



Indian River Lakes CONSERVANCY

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Water Project Update - June 2015

Your Lakes, Your River, Your Future

The eighteen months of sorting out the root causes of the Water quality deterioration in the lakes has made for a fascinating learning experience. We now know that there are many sources of nutrient and other pollutants fouling the Water. Runoff from developed areas, septic systems, wastewater treatment plants, farms and other sources all contribute. After analyzing local conditions and a study done on Moon Lake it is clear that for the Indian River Lakes septic systems are likely the leading contributor of the nutrients polluting the Water .

Distilled down, it now seems clear there are three major parts to the Indian River and Lakes Water problem: soil conditions generally unsuitable for on-site septic systems, the historical evolution of development around the lakes and the New York State Home Rule choices that have been made.



Unsuitable soil conditions:

Most of us Waterfront residents have homes or cottages with septic systems sited on granular permeable soils that average under 3 feet in depth to bedrock and the bedrock is fractured and or slopes down toward the lakes.

Jefferson County septic system soil suitability mapping shows well over 95 percent of the soils around all the lakes "severely limited" for septic systems (a translation: "don't put a septic system there"). The remaining 5 percent of the soils are "somewhat limited" (a translation: "a bad idea to put a septic system on that soil if it's anywhere near a lake or tributary stream to a lake").

Historical evolution of development:

People have always been drawn to live or spend the warm-weather months near beautiful lakes and the Indian River Lakes are very beautiful lakes.

We river and lakeside residents have progressed in treating our wastewater from using outhouses and draining sinks onto the ground under the camp to indoor plumbing and whatever cesspool or underground tank we thought would do the job (and were willing to pay for). Most of these plumbed wastewater disposal systems from cottages were a tank with an open overflow pipe out to the lakeshore.

It was thought the solution to pollution was dilution and it seemed to be working almost just fine.

In recent years there are more cottages and more people spending more time at lots of these cottages. Over time septic systems have been upgraded with the hope of accommodating the added usage or were opted for due to stench or septic black Water coming to the surface after downpours or heavy cottage use.



These are the systems in place today and in our severely challenged soil conditions these yesterday's "septic systems" are not keeping nutrient and other pollutants out of the Water.

New York State, a Home Rule state:

Libertarian minded New Yorkers rejoice! The following few paragraphs is quoted from *Adopting Local Laws In New York State, James A. Coon Local Government Technical Series:*

"Since colonial times, citizens of New York State have looked to local governments for basic services. Even as we approach the twenty-first century, citizens continue to rely on cities, counties, towns and villages for a great many of their needs.

The enactment of Article IX of the State Constitution, the Municipal Home Rule Law and the Statute of Local Governments have provided local governments the means to meet the challenges of our times.

Through the adoption of local laws, cities, counties, towns and villages may implement the policies as mandated by the demands of the people and the times. The power to enact local laws is granted by the State Constitution. The scope of this power and the procedures for implementing it are set out in the Municipal Home Rule Law. A local law has the same status as an act of the State Legislature."

What this Home Rule freedom means for us in the counties and towns surrounding the Indian River and Lakes is that we can and do make our own rules regulating setbacks, wastewater treatment and other property conditions that powerfully affect Water quality.

Until now we thought everything about how we regulate (or don't) septic systems around the lakes was working fine for engineers, contractors, property owners and the Towns... until now. The pollution we are allowing into the lakes is overwhelming the dilution capacity of the Waters.

Now, with a forward looking consensus, regulations must be adjusted to lead to an outcome that matches stakeholders desires for what we want the Water and area to look like in the future.

We, the people have the power to decide and act:

We need to partner with Town and County officials to pass and enforce up to date regulations that address our local conditions and vulnerability to septic system and other runoff pollutants.

Please read and reread Appendix 75-A of the NYS Rules and Regulations Title 10. Department of Health. Chapter II. Part 75, Wastewater Treatment Standards- Residential Onsite Systems.



We each need to understand our current home or cottage wastewater system and what might need to be done with it so that it is no longer contributing to the problem:

- Change to a composting toilet or other non-water based system for your toilets and install and maintain a fully effective grey Water system to treat the wastewater from sinks and showers.
- Change to a National Sanitation Foundation (NSF) Standard 40 Class 1 septic system if you have sufficient depth and area of usable soil.

If you have a composting toilet take the highly nutrient rich compost FAR (1000 feet or more) from the lake to use around plants or add to other compost. Please do not put toilet compost on the ground near the lake or river.

Use only non-phosphate and non-nitrate household cleaners, detergents, soaps shampoos and anything else that goes down the drain.

Grow the densest and most verdant and absorptive multi-tiered buffers possible between buildings and the waterfront to disrupt and capture polluted runoff. Runoff from mowed lawns adds to the problem. Phosphorous attaches to soil and moves with the soil. Soil particles easily erode in mowed areas and carry the phosphorous into the water. Stop mowing your lawn and raking leaves near the lake.



Let the natural mulch accumulate, let native plants grow and add a few you would like here and there. Create a natural "forest floor" condition that accumulates a spongy natural buffer that will absorb nutrient laden runoff.

Reduce the amount of Water you use. It comes into the cottage clean and goes out down the drain contaminated.

We all have to start taking these steps now before it is too late.

The decision (for now) to clean up our lake Waters is up to us. The state owns the water and if we do not turn the situation around the Health Department will ultimately step in. At that point we will lose control of enacting solutions and be forced to accept the consequences.

Considering what is at stake (the health of lake users, property values, the viability of local businesses, the local economy and the tax base) everyone needs to get involved. De-phosphate your household products, grow a dense wide buffer along your shore, look into a Standard 40 Class 1 septic system or compost toilet and discuss the problem and solutions with your family, friends and neighbors.

Call the IRLC office (482-4757) with questions or concerns or to help out with a particular piece of the Water Project.

The Indian River & Lakes Water Project Team is ready to share information and contacts and assist in every way we can!

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Water we waiting for? Lets get to work,

The Water Team