
TECHNICAL MEMORANDUM

**SUBJECT: Snake/Salt River Basin Plan
Palisades Reservoir Contract**

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Introduction:

The technical memorandum Summary of Interstate Compacts and Court Decrees summarized the interstate compacts in the Snake/Salt River basin and discussed a unique provision within the Snake River Compact requiring Wyoming to provide replacement storage space for one-third of any use after the first half (2%) of Wyoming's allocation is diverted or stored. This technical memorandum will summarize the history and details of the State of Wyoming's contract for storage space in Palisades Reservoir to meet this Compact obligation and other important needs in the Snake/Salt River basin of Wyoming.

Background:

While the initial Congressional authorization for the Bureau of Reclamation (Bureau) projects in the Snake River basin was provided in 1904, the series of reservoir and irrigation canal projects developed over a number of years. In response to the drought of the 1930's additional pressure for reservoir development occurred. After the requisite planning and technical analyses and enactment of the negotiated 1949 Snake River Compact by Congress on March 21, 1950, the Bureau received specific Congressional authorization for the Palisades Dam and Reservoir project on September 30, 1950. In 1951 the Bureau began construction of the Palisades Reservoir project, which was completed in 1957. During the early planning and development efforts the Bureau administratively reserved a portion of the storage space in Palisades Reservoir as a source of the replacement storage space for Wyoming's obligations, pursuant to the Compact.

As a partial result of the dry sequence of streamflow years beginning in 1988, and continuing through to 1990, the State of Wyoming became more actively involved in the operations of the set of reservoirs in the Upper Snake River basin, including Jackson Lake and Palisades. These facilities and others are owned and managed by the Bureau in close cooperation with the Idaho water right administration officials, the Water District No. 1 Watermaster. Initially, pressure from the fishery and recreation interests in Teton County focused important attention on the Bureau's reservoir operations under these low streamflow conditions and the dramatic impacts upon the river resources and the valuable tourism and recreation segments of the

local economy. One realization resulting from detailed river operation inquiries was the fact that neither the State of Wyoming nor our water users had a firm stake in any portion of the extensive storage water supplies that dominate the basin. Indeed 100% of the storage water in Jackson Lake and Palisades Reservoir is controlled by the Bureau and under contract with water users in Idaho. During normal or average year streamflow conditions this arrangement has been satisfactory, however when the river system is stressed by drought, many Wyoming residents felt their interests were discounted and not considered an important factor in planning and influencing Bureau reservoir operation decisions.

For Wyoming, several important results were derived from the increased attention by the State through the State Engineer's Office and Wyoming Game and Fish Department. These were 1) the re-discovery of the storage space set aside by the Bureau in Palisades Reservoir and 2) a change in procedures by the Bureau to actively consult with and involve the State agencies, local environmental, fishing and recreation interest groups and the public at large in the annual reservoir and river operation planning for the upper Snake River basin. These changes took place over several years, but were prompted by the State of Wyoming deciding to engage in the successful negotiation of a contract with the Bureau for the "reserved storage space" in Palisades Reservoir. At that point, the State became a "spaceholder" and a more direct player in the reservoir and river operations like other downstream water users in this river system.

Palisades Reservoir Contract:

Overview

As a result of evaluation and involvement with the reservoir and river operations, use of storage space set aside by the Bureau soon became the State's primary opportunity for addressing several important issues in the Snake/Salt River basin. First, the quantity of storage space "reserved" by the Bureau was the amount estimated to be required to meet Wyoming's compact replacement storage space obligations. By securing the replacement storage space Wyoming would assure its' long-term ability to continue to develop and beneficially use the waters allocated from this river basin. Secondly, by holding a contract for storage space in the Bureau reservoir system, through an exchange of storage water between Palisades and Jackson Lake reservoirs, the state could also provide water or protection for the minimum river flow regime below Jackson Lake Dam and for the maintenance of higher levels in Jackson Lake during periods of drought.

To accomplish these dual benefits, the State initiated the negotiation and contracting process with the Bureau to obtain control over the "set aside" storage space in 1988 and eliminate any other potential water user from obtaining this water resource. On July 13, 1989 the Commissioner of the Bureau of Reclamation approved the "basis of negotiation", an internal Bureau document authorizing the regional representatives to move forward with the detailed negotiations. The Bureau entered the final contract, through then Regional Director John Keys (now the Commissioner of the Bureau) with Governor Mike Sullivan on behalf of the State of Wyoming effective October 31, 1990.

In summary, the contract provides Wyoming with 33,000 acre-feet (AF) or 2.75% of the 1,200,000 AF of active storage space in Palisades Reservoir. Wyoming is entitled to the water

accruing to this space in priority for a variety of purposes, including the compact replacement storage space obligations, subcontracting the use of storage water to others and to maintain instream flows and lake levels within Wyoming, through an exchange. Wyoming is contractually treated for the most part like any other storage spaceholders in Palisades Reservoir under contract with the Bureau, with the same general rights and obligations for the use, accounting, and administration of the storage space.

Costs

Under the spaceholders contract Wyoming agreed to pay a proportion of the Bureau's (federal) construction costs allocated to irrigation and a corresponding share of the interest during construction for the 33,000 AF (2.75%) of Palisades Reservoir storage space. This amount totaled \$567,270, which was appropriated from the water development fund by the Wyoming legislature during the 1991 session. In addition, Wyoming will annually pay a proportion (2.75%) of the operation and maintenance (O&M) costs associated with Palisades Reservoir. A capital account called a "sinking fund" was established within the State Treasurer's accounts, which is administered by the Wyoming Water Development Commission (WWDC), with a deposit of funds from the Wyoming Game and Fish Department. The interest accruing to this fund is used by the WWDC to annually pay the O&M obligations to the Bureau.

Contract Amount of Water

The amount of replacement storage space is determined based upon the provisions of Article III A of the Snake River Compact. Under the Compact, 4% of the waters of the Snake River basin (including the Greys and Salt Rivers) are allocated to Wyoming for direct diversion or storage. The first half or 2% of the compact allocation can be diverted or stored without any storage space replacement requirement. Wyoming shall provide replacement storage space equal to one-third of any additional use under the second half of the 4% allotment. It is estimated that Wyoming's 4% share at the Wyoming-Idaho border is approximately 200,000 AF (5,000,000 AF X 4%). One-half is approximately 100,000 AF and one-third of this amount is 33,000 AF of storage space. This was the amount "set aside" by the Bureau and, in 1990 placed under contract with Wyoming.

The estimate of current use within Wyoming outlined in this plan indicates that Wyoming is using less than the first 2% and as such, at this time the state has no compact requirement for this storage space. As growth and the demand for water increases in the basin then under the terms of the Snake River Compact this storage space will be incrementally used to meet the compact obligations to the State of Idaho. Since the potential for developing new replacement storage in the Snake River basin is limited, it was uniquely beneficial for the State to contract for the 33,000 AF of existing space available in Palisades Reservoir. Until the need for replacement storage arrives Wyoming can use the storage space for other authorized and beneficial purposes.

Other Uses for Water

As mentioned previously, to protect the important instream values of the Snake River between Jackson Lake and Palisades Reservoirs and the reservoir level at Jackson Lake, Wyoming's contract provides the opportunity to exchange the purchased Palisades storage for an equal amount of storage water in Jackson Lake under contract to others. Since all of the space

and water contracts in Jackson Lake are held by irrigation users in Idaho the opportunity to exchange (make an accounting trade) the storage water held by Wyoming for an equal amount held by downstream Idaho irrigation districts exists. Operationally, it makes no difference to the Idaho irrigators where the irrigation water is derived, as long as they receive their proper contractual amount. Under this alternative, at Wyoming's discretion and based on water availability, Wyoming has the option to exchange the Palisades water upstream to Jackson Lake, and use the Wyoming water to help maintain higher lake levels or to release the water to satisfy the instream flow needs along the Snake River, during low streamflow periods. These Wyoming releases would supplement the minimum releases provided by the Bureau. These low streamflow circumstances generally occur during the non-irrigation season.

An exchange as described above, is one of several different types of reservoir storage and river operations that can be implemented to obtain multiple benefits of the storage space and water Wyoming has under contract. To understand and monitor these operational opportunities Wyoming's Palisades Reservoir contract provides for the joint development of a detailed set of guidelines for decision-making related to the operation of the Wyoming storage account in Palisades Reservoir and other facilities in the basin. These operating guidelines are discussed later in this memorandum.

The contract also provides Wyoming with the same access as other spaceholders in Palisades Reservoir to the Upper Snake River Rental Pool, also referred to as a "water bank". In order to facilitate the use of the available water supply between those users with a surplus and those users suffering a shortage, Idaho law authorized the creation of water banks that provide for a local governing body, and appropriate rules and policies for administering these types of short-term water transactions. Contributions of water (deposits to the bank) from a willing storage contractor with a surplus can be offered to the rental pool and the withdrawal of water for the benefit of others willing to purchase the available temporary storage supply are administered by a local governing body. In the Snake River basin an organization called the Committee of Nine is the designated body. Wyoming, after becoming a spaceholder in Palisades Reservoir was invited to be an ex-officio member of the Committee of Nine. Further, the actual delivery and accounting of the storage water from the bank is handled by the Water District No. 1 Watermaster.

These types of water marketing transactions can facilitate the maximum beneficial use of the available supply of water within the upper Snake River basin through the Bureau's reservoirs to meet the demands of the natural flow priority water rights and the storage contractors. If Wyoming were to determine that the water available in the Palisades Reservoir account were not needed, the state could deposit any portion of that water into the water bank for use by others and, if used, receive a modest financial benefit at a price set by the Committee of Nine. However, the rules of refilling the storage account and the use of the water must be carefully considered and analyzed before making such a decision.

Mitigation Inc. – MOA

The first example of Wyoming completing a water transaction under this provision of the Palisades Reservoir contract was executed in September of 2001. At that time, Wyoming, through the State Engineer's Office entered into a memorandum of agreement (MOA) with

Mitigation Inc., an Idaho corporation that has the responsibility of mitigating the effects experienced by its member irrigation organizations as a result of the 1990 Fort Hall Indian water rights settlement. Mitigation Inc. periodically leases additional storage water from the Upper Snake River Rental Pool managed by Water District No. 1 to supplement their available storage supplies to meet their annual mitigation requirements. Under the rules and procedures authorizing such storage and water transactions, Wyoming agreed to lease up to the 33,000 AF held in Palisades Reservoir to Mitigation Inc. to meet their end-of-season storage requirements above Milner Dam. Because of the unique location and requirements of Mitigation Inc., Wyoming will also be able to use the Palisades water it leased, through an exchange, for river releases below Jackson Lake Dam during the non-irrigation season. Wyoming received a rental payment for the amount of water actually needed by Mitigation Inc. at the approved rental pool irrigation rate.

Operating Guidelines:

In follow up to a specific contract provision, the Bureau and Wyoming, through the State Engineer's Office, developed and adopted a set of operating guidelines for Palisades Reservoir in September of 1996. These guidelines provide detailed descriptions of the general reservoir system operations, water supply forecasting, flood control operations, and the technical criteria considered in making seasonal and annual reservoir operating decisions during normal, low, and high streamflow conditions. Streamflow conditions vary each year depending primarily upon the runoff from snow accumulations each winter. As such, the Bureau adjusts their reservoir operations to reflect the actual streamflow and reservoir conditions, the water user demands and other factors, like the COE adopted flood control criteria. This set of guidelines describes the general operating criteria that is reflective of the historical operations and water supply conditions, and provides some notice to the Wyoming public and the state agencies regarding the reservoir and streamflow conditions that can be expected, but not guaranteed, under any particular set of water supply conditions.

Because of the numerous reservoirs, canals, water rights and delivery systems in the upper Snake River basin within the two states, the accounting of the delivery and use of both natural flow and storage water is complex. As a storage spaceholder, Wyoming is more involved with and is consulted on the annual operating decisions made by the Bureau than in the past. Further, Wyoming now routinely receives and monitors the accounting and administration of storage water from Jackson Lake and Palisades Reservoir that is managed by the Idaho Department of Water Resources through the Water District No. 1 Watermaster. In addition and at Wyoming's encouragement, the Bureau formalized and expanded the public opportunities to obtain information and provide input to the reservoir and river system operations. Each year the Bureau hosts public meetings in Jackson, Wyoming during the spring and fall for these purposes and to coordinate with state agency representatives.