Denver Water has a longstanding, highly effective and nationally applauded water conservation program because we respect the value of water in a dry region. Conservation is a critical part of our future water supply plan.

Since the 2002 drought, Denver Water asked our customers to cut their water use by 22 percent. Today, we have nearly reached that goal. We serve 1.4 million people. Our service area uses 21 percent less water than they did a decade ago—and there are 130,000 more people to serve.

Since the early 1970s, the number of people we serve has increased by almost 350,000 while the amount of treated water they use has increased only 6 percent.

Every type of customer is asked to use only what they need, and Denver Water has programs aimed at residential, commercial and industrial water uses. We also have rules that ensure that our customers don't waste water, including a limit on the number of days and times customers can irrigate lawns or landscapes.

We have a tiered rate structure to encourage water conservation. The more customers use, the more they pay.

Denver Water spends more than $5 million each year to provide incentives to our customers to retrofit appliances, fixtures and irrigation systems with more efficient models.

Why does Denver Water need to expand Gross Reservoir?
Our current water supply system isn't ready to handle the very real threat of future water shortages. Expanding Gross Reservoir will bolster water supply and reliability with more storage to meet the Denver Metro Area's existing and future needs.

Is this project really needed?
Yes. The Gross Reservoir Expansion Project is important in protecting against potential catastrophic events such as fires, landslides, floods, drought and infrastructure failures. Shortfalls in our overall water storage system could occur as early as 2022 if we don't increase storage capacity. Expanding Gross Reservoir provides that storage capacity, but the project will take several years and must begin before a crisis is upon us.

When this project is completed, how much more of our winter runoff can we keep in Colorado during wet years?
It varies, but will be significant. As an example, most runoff available to Denver Water during the wet winter of 2014 and spring of 2015 flowed out of state because existing Denver Water reservoirs were full and there was no place to capture and store it. Because this project is designed to capture and store water in average and wet years, if the Gross Reservoir Expansion Project had been completed in 2014 the reservoir could have stored 72,000 acre feet of water in the new storage space by the summer of 2015.

Why was Gross Reservoir not built to its capacity originally?
When it was built, its capacity was sufficient to meet customer needs. Forethought and fiscal responsibility aligned to prepare for today's needs, as decisions made then enabled our work today to meet the challenge of an economically and environmentally responsible storage solution.

Why has this project taken so long?
This project requires federal permitting, which in itself is a lengthy, complex process. It was important to Denver Water that all impacts to the surrounding area and the water system were analyzed and that the most environmentally responsible and economical alternative was chosen to increase storage. In partnership with federal authorities, more than 14 years of study has identified potential impacts and mitigation strategies. We anticipate final federal approval soon as the project moves forward into the design and construction phases.

This is a great example that water projects are not a “just in time” enterprise—they must be carefully planned, undergo environmental studies, have very detailed designs, and be constructed in a safe manner to last for generations.
Who benefits from this project?
The primary beneficiaries of this project are the 1.4 million people Denver Water currently serves and many of the projected 7.7 million who will call Colorado home by 2040. The environment and West Slope stakeholders also benefit through two agreements related to expanding Gross Reservoir: the Colorado River Cooperative Agreement and the Mitigation and Enhancement Coordination Plan. In addition, Denver Water partnered with the City of Boulder and Lafayette to provide additional storage in Gross Reservoir in the form of an environmental pool that will allow water releases to South Boulder Creek to improve stream health. Beyond supply reliability and environment safeguards, additional storage means greater water resources in times of emergency.

When will the project be complete?
Preliminary design has begun and pre-construction activities and dam design will continue into 2018. Final design is expected to be completed by the end of 2017 and construction is expected to take about four-and-a-half years. If all goes according to the current timeline, construction completion is anticipated around 2025 and, depending on water availability, it will take approximately five years to fill the reservoir to its new capacity.

What will happen if you don’t do this project?
Denver Water has a responsibility to meet the needs of the 1.4 million people we serve today and future demand created by population growth. Without the project, Denver Water’s system will remain vulnerable to catastrophic events and continue to be ill-equipped to handle an increase in stress to the system. Currently, a single dry year or emergency—such as a forest fire or treatment plant shutdown—puts our system at risk.

Expanding Gross Reservoir helps us avoid running out of water in any given year and helps us put water where we need it.

What is Denver’s North System and why is it important?
Denver Water’s supply system is essentially in two parts: the North System and South System. During a spell of several dry years, the North System, in its current state, will not have enough storage capacity to supply water to residents. Nearly 90 percent of water shortages rest in Denver Water’s South System, so the entire system is out of balance. This project will help to balance out the two systems and provide more water supply for the entire system, should the South System be impacted again as it was in 1996 following the Buffalo Creek Wildfire.

If a greater level of water conservation were required in the Denver Metro Area, could we postpone or not need to build this project?
No, conservation is critically important, but it doesn’t replace the need for expansion. In 2005, our customers used less water per capita than they did in the last 40 years. Quite an accomplishment considering the Denver Metro population has increased by 350,000 people since 1970. Our consumer base has grown 20 percent, yet we’ve cut our water use by a third as they did in a previous drought year, we still run the risk of running out of water on the north end of our supply system – beyond Gross Reservoir is a critical part – and this project helps fix that imbalance. The fact is we’re vulnerable on several fronts. We are short of supply and storage capacity on this end of our system making us vulnerable to drought. We’re also vulnerable to an infrastructure failure that could occur on the south end of our system. Consider something like the August 2015 Animas River contamination occurred upstream on our South System, we’d be left with zero storage to fill our pipeline. No tax dollars will be directed towards Denver Water or to the Gross Reservoir Expansion Project.

As a public agency, Denver Water is entirely funded through rates, new tap fees and the sale of hydropower. No tax dollars will be directed towards Denver Water or to the Gross Reservoir Expansion Project.

How much will this project cost? Who will pay for it?
The anticipated cost of the project is approximately $444 million (in 2025 dollars). This cost includes design, project management, permitting, mitigation and construction. As a public agency, Denver Water is entirely funded through rates, new tap fees and the sale of hydropower. No tax dollars will be directed towards Denver Water or to the Gross Reservoir Expansion Project.

If we aren’t in a drought anymore, why spend the money to do this?
While Colorado is currently not suffering from drought conditions, future droughts are inevitable in this region. Research indicates the strong potential for future water shortages based on drought and community growth. We would not be responsible stewards of this scarce resource if we did not prepare now on this looming supply challenge.

What are the environmental impacts of a project of this magnitude?
The environmental impacts of expanding Gross Reservoir were all identified in the Final Environmental Impact Study and Denver Water has proposed mitigation for all of these identified impacts. We have collaborated with others committed to environmental health of our state to offset the identified environmental impacts. We’re proud that the Colorado Department of Public Health and Environment has determined the project will have a net environmental benefit on the state. Our collaboration efforts have also resulted in the project being endorsed by Governor John Hickenlooper, Colorado Trout Unlimited and Western Resource Advocates – two major environmental groups focused on stewardship and sustainability. A few examples of our commitment to watershed enhancements include:

- Agreeing with the cities of Boulder and Lafayette to provide an environmental pool in an enlarged Gross Reservoir that will be used to provide enhanced stream flows to a 17-mile stretch of South Boulder Creek below the reservoir.
- Providing water for current and future West Slope environmental and consumptive use needs.
- Protecting river flows and enhancing the aquatic environment from the headwaters of the Fraser and Blue rivers at the Continental Divide to the state line.
- Earmarking millions of dollars for projects on the West Slope, such as improving rivers and streams and constructing the Pass sedentation pond to improve water quality.
- Making available 1,000 acre-feet of water each year from Denver Water’s share of the Fraser River for environmental purposes in Grand County, at times and locations requested by the Colorado Water Resources Board.
- Denver Water also will release an additional 1,000 acre-feet from Williams Fork Reservoir under specified conditions at the request of Grand County.
- Partnering with Northern Water and the Colorado Parks and Wildlife to restore a portion of the Colorado River below Windy Gap Reservoir.
- Providing $16.5 million for the Forests of Creative Watershed partnership, to be matched by the U.S. Forest Service (total of $33 million), for forest health initiatives in our watersheds.

What wildlife will be impacted by this project and how is that being mitigated?
The Final EIS identified some impacts to wildlife and we committed to mitigating these impacts. For example, one concern was the impact to the local elk herd on its winter range. To mitigate this impact, Denver Water has purchased land within the South Boulder Creek basin that will be preserved for elk habitat and other environmental needs.

How many acres of trees will be cut down? What will be done with all the trees that are cut down?
On construction starts, it should take between six and eight months to remove the 400 acres of trees that will otherwise be inundated by the new high water line. We will make every effort to dispose of the trees responsibly, which includes recycling the wood, allowing people to gather firewood and hauling debris to a landfill. We will not use a traditional slash pile-and-burn method because of air quality concerns and regulations, and will make sure we comply with air regulations as we reduce slash piles to ash.

How many property owners might be affected by this project?
Construction impacts from this project vary depending on where the community member lives and their movement habits throughout the area. There are fewer than 100 property owners who will be directly affected by construction – meaning that their homes are directly adjacent to Gross Dam Road. These neighbors will experience truck traffic and potential noise and dust.

Those with a view of dam construction activity will see their views change, and have temporary noise and light disruptions. Other members of the community will be impacted indirectly by experiencing traffic disruptions and the frustration of having an ongoing construction project near their homes for a period of about four years. There is one property owner whose land is needed for the project and Denver Water is negotiating a land swap agreement to properly compensate them.

How much higher will the lakefront water level be after the project?
The reservoir will have a high water line that is 124 feet higher than it is today.

If you are raising the reservoir level 124 feet, won’t that submerge most of the private property around it?
Less than 15 acres of private land will be inundated by the proposed project. We’re arranging a land swap with the property owner to properly compensate them.

Can what be done to lessen the traffic impacts and ensure the safety for residents, especially children, who travel along Hwy 72 every day?
There is a lot that can be done. We plan to work closely with local residents to ensure safety, coordinating with school bus schedules and are evaluating scheduling options that minimize impacts. Safety is our number one priority and we will be responsive to community concerns.

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