

Below is a summary of our August 18, 2011 meeting to coordinate Reclamation's operation of the Aspinall Unit. The meeting was held at the Blue Mesa Reservoir Visitor's Center.

Highlights of the operation meeting include:

- Blue Mesa April through July inflow was 893,000 af, representing a moderately wet year. This is an above average inflow expected to be exceeded in approximately 27 percent of years. Based on May 1 projections, the Black Canyon reserved water right 1-day peak target was 6,793 cfs; actual peak was 7,180 cfs. Peak flow at Whitewater was 15,100 cfs.
- Snowmelt and runoff was delayed throughout the basin, resulting in peaks later than normal. North Fork peaked on June 6 and the Gunnison River in the Black Canyon and at Whitewater on June 8.

If you have any suggestions on improving the operation meetings or summaries, please let us know. The next operation meeting will be on Thursday, January 19th in Montrose. The location will be announced. If you have any questions, please call me at 970 248-0652 or contact me at dcrabtree@usbr.gov.

Sincerely,

Dan Crabtree
Water Resources Group Chief

Aspinall Unit Operation Coordination Meeting
August 18, 2011

Participation: This meeting was held at the Blue Mesa Visitor Center. Attendees are noted on the distribution list located at the end of these notes. **Handouts and presentations are available for review at:**

<http://www.usbr.gov/uc/wcao/water/rsvrs/mtgs/amcurrnt.html>

Purpose of Meeting: The purpose of operation meetings-- 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 (www.usbr.gov/uc/water/crsp/studies/index.html) 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 2011 operations; projected inflows to the reservoirs for 2011; and proposed operation plans for the remainder of 2011 under probable maximum, most probable, and probable minimum runoff forecasts for this spring.

The Fish and Wildlife Service flow recommendations for endangered fish have been completed and published, and a final Aspinall Operations EIS is being prepared to evaluate alternative operations to help meet these recommendations. In addition, the water right for the Black Canyon National Park has been quantified and adjudicated. These operation meetings are used to discuss proposals for long-term operation plans to address these and related resource management issues.

Operations:

General: Blue Mesa Reservoir capacities are described in meetings as follows: The reservoir holds 940,700 acre-feet (af). Active capacity is 748,400, inactive capacity is 81,100, and dead storage is 111,200. Live capacity is the active plus inactive, which totals 829,500. Discussions during operation meetings use live capacity.

April 2011-August 2011 Operations:

The actual April through July inflow into Blue Mesa was 893,000 af which is considered a moderately wet year exceeded 27 % of the time based on 1937-2010 history. The forecast varied from 775,000 in February to 945,000 in May and the runoff was late due to cold conditions. Normally snowpack peaks in mid-April but this year snow continued to accumulate into early May. The forecast jumped from 800,000 to 945,000 between April 15 and May 1 due to heavy

precipitation.

The Black Canyon water right peak target of 6,793 cfs was calculated based on the May 1 forecast. The actual peak was 7180 cfs occurring on June 8. The peak was planned to maximize use of side inflows including the Cimarron River which peaked later than normal. Peak flows at Whitewater and Delta were 15,100 and 13,700 cfs respectively. There were no reports of significant damage at Delta due to high water. There were 22 days with daily averages over 8.070 cfs (half bankfull) at Whitewater and 3 days with instantaneous peaks over 14,350 (bankfull).

In response to several questions, it was stated that Crystal spillway use reached 3,800 cfs and there was an effect on hydropower production as the powerplants were bypassed. This is done to meet other goals such as meeting the Black Canyon water right. There are expenses related to Crystal spilling—preparations are needed to protect facilities and wear/tear on stilling basin and facilities increases.

Blue Mesa filled and reached 7519.25 feet or 828,200 af on July 17th. Water levels were within 0.15 inch of the top of spillway gates. Release changes from Crystal were ramped successfully this year and were ramped down to approximately 2,000 cfs at the end of June. However inflows did not drop as was forecasted and releases had to be increased to over 4,000 cfs by mid-July. This created a second, smaller peak in the Black Canyon/Gunnison Gorge. Throughout late spring, the actual inflow stayed higher than the forecasted inflow causing higher than expected downstream flows.

There were concerns from recreation/fishing interests with the late peak, second peak, and higher than usual June flows. Sources of errors in the forecast were reviewed (see handouts). In general more data (snotels, rain gages, snowcams) could reduce errors in the future.

Blue Mesa should reach elevation 7490 by the end of December. Black Canyon flows should remain around 1,000 cfs into November and reach around 1,500 cfs in late November and December. The late November/December increase is to better meet winter hydropower demands.

There are no special flow requests. Colorado Division of Wildlife will do a longitudinal fishery survey rather than the Ute Park population survey. Predicted flows should be good for this survey.

EIS update: Draft EIS on Aspinall operations was released in February 2009. Following public review, an advanced draft final was prepared and sent to Washington for review. This review was completed and an advanced draft was provided cooperating agencies for a review. Comments received last April and are being considered by Interior. Reclamation hopes to complete final EIS and Record of Decision by April 2012. The preferred alternative has not changed in the final EIS.

As part of the Programmatic Biological Opinion, a selenium management plan is being completed. Salinity and selenium reduction programs have resulted in a downward trend in selenium concentrations in the Gunnison River and downstream in the Colorado River. Public

meetings October 17 and 20.

Power Office: Normal maintenance work on Blue Mesa and Morrow Point this fall and winter.

Agency/Organization Activities and Discussion of Related Activities:

Colorado Division of Wildlife: Will do longitudinal study this fall instead of Ute Park population study. This is last year of CSU lake trout/kokanee study. Continuing mussel inspections at Blue Mesa and Taylor Park. 5.2 million kokanee released from Roaring Judy last April. Lake trout removal to benefit kokanee continuing.

Colorado Water Conservation Board: Next meeting September 13-14 in Grand Junction.

Dust on Snow: Chris Landry reported on the dust on snow monitoring. There were 11 dust events this year but most dust layers immediately buried by new snow. Dust did not result in early runoff but may have sped it up at the end of runoff. Warm storm last December resulted in near record high elevation snow but lots of rain at lower elevations.

Fish and Wildlife Service: Redlands fish ladder used by 2 pikeminnow, 1 razorback and 5 bonytail this year. Bonytail had been stocked previously upstream of ladder at Butch Craig pond. Also doing larval and adult sampling in the Gunnison.

Uncompahgre Valley Water Users: No serious problems with high spring flows this year. Hope to do some repairs on diversion dam next spring if flows allow.

Western Area Power: Equalization rules in effect with Lake Mead and above average Lake Powell inflow forecast, results in more water being released from Glen Canyon. Good water conditions to the north and coordination of moving lots of power has been a challenge. Focus this year on managing generation instead of power purchases. Good coordination with Reclamation this year in developing peak flow. This was Jennifer Henn's final Aspinall Operations Meeting as she is moving to Sacramento. Thanks to Jennifer for a job well done!

Bureau of Land Management: Helped with public information concerning spring peak; no major problems. Private use during June peak use month was down and this probably resulted in less resource impact than occurs in heavy use springs. Commercial use was up this year.

Upper Gunnison Water Conservation District: Water right issues at Lake San Cristobol settled out of court. Working on water park water rights and second fill at Taylor Park. Completed construction on 3rd feature of water park.

Colorado River Water Conservation District: Hartland Diversion improvement work to start this September. Working on "CRSP MOA money" with the state and Reclamation for projects such as selenium and salinity control. Annual seminar in Grand Junction is September 15. See www.crwcd.org.

City of Gunnison: City officials asked on status of Colorado’s interest in purchasing water from Blue Mesa. Reclamation reported no activity on their part.

Tri-County: Ridgway spilled a little due to early July rain. Reservoir content higher than usual for this time of year. Working on hydropower development at the reservoir.

National Park Service: Curecanti has operated with Reclamation under an MOA since 1965. Senator Bennet is considering legislation that would replace MOA. Will initiate long-term vegetation monitoring along the river near the upstream boundary of the National Park. Will continue quagga mussel work.

USGS: Flow at stateline so far is 5.8 million af with Colorado River peak of 46,800 cfs; 2.9 million on Yampa. San Juan Flows lower. New Cimarron gage is operating.

CREDA: Appreciates efforts to match side inflow and North Fork peaks to reduce impacts on hydropower.

State Engineer: Good water supply; less administration and very late use of storage in areas such as Grand Mesa.

Project 7: Some water quality concerns with increased total organic carbons.

High Country Citizens: Working on local water quality projects.

Weather Service: Long-term possibility of La Nina conditions similar to this years. Greg Smith will work on Gunnison Basin forecasting next year.

Gunnison Basin Power: Interested in fracking and rare earth mining (Powderhorn area). Monitoring is needed.

Next Meeting: The next operation meeting is scheduled for January 19th, 2012 at 1 pm in Montrose, Colorado. Further location to be announces. .

August 18th, 2011 Aspinall Operation Meeting

*An asterisk indicates person attended the meeting in person or by phone

Argonne National Laboratory John Hayse, Kirk Lagory
Black Canyon Anglers.....Richard Dudginski
Bureau of Land Management Roy Smith,
Rooster Barnhart*, Karen Tucker, Edd Franz, Forest Zerbe, Jesse Kirthorp, Peter Dennett, Julie Stotler,
Ryan Mathis*, Michelle Bailey, Patrick Pratchett, Jeremy Matlock*
Bureau of Reclamation... Denny Johnson, Phil Martin, Ed Warner*, Steve McCall*, Ted Dunn*, Dan
Crabtree*, Terry Stroh, Carol DeAngelis*, Jane Blair, Paul Davidson*, Justyn Hock, Erik Knight*,
Nancy Coulam, Laurie Jones, Tom Ryan*, Sandra Caskey*, and Keith Twehous
CSAS-CODOS.....Chris Landry*
City of Grand Junction..... Terry Franklin, Rick Bukus, Greg Trainor
Club 20Reeves Brown
Colorado Department of Agriculture..... Jim Miller

Colorado River Energy Distributors.....Leslie James*, Kent Holsinger*
Colorado River Water Conservation DistrictDave Kanzer*, Don Meyer, Jim Pokrandt, Eric Kuhn,
David Halford, Ray Tenney
Colorado State University Brett Johnson
Colorado Division of Water Resources Pat McDermott, Bob Hurford, Scott King, Richard Rozman,
Luke Reschke*, Jason Ullmann*
Colorado Division of Wildlife..... John Alves,* Dan Brauch, Dan Kowalski, David Graf,
Ryan Swygman, Jay Skinner, Rick Anderson, Mark Uppendahl
Colorado U/CADSWES.....Edie Zagona, Satish Regonda
Colorado Water Conservation Board...Ray Alvarado, Michelle Garrison*, Rick Brown, Steve Miller
Congressman Scott Tipton.....
Daily Sentinel..... Gary Harmon, Dave Buchanan
Delta County IndependentBob Borchardt
Delta County Commissioners.....Jan McCracken, Wayne Wolf, Olen Lund
Delta County..... Duane Freeman
City of Delta..... Lanny Sloan, Steve Glammeyer, Glen Black, Barry
Bullard, Jim Brown, Wilma Ervin
Delta County Emergency Management.....Rob Fiedler
Delta Montrose Electric Association..... Jim Heneghan
Department of Justice.....Dave Gehlert
Fish and Wildlife Service..... Jana Mohrman, Patty Gelatt*
Gunnison Country Times Michelle Burkhart, Will Shoemaker, Alan Wartes, Pat Daniel
Gunnison Basin POWER Ralph (Butch) Clark*, Ramon Reed
Gunnison County Commissioners Hap Channell, Paula Swenson, Jim Starr
Gunnison River ExpeditionsHank Hotze, Al DeGrange
Helton & Williamsen, P.C. Duane Helton
High Country Citizens Alliance/Sierra ClubSteve Glazer*, Jennifer Selby*,Wendy McDermott,
Steve Schechter, Shara Rutberg
Interior Solicitors Office..... John Bezdek, Peter Fahmy
Matt Owens Fly CompanyMatt Owens
Mesa County Emergency Management.....
Montrose Daily Press..... James Shea, Jason Monroe, Caitlin Switzer
National Drought Mitigation Center.....Donna Woudenberg
National Oceanic & Atmospheric Administration..... Andrea Ray, Robert Webb, Klaus Weickmann,
Brad Udall, Kevin Werner*, Chad McNutt, Tracy Cox, Brenda Alcorn, John Lhotak
National Park ServiceConnie Rudd*, Ken Stahlnecker, Matt Malick, Mark Wondzell,
Melissa Trammell, Michael Dale*, Bill Johnson, Dan Gude Bockus, Bill Hansen, Clayton Frazier, Norm
Henderson
National Weather Service..... Brenda Alcorn, John Lhotak, Jim Pringle, Bill Reed,
Aldis Strautius*
NRCS..... Paul Van Ryzin, Tom Pagano, Mike Gillespie, John Scott
North Fork Water Conservancy District Tom Alvey
Painted Sky RCD..... Cary Denison, Mike Drake
Project 7 Adam Turner*
Recovery ProgramTom Pitts, Tom Chart
Redlands Water and Power Company Charles Mitisek, Mike Gross
Ridgway Guide Service.....Tim Paterson, Matt McCannel
SelfCurt Treichel*, Lynn Johnson, George Sheldon, Bo Gates, Marlene
Zanatell, Jim Cochran, Jim Hokit, Richard Girvan, Coll Stanton, Joe Waggoner*, Ralph Files, Bill
Dvorak, Vida Turek*, Curt Treichel
Senator Mark Udall.....
Senator Michael Bennet Trudy Kareus

Tri County WaterMike Berry*, Ion Spor, Kathleen Margetts,
Trout Unlimited Pat Oglesby, Cary Denison, Melinda Kassen, Drew Peternel, John Trammell,
 Marshall Pendergrass, Matt Mayer, Mac Cunningham
Uncompahgre Valley Water Users Association..... Ed Suppes*,Steve Fletcher, Steve Shea
Upper Colorado River CommissionEverett Sunderland
Upper Gunnison R. Water Conservancy District.....John McClow, Frank Kugel, Bill Nesbitt*,
 Greg Peterson, Mark Schumacher, Tyler Martineau, Jim Slattery, Ken Spann
U.S. Geological Survey..... David Brown*, Bob Jenkins, Gordon Mueller, Gerhard Kuhn, Bob Boulgarz,
 Steve Anders, Trisha Solberg
Western Area Power Administration..... ..LaVerne Kyriss*, Brad Warren, Nancy Scheid, Bill Wilson,
 Clayton Palmer, Carma Edgell, Jeff Ackerman, Kathy Gravestock, Chrystal Dean, Jennifer Henn*, Stacy
 Russ , Rachelle Fellin*
University of Colorado..... Christina Alford
Western Colorado CongressFred Wetlauffer
Western Resource Advocates..... Bart Miller
Xcel Energy..... Fred Eggleston, Tom Minerick