



GREAT LAKES
ECOREGION NETWORK

RÉSEAU ÉCORÉGIONAL DES
GRANDS LACS
ET DU SAINT-LAURENT

Comments on the U.S. Great Lakes Restoration Initiative Plan IV

- **Submitted by Great Lakes Ecoregion Network (GLEN) on May 24, 2024**

Introduction

The Great Lakes Ecoregion Network (GLEN) works to empower public constituencies across the Great Lakes and St. Lawrence Basins to drive transformational strategies and actions that will safeguard and restore the health and resilience of the Great Lakes and St. Lawrence ecoregions.

Government actions in the Great Lakes have focused on incrementalism, in both policy and practice, which in so many cases normalizes degradation. For the long-term well-being of the Great Lakes basin, we must instead focus on transformational change.

The U.S. Great Lakes Restoration Initiative (GLRI) states as its purpose to “hasten the day when we can achieve and maintain our long-term goals” (see p. 3). This is our leading guide in our comments. In accord with our emphasis on transformational strategies and action, the perspectives that dominate our thoughts as we review the GLRI Plan IV are resilience, prevention, precaution and innovative approaches – principles that are at the core of the GLWQA..

The GLRI describes itself as a “nonregulatory program.” Regulations will have to be components for achieving and maintaining long-term goals. Therefore, some of our recommendations include GLRI funding research, etc., aimed at helping us to determine the types of regulations we need and the processes for getting there.

Another underlying approach that we focus on is the need to work collaboratively with others throughout the basin to develop long term goals and strategies. These collaborative structures must include the indigenous communities as well as the communities that are underserved and underrepresented.

Environmental Justice section (p. 5)¹.

GLEN is pleased to see the GLRI's overarching goal of environmental justice. We are particularly pleased to see the following sentence: "EPA has expanded the concept of fair treatment to include not only consideration of how burdens are distributed across all populations, but the distribution of benefits as well." Environmental injustices are the product not just of having some communities more exposed to environmental degradation and health issues, etc. It is also environmental injustice if some communities do not have the opportunity to enjoy living in thriving environmental areas with all the spiritual and other benefits that brings to the community.

To achieve environmental justice, we must go beyond looking at who benefits from the actions to looking at who designs the programs and decision-making. It is not good enough to consult with the underserved and underrepresented communities. Members of these communities (chosen by the communities) must be involved in the very beginning stages of a program to determine what the community needs are, to explore the options for solving the problem and to implement the solutions. This means that we know that we have much to learn from their lived experiences and recognize that they bring essential wisdom to the table that results in much better, more appropriate solutions. It means listening and learning with respect.

Critically important to making this work is to give the community suffering from environmental injustice the resources to explore the issue. It means that the GLRI must give money to such communities to direct the studies themselves, to choose the expert advisors they may need to carry out studies, etc. and to cover the time of those working on the project, as well as their expenses.

Achieving environmental justice also means that the power to make the final decision lies with the underrepresented.

Responding to a Changing Climate (p. 6).

GLEN is also pleased to see that the GLRI is encouraging a greater emphasis on climate adaptation and resilience in its project guidance, and encourages not only emphasis, but priority, for responsive climate action in selecting the next phase of projects. The guidance in "National Climate Resilience Framework and the Strategies," and menus for "Adapting Great Lakes Coastal Ecosystems to Climate Change" are valuable. However, the diverse types and objectives for GLRI projects means that progress is likely to be incremental and not cohesive across the region.

We urge EPA to establish specific goals and measurable objectives for climate action across the Great Lake system and/or for specific types of communities, habitats, and landscapes, as well as water quality objectives, so that outcomes are additive and cumulative and not a patchwork of ad hoc efforts. While individual projects may contribute to broader goals, the urgency of climate disruption argues for investments in critical habitat and human health and safety.

¹ The page numbers in brackets throughout this submission are the relevant page numbers in the GLRI Plan IV that was released for comment.

In the same vein, GLEN urges multi-agency and transboundary collaboration and coordination so that finite resources are allocated in ways that align to advance common goals for overall Great Lakes health and vitality. Within the United States, alignment between the U.S. EPA, NOAA, the U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service is essential. Also, alignment needs to occur across the U.S.-Canada border. This could be assisted by working jointly with the International Joint Commission, the Great Lakes Executive Committee, the Great Lakes Fishery Commission, the Great Lakes Commission, and the Great Lakes-St. Lawrence River Basin Sustainable Waters Resources Agreement and the Great Lakes Compact. GLEN has drafted a proposed framework for common goals, principles, and prescriptions for climate response to protect the Great Lakes and St. Lawrence systems. We would welcome the opportunity to discuss these with EPA.

GLRI distinct Tribal Program (p. 7).

GLEN supports the rights-holders status of the Indigenous peoples of the Great Lakes basin and, therefore, we leave it in their hands to negotiate with the U.S. government. We stress the importance for the U.S. government to provide funds to the Indigenous governments for their programs.

We also support the last paragraph of this section where Indigenous Knowledge and Traditional Ecological Knowledge is talked about. We stress that Indigenous Knowledge and Traditional Ecological Knowledge need to be spread to all of our communities and integrated into all of our decision-making regarding the Great Lakes whether we are Indigenous or not. Only with that wisdom, perspective and knowledge will we be able to go down paths on which the Great Lakes Basin and all life within that basin will thrive.

Focus Area 1 – Toxic Substances and Areas of Concern (pp. 12-16).

Section 1.1: In addition to having an objective of delisting AOCs, there should be measures to ensure that these areas do not deteriorate again, i.e., proper monitoring to get early warnings of re-emerging or new contamination problems, and commitments to immediately take preventive actions when there are any early warning signs of a problem arising. Also, when a project is being discussed for the community that could be a setback, the objectives of the RAP should be given top priority in deciding on the project's appropriateness.

An on-going citizens' advisory and monitoring committee should be maintained and funded for the area long after the AOC is delisted. As one of our members says, once the cleanup has happened, "areas of concern" should be renamed "areas of protection" to ensure that we do not let them slip back into a problem area again, wasting the money and effort we spent cleaning them up.

Monitoring should also be carried out for other communities that have not been listed as an AOC but are in a state of deterioration or under threat. In line with the environmental justice principles in the GLRI, the government should approach all underserved communities to assess the existing deterioration and threats and work with the local communities to improve and protect these communities. Funding should be provided to the underserved and underrepresented communities to help them carry out their own studies on the status and needs of their community and to plan and carry out solutions.

Section 1.2 & 1.3: The objectives stated in the GLRI IV to make people aware of consumption advisories for fish, wildlife and harvested plant resources and aware of contamination issues in the Great Lakes are important. The people under threat in these communities should play a lead role in determining the most effective methods for reaching out to their communities and determining the content of any materials produced or events being held. People from those communities should be hired to help put together information and events that ensures that they will be of relevance and be effective at reaching these communities.

A **section 1.4** should be added to the toxics focus area in the GLRI IV. The objective of this section should be to reduce and eliminate toxics in the Great Lakes basin so consumption advisories are no longer needed, to ensure access to safe drinking water for all, and to ensure that we have thriving wildlife, fish, birds, humans, etc. throughout the Great Lakes basin.

Some commitments and measures that should be put into this new section 1.4 are:

- PFAS: All individual PFAS are extremely persistent or will transform into extremely persistent ones that will remain in the environment for hundreds if not thousands of years. They are now widespread in the Great Lakes and in all living beings. We must address the estimated 16,000 individual PFAS as a class (not individually). Failure to do so will mean that we will never seriously address the PFAS problem.
 - Add PFAS as a Class to the Toxics Release Inventory. Currently only 196 PFAS are reported under TRI.
 - Add PFAS as a Class to Chemicals of Mutual Concern under the GLWQA instead of the limited number currently listed as CMCs.
- Radionuclides: The IJC has declared high level radionuclides as being the most persistent and most toxic substances and declared that they should be subject to the zero discharge provisions of the GLWQA. Despite the presence of 38 nuclear reactors in the Great Lakes basin, with 20 of these on the U.S. side, and the widespread discussion of expansion of nuclear power reactors, the governments have not yet declared radionuclides as Chemicals of Mutual concern.
 - The U.S. government should push for radionuclides to be declared as chemicals of mutual concern.
 - GLRI should fund studies to deepen our understanding of the potential impact on the Great Lakes from on-going discharges or from accidents.
- The GLRI should provide funding to do similar analyses for other substances that have been nominated to be chemicals of mutual concern in the Great Lakes basin. These currently include PAHs, lead, sulphate, and microplastics.
- Drinking water sources: GLRI should fund studies to assess what needs to change to protect the safety of drinking water sources in the Great Lakes Basin.
- Prevention methods: GLRI should fund the development of a plan for achieving zero discharge and virtual elimination for the substances just mentioned as well as others, as well as assessing how we can do a much better job of preventing further toxic pollution.
- Regrettable substitution: GLRI should fund studies to figure out the most effective ways to avoid “regrettable substitution” of one toxic substance by another substance that ends up being another massive threat, and to avoid new toxic substances being introduced into the Great Lakes basin.

Focus Area 3 – Nonpoint Source Pollution Impacts on Nearshore Health (pp. 25-31) & Focus Area 4 – Habitats and Species (pp 32 – 36).

The GLWQA begins with the following overall purpose: “The purpose of the Parties is to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem.” Over the past fifty years the focus of work under the GLWQA has been on chemical and biological integrity – but little attention has been paid to the importance of physical integrity. Indeed, much of our work has reduced the physical integrity of the Great Lakes basin. The work in the “Areas of Concern” is an example of this.

GLEN believes that "physical integrity" was never sufficiently addressed in previous GLRIs, and that physical integrity should be a focus over the next 5 years of the GLRI.

Here are some of the current flaws:

- Failure to treat the Great Lakes watershed - including tributaries, headwaters, forests, wetlands, coastal areas, and groundwater - as a whole interconnected ecosystem or bioregion, where we act with recognition of the effects not just on one part of the system, but on the whole system. At each level measures like “acres of coastal wetlands protected or enhanced” or “miles of connectivity for aquatic species” make more sense as a percent of the whole rather than the simple numeric goals recommended in the new draft GLRI 5-year Great Lakes restoration plan.
- Restoration strategies are often driven by opportunities for shoreline development, and less by long-term ecological restoration and vitality.
- Remedial strategies for many AOCs including storing highly contaminated sediments in confined disposal facilities near or in the water, increasing risks for future generations.
- Relying upon traditional engineering “solutions” such as major construction projects that harden the shores, that straighten out the natural flows and meanders, that disrupt the natural physical system of the Great Lakes.
- Wetlands: For example, 90 % of wetlands on Lake Erie have been destroyed. Restoration projects have only been tokens towards restoration and continue to be far outweighed by engineering projects that disrupt the natural systems.
- Lack of focus on building resilience in the face of climate change, to live with natural water level fluctuations, and protecting vulnerable coastal lands from development.
- The AOCs were rarely addressed as watersheds (or sub-watersheds or natural catchments, i.e., hydrologic units) but often as so many miles of river or riverbank, thereby leading to restorations of so many linear feet as a delisting goal rather than looking at the whole ecosystem.
- Focus in many instances on investment that will create a certain amount of “shovel-ready sites.”
- The "Habitats and Species" focus area of the draft GLRI similarly measures outcomes in "acres of wetlands" or "miles of connectivity" without reference to the whole.
- This has sometimes led to RAP efforts to meet comparatively small measurable targets while ignoring major losses of wetlands and habitat connectivity both upstream and down.
- This is especially true where AOCs were narrowly defined--as say the last 6 miles of a river channel.

The proposed new GLRI action plan does not provide a way out of this old way of thinking about isolated problems as if they are small holes in the planetary fabric. The fabric of the Great Lakes-St. Lawrence Basin is itself an AOC (like many of our planet’s primary organs) and the model for intervention must

start with a concerted effort to understand and protect what we have left that is still working, and then building on that.

Restoring and maintaining physical integrity (as well as biological and chemical) requires dealing with whole watersheds. It requires understanding and responding to how rivers work--from headwater forests and groundwater to coastal wetlands. It requires moving away from traditional engineering "solutions" based on control, to actions that will encourage and allow the natural ecosystem to restore itself.

Education programs should include Indigenous TEK and river science or fluvial geomorphology, and plant and wildlife biology to meet the objectives of this section.

Focus Area 5 – Foundations for Future Restoration Actions (pp. 37-40).

GLEN is pleased to see the educational aspects, etc. in this section. We think one objective should be added related to the content of the education. It should include education on Indigenous TEK as a strong component.

Let's keep in mind in this action plan that our goal is to achieve resilience. We don't just want the system to be restored; what we need is to have the ecosystem back into a situation where it is resilient, and where we will be living wisely as part of the ecosystem. Our focus needs to be on our own actions and to work to manage our own actions so as to allow the Great Lakes ecoregion to thrive – instead of deceiving ourselves into thinking we can manage the Great Lakes.

This is a message that should be brought to the students and should be used in their work situations.

These comments were prepared on behalf of the Great Lakes Ecoregion Network by the following members: John Jackson (GLEN chair & chair of the GLWQA Issue Team), Jane Elder (GLEN-vice chair & and chair of the Climate Change Issue Team), Derek Coronado (chair of the Toxics & Radionuclides Issue Team), Margaret Wooster (chair of Landscape & Physical Integrity Team), Barry Boyer (member of Landscape & Physical Integrity Team & Agriculture and Nutrients Team), and Daniel Green (member of Toxics & Radionuclides Issue Team).

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