WCG-SMcCall ENV-4.00/PRJ-13.00

Subject: Wayne N. Aspinall Unit Operations

Dear Interested Party:

Enclosed is a summary of our August 30, 2007, meeting to coordinate Reclamation s operation of the Aspinall Unit. The meeting was held at the Elk Creek Visitors Center on Blue Mesa. Highlights of the operation meeting include:

•Runoff forecasts in 2007 declined from 97 percent of average in January to 62 percent on May 1^{st} . Actual runoff ended at 71 percent of the 1971 - 2000 average. Operations were conservative to maximize storage and Blue Mesa peaked within 5 feet of filling on July 2nd.

•The Gunnison Basin experienced its 8th straight year of average dry or lower inflows.

- Despite below average runoff in the basin, Reclamation reservoirs in the Gunnison Basin filled, with the exception of Blue Mesa.

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 17th at 1 p.m. in Montrose. If you have any questions, please call me at 970 248-0652.

Sincerely,

Dan Crabtree Water Resources Group Chief

Daily Sentinel	Gary Harmon, Dave Buchanan	
	Bob Borcharcht	
v i	Michelle Burkhart, Alan Wartes, Pat Daniel	
Montrose Daily Press	James Shea, Jason Monroe, Caitlin Switzer	
Western Resource Advocates	Bart Miller	
Club 20	Reeves Brown	
Colorado State University	Brett Johnson	
Environmental Defense Fund	Jim Martin	
Gunnison Basin POWER	Ralph (Butch) Clark*, Ramon Reed	
Gunnison River Expeditions	Hank Hotze	
	Duane Helton	
High Country Citizens Alliance/Sierra Club	Steve Glazer* Wendy McDermott,	
Steve Schechter, Shara Rutberg		
Xcel Energy	Fred Eggleston*	
	Matt Owens	
•	esby*, Melinda Kassen, Drew Peternell John Trammell	
Western Colorado Congress	Randy See, Fred Wetlaufer	
Argonne National Laboratory	John Hayse, Kirk Lagory	
University of Montana	Jack Stanford	
Colorado River Water Conservation District	.Dave Kanzer*, Don Meyer, Eric Kuhn, Bill Trampe,	
David Halford, Ray Tenney		
	Lynn Johnson*, George Sheldon, Bo Gates, Marlene	
Zanatell, Jim Cochran, Jim Hokit		
	Leslie James, Kent Holsinger*	
	Tom Alvey	
-	Mike Berry, Ion Spor, Kathleen Margetts*,	
0		
·	Chuck Mitisek*, Mike Gross	
	Marc Catlin*	
11	Everett Sunderland	
Upper Gunnison R. Water Conservancy DistrictFrank Kugel*, Greg Peterson, Mark		
Schumacher, Tyler Martineau, Dennis Steckel*, Jim Slattery, Ken Spann		
	Terry Franklin, Greg Trainor	
	Jan McCracken, Wayne Wolf, Olen Lund	
	Duane Freeman	
	Dales Hukle, Barry Bullard, Wilma Ervin	
	Rob Fiedler	
	Hap Channell, Paula Swenson, Jim Starr	
Colorado Division of Water Resources		
Colorado Division of Wildlife Mike Japhet, Daniel Brauch*, Sherman Hebein, Dan Kowalski*, David		
Graf, Buen Sumemon Jay Skinner Det Mertiner, Diels Anderson Mark Unnendekl		
Ryan Swygman, Jay Skinner, Pat Martinez, Rick Anderson, Mark Uppendahl Colorado Water Conservation Board Randy Seabolm Bay Alvarado Michelle Garrison Rick		

Colorado Water Conservation Board......Randy Seaholm, Ray Alvarado, Michelle Garrison, Rick Brown,

Steve Miller	
Wyoming State Engineers Office	John Shields
Congressman John Salazar	
Senator Wayne Allard	Derek Wagner
Senator Ken Salazar	
Army Corps of Engineers	
Bureau of Land Management	
Rooster Barnhart, Karen Tucker, John Arkins, Forest Zerbe, Je	sse Kirthorp, Peter Dennett, Julie Stotler
Fish and Wildlife Service Al Pfister, G	Chuck McAda, Patty Gelatt*, George Smith
National Park ServiceConnie Rudd*, Ken S	tahlnecker*, Matt Malick, Mark Wondzell,
Melissa Trammell, Michael Dale*, Bill Johnson, DanGude Boo	ckus, Bill Hansen, Chuck Pettee, Norm Henderson
National Weather Service	Bill Reed, Brian Avery
National Oceanic & Atmospheric Administration And	lrea Ray, Robert Webb, Klaus Weickmann,
Brad Udall	
U.S. Geological SurveyPaul von Guerard, Bob Jenkins,	Gordon Mueller, Gerhard Kuhn, Bob Boulgarz,
Joe Sullivan*	
Western Area Power AdministrationBra	
Jeff Ackerman*, Kathy Crane*, Ken Green, Annette Falvo, Ke	n Otto, Gary Burton; Margaret Matte,
Dave Shelton, Jennifer Turnbull, Chris Brown	
Bureau of Reclamation Carol DeAngelis, Ed Warner*, Steve	e McCall, Coll Stanton, Don Phillips*,
Grant Watson*, David Steinmark, Ted Dunn, Dan Crabtree*, 7	erry Stroh*, Jane Blair, Paul Davidson*,
Justyn Hock, Erik Knight*, Nancy Coulam, Dennis Kubly, Da	ve Harpman, Dawn Munger, and Rick
Vinton	
Interior Solicitors Office	John Bezdek, Peter Fahmy
Department of Justice	Dave Gehlert
Colorado U/CADSWES	Edie Zagona, Satish
Regonda,	

Aspinall Unit Operation Coordination Meeting August 30, 2007

Participation: This meeting was held at the Elk Creek Marina Visitors Center on Blue Mesa Reservoir. Attendees are noted on the distribution list.

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 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 2007 operations; projected inflows to the reservoirs for the remainder of 2007; and potential operation plans under maximum, most, and minimum probable runoff forecasts.

The Fish and Wildlife Service flow recommendations for endangered fish have been completed and published, and an Aspinall Operations EIS has been initiated to evaluate alternative operations to help meet these recommendations. 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:

<u>General</u>: Blue Mesa Reservoir capacities are described in meetings as follows: The reservoir holds 940,700 acre-feet. 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.

January-August 2007 Operations:

In response to declining spring forecasts, Unit releases ranged from 1,600 in January to about 600 cfs just prior to the spring opening of the Gunnison Tunnel. The Uncompahgre Valley Water Users relied heavily on the Uncompahgre River throughout the irrigation season thus reducing the demand on their storage in Blue Mesa (water stored under the 1975 exchange agreement) This, along with good monsoonal moisture, allowed Blue Mesa to remain at a higher level throughout the summer. At meeting time Crystal releases are 1,800 cfs, and flows in the Black Canyon are 867 cfs.

Based on January 1 snow conditions, the forecasted April through July runoff into Blue Mesa was predicted to be approximately 97 percent (700,000 af) of the 1971-2000 average; but by May 1st this had dropped to 445,000 af or 62 percent of average and actual runoff was 511,000 or 71 percent of the average. Inflow was considered "moderately dry", making 2007 the 8th year in a row that inflow has been average dry or lower.

Reservoir releases were conservative again this year in order to improve the chances of filling Blue Mesa. Blue Mesa peaked at elevation 7514.66 (5 feet from full) on July 2^{nd} .

Flows through the Black Canyon were around 500 cfs in the spring and between 700 and 1000 cfs through the summer.

Despite below average snowmelt runoff, other Reclamation reservoirs in the Gunnison Basin filled this year.

Releases from Crystal are anticipated to begin decreasing in September and will be in the 600-900 cfs range this winter. Blue Mesa should reach the icing target of 7490 feet near the end of December.

Flow Requests: Input was requested from those in attendance concerning operations:

- As requested by WAPA at last year's meeting the Colorado Division of Wildlife moved their flow request for fishery inventories in the Gunnison Gorge from the last week of September to the first week of October. Stable flows between 700-1000 cfs were requested. DOW's new equipment has given them the ability to do this work at higher flows.

In addition, DOW requested releases from Taylor Park be reduced next week to 200 cfs to facilitate fish passage work on the Kelmel Owens #2 diversion project located on the Gunnison River below the town of Gunnison upstream of Blue Mesa Reservoir. Duration of construction will be about 5 days. Gunnison River flows below 380 cfs will be necessary for construction.

- Upper Gunnison mentioned that work will be conducted by Gunnison County on the Gunnison River Water Park later on this winter.

Quagga Mussels (Zebra Mussel's cousin): After first being discovered in Lake Mead above Hoover Dam in January of this year, adult populations of quagga mussels have and are continuing to establish themselves downstream along the Colorado River (at Reclamation's Hoover, Davis, & Parker Dams), and have worked their way into both the Metropolitan Water District of Southern California's Colorado River Aqueduct (into Southern CA) and the Central Arizona Project's Aqueduct (into the Central Arizona/Phoenix area). With the current technology these mussels can't be eradicated in major rivers/reservoirs, or in waterways which carry drinking water.

Agency/Organization Activities and Discussion of Related Activities:

High Country Citizens Alliance – Expressed concerns for the well being of fish in the lower Gunnison River. These fish may be confused as to which hemisphere they are residing due to high fall and winter releases. Suggested additional data collection on soil moisture to help improve forecasting. NAWQA site on East River below Cement Creek has an \$8K shortfall. Need to make up this need with new partners. Tyler Martineau is coordinating. Concerned about drops in stream flows on the Slate and Coal Creek. Working with Crested Butte to keep streambeds wet. Water quality concerns related to Superfund site. Working on nonconsumptive needs assessment for Gunnison Basin Roundtable.

Tri County Water Conservancy District - Filled Ridgway within 1 foot this year. Working on gaging station on Cow Creek.

National Park Service – Good visitation this year.

Upper Gunnison Water Conservancy District – Next Roundtable meeting September 10th in Montrose. Also concerned with dry streambeds. Getting close to agreement/settlement on outstanding litigation regarding instream water rights on the Taylor.

Reclamation – Outage at Blue Mesa is planned September 30 – October 6. Morrow Point Reservoir will be drawn to down to accommodate maintenance activity in the Blue Mesa outlet works. Flows downstream from Crystal Dam will not be affected. Grant Watson was introduced as the new Blue Mesa Plant Supervisor.

Colorado River Conservation District – Compliments on Aspinall Operations process. River District is participating with USGS by contributing \$500K for a Western Colorado gaging program. \$42K goes toward 6 surface water gages on the Uncompany and Taylor Rivers and \$35K goes toward water quality monitoring. Additional cost-share support is needed to continue operation of some of the gages. Contact the River District to help out.

Fish and Wildlife Service – 20 pikeminnow and 4 razorback suckers have used the fish ladder at the Redlands Diversion so far this summer and the Redlands fish screen is operating. Approximately 3000 razorbacks were stocked near Delta this summer. Fish survey on the Gunnison yielded 12 razorbacks stocked 5 years ago along with larval razorbacks.

Gunnison Basin Power - Interesting information being developed regarding ancient bacteria being extruded with deep pumping. Suggested further investigation of icing targets at Blue Mesa. Corp of Engineers does do ice monitoring and ice control studies. Concerns with westwide energy corridor and future major pipelines. Possible water quality impacts related to possible ruptures.

State Engineer- Introduced new assistant, Bob Hurford.

Project 7- Conducting feasibility studies with Uncompanyer Water Users for raw water storage.

Uncompany Valley Water Users – Irrigation winding down. Recently cut Ridgway releases

by 50 cfs. Have 4300 ac-ft left. Hoping for a lot of winter grain, uses less water late.

Colorado Water Conservation Board- Did not attend but asked that we mention CWCB Board Meeting September 18 and 19 in Grand Junction.

Redlands Water and Power – Fish screen operating. Concerns about Quagga mussels. Interesting road bore dilemma on Broadway.

Public Service Company of Colorado – Shoshone should be back on line sometime during the spring of 2008. September 19th is the 50th anniversary of the Cameo Powerplant.

CREDA – The Colorado Energy Forum report on Colorado's Electricity Future concludes Colorado will need an additional 4,000 MW of generation by 2020. Energy demands in Colorado are rising and every MW of existing generation is going to be even more critical. For that reason, CREDA urges the Bureau and Western to operate Aspinall to produce the maximum practicable amount of hydropower consistent with the Colorado River Storage Project Act.

It was pointed out that these needs do not include those for development of natural gas and oil shale.

Aspinall Unit EIS and Black Canyon Water Right- Hard to talk about the EIS without talking about the Black Canyon Water Right Case. Lots of stipulations have been signed. Without settlement, the water right case is scheduled for trial in June and July of 2009. A mediator has been hired by the Department of Justice in order to settle the case. Reclamation has been asked when the EIS process will be reconvened. Difficult to do when there is an unquantified senior water right downstream of the unit. However modeling efforts are continuing along with discussions with the Fish and Wildlife Service regarding interpretation of the Flow Recommendations.

The River District encouraged the broadening of Section 7 discussions to include other Federal Reservoirs. Also asked Fish and Wildlife how Aspinall Operations EIS will be addressed in this year's sufficient progress report. Fish and Wildlife responded that lack of progress on the EIS will be listed among this year's concerns.

<u>Next Meeting</u>: The next operation meeting is scheduled for 1:00 p.m., Thursday, January 17th. Place to be announced.