COLORADO
Division of Water Resources
Department of Natural Resources

Division 7 Annual Report

Water Year 2019
(November 1, 2018 – October 31, 2019)

by
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1 Water Supply

Snowpack in the San Juan and Dolores River Basins during the winter of 2018-2019 (Water Year 2019) was one of the best on record, following one of the worst years on record. Although snowpack prior to January was below average, snowfall beginning in January drove the snowpack to record levels in mid-March. A cool and wet spring dampened excessive runoff, allowing most basins to operate under free river conditions through June. The peak daily discharge on the Animas River occurred on June 9 (6850 cfs) and the peak runoff on the La Plata occurred on June 13 (484 cfs).

Once again, the late summer monsoonal rains did not arrive. However, most rivers saw typical administration later in the summer and reservoirs were critical in providing water during the summer months. In some areas, the drier summer may have been welcomed due to concern over runoff from burn areas.

The winter saw approximately 140% of the average precipitation. Coming mainly in the latter part winter and spring, precipitation in February, March, and May saw approximately 200% of average precipitation.

All Division 7 reservoirs were filled to capacity during the 2018-2019 runoff season. Many reservoirs were challenged in how to release the excess runoff in a controlled manner. Fortunately, the runoff was a slow process and all reservoirs were able to successfully manage levels to pass peak flows while filling to capacity.

The summer of 2019 was a welcome change from 2018.

Figure 1: Avalanche chute near Animas Forks in late May

2 Surface Water Issues

Due to the large runoff, surface water administration during the early part of the irrigation season was generally less demanding compared to most years. However, a dry summer and fall led to more challenges later in the season, with only the senior water right holders remaining in priority on many rivers.

There were 54 administrative calls placed on 7 different stream systems in Division 7. From the total, four of the calls were on the Florida River, 25 of the calls were on the La Plata River, 11 of the calls were on the Mancos River and 9 of the calls were on the Pine River. Administrative calls also occurred on Devil Creek, Fourmile Creek, and Trumble Draw. There were no in-stream flow calls made by the Colorado Water Conservation Board.

Vallecito Reservoir, with a capacity of 126,000 +/- AF, filled in July and made peak runoff releases of 2,460 cfs. As is normal practice, a large amount of water was bypassed in the spring and early summer prior to filling. Experience gained previously in managing large peak flows proved useful this year. A total of 330,000 AF was measured at the gage below Vallecito Reservoir. The reservoir contained 26,947 AF at the start of the water year. Vallecito Reservoir filled to a volume of 126,000 AF on July 18, 2019 and later dropped to a low of 71,370 AF on October 21, 2019. Ending the 2019 water year and heading into the 2020 water year, Vallecito contained 71,888 AF.

McPhee Reservoir, with a capacity of 382,000 +/- AF, contained 169,692 AF at the start of the water year. McPhee Reservoir began filling rapidly in April. Releases made to the Dolores River from mid-May through the beginning of July created additional storage and provided downstream boating opportunities among other benefits. A peak release of 3,400 cfs was made on June 14, 2019. A total of 163,000 AF was measured at the gage on the Dolores River below McPhee Reservoir. On June 23, 2019, McPhee Reservoir reached capacity (approximately), and at the end of the 2019 water year contained 292,000 AF. The amount diverted from the Dolores River basin into the McElmo Creek basin totaled 202,000 AF. The Colorado Water Conservation Board did not place a call on the Dolores River downstream of McPhee Reservoir this year.

Lemon Reservoir, with a capacity of 39,790 AF, contained 7,330 AF to start the 2019 water year. Lemon Reservoir filled to capacity on June 20, 2019 and later dropped to a low of 16,700 AF on October 31, 2019, the end of the 2019 water year. The maximum release from Lemon Reservoir was 956 cfs from June 29 – July 1. A total of 80,000 AF was measured at the gage below Lemon Reservoir.

Long Hollow Reservoir, with a capacity of 5,300 AF, contained 195 AF at the start of the water year. Long Hollow Reservoir filled to a volume of 4,680 AF on July 9, 2019 and dropped to a low of 2,339 AF on October 18, 2019. Ending the 2019 water year and heading into the 2020 water year, Long Hollow Reservoir contained 3093 AF. Long Hollow is still completing the first fill. Seepage issues were investigated and addressed as the reservoir fills.

The San Juan – Chama Project, which diverts water from Colorado into New Mexico diverted 138,952 AF during the year, which was 158% of average since diversions started in 1971. This was the fifth most diverted into New Mexico in any year since diversion began.

3 Ground Water Issues

There were 175 well permits issued in Division 7 in calendar year 2019. Of these, 117 exempt domestic well permits, 1 rooftop precipitation collection permit, 4 non-exempt well permits, and 12 monitoring well permits were processed in the Durango office. There were also 24 non-exempt well permits, 1 monitoring well permit, 11 monitoring holes permits, and 5 Oil and Gas (Coal Bed Methane) well permits processed in the Denver office. There were no dewatering wells or geothermal wells permitted in Division 7 during the 2019 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 2019 to address these wells and associated applications for water rights and plans for augmentation.

4 Compact Issues

4.1 La Plata River Compact

As a result of above average snowpack, there was abundant water available in the spring and the La Plata River was not under administration until New Mexico place a compact call for 65 cfs on July 8. New Mexico did not increase the request above 65 cfs in 2019.

Long Hollow Reservoir started the water year with only 195 AF. During the spring, water was diverted from the La Plata River by ditches on the east side of the river in an attempt to fill Long Hollow Reservoir. On July 8, the volume of water in Long Hollow Reservoir reached 4683 AF.

The exchange of water from Long Hollow Reservoir to irrigators assisted in Compact administration. The irrigators upstream from the confluence of Long Hollow and the La Plata River exchanged water from the reservoir, which allowed senior irrigators to benefit from the increased efficiency of the delivery, compared to trying to make the Compact delivery through the entirety of the La Plata River. In total, ten ditches exchanged a total of 1220 AF. Partially due to paltry monsoonal rains, exchange potential was limited, and Long Hollow ended the water year with 3089 AF.

Once it was determined there was no exchange potential, a split river condition was initiated and the Compact Pool from the reservoir was used to make deliveries to New Mexico from September 8 thru October 14. A total of 104 AF was released from the 300 acre-foot Compact Pool in order to satisfy the compact obligation to New Mexico.

Due to the efficiency of operating the exchange, 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

33 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 replaced with 880 AF of water pumped from the Animas River at the Durango Pumping Plant and by local runoff from the Basin Creek drainage.

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 fifth year that Long Hollow Reservoir has stored water, and by all accounts, parties on the La Plata River 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 also allowed Red Mesa Reservoir to store additional water (by exchange) that benefits irrigators downstream of Red Mesa Reservoir.

A total of 10 ditches received 1220 AF of exchange water, with the exchange period running from July 8 to September 8. Releases from the Compact Pool began September 8 and continued through October 14. A total of 104 acre feet was released for Compact compliance.

The carryover of approximately 3000 AF of water from 2019 into 2020 was quite large when compared to the amount used during 2019. Irrigators could have benefitted if more water was delivered by exchange, however the limited amount of water physically in the La Plata River adversely impacted the exchange potential.

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

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. Division Staff provided assurance that flood control releases would not be accounted for as a non-decreed release.

6 Community Involvement

Division 7 staff was involved in various community activities. Division staff regularly attended meetings of 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 meetings 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 a local group, 4Core, to ensure their rainwater storage project at the Bayfield Public Library legally stored water when the Pine River was not on call.

Division 7 staff assisted local emergency management to monitor a potentially uncontrolled release from Haviland Lake due to the outlet structure failing.

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.

Water Commissioners regularly attended ditch company meetings held in their Districts. Additionally, Division 7 staff participated in the local "Water Fair" used to educate hundreds of schoolchildren on where water comes from, what it is used for, and how it gets to their homes and farms.

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 attended conferences presented by the Southwestern Water Conservation District, Colorado Water Officials Association, and Colorado Water Congress.

7 Highlights

7.1 2020 Abandonment

Division 7 staff assisted in the 2020 abandonment process. Water Commissioners completed field investigations for the water rights that were identified as potentially being included on the 2020 abandonment list.

7.2 Important Court Cases

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

7.2.1 10CW98 – La Plata Water Conservancy District

A decree was entered in this case. La Plata Water Conservancy District filed an application for a finding of reasonable diligence for Long Hollow Reservoir and Recharge Basins used to fill Long Hollow Reservoir. The district has yet to complete an engineering study that computes the amount of recharge credit available in Long Hollow Reservoir and the timing delay.

7.2.2 18CW3052 – Montezuma Valley Irrigation Company

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 Narraguinnep 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.

7.2.3 19CW3005 – Montezuma Valley Irrigation Company

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.

7.2.4 19CW3028 – Colorado Water Conservation Board

The Colorado Water Conservation Board ("CWCB") filed an application for water rights to preserve the natural environment to a reasonable degree, also known as an in-stream flow. The CWCB filed for all unappropriated flow on the Himes Creek drainage.

7.3 Hydrography

7.3.1 La Plata River Gaging Improvements

Division 7 Hydrographers and the District 33 Water Commissioner are working to install gages with telemetry on some of the ditches on the La Plata River that have outdated equipment. This project involved funds from the Animas La Plata Water Conservancy District.

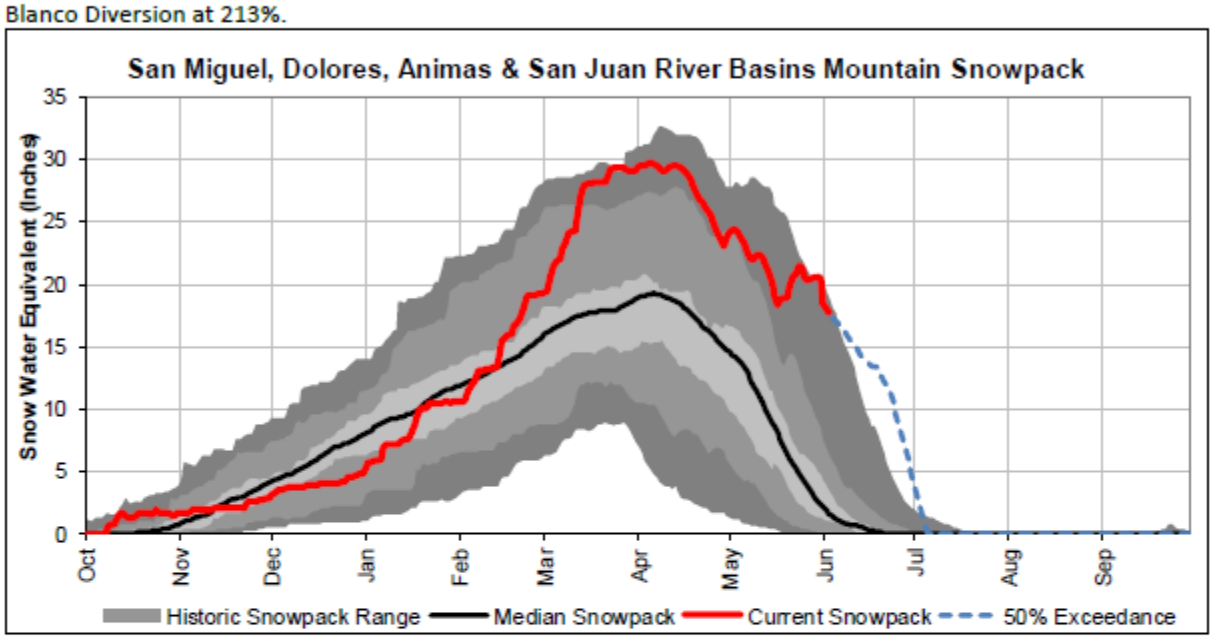
Figure 2: Hydrographer at La Plata River at Hesperus (March 5)

8 *Appendix*

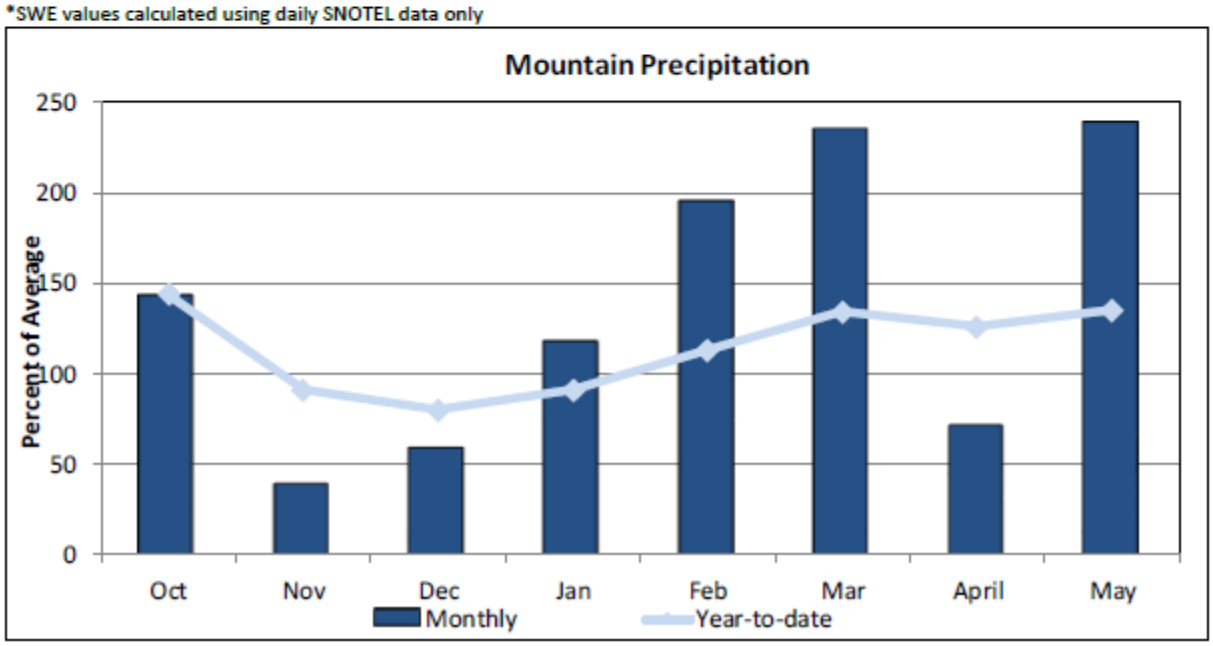
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS

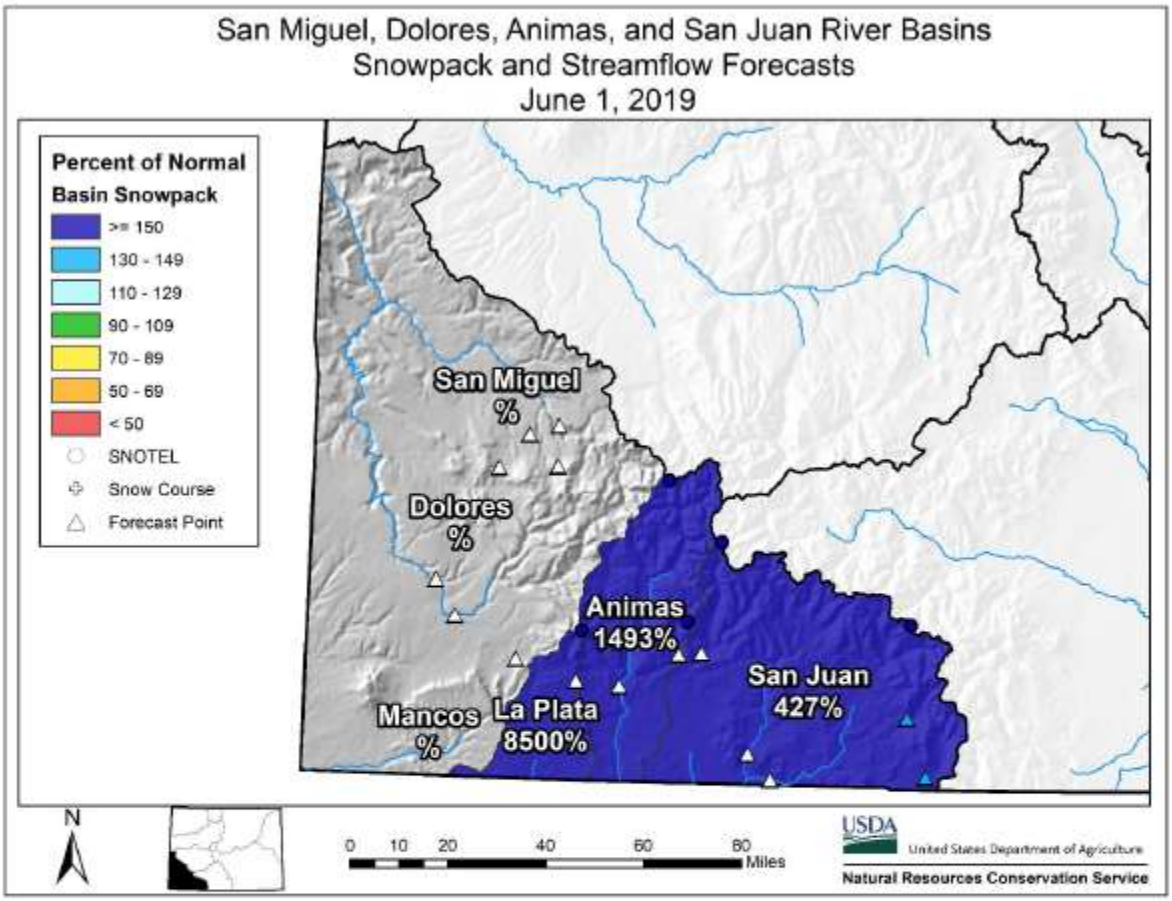
June 1, 2019

Snowpack in the combined southwest river basins is above normal at 1002% of median. Precipitation for May was 238% of average which brings water year-to-date precipitation to 135% of average. Reservoir storage at the end of May was 88% of average compared to 75% last year. Available streamflow forecasts include the Navajo River at Oso Diversion which is 190% of average for the June through July period and Rio Blanco at Blanco Diversion at 213%.



*SWE values calculated using daily SNOTEL data only

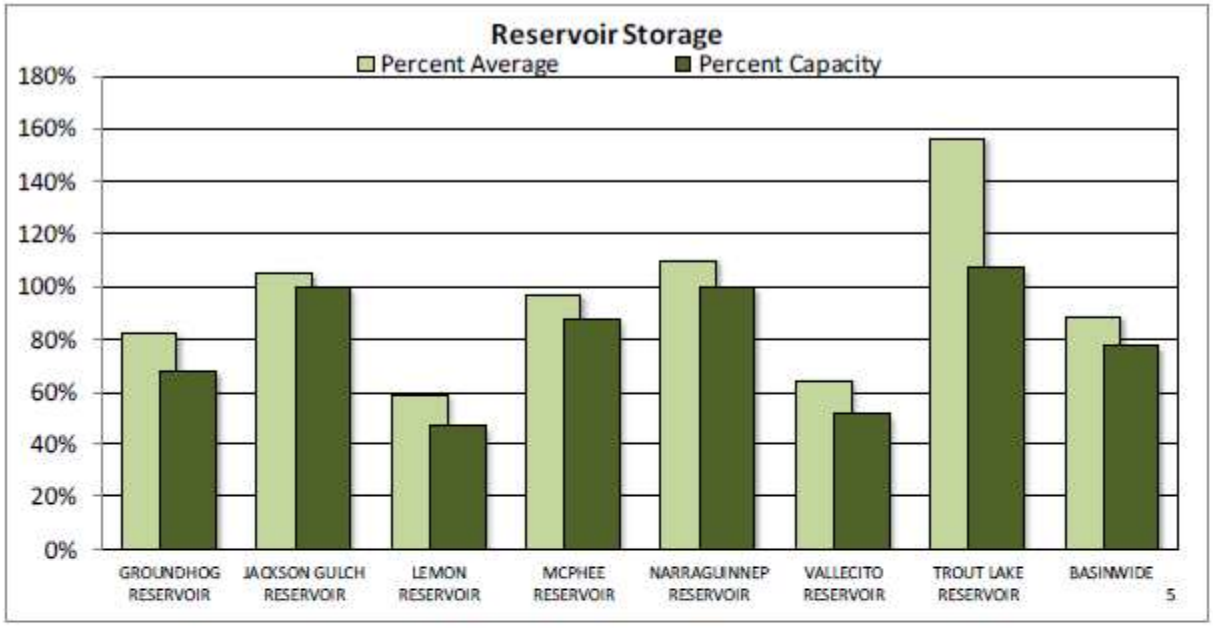




Watershed Snowpack Analysis June 1st, 2019

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

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



Reservoir Storage End of May 2019

Reservoir	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
GROUNDHOG RESERVOIR	14.9	13.4	18.2	22.0
JACKSON GULCH RESERVOIR	10.0	5.2	9.5	10.0
LEMON RESERVOIR	18.9	18.5	32.1	40.0
MCPHEE RESERVOIR	333.7	257.2	344.7	381.0
NARRAGUINNEP RESERVOIR	19.0	10.9	17.3	19.0
VALLECITO RESERVOIR	64.5	84.4	100.7	126.0
TROUT LAKE RESERVOIR	3.4	2.8	2.2	3.2
BASINWIDE	464.3	392.3	524.7	601.2
Number of Reservoirs	7	7	7	7