Aspinall Unit Operations Meeting January 19, 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 triannually, with meetings typically occurring in January, April, and August of each year.

Aspinall Unit Operations – Erik Knight (USBR)

<u>Operations Past and Present:</u> From September 2016 to mid-January 2017, Blue Mesa content dropped 127,000 acre-feet (AF). Blue Mesa content is currently 591,000 AF. During this same time period, Gunnison River flows at Whitewater have consistently remained above the 1,050 cfs target. As of January 17, 2017, the conditions of reservoirs in the basin are as follows:

Reservoir	% of Capacity
Paonia	10%
Taylor Park	66%
Crystal	92%
Morrow Point	95%
Blue Mesa	71%
Ridgway	76%
Silver Jack	21%

<u>Snow Conditions:</u> October 2016 was very dry, with the monthly precipitation in the Gunnison Basin being less than 50% of average. November 2016 was still dry, however the last week of November provided enough precipitation to bring the majority of the Gunnison Basin up to between 70 and 89% of average. December 2016 experienced very wet conditions, with the Gunnison Basin experiencing over 150% average monthly precipitation. By January 1, 2017, the Gunnison Basin snow pack was 118% of normal. Wet conditions have continued in January, with precipitation being 200% of normal. As of January 16, 2017, the Gunnison Basin's snow water equivalent is at 172% of normal. If the Gunnison Basin receives average snow fall from now to the end of the season, different areas within the Gunnison Basin would have snow water equivalents between 118% and 160% of normal by spring runoff.

<u>Runoff Forecasts and Future Operations:</u> The January 1st Blue Mesa Forecasted April-July Inflow was 575,000 acre-feet. By mid-January, this forecast increased to 915,000 acre-feet. This forecast would categorize 2017 as a Moderately Wet year. If the forecast were to remain unchanged, a Moderately Wet year would result in a desired Whitewater peak of 14,350 cfs. The duration of half bank flows (8,070 cfs) would be 40 days, and the duration of peak flow (14,350 cfs) would be 10 days. Assuming the forecast doesn't change for the May 1st forecast, the Black Canyon Peak Flow would be 6,501 cfs, with May 1st to July 25th shoulder flows of 904 cfs. Baseflow targets at Whitewater would be 1,050 throughout the remainder of winter and spring. Changes in the forecast could go either way – wetter or drier. An example of what to expect should inflow conditions remain unchanged involves ramping releases around mid-May to reach the Whitewater peak and the half bankfull duration. Flows could be over 8,000 cfs in the Black Canyon. Flooding in Delta, Colorado becomes a problem when flows reach above 1,5000 cfs at Delta. To meet the 14,350 cfs Whitewater target, flows in Delta will likely reach 12,500 cfs.

2017 Weather Outlook – Aldis Strautins (NWS)

We are experiencing a weak La Nina, however our weather patterns aren't completely following typical La Nina weather patterns. We have been experiencing the lower level temperatures, but our storms have been tracking in directly from the West, which isn't typical. Weather events overpower climatic conditions. It looks like we are transitioning back to neutral conditions. Models show we will be in more neutral rather than La Nina conditions by February, but the actual atmospheric trends tend to lag behind the model a bit.

Forecasts		
Time Period	Temperature	Precipitation
6-10 Day	↑ probability of ↓ temperature	↑ probability of ↑ precipitation
8-14 Day	↑ probability of \downarrow temperature	↑ probability of ↓ precipitation
February/March/April	↑ probability of ↑ temperature	<pre>\$ precipitation</pre>
March/April/May	↑ probability of ↑ temperature	<pre>\$ precipitation</pre>

**KEY: \uparrow = increased; \downarrow = decreased; \updownarrow = equal chances

The drought monitor shows that western Colorado is not in a drought, however Western Colorado has entered into an abnormally dry to moderate drought since August 2016. Nationally, the western United States is looking much better now than it did in January 2016, but some areas in southern California are still in an extreme to exceptional drought.

Special Flow Requests and Discussion

Fishing outfitters request Reclamation begin their increased Aspinall Operations flows in high water years get started as early as possible in order to have the lowest impact on their outfitting operations. They request Reclamation continue to email forecast updates every couple weeks.

The icing target at Blue Mesa is 7490'. This is the second year in row that the reservoir has not met the icing target. It was requested Reclamation try to hit the icing target in 2017.

Reports of Agencies and Organizations

<u>FWS</u>: 10,000 fish passed through the Redlands Fish Ladder in 2016, which is a record. There were 33 pikeminnow within a two week span in August. One razorback passed through the ladder.

<u>USGS</u>: USGS gages typically transmit data every 15 minutes, and the data is updated on their website every hour. The USGS is updating three of their gages (Uncompany reservoir, Gunnison below the tunnel, and Colorado River at Cameo) to give more frequent updates.

<u>BLM</u>: The local area (Delta County) is looking to improve its economic situation, typically with recreation and fishing. There is increasing sensitivity to the ability to fish and recreate in the area.

<u>UGRWCD</u>: The USGS is putting a streamflow gage on the Gunnison immediately downstream of the bridge on Hwy 6 & 50. This will go online in April. Their cloud seeding generator is up and running in Irwin.

FMC: Work on the outlet at Paonia Reservoir has been postponed until Fall 2017.

<u>Center for Snow and Avalanche Studies</u>: There have not been any observations or reports of dust on snow.

 $\underline{4U}$: They are watching for logs in the river so they can get them out before people start using the water park.

<u>CO Emergency Management Office</u>: They will start holding public coordination meeting for public safety regarding flooding in March. If runoff starts sooner, they'll hold their meetings sooner.

<u>UVWUA</u>: There is a ton of snow at Taylor Dam. Need to do some work to remove trash at the Gunnison Tunnel inlet.

<u>Tri-County</u>: Iron has retired and is being replaced by Tony Mitchell. They are releasing lower flows right now because the reservoir level is below average. Considering the runoff forecast, they may increase their releases.

<u>NPS</u>: Chris Mangel is the new Chief Ranger at Curecanti. The new Chief Resource Manager is Kim Hartwig. NPS has had a very successful invasive aquatics prevention program for years, however 1/3 of those employees were hired and paid by CPW. This funding is gone, and there is no replacement. NPS is not sure what they'll do, but in all likelihood, they will have fewer boat ramps operating and will need to cut back the hours of some of the ramps which will remain open. The Morrow Point boat tour is still going to happen this summer.

WAPA: The opportunity to release extra water in February would be helpful.

<u>River District</u>: the Lower Gunnison Draft Environmental Assessment will be out for public comment by the end of February. Their annual Small Grant Program applications are due January 31st. Their new State Rep is Mark Catlin. Dick Proctor passed away.

<u>TU</u>: They encourage everyone to weigh in on the Lower Gunnison Draft EA. Encourages Reclamation to continue their excellent communications regarding Aspinall Operations and linking operations to Ridgway.

<u>CWCB</u>: Their board meeting is next week, and the agenda is online. Included in the agenda is a discussion of NPS' invasive aquatics prevention funding woes, as well as CWCB's funding woes. They are still accepting grant applications, but funding is low. An agreement for Minute 32x was not able to be put in place, so this will be up to the new administration. Secretary Jewell issued a Secretarial Order to continue work on 32x. Minute 319 expires soon.

<u>BOR Curecanti Field Office</u>: It is time for some major upgrades to the power plants. Work at Crystal will begin next month, so that power plant will be down for about two months. Work at Morrow Point will begin in July, and units there will be down until the end of the year. Work at Blue Mesa is scheduled to begin in July 2018.

<u>BOR SLC Regional Office</u>: Meeting the Whitewater peak may draw Morrow Point down to where they can't operate the tour boat. In 2016, Morrow Point had to rise 20' after the peak in order for the tour boat to operate. This could potentially happen this year, too. They might be able to raise Morrow Point before the peak to offset the amount it would need to rise after the peak.

NEXT MEETING: Thursday, April 27, 2017 @ 1:00 PM at the WCAO Reclamation Office in Grand Junction, CO.

January 17, 2017 Aspinall Operation Meeting Attendance *indicates person attended meeting in person or by phone

Argonne National Laboratory Black Canyon AnglersI			
Bureau of Land ManagementRooster I			
Chris Smith, Jason Young, Kevin Kobe, Katy Smith			
Bureau of ReclamationEd 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, Vern			
Harrell, Jed Parker*, Jesus Hernandez*, Amanda Ewing*			
CSAS-CODOS			
City of Grand Junction	Terry Franklin, Greg Trainor		
Club 20	Reeves Brown		
Colorado Department of Agriculture	Jim Miller		
Colorado Emergency Management	Drew Petersen*		
Colorado Mesa University	Hannah Holm		
Colorado River Energy Distributors	Leslie James		
Colorado River DistrictDave Kanzer*, Jim Pokrandt, Eric Kuhn, Sonja Chavez			
Colorado State UniversityBrett Johnson			
Colorado Division of Water ResourcesPat 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 Borcharcht 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*, Jana Mohrman, DarekElverud* Gunnison County Commissioners High Country Citizens Alliance......Steve Glazer, Jennifer Boch, Wendy McDermott Interior Solicitor.....John Bezdek, Peter Fahmy 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, Tracy Cox, 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*, Megan Stackhouse* NRCS......Brian Domonkos, Lexi Landers, Karl Wetlaufer, Mage Hultstrand Precision Water Resources Engineering......Mike Coleman Project 7......Adam Turner* Redland Water and Power Tri-County Water......Mike Berry*, Ion Spor, Kathleen Margetts, Tony Mitchell* Trout Unlimited...... 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 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, Rachel Grubbs