



State Engineer's Office

HERSCHLER BUILDING, 4-E CHEYENNE, WYOMING 82002
(307) 777-7354 FAX (307) 777-5451

seoleg@seo.wyo.gov

DAVE FREUDENTHAL
GOVERNOR

PATRICK T. TYRRELL
STATE ENGINEER

November 26, 2008

John H. Lawson
Wyoming Area Manager
U.S. Bureau of Reclamation
P.O. Box 1630
Mills, Wyoming 82644

RE: Preliminary Analysis of the Application to Export Storage Water from the Pathfinder Modification Project

Dear Mr. Lawson:

Upon the completion of my review of the Application to Export Storage Water from the Pathfinder Modification Project, pursuant to WYO. STAT. ANN. § 41-3-115, I hereby issue a preliminary analysis of that application which was submitted on November 17, 2008.

Should you have questions, require additional information, or receive inquires concerning the analysis, please do not hesitate to call me. Additionally, all documents are on our website (<http://seo.state.wy.us/>) for the public to review prior to the public hearing on December 12, 2008.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick T. Tyrrell", is written over a light blue circular stamp.

Patrick T. Tyrrell
State Engineer

Atth: State Engineer's Preliminary Analysis
Reasonable Summary

CC: Michael K. Purcell, Director
Wyoming Water Development Office

BEFORE THE WYOMING STATE ENGINEER

IN THE MATTER OF THE APPLICATION BY THE BUREAU OF RECLAMATION TO EXPORT A PORTION OF THE UNITED STATES OF AMERICA APPROPRIATION, PERMIT NO. 609 RES., PATHFINDER RESERVOIR, STORING WATER FROM THE NORTH PLATTE RIVER WITH A PRIORITY OF DECEMBER 6, 1904 FOR IRRIGATION, DOMESTIC, MUNICIPAL, FISH & WILDLIFE AND ENVIRONMENTAL USES

STATE ENGINEER'S PRELIMINARY ANALYSIS

Having completed a review of an application for the appropriation of water stored in Pathfinder Reservoir for use out of state (export) pursuant to WYO. STAT. ANN. § 41-3-115, this preliminary analysis of that application submitted on November 17, 2008 is hereby issued. The United States Bureau of Reclamation (Reclamation) is the owner and operator of Pathfinder Reservoir and the Wyoming Water Development Commission (WWDC) is the contractor for storage water in the Pathfinder Modification Project (PMP). The application describes a proposed export greater than 1,000 Acre Feet (AF) which is necessary to fulfill Wyoming's obligation under the Platte River Recovery Implementation Program (Program). WYO. STAT. ANN. § 41-3-115 requires approval of the proposed appropriation by the Wyoming State Legislature after receipt of an opinion and recommendation from the State Engineer.

The application should proceed through the approval process for the reasons discussed below:

1. Reclamation and the WWDC seek authorization to export a portion of the water stored in Pathfinder Reservoir to serve as the State of Wyoming's water contribution to the Program on behalf of Wyoming's water users and the federal storage water contractors in Wyoming and Nebraska. This water contribution, as well as Wyoming's monetary contribution, would help provide regulatory certainty under the federal Endangered Species Act, 16 U.S.C. §§ 1531, *et seq* (ESA).
2. The exported water would be released from the "Environmental Account" in the PMP. That account has a capacity of 33,493 AF. Water from the account would specifically be used for fish and wildlife and environmental purposes to improve and develop habitat in Nebraska for four target species (interior least tern, whooping crane, piping plover and pallid sturgeon), all listed as threatened or endangered under the ESA. Annual releases from the Environmental Account would be made as needed to meet Wyoming's obligation for water delivery under the Program. Releases would be determined by the Environmental Account Manager, a representative of the U.S. Fish and Wildlife Service (Service).
3. Additionally, Reclamation and the WWDC seek authorization to export stored water from the "Wyoming Account" in the PMP. That export water would be leased to the

Program. Any such leases would have a term of one year and would be accomplished through temporary water use agreements approved by the Wyoming State Engineer.

The Wyoming Account has a capacity of 20,000 AF. Reclamation would operate this account to provide a reliable yield of 9,600 AF of water per year. If the water is not needed for Wyoming's primary purposes, the WWDC may lease all or part of the yield from the Wyoming Account to the Program. The primary purposes are listed, in priority, to provide:

- a. A supplemental water supply for Wyoming municipalities during times of water rights regulation.
- b. A replacement water supply to meet certain Wyoming obligations in the *Nebraska v. Wyoming*, 534 U.S. 40 (2001) settlement agreement.
- c. A replacement water supply to mitigate water use in excess of Wyoming's existing water-related baselines defined in Wyoming's Depletion Plan.
- d. **An additional water supply for the Program under temporary annual lease agreements with the State of Wyoming.**

4. WYO. STAT. ANN. § 41-3-115(r) requires the following factors to be considered, in addition to any other information deemed relevant by the State Engineer per WYO. STAT. ANN. § 41-3-115(o), in assessing an application for transfer of water for use outside of state to assure the Wyoming's interests in conserving and preserving its water resources for the maximum beneficial use.

- i. *The amount of water proposed to be appropriated and the proposed uses;*

The water to be exported is stored by Reclamation in Pathfinder Reservoir under Permit No. 609 Res. More specifically, the water would be stored in the Environmental Account and Wyoming Account of that portion of the Pathfinder Reservoir described as the PMP. The PMP was approved as described in Application, Attachment A – Appendix F, Amendment of the 1953 Order to Provide for the Modification of Pathfinder Reservoir (Final Settlement Stipulation). See *Wyoming v. Nebraska*, 325 U.S. 556 (1945) and *Wyoming v. Nebraska*, 534 U.S. 40 (2001).

No more than 33,493 AF per year would be exported from the Environmental Account in the PMP.

No more than 9,600 AF per year would be potentially exported from the Wyoming Account in the PMP when not needed for uses 3 a. – c. above, as environmental uses are the fourth priority.

The proposed uses for the exported water are fish and wildlife and environmental purposes. More particularly, the water would be used to benefit threatened and endangered species and their habitat in Central Nebraska. The water would be exported to help provide regulatory certainty under the ESA for water users in Wyoming and the federal storage water contractors in Wyoming and Nebraska.

- ii. *The amount of water available for appropriation from the proposed source, and the natural characteristics of the source;*

Pathfinder Reservoir stores waters of the North Platte River and its tributaries in accordance with Permit No. 609 Res. and has an adjudicated capacity of 1,070,000 AF. The PMP storage accounts apportioned for the purposes of the proposed exports have a capacity of 53,493 AF. On November 4, 2008, the Wyoming Board of Control approved a petition to change the use (for additional uses) for that portion of Pathfinder Reservoir designated as the PMP in the following manner:

<u>Account</u>	<u>Additional Uses</u>	<u>Capacity</u>
Environmental	Fish & Wildlife, Environmental	33,493 AF
Wyoming	Municipal, Fish & Wildlife, Environmental	<u>20,000 AF</u>
Total		53,493 AF

The adjudicated capacity of Pathfinder Reservoir of 1,070,000 AF would be maintained and the existing permitted irrigation and domestic uses would not be affected. Reclamation’s December 6, 1904 priority water right for water storage in Pathfinder Reservoir is a senior right in the North Platte Basin during the non-irrigation season. Water available to this senior right would not be affected by the export of water under this application.

- iii. *The economic, social, environmental and other benefits to be derived by the state from the proposed appropriation;*

Interpretation by the Service of the federal ESA’s broad authority has in other river basins in the West sometimes negatively impacted various states’ abilities to use and administer water under state law. Federal storage contracts, as well as provisions under interstate compacts and decrees have also been affected. The Service, as guardian of the species protected by the ESA, is required by federal law to pursue its objectives with or without the Program. Without this proposal, Wyoming water users may be required to undergo costly and uncertain individual consultations to obtain project clearance under the ESA. The collective effect of those consultations could result in the requirement to commit more Wyoming water to achieve Service objectives, than that which is expected to be provided by the proposed exports envisioned in the application.

Irrigated agriculture throughout the North Platte Basin has long been the foundation of economic stability for the residents and communities of southeastern Wyoming. One of the goals of the Program is to achieve ESA compliance without disrupting this important economic base.

The Program is a three-state effort through which Wyoming derives benefit by actively working with Colorado and Nebraska to accomplish threatened and endangered species recovery goals. The Service’s acceptance of an adaptive

management approach, which would be facilitated by approval of this proposal, to achieve recovery goals would likely lessens impacts to individual water users and federal contractors. Through participation in the Program, ESA-related regulatory burdens shift from individual water users and federal contractors to the State of Wyoming.

- iv. *The benefits to the state by the use of the water within the state that will be foregone by the proposed appropriation;*

The PMP recaptures 53,493 AF of storage space within Pathfinder Reservoir. The present inability to store this amount of water in Pathfinder Reservoir, which serves the North Platte Project, has largely benefitted the Kendrick Project, which provides water to the Casper Alcova Irrigation District. The contractors of federal storage water from both the North Platte and Kendrick Projects in Wyoming have documented their support of the PMP because they believe the exported water would serve to ensure their water supplies would not be subject to consultation under the ESA. (See Application, Attachment B).

As the export proposal should have no impact on water users upstream of Reclamation's North Platte reservoirs, there are no benefits foregone to that segment of Wyoming water users. As described in the application, there may be a small impact to the federal contractors since approximately 5% of the space in Pathfinder would be offset by the PMP. But, as also noted in the application, these contractors have reviewed their risk and are in support of the Program and PMP because they believe the potential impacts would be offset by the ESA assurance they expect to gain.

- v. *The benefits presently and prospectively derived from the return flow of water in intrastate use which will be eliminated by the proposed out-of-state use;*

As the exported water would be delivered from storage space in Pathfinder Reservoir made available through the PMP, there would be minimal effects on return flows that would be available for Wyoming water users. Those minimal effects would primarily fall upon federal contractors for storage water from Pathfinder Reservoir, and these contractors have already documented their support for the proposal (PMP). A large percentage of the water delivered to North Platte Project contractors is delivered either to Nebraska or in the Whalen Dam to Stateline area in Wyoming. The return flows from these deliveries are thus largely unavailable for diversion to other Wyoming water rights. Lands served by the Kendrick Project are further upstream in Wyoming, so there could be a slightly higher impact to return flows from these lands if the application is approved. However, lands served by the Kendrick Project are presently undergoing operational changes, such as improved irrigation delivery and application, which are expected to have a more significant impact on return flow dynamics than any changes potentially attributable to the proposed export deliveries.

- vi. *The injury to existing water rights of other appropriators that may result from the proposed use;*

Injury to existing water rights was discussed at length during the Wyoming Board of Control deliberations on the PMP petition for change in use. Per this export application now under consideration, discussions on injury are for the export itself.

Any injury relating to the proposed export would likely occur mainly to the federal reservoir water rights in Wyoming. The water rights for the Pathfinder Reservoir are held by Reclamation, the applicant for this proposed export. During the evaluation of the feasibility of the PMP, Reclamation (and the WWDC) completed preliminary hydrologic analyses relating to the potential effects of the proposed project. These analyses indicate that the effects of the PMP would be borne primarily by the Kendrick Project (Seminoe Reservoir) and the North Platte Project (Pathfinder Reservoir). The federal contractors of storage water from the Kendrick and North Platte Projects have documented their support for this proposal, since they believe that the proposed export of water would serve to protect their own water supplies from certain requirements under the ESA. (See Application, Attachment C).

In addition to these impacts to the federal contractors, minimal to no injury to downstream municipalities are anticipated to occur from the export itself. Users upstream of Seminoe Reservoir would be protected from injury resulting from storage by the PMP due to Reclamation's agreement to develop dual accounting to track the forecasted supply calculations under the Modified Decree both with and without the PMP in place. Reclamation's utilization of the larger forecasted supply calculation of the two accounting methods benefits the Upper North Platte water users.

- vii. *Whether the use formulated and carried out promotes or enhances the purposes and policies of the state's water development plans and water resources policy, and that the use will not unreasonably interfere with other planned use or development for which a permit has been or may be issued,"*

Federal administration of the ESA in the Platte River Basin has impacted Wyoming's water development plans and water resources policies for many years. As the WWDC is named as a "co-applicant" on this export application, it can be inferred that this proposal is congruent with the state's water development plans.

- viii. *Whether the proposed use will significantly impair the state's interest and ability to preserve and conserve sufficient quantities of water for reasonably foreseeable consumptive uses and other beneficial uses recognized by law to include but not limited to domestic, livestock, agricultural, municipal and industrial purposes;*

The Modified North Platte Decree envisioned the development of the PMP. Wyoming's participation in this Program should not have an impact on Wyoming's ability to utilize water as allowed under the Decree. One reason Wyoming participates in the Program is to allow for the continued use, and potential development, of water for these purposes without impairment resulting from ESA compliance.

- ix. *Whether the proposed use will adversely affect the quantity or quality of water available for domestic or municipal use;*

The priority list of purposes for the use of water from the Wyoming Account specifies that supplemental water for municipal use is the number one priority and would be satisfied before water from this account is made available for export. No water quality impact, positive or negative, is anticipated should this proposal be approved by the Legislature.

- x. *Whether, to the greatest extent possible, the correlation between surface water and groundwater has been determined, to avoid possible harmful effects of the proposed use on the supply of either.*

Groundwater usage in the North Platte Basin is higher than elsewhere in the state, and this use has resulted in the State Engineer's Office having a better understanding of the groundwater/surface water interactions in this basin. The marginal difference in the amount of water which would be transported in the North Platte channel to satisfy this export would be quite small and no significant influence to the groundwater resource is expected.

5. WYO. STAT. ANN. § 41-3-115(s) also provides that nothing in the act should be construed to interfere with existing compacts, court decrees, and treaty obligations. The Modified North Platte River Decree, which the Wyoming State Engineer is charged with administering on behalf of the State of Wyoming, envisions the development of the PMP. The proposed export is integral to the development of that project.
6. Preliminary analysis of the application has determined that the application should proceed through the approval process for consideration by the Wyoming State Legislature, for all the reasons given above.

Dated this 26th day of November, 2008.



Patrick T. Tyrrell
Wyoming State Engineer