

Would Fontanelle Dam Expansion Hurt—Or Help—The Green River's Fishery?

By [Alanna Elder](#) • Jul 21, 2017



Paddling down the Green River, Trout Unlimited project manager Nick Walrath has a fish tale for almost every bend of the Green River below the Fontenelle Dam in southwest Wyoming.

"I drive my wife crazy because I'm like, remember that fish you caught by that big tree?" Walrath says, rowing past the spot where he once made a brown trout "rise" from a patch of grass.

As we crossed into Seedska-dee National Wildlife Refuge, we spot two young bald eagles perched on the bank, looking past us to the yellow bluffs.

Wyoming Game and Fish biologist Robert Keith says this place harbors many kinds of birds, including a population of trumpeter swans that returns every year.

“This is their destination, the reach below Fontenelle Dam, to winter and complete their life history,” Keith says.

Keith explains, waterfowl flock to Seedska-dee because the dam keeps the river flowing year round.

“You have a lot more water in the system below the reservoir through the low water months than you would if the reservoir didn’t exist. In the winter months, it’s kept from freezing,” he says.

The dam keeps the water warmer in winter and cooler in summer, which is why people like Walrath and Keith like to fish here.

“The fishery below Fontenelle Dam historically would have been a warm water fishery, not of sport fish like we know, but of native species,” Keith says. “But what the reservoir did was create conditions that were favorable for trout; that allows a really popular trout fishery to persist below the dam.”

The drainage is now home to Kokanee salmon and rainbow trout, which Game and Fish restock every year. A population of wild brown trout persists on its own.

Keith is interested in the state’s [plans](#) to put rock or concrete armor called rip-rap on the lower part of the dam wall. Water is really powerful, and waves constantly knocking against an unprotected dam wall can cause erosion. The project would make it possible to draw more water from the Fontanelle Reservoir to deal with the likelihood of worsening drought conditions.



State Engineer Patrick Tyrell says they will need federal approval to change the dam's design. Originally, he says, "they didn't see a need to put the rock down there if the water level was never going to be down there. That was before we experienced the worst sixteen-year drought on the books. Now we're just sort of making sure that should we ever need that space, that it is available to us."

The idea is that an extra 80,000 acre feet of storage at the bottom of the reservoir could protect water users in Wyoming if the state were forced to give up rights to drought-stricken users in downstream states.

Senator [John Barrasso](#) and Representative [Liz Cheney](#) have introduced legislation to approve the rip-rap project, maintaining that it could make the area more attractive to new water users of all kinds. Governor Matt Mead's policy advisor Nephi Cole says storage projects like this one could really benefit Wyoming.

"We have this great access to this resource for recreation, for industrial, municipal, agricultural use. We can use it for beautification," Cole says.

"Water truly is the most precious commodity we have in the West. In order for us to be able to utilize it for any use, we have to plan for it. We have to build the infrastructure needed for it."

Fontenelle Reservoir was originally a diversion project meant to turn the

area into productive farmland. But after building the dam, the Bureau of Reclamation tested that idea by pumping water to experimental farms. It did not work - according to state engineer Tyrell, they discovered the project was not economical. Right now, a few companies have rights to the reservoir water, although they are not actively using it. Seedskadee Wildlife Refuge and nearby towns hold other rights.

Then there are the trout, and the recreationists they bring to the river. Game and Fish's Keith says expanding the reservoir's usable capacity could kill a lot of fish - or not. It depends on whether or not they decide to drain the water.

"The concerns really revolve around *how* the project's implemented," Keith says. "If it's implemented in the wet, and the reservoir and the river are maintained, impacts mostly go away. If it's implemented in the dry, depending on the time of year, then that's when there [are] concerns."

Keith says the Kokanee salmon and rainbow trout would take a few years to bounce back, but he worries that the drainage would lose its self-supporting brown trout population. He and other biologists have met with Engineering Analytics, the consulting firm working to create a plan for the project. A representative of that company said they hear those concerns, but, putting the rip rap in without emptying the reservoir would be pricey, possibly six or seven times more expensive than it would be if they worked "in the dry". They will come out with a public recommendation soon, but it could be years before construction begins since the bill still has not passed Congress.

Trout Unlimited's Walrath has also spoken with the company. He is hoping that if this project does go through, the process will be collaborative.

"There's a lot of people that have stake in this water," Walrath says. "It's just what those good things are... I hope we can all sit at the same table, and everybody can see everyone else's point of view."

After the boat trip, Walrath and I run into an outfitter who had also been fishing that day. Ryan Hudson has not heard much about the Fontenelle project, but he is interested. He says he spends about 180 days a year guiding out-of-staters on this and other stretches of the Green River.

"It's how we pay our bills," Hudson says. "We have a good population of some natural sustaining fish, that's certainly a plus, and we'd like to keep it that way."

While supporters of the project would like to see more water in the state, the people using this stream do not want that to happen at the expense of fish.