

CAC UPDATE

For the meeting of March 15, 2018

Big dig under I-70 clears path for future water delivery

If you've driven on Interstate 70 through Jefferson County, Colorado, recently, chances are you've noticed the big blue pipes lined up in a field near Golden.

These large sections of pipeline — 50 feet long, 7 feet in diameter and weighing 25,000 pounds — are a critical part of a \$90 million pipe replacement project for Denver Water's northern delivery system.

"The pipeline will play a big role in how we get water from the mountains to our customers in the city," said Jim Light, design project engineer at Denver Water.

The new water line will replace two existing pipelines that were built in the 1930s and 1950s. The pipelines carry water from Ralston Reservoir north of Golden to the Moffat Treatment Plant in Lakewood.

An assessment of the two existing pipes in 2012 found signs of wear, cracking and concerns with the joints.

"The old pipes served us well, but they're showing their age," Light said. "We want to replace them now before there are any major problems."

The pipeline replacement is part of Denver Water's nearly \$700 million North System Renewal — a renovation project to update the infrastructure that brings 20 percent of Denver Water's water to customers in the metro area.

The large row of pipes sitting in the field near I-70 and state Highway 58 will be installed as part of the first phase of the construction project.

"We wanted to get the pipes underground before this area is developed," Light said.

The first phase also includes digging tunnels under state highways 93 and 58, as well as I-70 and two railroads.

"Installing pipelines was easier back in the 1930s when this was all rural farmland," Light said. "Now we have to work around major highways, homes and businesses." Or more on this story and to watch the video please visit the TAP article [here](#).

Can Day Zero happen here?

There's a stunning date looming for one of the most water-efficient cities in the world: Day Zero, the time Cape Town runs out of water.

Absent any rain, that day is July 15, when officials will shut off taps in South Africa's second-largest city, and residents will receive water rations at collection sites throughout the city, a move civic leaders say will wreak havoc on public health and cause chaos throughout the city.

What is Denver Water doing to avoid its own Day Zero? Could it happen here?

"We're never in control of Mother Nature," said Dave Bennett, Denver Water's director of water resource strategy. "But we're working very hard to make sure we have a secure water future for our customers."

With that in mind, Denver Water focuses on three strategies to ensure customers always have the water they need.

Cape Town is a model of sustainability and careful water management, according to a recent New York Times article, which said: "The city's water conservation measures — fixing leaks and old pipes; installing meters and adjusting tariffs — had a powerful impact. Maybe too powerful. The city conserved so much water that it postponed looking for new sources."

Denver Water has had a popular water efficiency program for years, but it has always been part of a larger, diversified approach. That includes working to find new uses and customers for recycled water, investigating new ways to store water, like Aquifer Storage and Recovery, encouraging small-scale rainwater capture and responsibly sourcing new supply. For more you can find the article on TAP [here](#).

Living up to the La Nina hype

La Nina is the presence of cooler-than-usual sea-surface temperatures in the central Pacific Ocean. For Colorado, this often means more snow for the northern mountains in the state, but drier conditions in the southern part as the jet stream tends to push major weather patterns further north.

Sound familiar?

Look at the state's most recent snow water equivalent map, and it shows La Nina has lived up to her reputation. More snow in the northern mountains, and alarmingly low levels in the south, particularly in the southwestern corner of the state.

For Denver Water customers, that map is relatively good news. We get our water supply from sections of the South Platte and Colorado river basins, which have seen relatively decent snowfall during this La Nina spell. Our reservoir levels are in good shape for this time of year as well, sitting at 89 percent of capacity against a historic median of 80 percent.

“Certainly it’s been drier than we’d like to see this winter,” said Nathan Elder, a senior water resource engineer at Denver Water. “But the snowpack levels in the river basins we monitor are still good. And we’ve had a few seasons of wet weather to help build our reservoir levels. Overall, Denver Water customers should feel comfortable with where we are right now.”

However, the statewide snowpack level sits at just 73 percent. It’s dragged down by the lower totals in the southwest mountains of Colorado. But changes may be on the way. The National Oceanic and Atmospheric Administration released its monthly forecast, calling for La Nina conditions to weaken by spring and move toward a more neutral weather pattern (“ENSO neutral” if you really want to go down a rabbit hole).

But NOAA’s three-month temperature and precipitation forecasts may not carry good news. The forecast map predicts above-average temperatures and below-average precipitation for much of Colorado for March, April and May. That’s not ideal weather for accumulating snowpack.

“Typically, March is the snowiest month of the year in our collection areas,” said Elder. “March and April are always a critical time of year for watching the snowpack. We’re in good shape now, but things can change quickly this time of year.”

Here’s hoping forecasters only bat .500 for the winter, and we see milder temperatures with more moisture this spring. To all the meteorologists out there, we promise not to hold it against you if you’re wrong this time. We’re kind of rooting for it.