

## Addressing the Increasing Challenges of Reducing Phosphorous Loading to the Great Lakes

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**Background:** Excess nutrient loadings are irreversibly harming our Great Lakes. Before the closing of the Toledo Water Treatment plant on August 1, excess phosphorous loadings were seldom viewed as a public health threat. That has forever changed. Now whenever the toxic algal outbreaks reoccur in western Lake Erie, people will question whether enough is being done to protect the Great Lakes.

Phosphorous is unlike many of the traditional pollutants that have challenged regulators and regulated entities. It is a conservative pollutant. Unlike CSOs or *E. coli* that “go away” with time, once phosphorous enters a Great Lake, it does not leave. It cycles between soluble and insoluble and into and out of plant life but it does not go away with time. It can be physically removed through dredging or plant harvesting and a very small portion can leave through the St. Lawrence Seaway. But as a practical matter it doesn’t go anywhere.

In the Great Lakes region, the sources of phosphorus can be divided between regulated and unregulated sources. As a practical matter, the costs of reducing excess nutrient loadings up to this point have been skewed toward the regulated community, while the unregulated community continues to grapple with ways to reduce their portion of the load in an unstructured and unscheduled manner. More specifically, costs that should be borne by unregulated sources – notably agriculture – have been shifted to the regulated community – notably municipalities. Municipal Wastewater Treatment Facilities are being asked to spend hundreds of millions of dollars to eliminate an ever decreasing fraction of the phosphorous load. Ratepayers are questioning this disparity.

EPA and the states have an important role in guiding – and accelerating - efforts that already are underway to reduce phosphorus loading. The Great Lakes Water Quality Agreement’s Annex 4 brings a welcome emphasis to the issue. States must take these issues seriously and begin taking pragmatic steps to address nonpoint sources of phosphorus pollution.

**What should the GLAB do?** – The GLAB would be well served to review current approaches to phosphorous reductions and determine if the current course can be expected to reduce phosphorous loading sufficiently to achieve the goal of fishable, swimmable and drinkable Great Lakes. The subgroup recognizes the important and difficult work being done in Wisconsin, and believes similar actions must be implemented throughout the region. The GLAB should recommend that the agencies:

- a. Establish phosphorus targets on all affected waterways and TMDLs for those that fail to meet those targets.
- b. Establish numeric phosphorus criteria for all rivers entering to the Great Lakes.
- c. Champion cost-effective phosphorous reduction programs, including water quality trading and adaptive management.
- d. Using the existing regulatory tools, proceed with a program that targets phosphorous reductions that can be achieved by voluntary programs and compliance monitoring/reporting, but also considers regulation and enforcement of the unregulated community.
- e. Require complete, permanent conservation farm plans that comply with NRCS standards when federal funds are committed to agricultural conservation programs.