

**Aspinall Unit Operations Meeting
January 23, 2014, 1:00 PM**

Participation: This meeting was held at the Holiday Inn Express in Montrose Colorado. 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.htm>

Purpose of Meeting: The purpose of operation meetings which are usually held in January, April, and August is to gather input for determining upcoming operations of the Aspinall Unit (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 includes plans for Glen Canyon, Flaming Gorge, and Navajo Units, as well as the Aspinall Unit. Operation of the Aspinall Unit considers forecasted inflows to the reservoirs, hydropower and flood control needs, existing water rights, minimum instream flows, target elevations for reservoirs; flow needs and flow recommendations 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 include data on 2013 operations, inflows to the reservoirs for 2013, and projected most probable, minimum, and maximum inflow forecasts for 2014 as well as projected operations for 2014.

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. In addition, the water right for the Black Canyon of the Gunnison 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.

Funding Opportunity Announcement (FOA): The Bureau of Reclamation issued a FOA under their Water Conservation Field Services Program. The funds are for developing a Water Management Plan or for implementing water project(s) identified in the entities' existing plan. The FOA closes on February 7, 2014. Additional information and the application can be obtained at www.grants.gov.

Aspinall Unit Operations - Reclamation

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

Snow Conditions: The Gunnison Basin has remained near to average throughout the first half of the snow season. Snow accumulation got off to a good start but then tapered off in December and January. Currently, the Gunnison Basin is at 97% of normal snow conditions, and the Colorado Basin is at 117% of normal snow conditions. Overall snowpack conditions in the Aspinall Unit area are close to the median, and would need 104% of normal conditions from this point on to reach average peak snowpack conditions. The snowpack upstream of Blue Mesa is at 102% of the median, similar to the rest of the Gunnison Basin.

Operations 2013-2014

Blue Mesa content increased from September to January, finishing the calendar year with 381,000 acre-feet. Today, Blue Mesa holds 386,000 acre-feet. The Whitewater gauge experienced a 3600 cfs peak at the end of September, due to the significant precipitation received that month. Flows remained above the 750 cfs required by the EIS throughout the year. Current storage capacity for area reservoirs are:

Blue Mesa	47% full
Taylor Park	67% full
Dallas Creek	88% full
Silver Jack	78% full
Paonia	3% full

Forecasts & Future Operations

The forecast for April – July Unregulated Inflow to Blue Mesa Reservoir for 2014 is 660,000 acre-feet. This categorizes 2014 as an “Average Dry” year according to the Aspinall Unit Record of Decision. Assuming the unregulated inflow forecast remains at 660K on May 1, 2014, the Black Canyon peak flow determination would be 4990 cfs. There is a drought recovery provision in effect for the Black Canyon Water Right this year due to the dry hydrology of 2013 and the low end of year Blue Mesa content.

Again assuming the April – July Unregulated Inflow remains 660,000 acre-feet, the peak flow at the Whitewater gauge will be 8070 cfs, with a half bank-full duration of ten (10) days. Base flow targets at the Whitewater gauge would be 1050 cfs throughout the year, with an increase to 1500 cfs in June and July.

2014 Weather Outlook – National Weather Service

The coldest average monthly temperature for three weather stations, ranked.

Station	January 2013		December 2013	
	<i>Temperature</i>	<i>Rank</i>	<i>Temperature</i>	<i>Rank</i>
Grand Junction	14.3	5 th	15.8	10 th
Montrose #2	19.6	14 th	21.5	34 th
Gunnison 3 SW	1.2	15 th	7.4	87 th

ENSO Cycle

We are coming from La Nina, and remain in a neutral state. Models are trending towards El Nino, but this most likely will not occur until next fall.

Weather expectations in the ENSO Cycle

	<i>North CO</i>	<i>SouthCO</i>
El Nino	Dry/Warm	Wet/Cool
La Nina	Wet/Cool	Dry/Warm
Neutral	Above average moisture in Fall & Spring, Dry Winter	

Currently, there is an atmospheric river over California, causing moisture to pass over the intermountain states. Around January 30, the ridge will break and a few storm systems will head our way. This will hopefully bring us wetter conditions.

6 – 10 Day Outlook

Above average temperatures, below average precipitation.

8 – 14 Day Outlook

Probably for above average temperatures and below average precipitation dropping off.

February

Equal chances for above or below average temperature and precipitation.

Feb/March/April

Above average temperatures, equal chances for above or below average precipitation.

March/April/May

Above average temperatures, equal chances for above or below average precipitation.

Drought Monitor

The rains we experienced last fall helped alleviate our drought conditions, however, we are still in a drought. Hydrologic conditions are better than last spring.

Gunnison River Flash Flood & Silting in the Canyon – Trout Unlimited

The last major peaking flow in the Black Canyon occurred in June 2011. Flash floods in July 2013 left major silting and sediment deposits. The river flow in the canyon has been at 300 cfs since September. An October 1997 study by Elliot and Parker found a 1993 peak flow of 4700 removed debris from two low flow years (1989 and 1992). Later, the same peak didn't remove the hard layer that didn't get washed away. They found a higher peak didn't remove the compacted layer, but recommended a need to maintain time at bank-full stage.

Trout Unlimited recommends establishing bank-full flushing levels with a preference on lower sustained flows. They believe it would be beneficial to try to implement the extended flushing period rather than a large peak flow, while still using the same acre-feet that a higher peak would use.

Special Flow Requests

Colorado Parks and Wildlife

They usually do their annual sampling the first week of October, and request flows in the 600 cfs to 800 cfs range

Bureau of Land Management

They need to get through the Gunnison Gorge in mid-May. When they attempt to get boats through at 300 cfs, they have problems, but at 330 cfs, they don't have problems.

Trout Unlimited

TU is still working on the relief ditch diversion modification. The lower flows are ok with them for the time being. The work is going well; they are upstream from Austin, about 4 miles downstream of the confluence with the North Fork.

Reports of Agencies and Organizations

Montrose Power Office

They are working on a couple projects. 1) They plan to drain the Morrow Point stilling basin to remove debris and repair the walkway that was taken out by a rockfall. 2) They are going to do Sonar mapping of the Crystal stilling basin, as they did in 2008. Annual maintenance will take place at Crystal starting next Monday, and at Blue Mesa at the end of March. Morrow Point power plant is currently offline, and hopefully maintenance will be completed and it will be back online by Mid-February.

Western Area Power Administration

They have to purchase energy to cover contracts because of the drought. They are peaking with Glen Canyon since the Morrow Point power plant is down.

Division 4 Engineer

The Taylor Park first fill account is already full, and they are working on the 2nd fill account. They are excited, and much better off this year than they were last year.

Colorado Water Conservation Board

They have their next board meeting on Monday and Tuesday. The agenda is online and will be broadcasted. Next week is the severance tax proposal deadline, so if anybody wants to apply for funds, they need to get in touch with a staff member.

Colorado Parks and Wildlife

Trout were sampled at the East Portal, and they are working on a report which will evaluate the electronic fish barrier. They will let us know once this report becomes available. They also sampled trout at Pleasure Park after the flooding. The trout looked robust!

Colorado River Water Conservation District

Their quarterly board meeting is completed. They agreed to work with local producers in the Lower Gunnison basin for on-farm research. They continue to fund the Selenium Task Force. Their grant program is still open until January 31st. There is up to \$150,000 per grant up to a total of \$250,000 for water supply development.

Upper Gunnison Water Conservation District

The Natural Resources Conservation Service (NRCS) posted that they would no longer be conducting snow surveys in 2014 and beyond because of budget cuts. There was a public outcry, and NRCS reconsidered. They will maintain their surveys in 2014, but they will need stakeholder support beyond that. NRCS is dropping the Park Cone site in the Upper Gunnison, which is across from the Upper Gunnison WCD snow course site, so the NRCS didn't want to collect duplicate data. Maintenance teams have been cut from 3 to 1. Upper Gunnison WCD has a meeting with the State Conservation Office tomorrow.

Uncompahgre River Water Users Association

They have planned repair work on the South Canal to begin in the fall. They will probably start the Tunnel at the end of March or early April, depending on conditions at Ridgway Reservoir.

Tri-County Water Conservancy District

They are winding down on the hydropower project, and will begin testing the generators; now for the small generator and March/April for the larger. The above normal 5,000 acre-feet in the reservoir will be used up in testing, but they will coordinate this with the Gunnison Tunnel diversion so no water is wasted. There will be a fairly quick ramp up from 45 cfs, which is not out of the norm. They need to release only 30 cfs for an hour or two just to see what low points will look like. They will try to plan this when there is Cow Creek snow melt. The range for the small generator is 30-75 cfs, and the large generator is 125-440 cfs. There will be a 5 day run test at full tilt. In the future, the large generator will be run in the summer, the small in the winter, and possible both in the summer. On June 6, there will be a public project party with tours, lunch, etc.

Project 7

They haven't seen flows this low since 2000. Fairview reservoir is doing 4.6 when it used to average 5.0.

Center for Snow and Avalanche Studies/Dust-on-Snow

No dust on snowpack so far, which is not too unusual. There is persistent/developing drought throughout the dust area. There is a small water and snow hydrology course in February.

The next Aspinall Unit Operations meeting will occur on April 24, 2014 at the Western Colorado Area Office. New location: 445 West Gunnison Avenue, Suite 221, Grand Junction, Colorado.

January 23, 2014 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*, Karen Tucker
- Bureau of Reclamation**.....Ed Warner*, Ted Dunn*, Ryan Christianson*, Jenny Hamilton*, Sandra Caskey*, Terry Stroh*, Jane Blair, Paul Davidson*, Justyn Hock, Erik Knight*, Phil Martin, Grant Watson*, Larry Lingerfelt*
- CSAS-CODOS**.....Chris Landry*
- City of Grand Junction**.....Terry Franklin, Greg Trainor

Club 20.....Reeves Brown
Colorado Department of Agriculture.....Jim Miller
Colorado River Energy Distributors.....Leslie James
Colorado River Water Conservation District...Dave Kanzer*, Jim Pokrandt, Eric Kuhn
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 Gardinio*
Colorado Water Conservation Board...Michelle Garrison*, Ray Alvarado, Steve Miller
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.....Rob Fiedler
Fish and Wildlife Service.....Patty Gelatt, 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
Montrose Daily Press.....James Shea, Jason Monroe, Caitlin Switzer
National Drought Mitigation Center.....Donna Woudenberg
NOAA.....Andrea Ray, Robert Webb, Klaus Wieckmann, Brad Udall,
Kevin Werner, Chad McNutt, Tracy Cox, Brenda Alcorn, John Lhotak
National Park Service....Michael Dale*, Connie Rudd, Ken Stahlnecker, Mark Wondzell,
Melissa Trammell
National Weather Service.....Brenda Alcorn, Aldis Strautins*
NRCS.....
North Fork Water Conservancy.....Tom Alvey
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, Norm Brooks
Trout Unlimited.....Pat Oglesby, Marshall Pendergrass*, Cary Denison*,
Drew Peternel, John Trammell
UVWUA...Ed Suppes, Steve Fletcher*, Steve Shea*, Aaron English*, Dennis Veo,
Michelle Decker
Upper Gunnison River Water.....John McCloy*, Frank Kugel*, Greg Peterson
USGS.....David Brown, Bob Jenkins, Steve Anders*, Trisha Solberg
Western Area Power...Clayton Palmer, Jeff Ackerman, Jerry Wilhite, Nancy Scheid,
Tim Vigil*, Tanya Newman, Chrystal Dean*
Western Colorado Congress.....Fred Wetlaufer
Western Resource Advocates.....Bart Miller
Xcel Energy.....Fred Eggleston