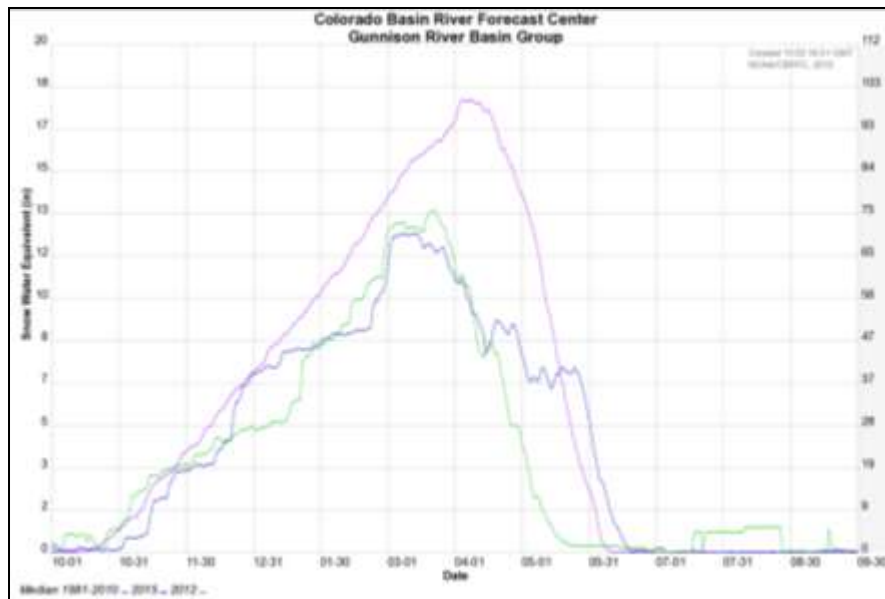


Water Supply

The 2015 water year got off to a rough start with snow accumulation at record lows and by mid-March, runoff conditions for 2015 were beginning to look like a repeat of 2012, which was one of the worst water supply years on record. The spring snowmelt began in mid-March with unseasonably warm conditions, and by mid-April basinwide water supply conditions were looking to be very dismal and water users were bracing for the worst. Winter seemed to return with a vengeance in mid-April and the April through May precipitation coupled with a delayed runoff due to a cooling trend salvaged the irrigation season. While the peak snow pack was only 70 percent of normal basin wide, the precipitation that occurred in April and May filled reservoirs and streams just when irrigators needed it the most. The weather conditions were quite an anomaly during the spring with precipitation at 200-300 percent of normal across Colorado. As you can see from the graph below, the timing of the runoff in 2015 was extended well into June, significantly later than average. Such timing is very favorable for meeting irrigation demands. Soil moisture conditions were favorable going into winter, which also helped improve runoff totals.

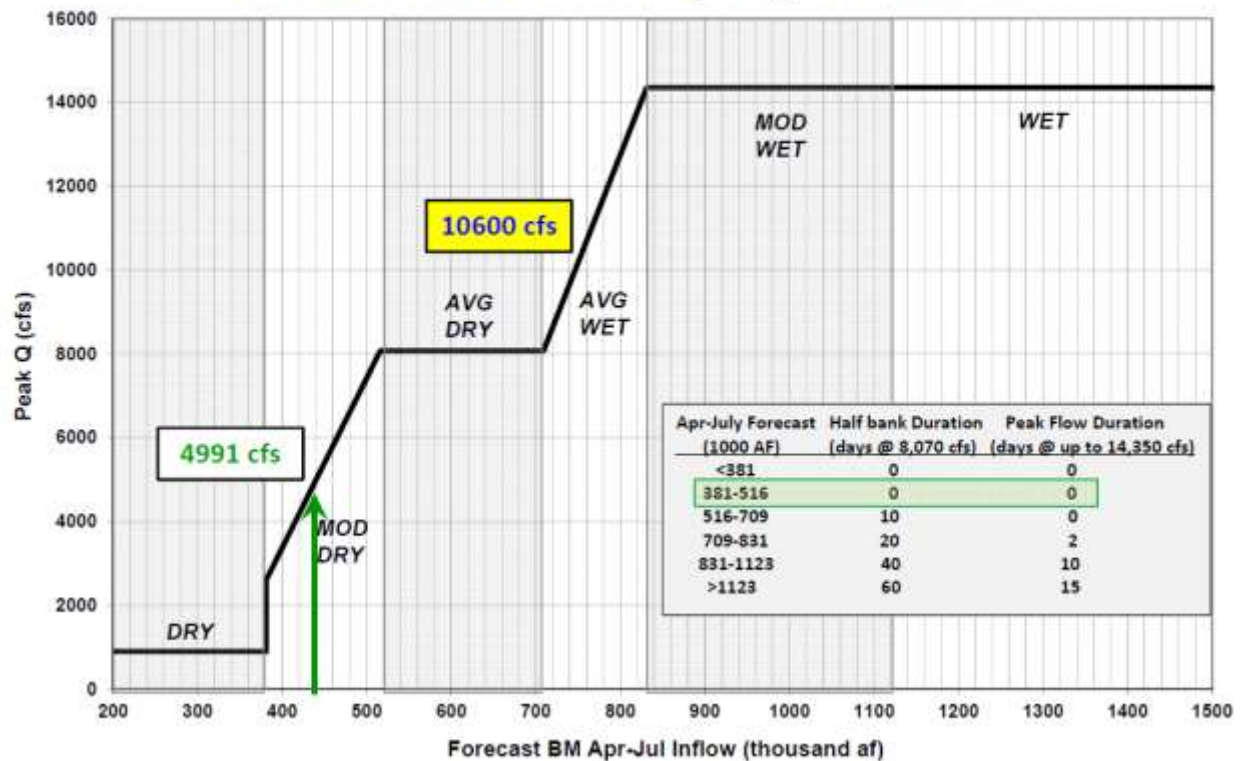


In addition to the late snow and heavy rain in April, May, and June, the Gunnison Basin received a good monsoon season in July and August, adding significantly to storage supplies. Base flows on all streams in the Gunnison Basin remained at or above normal flow rates for the most of the irrigation season. Many reservoirs were also able to store water in priority before the reservoir fill season began on November 1st, which will be very helpful for water supply conditions during the 2016 irrigation season. In summary, even though the snowpack conditions were well below normal, near 70 percent, the very wet spring improved water supply conditions to just over 100 percent of normal. As a result, the late runoff which extended well into June postponed most typical river calls which occur in June on many streams throughout the basin. Some streams such as the San Miguel River had no river call throughout the entire irrigation season which is not common.

Surface Water Administration

The April-through-July forecasted inflow to the Aspinall Unit (Blue Mesa, Morrow Point, and Crystal Reservoirs) was a dismal 73 percent of the 30-year median seasonal peak, only 440,000 acre-feet, categorizing the season as a “moderately dry” year for storage management purposes under the Record of Decision for the operation of the Aspinall Unit. This would rank 2015 in the bottom one-third of runoff records. However, due to the late April, May, and June precipitation, the actual April through July runoff volume into Blue Mesa Reservoir finally measured at 708,000 acre-feet. Based on the Colorado Basin River Forecast Center’s May 1st forecasted inflows into Blue Mesa Reservoir, the target peak flow in the critical stream reach of the lower Gunnison River for 2015 was 4,991 cfs as measured at the Whitewater stream gage, shown in the chart below. However, due to such high inflows during May and June, the peak was actually accomplished by normal releases from Crystal Reservoir, combined with tributary runoff peaks on the North Fork River and Uncompahgre River resulting in a peak flow being measured at the Whitewater stream gage of just over 5,000 cfs on May 6th.

2015 Peak Flow and Duration Day Targets at Whitewater



Again, each year, the Bureau of Reclamation attempts to meet the peak flow target on the critical habitat stretch of the lower Gunnison River as measured at the river gage at the little town of Whitewater at the lower end of that stream reach. In addition, there is a duration component involved with the releases from the Aspinall Unit as show in the inset table on the chart above. For example, in 2015, the peak flow to meet at the Whitewater gage was 4,991 cfs with no duration requirement.

As explained above, the delayed runoff conditions coupled with record rainfall in May and June for much of the great basin and certainly the Gunnison River Basin resulted in much more inflow into Blue Mesa Reservoir than could have been forecasted by the snowmelt runoff alone.

Taylor Park Reservoir had its first fill account filled at the beginning of the fill season and the second fill account in Taylor Park was filled by the last week of June. Given the ample water supply conditions in the Upper Gunnison River basin, the Uncompahgre Valley Water Users Association was able to provide 100 percent supply to its users in 2015. There was no chance of a call on the Uncompahgre River during 2014 due to the sufficient supply through the Gunnison Tunnel and thanks in part to the late spring snows and cool spring weather which provided for more prolonged runoff conditions than expected.

In District 40, the runoff conditions from the Grand Mesa were less than average, but certainly better than the previous two years and carryover storage was also improved. Water users did not need to start using reservoir water this year until July. Reservoir storage is critical in this area, thus the hundreds of reservoirs constructed on the Grand Mesa. Late March and early April precipitation helped to delay the timing of the runoff and reservoirs were able to fill prior to the main stream systems (Ward Creek and Surface Creek) going on call. The season ended with significant rainfall and significant carryover storage from 23 percent on the Youngs Creek drainage (which is normal) to 62 percent at the Granby reservoirs. Fruitgrowers Reservoir filled in priority over the winter due to the increased base flows from the monsoon season. In addition, the twenty-nine reservoirs on Leroux Creek system were able to fill during the runoff and went into the next fill season in good shape.

Paonia Reservoir dominates river operations on the North Fork River during irrigation season and the storage water is primarily owned by the Fire Mountain Canal Company. The Fire Mountain Canal relies on natural flow during the spring until the runoff season ends; then it relies on storage out of Paonia Reservoir. The North Fork Farmer's Ditch placed a call on the North Fork River on July 27, which calls out the Fire Mountain Canal. This action is typical of a normal water administration year.

In water District 60, the San Miguel River held up surprisingly well and there were no calls by the downstream irrigators (namely the Highline Canal) on the San Miguel River in 2015.

Groundwater Administration

The Well Permitting Program in Division 4 continues to provide timely issuance of exempt well permits. There were 217 well permits issued within Division 4 during the 2015 water year, a decrease from the 276 permits issued the previous year. 198 of the total 217 permits were exempt well permits issued by Scott King, the Division 4 well commissioner. The remaining 19 non-exempt permits were issued by the Divisions 456 Team staff out of the Denver Division of Water Resources Office. The Division 4 Office will continue issuing exempt well permits for the foreseeable future.

Water District 40 is the largest district and much development relies on individual wells for water supply. Similarly, development and growth in Water Districts 59 and 60 rely on individual wells for water supply. Due to the availability of a treated potable water supply throughout the Uncompahgre Valley, comparatively fewer domestic use wells are drilled in Districts 41 and 68.

As all exempt well permits in Division 4 were issued out of the Montrose office, staff has spent a considerable amount of time identifying and correcting information in the well permit database. The Well Commissioner has also undertaken several GIS projects involving this database that is proving very useful in getting parcel information from the counties in a useable form and moving toward replacing the hand drawing process on the paper maps. Use of Aquamap has allowed the Well Commissioner to use GIS parcel data to easily identify parcels that are locked up with a permit. His use of GIS data continues to expand to make him more efficient in approving and tracking well permit applications.

Hydrographic Activities

Div 4 has thirty-one Satellite Monitoring Stations (SMS), an increase of two additional SMS gages this season. Eleven of these gaging stations are record gages that are published annually. The data from these stations may all be found on the *Colorado's Surface Water Conditions* web site. We cooperate with the US Bureau of Reclamation at four sites and publish two of these. Hydrographer Jerry Thrush continues to provide hydrographic support for this Division. With the assistance of several Water Commissioners, Jerry maintains the eleven published gages, twenty-five administrative gages and keeps satellite monitoring equipment maintained. In 2015, a total of 219 measurements were made by Jerry and the water commissioners that assist him.

Division 4 has experimented with replacing Stage Discharge Recorders with Radar Water Level Sensors at several stations with excellent results. The radar units are more expensive than the SDRs but they require less maintenance and there are fewer electronic components associated with the system, which translates to less maintenance.

Jerry led an informal training session this year at the Cedaredge Field Office with the water commissioners who assist him concerning communication with DCPs and going over proper field procedures. Five water commissioners performed a total of 109 measurements, some administrative only, others for published records.

Personnel

Division 4 suffered the tragic loss of Richard Rozman as a result of injuries he sustained in an auto collision in May of 2015 at the age of 72. The Rozman family settled in the Crested Butte valley in the late 1800's and raised cattle and hay there for a hundred years. Richard's name is synonymous with "water commissioner" and he was a very well respected member of the community, an ambassador if you will, between the old hard scrabble ranchers and miners and the new recreational/skiing population. We all miss Richard dearly and will always remember him for his gentle spirit and unwavering commitment to his family, job, and his community. Thomas Rozman replaced Richard as the lead water commissioner in Water District 59. Perry Anderson, another local from the Upper Gunnison area is now the deputy replacement in District 59 backfilling Thomas Rozman's former position. Lynne Bixler, lead water commissioner of District 42 (Kannah Creek and the Lower Gunnison River) retired after a 22-year career with the Division of Water Resources. Lynne also served as the Division's database coordinator and water rights tabulation specialist. The past twenty years brought vast changes in technology which affected and changed the way we have done business at DWR and Lynne accepted and grew through the upgrades that have made our information management more accurate, timely, and more available to the public than in years past. Luke Reschke, the lead water commissioner

in Districts 41/62 replaced Lynne Bixler as the new lead in District 42. Luke is very technology oriented and will take on the database manager duties as well.

Community Involvement

Past experience has revealed the extreme importance of having respectful and trusting relationships with the variety of water use organizations and members of the community. Without such trust and respect, this office would have limited effectiveness. Division 4 appears to be somewhat unique, wherein the major water user groups work together with the government organizations for the betterment of the basin. It is a pleasure to be a part of that cooperation.

The Division 4 staff was greatly involved in 2015 with our water users and we see such interaction as an increasingly important part of our responsibility as water stewards. To this end, we frequently attended meetings of the Upper Gunnison River Water Conservancy District, Tri-County Water Conservancy District, North-Fork Water Conservancy District, Uncompahgre Valley Water Users Association and its Board of Directors, Farmers Water Development, Surface Creek Ditch and Reservoir Company, Granby Ditch and Reservoir Company, Big Ditch Company and Park Reservoir Company, Overland Ditch and Reservoir Company, and other water interest groups.

The Division Engineer consistently attended meetings of the Colorado Water Conservation Board, Southwest Water Conservation District in Durango, US Forest Service, Bureau of Land Management, and the US Bureau of Reclamation. Not only is valuable input offered, there is an opportunity to be informed of many other basin issues potentially affecting this office.

Our public involvement included participation on the Gunnison and San Miguel Basin Roundtables, both for the Statewide Water Supply initiative, or SWSI, and the Interbasin Compact Committee. We have worked closely with both the Executive Director's Office of DNR as well as the Colorado Water Conservation Board in providing a local perspective of basin water issues. We helped identify existing water supplies and pointed out areas where future growth might be faced with water shortages.

Many Water Commissioners attend local water user meetings in their communities, a practice strongly encouraged by this office. As they are the local water experts in the area, they can provide local knowledge and valuable input.