

Integrated solutions to cross-cutting issues

“Integrated solutions to cross-cutting issues” consists of three important ideas: integrate climate resiliency into GLRI projects, continue to promote Great Lakes-based environmental education and stewardship, and implement a science-based adaptive management approach for the GLRI. These are excellent and important measures. Respondents offered several suggestions and, following a brief summary, their full remarks are given below. The majority of the remarks centered around adaptive management, suggesting the need for more extensive discussion of that topic.

Integrate climate resiliency into GLRI projects: (1) standardized climate resiliency criteria need to be determined and may not be as easily developed for all project types; (2) it would be desirable to implement this sooner, and NOAA’s climate criteria may serve as a model.

Promote Great Lakes-based environmental education and stewardship: (1) a more direct measure of impact, such as “number of educators actively teaching content derived from GLRI funded projects”, would be desirable.

Implement a science-based adaptive management approach for the GLRI: (1) adaptive management often is seen as project-specific learning based on measurement and monitoring, whereas Plan II treats it more as a priority-setting process. It may be wise to separate these. (2) Plan II should make greater use of the IJC’s newly released ecosystem indicators as well as coordinate with other efforts in order to track GLRI progress and measure ecosystem health. (3) Both the LAMPS and the GLWQA need to be expressly included in the planning process and to identify the work that needs to be done on the Great Lakes. (4) Inclusion of environmental justice is lacking throughout the Action Plan, and it has a place in Step 2 of the adaptive management cycle. (5) Please see individual responses for additional detail.

Integrate climate resiliency into GLRI projects:

Allan comments:

Note that these standardized climate resiliency criteria are to be developed using lessons learned from previous and on-going projects. Although some good examples are put forward (eg, plant appropriate trees), there is clearly much work to be done to develop climate resiliency criteria that will be broadly applicable, and it may be difficult to develop such criteria for some kinds of projects. There are important details to be worked out.

Allan: The National Climate Assessment has been developing metrics for climate impact – it may be useful to learn more about their outputs.

Hill comments:

Very pleased to see such strong climate change components in the new Action Plan. I would push back on the time line though and ask the agencies to move up their measures of progress so that we see climate resiliency criteria released by 2015, and incorporation into projects in 2016. Right now, climate will not be fully integrated into GLRI projects until mid-way through the new Action Plan. Since agencies like NOAA already have climate criteria within their RFPs, I'd like to see criteria developed on a quicker timeframe than within 3 years if possible.

Page 26: the last paragraph is missing some statistics.

Promote Great Lakes-based environmental education and stewardship:

Allan comments:

Is there is any upper limit to the student pool available to these educators – the calculation assumes one can never saturate the pool of students. Actually quantifying extent of reach is needed for credibility here – still, very important.

Hill comments:

I don't think counting the number of educators trained through GLRI funded projects is the best way to measure progress here. I'd rather see something like 'number of educators actively teaching content derived from GLRI funded projects' or something similar that is measuring how many educators are teaching the content they have learned through GLRI.

I am very pleased to see the coordination that will take place with existing educational standards.

Implement a science-based adaptive management approach for the GLRI:

Allan comments:

In its narrowest sense, adaptive management is project specific learning that can be applied to similar projects – the best nutrient control measures are learned at a site, and then may be used in subsequent years and at other locations. This vision is much more ambitious, as it includes (on a 5-yr cycle) the identification of the most important priorities, which presumably can be re-visited after 5 years to determine if they are still the most important, or if some change is needed. It also uses knowledge gained to re-assess priorities on an annual basis.

It isn't clear to me that the management actions taken over that 5-yr period help one identify the most important priorities for the next 5 years. Likewise, if one can get timely enough information for an annual review of project success, does this help one re-evaluate priorities?

Step 4, on-going ecosystem monitoring, seems to be most relevant to setting the 5-yr action plan, although it would be helpful to add more explanation of how this will be used.

Might it be challenging to get 15 or so federal agencies to agree on the most critical GL ecosystem problems? Might that task better be carried out by some independent group that is less likely to be influenced by agency mandates? “agencies often use GLRI funds to leverage projects funded by their base budgets, and vice versa.”

Hill comments:

In the GLAB's December report, we urged the agencies to use the IJCs newly released ecosystem indicators to track GLRI progress and measure ecosystem health. Although Step 4 of the adaptive management plan is dedicated to assessing ecosystem health and ID-ing problems, I don't see any language in here specifically referencing the IJC indicators as tools to use in this step. Are they implied? If so, I think at a minimum a sentence needs to be added here to make clear that Step 4 will not take place in a vacuum. Rather, the agencies will utilize/coordinate with ongoing efforts to assess the health of the system. Having said that, I would prefer there is a specific reference to the IJC indicators.

Isham comments:

Instituting an annual planning process is a very good way to implement adaptive management, and to get everyone started off on the same foot. However, I still strongly believe that LAMPS need to be expressly included in the planning process. The GLWQA itself is a clear statement about the work that needs to be done on the Great Lakes – a statement that is agreed on by the United States. Additionally, the Lake Superior LaMP, at least, is full of the people who have been working on the protection and restoration of Lake Superior on the ground, and are in some of the best positions to understand what is needed. So why aren't resources cultivated under the GLWQA used to help inform GLRI funding priorities rather than duplicating efforts?

This same comment goes for Step 4(page 29): Assess effectiveness of GLRI projects on multiple scales. Under the latest update of the GLWQA, the LAMPS are currently working on lake ecosystem objectives for each of the Great Lakes. While I understand that the EPA is trying to ensure that the GLRI is not just a funding program for the GLWQA, it seems a waste of resources to not use those resources under the Agreement to help inform GLRI-funded activities. Since the GLWQA is a statement of the work that needs to be done in the Great Lakes, there will inherently be some overlap in GLWQA activities and those that are embraced by the GLRI Action Plan.

I feel like the inclusion of environmental justice communities is lacking throughout the Action Plan, and that it has a place in the write-up on Step 2. While Cam expressed the EPA's limited authority to impose environmental justice considerations on other agencies over the funds they distribute, each of those agencies has a funding agreement with the EPA to receive GLRI funds. Those agreements would provide the EPA at least some leverage to address environmental justice considerations with regard to GLRI funds.

Additionally, the final bullet under Measures of Progress on page 29 should read "Regularly update publicly...." It's a minor change, but I believe the EPA should work as hard as it can to keep the public regularly informed about the GLRI.