

***Attachment 11--Additional guidelines for Aspinall Unit operations included in proposed action***

- Aspinall Unit in place, regulating the river and operating for authorized Unit purposes under a wide range of annual inflow conditions.
- At the beginning of the year, water would be released using the most recent January through March inflow forecast and downstream water demands with the goal of achieving a March 31<sup>st</sup> Blue Mesa Reservoir content target (determined from the January, February, and March 1<sup>st</sup> forecasted April-July Blue Mesa inflow) and with a goal of higher releases during January for power purposes. The March 31<sup>st</sup> target is intended to optimize Aspinall Unit storage, flood control, and hydropower production. (Note: The first April through July forecast is received on January 1, after which they are received twice a month through July.) Filling Blue Mesa Reservoir by the end of runoff season is a general goal. Maximum capacity is reached at 7519.4 feet; however, operations are designed to fill to a lesser level to provide a safety factor for controlling the reservoir in case of sudden high inflow due to thunderstorms or high rate of snowmelt.
- Operations will meet at least 300 cfs in the Black Canyon and Gunnison Gorge except in certain cases of significant drought (e.g. as determined by reservoir elevation projections) or emergencies when flows may be reduced to 200 cfs as measured at the USGS Gage below the Gunnison Tunnel. Such a decision will be made only after coordinating with the State of Colorado and other interested/affected parties.
- The Corps of Engineer's flood control manual requires that efforts are made to keep flows below 15,000 cfs. Existing spring flood control operations would be continued using discretion and coordinating with the city and county of Delta in an effort to maintain flows below levels which may cause damage.
- Significant Gunnison Gorge flow decreases that could damage redds from October 15<sup>th</sup> through May for brown trout recruitment would be avoided when practical. Flow decreases would be avoided after April 15<sup>th</sup> for rainbow trout spawning when practical. Flow decreases can lead to dewatering or ice damage to eggs.
- Blue Mesa winter icing elevation target, 7490 feet or lower at end of December, will be operated for to reduce chances of ice jams causing upstream flooding in the Gunnison area, for example in the Dos Rios subdivision area.

- The potential exists for modifications to operations under the alternatives as a result of extreme hydrologic conditions, emergencies, or unforeseen conditions. Operational changes in severe or extended droughts could include temporary modifications to any given operation plan for the reservoir and potential short-term modifications to the target flows in the Flow Recommendations. In periods of extreme, multi-year droughts, releases from the Aspinall Unit may have to be reduced to match the inflow to the reservoir during part of the year.

Operations may be modified due to special maintenance or replacement needs at the Aspinall Unit which may limit outlet capacities or require special downstream flows for repairs and inspections. Special flows may also be needed at some time in the future for repairs or replacement of the Gunnison Tunnel Diversion Dam.

Emergencies may be associated with dam safety, safety of individuals and groups associated with recreation or other activities on the river, or power system conditions. Emergencies associated with dam safety could require unforeseen releases or operations to protect dam structures. Emergencies related to the safety of individuals may be associated with river rescue or recovery operations. Power emergencies could include insufficient short-term generation capacity, transmission maintenance, and other factors. Emergency power operations are typically of short durations as a result of emergencies occurring at the dam or within the transmission network.

In the case of emergencies, Reclamation will take appropriate actions immediately and then contact the Service in as timely manner as practical for advice on measures to minimize the effects; and formal consultation, if needed, will be conducted after the fact.

- Peaking power operations conducted at Morrow Point and Blue Mesa will continue with flows downstream from Crystal regulated through constant releases to offset impacts of peaking operations upstream. Blue Mesa power releases will range from 0 to 3,400 cfs and Morrow Point power releases from 0 to 5,000 cfs. During Crystal spills, Morrow Point peaking releases may be reduced to avoid large daily fluctuations downstream from Crystal.
- Alternatives will continue to meet power system requirements of the North American Electrical Reliability Council and the Western Electricity Coordinating Council such as generation control, voltage regulation, black start capability, and reserves. For example, Unit operations--such as Morrow Point peaking—are used in emergency situations to prevent major power problems in the West. Existing power contracts from the Unit would be included (note that CRSP power contracts are not “unit specific” but apply to integrated project facilities). Reclamation will continue to

assist Western Area Power Administration (Western) in meeting contract needs while following relevant laws and regulations and the Reclamation/Western MOU.

- The Black Canyon of the Gunnison National Park reserved water right exists but is not quantified. Expected to be quantified but details not determined.
- Morrow Point and Crystal Reservoirs' daily fluctuations will be limited by landslide criteria.
- The Unit will be operated subject to water laws and water rights as decreed under Colorado water law and the Law of the River
- Alternatives honor existing contracts and agreements, including water sales from the Aspinall Unit.
- Existing depletions in the Gunnison River basin from private and public water rights under Colorado law (including evaporation, diversions, transpiration, etc) will continue. Reasonably foreseeable future depletions, based on input from water user representatives, will be included:
  - Assume 3,500 acre-feet (af) of additional depletion in the North Fork area
  - Assume full depletion of Dallas Creek Project water in the Uncompahgre Basin (17,200 af)
  - Assume 8,600 af presently being used under the Upper Gunnison Subordination Agreement
  - Assume additional 22,000 af of future depletion under the Upper Gunnison Subordination Agreement—total depletion under agreement would be 30,800 af in foreseeable future. Ultimate use of full 60,000 af assumed.
  - Assume full depletions of the Dolores Project occurring.
- The proposed action also recognizes that one of the purposes of the Aspinall Unit is "...storing water for beneficial consumptive use, making it possible for the States of the Upper Basin to utilize, consistently with the provisions of the Colorado River Compact, the apportionments made to and among them in the Colorado River Compact and the Upper Colorado River Compact, respectively...". This use is compatible with the Recovery Program which has a goal of fish recovery and water development.

Remaining project yield" (not precisely known, but up to approximately 300,000 af, minus subordination water use and existing water contracts)

will continue to be stored or go downstream and be modeled as such. It is recognized that this remaining water may be developed in the future pursuant to the Colorado River and Upper Colorado River Basin Compacts, and subject to and consistent with the Unit's authorized purposes and other applicable laws. The State of Colorado has consumptive use depletions remaining for use under the Colorado River Compact of 1922 and the Upper Colorado River Basin Compact and a portion of this would legally be available for development using sources in the Gunnison Basin. The unused portion of the Unit yield would not be reserved permanently for flow recommendations. In the EIS, the potential use of the remaining yield is not included in alternatives because specific foreseeable proposals are not available, so that the unused portion of the Unit's yield would be available for meeting the flow recommendations under the alternatives. Alternatives recognize that consumptive use up to a total of 300,000 af of yield may occur in the future under Colorado's compact entitlements. When future water sales or uses of portions of the "remaining project yield" from the Unit are proposed, the proposals will be evaluated under NEPA. If Reclamation determines the proposed sale or use may affect a listed species, formal ESA consultation will commence. If the Upper Colorado River Basin Recovery Implementation Program (UCRIP) has made sufficient progress implementing the Recovery Action Plan, then the UCRIP may serve as reasonable and prudent measures or reasonable and prudent alternatives, as appropriate. The Section 7 Consultation, Sufficient Progress, and Historic Projects Agreement for the UCRIP as revised in 2000 provides information on ESA compliance for future projects, such as use of Aspinall Unit yield.

- Alternatives will include Taylor Park 1975 and 1990 agreements and Taylor Park refill right in place. Aspinall Unit will be operated to protect Uncompahgre Project water stored in Blue Mesa under the Taylor Park Exchange Agreement. The Uncompahgre Project's Gunnison Tunnel and Dallas Creek Project's Ridgway Reservoir exchange will continue in place.
- Operation meetings will be held 3 times per year to discuss operation plans for the Unit.