

Aspinall Unit Operations Meeting August 17, 2017 – 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 tri-annually, with meetings typically occurring in January, April, and August of each year.

Runoff Forecast Discussion – Greg Smith (CBRFC)

A record wet January resulted in significant snowpack conditions early in the season, which created a large increase in the forecasts into February. March was dry, and record heat caused significant snowmelt and record runoff. An end of March storm resulted in a minor rebound. April was a dry month, with rapid snowmelt creating high runoff volumes. This resulted in a forecast decrease, and the May – July runoff was expected to be near 118% of average. A very cold storm system in mid-May caused late-February-like temperatures in the area, and therefore runoff was lower than forecast. In early June, significant warm up occurred. This drastic change in conditions resulted in impacts to the model simulations. In an attempt to better synchronize the model to existing conditions, CBRFC increased melt in the model. This resulted in too little snow in the model later in the season. The model needed more snow, particularly in the lower elevations. This would have resulted in a higher volume forecast and probably a better representation of the Blue Mesa peak inflow.

Aspinall Unit Operations – Erik Knight (USBR)

Spring Runoff Conditions: The May 1st forecast for Blue Mesa Inflow was 850,000 AF, placing Water Year 2017 Aspinall Operations just within the threshold of the Moderately Wet year category. Actual inflow into Blue Mesa was approximately 915,000 AF. This amount of inflow would still place operations in a Moderately Wet year category.

Black Canyon Peak and Lower Gunnison River Targets: Based on a May 1st forecasted inflow of 850,000 AF, the Black Canyon peak flow requirement was 6,427 cfs. On May 25th, there was a 12,200 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.

Peak flow and duration days at Whitewater based on the May 15th forecasted inflow required 14,040 cfs for 2 duration days. In addition, the forecasted inflow required half bank flows of 8,070 cfs for 20 duration days. To meet the target flows at Whitewater, Blue Mesa would need to spill. May 25th marked the first day of meeting the 14,040 flows at Whitewater.

Flows at Whitewater actually reached 15,900 cfs due to a situation outside of Reclamation's control at the Crystal power plant. On May 24th at 7 pm, the Crystal power plant went offline while at full capacity. This resulted in the loss of 1,900 cfs coming through the power plant. At 10 pm, the power plant came back online, and 1,900 cfs went back into the Gunnison River. At 2 am, the power plant went offline again. Water started releasing over Crystal's spillway, and Crystal was releasing 13,600 cfs. At this same time, flows in the North Fork increased a bit. This resulted in flows at Delta reaching close to 15,000 cfs when it was planned to only

reach 14,000 cfs. There were no reports of anyone being stranded due to high river flows. Reclamation plans on adding procedures in Crystal Power Plant's Standard Operating Procedures to bring the power plant back online slowly. This is in process; so far, it has been determined that bringing the power plant back online in four hours is too fast. Reclamation will also consider bringing the power plant back online in eight and twelve hours.

Reclamation released additional water beyond what was required by the ROD to keep the Blue Mesa content from overflowing. This resulted in about four days of peak duration flows greater than 14,000 cfs before dropping flows down to meet the half bankfull target at Whitewater. Right now, Blue Mesa Reservoir has the second highest content on this date (with the first highest content on this date being in 1984). To meet the winter target level of 580,000 AF, Reclamation currently has the Crystal power plant at maximum release capacity. There are no plans to bypass the power plants to reach the winter target.

Summer/Fall Operations: Other reservoirs in the Gunnison Basin continue to be fairly full, with the lowest reservoir level being Paonia at 79% capacity. Blue Mesa is currently 99% full. The Moderately Wet year baseflow target from September 2017 through May 2018 is 1,050 cfs. There should be no issue maintaining the baseflow level throughout the year.

Weather Outlook – Aldis Strautins (NWS)

Atmospheric rivers created precipitation events in the Gunnison Basin throughout 2017. In June, a ridge pushed what was left of these rivers/storms to the north. By mid-July, a monsoonal push created a ridge from the south, which pushed the westerlies over the northern Rocky Mountains. This is a normal monsoonal pattern. By early August, this ridge broke down and began building west of the Gunnison Basin. The Gunnison Basin is on the southern edge of the northwest winds, and are bringing weather systems from the Pacific northwest. While these are westerly flows, they are not part of a true monsoonal push.

The ENSO outlook projects neutral conditions, but on the positive side of neutral (closer to El Nino).

Special Flow Requests and Discussion

There was a discussion as to whether or not Reclamation times their releases to meet the Whitewater targets with the North Fork peak. Reclamation typically attempts to do this; however, this year we did not see that the North Fork peak was about to happen. The North Fork peaked prior to the 10 day ramp up for Blue Mesa releases.

Reclamation will try to meet the Blue Mesa icing target, as the target was not met last year and there were minor icing problems, some unrelated to the elevation of Blue Mesa Reservoir.

Reports of Agencies/Organizations

NWS – Nothing to report.

CBRFC – They have a verification webinar this fall. Seasonal guidance for forecasts are on their website, extending to about mid-December. There is a stakeholder meeting the 3rd or 4th week in October. Fontenelle received record flows this year, and Flaming Gorge came in 2nd by about 10,000 AF.

WAPA – Energy prices are mild.

UVWUA – UVWUA had a good water year and summer.

Tri-County – Ridgway was 5,000 AF short of filling due to “new operator paranoia” and not wanting to spill the reservoir due to the Smallmouth Bass. Their fishing tournament went well, with about twice as many fish (and larger fish, ~17 inches) caught than in previous years. This is also the result of the contest going on longer. Ridgway stayed at peak elevation for a good while, and is dropping down now.

Upper Gunnison – They installed a remote cloud seeding generator at Lake Irwin. This operated last year; however, snow levels reached avalanche targets by mid-January, so it was only operated for about a month and a half. They would like the icing target met this year.

DWR – North Fork call came on late and is now off. New water commissioner in North Fork basin. Taylor Park accounts are full. Gunnison River still running on natural flow.

BLM – There was considerable public interest in the high flows this year. The flows reached near 13,000 cfs in the Black Canyon, which is the highest since 1957. This brought some boaters out of the woodworks. They almost all flipped, but there were no really bad incidents. Many of the whitewater areas washed out, but the ones that remained were big. BLM is stocking rainbow tomorrow. The rainbow trout below Crystal are doing well, no adverse impacts to the trout fishery from the spring peak. The earlier peak for the Whitewater target was beneficial to businesses, so that worked well this year.

USGS – The USGS is reaching out to their cooperators to discussing FY18 funding. They appreciate the collaboration.

TU – Nothing to report.

NPS – There are happy salmon fishermen right now. Visitation is up almost 30% this year. They appreciate the extra communication from Reclamation for managing the area.

CWCB – Their new director is Becky Mitchell. The Deputy Director position posted today. The Colorado Water Plan Implementation Funding grants are available on the CWCB website. Lake Powell saw a higher than average inflow this year, mostly from record flows in the Green River. There is a planned nine million AF release to the lower basin this year, and probably next year, so the reservoir level won't go up much, but at least it is not going down. CWCB's next board meeting is in Walden in September. This is usually the meeting where finances are discussed.

Montrose Power Office – Morrow Point exciter replacement work has been rescheduled from September to January. Only one unit can be replaced at a time, and it takes about 45 days per unit. Thanks to all for your understanding while they update their equipment.

River District – Their next Annual Water Seminar is scheduled for September 17th in Grand Junction.

Daily Sentinel – Nothing to report.

The next Aspinall Operations Meeting will be held on January 18, 2018 in Montrose, CO.

August 17, 2017 Aspinall Operation Meeting Attendance

***indicates person attended meeting in person or by phone**

Argonne National Laboratory.....John Hayse, Kirk Lagory
Black Canyon Anglers..... Derek Kehmeier, Richard Dudginski
Bureau of Land Management.....Rooster Barnhart*, Edd Franz*, Wanda Lassiter,
Chris Smith, Jason Young, Kevin Kobe, Katy Smith, Kevin Kobe
Bureau of Reclamation.....Ed Warner*, Ted Dunn, Ryan Christianson*, Jenny Ward*,
Paul Davidson, Justyn Liff*, Erik Knight*,Rick Clayton*, Grant Watson*,
Larry Lingerfelt*, Randy Kramer, David Speas*, David Klein, Dale Carpenter*,
Lesley McWhirter
CSAS-CODOS.....Jeff Derry
City of Grand Junction.....Terry Franklin, Greg Trainor
Club 20.....Reeves Brown
Colorado Department of Agriculture.....Jim Miller
Colorado Mesa University.....Hannah Holm
Colorado River Energy Distributors.....Leslie James
Colorado River Water Conservation District...Dave Kanzer*, Jim Pokrandt*, Eric Kuhn,
Sonja Chavez
Colorado State University.....Brett Johnson
Colorado Division of Water Resources...Pat McDermott, Bob Hurford*, Scott King,
Richard Rozman, Luke Reschke, Jason Ullmann*
Colorado Parks and Wildlife..... Jay Skinner, John Alves, Dan Brauch,
Dan Kowalski, David Graf, Eric Gardunio*
Colorado Water Conservation Board...Michelle Garrison*, Ray Alvarado, Steve Miller ,
Karen Kwon
Daily Sentinel.....Dave Buchanan
Delta County Independent.....Bob Borchardt
Delta County Commissioners.....
Delta County.....
City of Delta.....Steve Glammeyer, Glen Black
Delta County Emergency Management.....Jeff Wright
Dolores WCD.....Ken Curtis
Fire Mountain Canal Co.....Steve Fletcher*
Fish and Wildlife Service.....Dale Ryden, Don Anderson
Gunnison Country Times.....Michelle Burkhart
Gunnison Basin POWER..... Butch Clark, Ramon Reed
Gunnison County Commissioners.....
Gunnison River Expeditions.....Al DeGrange
High Country Citizens Alliance.....Steve Glazer, Jennifer Boch, Wendy McDermott
Interior Solicitor.....John Bezdek, Peter Fahmy
Mesa County Emergency Management.....Andy Martsolf
City of Montrose.....Stephen Alcorn, Bob Nicholson
Montrose Daily Press.....Katharhynn Heidelberg
National Drought Mitigation Center.....Donna Woudenberg
NOAA.....Andrea Ray, Robert Webb, Klaus Wolter, Brad Udall, Kevin
Werner, Chad McNutt, Ashley Nielson, Brenda Alcorn, John Lhotak, Greg Smith*
National Park Service.....Michael Dale*, Kim Hartwig*, Christine Landrum,
Mark Wondzell, Melissa Trammell, Jenny Rebenack, Rob Billerbeck, Bruce Noble, Gene
Seagle

National Weather Service.....Aldis Strautins*, Dennis Phillips*
NRCS.....Brian Domonkos, Lexi Landers, Karl Wetlaufer, Mage Hultstrand
North Fork Water Conservancy.....Tom Alvey
Precision Water Resources Engineering.....Mike Coleman
Project 7.....Adam Turner
Recovery Program.....Tom Pitts, Tom Chart
Redland Water and Power.....
Ridgway Guide Service.....Tim Paterson, Matt McCannel
Tri-County Water.....Mike Berry*, Ion Spor, Kathleen Margetts, Teddy Earley,
 Tony Mitchell*
Trout Unlimited.....Pat Oglesby, Marshall Pendergrass, Cary Denison* Drew
 Peternell, John Trammell, Jesse Kruthaupt
UVWUA...Ed Suppes*, Steve Anderson*, Steve Shea, Dennis Veo*, Michelle Decker,
 Tim Barrientos
Upper Gunnison River Water.....John McClow, Frank Kugel*, Ken Spann, Brett
 Redden
USGS.....Ken Leib*, Bob Jenkins, Steve Anders*, Trisha Solberg,
 Bryan Moore, Bob Kimbrough
Xcel Energy.....Kelly Flenniken
Western Area Power...Clayton Palmer, Jeff Ackerman, Jerry Wilhite*, Tim Vigil,
 Tanya Newman, Chrystal Dean*, Tyson Taylor, Steve Johnson, Rachelle Grubbs