September 11, 1997

WCN-LWest ENV-4.00/PRJ-13.00

Subject: Wayne N. Aspinall Unit Operations

Dear Interested Party:

Enclosed is a summary of our August 21, 1997, meeting to coordinate Reclamation's operation of the Aspinall Unit. Thanks to the National Park Service for hosting this meeting at Elk Creek Visitor's Center on Blue Mesa Reservoir. The next meeting has been tentatively scheduled to begin at 12:30 on Tuesday, January 27, 1998, at our office in Grand Junction. Verification of this schedule and additional details will be sent out later; we are trying to avoid conflicts with Colorado Water Congress and Colorado Water Conservation Board meetings.

Highlights of this meeting include:

--Above average precipitation and inflows are continuing. As of mid-August, Blue Mesa Reservoir is within a couple feet of being full. Releases may need to be increased to meet the end-of-year elevation target for Blue Mesa.

--Average monthly flows planned for the Gunnison River through the Black Canyon National Monument and Gunnison Gorge are for 1,200-1,300 cfs through December, and could be higher if we have a wet fall. Between September 23-26, flows will be reduced to 600 cfs to assist in Colorado Division of Wildlife's annual trout census.

--Colorado River strains of rainbow trout were lost at the Glenwood Springs hatchery due to a kidney disease. Therefore, plans to stock rainbow trout in the Gunnison Gorge this fall are being revised. Colorado Division stills hopes to stock 60,000 fish from the Ft. Collins hatchery. They want to collect rainbow trout eggs from the Gunnison River population in the spring to replenish hatchery supplies.

If you have questions, please call me at (970) 248-0654.

Sincerely,

/s/ Ed Warner

Ed Warner Water Resources Group Chief cc: 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-288, UC-297, UC-600, UC-320, UC-332 (ea w/encl) bc: WCN-CDeAngelis, DMutz, EWarner (ea w/encl)

WCN -SMcCall, CStanton, JWright, RStorbo, KFogelquist, MSteves (ea w/o encl)

WBR:LWest:rb:9/10/97:aspinall.lw

Interested Individuals	Kevin & Kim Chedd
Argonne National Laboratory	John Hayse
City of Grand Junction	Greg Trainor
Club 20	Greg Walcher, Shane Henry
Colorado State University	Brett Johnson
Environmental Defense Fund	
Gunnison Basin POWER	
Gunnison River Expeditions	
High Country Citizens Alliance	Steve Glazer*
Matt Owens Fly Company	Matt Owens
Trout Unlimited	Pat Oglesby*
Western Colorado Congress	Fred Wetlaufer
University of Montana	Jack Stanford
Colorado River Water Conservation District	Mike Gross*, Dave Kanzer*, Ray Tenney*
North Fork Water Conservancy District	Tom Alvey
Redlands Water and Power Company	Gregg Strong*
Uncompany Valley Water Users Association	Jim Hokit, Mark Catlin
Upper Colorado River Commission	
Upper Gunnison River Water Conservancy District	Tyler Martineau*
	Mark Schumacher*, Dennis Steckel*
Colorado Department of Agriculture	
Colorado Division of Water Resources	Ken Knox, Wayne Schieldt
Colorado Division of Wildlife	Rick Anderson
	Robert Caskey, Pat Martinez
	Sherman Hebein*
	Dan Braugh
Colorado Water Conservation Board	
Wyoming State Engineers Office	
U.S. Army Corps of Engineers	-
U.S. Bureau of Land Management	
	Roy Smith
	Dennis Murphy
U.S. Fish and Wildlife Service	· · · ·
	Reed Harris
	Chuck McAda*; Terry Ireland, Rick Krueger
	George Smith
U.S. National Park Service	
	Rick Harris*; Sheridan Steele*
	Myron Chase*; Dave Roberts
U.S. National Weather Service	
U.S. Geological Survey	
	John Elliot; Gordon Mueller; Jonathan Friedman
U.S. Western Area Power Administration	
	Jeff Ackerman*, Kathy Crane
	Gene Iley Jr., Clayton Palmer
U.S. Bureau of Reclamation	
Rick Gold, Arlo Allen, Paul Davidson	*, Chris Karas, Ron Sutton, Tony Morton, Tom Ryan
	Al Inman*, Gary McDermott

Distribution List - August 21, 1997 Aspinall Meeting *An asterisk indicates person attended the meeting

Aspinall Unit Operation Coordination Meeting August 21, 1997

Participation: This meeting was held at the Elk Creek Visitor Center on Blue Mesa Reservoir. Attendees are noted on the attached distribution list. First-time participants included Susan Earley (Western Area Power Administration), Ray Alvarado (Colorado Water Conservation Board), Mark Schumacher and Dennis Steckel (Upper Gunnison River Water Conservancy District), and Al Inman (USBR/Curecanti Field Division).

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 also used in development of an overall 24-month study for operation of Reclamation projects in the Upper Colorado River Basin, which also includes plans for Glen Canyon, Flaming Gorge, and Navajo Units. Operation of the Aspinall Unit is based on projected inflows to its reservoirs, existing water rights, minimum instream flows, target elevations for reservoirs, flows 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. Handouts provided include background data on 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 are also discussed at the meeting. Studies leading to flow recommendations to protect downstream endangered fish and to quantify a Federal reserved water right for the Black Canyon of the Gunnison River National Monument are being completed. These operation meetings will be used more in the future to discuss proposals for long-term changes in operations to address these and related resource management issues, including completion of a Draft Biological Opinion on Aspinall operations that is scheduled for completion by next March.

<u>April-August Operation</u>: A 1997 graph was presented to show daily inflow and content of Blue Mesa, Crystal releases and flows in the river below the Gunnison Tunnel during April-July. Flood control operations initiated in March, in response to a 185 percent of normal snowpack measured on February 1, resulted in Blue Mesa being lower in April than it has been in many years. Replacement of the transformer at Crystal, which limited hydropower production flows to around 1,850 cfs, were completed by mid-May. A wet spring helped produce a spill at Crystal to provide a late June peak flow in the Gunnison River. By mid-August, Blue Mesa had received it's full supply of forecasted inflow for August, and is within 3 feet of being full.

Use of our new 'fax tree' is helping to keep people informed of short-term changes in flows, especially as changes affect public safety. Blue Mesa's low levels during a Memorial Day fishing tournament yielded some criticism. Park Service concessionaires and fishing/rafting guides need to stay informed so docks can be moved and expectations for pre-arranged trips can be tempered. (In general, rafters may depend too much on predictions which can change frequently as snowpack changes.)

<u>Proposed August-December Operation</u>: Some people are predicting a wet fall based on the temperature of ocean currents (El Nino effect). Because of high inflows in August, the operation plan is being revised. It is projected that flows between August and December will be at least 1,200-1,300 cfs through the Black Canyon and Gunnison Gorge. Continued above normal precipitation would increase this flow.

<u>Special Flow Requests</u>: Sherman Hebein of the Colorado Division of Wildlife (CDOW) verified their request for flows of 600 cfs from September 23-26. This level is needed at Buttermilk rapid in the Ute Park area by 10 am on the 23rd; flows can increase after noon on the 26th.

CDOW's plans for this fall's stocking of 3-5" Colorado River strain rainbows in the Gorge, to help recover from whirling disease losses, were set back by theft and kidney disease losses at the Glenwood Springs hatchery. It is still hoped that fall stocking will occur, using fish from Ft. Collins. These setbacks have also increased the importance of existing rainbow trout in the Gunnison for future hatchery/stocking efforts. CDOW asked if stable flows could be provided between Crystal and the Gunnison Tunnel from mid-April to early June to help them collect eggs to raise in a hatchery. Flows of around 2,000 cfs would be OK, the most important thing would be for them to be advised of changes so they can move nets they would set up. While Reclamation believes we can provide the stable flow on a daily basis, this effort will need to be discussed further at the January and April meetings as more is known about water supply and runoff conditions.

At previous meetings, Jim Hokit had requested the Uncompahgre Valley Water Users Association be notified if/when Crystal releases might be reduced below 600 cfs during the nonirrigation season -- to allow them to replace gates at the Gunnison Tunnel portal. Gregg Strong of Redlands Water and Power would like to coordinate such low flows to allow them to replace panels at the Redlands Diversion Dam. They would need flows below 1,000 cfs at the Redlands Dam for 12-24 hours.

Agency/Organization Activities and Discussion of Related Activities

Western Area Power Administration - Business during this high water season was good --The power grid was tight and Western was able to sell surplus power at a good price (up to \$190 per kilowatt-hour), both on- and off-peak.

National Park Service - Water quality work is going well, and a wrap-up report for the 5th year of limnology studies is being drafted with interesting findings on the reservoir fish. They are still coordinating activities to quantify the reserved water right with the endangered species consultation schedule so issues can be resolved concurrently. Chuck Pettee is now Chief of the Water Rights Branch for the NPS.

Bureau of Land Management - Pilot funds authorized by the 1996 Omnibus bill may result in implementation of a fee program for the Gunnison Gorge in 1998. This has been a record year for visits. BLM has completed a vegetative inventory of the riparian corridor that includes weeds. Findings include tamarisk invasion above Chukar Trail, which exceeds the 6,800-foot elevation range of other studies. (Stunted tamarisk has also been found even higher around Blue Mesa Reservoir).

High Country Citizens Alliance/Sierra Club - These organizations are monitoring activities with concerns about progress of the endangered fish recovery program, diseases plaguing our fish, declines of native fish (including results of Platte River studies), and selenium contamination in the Uncompany and Grand Valleys. They are pleased with cooperation and results for the rule-making hearings for the water quality standards held in June.

Fish and Wildlife Service - Chuck McAda reported scientists are finishing reports on individual recovery program studies to be consolidated into the 'Synthesis Report' that is due in December 1997. The synthesis will describe flow needs of the fish and their habitat. (Work on hydrologic models that will allow Reclamation to use flow recommendations and test their

effects and 'reasonableness' as they relate to Aspinall operations were discussed at the end of the meeting.)

About 1,000 razorbacks raised in hatcheries are available to stock in the Gunnison this year. So far this year, 17 squawfish have used the Redlands fish ladder. All but two were untagged fish; one of the tagged fish was from Moab. Chuck believes young adults from the strong age class of 1985-86 are taking advantage of the ladder to establish their home range. Native fish using the ladder exhibit a wide range of size class and swimming abilities, indicating that no modifications to the baffles are needed to adjust velocities in the ladder. It may be coincidence, but the squawfish use occurred after a different gate was opened and bypass flows were cut. Ninety percent of use has been by native fish (15-16,000), but use by non-natives seems to be increasing. Day-to-day use of the ladder is highly variable.

Bureau of Reclamation - Curecanti Field Division work in the stilling basin at Morrow Point is beginning. Other major work at Blue Mesa powerplant should not affect operations. The powerplants will be undergoing a comprehensive field review when CDOW's trout census is scheduled; the 600 cfs flows will accommodate this.

Gunnison Basin POWER- This group continues to monitor the Arapahoe Case and other activities affecting the basin. They are becoming increasingly interested in how reservoir operations can affect water quality problems (reservoir bacterial levels, selenium contamination and salinity control).

Colorado River Water Conservation District - Mike Gross requested an update on the "NPS contract" and/or water right quantification process. Chuck Pettee reported that the NPS is meeting with other Federal agencies about the reserved water right, and they continue to coordinate activities with endangered fish flow recommendations. Their priority is to obtain their water right; they have reduced emphasis on if a contract may be necessary. CRWCD also asked if any general pattern, such as mimicking inflow, has emerged from their studies. Chuck responded that all resource studies point towards a need to protect variability throughout the basin, including a high spring flow. NPS should have a public schedule by our next operation meeting in January.

Upper Gunnison River Water Conservancy District - Tyler Martineau encouraged the National Park Service to get non-Federal parties to the table ASAP to discuss the reserved water right, especially the Colorado Water Conservation Board who would look out for other water users' interests. Specifically, UGRWCD mentioned all non-Federal parties to the 1975 Exchange Agreement for Taylor Park and Blue Mesa Reservoirs are interested because the Black Canyon right is senior to the first fill right for Taylor Park.

Colorado Division of Wildlife - Sherman Hebein advised the group that various age classes of Mackinaw (lake trout) had been found in vertical gill net studies at Blue Mesa Reservoir, indicating they are successfully reproducing. This could negatively affect kokanee populations. Sherman also reported on activities resulting from the kidney disease losses at the Glenwood Springs trout hatchery (see section on special flow requests). A recent review of CDOW programs has focused emphasis on native species management, including pond reclamation and stocking programs. Last night, an Angler Roundtable was held in Grand Junction; these meetings are 'the place' to give CDOW input on their fish management programs. This winter, non-native fish may be removed from two additional ponds along the Gunnison. Flows over 12,000 cfs will overtop the berm of a recently reclaimed gravel pit near Delta.

Status of Modeling, Accounting

Ray Alvarado (Colorado Water Conservation Board) reported progress in modeling the Gunnison River as part of the State's "Colorado River Decision Support System" effort, with calibration expected by September. CWCB has completed similar efforts for the Yampa, White and San Juan Rivers as part of the Statewide model, and they are now finishing work on the Colorado mainstem. Ray believes this model will be more detailed than another model under development for the Gunnison Basin, referred to as GunMod. Mike Gross (Colorado River Water Conservation District) reported that 'performance testing' on GunMod is underway. Performance testing ensures that numbers come out right (as opposed to 'functionality testing' that is completed to test whether 'buttons' are right). They are optimistic that GunMod will be a state-of-the-art tool capable of looking at options for the Black Canyon water right, contracting options, and interplay with other rights.

NPS has not developed a detailed model to support their water right quantification. They instead are working with Reclamation, CWCB and FWS on an 'accounting spreadsheet.' Progress remains on-hold due to the October trial of the Arapahoe County case for the Union Park Project.

Butch Clark asked about a model being developed to support Western Area Power Administration's Marketing EIS. Jeff Ackerman was aware that Argonne, who is developing the model for Western, had discussed the model with Western in Salt Lake this week. A few items had been added to Flaming Gorge to incorporate endangered fish releases and Jensen gage measurements.

<u>Next Meeting</u> - **Tentatively** scheduled for Tuesday on **January 27, 1998** at 12:30, Reclamation's Grand Junction office (2754 Compass Drive). We need to avoid conflicts with Colorado Water Conservation Board and Colorado Water Congress meetings.