

Testimony of Jared Carpenter  
Water Protection Advocate, Lake Champlain Committee  
Before the House Agriculture and Forestry Committee  
February 8, 2017

Good Afternoon, Chair Partridge and Members of the Committee,

Thank you very much for inviting me to testify on this important subject. My understanding is that you wanted to broadly discuss the Total Maximum Daily Load (TMDL) Program and the Clean Water Fund Report.

First some background on the Lake Champlain Committee:

The Lake Champlain Committee (LCC) has a history of protecting the Lake Champlain Basin and seeks to continue to work together with all stakeholders towards clean water. New York and Vermont citizens formed the group in 1963 to prevent the lake from becoming a commercial seaway for ocean-going vessels. From that victory we went on to advocate against a nuclear power plant being built on the Charlotte, Vermont shore.

LCC has been involved in many projects that benefited the Lake. We championed the phosphate detergent ban which reduced nutrient loading from sewage treatment plants by more than 50%, launched the longest-running citizen monitoring program in the country, and helped craft the clean up plan for the PCBs contaminating Cumberland Bay. Boat holding tank laws, water quality standards for phosphorus, and an international water quality agreement all came with the help of Lake Champlain Committee's vigilance and advocacy.

Monitoring Program:

LCC helped launch one of the longest running citizen monitoring programs in the country. The data gathered by volunteers leverages state resources and has been instrumental in guiding policy decisions. The point of the monitoring program is to raise awareness of the issue, build a database of information on the bloom frequency and be sure that any potential health hazards are recognized and avoided by all people. LCC initiated a blue-green algae monitoring program on Lake Champlain in 2004. We annually train and enlist citizen volunteers to observe and report on water conditions. Our award-winning program provides critical data on where and when blooms are happening. The information we gather is used by public health officials to assess whether the water is safe for swimming.

Phosphorus Reduction

LCC has helped push for significant measures to protect Lake Champlain. We have long advocated for a joint New York, Vermont, and Quebec approach to reduce nutrient loading, including sewage treatment upgrades and phosphorus removal at wastewater treatment plants. We also pushed for more stringent standard of phosphorus removal for Lake Champlain wastewater treatment plants, and secured passage of the first ban on phosphorus in the laundry

detergents, which resulted in the most significant reduction in pollution loading the lake has seen. Moreover, LCC helped establish numeric water quality standards for phosphorus levels in the lake, for which we co-wrote the standards and worked to ensure their adoption. Without numeric standards it is unlikely that the clean-up efforts of the last decade would have happened.

LCC has also worked in other areas, such as programs to reduce invasive species; reduce toxins such as PCBs, pharmaceuticals, plastics and pesticides; promotion of water conservation and energy efficiency; and, education efforts on the impacts of global warming on the Lake.

### **Overview from the TMDL Phase I Implementation Plan, what we must do:**

Total Maximum Daily Load (TMDL) is best described as a “pollution budget” that describes the amount of pollution a water body can tolerate and still maintain water quality standards.

In Vermont, phosphorus runoff results in excess growth of cyanobacteria that can produce toxins that can harm public health.

94% of the state is under the TMDL plan and must reduce phosphorus and sediments.

To meet the TMDL, we must reduce the phosphorus load by an average of 33.7%, including 80% reduction from agricultural production areas lands, 53.6% from agriculture nonpoint, 20.9% from developed land, and 42.1% from wastewater (to name just a few).

Not just Lake Champlain anymore: Important to note that Cyanobacteria (blue-green algae) is now found in other water bodies, not just Lake Champlain. It has been found in Lake Carmi in Franklin, Lake Elmore and Lake Iroquis in Lamoille County, and Lake Memphremagog in Orleans County.

### **Economic Impacts:**

Potential Economic Impacts if we don't act include loses to the \$2.5 billion in tourism revenue. Loss of property values are also a real concern, in 2015, the grand list in Georgia, VT, decreased \$1.8 million due to a decline in lakeside property. According to a UVM Study, a one-meter increase in water clarity would result in a 37% increase in seasonal home prices.

According to the Treasurer's Report, visitor spending contributed \$318 million in tax and fee revenues for 2013 and supported an estimated 30,000 jobs. This \$318 million includes \$115 million to the general fund and \$188 million to the education fund.

Who wants to come visit and spend money at a polluted lake?

Some important guidelines when deciding on a revenue sources:

- We must be “all in” – everyone pollutes to varying degrees, so everyone should pay to varying degrees. As 94% of the state is under the Vermont TMDL plan, the argument is for “all in.”
- The funding must be long-term and stable, so plans with long-term goals can be made.
- There must be a significant nexus to the pollution.

If we do not act, costs will get worse. I am already hearing, let’s put off long term funding for two years. This was said in 2015 when Act 64 passed, and here we are again.

### **Numbers from the Funding Report:**

1. Need to look at long-term funding

Annual compliance cost = \$115.6 million

Annual revenues = \$53.2 million

Annual gap = \$62.4 million

Important to look at the annual gaps by sector:

- Agriculture Annualized Statewide Funding Gap \$18.2 million
- Stormwater / Developed Lands Annualized Statewide Funding Gap \$25.3 million
- Municipal Wastewater Annualized Statewide Funding Gap \$13.7 million
- Natural Resources Annualized Statewide Funding Gap \$5.2 million

Annual Tier 1 cost (to implement TMDL) gap, the bare minimum needed = \$48.5 million

- Agriculture Tier 1 Gap = \$15.9 million
- Stormwater / Developed Lands Tier 1 Gap = \$23.9 million
- Municipal Wastewater Tier 1 Gap = \$6.1 million
- Natural Resources Tier 1 Gap = \$2.5 million

If the state does not act on some level of funding to fill this gap, the costs will fall completely on the regulated community, mostly farmers and municipalities. For example, for the first time, small farms (ie 50 to 199 mature dairy cows) need to be certified that they are following the RAPs.

2. Two Year Bond Option to generate \$25 million per year for two years, mostly through issuance of bonds, as well as short-term extension of property transfer tax.

- General Obligation debt issuance = \$15 million.
- Transportation Infrastructure Bond = \$5 million
- Extended property transfer tax = \$5 million

3. Report also makes a series of recommendations for cost-effective improvements, such as incentivizing best management practices, and the use of new technologies, including methane digesters and removal of phosphorus from manure before it is spread.