



Division 7 Annual Report

Water Year 2020
(November 1, 2019 - October 31, 2020)

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1 Water Supply

Snowpack in the San Juan and Dolores River Basins during the winter of 2019-20 (Water Year 2020) was close to normal. However, a drought that began in April caused water users to rely on stored water in reservoirs later in the summer. Fortunately, in the prior water year (water year 2019) the reservoirs were not drained due to above average moisture. Some reservoirs even filled to capacity in 2020 due to the carryover of water from the prior year. The stored water that was carried forward provided water for many irrigators.

The winter saw approximately 70% of the average precipitation from November through May. April and May were well below average.

The rivers did not experience a large peak runoff due to the start of runoff in April that continued through May. Therefore the peak flowrate that typically occurs in early June was reduced and the runoff period quickly dropped off due to the early snowmelt. Many rivers saw a peak flow in early June, but the peak was caused by a rain in early June rather than snowmelt.

The late summer monsoonal rains provided only a minimal amount of relief. All rivers saw typical administration during the summer and reservoirs were critical in providing water during summer months.

2020 is a year that stressed many reservoirs, and the snowpack leading in to 2021 will be critical to provide water in 2021.

2 Surface Water Issues

Much like two years ago in the 2018-2019 water year, surface water administration was very demanding. In many of the basins, only the senior water right holders remained in priority and diverted water. Fortunately, there was significant carryover in reservoirs from the year prior that helped augment the limited water. In particular, Long Hollow Reservoir proved to be very beneficial in providing water to irrigators, as well as making Compact deliveries.

There were 175 administrative calls placed on 10 different stream systems in Division 7. From the total ten of the calls were on the Florida River, 38 of the calls were on the La Plata River, 55 of the calls were on the Pine River, 39 of the calls were on the Mancos River, and 28 calls were on McElmo Creek. Administrative calls also occurred on Trumble Draw, Fourmile Creek, Elbert Creek, Devil Creek and Chicken Creek.

McPhee Reservoir, with a capacity of 382,000 +/- AF, contained 292,172 AF at the start of the water year. McPhee released water through the winter and spring at a rate greater than the inflow, dropping to a low of 275,140 AF on April 27, 2020. McPhee was able to store water for less than a month in early May. On May 21, 2020, McPhee contained 286,416 AF of stored water, the maximum volume for the year. Reservoir elevation immediately began to drop in order to provide water to irrigators. At the end of water year 2020, McPhee contained 170,631 AF. The amount of diverted water from the Dolores River basin into the McElmo Creek basin totaled 207,000 AF, which is close to the historical average diversion over the last 15 years. The Colorado Water Conservation Board did not place a call on the Dolores River downstream of McPhee Reservoir this year.

Vallecito Reservoir, with a capacity of 126,000 +/- AF, filled in early June and made peak runoff releases of 2620 cfs, providing flood protection to downstream properties. As is normal practice, a large amount of water was bypassed in the spring and early summer prior to filling. Managing large peak flows is a normal procedure and previous experience proved useful again. A total of 203,000 AF was measured at the gage below Vallecito. The reservoir contained 71,900 AF at the start of the water year. Vallecito Reservoir filled to a volume of 126,000 AF on June 9, 2020 and later dropped to a low of 30,900 AF on October 2, 2020. Ending the 2020 water year and heading into the 2021 water year, Vallecito contained 31,400 AF.

Lemon Reservoir, with a capacity of 39,790 AF, contained 18,651 AF to start the 2020 water year. Lemon Reservoir released water through the winter and spring at a rate greater than the inflow, dropping to a low of 17,766 AF on March 5, 2020. Lemon Reservoir stored water through early June. On June 8, 2020, Lemon contained 30,038 AF of stored water, the maximum volume for the year. The reservoir elevation began to drop on June 9 in order to provide water to irrigators. The maximum release from Lemon Reservoir was 236 cfs. At the end of water year 2020, Lemon Reservoir contained 11,230 AF, the low for the year. A total of 44,000 AF was measured at the gage below Lemon Reservoir, well below the prior year's total of 80,000 AF.

Long Hollow Reservoir, with a capacity of 5,300 AF, contained 3093 AF at the start of the water year. Long Hollow Reservoir filled to a volume of 5,161 AF on April 7, 2020 and dropped to a low of 115 AF on October 13, 2020, where it ended the water year. Long Hollow has satisfied the requirements necessary to complete the first fill following completion of construction.

The San Juan - Chama Project, which diverts water from Colorado into New Mexico, diverted 45,082 AF during the year, which is only 50% of average since diversion started in 1971.



Figure 1: Long Hollow Reservoir completing its first fill

3 Ground Water Issues

There were 288 well permits issued in Division 7 in calendar year 2020. Of these, 204 exempt domestic well permits, and 29 monitoring well permits were processed in the Durango office. There were also 41 non-exempt well permits, 1 monitoring well permit, 6 monitoring hole permits, and 7 Oil and Gas (Coal Bed Methane) well permits processed in the Denver office. There were no dewatering wells, rooftop precipitation collection permits or geothermal wells permitted in Division 7 during the 2020 calendar year.

There are currently over 3,900 coal bed methane (CBM) wells in Division 7, 90% of which lie within the Southern Ute Indian Reservation boundary. The Colorado Supreme Court upheld the question of the State's authority to administer non-tributary groundwater within the Ute Reservation. Stayed applications pending a Supreme Court decision resumed, and consultation with the Attorney General continued in 2020 to address these wells and associated applications for water rights and plans for augmentation.

4 Compact Issues

4.1 La Plata River Compact

Due to runoff developing early in the spring, NM placed a call on April 6 for half the flow as measured at the La Plata River at Hesperus gage, up to a maximum of 30 cfs. On April 24, NM increased their call on the La Plata up to 60 cfs. And finally on May 4, NM increased their call on the La Plata up to 70 cfs. Compact administration was unique this year because nearly all deliveries were made out from Long Hollow - either native flows or reservoir deliveries.

Long Hollow contained approximately 3000 AF at the beginning of the water year and filled to 5163 AF on April 7, which is considered fully filled when considering dam safety issues. Irrigators were able to immediately begin diverting water by exchange in early April.

For most of the year, the entire La Plata River was diverted either by irrigators diverting in priority or by irrigators diverting in exchange for releases from Long Hollow. The exchange of water from Long Hollow Reservoir to irrigators assists in Compact administration, specifically when the delivery to NM is composed mainly of releases from Long Hollow Reservoir rather than water being bypassed along the La Plata River. This method of delivery allowed for a steady delivery to NM rather than delivering water with diurnal peaks.

The water users in Colorado developed a strategy to divert the entire La Plata River into Red Mesa Reservoir using the Red Mesa Supply Canal in order to remove diurnal fluctuations and also store any excess runoff that might have unintentionally been shepherded to the Stateline. The Colorado water users were willing to accept a transit loss when running water through Red Mesa in order to provide a steady supply of water to all irrigators in Colorado.

It was determined there was no exchange potential on July 10, and a split river condition was initiated. The compact pool from the reservoir was used to make deliveries to New Mexico from July 10 through August 8.

Once there was no exchange potential and the designated compact pool was exhausted, deliveries to NM were difficult. During the late summer months, the only water that would arrive to the Stateline was the water that emanated from Long Hollow. This was a year when a larger compact pool would have helped with deliveries to the Stateline for compact compliance.

Due to the efficiency of operating the exchange from Long Hollow, the use of Cherry Creek to convey water to satisfy the Compact was not utilized.

4.2 Animas - La Plata Compact

4.2.1 *A-LP Release and Diversions*

202 AF of water was delivered from Ridges Basin Reservoir to Johnson Reservoir (Lake Durango). There were no flushing flow releases to Basin Creek. Prior year diversions and evaporative losses from Ridges Basin Reservoir were not replaced with water pumped from the Animas River at the Durango Pumping Plant. Local runoff from the Basin Creek drainage provided some water to the reservoir, but the reservoir remained below the maximum elevation.

4.2.2 *Lake Durango Pipeline Construction*

Construction on infrastructure to deliver water from Lake Nighthorse to the western part of La Plata County continued. The project is a joint venture between the La Plata West Water Authority, Southern Ute Indian Tribe, Ute Mountain Ute Tribe, and Lake Durango Water Authority.

5 Problems Solved

5.1 Long Hollow Reservoir Exchange and La Plata River Administration

This year was the sixth year that Long Hollow has stored water. The amount of water released far exceeded any amount released in the past. All parties on the La Plata once again were satisfied with water administration and the operation of the reservoir.

Due to efficiencies of delivering water to the Stateline from Long Hollow Reservoir rather than through the length of the La Plata River, senior irrigators were allowed to stay on longer than if the reservoir was not operating.

Releases from Long Hollow Reservoir allowed Red Mesa Reservoir to store additional water (by exchange) that benefited irrigators downstream of Red Mesa Reservoir.

A total of 15 ditches received 4569 AF of water, with the exchange period running from April 8 to July 10. Releases from the compact pool began July 10 and continued through August 8. A total of 259 AF was released for compact compliance. Due to the need to make releases for compact purposes in early July, the amount of stored water was not sufficient to provide for releases the entire compact period.

The carryover of approximately 3000 AF of water from 2019 into 2020 was quite large, due to the limited exchange potential in 2019. However, the stored water proved to be extremely beneficial to irrigators, particularly junior water right holders.

Once again, Long Hollow Reservoir helped to precisely and reliably meet much of the compact delivery requirement, provided supplemental water to irrigators who weren't in priority, and kept senior irrigators in priority longer due to increased efficiencies.



Figure 2: Long Hollow Reservoir with approximately a full pool

5.2 Vallecito Reservoir Flood Control Operations

Division 7 Staff worked with the Pine River Irrigation District and the Bureau of Reclamation to plan releases of water in the spring from Vallecito Reservoir to attenuate the peak flow run-off. This year's flood control release was smaller than the past years due to the early runoff in April and May which decreased the volume of water that typically will runoff in

June. Had there not been a rain in June, there may not have been a need to release for flood control. Division Staff provided assurance that flood control releases would not be accounted for as a non-decreed release.

6 Community Involvement

Water year 2019-2020 was unlike any other year, due to the Corona Virus Disease 2019 (COVID-19). In March 2020, the Durango office, Pagosa Springs office, and Cortez office all closed and employees were directed to work from home. Due to the COVID-19 pandemic, community involvement was significantly reduced.

Division 7 was however still able to attend virtually meetings with the Southwestern Water Conservation District; Animas-La Plata Operation Maintenance, and Replacement Association; Animas-La Plata Water Conservancy District; Dolores Water Conservancy District; San Juan Water Conservancy District; Montezuma Valley Irrigation Company; Pagosa Area Water and Sanitation District; and other water user group meeting they were invited to attend.

The Division also made efforts to keep the public at large informed of water issues by participating in interviews for articles in the local newspapers and television stations. The Division worked closely with local, city and county governments on water issues.

Division 7 staff assisted managing the water in Cascade Reservoir (aka Electra Reservoir) to determine the extent of the uncontrolled seepage from the face of the dam.

The Division is working closely with owners of the Red Mesa Reservoir to obtain funding to address safety issues. Particularly, the Division is exploring options on how an enlargement to Red Mesa Reservoir could assist in administering the La Plata River Compact.

Division staff did not attend conferences presented by the Southwestern Water Conservation District, Colorado Water Officials Association, and Colorado Water Congress due to cancellations caused by COVID-19.



Figure 3: Upstream face of dam at Cascade (Electra) Reservoir



Figure 4: Cascade (Electra) Reservoir drained for repairs



Figure 5: Draining of Haviland Lake to repair outlet structure

7 Highlights

7.1 2020 Abandonment

Division 7 staff assisted in the 2020 abandonment process. As required by statute, the Division Engineer's abandonment list was published and notices were mailed to all water right holders on the abandonment list.

A total of 1,497 water rights were initially identified as being subject to abandonment. Of the total, 621 were identified as "post-compact" and subject to abandonment. Following a review by Water Commissioners and DWR Staff, a total of 182 water rights were added to the Division Engineer's abandonment list. In 2021, staff will meet with water right owners who claim they do not have an intent to abandon their water right.

7.2 Important Court Cases

There were no court cases that went to trial this year in Division 7.

7.2.1 09CW96 - Enduring Resources (Coal Bed Methane (CBM) Production)

This case was filed by Chevron U.S.A. Inc., Four Star Oil & Gas Company and Chevron Midcontinent, L.P. for underground water rights to nontributary groundwater associated with the production of coal bed methane. The Court dismissed the applicants claim for determination of rights to nontributary groundwater and the applicants filed an application in 2015 for underground water rights that do not include any claim for the determination of rights to nontributary groundwater. Enduring Resources IV, LLC was substituted as the Applicants.

The applicants operate CBM wells in the Northern San Juan Basin, which includes portions of the Florida River Basin and Animas River basin. As part of the CBM process, wells withdraw and produce naturally-occurring ground water from the deep formations containing the CBM gas. The principal formation is referred to as the Fruitland Formation. Using a numeric model, the applicant determined the groundwater withdrawn by certain CBM wells in the northern portions of the Fruitland Formation is tributary to the Florida and/or the Animas River.

Pursuant to the decision of the Colorado Supreme Court in *Vance v. Wolfe*, CBM wells that withdraw tributary groundwater are subject to the water well permitting and administration requirements of C.R.S. 37-90-101, et seq. and C.R.S. 37-92-101, et seq.

110 structures were tabulated as part of this decree.

7.2.2 10CW7 - Enduring Resources (CBM Augmentation Plan)

As a companion case to 09CW96, the Court approved an augmentation plan to replace out-of-priority depletions caused by Applicants' CBM wells that withdraw groundwater tributary to the Florida River. The Animas River is not critical and an augmentation plan was not required for depletions caused by Applicants' CBM wells that withdraw groundwater tributary to the Animas River.

7.2.3 19CW3028 - Colorado Water Conservation Board (CWCB)

The Court granted the CWCB the Himes Creek Instream Flow Water Right in the amount of "All unappropriated flow (01/01-12/31), absolute." The Southwestern Water Conservation District, Dolores Water Conservancy District, and Bootjack Ranch, LLC filed statements of opposition.

7.2.4 18CW3052 - Montezuma Valley Irrigation Company (Change of Use)

Montezuma Valley Irrigation Company filed an application for change of water right and for confirmation of relocated points of diversion. The Applicant seeks a change of their 87.3 cfs conditional water right from a direct flow right on the Dolores River to a storage right that may be stored in either McPhee Reservoir and/or Narraquinnep Reservoir, for subsequent irrigation. As part of the change of this conditional water right, the Applicant submitted an analysis of the “contemplated draft” that this water right would have on the Dolores River. The Applicant requests to store a maximum of 22,755 AF in any calendar year, with maximum monthly volumetric diversion limits. As an alternative claim, the applicant seeks judicial confirmation that relocation of the points of diversion to the Great Cut Dike and the Dolores Tunnel Inlet is consistent with C.R.S. § 37-86-111 because the decreed points of diversion were inundated by McPhee Reservoir.

The State Engineer and Division Engineer filed a Statement of opposition, requesting that the proposed change be held to strict proof of the contemplated draft to ensure the change does not result in expansion of the original water right. The State and Division Engineer ask to consider whether this water right has been abandoned as it has not been used for over 100 years. Additionally, the State and Division Engineer ask that the Applicant be held to show they can and will beneficially use the changed conditional water for the decreed purposes.

7.2.5 19CW3005 - Montezuma Valley Irrigation Company (Diligence)

Montezuma Valley Irrigation Company filed an application for finding of reasonable diligence for the Main No. 1 Canal and the Main No. 2 Canal. The Applicant owns 87.3 cfs of an irrigation water right on the Dolores River with an appropriation date of November 25, 1885.

The State and Division Engineer filed a Statement of Opposition, indicating that the Applicant needs to demonstrate the water right has not become speculative over time. This water right is the same water right in Case No. 18CW3052, in which the State and Division Engineer have filed a Statement of Opposition.

7.2.6 17CW3036 - Pine River Irrigation District Augmentation Plan

Pine River Irrigation District filed for a basin wide augmentation plan. Division staff continues to work through the Attorney General to conclude this case.

7.2.7 07CW37 - Pine River Irrigation District 2nd Fill of Vallecito Reservoir

Pine River Irrigation District (PRID) filed for a second fill of Vallecito Reservoir. Division staff has worked with PRID to include terms and conditions that will address the claim for flood control.

7.2.8 15CW3017 - Town of Bayfield

The Town of Bayfield filed for a change of water use on the Los Pinos Ditch. Division staff continues to work through the Attorney General to conclude this case.

7.3 Hydrography

7.3.1 City of Durango Florida River Diversion and Flume

Division 7 Hydrographers worked with the City of Durango to install new telemetry for the new flume for the City's main diversion from the Florida River. Staff also helped to install a new flume to measure bypasses around the structure in case releases from Lemon Reservoir must be measured past the City's diversion.



Figure 6: City of Durango Flume on the Florida River



Figure 7: City of Durango Bypass Flume

7.3.2 *Other Hydrography Work*

Division 7 hydrographers worked to maintain and improve many gages. The La Plata-Cherry Creek Ditch electronics were upgraded. This is an important gage used in the La Plata Compact.



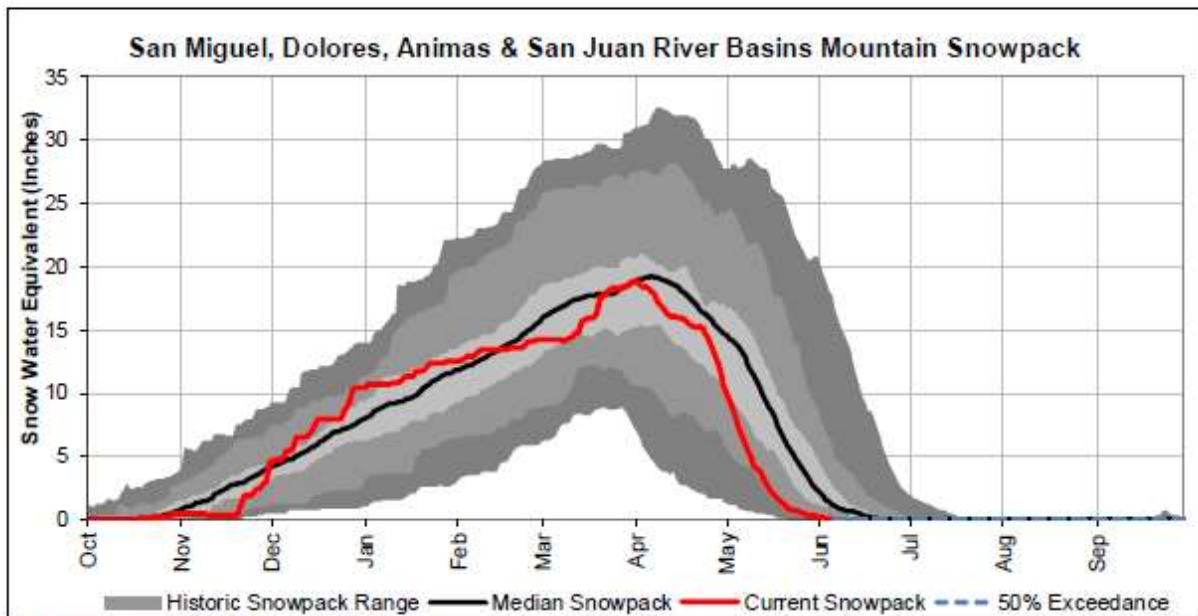
Figure 8: La Plata - Cherry Creek Ditch Telemetry Improvements

8 Appendix

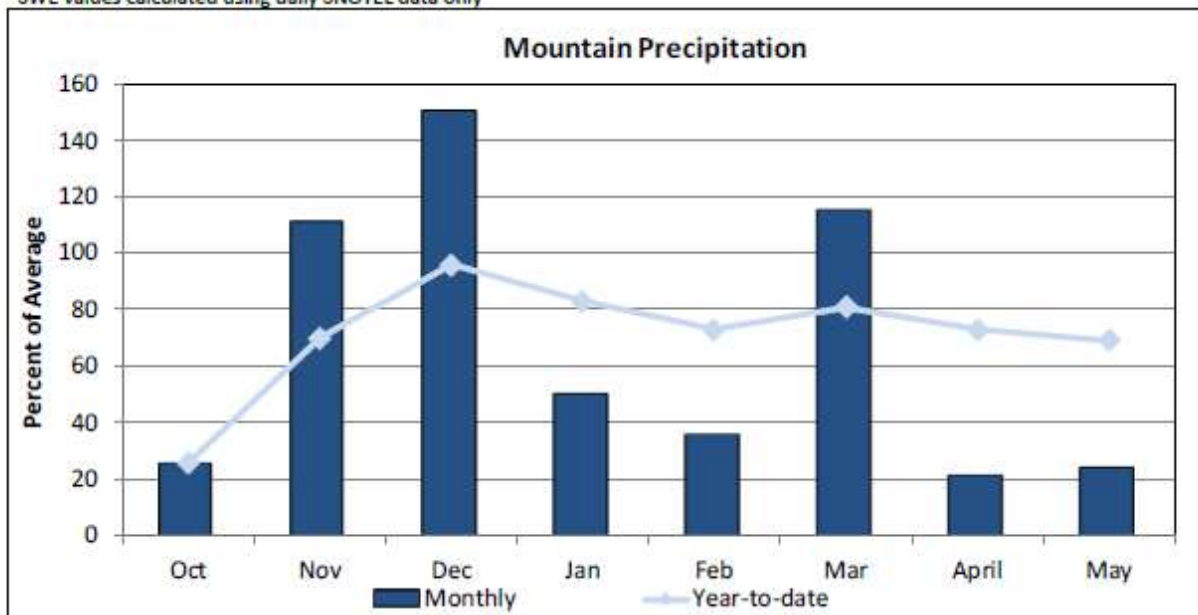
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS

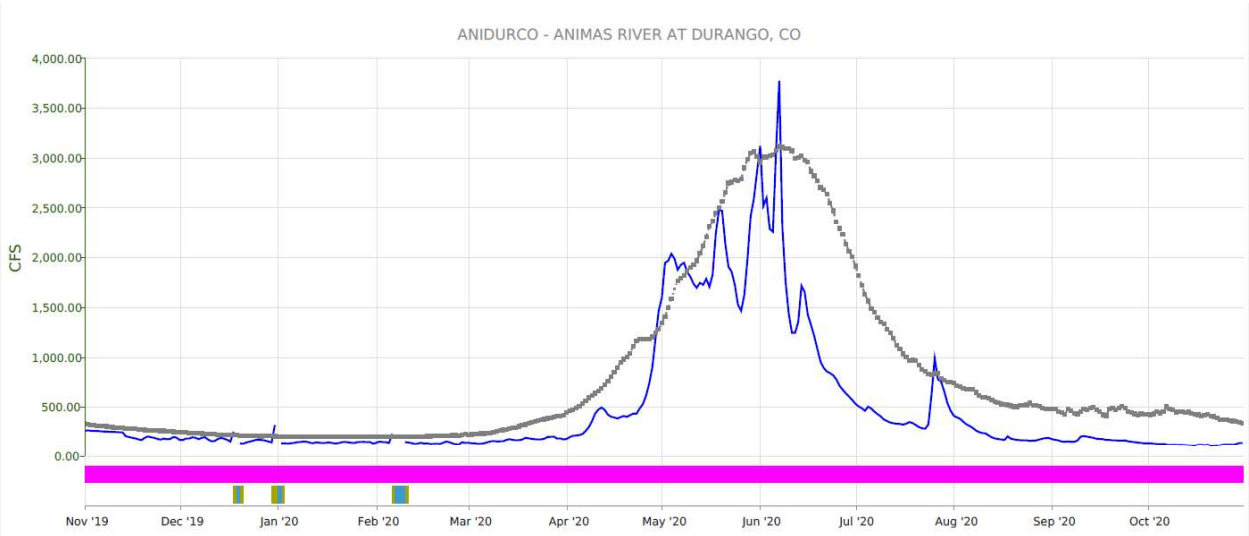
June 1, 2020

Snowpack in the combined southwest river basins is below normal at 9% of median. Precipitation for May was 24% of average which brings water year-to-date precipitation to 69% of average. Reservoir storage at the end of May was 92% of average compared to 88% last year. Current streamflow forecasts range from 13% of average for the Gurley Reservoir Inlet to 48% for the Animas River at Durango.

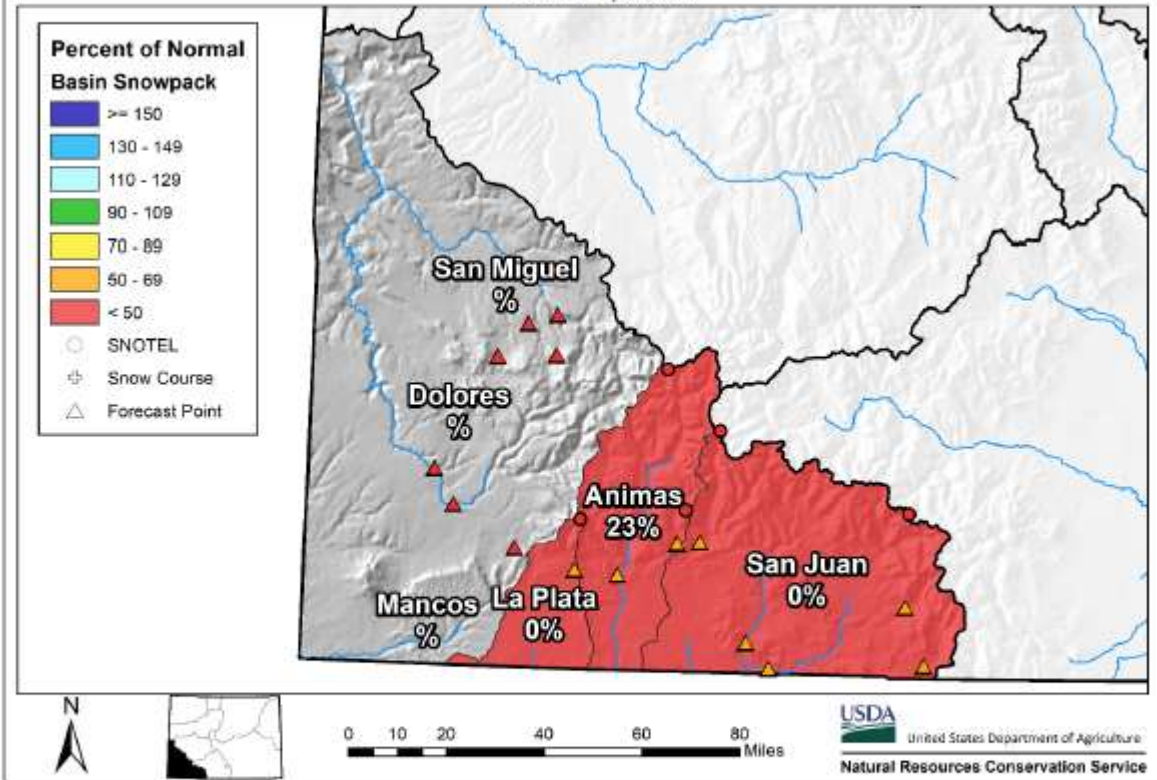


*SWE values calculated using daily SNOTEL data only





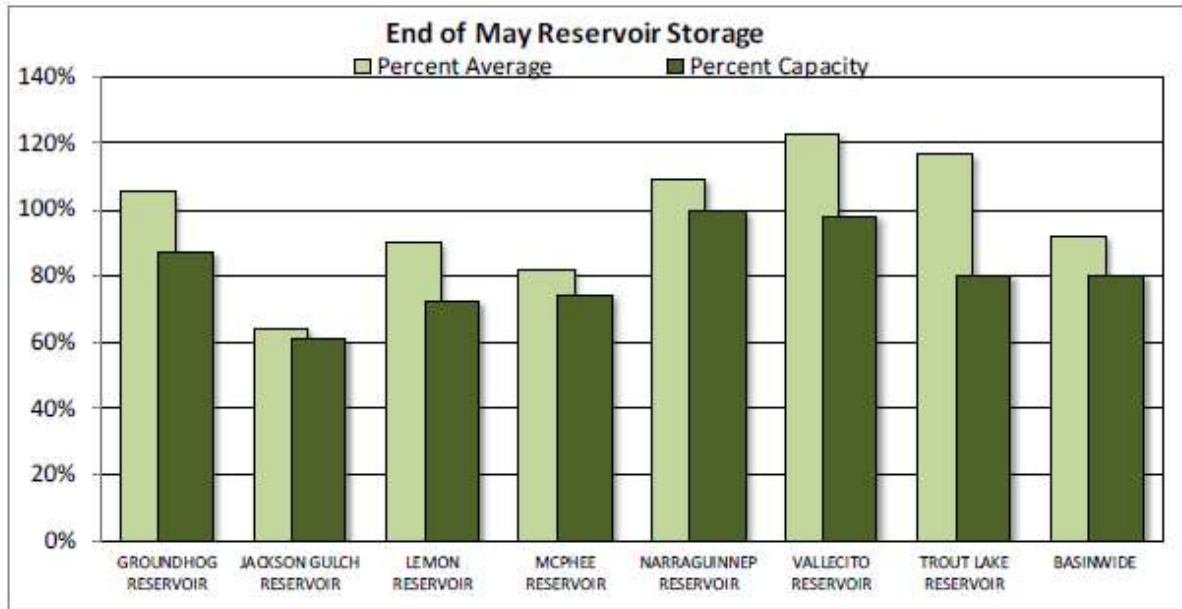
San Miguel, Dolores, Animas, and San Juan River Basins
Snowpack and Streamflow Forecasts
June 1, 2020



Watershed Snowpack Analysis June 1st, 2020

| Sub-Basin | # of Sites | % Median | Last Year % | |
|-------------------------|------------|----------|-------------|-------------|
| | | | % Median | Median |
| Animas | 9 | 23 | | 1493 |
| Dolores | 5 | | | |
| San Miguel | 3 | | | |
| San Juan | 3 | 0 | | 427 |
| Basin-Wide Total | 19 | 9 | | 1002 |

*SWE values calculated using first of month SNOTEL data and snow course measurements



Reservoir Storage End of May 2020

| Reservoir | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|-------------------------|------------------|--------------------|------------------|-------------------|
| GROUNDHOG RESERVOIR | 19.2 | 14.9 | 18.2 | 22.0 |
| JACKSON GULCH RESERVOIR | 6.1 | 10.0 | 9.5 | 10.0 |
| LEMON RESERVOIR | 28.9 | 18.9 | 32.1 | 40.0 |
| MCPHEE RESERVOIR | 283.4 | 333.7 | 344.7 | 381.0 |
| NARRAGUINNEP RESERVOIR | 18.9 | 19.0 | 17.3 | 19.0 |
| VALLECITO RESERVOIR | 123.7 | 64.5 | 100.7 | 126.0 |
| TROUT LAKE RESERVOIR | 2.6 | 3.4 | 2.2 | 3.2 |
| BASINWIDE | 482.7 | 464.3 | 524.7 | 601.2 |
| Number of Reservoirs | 7 | 7 | 7 | 7 |