

Follow-up questions and answers regarding The City of Toledo's conceptual Alternate Water Reservoir

1. **So as this will ruin my property value the view and peace and quiet that I moved back out here to enjoy ?**

One of the goals identified early in the reservoir design process has been to partner with agenc(ies) such as Metroparks and US Fish and Wildlife to assist in developing the project into an asset for the Jerusalem Township community that is favorable for property valuation and upon completion adds habitat and beauty to the community. The operation of the reservoir will be a quiet, low traffic operation.

2. **Who will maintain it, who will be held accountable for maintaining it? Will this cause flood insurance to go up?**

The City of Toledo will be responsible for the maintenance of the proposed reservoir. The Ohio Department of Natural Resources will regulate the reservoir for structural integrity and will permit the design and construction as well as periodically inspect the site to ensure that proper maintenance is being performed. It is not expected that the reservoir will impact flood insurance or impact FEMA's established 100 year flood elevation designations.

3. **How will the water be moved from the reservoir? Will a water line be put in?**

Water will be moved into and out of the reservoir through underground piping. However, the reservoir will not contain fully treated potable water as the water treatment process will not be complete until the water has flowed from the reservoir and through the Collins Park Water Treatment Plant.

4. **I'm CONCERNED about the protected lands, the State Park and more construction on top of construction and interrupting our already dwindling wildlife.**

The proposed project will not encroach on protected land or the State Park and will potentially add habitat for wildlife and improve the long term outlook for wildlife. In the spirit of improving habitat for wildlife in Jerusalem Township, the City of Toledo has routinely worked with US Fish and Wildlife to improve habitat management on existing City of Toledo property in Jerusalem Township; the City intends to continue be a neighbor that is respectful of wildlife and the environment as we have been for the last eighty years in Jerusalem Township.

5. **Our location alone is vital to migrating birds. Construction ruins wildlife!**

The proposed construction will be taking place solely on what are currently agricultural lands. The finished project will transform a 200 to 300 acre tract of vacant agricultural land into essentially an inland lake that will provide favorable conditions for migratory waterfowl.

6. **For starters, I would like to know if the lake water being held in this reservoir has any sort of chemical treatment (potassium permanganate, etc). If the lake water is untreated, I would assume that during peak algae season (July-September), given that a reservoir would be less likely to be affected from wind/turnover, would create prime conditions to have a Microcystis algal bloom in this reservoir.**

The water held in the proposed reservoir will be treated at a minimum with potassium permanganate, and possibly powdered activated carbon.

As to reservoir management, it will be our intent to selectively fill the reservoir when water quality is good. This will allow some level of control for nutrient management. Part of the detailed design will include development of criteria to judge when to fill the reservoir.

Reservoir design will consider one or more smaller reservoir cells designed for pre-sedimentation to further reduce nutrient loading to the larger reservoir.

- 7. In addition, if this reservoir is built on former farmland, the soils used in construction will be loaded with Phosphorous, which is a primary driver of algal blooms on the lake. UT is currently conducting research on nutrient release from lake sediments on the bottom of the lake. The soils used to construct the reservoir could potentially leech nutrients into the reservoir, helping to drive an algal bloom in the reservoir.**

Agricultural topsoil on the site will be stripped and not used to line the interior of the reservoir or for the structural embankment. Subsoils with significantly lower phosphorus concentrations will be used to construct the embankment and liner.

The City of Toledo has participated with The University of Toledo on studies evaluating the management of microcystin and water quality. The City intends to continue that collaboration going forward.

- 8. Furthermore, Microcystis can aerosolize from a body of water, causing odor and air contamination. I would be concerned about these factors if I was a nearby property owner. As far as recreation goes, I would be concerned about what effect algal blooms and aerosolization could cause to recreational visitors.**

Similar to many municipalities which rely on reservoirs for water supply, the City intends to actively control and manage algal concentrations in the reservoir. The City employs several operators which have had direct experience managing reservoirs for other municipalities. The City also routinely conducts water quality analysis on source water and at numerous locations throughout the treatment process and will conduct similar testing within the reservoir.