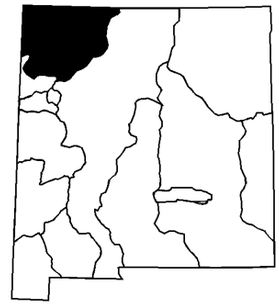
ZUNI-BLUEWATER BASINS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Rio Nutria nr Ramah[3]	FEB-MAY	0.27	0.96	1.8	129%	3	5.7	1.4
Zuni R ab Black Rock Reservoir[3]	FEB-MAY	0.04	0.09	0.5	132%	1.47	4.4	0.38

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

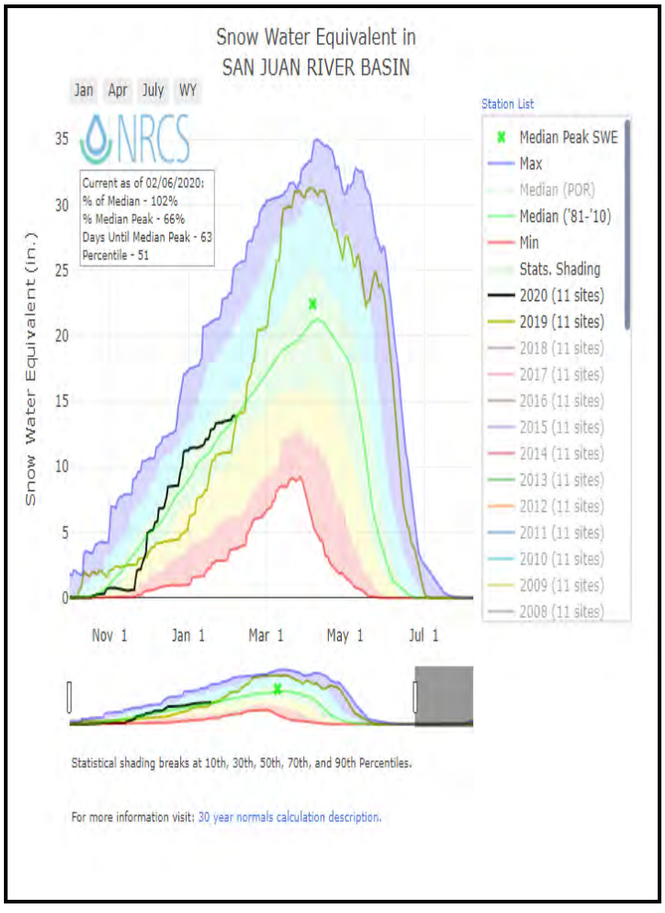
Reservoir Storage End of January, 2020	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Bluewater Lake		3.1	5.9	38.5
Basin-wide Total		0.0	0.0	0.0
# of reservoirs	0	0	0	0

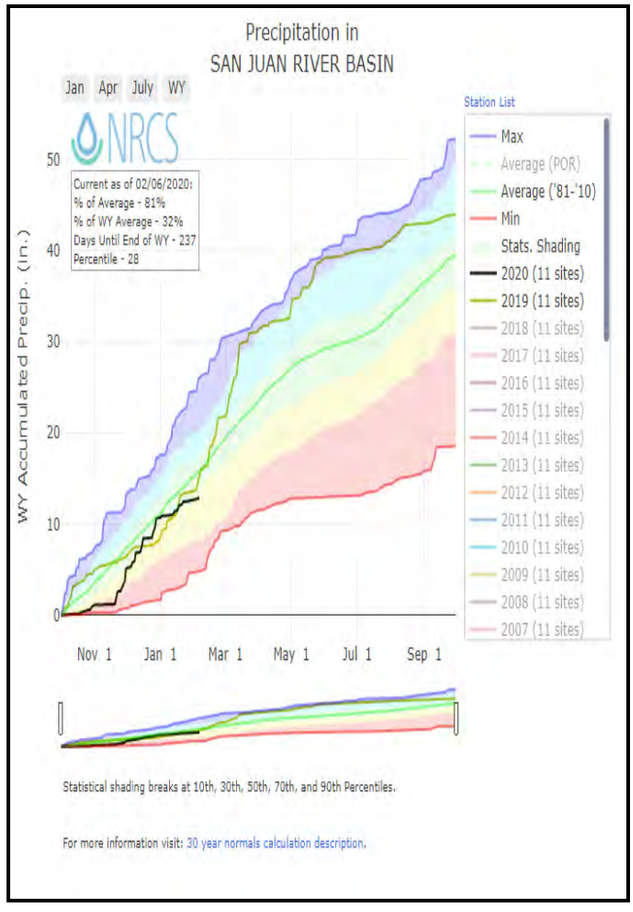
Watershed Snowpack Analysis February 1, 2020	# of Sites	% Median	Last Year % Median
ZUNI-BLUEWATER BASINS	4	73%	100%

San Juan River Basin
Water Supply Outlook Report
as of February 1, 2020



December received just 48 percent of the average monthly precipitation bringing the water year-to-date total to 83 percent of the average. Snowpack is still barely above the median at 103 percent, which remains above the 85 percent at this time last year! Forecasts for the San Juan Basin are all below average ranging from 71 to 78 percent. Navajo reservoir storage contains 1,307,800 acre-feet or 100 percent of the average water stored at the end of January!





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San Juan River Basin
Streamflow Forecasts - February 1, 2020

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

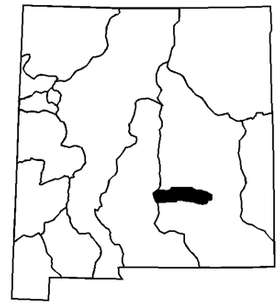
SAN JUAN RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Rio Blanco at Blanco Diversion [2]	APR-JUL	25	34	42	78%	50	64	54
Navajo R at Oso Diversion [2]	APR-JUL	29	41	50	77%	60	77	65
Navajo Reservoir Inflow [2]	APR-JUL	315	435	525	71%	625	790	735
Animas R at Durango	APR-JUL	215	275	325	78%	375	460	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, 2020	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Navajo Reservoir	1307.8	869.1	1310.0	1696.0
Basin-wide Total	1307.8	869.1	1310.0	1696.0
# of reservoirs	1	1	1	1

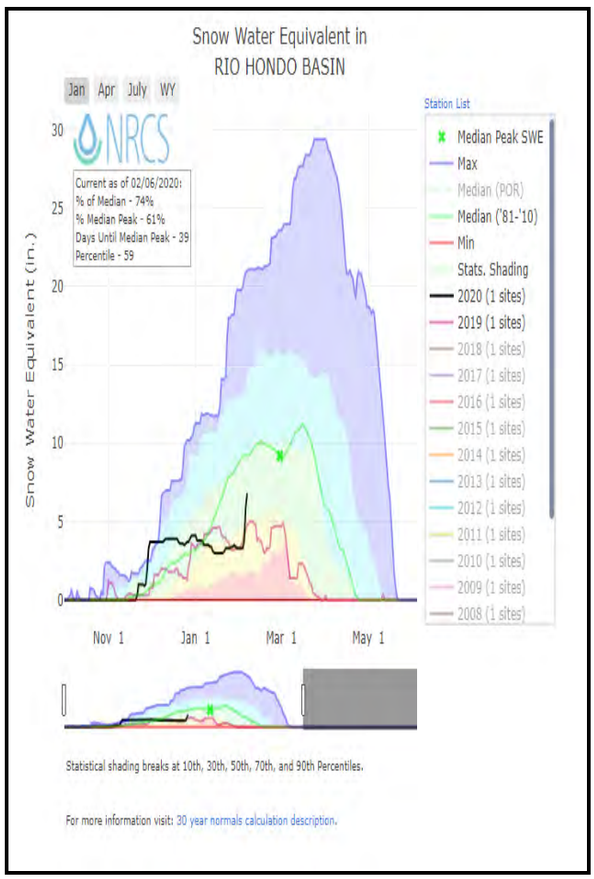
Watershed Snowpack Analysis February 1, 2020	# of Sites	% Median	Last Year % Median
SAN JUAN RIVER BASIN	12	103%	85%

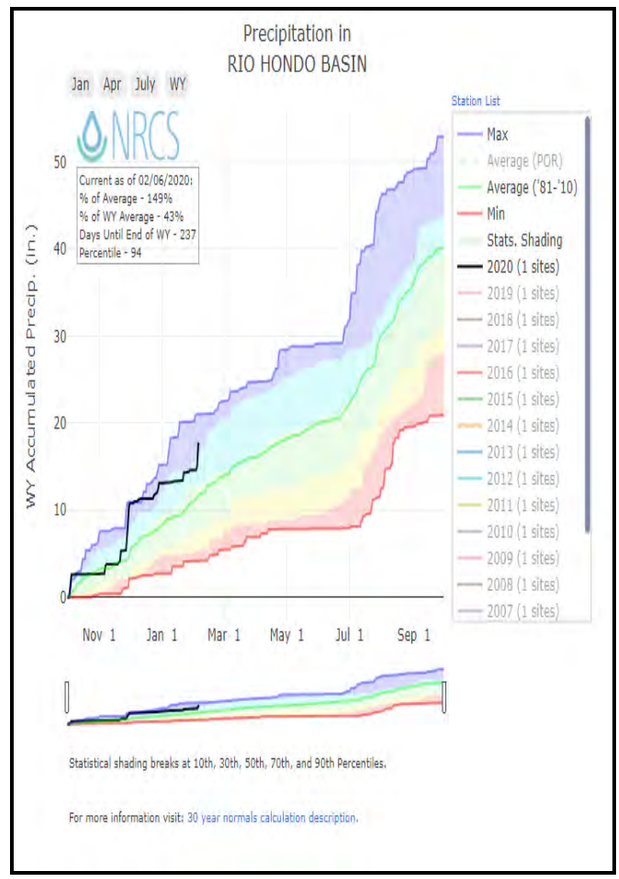
Rio Hondo Basin
Water Supply Outlook Report
as of February 1, 2020



December was a below average month for the Rio Hondo having received just 58 percent of the average monthly precipitation. This now puts the water year-to-date total at 133 percent of the average. Snowpack in the basin is currently at 37 percent of the median which is the same as last year at this time. The forecast for the Rio Ruidoso at Hollywood well below the average at 33 percent. This measurement however should be used with caution as the Sierra Blanca SNOTEL site was impacted by the Little Bear Fire five 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, 2020

		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	0.49	1.38	2.2	33%	3.3	5.3	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, 2020	# of Sites	% Median	Last Year % Median
RIO HONDO BASIN	1	37%	37%

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			
Aztec #2	SC	9880	12	2.6	2.3	113%	2.6	113%
Bateman	SNOTEL	9300	33	8.7	6.9	126%	6.7	97%
Boon	SC	8140	12	2.8	4.6	61%	4.6	100%
Bowl Canyon	SC	8980	26	7.6	5.8	131%	7.0	121%
Chamita	SNOTEL	8400	30	7.6	6.5	117%	5.8	89%
Dan Valley	SC	7640	9	1.8	3.1	58%	3.2	103%
Elk Cabin	SNOTEL	8210	9	4.2	3.8	111%	3.1	82%
Frisco Divide	SNOTEL	8000	7	2.4	2.5	96%	2.0	80%
Gallegos Peak	SNOTEL	9800	29	7.3	6.1	120%	6.8	111%
Hematite Park	SC	9500	23	4.8	3.4	141%		
Hidden Valley	SC	8480	22	6.8			6.1	
Hopewell	SNOTEL	10000	36	9.8	11.0	89%	8.5	77%
Lookout Mountain	SNOTEL	8500	1	0.3	2.3	13%	0.2	9%
Mcgaffey	SC	8120	6	1.6	2.7	59%	2.4	89%
Mcknight Cabin	SNOTEL	9240	2	0.6	2.4	25%	0.7	29%
Missionary Spring	SC	7940	10	2.3	3.6	64%	4.6	128%
Navajo Whiskey Ck	SNOTEL	9050	28	8.7			7.9	
North Costilla	SNOTEL	10600	23	5.8	3.6	161%	5.0	139%
Ojo Redondo	SC	8200			3.4			
Palo	SNOTEL	9350	19	5.0			4.5	
Palo	SC	9300	19	3.9	4.6	85%		
PanchueLa	SC	8400	16	3.1				
Quemazon	SNOTEL	9500	23	6.3	6.7	94%	6.5	97%
Red River Pass #2	SNOTEL	9850	20	5.8	5.0	116%	4.4	88%
Rice Park	SNOTEL	8460	20	5.1	5.0	102%	5.2	104%
Rio En Medio	SC	10300	26	6.4	6.2	103%		
Rio Santa Barbara	SNOTEL	10664	34	8.4			9.5	
San Antonio Sink	SNOTEL	9100	23	5.6			5.0	
San Antonio Sink	SC	9200	25	5.0	5.2	96%	3.4	65%
Santa Fe	SNOTEL	11445	41	11.5	9.5	121%	10.4	109%
Senorita Divide #2	SNOTEL	8600	25	6.0	5.6	107%	5.2	93%
Shuree	SNOTEL	10100	27	6.3			4.8	
Shuree	SC	10097	26	5.1	2.2	232%		
Sierra Blanca	SNOTEL	10280	14	3.3	8.9	37%	3.3	37%
Signal Peak	SNOTEL	8360	0	0.0	3.9	0%	0.0	0%
Silver Creek Divide	SNOTEL	9000	22	8.5	6.1	139%	5.8	95%
State Line	SC	8000			1.8			
Taos Canyon	SC	9100	16	4.0	4.0	100%		
Taos Powderhorn	SNOTEL	11057	42	13.1			9.8	
Taos Powderhorn	SC	11250	58	16.7	14.2	118%		
Tolby	SNOTEL	10180	29	7.1	5.5	129%	4.8	87%
Tres Ritos	SNOTEL	8600	11	3.7			2.8	
Tres Ritos	SC	8600	17	3.5	4.0	88%		
Vacas Locas	SNOTEL	9306	31	8.3	7.9	105%	7.8	99%
Wesner Springs	SNOTEL	11120	39	10.5	9.5	111%	8.7	92%
Whiskey Creek	SNOTEL	9050	25	7.6	6.3	121%	7.9	125%
						99%		**90%**
						28		28

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New Mexico
Basin Outlook Report

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