

**Statement of Estevan López, Commissioner  
Bureau of Reclamation  
U.S. Department of the Interior  
before the  
Committee on Natural Resources  
Subcommittee on Water, Power and Oceans  
U.S. House of Representatives  
on  
HR 2273  
Amendment to the Colorado River Storage Project Act on Increasing the Active Capacity  
of Fontenelle Reservoir  
June 25, 2015**

Chairman Fleming and members of the Subcommittee, I am Estevan López, Commissioner at the Bureau of Reclamation (Reclamation). Thank you for the opportunity to provide the views of the Department of the Interior (Department) on HR 2273, which would amend the Colorado River Storage Project Act (Public Law 84-485). The amendment authorizes Reclamation to increase the active capacity and, as a result, the amount of water developed by Fontenelle Reservoir in Wyoming. With the concerns described below appropriately noted, the Department does not oppose HR 2273 in its current form.

Fontenelle Reservoir is part of the Seedskadee Project, a participating project under P.L. 84-485. The dam and reservoir are located in the Upper Green River Basin in southwestern Wyoming about 50 miles from Rock Springs. Fontenelle Dam is an embankment dam standing 139 feet high with a crest length of over a mile (5,421 feet). Fontenelle Reservoir has a total capacity of 345,360 acre-feet and is operated for municipal and industrial water use, power production, flood control, and fish and wildlife—in support of the Seedskadee National Wildlife Refuge. Recreation facilities at Fontenelle Reservoir are managed by the Bureau of Land Management under an agreement with Reclamation.

The intent of HR 2273 is to increase the yield of Fontenelle Reservoir, further developing the State of Wyoming's allocation of Colorado River water under the Colorado River Compact. To understand how HR 2273 would increase the water available to Wyoming, it is important to review some basic engineering features associated with Fontenelle Dam.

In general, the active capacity of a reservoir is the space between the highest elevation at which water can be stored and the lowest elevation from which water can be released so as to allow operation for all authorized purposes. Power is an authorized purpose of the Seedskadee Project. The lowest elevation at which Fontenelle Powerplant can be safely operated is approximately 40 feet above the bottom elevation of the inlet to the powerplant, and is referred to as “minimum power pool elevation.”

In order to protect the upstream face of a dam from erosion caused by wave action, large stones that are resistant to erosion and wave action are placed on the upstream side of the dam. These stones are referred to as “riprap”. In keeping with engineering practices, Fontenelle Dam

includes riprap protection on the upstream face of the embankment. Because the dam would not be operated with any frequency below the lowest power production elevation, original construction and subsequent modifications did not include placing riprap on the upstream face of dam below minimum power pool elevation.

For some years, the State of Wyoming has expressed interest in placing riprap below the minimum power pool elevation, and this project has come to be known as the “Riprap Project.” By doing so, it would be possible to operate the reservoir within a greater range of elevations—increasing the operating range and yield of the reservoir. HR 2273 would authorize the Department to undertake the “study, planning, design and construction activities” necessary to consider and implement the Riprap Project (a lowering of the elevation of the riprap).

In considering the Riprap Project, Reclamation has had concerns, and we appreciate the chance to review this legislation as it was drafted over the past several months. We are pleased to note that each of these concerns appears to be addressed in the introduced language of HR 2273.

HR 2273 amends P.L. 84-485 to authorize consideration and implementation of the Riprap Project. In doing so, it grounds the Riprap Project on the statute that originally authorized the Seedskadee Project. HR 2273 relies upon the authority of the Contributed Funds Act (Act of March 4, 1921) as the means for the State of Wyoming to provide the funding to consider and undertake the Riprap Project. With this arrangement, Reclamation believes that the Riprap Project can be implemented without any request for new appropriations, and with no foreseeable impact to Reclamation’s already constrained budget.

It is unlikely that the Riprap Project will adversely affect other states dependent on the Colorado River or Mexico beyond what they would face when the Upper Basin States make full utilization of their apportionments, considering their apportionments and required releases from the Upper Basin to the Lower Basin under current operational guidelines that implement key provisions of the Law of the River including the Colorado River Compact. Having said that, if HR 2273 becomes law, it will be important to conduct additional analysis to ensure that other interests are protected. HR 2273 includes the following elements that should provide some assurance of no adverse impacts to other water uses.

First, HR 2273 appears to create robust sideboards to prevent the Riprap Project from conflicting with law, compacts, and treaties. This protects against Wyoming expanding its entitlement to Colorado River water. In Section 2, HR 2273 provides reassurance that it will not modify, conflict with, preempt, or otherwise affect any applicable federal statutes or decrees, including, but not limited to:

- Boulder Canyon Project Act
- Colorado River Compact of 1922
- Boulder Canyon Project Adjustment Act
- Treaty between the United States of America and Mexico relating to the utilization of waters of the Colorado and Tijuana Rivers and of the Rio Grande
- Upper Colorado River Basin Compact

- Colorado River Storage Project Act (P.L 84-485), other than as indicated in Section 1 of HR 2273
- Colorado River Basin Project Act (Public Law 90-537; 82 Stat. 885)
- Any State of Wyoming or other State water law

Second, HR 2273 amends P.L. 84-485 to authorize the planning, design, and construction of the Riprap Project. The bill's stated purposes include "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 Basin Compact, respectively." P.L. 84-485 sets a clear boundary around the Riprap Project; it cannot permit Wyoming to expand its entitlements under the Colorado River Compact and the Upper Colorado River Basin Compact.

Another important element of HR 2273 is the definition of active storage capacity. Although active capacity can generally be understood as the difference between the upper and lower elevations at which a reservoir may be operated, the elevation of both the upper and lower limit may also be defined by considerations beyond engineering. Other considerations often limit the degree to which a reservoir may be drained. These considerations include issues of law, hydrology, economics, and environment. HR 2273 acknowledges these limitations; in the bill "active storage capacity" is "defined or limited by legal, hydrologic, structural, engineering, economic, and environmental considerations."

Environmental compliance concerns also are addressed under HR 2273. The bill requires compliance under the National Environmental Policy Act, the Endangered Species Act, and the National Historic Preservation Act.

While HR 2273 is clearly written to integrate with existing law, regulations and contracts, there are some questions associated with operation and design that may limit the scope of the Riprap Project. Reclamation has not studied the operation of Fontenelle Dam at the lower elevations proposed under the Riprap Project. The original planning and design for the facility did not include operations at such low levels. Operation at lower levels could raise the following issues that should be explored by the study to be authorized by this Act:

- Water Delivery Requirements – At lower reservoir elevations, the rate at which the reservoir can be drained is slowed (because of the reduced hydraulic head). Without the study and planning that would be conducted pursuant to this bill, Reclamation does not know whether water can be delivered at such rates as would be necessary.
- Instream Flows – Under current operations and agreements, Reclamation is required to deliver 5,000 acre-feet to the Seedskadee National Wildlife Refuge for fish and wildlife purposes on an annual basis. As noted above, without additional study Reclamation does not know whether it will be able to meet these flow requirements at lower reservoir levels.
- Power Generation – Operating the reservoir at lower elevations will affect powerplant operations. There would be periods when the powerplant cannot be operated efficiently and when the powerplant cannot be operated at all. The result will be impacts on Reclamation's

ability to generate and deliver power under P.L. 84-485. There is a potential for impacts to irrigators and municipalities that use Colorado River Storage Project power as well as to the members of the Colorado River Energy Distributors Association, which rely upon and purchase the power.

That concludes my statement. I am pleased to answer questions at the appropriate time.