

Aspinall Unit Operations Meeting
January 19, 1993

The subject meeting was held in Grand Junction, Colorado. An attendance list is enclosed. The purpose of the meeting was to establish operation plans for the Aspinall Unit for the January-April 1993 period with input from all affected parties.

Review of August through December 1992 Operations

At the beginning of the meeting, the August-December, 1992, operations were reviewed and data tables provided. Actual releases from the Unit were within 2 percent of those projected in the August, 1992, operations meeting. Inflow during the period to the Unit was 214,000 acre-feet and releases were 336,900 acre-feet. The December 31, 1992, content of Blue Mesa Reservoir was within two-hundredths of the target elevation of 7,490 feet, and target storage (581,000) to begin the January-July period.

September and October flows provided for Colorado Division of Wildlife 1992 fish sampling went well.

Discrepancies were noted between the measurement of releases at Crystal Dam and measurements at the stream flow gage below the Gunnison Tunnel diversion (located near the upstream boundary of the Black Canyon of the Gunnison National Monument). Preliminary flows reported for the United States Geological Survey (USGS) gage may not have the "shift" applied. Reports from Crystal are based on flow discharge curves and turbine discharge readings. Jim Schumacher of Curecanti Field Division reported they are planning to install flow meter devices at all outlets on Crystal, including the river bypass. The need to monitor and provide accurate information on flows and flow changes to researchers, managers, water users, and the public was also discussed.

The Grand Junction Projects Office will take the lead in coordinating work aimed at reporting flow measurements and projections through the canyon, and will continue to coordinate providing information to interested parties.

1993 Runoff Forecast/Anticipated Aspinall Unit Operations

The January 1, 1993, runoff forecast and handouts depicting releases under minimum, most probable, and maximum forecasts were reviewed. Most probable inflows for the January through July period are forecasted at 86.7 percent of average. Brad Vickers noted we are now getting more moisture since January 1, 1993, and if these trends continue, releases may need to be increased.

Continuation of Delivery to the Monument and Operation Plan Development

Anticipated deliveries to the Black Canyon of the Gunnison National Monument (Monument) for January through July were computed based on the equation described in the preliminary working draft of a water service contract for the Monument. Handouts covering this material were provided at the meeting. For the first time since these meetings began last January, we have enough water to deliver water through the Monument computed by the formula instead of by the calculation of the amount required to meet a minimum release of 300 cubic feet per second (cfs). The computed delivery to the Monument (and endangered fish) of 228,100 acre-feet exceeds the 126,000 acre-feet needed to meet a minimum release of 300 cfs for the January through July period.

Anticipated water **releases** from Crystal Dam for the January-July, 1993, period were reviewed. Total releases, based on the **most probable** forecast, were projected to be 593,000 acre-feet. Resulting estimated average monthly flows through the Monument are: January through March, between 450-520 cfs; April up to 1340 cfs; May adjusted to more than 1200 cfs to reflect probable peak at the end of May; June adjusted from 1710 cfs to reflect gradual ramping from peak; and July-860 cfs. It was again noted that the Bureau of Reclamation (Reclamation) may need to vary these flows as runoff forecasts change. For example, if runoff forecasts increase, February flows could increase by 100--200 cfs. If increases of more than 200-300 cfs, are projected, Reclamation will convene another meeting prior to the April forecast meeting.

Coordination Needs

Timing of the peak flow release from Crystal was discussed. The Fish and Wildlife Service indicated the peak for downstream endangered fish species should occur between May 15 to June 15. The meeting attendees concurred with the Colorado Division of Wildlife to narrow this window to between May 20 and June 10 to better protect trout fisheries. Ramping rates were verified. Recommendations are to ramp up at 500 cfs per day (when beginning flows are around 2,000 cfs), and to ramp down at 250 cfs per day. Brad Vickers should adjust the operation plan to reflect a shift in the probable peak from early June to late May.

The Curecanti Field Division discussed coordination needs for several power plant maintenance and inspection activities. Starting January 20, 1993, Crystal generators will be down for inspection for approximately 1 week, and bypasses will be used to provide downstream flows. In March and April tests at Blue Mesa and Morrow Point Powerplants will be conducted. These tests will be coordinated between Jim Schumacher and Brad Vickers to avoid flow problems.

John Chapman mentioned the operation reports showing anticipated Blue Mesa Reservoir levels help them to plan for work needed on the boat ramps at Curecanti National Recreation Area.

Research flows of 600 cfs were requested by the Colorado Division of Wildlife for fish population surveys on the following dates in 1993: September 27-30; October 12-15; and October 18-22.

Conclusions

-The Grand Junction Projects Office will be responsible for informing interested parties of flow changes and **plans**.

-Measurement of flows continues to be a problem. The Curecanti Field Division is planning to install better measurement devices on Crystal Dam within the next year.

-The draft contract delivery water for the January-July, 1993, period is now estimated at 228,000 acre-feet.

-Brad Vickers will adjust releases to reflect new forecasts; if adjustments exceed 300 cfs, the operation group will be reconvened to discuss.

-Brad Vickers and Jim Schumacher will coordinate tests and inspections at the dams to avoid flow problems.

Copies of handouts from this meeting are available from Lorrie West or Steve McCall. The next meeting on operations will be held in Grand Junction at 1 p.m. on April 15, 1993.