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[Bureau of Reclamation, Grand Junction CO
Mailed August 26, 1999]

WCN-SMcCall
ENV-4.00/PRJ-13.00

Subject: Wayne N. Aspinall Unit Operations

Dear Interested Party:

Enclosed is a summary of our August 19, 1999, meeting to coordinate Reclamation's operation of the Aspinall Unit. Thank-you to the National Park Service for hosting this meeting at Blue Mesa, and to Clayton Palmer for his informative talk on Western Area Power Administration's power marketing.

Highlights of the meeting include:

--The April-July inflow to Blue Mesa Reservoir was 676,000 acre-feet, which is near average; however, the distribution of the inflow was not typical. Blue Mesa filled within 0.1 foot of maximum water surface. Late spring and summer precipitation increased the inflow significantly from the very low runoff predicted in April. A late May peak of 2,800 cfs through the Black Canyon occurred. An early August peak of around 2,700 cfs also occurred due to high inflows from summer rains.

--Average monthly flows planned for the Gunnison River through the Black Canyon National Monument and Gunnison Gorge are around 1,000-1,200 cfs for the remainder of the summer and early fall. Flows will increase to around 1,500+ cfs following the irrigation season. These initial plans will change if above average precipitation continues to occur.

--The Fish and Wildlife Service is making progress on recommended flows for endangered fish, and the draft synthesis report is undergoing internal review.

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 **January 31 at 12:30 at the BLM/NPS Office in Montrose (2465 South Townsend)**. If you have questions, please call me at (970) 248-0654.

Sincerely,

/s/

Ed Warner
Water Resources Group Chief

Enclosure
Distribution (see attached list)

bc: Curecanti Field Division, Attention: CCI-100, CCI-400, CCI-420, CCI-460, CCI-140,
CCI-410, CCI-220, 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-434, UC-600, UC-723, UC-720, UC-700, UC-726, UC-433, UC-606 (ea w/encl)

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

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

WCS-RRydiger

WBR:LWest:rb:8/25/99:0638:aspinall mtg 8-19.lw

Distribution List - August 19, 1999 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*, Ray Tenney
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, Dennis Steckel*
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*, 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 Katie Aggler
Army Corps of Engineers Grady McNure
Bureau of Land Management Allan Belt, Dennis Murphy, Roy Smith
Fish and Wildlife Service Sue Moyer*, Chuck McAda*, Terry Ireland
Reed Harris, Henry Maddux, George Smith
National Park Service Sheridan Steele, Myron Chase*; Ken Stahlnecker*, Mark Wondzell*
Bill Hansen, Chuck Pettee*
National Weather Service Eric Holloway, Mike Myers
National Oceanic & Atmospheric Administration Andrea Ray*, Klaus Weickmann
U.S. Geological Survey Paul von Guerard*, Bob Jenkins, Gordon Mueller
Western Area Power Administration Shane Collins*, Clayton Palmer*

Jeff Ackerman, Kathy Crane, Ken Green*, Annette Falvo; Shane Collins*
Gary Burton; Margaret Matter

Bureau of Reclamation Carol DeAngelis*, Ed Warner*, Steve McCall*, Coll Stanton*, Steve McCall*
Karen Fogelquist, John Ozga*, Russ Storbo*, Lorrie West*
Ruth Rydiger
Gary McDermott*, Don Phillips*, Laurie Jones
Chris Lakin*, John Miller*, Liz Rankin*, David Steinmark*, Richard Stodt*, Jane Tellechea*
Bob Adams, Arlo Allen*, Jane Blair*, Paul Davidson*, Christine Karas, Tony Morton*

Aspinall Unit Operation Coordination Meeting

August 19, 1999

Participation: This meeting was held at Blue Mesa Reservoir at the NPS Elk Creek Visitor Center. 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 in stream 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-August operations; projected inflows to the reservoirs; and proposed operation plans under maximum, most, and minimum probable water supply forecasts.

Activities related to long-term operation planning were also discussed at the meeting. 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 River National Monument have been completed. The Fish and Wildlife Service has made progress on the 'Synthesis Report' that will include flow recommendations for endangered fish; a draft is undergoing internal review. 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.

April-August 1999 Operation: Actual April-July runoff into Blue Mesa in 1999 was near average at 676,000 acre-feet. While the volume was near average, the distribution was not. A very dry winter and early spring was followed by a very wet late spring and summer. This can be seen from the mid-April data that projected an inflow of only 460,000 acre-feet. In April, Blue Mesa was projected not to fill; by July the reservoir level reached within 0.1 feet of maximum water surface.

Flows through the Black Canyon were around 450 cfs in the beginning of April. Peak flows occurred in late May at around 2,800 cfs and then declined to around 1,000 cfs in early June. Due to rainfall, flows were increased to around 1,700 cfs in late June. Unusually high rainfall in late July created another peak of around 2,600 cfs to keep Blue Mesa from spilling.

Proposed August-January 1999 Operation: Flows through the Black Canyon should remain between 1,000 cfs and 1,500+ cfs for the remainder of the year, assuming average precipitation patterns. Continued high precipitation would result in higher flows. Blue Mesa Reservoir elevation will be lowered 26 feet by the end of December to reach 7490 feet. This target elevation is to reduce potential

upstream ice problems in severe cold periods. To accommodate this year's Colorado Division of Wildlife trout survey, flows will be reduced to 600 cfs between September 21 and 24.

Aspinall Unit Maintenance Work: Scheduled Blue Mesa penstock and stilling basin inspection work was completed during mid-June. The Blue Mesa spillway was used to release water as needed; however, efforts were made to minimize the amount of spills and to time spills during the daylight in order to reduce loss of kokanee from Blue Mesa.

Crystal power plant will be down for 24 hours on August 23 to investigate overheating problems. The system has been operating at 23 MW rather than its potential of 30 MW. There will be no interruption of stream flows, as the bypass will be used.

In early September we will start lowering Crystal Reservoir 40 feet. This will allow removal of debris from the trash rack. This operation should be completed by late September. During this same period, Blue Mesa releases will be shifted from the power plant to bypasses in order to remove large rocks from the Blue Mesa stilling basin. Downstream flows should not be affected by either activity.

Regular maintenance will be done at Morrow Point in December and at Crystal in February. In 2001, a rewind is planned at Crystal. This will take the power plant out of service for 120 days, and releases will be made through the bypass.

In the near future, possibly next year, an ultra sound inspection of the Crystal stilling basin is needed to determine if reservoir spills have eroded concrete in the basin. This may require shutting down releases. More details will be provided as they become available.

Discussion of Operations: Reclamation's preliminary operation plan in April did not include a spring peak. In response to increased precipitation in May, a peak of around 2,800 cfs was provided in late May. Reclamation's April and May projections did not expect Blue Mesa to fill, but it did so by the end of July and required use of the Crystal bypass to avoid spills. High precipitation continued into August and operations centered around releasing enough water to prevent spills at Blue Mesa while still allowing Blue Mesa to fill. For the remainder of the year, flows through the Black Canyon should range from 1,000 cfs to 1,500+ cfs with the exception of the 600 cfs trout survey flows.

Special Flow Requests: The Division requested a flow of 600 cfs in the Gunnison Gorge from 10 a.m. on September 21st until noon on September 24.

Western Area Power Administration (WAPA) presentation on power marketing

WAPA gave a presentation on marketing of hydropower from the Aspinall Unit and other Units of the Colorado River Storage Project (CRSP). Aspinall's generating capacity (280 MW) is relatively small compared to the entire CRSP capacity of 1600 MW; however, Blue Mesa and Morrow Point provide most of the peaking power. In the big scheme, the peaking power is very valuable. Because Crystal serves as a re-regulating reservoir, Morrow Point and Blue Mesa can follow hydropower needs

closely. Reclamation owns and operates the dams, reservoirs, and powerplants; WAPA owns and operates the substations and transmission lines and markets the power.

Power is sold mostly to rural areas of Utah, Colorado, Wyoming, New Mexico, and Arizona. Hydrologic conditions reported in the 24-month study are used early in the year to estimate power availability. Power demands peak during the day. At certain times, WAPA has surplus power to sell, at other times it purchases power to meet contract obligations. Most of the purchased power comes from coal fired plants. Constraints on generation (environmental or other) increase the need for power purchases to meet existing contractual obligations. They may also cause WAPA to sell less power in the future. Constraints at Flaming Gorge and Glen Canyon have reduced WAPA's ability to meet demands during certain periods. WAPA is interested in having any constraints be scientifically supported.

Power rates are determined by a formula to recover operating costs, power purchase costs, costs of unit features, costs of unit rehabilitation, 95% of costs of CRSP irrigation projects, environmental costs, portions of salinity control project costs, and other factors. Power revenues pay most of the cost of CRSP dams and reservoirs. The major units are to be paid off in 50 years (for example, in 2013 for Glen Canyon and 2026 for Aspinall).

Agency/Organization Activities and Discussion of Related Activities:

Colorado Division of Wildlife - Rainbow trout collected immediately downstream from Crystal Dam continue to be disease free which means next year they may be used for spawning and as a source of fish for stocking in the lower gorge. Creel census work continues on Blue Mesa Reservoir. The kokanee decline appears to be continuing, while lake trout are increasing.

National Park Service - NPS continues to work on reserved water right for Black Canyon. The basic framework, presented to the public in December 1998, is still being used as a guide. The NPS is working with other agencies to address comments received from the public. The NPS still plans to quantify the right through the standard state water right system. Proposed legislation for turning the National Monument into a National Park should not affect water issues. In response to an audience question, NPS indicated that quantification of the reserved right does not require compliance with the National Environmental Policy Act.

Fish and Wildlife Service - FWS is continuing to work on the synthesis report, and a draft is undergoing internal review. The report should go to the Recovery Program for review later this year. When flow recommendations are available, Reclamation will prepare a biological assessment on a plan for operating the Unit to help meet these flows. This will be followed by a biological opinion from FWS. Reclamation still plans on concurrently preparing a draft and final environmental impact statement on operation changes.

FWS is revising its letter to Reclamation to clarify its “no effect” position on the 60,000 acre-feet depletion allowance upstream from the Aspinall Unit. This letter is needed to finalize the agreement on subordination of the Blue Mesa water rights to these depletions.

Bureau of Reclamation - Work on the voluntary EIS on endangered fish operations will begin when flow recommendations and the synthesis report are available. Work will begin soon 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 - The District is interested in schedules for quantification of the Black Canyon Monument’s reserved water right and for the synthesis report on downstream endangered fish. The 5-year agreement on providing flows in the river for operation of the Redlands fish ladder needs to be renewed in the next year. The District is also interested in having the 60,000 acre-foot depletion agreement signed in the near future.

Sierra Club/High Country Citizens - Working on selenium and water quality issues in the Gunnison Basin.

Colorado Water Conservation Board and Upper Gunnison River Water Conservancy District - These organizations had similar comments as the Colorado River Water Conservation District.

Western Area Power Administration - Western requested that they be kept informed of any changes in schedules on endangered species and reserved water right programs. Western emphasized that variations and constraints on power generation does affect power marketing.

Gunnison POWER - Brought up the idea of watershed planning—perhaps the Aspinall operation group could be expanded to more formally cover issues and interests. One of the first jobs would focus on the reoperation plans to help meet flow recommendations for endangered fish.

Gunnison County - Has met with the NPS on long-term planning. NPS may provide planning assistance. There is need to continue coordination between NPS and the county on land use around Blue Mesa Reservoir. Gunnison County is also interested in making progress on the Aspinall Unit fishing easement program.

Redlands Water and Power - Maintenance on the system will occur in mid-October; diversions cease during the maintenance.

U.S. Geologic Survey - This summer’s storms have provided an opportunity to collect selenium samples during flash flood events. Very preliminary data indicate that Dallas Creek peaked around 3,600 cfs during one thunderstorm event.

Uncompahgre Valley Water Users - Tunnel diversions may be reduced earlier this year due to the summer precipitation patterns.

NOAA - A representative from NOAA attended the meeting. They have a climate diagnostic center and are interested in using long-term forecasts in water resource management. Would be available to give a presentation on this at a future operations meeting.

State Engineer - Went from managing an impending drought early in year to watching floods later in the year.

Next Meeting - Scheduled for **12:30 on Monday, January 31**, at the National Park Service/BLM conference room in Montrose.