

TANK AND RESERVOIR INSPECTIONS

By Jonathon Barnes

I have had the opportunity to witness new tanks going in along with older tanks being eliminated. I've had walk arounds among many reservoirs throughout the years. I have to say some of them have had some very interesting things within them. I know a lot of our operation specialists are older gentlemen that aren't very comfortable getting up on these tanks and handling the lids or handling the height. However, that does not mean it just goes without a look. Tanks and reservoirs are built in many ways. You need to understand the design of your tank or reservoir. Every system must do an annual inspection and report the findings and information from their tank inspection to the DOH. If you are not getting up there or getting someone to get up there that knows what to look for then you're putting yourself behind the 8 ball. Just please don't fall in or off and ALWAYS have at least two people onsite when climbing and inspecting.

One system particularly, I remember that the tank was installed within the last 5 years, and it had a standpipe in the bottom to keep any heavy sediment from going into the system. The tank itself was in near brand-new condition. However, the sediment in the bottom was to the top of the standpipe. Only after the draining of this tank could we see that there was a standpipe there and the sediment was a full 2' thick at the bottom. Its sediment capacity was maxed out, subsequently allowing the excess sediment to flow throughout the system and create issues within the mains and services and allowing particulates throughout. After we removed all the sediment and got a good look inside the tank itself, the only issue was the sediment build up. Afterwards we cleaned the tank top to bottom, inspected for any damaged areas, started filling and super chlorinated with proper dosing. After seeing what was involved with removing the sediment and cleaning, the Operation Specialist knew he could have done that with a vac truck, some hose extensions and a couple extra guys. Saving his community thousands. Hindsight! Now we don't all have vac trucks and getting rid of the sediment can be an issue in some cases, but it doesn't have to be a project that requires an expensive third-party contractor. Calling in a vac truck on your own and doing the job yourselves could save you tens of thousands of dollars. There is a lot of planning that goes into taking down a tank and cleaning it and the timing must be right, but it can be done. However, the FIRST step is getting on top of those tanks and taking a good look at the interior and assessing the situation to determine if a diver or a robot is necessary for further inspection. Or does it just need to be taken down and cleaned.

Reservoirs on the other hand, require a little more care to many of the surrounding areas and protections for refilling. However, a simple walk around to inspect the reservoir is necessary. Knowing the area and what is and what is not supposed to be there is crucial to knowing what is ok and what is not. Open reservoirs are highly susceptible to dying animals as they generally look

for a water source to lay in as they deace. Removing anything found dumped nearby or anything that is not supposed to be in the area, is a must. In fact, if community members and others see an operation specialist walking around and inspecting these sometimes multi acre reservoirs they are less likely to have issues with dumping. Other factors to consider include flooding. Flooding drags plenty of debris with it usually ending up right where we don't want it, near or in our reservoirs or blocking or ruining fencing or even washing out banks or damaging headworks.

In all, our annual full inspections are extremely important and necessary. In my humble opinion however, being proactive and doing a simple walk around the reservoirs and quick looks inside the tanks at least once a month and especially after a storm event can be the deterrent to many vandalism issues. Along with setting up a plan to address fallen trees that knock out gates or even fences. Often times, you might even find yourself enjoying the usually peaceful and serene nature along the way. Take a cup of coffee or your favorite morning wake up and take a hike. If need be, take the chainsaw too. Feel free to contact me or any of our other awesome water professionals here at NYRWA if you have any questions or would like to discuss further about your reservoir or tank cleanups. We'd be happy to assist. 💧💧

Jonathon Barnes
Circuit Rider
barnes@nyruralwater.org

