

# New Mexico Basin Outlook Report March 1, 2021



Conditions near the Hematite Park Manual Snow Course  
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/>

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## *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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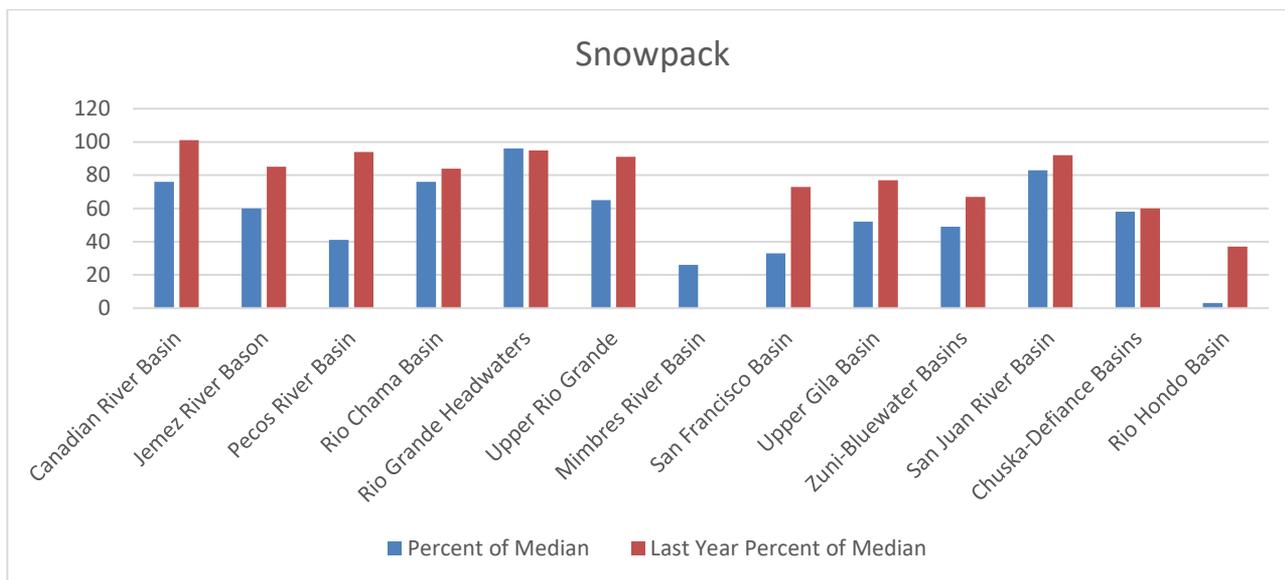
## Summary

Most of the state remains in drought conditions (D2-D4). Near to below average precipitation across the basin in February means that forecasts are the same or lower generally than those issued last month. Due to soil moisture and groundwater deficits entering the water year, snowpack conditions may indicate a rosier picture for runoff than what is actually expected. Conditions in New Mexico remain challenging. Water users should continue to monitor weather conditions to evaluate their water needs as the winter progresses.

## Snowpack

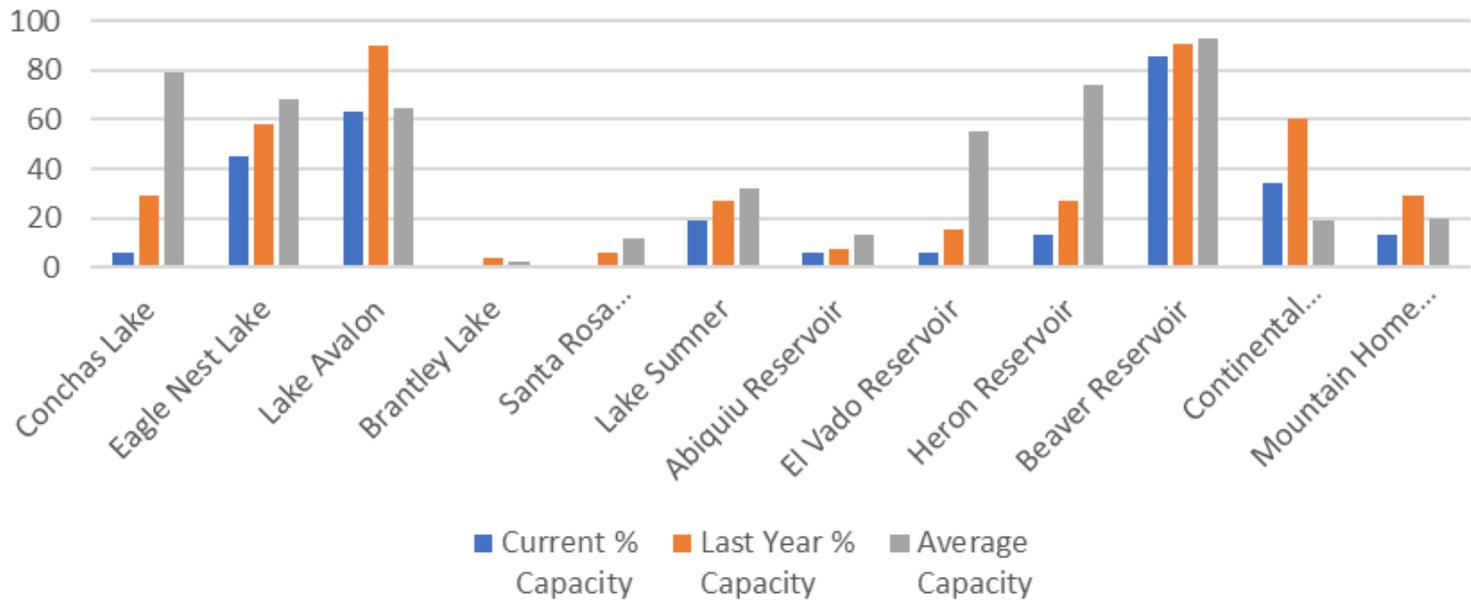
Snowpack levels ranged from a high of 96 percent of median in the Rio Grande Headwaters to a low of 3 percent in the Rio Hondo Basin. Statewide snowpack average is 77 percent of median as compared to 89 percent at this time last year.

New Mexico Statewide Snowpack	Percent of Median	Last Year Percent of Median
Canadian River Basin	76	101
Jemez River Bason	60	85
Pecos River Basin	41	94
Rio Chama Basin	76	84
Rio Grande Headwaters	96	95
Upper Rio Grande	65	91
Mimbres River Basin	26	0
San Francisco Basin	33	73
Upper Gila Basin	52	77
Zuni-Bluewater Basins	49	67
San Juan River Basin	83	92
Chuska-Defiance Basins	58	60
Rio Hondo Basin	3	37
<b>Statewide Snowpack</b>	<b>77</b>	<b>89</b>
<i># of sites</i>	<i>68</i>	<i>68</i>

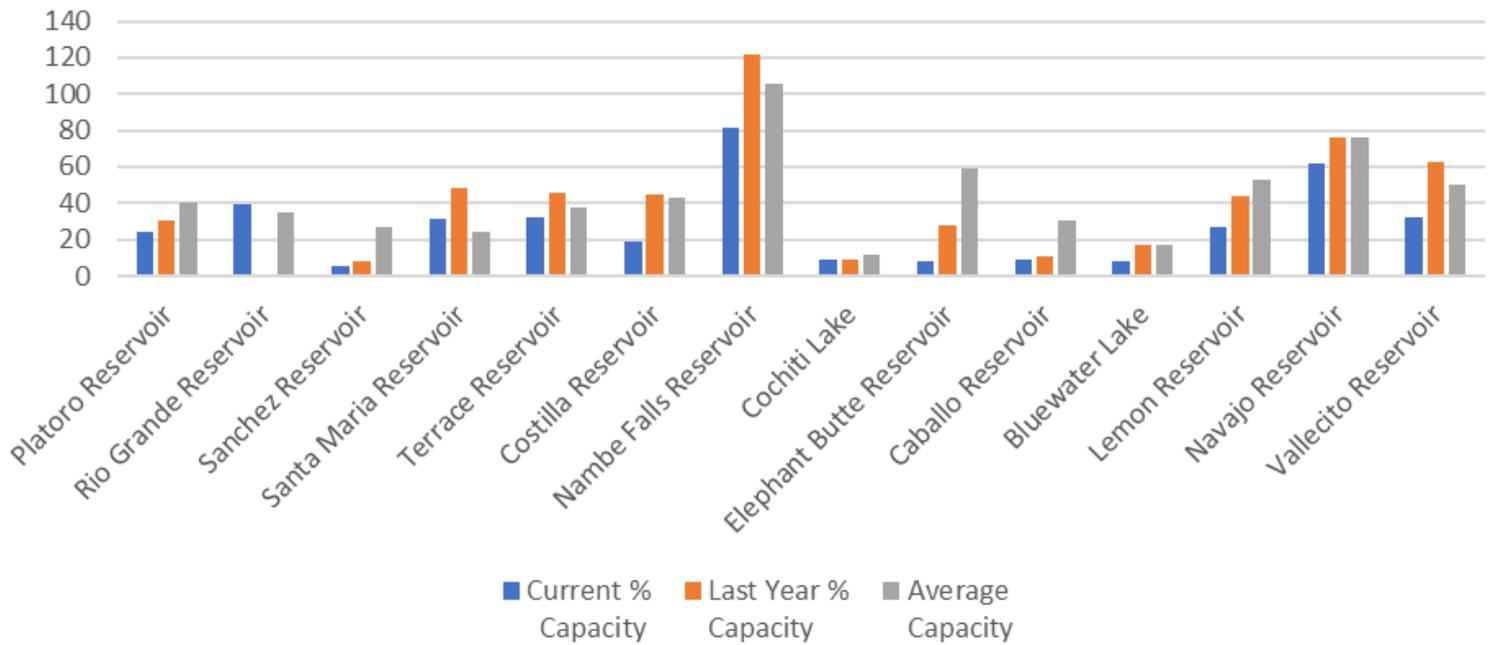




### Reservoir Storage



### Reservoir Storage



## Streamflow

Forecasts are near or below average. Snowpack to date has been insufficient to overcome the poor monsoon season last summer. Water users and managers should continue to watch the forecasts as water supply conditions evolve across the state.

Basin	Forecast Point	period	% of average
Canadian River	Vermejo R nr Dawson	MAR-JUN	62
	Cimarron R bl Eagle Nest Dam (2)	MAR-JUN	59
	Cimarron R nr Cimarron (2)	MAR-JUN	59
	Ponil Ck nr Cimarron	MAR-JUN	64
	Rayado Ck nr Cimarron	MAR-JUN	66
Northwestern Rio Grande in Colorado	Rio Grande at Thirty Mile Bridge (2)	APR-JUL	69
		APR-SEP	67
	Rio Grande at Wagon Wheel Gap (2)	APR-SEP	71
	SF Rio Grande at South Fork (2)	APR-SEP	73
	Rio Grande nr Del Norte (2)	APR-SEP	71
	Saguache Ck nr Saguache (2)	APR-SEP	78
	Alamosa Ck ab Terrace Reservoir	APR-SEP	75
	La Jara Ck nr Capulin	MAR-JUL	73
	Platoro Reservoir Inflow (2)	APR-JUL	84
		APR-SEP	81
	Conejos R nr Mogote (2)	APR-SEP	79
	San Antonio R at Ortiz	APR-SEP	42
	Los Pinos R nr Ortiz	APR-SEP	66
	Rio Grande nr Lobatos Obs	APR-JUL	40
Northeastern Rio Grande in Colorado	Ute Ck nr Fort Garland	APR-SEP	90
	Sangre de Cristo Ck (2)	APR-SEP	85
	Trinchera Ck ab Turners Ranch	APR-SEP	89
	Culebra Ck at San Luis (2)	APR-SEP	84
	Costilla Reservoir Inflow (2)	MAR-JUL	96
	Costilla Ck nr Costilla (2)	MAR-JUL	92
Middle Sangre Mtns in New Mexico	Red R bl Fish Hatchery nr Questa	MAR-JUL	74
	Rio Hondo nr Valdez	MAR-JUL	73
	Rio Lucero nr Arroyo Seco	MAR-JUL	68
	Rio Pueblo de Taos nr Taos	MAR-JUL	56
	Rio Pueblo de Taos bl Los Cordovas	MAR-JUL	47
	Embudo Ck at Dixon	MAR-JUL	46
	Santa Cruz R at Cundiyo	MAR-JUL	41
	Nambe Falls Reservoir Inflow (2)	MAR-JUL	38
	Tesuque Ck ab diversions	MAR-JUL	32
	Santa Fe R nr Santa Fe (2)	MAR-JUL	26
El Vado, Jemez	El Vado Reservoir Inflow (2)	MAR-JUL	50
		APR-JUL	49
	Jemez R nr Jemez	MAR-JUL	33
	Jemez R bl Jemez Canyon Dam	MAR-JUL	26
Rio Grande Mainstem Routings	Rio Grande at Otowi Bridge (2)	MAR-JUL	54
	Rio Grande at San Marcial (2)	MAR-JUL	35
Pecos	Pecos R nr Pecos	MAR-JUL	33
	Pecos R nr Anton Chico	MAR-JUL	20
	Gallinas Ck nr Montezuma	MAR-JUL	31
	Pecos R ab Santa Rosa Lk	MAR-JUL	14
Ruidoso and Mimbres	Rio Ruidoso at Hollywood	MAR-JUN	24
	Mimbres R at Mimbres (3)	MAR-MAY	57

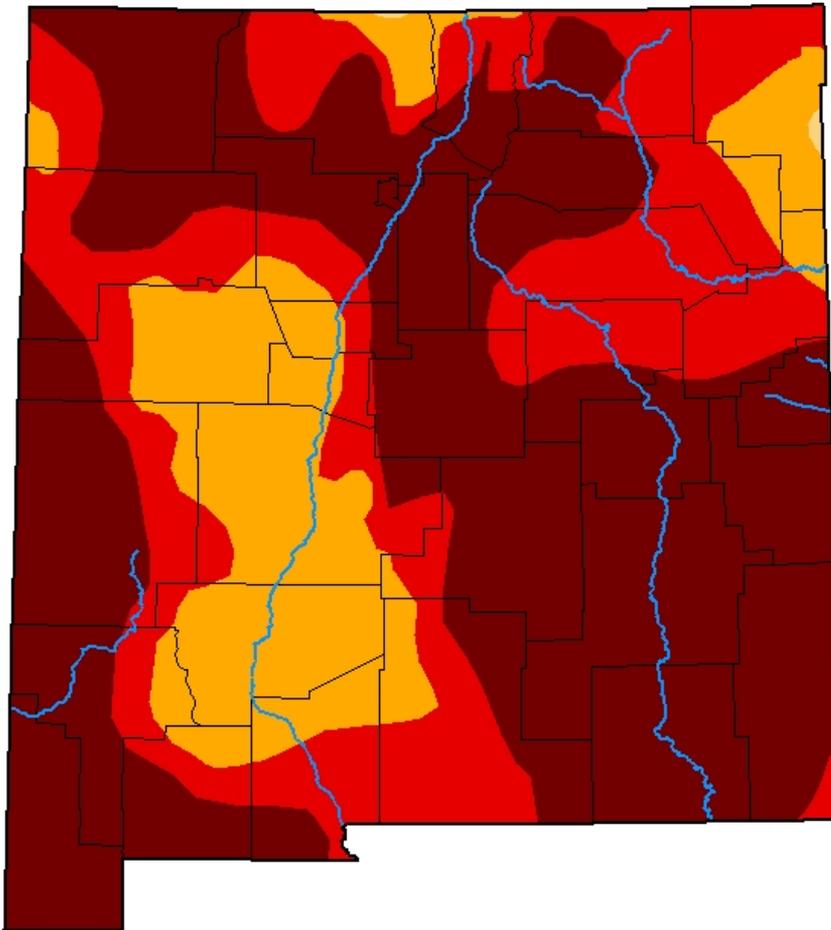
Footnotes:

2) streamflow is adjusted for upstream storage

3) median value used in place of average

# U.S. Drought Monitor New Mexico

**March 2, 2021**  
(Released Thursday, Mar. 4, 2021)  
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	0.00	100.00	100.00	99.91	82.18	54.15
<b>Last Week</b> <i>02-23-2021</i>	0.00	100.00	100.00	99.91	82.03	54.24
<b>3 Months Ago</b> <i>12-01-2020</i>	0.00	100.00	100.00	99.59	82.26	53.27
<b>Start of Calendar Year</b> <i>12-29-2020</i>	0.00	100.00	99.97	99.59	82.26	53.20
<b>Start of Water Year</b> <i>09-29-2020</i>	0.00	100.00	99.92	73.65	39.88	2.90
<b>One Year Ago</b> <i>03-03-2020</i>	44.24	55.76	28.52	11.40	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

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National Drought Mitigation Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

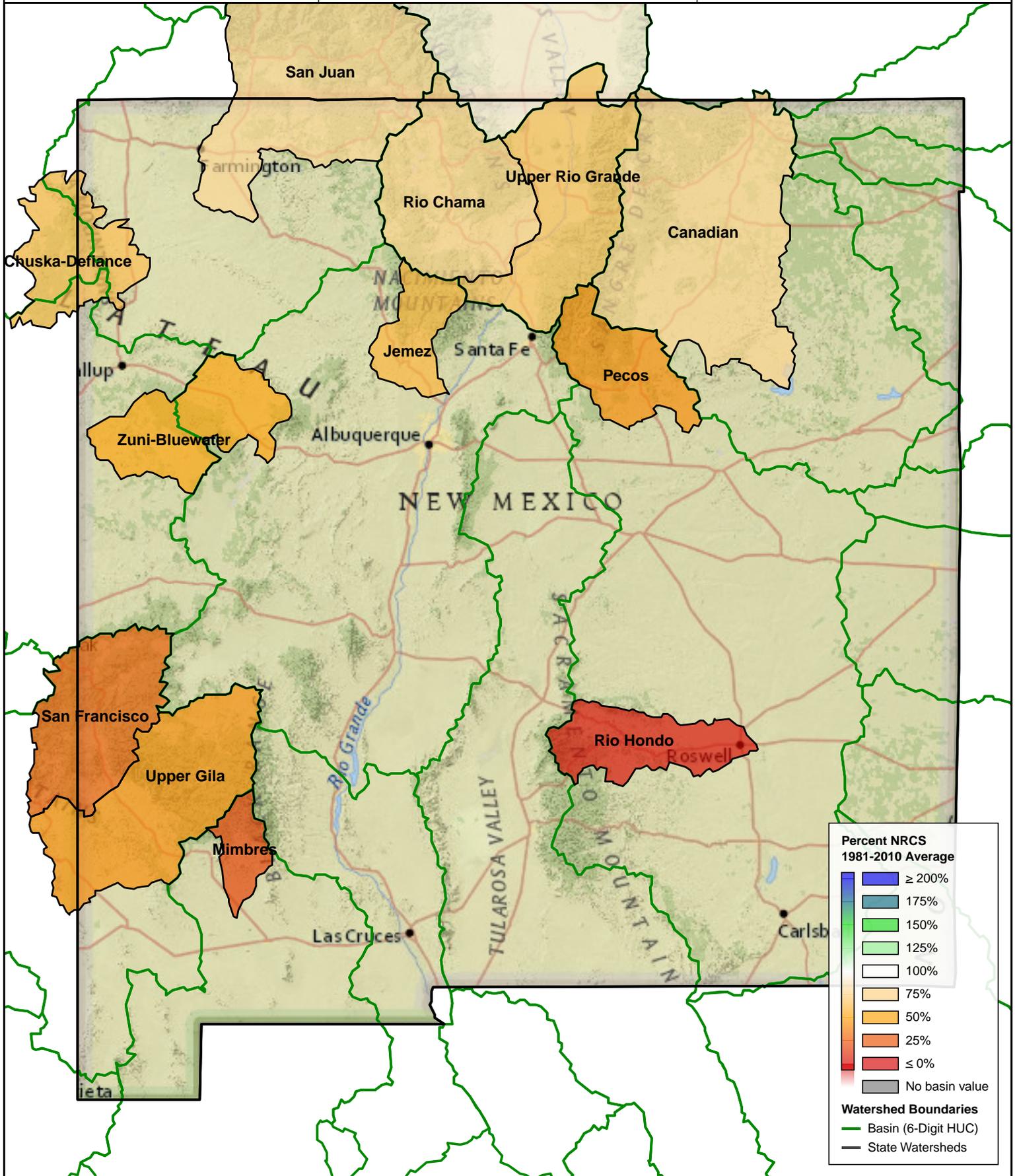
Every week, The U.S. Drought Monitor is produced in partnership between the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration. This useful tool uses multiple inputs, including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

Due to a very limited monsoon season and sparse fall and winter snows, drought conditions have persisted across New Mexico. Conditions for the majority of the state are now Severe (D2) to Exceptional (D4). As a result, antecedent soil moisture conditions across the state are low and runoff levels continue to be impacted. Without significant increases in snowfall and precipitation through spring, drought conditions are expected to persist.

Snow Water Equivalent

Percent NRCS 1981-2010 Average

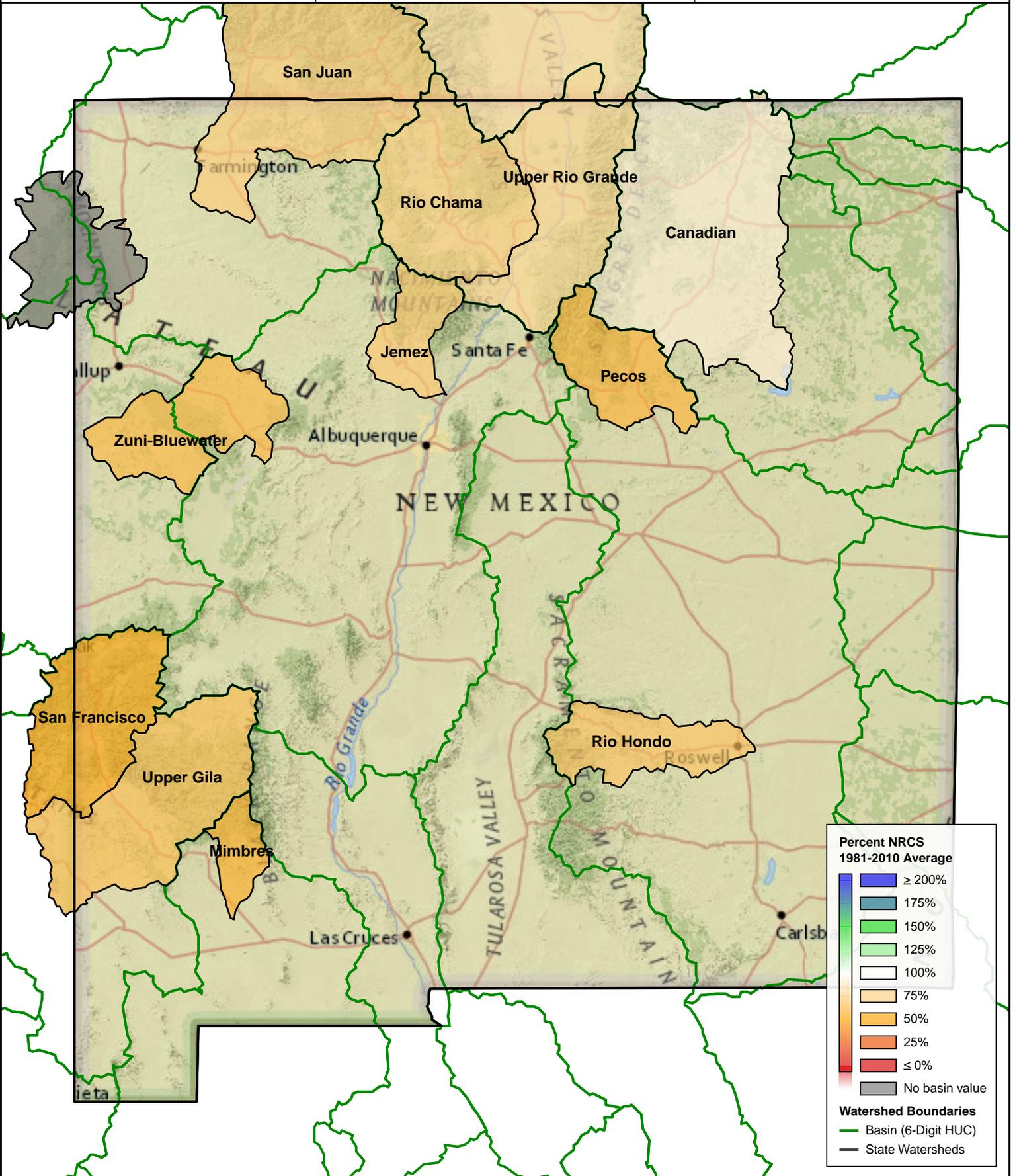
March 1st, 2021



3 month Precipitation

Percent NRCS 1981-2010 Average

December 1, 2020 - February 28, 2021



# Canadian River Basin Water Supply Outlook Report as of March 1, 2021

Snowpack in the basin is at 76 percent of the median. This is a significant decrease from 101 percent at this time last year. Forecasts are all below average with the highest being 66 percent of average at Rayado Creek near Cimarron. Reservoirs are currently holding 49,500 acre-feet of storage, which is a decrease of 119,500 acre-feet from the end of last February. This equates to 15 percent of the average capacity and 19 percent of the average stored water for the basin at the end of February.

### Streamflow Forecast Summary: March 1, 2021 (averages based on 1981-2010 reference period)

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

CANADIAN	Forecast Period	90%	70%	50%	% Avg	30%	10%	30yr Avg
		(KAF)	(KAF)	(KAF)		(KAF)	(KAF)	
Vermejo R nr Dawson	MAR-JUN	1.7	3.3	4.8	62%	6.7	10.4	7.8
Eagle Nest Reservoir Inflow	MAR-JUN	2.8	4.8	6.6	59%	8.8	12.8	11.2
Cimarron R nr Cimarron <sup>2</sup>	MAR-JUN	0.2	3.3	9.4	59%	15.5	25	15.8
Ponil Ck nr Cimarron	MAR-JUN	1.91	3.3	4.6	64%	6.2	9.1	7.2
Rayado Ck nr Cimarron	MAR-JUN	1.74	3.2	4.6	66%	6.3	9.6	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

Reservoir Storage end of February 2021	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Conchas Lake	14.0	73.6	202.0	254.4
Eagle Nest Lake nr Eagle Nest, NM	35.5	45.9	54.1	79.0
Basin-wide Total	49.5	119.5	256.1	333.4
# of reservoirs	2	2	2	2

Winter Snowpack Analysis March 1, 2021	# of sites	% Median	Last Year % Median
Basin Index	7	76%	101%

# Jemez River

## Water Supply Outlook

### Report

#### as of March 1, 2021

The month of February received 58 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 71 percent as compared to 76 percent last year at this time. Snowpack in the basin is at 60 percent of the median. This is a significant decrease from 85 percent at this time last year. Forecasts are well below average in the watershed.

#### Streamflow Forecast Summary: March 1, 2021 (averages based on 1981-2010 reference period)

JEMEZ	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)
Jemez R nr Jemez	MAR-JUL	5.8	10.2	14	33%	18.4	26	42
Jemez R bl Jemez Canyon Dam	MAR-JUL	2.6	5.9	9	26%	12.7	19.4	34

- 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

Winter Snowpack Analysis March 1, 2021	# of sites	% Median	Last Year % Median
Basin Index	3	60	85

# Pecos River Basin Water Supply Outlook Report as of March 1, 2021

The month of February received 55 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 53 percent as compared to 98 percent last year at this time. Snowpack in the basin is at 41 percent of the median. This is a significant decrease from 94 percent at this time last year. Forecasts are low with the highest being 33 percent of average at the Pecos River near Pecos and the lowest being 14 percent at Santa Rosa Lake. Reservoirs are currently holding 39,300 acre-feet of storage, which is a decrease from 99,200 acre-feet last year at this time. This equates to 35 percent of the average capacity for the basin at the end of February.

### Streamflow Forecast Summary: March 1, 2021 (averages based on 1981-2010 reference period)

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

PECOS	Forecast Period	90%	70%	50%	% Avg	30%	10%	30yr Avg
		(KAF)	(KAF)	(KAF)		(KAF)	(KAF)	
Pecos R nr Pecos	MAR-JUL	6.7	13.3	19	33%	26	37	57
Pecos R nr Anton Chico	MAR-JUL	0.59	5.8	12.4	20%	22	39	63
Gallinas Ck nr Montezuma	MAR-JUL	0.24	1.52	3	31%	5	8.8	9.8
Pecos R ab Santa Rosa Lk	MAR-JUL	0.03	3.1	8	14%	15.2	30	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 February 2021	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Lake Avalon	2.5	3.6	2.6	4.0
Brantley Lake nr Carlsbad	13.9	42.1	22.9	1008.2
Santa Rosa Reservoir	3.8	26.1	53.2	432.2
Lake Sumner	19.1	27.4	33.1	102.0
Basin-wide Total	39.3	99.2	111.8	1546.4
# of reservoirs	4	4	4	4

Winter Snowpack Analysis March 1, 2021	# of sites	% Median	Last Year % Median
Basin Index	4	41	94

# Rio Chama

## Water Supply Outlook

### Report

#### as of March 1, 2021

The month of February received 48 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 76 percent as compared to 73 percent last year at this time. Snowpack in the basin is at 76 percent of the median. This is a decrease from 84 percent at this time last year. Forecasts at El Vado reservoir are 50 percent of average forecast for March through July. Reservoirs are currently holding 137,000 acre-feet of storage, which is a decrease from 219,700 acre-feet last year at this time.

#### Streamflow Forecast Summary: March 1, 2021 (averages based on 1981-2010 reference period)

RIO CHAMA	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)
El Vado Reservoir Inflow <sup>2</sup>								
	MAR-JUL	53	86	113	50%	144	196	225
	APR-JUL	44	75	100	49%	129	179	205

- 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 February 2021	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Abiquiu Reservoir	73.3	86.7	154.8	1198.5
El Vado Reservoir	10.2	26.9	100.8	184.8
Heron Reservoir	53.6	106.1	297.8	400.0
Basin-wide Total	137.0	219.7	553.4	1783.3
# of reservoirs	3	3	3	3

Winter Snowpack Analysis March 1, 2021	# of sites	% Median	Last Year % Median
Basin Index	4	76	84

# Rio Grande Headwaters

## Water Supply Outlook

### Report

#### as of March 1, 2021

The month of February received 64 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 84 percent as compared to 77 percent last year at this time. Snowpack in the basin is at 96 percent of the median. This is an increase from 95 percent at this time last year. Forecasts are at or below average with the highest being 84 percent of average at Culebra Creek and the lowest being 42 percent at San Antonio River. Reservoirs are currently holding 73,800 acre-feet of storage, which is a decrease from 82,100 acre-feet last year at this time.

#### Streamflow Forecast Summary: March 1, 2021 (averages based on 1981-2010 reference period)

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

<b>RIO GRANDE HEADWATERS</b>	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Rio Grande nr Del Norte <sup>2</sup>	APR-SEP	215	300	365	71%	435	555	515
Platoro Reservoir Inflow	APR-JUL	33	41	47	84%	53	64	56
	APR-SEP	34	43	50	81%	57	69	62
Conejos R nr Mogote <sup>2</sup>	APR-SEP	100	130	153	79%	178	220	194
Los Pinos R nr Ortiz	APR-SEP	28	39	48	66%	57	73	73
San Antonio R at Ortiz	APR-SEP	2.5	4.6	6.5	42%	8.7	12.4	15.6
Culebra Ck at San Luis	APR-SEP	10	15.2	19.4	84%	24	32	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

<b>Reservoir Storage end of February 2021</b>	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Beaver Reservoir	3.8	4.1	4.2	4.5
Continental Reservoir	9.3	16.1	5.1	27.0
Mountain Home Reservoir	2.3	5.2	3.6	18.0
Platoro Reservoir	14.2	18.2	23.9	60.0
Rio Grande Reservoir	19.6	0.0	17.6	51.0
Sanchez Reservoir	4.8	8.6	27.6	103.0
Santa Maria Reservoir	14.0	21.6	10.7	45.0
Terrace Reservoir	5.7	8.3	6.9	18.0
<b>Basin-wide Total</b>	<b>73.8</b>	<b>82.1</b>	<b>99.6</b>	<b>326.5</b>
# of reservoirs	8	8	8	8

<b>Winter Snowpack Analysis March 1, 2021</b>	# of sites	% Median	Last Year % Median
Basin Index	21	96	95

# Upper Rio Grande Water Supply Outlook Report as of March 1, 2021

The month of February received 77 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 70 percent as compared to 95 percent last year at this time. Snowpack in the basin is at 65 percent of the median. This is a decrease from 91 percent at this time last year. Forecasts are below average with the highest being 96 percent of average at Costilla Reservoir and the lowest being 32 percent at Tesuque Creek. Reservoirs are currently holding 260,700 acre-feet of storage, which is a decrease from 701,300 acre-feet last year at this time.

<b>Streamflow Forecast Summary: March 1, 2021</b> (averages based on 1981-2010 reference period)									
Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast									
<b>UPPER RIO GRANDE</b>	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)	
Costilla Reservoir Inflow	MAR-JUL	6.4	8.8	10.7	96%	12.7	16.1	11.1	
Costilla Ck nr Costilla <sup>2</sup>	MAR-JUL	12.3	18.7	24	92%	30	39	26	
Red R bl Fish Hatchery nr Questa	MAR-JUL	13.9	20	25	74%	30	39	34	
Rio Hondo nr Valdez	MAR-JUL	6.9	10.6	13.5	73%	16.8	22	18.4	
Rio Pueblo de Taos nr Taos	MAR-JUL	3.7	6.8	9.5	56%	12.6	17.9	17	
Rio Lucero nr Arroyo Seco	MAR-JUL	3.5	5.6	7.4	68%	9.4	12.8	10.9	
Rio Pueblo de Taos bl Los Cordovas	MAR-JUL	4.2	10.8	17	47%	25	39	36	
Embudo Ck at Dixon	MAR-JUL	5.6	14.1	22	46%	32	49	48	
Santa Cruz R at Cundiyo	MAR-JUL	3.4	5.6	7.5	41%	9.6	13.2	18.3	
Nambe Falls Reservoir Inflow	MAR-JUL	1.13	1.9	2.5	38%	3.3	4.5	6.5	
Tesuque Ck ab diversions	MAR-JUL	0.09	0.26	0.43	32%	0.64	1.03	1.34	
Rio Grande at Otowi Bridge <sup>2</sup>	MAR-JUL	184	295	390	54%	495	670	720	
Rio Grande at San Marcial <sup>2</sup>	MAR-JUL	-148	46	177	35%	310	505	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

<b>Reservoir Storage end of February 2021</b>	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Costilla Reservoir	3.0	7.1	6.9	16.0
Nambe Falls Reservoir	1.4	2.0	1.8	1.7
Cochiti Lake	43.2	46.2	58.3	491.0
Elephant Butte Reservoir	182.3	609.5	1305.0	2195.0
Caballo Reservoir	30.9	36.4	101.1	332.0
Basin-wide Total	260.7	701.3	1473.1	3035.7
# of reservoirs	5	5	5	5

<b>Winter Snowpack Analysis March 1, 2021</b>	# of sites	% Median	Last Year % Median
Basin Index	11	65	91

# Mimbres River Basin

## Water Supply Outlook

### Report

#### as of March 1, 2021

The month of February received 90 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 51 percent as compared to 120 percent last year at this time. As of March 1, 2021, snowpack was at 26 percent of median. The forecast for the basin is at 57 percent of average.

#### Streamflow Forecast Summary: March 1, 2021 (averages based on 1981-2010 reference period)

MIMBRES RIVER	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)
Mimbres R at Mimbres	MAR-MAY	0.16	0.48	0.86	57%	1.4	2.5	1.5

- 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

Winter Snowpack Analysis March 1, 2021	# of sites	% Median	Last Year % Median
Basin Index	2	26	0

# San Francisco

## Water Supply Outlook

### Report

#### as of March 1, 2021

The month of February received 68 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 50 percent as compared to 108 percent last year at this time. Snowpack in the basin is at 33 percent of the median. This is a decrease from 73 percent at this time last year. Streamflow forecast data were unavailable at the time of publication.

<b>Winter Snowpack Analysis</b> <b>March 1, 2021</b>	# of sites	% Median	Last Year % Median
Basin Index	7	33	73

# Upper Gila Water Supply Outlook Report as of March 1, 2021

The month of February received 91 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 59 percent as compared to 107 percent last year at this time. Snowpack in the basin is at 52 percent of the median. This is a decrease from 77 percent at this time last year. Streamflow forecasts were unavailable at the time of publication.

<b>Winter Snowpack Analysis March 1, 2021</b>	<b># of sites</b>	<b>% Median</b>	<b>Last Year % Median</b>
Basin Index	3	52	77

# Zuni/Bluewater

## Water Supply Outlook

### Report

#### as of March 1, 2021

The month of February received 55 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 65 percent as compared to 94 percent last year at this time. Snowpack in the basin is at 49 percent of the median. This is a decrease from 67 percent at this time last year. Streamflow forecasts were unavailable at the time of publication. February reservoir storage was at 3,200 acre feet at Bluewater Lake.

<b>Reservoir Storage end of February, 2021</b>	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Bluewater Lake	3.2	6.6	6.6	38.5
Basin-wide Total	3.2	6.6	6.6	38.5
# of reservoirs	1	1	1	1

<b>Winter Snowpack Analysis March 1, 2021</b>	# of sites	% Median	Last Year % Median
Basin Index	4	49	67

# San Juan

## Water Supply Outlook

### Report

#### as of March 1, 2021

The month of February received 63 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 69 percent as compared to 78 percent last year at this time. Snowpack in the basin is at 83 percent of the median. This is a decrease from 92 percent at this time last year. Forecasts are below average with the highest being 74 percent of average at Blanco Diversion. January reservoir storage was at 1,103,400 acre feet. Storage at this time last year was 1,392,100 acre feet.

#### Streamflow Forecast Summary: March 1, 2021 (averages based on 1981-2010 reference period)

SAN JUAN	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)
Rio Blanco at Blanco Diversion <sup>2</sup>	APR-JUL	23	33	40	74%	48	62	54
Navajo R bl Oso Diversion <sup>2</sup>	APR-JUL	26	36	45	69%	54	70	65
San Juan R nr Carracas	APR-JUL	134	196	245	64%	300	390	380
Piedra R nr Arboles	APR-JUL	59	85	105	50%	127	164	210
Vallecito Reservoir Inflow	APR-JUL	69	91	108	56%	126	155	194
Navajo Reservoir Inflow <sup>2</sup>	APR-JUL	210	300	375	51%	460	595	735
Animas R at Durango	APR-JUL	139	188	225	54%	265	330	415
Lemon Reservoir Inflow	APR-JUL	15.7	22	27	49%	32	41	55

- 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 February, 2021	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Lemon Reservoir	10.8	17.4	21.0	40.0
Navajo Reservoir	1051.9	1294.8	1292.0	1696.0
Vallecito Reservoir	40.7	79.9	63.6	126.0
Basin-wide Total	1103.4	1392.1	1376.6	1862.0
# of reservoirs	3	3	3	3

Winter Snowpack Analysis March 1, 2021	# of sites	% Median	Last Year % Median
Basin Index	14	83	92

# Rio Hondo

## Water Supply Outlook

### Report

#### as of March 1, 2021

The month of February received 93 percent of the average amount of precipitation for the month. This puts the water year-to-date average amount of precipitation at 58 percent as compared to 145 percent last year at this time. Snowpack in the basin is at 3 percent of the median. This is a decrease from 37 percent at this time last year. Forecasts are below average at 24% of average.

**Streamflow Forecast Summary: March 1, 2021**  
(averages based on 1981-2010 reference period)

RIO HONDO	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)
Rio Ruidoso at Hollywood	MAR-JUN	0.11	0.79	1.6	24%	2.7	4.8	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

Winter Snowpack Analysis March 1, 2021	# of sites	% Median	Last Year % Median
Basin Index	1	3	37

<b>NEW MEXICO STATEWIDE SNOWPACK</b>	Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
Bateman	SNOTEL	9300	27	7.1	10.9	65%	9.9	91%
Beartown	SNOTEL	11600	49	14.7	18.7	79%	17.2	92%
Beartown	SNOTEL	11600	49	14.7	18.7	79%	17.2	92%
Beaver Head	SNOTEL	7990	0	0.0	5.2	0%	0.1	2%
Boon	SC	8140	7	2.0	4.5	44%	2.4	53%
Bowl Canyon	SC	8980	20	5.6	8.7	64%	7.7	89%
Cascade	SNOTEL	8880	26	7.7	12.0	64%	11.4	95%
Cascade #2	SNOTEL	8920	23	6.5	9.2	71%	8.6	93%
Chamita	SNOTEL	8400	26	7.0	9.5	74%	9.0	95%
Cochetopa Pass	SNOTEL	10020	22	4.5	3.1	145%	5.6	181%
Columbus Basin	SNOTEL	10785	45	11.8	20.0	59%	18.2	91%
Coronado Trail	SC	8350	0	0.0	1.8	0%	0.0	0%
Coronado Trail	SNOTEL	8400	0	0.1	2.4	4%	0.0	0%
Culebra #2	SNOTEL	10500	50	13.2	10.4	127%	13.0	125%
Cumbres Trestle	SNOTEL	10040	61	19.0	21.4	89%	18.7	87%
Dan Valley	SC	7640	8	1.8	3.5	51%	2.2	63%
Elk Cabin	SNOTEL	8210	2	0.7	4.8	15%	4.1	85%
Frisco Divide	SNOTEL	8000	1	0.1	2.4	4%	2.4	100%
Gallegos Peak	SNOTEL	9800	29	7.3	9.8	74%	9.1	93%
Hannagan Meadows	SNOTEL	9020	8	3.2	10.3	31%	9.9	96%
Hematite Park	SC	9500	24	4.5	5.0	90%	5.8	116%
Hopewell	SNOTEL	10000	41	11.2	16.2	69%	11.3	70%
La Veta Pass	SC	9440	38	9.8	8.2	120%	9.4	115%
Lemon Reservoir	SC	8700	22	5.5	8.0	69%	7.8	98%
Lily Pond	SNOTEL	11000	42	11.9	11.2	106%	9.2	82%
Lookout Mountain	SNOTEL	8500	0	0.0	0.6	0%	0.0	0%
Love Lake	SC	10000	28	6.6	7.7	86%	8.4	109%
Mcgaffey	SC	8120	2	1.0	1.4	71%	0.4	29%
Mcknight Cabin	SNOTEL	9240	6	1.9	3.1	61%	0.0	0%
Medano Pass	SNOTEL	9649	20	5.0	5.7	88%	7.1	125%
Middle Creek	SNOTEL	11250	48	14.9	14.9	100%	13.5	91%
Mineral Creek	SNOTEL	10040	40	10.7	11.8	91%	11.2	95%
Missionary Spring	SC	7940	5	1.8	4.1	44%	0.0	0%
Molas Lake	SNOTEL	10500	42	11.4	15.2	75%	12.5	82%
North Costilla	SNOTEL	10600	22	5.1	5.9	86%	7.0	119%
Nutriosio	SC	8500	0	0.0	0.6	0%	0.0	0%
Palo	SC	9300	26	5.4	6.8	79%	6.0	88%
Pinos Mill	SC	10000	59	17.8	20.2	88%	14.8	73%
Platoro	SC	9880	42	10.7	12.0	89%	7.8	65%
Porcupine	SC	10280	30	6.6	6.9	96%	7.5	109%

<b>NEW MEXICO STATEWIDE SNOWPACK (continued)</b>	Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
Quemazon	SNOTEL	9500	10	4.3	8.4	51%	7.4	88%
Red Mountain Pass	SNOTEL	11200	56	15.9	17.5	91%	18.4	105%
Red River Pass #2	SNOTEL	9850		6.0	6.8	88%	7.1	104%
Rice Park	SNOTEL	8460	12	3.6	7.6	47%	6.4	84%
Rio En Medio	SC	10300	13	3.2	8.4	38%	6.5	77%
San Antonio Sink	SC	9200	25	5.5	7.1	77%	5.2	73%
Santa Fe	SNOTEL	11445	25	6.0	13.4	45%	13.3	99%
Santa Maria	SC	9600	12	2.4	3.5	69%	4.4	126%
Senorita Divide #2	SNOTEL	8600	17	4.6	8.7	53%	7.3	84%
Sierra Blanca	SNOTEL	10280	0	0.3	9.1	3%	3.4	37%
Signal Peak	SNOTEL	8360	0	0.0	4.3	0%	0.0	0%
Silver Creek Divide	SNOTEL	9000	21	6.8	8.3	82%	10.1	122%
Silver Lakes	SC	9500	19	4.5	6.4	70%	4.6	72%
Slumgullion	SNOTEL	11560	42	9.7	10.4	93%	11.8	113%
Spud Mountain	SNOTEL	10660	55	16.8	20.4	82%	18.0	88%
Stump Lakes	SNOTEL	11200	45	11.7	14.1	83%	13.9	99%
Taos Canyon	SC	9100	20	3.6	5.6	64%	2.1	38%
Taos Powderhorn	SC	11250	62	15.9	20.3	78%	18.2	90%
Tolby	SNOTEL	10180	29	7.0	7.2	97%	9.4	131%
Trinchera	SNOTEL	10860	42	9.9	7.9	125%	9.5	120%
Upper Rio Grande	SNOTEL	9400	23	5.4	5.6	96%	7.5	134%
Upper San Juan	SC	10200	65	21.0	24.2	87%	22.6	93%
Upper San Juan	SNOTEL	10200	71	23.1	26.0	89%	20.3	78%
Ute Creek	SNOTEL	10650	44	11.1	11.9	93%	9.2	77%
Vacas Locas	SNOTEL	9306	29	8.3	11.7	71%	9.7	83%
Vallecito	SNOTEL	10880	45	12.0	13.6	88%	14.4	106%
Wesner Springs	SNOTEL	11120	21	6.0	12.1	50%	12.6	104%
Wolf Creek Summit	SNOTEL	11000	80	25.8	24.9	104%	21.5	86%
<b>Basin Index</b>						<b>77%</b>		<b>89%</b>
# of sites						68		68

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