



ADVANCING PUBLIC TRUST SOLUTIONS  
TO SAVE THE GREAT LAKES

## **FLOW'S COMMENTS TO THE IJC'S DRAFT LEEP REPORT: ASSERTING THE PUBLIC TRUST TO PROTECT LAKE ERIE FROM HARMFUL ALGAL BLOOMS**

### **OVERVIEW**

In 2011, Lake Erie experienced an unprecedented harmful algal bloom (HAB) that covered most of its western basin and created a “dead zone” the size of Delaware and Rhode Island combined. The slimy green algae excrete toxins that result in closed beaches, threatened drinking water, and harmed wildlife. To address this issue the bi-national regulating agency of the Great Lakes, the International Joint Commission (IJC) drafted the Lake Erie Ecosystem Priority (LEEP) report to guide research and solutions addressing the science, socio-economic, and regulatory causes of HABs. On October 5, 2013, FLOW submitted comments on the LEEP report, reasoning that the IJC can apply the public trust doctrine to better regulate the causes of HABs because they not only pose threats to water quality and ecosystems, but they affect specially protected private and public use and enjoyment of the waters.

### **THE PROBLEM**

HABs can occur when nutrients (namely phosphorous) from the soil and air become highly concentrated in bodies of water. These algal blooms first appeared in the 1960s and 1970s, and regulators responded with environmental regulations that targeted point sources of phosphorous from municipal sewage and household detergents. Lake Erie's rapid recovery by the 1980s was heralded as a national success.

In the 2000s, Lake Erie once again faced algal blooms, with the worst one hitting the lake in 2011. The massive Lake Erie HAB in 2011 points to two critical points of concern for addressing modern nutrient runoff issues. First is that nutrients are “loading” into water at an increasing rate, including from hard-to-regulate non-point sources of phosphorous (and its more harmful corollary, dissolved reactive phosphorous, or DRP). Second is the amplifying effect of climate change due to warmer water temperatures and more extreme wet weather events, which increases loading from “nutrient runoff” after heavy rains or floods.

### **THE SOLUTION**

The draft LEEP report focuses on four categories of solutions for eliminating HABs: (1) setting phosphorous reduction targets for Lake Erie, (2) reducing phosphorous loading into Lake Erie from agricultural sources, (3) reducing phosphorous loading into Lake Erie from urban sources, and (4) strengthening research and monitoring in the Lake Erie basin. Based on these, FLOW recommends that the IJC include public trust standards in its regulatory recommendations in order to enforce nutrient runoff limitations, particularly to hold non-point polluters accountable for the consequences of their actions in consideration of their violation(s) of the protected uses under the public trust. FLOW also recommends including public trust standards as an ultimate backstop to enforce the IJC's proposed analogous Clean Water Act Total Maximum Daily Load (TMDL) program to reduce phosphorous loading and related nutrient runoff throughout the basin. Thus, the benefits of the public trust principles are clear: they can serve to provide an enforceable limit on all types of actions (both point and non-point sources) that cause algal blooms and materially impair the waters and the protected public uses.

### **THE BOTTOM LINE**

FLOW posits that public trust principles would buttress the collaborative research, cooperation, and regulatory efforts of the federal, state, and local governments, as well as the IJC and its key boards to eradicate HABs.