September 29, 2017

Ms. Santina Wortman
U.S. Environmental Protection Agency – Great Lakes National Program Office
77 West Jackson Boulevard
Chicago, IL 60604


Dear Ms. Wortman,

The Northeast-Midwest Institute (NEMWI) commends the Great Lakes state and federal agencies on the development of the U.S. Action Plan for Lake Erie (Plan). Given the extremely broad scope of the document, the Plan is a comprehensive and informative document.

NEMWI submits the following suggestions to improve this Plan:

1. Throughout the Plan, the description of existing conditions is extensive, but the description of planned actions would benefit from more detailed and definite description. In particular, it would be beneficial if planned actions were linked directly to a predicted phosphorus load reduction to Lake Erie and/or its tributaries. It would also be helpful if a timeline for the planned actions and their associated monitoring activities was presented.

2. Moving forward with the restoration of Lake Erie, regulatory programs must be robust – goals within these programs need to require targets that are effective in achieving phosphorus load goals. Because a significant proportion of phosphorus load into Lake Erie originates from agricultural activities, reducing phosphorus via conservation or other watershed-scale practices is essential to addressing this issue. Instream measurements of phosphorus reductions are significantly less than the edge-of-field measurements; therefore, a more explicit connection should exist between agricultural conservation actions and edge-of-field and instream phosphorus loads.
3. Much emphasis is placed on total phosphorus (TP) loads to Lake Erie. The parameter of greater concern is dissolved reactive phosphorus (DRP), because it is the form of phosphorus that is taken up by algae. The fraction of TP that is DRP can vary, so it is incorrect to assume that reductions in DRP will be proportional to reductions in TP. DRP should be the focus of quantitative load targets.

4. The Plan devotes very little attention to the important issue of climate variability. The Plan states that its “predictions may not hold true in 10 years if the frequency of large rainfall events continues to increase.” Although by definition, climate variability is difficult to model and implement in a Plan, given its effects, it is critical to incorporate scenarios that include intense rain events, long-term droughts and lengthening of the growing season.

5. Adequate funding should be allocated to monitoring activities both within the lake and within its surrounding watershed.

6. Water quality trading is widely being explored in U.S. and international watersheds to achieve nutrient targets at efficient costs. Since the location of the source has an impact on the fate and transport of the nutrient within the waterbody, any trading program should include an accurate assessment of the hotspots and sensitive areas within the watershed to ensure the health of the Lake and its watershed.

In addition, NEMWI reminds the Great Lakes state and federal agencies that an effective monitoring plan for Lake Erie tributaries should do the following:

- Target a variety of watershed scales and loading sources, and
- Occur at significant frequencies over a period of time such that an adequate number of samples are obtained to detect trends in nutrient concentrations.

While the monitoring plan mentioned in the Plan suggests that these criteria will be met, it is difficult to ascertain without further detail than what is provided.

In closing, NEMWI commends the Great Lakes state and federal agencies on creating the U.S. Action Plan for Lake Erie. The Plan is a major step towards reducing nutrients in Lake Erie.

Thank you for your consideration. Please feel free to contact us with any questions.

Sincerely,

Ankita Mandelia  
Policy Analyst  
Towards Sustainable Water Information Project

Sridhar Vedachalam, Ph.D.  
Director  
Safe Drinking Water Program