



Taylor Talks About Quantification for the Black Canyon National Monument

December 5, 1998

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"Quantification" is the topic of the National Park Service's open house on December 15. It is between 5:30 and 9:30 PM at the Aspinall Wilson - Center just southeast of the Western State College campus in Gunnison. Quantification is about deciding how much and when water will flow through the Black Canyon of the Gunnison National Monument. The issues are many, complicated, tangled together, and emphasize the need for basin-wide water planning. What is decided will influence water use in our Upper Gunnison Basin and opportunities for future transmountain diversions. Please come and join the discussions.

As the fighting trout mascot of Gunnison Basin POWER, my friends asked me to outline what is happening.

POWER's PURPOSES

First let me summarize POWER's two purposes as an organization. They are: (1) to oppose transmountain diversions and (2) to promote uses of water in the basin that enhance recreational and environmental qualities. Both mean doing what is equitable, sustainable, and makes sense.

BACKGROUND

The Black Canyon of the Gunnison National Monument was created by several Presidential Proclamations beginning in the early 1930's. This was done after the Gunnison Tunnel began diverting water from above the Black Canyon and before construction of Taylor Reservoir. About twenty years ago, the national monument received a water right through Colorado's water court. The right's priority is the time of the Monument's creation. This means it is senior to almost half the irrigation rights in the Upper Gunnison Basin and senior by just a few months to Taylor Reservoir. However, the amount of this water right, or its quantification, remains to be determined. The meeting on December 15 is the first public step in this process of quantifying the Black Canyon water right for the Monument.

According to Colorado's courts, quantification of the Monument's water right must provide - at a minimum - enough water flowing through the Black Canyon to protect and maintain the Monument's unique and outstanding natural resources, features, and qualities. These are what led to the Black Canyon's designation as a national monument. It is impossible to know exactly what amount of water the National Park Service will decide is required for the Monument. POWER believes that an appropriate amount will be large, but limited as required to the amount necessary. However, those wanting to build new water projects inside and outside our basin did not anticipate how large this amount may be. With an appropriate quantification, no water remains available for transmountain diversion from the Gunnison Basin and very little or none for new consumptive local water development within the Upper Gunnison Basin.

About thirty years later, the three reservoirs of the Bureau of Reclamation's Aspinall Unit were built just upstream of the Monument. Since 1965, the Unit's operations have greatly changed the yearly pattern of water flowing through the Monument. Now during peak spring runoff, the Black Canyon receives only about 25% of the flow it had when the Monument was created. Yet, in late summer, fall, and winter, flows through the canyon are now about three times greater.

Before diversions of water through Gunnison Tunnel, the flows down the Black Canyon averaged over 7,700 cubic feet per second (cfs) for the month of June. These seasonally high flows provide a very real and essential "spring cleaning" of the canyon. They maintain it and the Monument's many other unique and outstanding natural resources.

In the late 1980's plans for operating the Aspinall Unit called for flows that averaged only about 1,260 cfs during June and over 1,300 cfs from December through March. More natural winter flows are 450 to 500 cfs. Since the early 1990's, operations of Aspinall Unit have tried to provide higher spring flows in the range of 3,000 to 3,500 cfs for the Monument and for recovery of endangered fish downstream. By contrast, most plans made in the 1980's for water development, such as those for the Union Park Project, assumed only a requirement to leave a minimum of 300 cfs flowing year around through the Monument.

The Aspinall Unit is managed to serve many objectives whose requirements are often in conflict. These include hydroelectric power generation, storage for downstream irrigators, recreation, flood and icing control, obligations to downstream states, and recently to provide increased flows needed by the Black Canyon and endangered fish. Changes made in operating other large reservoirs on the upper Colorado

River (Glen Canyon, Flaming Gorge, and Navajo) brought changes in the operation of the Aspinall Unit reservoirs. Among these is the particular importance of matching hydroelectric power generation to the very peak of demand. Attempting to serve this variety of objectives has meant that the pattern of water flows through the canyon has become unnaturally smoothed. Both the canyon and the endangered native fish need a natural flow pattern, or natural hydrograph - high in the spring and low in the winter.

The water right for the Monument is senior to those of the Aspinall Unit. Quantifying the Monument's water right means deciding how much, and when, water needs to flow through the Black Canyon in order to preserve the conditions that make it the very unique place it is. The natural flow pattern through the Monument can be achieved under its water right. In addition, the endangered native fish downstream of the canyon on the Gunnison River evolved and also require, not surprisingly, a very similar natural flow pattern or hydrograph to enable their recovery from the brink of extinction.

The way in which the Aspinall Unit has been operated for more than 30 years also successfully protected upstream water users from downstream "calls" or being shut off by those with senior decreed water rights below the unit. The value of this, though an incidental benefit of operational practices, can be upwards of \$1.2 million a year. The amount of water required to achieve this valued call protection is far beyond our local capability to build storage reservoirs even if water senior to the Monument's right was available to fill them. However, in comparison with other places in and beyond Colorado, irrigators in the Upper Gunnison Basin have absolute water rights that are large for the acreage irrigated. Greater efficiency in use of water could greatly reduce their needs for call protection.

How much water is available each year depends on precipitation. The Aspinall Unit's reservoirs are not large enough store the quantities of water proportionate to the total of the many requirements which now must be met. Instead the operations of the Aspinall Unit balance and combine requirements for water in terms of quantity and timing.

When water is available to the Aspinall Unit and the Monument also depends on how much is being diverted upstream for irrigation and storage. The Monument requires large flows in the spring time when the Aspinall Unit would otherwise accumulate water in storage and the irrigators flood their fields. The greatest requirement for generating hydroelectric power is during the late summer and winter months.

As indicated earlier, the water right for the Monument is senior to those of the Aspinall Unit and to almost half of diversions by upstream irrigation rights. To compromise this seniority of the Monument can compromise the protection and maintenance of the Monument as an outstanding component of our national heritage.

RECOMMENDATIONS

There is simply not enough water originating in our basin to meet all the many existing demands, provide valued call protection, and to develop new water projects - within the basin or for transmountain diversion over the mountain. How then can our community help to make sense of quantifying the water right of the Black Canyon of the Gunnison National Monument? Only a partnership between federal, state, and local agencies and citizens can begin to resolve an issue so vital to our basin's future. Features of such a cooperative, basin-wide plan might be that:

- The Monument accepts only about 65% of the potential quantity of its right but this water is managed to provide critical high spring flows and to meet the needs of the endangered fish recovery program.
- Establish the subordination of the Aspinall Unit to existing water rights upstream that are junior to it along with a commitment to continue call protection for irrigators.
- Local water users and the state of Colorado commit to no additional water consumption upstream of the Aspinall Unit, including foregoing any new transmountain diversion from the Upper Gunnison Basin.
- The Bureau of Reclamation and Department of Energy greatly reduce hydropower generation at the Aspinall Unit during the winter months to keep water available for release in the spring.
- Irrigators and other water users upstream undertake water conservation to make more efficient use of existing supplies and to reduce the extent of call protection needed by irrigators. This can be enabled with cost-share incentive programs such as those sponsored by the Department of Agriculture and funding from the private market sales and transfers of water rights occurring within the Upper Gunnison Basin.

The bottom line is trying to keep what we all value with creative watershed planning. Please attend the meeting on December 15 and follow this important quantification process for the water rights for the Black Canyon of the Gunnison National Monument. For more information and details, please contact members of the POWER Steering Team.