# Aspinall Unit Operations Meeting August 16, 2018 – 1:00 PM

**Background:** A Record of Decision for the Aspinall Unit Operations Environmental Impact Statement was signed on May 3, 2012. The EIS modifies the operations of the Aspinall Unit to provide sufficient releases of water at times, quantities, and durations necessary to avoid jeopardy to endangered fish species and adverse modification of their designated critical habitat while maintaining and continuing to meet authorized purposes of the Aspinall Unit. Meetings regarding the operations of the Aspinall Unit are open to stakeholders, and take place triannually, with meetings typically occurring in January, April, and August of each year.

# Aspinall Unit Operations – Erik Knight (USBR)

<u>Spring Runoff Conditions:</u> The May 1<sup>st</sup> forecast for Blue Mesa Inflow was 350,000 AF, placing Water Year 2018 Aspinall Operations within the threshold of the Dry year category. Actual inflow into Blue Mesa was approximately 238,000 AF. This amount of inflow would still place operations in a Dry year category.

<u>Black Canyon Peak and Lower Gunnison River Targets:</u> Based on a May 1<sup>st</sup> forecasted inflow of 350,000 AF, the Black Canyon peak flow requirement was 987 cfs. On May 14-15, there was a 1,010 cfs 24-hour peak flow. The peak flow exceeded the Black Canyon peak flow requirement due to the need to release sufficient water from Blue Mesa to meet targets at the Whitewater gage.

The baseflow at Whitewater during a Dry year is described in the figure below.

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	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Wet	1050	1050	1050	1050	1050	1500	1500	1500	1050	1050	1050	1050
Mod Wet	1050	1050	1050	1050	1050	1500	1500	1500	1050	1050	1050	1050
Avg Wet	1050	1050	1050	1050	1050	1500	1500	1050	1050	1050	1050	1050
Avg Dry	1050	1050	1050	1050	1050	1500	1500	1050	1050	1050	1050	1050
Mod Dry*	750	750	750/790	750/890	750/890	1050	1050	1050	750/890	750/790	750/790	750
Dry*	750	750	750/790	750/890	750/890	1050	1050	750/890	750/890	750/790	750/790	750

<sup>\*</sup>During March through November in Moderately Dry and Dry type years, additional releases will be made as necessary to provide flows above the 750 cfs anticipated to be diverted by the Redlands Water and Power Company, for the fish ladder and fish screen as shown.

# **Drought Rules**

During Dry and Moderately Dry years, if Blue Mesa Reservoir content drops below 600,000 af, the Whitewater baseflow target is reduced from 1050 cfs to 900 cfs until Blue Mesa Reservoir content exceeds 600,000 af

Flows of 890 cfs and 900 cfs, as appropriate, were maintained at the Whitewater gage over the spring and summer months. The Gunnison River at Whitewater reached a peak of 2,030 cfs on May 14<sup>th</sup>. Flows reached this level primarily due to the contribution of flow from the North Fork of the Gunnison River. For April to July forecasts of less than 381,000 AF, there are no half bank or peak flow duration days required at Whitewater.

<u>Summer/Fall Operations</u>: Blue Mesa is currently 45% full. The Dry year baseflow target from September 2018 through May 2019 ranges from 890-750 cfs through the end of 2018. Reclamation is continuing to make releases to hit the 890 cfs baseflow because the fish screen and passage at Redlands is still operating and actively being used by Pikeminnow. As soon as the fish passage is no longer being utilized by the endangered fish, Reclamation will cut flows to the lower level (750 cfs).

Other reservoirs in the Gunnison Basin have been impacted by the drought this year, with the lowest reservoir level being Paonia at 7% capacity. Ridgway reservoir is experiencing its lowest levels on record. They are currently not able to run their hydropower units, but will be able to begin running the small generator once they are passing inflow.

# **Spring Flows for Rainbow Trout – Marshall Pendergrass (TU)**

Trout Unlimited (TU) re-emphasized the importance of the Black Canyon rainbow trout fishery, and the importance of spring spawning. In April 2018, flows went from about 600 cfs in April down to about 400 cfs, going into the drought season with higher temperatures, lower flows, lack of cloud cover, etc. TU started seeing rainbow trout going down to beds in mid-March to early April. Due to the weather, there was a wider spawning season this year. When the flows lowered to 400 cfs, trout were already down to beds and this stranded a lot of fish. TU is seeing a lot of rainbow fry right now, so this did not have as bad an effect to the fishery as previously thought. TU would recommend coming into the spawn season around 300 – 350 cfs and keep it there rather than drop flows.

Colorado Parks and Wildlife (CPW) acknowledged that there may be some misunderstanding on spawning times. While spawning at the East Portal is typically from mid-April to May, spawning times are different down lower in the Gunnison Gorge. As a whole, the spawning window spans from mid-March to May, so it is important for flows to not drop a lot during that period. CPW is performing surveys this week to determine the effect the drop may have had on the fish, and would be willing to present their findings at the January meeting. Last year is the first year since the whirling disease outbreak where fry were found at all ten sampling sites. Anglers are catching some 8" – 12" fish, which hasn't really happened over the past 20 years.

Reclamation clarified they were operating under the thought that flows need to drop before the spawn, thinking the spawning season started around April 15<sup>th</sup>. Reclamation acknowledged the spawn can start earlier, and will be aware that flow drops should occur earlier, before mid-March.

#### Weather Outlook – Aldis Strautins (NWS)

2018 was one of the warmest, driest years on record. An atmospheric ridge which can typically develop over Colorado and adjacent states was aligned differently than usual, pushing moisture away from the area. The Gunnison River basin is now in an extreme drought.

The ENSO outlook projects neutral conditions, but on the positive side of neutral (headed up to El Nino). During an El Nino year, conditions are generally dry and warm north of Colorado and wet and cool south of Colorado.

#### **Special Flow Requests and Discussion**

CPW asked about releases the first week of October, as they are looking at sampling. Flows will likely be lower than what they are now; maybe 400 to 500 cfs. CPW may not sample this year due to the low flows.

The Crystal power plant experiences cavitation between 1,250 and 1,400 cfs, so releases must be made below or above these numbers.

# **Reports of Agencies/Organizations**

<u>CDWR</u> – Desperation due to lack of water, ranchers selling cattle, orchardist trying to keep things alive; worst in the North Fork Valley. Tensions are high and problem solving is the challenge among water users. Deeper calls than have been seen in many years, almost all streams are on full administration. The general public is learning a lot more this year about water rights and being force fed. Lots of empty reservoirs, especially on the Grand Mesa. Most of the water is moved from the upper reservoirs down to the control reservoirs. Average storage of Grand Mesa reservoirs was in the 50-60% range. San Miguel River system is at all-time lows as well.

<u>CRWCD</u> – The annual River District seminar is being held September 14 in Grand Junction. Registration is open. The Bureau of Reclamation Commissioner has been invited, but the River District does not know yet if she is coming. The River District is concerned about carry over storage and is looking for creative ways to provide for storage recovery. CRWCD is hosting their first ever Public Officials webinar on August 29. Sign up for the webinar is on the CRWCD website.

<u>NPS</u> – Boat ramps are slated to close soon due to reservoir elevation. Visitor numbers are up this summer, likely due to early and continued warm weather. The Elk Creek marina project is being finalized, should be done by end of September. Last step is to get electricity to the marina slips. Appearance is much improved over the past; turning the attention to the Lake Fork marina, as it is in rough shape. Invested a lot to keep invasive species out. AIS coordinator has left, former employer has been hired as a replacement in early September.

### <u>TU</u> – Nothing additional to add.

<u>CWCB</u> – Lake Powell will continue to drop significantly. There was a nine million AF release this year, and another will happen next year due to the low level of Lake Mead. The first part of the Upper Basin Contingency Plan is to look at extra storage in other CRSP reservoirs, such as Flaming Gorge. There is talk of a demand management program in the future, and this would take years to figure out. The next CWCB board meeting is the 3<sup>rd</sup> week of September in Steamboat.

<u>CPW</u> – CPW is monitoring water temperatures on streams. There have been voluntary closures on Tomichi Creek, where water temperatures have reached up to 75°. The Gunnison is maintaining better conditions, with water temperatures below 70° for most of the river. CPW is monitoring Kokanee in Blue Mesa, and is keeping an eye on algae blooms. The Ridgway small mouth bass tournament was held in July, and approximately 1,800 small mouth bass were removed. Over the four years of holding the tournament, the adult small mouth bass population dropped from 3,800 to 1,700.

<u>UVWUA</u> – Jesse Davidson is the water master north of Olathe to Delta, and this is his first Operations meeting. It has been a trying year. UVWUA had been running their system at 70%, but dropped to 60% last week. All the crops are coming in about two weeks ahead of time, so there is a good chance that demand will drop and UVWUA can finish out the year at 60%. Crops are about 2 weeks ahead of time. Dry beans and corn are being harvested and demand should tail off. Turn off tunnel on November 1<sup>st</sup>.

<u>Upper Gunnison</u> – Lake San Cristóbal will be releasing some water. 200 AF pool can be used for CWCB in-stream flow in Lake Fork. Releasing water out of reservoir above Crested Butte to meet CWCB instream flow. Ranchers are selling cattle, feed cost is high, tough year in the upper basin.

<u>WAPA</u> – There has been higher temperatures, especially in the south. Energy prices are extremely high. There has been a plague of wildfires, resulting in major transmission lines needing to be shut down.

<u>BLM</u> – Good news, boating activities have increased on the Gunnison gorge (probably busiest year). Camps have been full almost every night, due to low flow in other areas. Especially during the hatch, but continues to be busy due to fun and usable level. It seems like lower water years draw in more anglers during the hatch.

<u>USGS</u> – The USGS is seeing more awareness of water being a limited resource, so if there is anything positive about the drought, it's that people are becoming more aware that the resource is limited. USGS and Reclamation are discussing installing six additional precipitation gages in western Colorado. Hopefully this will provide information to make even better water management decisions. The gages will probably be installed this fall.

Power Office – Nothing to report.

<u>Tri-County</u> – The exchange pool in Ridgway was increased from 9k to 10k AF, given the projected deliveries to Fairview by UVWUA. UVWUA has used all of their irrigation pool and have ~900k AF left in the exchange pool. A call will remain on the river after the exchange pool is exhausted and TCW will pass inflow (minus evaporation). No current hydropower due to problematic release range; will turn on small generator when release is further reduced (likely week of Aug 19<sup>th</sup>). Releases will be passing inflow for the remainder of irrigation season.

The next Aspinall Operations Meeting will be held on January 17, 2018 in Montrose, CO.