



Sewer System is Critical Next Step for Findley Lake Water Quality

The Findley Lake Watershed Foundation (FLWF) is working on a comprehensive approach to improve water quality in Findley Lake for generations to come. Findley Lake is already classified as an impaired lake by New York State and is in the downward spiral of eutrophication where excessive phosphorus is causing abundant aquatic plant growth, harmful and potentially toxic algal blooms, and oxygen depletion that eventually will result in a dead lake that is incapable of supporting life. To reverse the decline in water quality resulting from eutrophication, the FLWF has a goal to achieve and to maintain a year-round concentration of phosphorus below 20 micrograms per liter – New York State considers lakes with levels higher than this to be eutrophic. Surface samples for the CSLAP program from 1998 through 2020 had a median value of 31 micrograms per liter. Deep samples at 3 points in 2021 averaged 60 micrograms per liter. So, we clearly have a long way to go.

As we work towards this goal, we will need to address all significant sources of phosphorus – both internal and external. Our comprehensive approach includes:

- Elimination of septic tanks and installation of a sewer system. Note that even a compliant and well-maintained septic system does not treat/ remove phosphorus and the closer the leach field is to the lake; the more phosphorus will break through into the lake.
- Projects underway by the Town to produce feasibility studies regarding stormwater runoff and in-lake nutrient controls such as aeration, or the application of alum which would keep the phosphorous in the sediment during anoxic conditions.
- Best management practices for agricultural runoff are also part of the solution. Note that the largest farm in our watershed already employs management practices that are monitored by the State – so not much more is likely to be gained here.
- Consideration of the feasibility, benefits, and costs of dredging.
- The continuation of our weed harvesting program, which removes phosphorus in the weeds that are harvested, and improves the usability of the lake.
- Application of herbicide. We are applying for a DEC permit to apply herbicide specific to the Eurasian water milfoil weeds over about 30 acres next year (see our FB post from 9/5/2023). Please note that the use of a herbicide does not remove phosphorus from the lake. Herbicide treatment improves the recreational useability of the lake and minimizes regrowth in treated areas.

Conclusion: The proposed sewer system is a necessary next step of a comprehensive solution to control both external and internal sources of phosphorus if we hope to have significantly better water quality in Findley Lake for generations to come.