

# Underwater work for water facility

By Steve Harding — mayor of Pierre



This floating platform is home base for underwater excavation and construction work for the drinking water treatment facility. The platform has an excavator, indoor office, four shipping containers, several docks, bathroom, other equipment, and a dozen people. – Photo provided by city of Pierre

Growing up in Pierre, I've spent a good amount of time on the water. I even spent a good amount of time under the water scuba diving. But of the decades of my life spent in, on, and under the Missouri River, I have never seen anything quite as intriguing as the operation I saw in, on, and under the river earlier this week.

The marine contractors working on the drinking water treatment facility took me out to the platform they have anchored just north of the train bridge. The work they were doing was fascinating.

They have fashioned a floating platform that serves as the home base for their underwater excavation and construction operation. This floating platform is large enough to house an excavator, an indoor office, four shipping containers, several docks, a dozen people, as well as the other equipment needed to complete their work. Plus it has a bathroom.

The marine contractor, JF Brennan Company out of La Crosse, WI, is tasked with building a trench in the river bed where a 720 foot intake pipe will be secured. That long pipe will eventually convey water from the Missouri River to the raw water holding tank recently built near the Ramkota.

Before they can sink, drag, and install that pipe, the JF Brennan team has to spin piles into the river floor — up to 25 feet into the bed — and then add supports to those piles to strap down the pipe. This requires divers to work underwater with hand tools to bolt materials together.

The planning needed to accomplish this is far more advanced and intricate than you might imagine. You see, the placement of the pipe must be precise. At 720 feet, the pipe is not that nimble, and it needs to align perfectly with the hole that has already been bored as deep as 28 feet below ground elevation between the river bank and the raw water holding tank.

This required surveyors and templates to make sure piles and supports are being placed in precisely the correct spot. Additionally, it requires a man above the water and another below to confirm the piles are hitting the target.

As I mentioned, I was astounded by the technology, technique, and expansive planning necessary to connect that intake pipe to our infrastructure on land. But while I was trying to wrap my brain around all that was happening, I couldn't stop thinking about those divers.

Growing up on the water, I know it's uncomfortable, even in a wetsuit, to dip your toe in the Missouri River this time of year. So I asked how the divers managed in these conditions. Turns out, they are the warmest people on that operation. They have special wet suits that circulate warm water and keep them toasty.

While I was amazed by that, the divers were amazed by the clarity of our river water. They are accustomed to murky rivers. Our clear water makes for easier underwater work, easier water processing and will ultimately make for better water quality for Pierre citizens.

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