

These preliminary draft comments are from individual members of the Great Lakes Advisory Board and do not represent consensus GLAB advice or EPA policy.

DO NOT CITE OR QUOTE

---

**Preliminary comments concerning refinements to the existing Great Lakes Restoration Initiative  
Action Plan (FY 2010 – 2014) from members of the Great Lakes Advisory Board  
As Of May 16, 2013**

**Comments from Steve Galarneau.....2**

**Comments from Bill Hafs.....5**

## Comments from Steve Galarneau

**Charge Question #1. Currently climate change impacts and adaptation are not explicitly included in the Action Plan. Should the connection between the Action Plan focus areas and the protection of the Great Lakes from the impacts of climate change be expressed more clearly in the next Action Plan? If so, how?**

Yes. The key thing is to have grant applicants identify how their proposed project will be climate change resilient. For example, a coastal wetland restoration should be designed in a manner that will be viable over a range of lake levels.

**Charge Question #2. In FY13, the federal agencies emphasized investments on three “priority” subjects: (1) expediting AOC cleanups, (2) reducing nutrients in priority watersheds, and (3) preventing the establishment of invasive species, particularly Asian carp. Should we keep or modify these three priorities?**

- **If we keep the current priority to expedite AOC cleanups, should we continue to balance our investments in efforts to so that we are completing all management actions to take some AOCs off the cleanup list soon while continuing to invest in AOCs that may not be taken off the cleanup list for several years?**

Yes. I think this a good and effective prioritization schema. By focusing efforts with near term demonstrative success. It is critical that we continue to support AOCs that have a longer time horizon and to lay the ground work so that one day these more complex AOCs can become a “priority AOC”.

- **The federal agencies have targeted three priority watersheds for accelerated nutrient reduction work: (1) Maumee River/Western Lake Erie, (2) Lower Fox River/Green Bay, (3) Saginaw River/Bay watersheds. If we keep the current priority to reduce nutrients in priority, should we also continue to focus conservation activities to have a stronger impact in some sub-watersheds of these three priority watersheds? Or should we disperse our conservation activities so they may have a wider geographical impact throughout the three priority watersheds (but potentially weaker impact across sub-watersheds)? How can we improve participation of key landowners in conservation programs in these watersheds?**

NPS efforts invariably require a multi-faceted approach. I would focus on sub-watersheds whereby one can nest projects and agency efforts but not lose the opportunity to act elsewhere in that larger watershed. By grouping practices in areas known to create the highest loading we can have more immediate nutrient reductions with our investments. It is also important to work with the county conservationists, local governments and other groups to find out how to improve landowner participation in the various practices and improve the success of these programs. The efforts by Wisconsin and others to think creatively with pollutant trading and adaptive management provide additional tools for engagement. We need to think collaboratively and creatively to make progress in this area. CAFOs – how do we do better with manure management for instance?

- **If we keep the current priority to prevent invasive species from becoming established, should we target our GLRI investments at a few specific species? Or should we address other invasive species, too, and if so, which ones? How do we strike the right balance between investing in the control of invasive species already in the Great Lakes and preventing new invasive species from entering them?**

This is a big topic but critical. I do not think we want to limit what AIS species we are trying to address. We need to continue to make progress addressing pathways and vectors and thereby addressing many AIS species. There needs to be added emphasis on species that affect accomplishing other Great Lakes goals (e.g. wetland functionality, sustainable fisheries).

There needs to be some flexibility for quickly responding to new invasives to be proactive in preventing them from establishing themselves.

Projects that are funded for invasive species should clearly indicate their sustainability plan for continued efforts for treatments, this is particularly important for making progress on aggressive species like phragmites.

The irony is that as we improve water quality and habitat connectivity in the Great Lakes tributaries we are likely to see more suitable habitat for some AIS (e.g. sea lamprey).

**Charge Question #3. How should the next Action Plan provide better guidance on the selection and prioritization process for restoration projects outside of AOCs?**

This is our opportunity to use the GLWQA LAMP annex and the Biodiversity Conservation Strategies as a means to set priorities and long range actions. The LAMPS should articulate a strategy or path forward for each lake and their tributaries as action items for maintaining the momentum on completed AOCs as well as meeting the larger objective of the GLWQA.

I would propose that we move the LAMPs forward much as we have for the AOCs, we'll want to see some specific goals and objectives with actions towards each. For example, we need to continue pushing forward on contaminated sediment sites. Not all "legacy" sites are in AOCs and we need to provide funds to identify and clean up these contaminated sites.

**Charge Question #4. Should the next Action Plan give priority to activities that leverage non-GLRI funding, where applicable, thereby enabling the GLRI funding to do more? Should it give greater priority to large-scale restoration projects (\$3-10M) that are less likely to ever be realized without GLRI resources?**

The ability of a project to leverage funds should not exclude a really important and good project. The overall impact and results of the project needs to be evaluated, not all critical projects are large or costly but just as important. Having said that, preference for leveraging funds should always be encouraged and considered when making funding decisions. I do not recommend a match requirement and recommend continued efforts for maximum flexibility in matches.

**Charge Question #5. Should the GLRI track jobs created or sustained through GLRI projects? Should the GLRI help promote environmental justice and support disadvantaged communities?**

The nexus of good environmental stewardship and a “healthy” and economically vibrant community is undeniable. As one who has sought to document economic benefits from the projects we implement this has been difficult to accomplish. In all honesty that may be more of an artifact that most of us working on the GLRI are environmental scientists of one type or another and not economists. Where we can provide some good science to acquire these data I think it would be beneficial.

We need to look for ways that will provide opportunities for economic benefits to local communities and job creation. We should encourage GLRI funded projects to include job shadowing/internship components where possible. For instance on the KK River Legacy Act project, some disadvantaged adults from the Wisconsin Community Conservation Corps shadowed some CH2M Hill workers and were later able to compete successfully for professional employment. This is one type of benefit that can be tracked. Also, with large national contractors, it could be encouraged use of small, disadvantaged or women owned businesses as subs to increase the impact to the local community. With a lot of the large projects, the small firms can’t even get a foot in the door.

**Charge Question #6. Should scientific indicators developed by the International Joint Commission or other official processes be considered for use refining Measures of Progress or other aspects of the GLRI Action Plan? If so, how should indicators be taken into account in the next GLRI Action Plan?**

Yes. The AOCs have largely defined very geographic specific indicators or “Measures of Progress”, I would charge our LAMPs to do the same. Monitoring and reporting on our progress is critical. This is an essential part of the feedback loop for us to evaluate our action plans and the priorities we set.

## Comments from Bill Hafs

**Charge Question #1. Currently climate change impacts and adaptation are not explicitly included in the Action Plan. Should the connection between the Action Plan focus areas and the protection of the Great Lakes from the impacts of climate change be expressed more clearly in the next Action Plan? If so, how?**

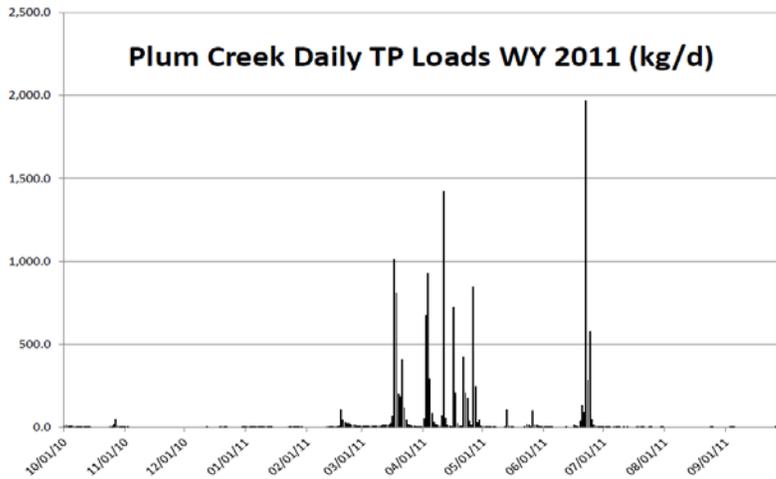
How much more clearly can the impacts be demonstrated than through pictures and graphs showing conditions and results of climate change and water quality monitoring. A picture says a thousand words:

**Fox River entering Green Bay April 15, 2011.**



Photo credit: Steve Seilo ([www.photodynamix.com](http://www.photodynamix.com))

- 1/3 of all nutrients entering Lake Michigan come from Fox River.
- Green Bay now has a seasonal hypoxic zone as monitored by NEW Water and UWM.
- Climate change is resulting in more intense storms (which lead to runoff events in picture).
- July 2012 Study by UWGB on Phosphorus and sediment loss in NE Wisconsin. Climate change 14 days = 89% TSS, 77% TP. Reduced Agriculture acres (urban sprawl) + more livestock = corn silage and bare fields in winter and spring = Sediment and P runoff.



- 77% of annual TP load occurred in 14 days
- 89% of annual TSS load occurred in 14 days

**Charge Question #2. In FY13, the federal agencies emphasized investments on three “priority” subjects: (1) expediting AOC cleanups, (2) reducing nutrients in priority watersheds, and (3) preventing the establishment of invasive species, particularly Asian carp. Should we keep or modify these three priorities?**

The priority subjects should be kept and an overarching strategy of sustainability policy needs to be added on top of the three priority subjects. Without sustainability policies cleanup activities can be short term and a waste of money.

- **If we keep the current priority to expedite AOC cleanups, should we continue to balance our investments in efforts to so that we are completing all management actions to take some AOCs off the cleanup list soon while continuing to invest in AOCs that may not be taken off the cleanup list for several years?**  
Choose the highest priorities, complete them to 100% compliance, ensure the compliance is perpetual, and then move on to next AOC. Otherwise you will end up with many projects that are partially completed forever.
- **The federal agencies have targeted three priority watersheds for accelerated nutrient reduction work: (1) Maumee River/Western Lake Erie, (2) Lower Fox River/Green Bay, (3) Saginaw River/Bay watersheds. If we keep the current priority to reduce nutrients in priority, should we also continue to focus conservation activities to have a stronger impact in some sub-watersheds of these three priority watersheds? Or should we disperse our conservation activities so they may have a wider geographical impact throughout the three priority watersheds (but potentially weaker impact across sub-watersheds)? How can we improve participation of key landowners in conservation programs in these watersheds?**  
Within the priority watersheds, sub-watersheds with highest loading have been identified. Focus efforts on highest contributing sub-watersheds. Complete conservation activities in highest contributing sub- watersheds to 100% compliance and then move onto the next highest priority sub – watershed in the Priority Watershed.

Improved participation question: We need to evaluate/analyze the least cost method per pound of sediment and phosphorus reduced over a 20 year lifespan:

1. Is the least cost system a traditional cost – share offered to agriculture producers/municipal storm water contributors through a contract with a life span on a voluntary basis and then recycling and starting the cost share cycle all over again in 10-20 years?
  2. Is the least cost system a combination of voluntary cost – share **and** regulatory requirements?
  3. Is the least cost system a purchase of high priority property (key wetlands, cropland adjacent to streams, hydric soils, and high phosphorus crop fields)?
  4. Governmental Policy to promote sustainable watersheds. How much cropland, woodland, residential, wetlands, buffers, impervious surface, animal units, industry can a watershed sustain and meet water quality standards of .1mg/L.
- **If we keep the current priority to prevent invasive species from becoming established, should we target our GLRI investments at a few specific species? Or should we address other invasive species, too, and if so, which ones? How do we strike the right balance between investing in the control of invasive species already in the Great Lakes and preventing new invasive species from entering them?**  
Target the worst, concentrate efforts, get the job done and move on to next most serious challenge.

**Charge Question #3. How should the next Action Plan provide better guidance on the selection and prioritization process for restoration projects outside of AOCs?**

Will the project be perpetual? Are their sustainable policies in place by local government to maintain the project? What is track record of implementers of project?

**Charge Question #4. Should the next Action Plan give priority to activities that leverage non-GLRI funding, where applicable, thereby enabling the GLRI funding to do more? Should it give greater priority to large-scale restoration projects (\$3-10M) that are less likely to ever be realized without GLRI resources?**

Priority should be given to organization or community willing to invest or contribute to the activity; non - GLRI funding demonstrates a commitment to the project. Without community commitment the activity may not be sustained by community. This also makes GLRI funds go further.

The funding should be based upon what will the project accomplish related to GLRI goals. Large scale restoration projects should not be funded solely based upon size.

**Charge Question #5. Should the GLRI track jobs created or sustained through GLRI projects? Should the GLRI help promote environmental justice and support disadvantaged communities?**

Economy and jobs created/sustained is important component of GLRI.

Yes – I agree with promotion of environmental justice and support disadvantaged communities.

**Charge Question #6. Should scientific indicators developed by the International Joint Commission or other official processes be considered for use refining Measures of Progress or other aspects of the GLRI Action Plan? If so, how should indicators be taken into account in the next GLRI Action Plan?**

Yes. Scientific indicators should be considered for refining the measure of progress.

Water quality monitoring – before/after project, edge of field, paired watershed monitoring.

In next GLRI Action Plan identify gaps in knowledge regarding key indicators of ecosystem health. What is the land use balance in a watershed or ecosystem needed to maintain water quality and ecosystem health? What are the variables that need to be considered when looking at ecosystem health: amount of impervious surfaces, cropland, industry, wetlands, forest, and number of livestock?