Thoughts on Evaluating Impacts of the Great Lakes Restoration Initiative Through Adaptive Management Jim Ridgway Molly Flanagan Katheryn Buckner August 12, 2014

Background – The Great Lakes Advisory Board (GLAB) has grappled with how best to evaluate progress on the Great Lakes Restoration Initiative (GLRI). Some tools already exist to help with this evaluation, but they do not evaluate socioeconomic impacts. With the GLAB looking to Adaptive Management as a way to measure progress, it must to look beyond the technical information collected and prioritized and include a broader base of measurements.

What Should the GLAB do? – The GLAB is charged with providing guidance to the 17 federal agencies that are involved in the restoration of the Great Lakes. To do this effectively, individual programs/projects must be evaluated against the Great Lakes Action Plan as well as within the larger scheme of regional restoration. This evaluation can be used to shape both priorities and budgets. To do this effectively, the GLAB should consider establishing a comprehensive list of measurable targets and use this information to help guide future decision making. In establishing this list, the GLAB should consider:

 Establish meaningful evaluations – The granting agencies have provided a great deal of information detailing the number and location of the funded projects. However, not all of these projects have resulted in equal benefit to the lakes and the residents. The GLAB should consider establishing a way to evaluate projects that calculates (or estimates) environmental benefits but also includes a measurement for socioeconomic impacts.

Socioeconomic impacts are difficult to measure because the financial costs of environmental impairments are borne by downstream users of the resource rather than the entity generating the environmental impairments. As an example, the consequence of fertilizer mismanagement is not born by the applicator but rather by downstream communities, fisheries and industries. They City of Toledo losing the use of its drinking water due to algal blooms caused largely by nutrient pollution from agricultural producers is a prime example of this.

- 2. Prioritize projects; both past and future Evaluations of past projects, both individually and collectively, should be used to assure maximum benefits are achieved from future projects and restoration activities. The evaluation should be easily accessible and allow comparisons between very disparate projects. As future priorities are set and budgets allocated, project types with the largest benefits should be expanded while less successful projects should not be replicated.
- 3. Limit duplication of efforts by building on the work of others Other entities are providing leadership and guidance on some of the most critical Great Lakes Issues. The GLAB should rely on these efforts to help guide future restoration recommendations. GLRI funded efforts should rely on information gathered by entities like the International Joint Commission, the Great Lakes Commission, universities and regional/state agencies to guide future efforts.
- 4. Build upon lessons learned in the implementation of the GLRI As projects are evaluated and progress toward restoration is made, the guidance provided by the GLAB must build upon this improved information to help guide resources to the most needed (and proven successful) projects.
- 5. Call for action beyond GLRI The GLRI is not the answer to all problems in the Great Lakes. The GLAB must carefully evaluate any "new" challenge before recommending the commitment of GLRI funding. The GLAB is well within its responsibility to call for additional efforts to address developing issues, but not at the expense of the initial charge of the GLRI.