

Aspinall Unit Operations Meeting August 18, 2016, 1:00 PM

Background: The purpose of operation meetings-- usually held in January, April, and August-- is to gather input for determining upcoming operations for Blue Mesa, Morrow Point, and Crystal Reservoirs. This input is used in Reclamation's development of specific operations for the Aspinall Unit and for the overall 24-month study for operation of Reclamation projects in the Upper Colorado River Basin, which include plans for Glen Canyon, Flaming Gorge, and Navajo Units, as well as the Aspinall Unit. Operation of the Aspinall Unit considers projected inflows to its reservoirs, hydropower and flood control needs, existing water rights, minimum instream flows, target elevations for reservoirs, flow needs for endangered fish and other resources, recreation, and other factors. In addition, the meetings are used to coordinate activities and exchange information among agencies, water users, and other interested parties concerning the Gunnison River.

Handouts provided included data on 2016 operations, a summary of forecasted and actual runoff and projections for operations for the remainder of the year.

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 occurring in January, April, and August of each year.

2016 Aspinall Unit Operations – Erik Knight (USBR)

Spring Runoff: Snowpack in the Upper Gunnison basin peaked at 84% of average. Snow accumulation continued about 3 weeks longer than typical, with some melt in the first part of April and additional snow accumulation in the second half of April.

The April 1st forecasted inflow to Blue Mesa Reservoir was 515,000 AF. The forecast increased to 525,000 AF for the May 1st forecast, placing Spring 2016 Aspinall Operations in the Average Dry year category. Forecasts continued to increase after May 1st with actual inflow into Blue Mesa coming in at 602,000 AF (still within the Average Dry category).

Runoff on other streams within the Gunnison Basin ranged between 80% and 100% of average. Runoff volumes were lower in the higher elevations of the Gunnison Basin and the North Fork basin, and higher along the southern side of the Gunnison Basin and in the northern San Juan Mtns.

Black Canyon Peak and Lower Gunnison River Targets: Based on a May 1st forecasted inflow of 525,000 AF, the Black Canyon peak flow requirement was 3,349 cfs. On May 23rd there was a 5,100 cfs 24-hour peak flow. Black Canyon flows exceeded the target due to water needed to meet the Lower Gunnison River targets as per the Aspinall ROD.

Peak flow and duration days at Whitewater based on the May 1st forecasted inflow required a peak flow of 8,070 cfs with 10 days of duration at this peak flow level. Efforts to meet these targets were timed with peak flows on the North Fork of the Gunnison River. The actual peak measurement at the Whitewater gage was 9,900 cfs. Contributing flow from the lower

elevation tributaries exceeded daily projections, resulting in a higher peak at the Whitewater gage relative to the target. 10 days of flows over 8,070 cfs were recorded during the second half of May.

After the conclusion of the spring peak operation, Blue Mesa Reservoir filled to a content of 799,000 AF, which is about 96% full.

Summer/Fall Operations: Other reservoirs in the Gunnison Basin were able to fill or reach over 90% of full this year. The Average Dry year baseflow target for the remainder of 2016 is 1,050 cfs. There should be no issue maintaining flows throughout the year.

Gunnison River Basin Runoff Forecast Review – Greg Smith (CBRFC)

Runoff forecasts for Blue Mesa Reservoir dropped off in February and March as a result of a very dry and warm 2 month period. Forecasts increased in April, May and June as April and May were relatively wet. The final forecast decrease was caused by very dry conditions in July.

Despite what seemed like good early season snow conditions, runoff forecasts were less than average due to the lack of good snow at the higher elevations. Cool spring weather helped retain the snowpack and prevent an early melt.

Peak flow forecasts on the North Fork of the Gunnison River depend on knowledge of operations at Paonia Reservoir. Sediment management strategies at Paonia Reservoir will dictate operations in the future and may provide more advanced information on releases at the dam.

Spring snowpack assessments depend on satellite data which can be obscured by frequent cloud cover.

Weather Outlook – Aldis Strautins (NWS)

Temperatures were cooler than average in May and then much warmer than average in June. April and May precip were mostly above average across Colorado with June being much drier than normal. Most of CO is not in drought with the exception of dry conditions in the southwest corner and in the northern mtns.

The very strong El Nino has ended and we are now in neutral conditions. La Nina conditions are given a 76% chance to arrive in early fall.

Temperatures over the next 2 weeks are forecast to be cooler than normal but September, October and November are given a higher probability for above average temperatures.

Special Flow Requests

CPW: CPW will be conducting their annual sampling the first full week of October. The sampling is most successful at flows between 800 – 1000 cfs.

UVWUA: Reduce releases from Crystal in late Feb, early Mar for maintenance on diversion dam.

Reports of Agencies

UVWUA: Cut back on irrigation releases from Ridgway. Drop 5 operational this week.

TU: Encourage communication on operations and flow changes; would like to expand to other reservoirs. Participating in RCPP projects.

BLM: Good season for fishing due to stonefly hatch and timing of spring peak release.

WAPA: Energy prices increased in August

NPS: Visitation up 10% at Elk Creek area, \$40 million annually at Curecanti. Kim Hartwig acting in Ken Stahlnecker's position until filled.

Tri-County: Ridgway is 79% full now, which is below average. Releases will be lower in fall. Hydropower was successful with more revenue generated. Construction of spillway net scheduled for fall 2018.

CRWCD: River District seminar on Sept 9th. Involved in System Optimization Project (RCPP)

CWCB: State is in financial crisis due to drop in tier 2 severance tax fund. Affecting boat inspections, Round table funding, Recovery Program etc. Unknown where future funding will come from. Board meeting in Beaver Creek on Sept 20-21.

DWR: Good water supply year.

BOR Power Office: Morrow Pt stilling basin cleaned out, minor damage but happy with results. Exciter replacement in Feb, starting at Crystal but all 3 plants will be done. Blue Mesa rewind planned for fall 2017.

CO River Forecast Center: Adding 5 years to model calibration thru 2015, not affecting averages. May impact San Juan basin the most. Will allow for including new Snotel data.

Fire Mtn Canal Co.: Good crop yield in the North Fork Valley. 2-3 weeks left of storage in Paonia. Hope to redo the intake of the outlet works.

Dolores WCD: Best water year in 5 years. Highest flow since 2011, peak on June 6th, small managed release.

NEXT MEETING: Thursday, January 19, 2017 at the Holiday Inn Express in Montrose

August 18, 2016 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*
Bureau of Reclamation.....Ed Warner, Ted Dunn, Ryan Christianson*, Jenny Hamilton, Paul Davidson, Justyn Liff, Erik Knight*,Rick Clayton, Grant Watson, Larry Lingerfelt, Randy Kramer*, David Speas, David Klein, Dale Carpenter*, Lesley McWhirter, Vern Harrell*
CSAS-CODOS.....Chris Landry
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, Jana Mohrman
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
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*
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
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
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*, Nancy Scheid,
Tim Vigil*, Tanya Newman, Chrystal Dean, Tyson Taylor, Steve Johnson, Rachel Grubbs*