

Gross Dam and Reservoir Expansion Approved



When completed, Gross Reservoir will be able to hold an additional 77,000 acre-feet of water—more than 25 billion gallons.

THE ARMY CORPS OF ENGINEERS on July 6 cleared the way for the \$380 million expansion of Gross Dam and Reservoir in Boulder County, concluding more than a dozen years of study and debate that ultimately produced widespread support for the project among water providers, environmentalists, civic leaders, and others.

“We did this carefully and thoroughly, and brought everyone into this process,” said Denver Water CEO Jim Lochhead. “As a result, we have a better project plan with significant environmental protections. We’re proud to be doing the right thing.”

The project earned key endorsements from Governor John Hickenlooper, state and federal lawmakers, major

environmental groups, local mayors and city councils, chambers of commerce and economic development corporations, county elected officials, and water interests on both sides of the Continental Divide.

Last year, the Colorado Department of Public Health and Environment through its 401 Certification process determined that the project will have a “net environmental benefit.” Denver Water worked with representatives of several environmental groups to develop the mitigation and enhancement plan that will carry out those benefits, which Trout Unlimited called “a victory for the river.”

Raising the dam

Gross Dam was built in the early 1950s



The project is called a “dam raise” because engineers will increase the existing concrete gravity arch dam by 131 feet, from 340 to 471 feet high, nearly tripling the reservoir’s storage capacity.

and was designed to be expanded in the future to increase water storage capacity. The project is called a “dam raise” because engineers will increase the existing concrete gravity arch dam by 131 feet, from 340 to 471 feet high, nearly tripling the reservoir’s

storage capacity. The surface area of the reservoir would be expanded from approximately 418 acres to 842 acres. Using existing collection infrastructure, water from the Fraser River, Williams Fork River, and South Boulder Creek would be diverted and delivered during average to wet years via the Moffat Tunnel and South Boulder Creek to Gross Reservoir.

When completed, Gross will hold an additional 77,000 acre-feet of water—the equivalent of more than 25 billion gallons—that will be added to the existing 41,811 acre-feet for a total storage capacity of 118,811 acre-feet

An expanded Gross Reservoir will provide balance and reliability to collection systems that serve many in the Denver metro area. Denver Water will use 72,000 acre-feet of the added capacity as insurance against future challenges, including

drought, wildfires and future growth, particularly on the north side of its collection system, which currently accounts for only 10 percent of total storage capacity. The additional water supply will come primarily during the high runoff months of May, June, and July. Additional water will not be diverted for this project during dry years. The remaining 5,000 acre-feet will be set aside for an environmental pool that provides additional water for South Boulder Creek during low-flow periods.

Preconstruction activities, including dam design and geotechnical work, are expected to begin in 2018. The entire project is expected to be completed in 2025.

Expanding Gross Reservoir fulfills a major piece of Denver Water’s long-term plan to deliver safe, reliable water to the people it serves now and

into the future. This plan also includes conservation, reuse and responsibly sourcing new supply.

The next milestone in the project comes with the anticipated approval by the Federal Energy Regulatory Commission of Denver Water’s hydro-power license amendment application. The license amendment allows Denver Water to expand the dam, produce more energy beyond its current level of 7.6 megawatts, and modify the existing recreation management plan to accommodate the new high water line, among other things.

“This project represents an enormous amount of work, input and collaboration,” said Lochhead. “From Denver Water’s perspective, we feel really good that we’ve done the right thing by the local communities, by the environment and for our long-term customers.”

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