

WCN-SMcCall  
ENV-4.00/PRJ-13.00

Subject: Wayne N. Aspinall Unit Operations

Dear Interested Party:

Enclosed is a summary of our April 20, 2000, meeting to coordinate Reclamation's operation of the Aspinall Unit.

Highlights of the meeting include:

–Based on April snow readings, the most probable April-July inflow to Blue Mesa Reservoir for this year is predicted at 630,000 acre-feet or around 90 percent of normal. This is a significant improvement from January predictions of 68 percent of normal.

–Average monthly flows planned for the Gunnison River through the Black Canyon National Park and Gunnison Gorge under most probable conditions will be around 900-1,000 cfs through the summer, increasing to around 1,200 cfs in the fall when irrigation diversions diminish. A peak flow through the Gunnison Gorge will be provided in late May; ranges between 3,000 and 4,400 cfs were discussed. Under these conditions, Blue Mesa will fill in mid-summer.

–The Fish and Wildlife Service updated the status of flow recommendations for endangered fish species, and quantification of the reserved water right for the Black Canyon of the Gunnison National Park was discussed.

–Research flows were requested during two periods in coming months—a 600 cfs flow from September 26-September 29 to facilitate the Colorado Division of Wildlife's trout census; and a flow of 500-600 cfs for a 5-day period in late July to conduct research in the Black Canyon of the Gunnison National Park.

Following the meeting, Reclamation made the following determinations:

1. A peak flow of 3,000 cfs (through the Gunnison Gorge) will be planned for around May 19 to May 24 with ramping periods before and after.
2. A special flow of 550 cfs will be provided in late July for the National Park Service research in the Black Canyon. If endangered fish flows downstream from the Redlands Diversion Dam are infringed on during the research as determined by the Fish and Wildlife Service or Reclamation, the flows will have to be increased.

If you have any suggestions on improving the operation meetings or the summaries of the meetings, please let us know. The next operation meeting will be held on **Thursday, August 17 at 12:30 in the National Park Service Elk Creek Visitor Center at Blue Mesa Reservoir**. If you have questions, please call me at (970) 248-0654.

Sincerely,

Ed Warner  
Water Resources Group Chief

Enclosure

Distribution (see attached list)

bc: Curecanti Field Division, Attention: CCI-100 1820 South Rio Grande Avenue, Montrose CO 81401

Regional Solicitor's Office, Attention: Scott Loveless  
125 South State Street, Room 6201, Salt Lake City UT 84138

Regional Director, Salt Lake City UT  
Attention: UC-400, UC-434, UC-438, UC-600, UC-723, UC-720, UC-726 (ea w/encl)

Director, Technical Service Center, Denver CO  
Attention: D-8510 (w/encl)

WCG-CDeAngelis, SMoyer, EWarner, SMcCall, JOzga, CStanton, KFogelquist, MSteves,  
RStorbo, JWright (ea w/ encl)

WCD-RSwickard, JSimons

WBR:SMcCall:rb:4/28/2000:0638: April 20 asp ops.wpd



Distribution List - April 20, 2000 Aspinall Operation Meeting

\*An asterisk indicates person attended the meeting

**Argonne National Laboratory** . . . . . John Hayse  
**City of Grand Junction** . . . . . Greg Trainor  
**Club 20** . . . . . Shane Henry  
**Colorado State University** . . . . . Brett Johnson  
**Daily Sentinel** . . . . . Dave Buchanan  
**Environmental Defense Fund** . . . . . Jim Martin  
**Gunnison Basin POWER** . . . . . Ralph (Butch) Clark, Ramon Reed  
**Gunnison Country Times** . . . . . Pat Daniel  
**Gunnison River Expeditions** . . . . . Hank Hotze, Bo Gates  
**Helton & Williamsen, P.C.** . . . . . Duane Helton  
**High Country Citizens Alliance/Sierra Club** . . . . . Steve Glazer\*  
**Matt Owens Fly Company** . . . . . Matt Owens  
**KNFS Environmental Services (Trans Colorado Pipeline Project)** . . . . . Craig Meis  
**Trout Unlimited** . . . . . Pat Oglesby\*  
**Western Colorado Congress** . . . . . Fred Wetlauffer  
**University of Montana** . . . . . Jack Stanford  
**Co. River Water Conservation District** . . . . . Mike Gross\*, Dave Kanzer\*, David Halford, Ray Tenney\*  
**Colorado River Energy Distributors**.....Cliff Barrett\*  
**North Fork Water Conservancy District** . . . . . Tom Alvey  
**Redlands Water and Power Company** . . . . . Gregg Strong  
**Uncompahgre Valley Water Users Association** . . . . . Marc Catlin\*, Jim Hokit  
**Upper Colorado River Commission** . . . . . Everett Sunderland\*  
**Upper Gunnison R. Water Conservancy District** . . . . . Kathleen Klein\*, Mark Schumacher\*, Tyler Martineau, Dennis Steckel, Jim Slattery  
**Delta County Commissioners** . . . . . Donna Ferganchick\*, Jim Ventrello  
**Gunnison County Commissioners** . . . . . Marlene Zanetell\*  
**Colorado Department of Agriculture** . . . . . Jim Miller  
**Colorado Division of Water Resources** . . . . . Wayne Schieldt\*, Frank Kugel, Richard Rozman  
**Colorado Division of Wildlife** . . . . . Daniel Brauch\*, Sherman Hebein, Pat Martinez, Rick Anderson  
**Colorado Water Conservation Board** . . . . . Randy Seaholm\*; Ray Alvarado\*  
**Wyoming State Engineers Office** . . . . . John Shields  
**Congressman Scott McInnis** . . . . . Don Hower  
**Senator Wayne Allard** . . . . . Shane Henry\*  
**Senator Ben Nighthorse Campbell** . . . . . George Rossman\*, Katie Aggler  
**Army Corps of Engineers** . . . . . Grady McNure  
**Bureau of Land Management** . . . . . Allan Belt, Dennis Murphy, Jim Ferguson, Carl Bauer, Roy Smith  
**Fish and Wildlife Service** . . . . . Rick Krueger, Frank Pfeifer\*, Chuck McAda\*, Terry Ireland  
Reed Harris, Henry Maddux, George Smith  
**National Park Service** . . . . . Sheridan Steele\*, Myron Chase; Ken Stahlnecker, Mark Wondzell\*  
Ron Thomas\*, Bill Hansen, Chuck Pettee\*  
**National Weather Service** . . . . . Bill Reed, Brian Avery\*

**National Oceanic & Atmospheric Administration** . . . . . Andrea Ray, Klaus Weickmann  
**U.S. Geological Survey** . . . . . Paul von Guerard\*, Bob Jenkins, Gordon Mueller  
**Land and Water Fund** . . . . . Bart Miller\*

**Western Area Power Administration** . . . . . Shane Collins\*, Clayton Palmer  
Jeff Ackerman\*, Kathy Crane, Ken Green, Annette Falvo;  
Gary Burton; Margaret Matte

**Bureau of Reclamation**...Carol DeAngelis, Sue Moyer, Ed Warner\*, Steve McCall\*, Coll Stanton\*,  
Karen Fogelquist\*, John Ozga\*, Russ Storbo\*, Ruth Rydiger, Gary McDermott, Don Phillips\*, Arlo  
Allen, Jane Blair\*, Paul Davidson, Larry Crist, Christine Karas, Tony Morton

**Interior Solicitors Office**.....Scott Loveless, John Bezdek, Peter  
Fahmy\*

**Department of Justice**.....Dave Gehlert\*

## Aspinall Unit Operation Coordination Meeting

April 20, 2000

**Participation:** This meeting was held in Grand Junction. Attendees are noted on the distribution list.

**Purpose of Meeting:** The purpose of these 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 an overall 24-month study 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 projected inflows to its reservoirs, flood control needs, existing water rights, minimum instream flows, target elevations for reservoirs, flow needs for endangered fish and other resources, recreation, hydropower needs 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 January-April 2000 operations; projected inflows to the reservoirs; and potential operation plans under maximum, most, and minimum probable water supply forecasts.

Activities related to long-term operation planning were also discussed at the meeting. Many of the field studies leading to flow recommendations to help recover downstream endangered fish and to quantify a Federal reserved water right for the Black Canyon of the Gunnison National Park have been completed. The Fish and Wildlife Service peer review draft of a 'Synthesis Report' that will include flow recommendations for endangered fish was also discussed. These operation meetings will be used more in the future to discuss proposals for long-term operation plans to address these and related resource management issues.

### **Operations:**

January-April 2000 Operation: Releases from Crystal Reservoir were reduced in January from approximately 1,300 cfs to 700 cfs in response to January snowpack levels that were around 68 percent of average. Snowpack conditions improved throughout the period and forecasted inflow to Blue Mesa reached 90 percent by April 1. In mid-March releases were raised in reaction to this increase.

April-August 2000 Operation: Based on April 1 snow course information, the most probable April-July inflow to Blue Mesa is 630,000 acre-feet or around 90 percent of the 30-year average. The maximum probable inflow is 790,000 acre-feet; minimum is 399,000 acre-feet. Under the most probable conditions, Blue Mesa will fill in late June or July and approximately 80,000 acre-feet of water would need to bypass the Crystal powerplant. Following a late May peak, flows through the Black Canyon should be around 1,000 cfs in the summer and 1,200 cfs in the fall (see special flow requests).

Two options for a spring peak were discussed. For this type of water year (average dry year) the Fish and Wildlife Service draft flow recommendations would call for a peak of 9,500 cfs at the Whitewater gage on the Gunnison River near Grand Junction. Using historical data for tributaries downstream from Crystal, Reclamation estimates that releases from Crystal of around 5,500 cfs would be needed to have a good probability of meeting the 9,500 cfs.

To reach 5,500 cfs would require releases of 4,000 cfs from Crystal (2,000 cfs through the powerplant plus 2,000 cfs through the bypass), plus a 1,500 cfs spill. The second option considered was to release 4,000 cfs, but not to spill, resulting in flows of about 8,000 cfs at the Whitewater gage.

The alternatives for the spring peak were discussed with the following input:

Western Area Power Administration: Western supported the 4,000 cfs release because it would protect the peaking capabilities of upstream Morrow Point Dam (when Crystal is spilling, Morrow Point peaking is restricted to avoid sudden fluctuations in the Black Canyon National Park and Gunnison Gorge). Glen Canyon has special releases planned for this spring and summer for endangered fish. These releases started April 6 with a steady flow of 8,000 cfs; this has increased to 17,000 cfs and will remain there till May 3. On May 3 a 4 day spike flow of 31,000 cfs will occur, and then flows will be ramped down. Flows of 8,000 cfs will be maintained through the summer. Flaming Gorge Dam peaking capabilities are also restricted and Western has significant concerns with meeting power demands in the southwest this summer.

Colorado Division of Wildlife: CDOW requested that ramping rates be followed carefully under either alternative.

Colorado River Energy Distributors Association: CREDA emphasized that this power situation shows the need to coordinate plans for Glen Canyon, Flaming Gorge, and the Aspinnall Unit.

National Park Service: The Service would prefer the spill alternative that would provide a larger peak through the Black Canyon (4,500 cfs). Under non-reservoir conditions, a peak of 7-8,000 cfs would be expected in years like this. NPS also requested that WAPA quantify the power/\$ differences between the alternatives.

(On April 21 an E-Mail was received by Reclamation from CREDA expressing the need to better coordinate Colorado River Storage Project facilities and to try to reduce impacts on hydropower this year. On April 25 Reclamation received a faxogram from Land and Water Fund of the Rockies, Sierra Club, and Trout Unlimited Western Water Project supporting the larger release to benefit endangered fish and other resources)

Special Flow Requests: The National Park Service requested flows of around 500-600 cfs to conduct research in the Black Canyon for a 5-day period between July 17<sup>th</sup> and July 28<sup>th</sup>. Research plots previously established for vegetation and other resources would be analyzed. Several comments were received—the Colorado Division of Wildlife was concerned with the drop in summer flows from around 1,000 to 500-600, but supported the research from a scientific standpoint; WAPA indicated that there would be hydropower losses due to the lower flows during the tests; the Fish and Wildlife Service and others mentioned that meeting endangered fish flows below the Redlands Diversion Dam might be

difficult with the lower releases. No action was taken on this request during the meeting. The Colorado Division of Wildlife requested flows of 600 cfs in the Gunnison Gorge between September 26 and September 29 for their annual trout census. There were no problems brought up with this request and it will be included in operation planning.

Aspinall Unit Maintenance Work: Don Phillips reviewed the general O&M schedule for the dams. There are no special activities planned for this year that would affect flows or operations. Next winter there will be a rewind at Crystal which should not affect flows. Plans are being made to dredge a silt deposit near the confluence of the Morrow Point tailwater and Cimarron Creek that reduces generation by approximately 1.5 percent. This work would occur in 2002.

Agency/Organization Activities and Discussion of Related Activities:

**Fish and Wildlife Service** - FWS has completed a draft of the synthesis report and peer review is being completed. The report will next be revised and provided to the Biology Committee of the Recovery Program for a 45-day review. The FWS gave an overview of the draft flow recommendations. Generally the draft report calls for a more natural hydrograph, with magnitude of the spring peak varying with the amount of unregulated inflow to Blue Mesa. A base flow of 300 cfs downstream from the Redlands Diversion is discussed in the report. The types of peaks discussed are listed below (draft) –these are flows at the Whitewater gage so they include flows from the North Fork, Uncompahgre and other tributaries as well as from the Aspinall Unit:

Extremely dry year-4,000 cfs or greater  
Moderately dry year- 7,000 cfs or greater  
Average dry year-9,500 cfs or greater  
Average wet year-12,500 cfs or greater  
Moderately wet year-17,000 cfs or greater  
Wet year-22,500 cfs or greater

**Colorado Division of Wildlife** - The Division is continuing research on lake trout and kokanee salmon at Blue Mesa Reservoir. Rainbow trout from the Gunnison River below Crystal are presently being spawned for eventual stocking in the Gunnison to reduce the impact of whirling disease on the rainbow fishery.

**Bureau of Reclamation** - Work on the EIS on Aspinall operations to implement the flow recommendations for endangered fish will begin when flow recommendations and the synthesis report are available. The EIS would not cover the National Park reserved right although the right would be addressed as a connected action or cumulative impact. Work is on schedule on renewing the 5-year interim agreement with the Service and Colorado Water Conservation Board to provide flows to the Redlands fish ladder. The existing agreement ends in August 2000.

**Colorado River Water Conservation District** - Mike Gross announced his upcoming retirement. Many thanks from all in attendance to Mike for his knowledge; humor; ability to work with people; and,



occasionally, his art work.

**Sierra Club/High Country Citizens** - The organizations are working on watershed planning and selenium issues in the basin.

**Upper Gunnison River Water Conservancy District** -announced a meeting May 24 at 1:30 pm at the Aspinall/Wilson Center at Western State with Tom Pitts to discuss the Endangered Species Act. The presentation is open to the public.

**National Weather Service**- Long range forecasts call for a very warm summer in the southwest with the possibility of an above average monsoon season.

**Justice Department** - Dave Gehlert from the Justice Department updated the group on efforts to quantify the Black Canyon reserved water right. The main task at the present time is developing a model to evaluate impacts of different flow scenarios. This model will also be used to evaluate effects of endangered fish flows and in Reclamation's operation EIS. In response to questions, Dave said the concept for the reserved right is still similar to ideas presented at public meetings in late 1998. The Colorado Water Conservation Board expressed some concerns with the use of RIVERWARE as the model basis and suggested close coordination with the Board to avoid future problems.

**Colorado Water Conservation Board** - Asked the question of whether research is showing that mimicry of the natural hydrograph is still viewed as the key to endangered fish recovery. Some concerns recently expressed are that encroachment of tamarisk (salt cedar) negates the value of high spring releases to some degree and the high spring releases may also lower water temperatures and delay spawning.

**Uncompahgre Valley Water Users** - No special work this summer.

**US Geological Survey**- The Survey announced a Gunnison River Adaptive Management workshop to be held in Grand Junction at the Grand Vista Hotel on May 15-16. Contact Sharon Campbell at 970-226-9331.

**Next Meeting: 12:30 on Thursday, August 17, National Park Service Elk Creek Visitors Center, Blue Mesa Reservoir**