



# Division 7 Annual Report

Water Year 2018  
(November 1, 2017 - October 31, 2018)

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## **1 Water Supply**

Snowpack in the San Juan and Dolores River Basins during the winter of 2017-2018 (Water Year 2018) was one of the worst years on record. Typically, peak flows occur in June. However, by June 1, 2018, the measured snowpack was at 0%, indicating a peak runoff much earlier than normal.

The winter saw only 45% of the average precipitation. The precipitation in October, November, and December was less than 20% of average for each month. February was the only month that received 100% of the average precipitation.

Although most reservoirs were not able to store significant water, there was a good amount of water carried over from a wet 2017. Despite the fact the reservoirs did not allow for a full delivery of water in most areas, the reservoirs were an important tool early in the irrigation year to provide water.

As a result of the dry weather, the “416 Fire” started north of Durango. The fire started on June 1 and burned over 55,000 acres. The fire was finally declared 100% contained on July 31. The summer of 2018 was not a year worth repeating.



**Figure 1: Fire debris collecting on the Hermosa Company Ditch headgate, downstream from 416 Fire**

## **2 Surface Water Issues**

Due to the extreme drought, surface water administration was very demanding compared to most years. In many of the basins, only the senior water right holders remained in priority and diverted water. Some rivers, such as the Animas, saw what might have been the lowest flow ever recorded. In basins with reservoirs, the allocation of storage water was generally below average. However, 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.



**Figure 2: Animas River below Animas Consolidated Ditch (September 2018)**

There were 166 administrative calls placed on 14 different stream systems in Division 7. From the total, 15 of the calls were on McElmo Creek, 18 of the calls were on the Florida River, 23 of the calls were on the La Plata River, 32 of the calls were on the Mancos River and 60 of the calls were on the Pine River. Administrative calls also occurred on Chicken Creek, Coal Creek, Devil Creek, Elbert Creek, Falls Creek, Fourmile Creek, Junction Creek, Oil Well Creek, and San Juan River. Of note, the in-stream flow call placed by the Colorado Water Conservation Board on the San Juan River was the first recorded call on the San Juan River.

Vallecito Reservoir, with a capacity of 126,000 +/- acre-feet, did not fill this year. There were no releases made in the spring to make storage available for flood control. The reservoir contained 61,391 acre-feet at the start of the water year. The large amount of water released in the fall of 2017 for maintenance caused a low reservoir elevation at the start of the season. Vallecito Reservoir filled to a volume of 90,401 acre-feet on May 17, 2018 and later dropped to a low of 21,560 acre feet on September 29, 2018. Ending the 2018 water year and heading into the 2019 water year, Vallecito contained 26,654 acre-feet.



**Figure 3: Vallecito Reservoir on October 2, 2018**

McPhee Reservoir, with a capacity of 382,000 +/- acre-feet, contained 293,401 acre-feet at the start of the water year, which was also the maximum volume throughout the year. The spring runoff was not sufficient to allow McPhee to gain in elevation; the senior water rights demanded the river, preventing McPhee Reservoir from filling. There were no releases made to the Dolores River for boating opportunities. McPhee Reservoir dropped to a minimum elevation of 168,065 acre-feet on October 2, 2018. Ending the 2018 year and heading into the 2019 water year, McPhee Reservoir contained 169,760 acre-feet. 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 +/- acre-feet, did not fill this year. The reservoir contained 19,690 acre-feet to start the 2018 water year. Lemon Reservoir filled to a volume of 23,820 acre feet on May 14, 2018. Reservoir deliveries were made through July 7, 2018, at which point the releases from Lemon dropped to 20 cfs. Lemon Reservoir dropped to a minimum elevation of 6,021 acre-feet on October 1, 2018. Ending the 2018 water year and heading into the 2019 water year, Lemon Reservoir contained 7,280 acre-feet.



**Figure 4: Lemon Reservoir in October 2018**

Long Hollow Reservoir, with a capacity of 5,300 acre-feet, contained 1043 acre-feet at the start of the water year. Long Hollow Reservoir filled to a volume of 2313 acre-feet on April 8, 2018. Ending the 2018 water year and heading into the 2019 water year, Long Hollow Reservoir contained 195 acre-feet, which was also the minimum elevation of the year.

The San Juan - Chama Project, which diverts water from Colorado into New Mexico diverted 35,255 acre-feet during the year, which was 41% of average since diversions started in 1971. Only two other years (1977 and 2002) was less water diverted into New Mexico.

Other streams required administration that typically don't require administration. Junction Creek operated under futile conditions, where the Sites Ditch was allowed to divert while the Animas City ditch was placing a call. The San Juan River was subject to a in-stream flow placed by the Colorado Water Conservation Board. This was the first time a call on the San Juan River had been placed. And McElmo Creek went on call in April.

The Florida River above Lemon Reservoir dropped to a low of 4.3 cfs at the end of September and the beginning of October, the lowest in recent years. As a result, augmentation plans built on F-9, F-10, and F-11 priorities failed, and with the exception of the F-1 and F-2 priorities, the senior water rights owned by the City of Durango went unfulfilled.

### **3 Ground Water Issues**

There were 203 well permits issued in Division 7 in water year 2018. Of these, 163 were exempt well permits, 12 were non-exempt well permits, one rooftop precipitation collection permit, and 32 monitoring well permits were processed in the Durango office. There were also 36 non-exempt well permits, 6 monitoring well permits, 13 monitoring holes, 4 exempt well permits, 2 geothermal exchange permits and 42 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 2017 water 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 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 2018 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 the short water supply, a La Plata River Compact call by New Mexico was made very early this year compared to a normal year. A call was made on February 20, 2018 for 10 cfs maximum. A later call for 100 cfs was made on April 20, 2018.

The storage of water in Long Hollow Reservoir in the prior year was beneficial to irrigators as well as for Compact Delivery obligations. The irrigators upstream from the confluence of Long Hollow and the La Plata River exchanged water from 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.

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 until it was exhausted in late September.

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

### **4.2 Animas - La Plata Compact**

#### **4.2.1 *A-LP Release and Diversions***

24 AF of water was delivered from Ridges Basin Reservoir to Johnson Reservoir (Lake Durango) via the recently completed pump and pipeline. There were no flushing flow releases to Basin Creek. Evaporative losses from Ridges Basin Reservoir were replaced with 4387 AF of water pumped from the Durango Pumping Plant.

The City of Farmington made a request to the Animas-La Plata Operations, Maintenance and Replacement Association for a delivery of water from Lake Nighthorse on October 3, 2018. Farmington requested a total of 585 acre-feet over a 4 day period utilizing Basin Creek and the Animas River. The Division 7 office worked closely with counterparts in New Mexico to coordinate and account for the planned delivery. The request was rescinded following precipitation that occurred in October.

#### **4.2.2 *Lake Nighthorse - Lake Durango Pipeline Construction***

Construction on infrastructure to deliver water from Lake Nighthorse to the western part of La Plata County is continuing. La Plata West Water Authority expects completion of Phase 0 by December 2018. Phase 0 will pump water from Lake Nighthorse to Lake Durango. La Plata West Water Authority also is in the beginning stages of Phase 1, that will deliver water to the west beginning at Blue Hill and then heading South. The project is a joint venture with La Plata West Water Authority, the Southern Ute Indian Tribe, the Ute Mountain Ute Tribe, and Lake Durango Water Authority.





**Figure 5: Lake Nighthorse to Lake Durango Pipeline Construction**

#### **4.2.3 Lake Nighthorse - Recreation**

Lake Nighthorse officially opened for recreation on April 1, 2018. The City of Durango operates the lake.



**Figure 6: Lake Nighthorse Recreation**

## **5 Problems Solved**

### **5.1 Long Hollow Reservoir Exchange and La Plata River Administration**

This year was the fourth year that Long Hollow Reservoir has stored water, and all parties on the La Plata River were satisfied with 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.

A total of 13 ditches received 1713 acre-feet of exchange water, with the exchange period running from April 8 to June 17. Releases from the Compact pool began June 27 and continued through September 5. A total of 264 acre feet was released for Compact compliance.

Prior to utilizing the Long Hollow compact pool, the Treanor Ditch was used from June 17 to June 27 as an alternative route to deliver compact water from the upper river to New Mexico via Long Hollow and passing through the reservoir. This decision was made after determining that transit loss in the Treanor Ditch was less than for the HH Ditch. While Cherry Creek had been utilized in the past, it was not considered an option this year as it was a dry channel. While sending compact water down the Treanor Ditch, the call fluctuated between Hay Gulch #5 to no priority water. Hay Gulch exchanged all or a portion of its water during this time, depending on where the call was set. Observations showed that delivery of water down the Treanor became futile with 5 cfs at the headgate, indicated by a dry spot in the ditch and no detectable increase in flow at the gage above Long Hollow Reservoir. On June 27, Hay Gulch was out of exchange water, and with the transit loss from Hesperus to the Treanor headgate it was determined that with the low flows (6.47 cfs at Hesperus) it was no longer possible to deliver compact water via the Treanor. A futile call was made at this point and Hay Gulch was allowed to sweep the river and the river operated under split conditions. Compact obligation was fulfilled via releases from the Compact pool from this point forward.

In summary, Long Hollow Reservoir helped to precisely and reliably meet the compact delivery requirement, provide supplemental water to irrigators who weren't in priority, and keep senior irrigators in priority longer due to increased efficiencies. It is of note that in the prior year, 2017, the reservoir was not needed to make Compact delivery, therefore the 300 acre-foot pool was available to irrigators in 2018.

## **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.

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 presented at Water 101 and Water 202, forums to educate the public about water rights and water issues. The presentations were well attended and included a visit from retired Supreme Court Justice Gregory Hobbs.

Two Water Commissioners presented at the Four Corners Ag expo in Dolores, fielding many questions related to administration on the Dolores River and McPhee under an administrative call for in-stream flows from CWCB.

The Deputy State Engineer attended a meeting with Division Staff at the Marvel Grange for La Plata water users to become more familiar with administration of the La Plata. The construction of Long Hollow has changed how the river has been operated in the past.

Division staff attended various conferences, such as the Colorado Water Officials Association and Colorado Water Congress.

## **7 Highlights**

### **7.1 Abandonment**

There were no abandonment cases this year.

### **7.2 Important Court Cases**

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

#### **7.2.1 17CW3002 - Animas - La Plata OMR Association**

The Animas - La Plata Operations, Maintenance and Replacement Association (Association) filed for a change of water right so that the Association's ALP Project water right may be delivered on a direct flow basis to any point on the Animas River downstream of the Animas River below the Durango Pumping Plant gauge, including deliveries to the New Mexico state line for use in New Mexico. The applicants stipulated with all opposers. The New Mexico La Plata Conservancy District, the San Juan Water Commission and Navajo Nation are Project beneficiaries located in New Mexico. On May 16, 2018, a decree was issued granting the change of water right.

#### **7.2.2 18SA110 - Gary Sheek v. Roger Brooks**

Gary Sheek filed a case against Roger Brooks in the Colorado Supreme Court appealing decisions made in 16CW3008. The issues being appealed do not implicate the Division Engineer, and the Court granted the Division Engineer's application for dismissal.

#### **7.2.3 18CW3019, 18CW3020, and 18CW3021 - Appeal of Town of Bayfield SWSP**

The Southern Ute Indian Tribe, Pine River Irrigation District, and the Los Pinos Ditch Company filed three separate Petitions for Judicial Review, appealing the Colorado Division of Water Resources' approval of the Town of Bayfield's proposed Substitute Water Supply Plan (SWSP) in Case No. 15CW3017. The SWSP issued in June 2018 allows for additional water to be diverted at the Los Pinos Ditch for municipal use. The Water Judge ordered the consolidation of all cases. The parties agreed to attempt to reach a stipulation in case 15CW3017, which would moot the SWSP appeal.

### **7.3 Hydrography**

#### **7.3.1 Pioneer Ditch at the Colorado-New Mexico Stateline (PIODITCO)**

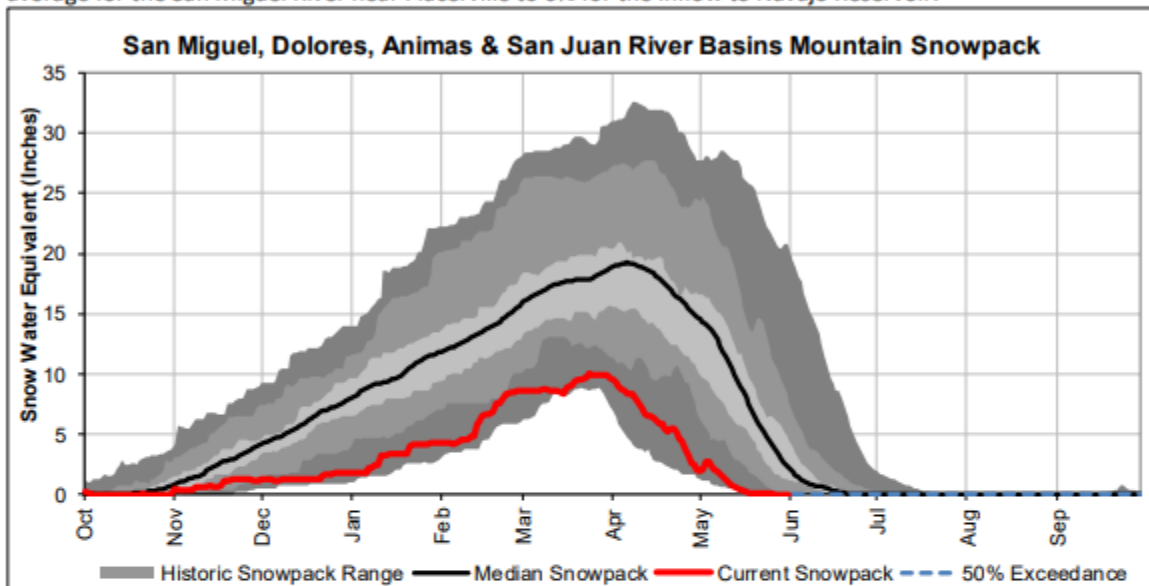
Staff has been coordinating the relocation of the Pioneer Ditch at the Colorado-New Mexico Stateline Gage to improve safety. This gage is important to the administration of the La Plata River Compact. Coordination with New Mexico and the Pioneer Ditch occurred and relocation may be possible in the next water year.

## 8 Appendix

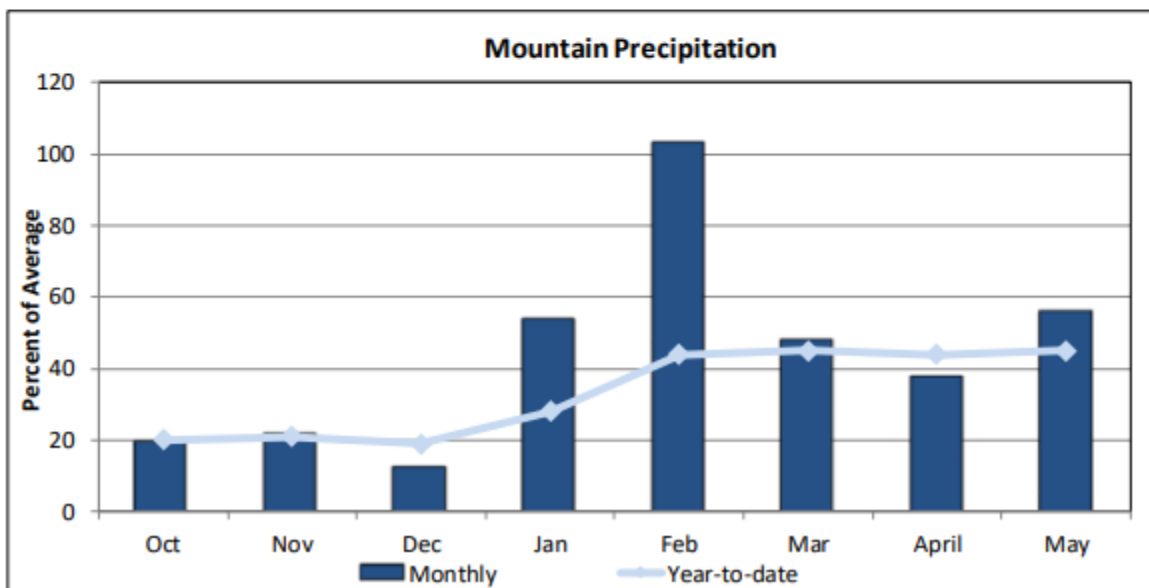
### SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS

June 1, 2018

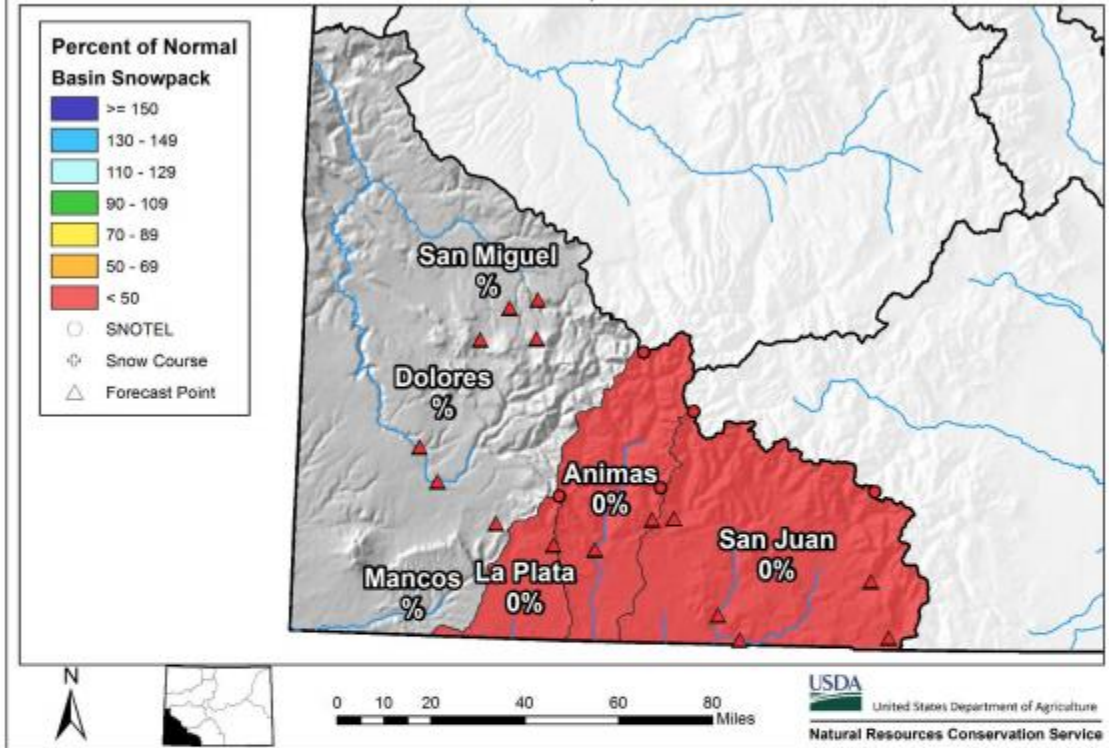
Snowpack in the combined southwest river basins is below normal at 0% of median. Precipitation for May was 56% of average which brings water year-to-date precipitation to 45% of average. Reservoir storage at the end of May was 75% of average compared to 108% last year. Current streamflow forecasts range from 23% of average for the San Miguel River near Placerville to 6% for the inflow to Navajo Reservoir.



\*SWE values calculated using daily SNOTEL data only



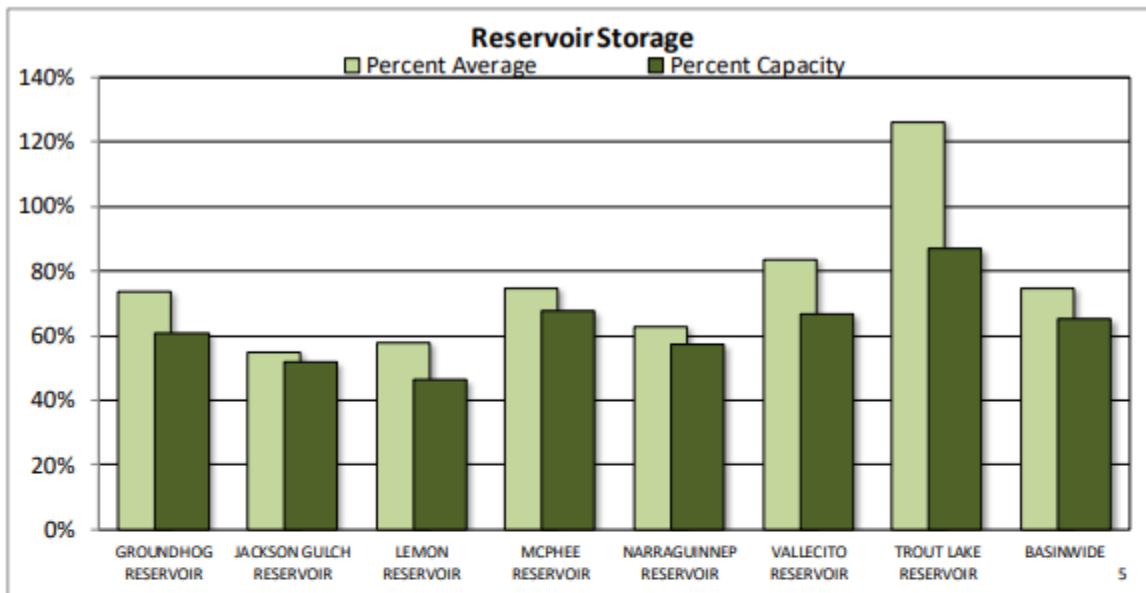
San Miguel, Dolores, Animas, and San Juan River Basins  
 Snowpack and Streamflow Forecasts  
 June 1, 2018



Watershed Snowpack Analysis June 1st, 2018

Sub-Basin	# of Sites	% Median	Last Year %	
			% Median	Median
Animas	9	0	0	267
Dolores	5	Median is 0		
San Miguel	3	Median is 0		
San Juan	3	0	0	127
<b>Basin-Wide Total</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>205</b>

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



**Reservoir Storage End of May 2018**

Reservoir	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
GROUNDHOG RESERVOIR	13.4	25.2	18.2	22.0
JACKSON GULCH RESERVOIR	5.2	10.0	9.5	10.0
LEMON RESERVOIR	18.5	36.0	32.1	40.0
MCPHEE RESERVOIR	257.2	367.1	344.7	381.0
NARRAGUINNEP RESERVOIR	10.9	18.9	17.3	19.0
VALLECITO RESERVOIR	84.4	109.1	100.7	126.0
TROUT LAKE RESERVOIR	2.8	2.1	2.2	3.2
<b>BASINWIDE</b>	<b>392.3</b>	<b>568.4</b>	<b>524.7</b>	<b>601.2</b>
Number of Reservoirs	7	7	7	7