

DIVISION 7

ANNUAL REPORT

WATER YEAR 2017

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Division of Water Resources
Division 7

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CONTENTS

1 WATER SUPPLY 1

2 SURFACE WATER ISSUES..... 2

3 GROUND WATER ISSUES 3

4 COMPACT ISSUES..... 4

4.1 La Plata River Compact Issues..... 4

4.2 Animas La-Plata Compact 4

 4.2.1 Basin Creek Release 4

 4.2.2 Lake Durango Pipeline Construction..... 6

5 PROBLEMS SOLVED 7

5.1 Long Hollow Reservoir Exchange and La Plata River Administration 7

6 COMMUNITY INVOLVEMENT 8

7 HIGHLIGHTS..... 9

7.1 Abandonment..... 9

7.2 Important Court Cases 9

 7.2.1 17CW3002 9

 7.2.2 12CW20 9

7.3 Hydrography 10

 7.3.1 Pioneer Ditch at the Colorado-New Mexico Stateline (PIODITCO)10

8 APPENDIX..... 11

1 Water Supply

Snowpack in the San Juan and Dolores River Basins during the winter of 2016-2017 (Water Year 2017) once again followed a more normal pattern compared to the recent dry years. The final snowpack prior to runoff in June was close to average and peak runoff occurred generally in June.

The winter began with a large amount of snow accumulating through January. In March and April, the temperatures were above average with very little precipitation, causing the snowpack to drop from above average to average values. Many rivers saw above average flows in March and April due to warm and dry weather. Average precipitation and cooler temperatures in May dampened the early run-off and delayed the peak runoff until June. Generally, an above average volume of runoff occurred this year, however with a large amount of runoff occurring in March and April, there was very little flooding caused by snowmelt.

Most reservoirs in the area were able to fill completely this year, including McPhee Reservoir. For the second year in a row, water released from McPhee Reservoir into the Dolores River provided a rare recreational opportunity for river users. Long Hollow Reservoir did not fill, but reached a volume of 2,932 acre-feet (AF) on June 12, surpassing the 769 AF volume reached in 2016.

There was minimal precipitation in June, resulting in wildfires in the area. Frequent rains in late July provided needed water to the area, and many reservoirs stored additional water during rainstorms that occurred in July and August.

2 Surface Water Issues

Due to the large runoff and precipitation late in the summer, surface water administration was generally less demanding compared to most years. However, administration on the La Plata River proved to be a challenge because this was the first year that a large amount of water was stored in Long Hollow Reservoir and available for exchange.

There were 102 administrative calls placed on 11 different stream systems in Division 7. From the total, 48 of the calls were on the La Plata River. Administrative calls also occurred on Cherry Creek, Chicken Creek, Coal Creek, Devil Creek, Florida River, Fourmile Creek, Los Pinos River, Mancos River, and Spring Creek.

Vallecito Reservoir, with a capacity of 126,000 +/- acre-feet, filled in June and made peak runoff releases of 1300 cfs. As is normal practice, a large amount of water was bypassed in the spring prior to filling. Experience gained previously in managing large peak flows proved useful this year, although the flows were lower than in prior years and aided by early spring reservoir releases and bypassed inflows. The reservoir contained 75,315 acre-feet at the start of the water year but dropped to 72,753 acre-feet on March 13, 2017 to allow space for runoff. Vallecito Reservoir filled to a volume of 125,823 acre-feet on June 26, 2016 and later dropped to a low of 60,005 acre-feet on October 19, 2017. Ending the 2017 water year and heading into the 2018 water year, Vallecito contained 61,223 acre-feet. A large amount of water was released in the fall to allow for maintenance, resulting in a lower than normal end of season storage.

McPhee Reservoir, with a capacity of 382,000 +/- acre-feet, contained 295,084 acre-feet at the start of the water year. McPhee Reservoir began filling rapidly in early March due to the early runoff. Releases made to the Dolores River in late March created additional storage and provided downstream boating opportunities among other benefits. A peak release of 4,000 cubic feet per second (cfs) made in early May 2017 lasted approximately 4 days. And releases less than 4,000 cfs continued through late June. On June 9, 2017, McPhee Reservoir reached capacity (approximately), and at the end of the 2017 water year contained 293,000 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, contained 19,810 acre-feet to start the 2017 water year. Lemon Reservoir filled to capacity on June 10, 2017 and later dropped to a low of 19,200 acre-feet on September 30, 2017. Ending the 2017 water year and heading into the 2018 water year, Lemon Reservoir contained 20,200 acre-feet. The maximum release from Lemon Reservoir was 750 cfs on April 20, 2017.

Long Hollow Reservoir, with a capacity of 5,300 acre-feet, contained 207 acre-feet at the start of the water year. Long Hollow Reservoir filled to a volume of 2,930 acre-feet on June 12, 2017 and dropped to a low of 957 acre-feet on September 26, 2017. Ending the 2017 water year and heading into the 2018 water year, Long Hollow Reservoir contained 1,040 acre-feet.

The San Juan - Chama Project, which diverts water from Colorado into New Mexico diverted 151,157 AF during the year, which was 172% of average since diversions started in 1971. Only two other years (1979 and 1973) was more water diverted into New Mexico.

3 Ground Water Issues

There were 169 well permits issued in Division 7 in calendar year 2017. Of these, 137 were exempt well permits, 17 were non-exempt well permits, and 15 monitoring well permits were processed in the Durango office. There were also 35 non-exempt well permits, 16 monitoring well permits, 13 monitoring holes, and 29 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.

The La Plata Water Conservancy District (LPWCD) worked to rebut the presumption of non-injury from exempt wells in the La Plata River basin. With assistance from Attorney General Office, a determination was made that the analysis does appear to confirm the tributary nature of the Red Mesa aquifer as a matter of hydrogeologic fact. Further, groundwater withdrawals from a well within the basin would result in an impact to the stream system necessarily follows from that determination. However, it was further determined that nothing in the analysis leads to the conclusion that the impact results in material injury. Further, it was concluded that rulemaking to preclude or otherwise limit the issuance of future exempt well permits in the La Plata River Basin or any other over-appropriated basin in Colorado would not be appropriate without further direction from the General Assembly. This is because the General Assembly did contemplate that groundwater withdrawals from exempt wells in a tributary aquifer would create some impact to the stream. However, concluding that the impact, in and of itself, rebuts the presumption of no injury so as to preclude the issuance of any exempt well permits in any over-appropriated basin would be inconsistent with the intent of the legislature.

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. Consultation with the Attorney General occurred continued in 2017 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 large runoff in the spring, a La Plata River Compact call by New Mexico was later in the year compared to a normal year. A call was made on May 23rd, 2017, and deliveries to New Mexico were successfully made for the entirety of the compact period.

Long Hollow Reservoir filled to a level much higher than the previous 2 years. This presented an opportunity to administer exchanges with Colorado irrigators on the La Plata River over an extended period. As a result, the use of Cherry Creek to convey Compact water was minimized and the majority of the 300 AF Long Hollow Reservoir compact pool was not used.

4.2 Animas La-Plata Compact

4.2.1 Basin Creek Release

No deliveries were made from Ridges Basin Reservoir to project beneficiaries. Evaporative losses were replaced from water pumped from the Animas Pumping Plant. The losses were not replaced last year.

The Bureau of Reclamation made a release from the reservoir to Basin Creek in June. The 100 cfs release was made to test the outlet works and to provide a flushing flow to the Basin Creek channel.



Figure 1: Drop structure on Basin Creek



Figure 2: Box culvert on Basin Creek at La Posta Road



Figure 3: Constructed meandering channel on Basin Creek

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 continued; however, it has not been completed. Construction delays due to environmental concerns and difficult construction conditions stalled construction. 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 4: Constructed of 16 inch pipeline from Lake Nighthorse to Lake Durago

5 Problems Solved

5.1 Long Hollow Reservoir Exchange and La Plata River Administration

Although this was the third year that Long Hollow Reservoir has stored water, this was the first year of heavy use. The large amount of water stored in Long Hollow Reservoir, the ability of the La Plata River to provide water for exchange in the upper reaches, along with the desire to exchange as much water as possible by the reservoir owner, created issues never before experienced on the La Plata River. A total of 16 ditches exchanged water from the reservoir, resulting in the release of 1,986 AF for exchange or direct diversion.

Exchange potential was calculated by first determining the compact requirement and then subtracting the flowrate in the La Plata River downstream from the confluence Cherry Creek. The exchange potential was further reduced by natural flows entering Long Hollow reservoir.

It became clear that return flows that accumulated to the La Plata River or Long Hollow reduced the exchange potential. There were concerns by water users that the return flows were indicative of wasteful irrigation practice. The Water Commissioners were diligent to curtail any wasteful diversion, however most return flows were non-wasteful return flows typically seen in past years.

There were complaints from some on the La Plata, most of which caused by the operation of a new reservoir in a setting that has an extensive history and scrutiny. Some senior water right holders were disgruntled when a junior water right was diverting by exchange and at the same time their senior water right was curtailed. In the mean time, the La Plata Water Conservancy District thought there should be more exchange potential. Red Mesa Ward Reservoir was not allowed to store water in September and October because their *refill* right is junior to the storage right owned by Long Hollow Reservoir.

In summary, the Long Hollow Reservoir provided a tool to more precisely and reliably meet the compact delivery requirement. The majority of the over-delivery to New Mexico was during the off-call run-off period, when all ditches in Colorado were in priority. The La Plata River was never administered as a split river, and therefore the 300 acre-foot Long Hollow Reservoir "Compact Pool" was not used, and the storage carry-over will benefit all storage users in the coming year.

6 Community Involvement

Division 7 strived to be involved in the community in 2017. 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.

The Division 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.

Division staff attended various conferences, such as the Ditch and Reservoir Company Alliance Convention, 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

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 Division 7 provided a consultation to the Water Court. The case remained open at the end of the year.

7.2.2 12CW20

A recent bathymetric survey revealed additional storage capacity in Groundhog Reservoir and an engineering study to determine the safe storage level of the dam. In response, the Montezuma Valley Irrigation Company (MVIC) filed for an additional storage right. After years of effort by MVIC, opposers and DWR, it is clear the case will be resolved. To address DWR concerns, MVIC constructed a grade beam along the spillway that indicates the maximum safe storage level allowed.



Figure 4: Groundhog Reservoir Grade Beam

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, 2017

Snowpack in the combined southwest river basins is above normal at 205% of median. Precipitation for May was 114% of average which brings water year-to-date precipitation to 109% of average. Reservoir storage at the end of May was 108% of average compared to 110% last year. Current streamflow forecasts range from 123% of average for the Mancos River near Mancos to 85% for the inflow to Lemon Reservoir.

