

Speaking Notes
GLRI Public Call 12-16-2009
Nearshore Health and Nonpoint Source Pollution

Good morning,

This is Paul Bertram speaking. I am the EPA lead person for the **Nearshore Health and Nonpoint Source Pollution** focus area. I would like to begin by providing some context for this portion of the rfp.

[General Background]

The nearshore areas are where most residents and visitors interact with the Great Lakes. The waters provide drinking water, fishing opportunities for both sport and commercial fishers, bathing beaches and other recreational activities.

Those of us who have spent time along the shoreline of much of the Great Lakes can identify several problems. Depending on which lake and local area we examine, we can find, for example,

- **Harmful algal blooms**, especially those dense growths of blue-green algae observed, for example, in the western basin of Lake Erie
- We see **excessive growths of the filamentous green algae called *Cladophora***, which can be found growing thickly on rocks and other hard surfaces near to the shoreline, and which can break free during storms and wash up on beaches, and subsequently rot and decay, leaving a stinking mess
- **Avian botulism** shows up sporadically, killing several kinds of fish-eating and other shoreline-using birds. Some years the outbreaks are worse than others, and the specific locations of the outbreaks are not always consistent.
- And **swimming beaches** are sometimes closed or advisories against swimming are posted. Usually high levels of potentially pathogenic bacteria have been detected or are assumed to be present based on weather or other environmental conditions.

We think we know many of the **contributing factors** for these impairments, the primary one being **excessive nutrients** in the nearshore waters. These nutrients could come from loadings from both point and non-point sources. More specifically,

- Agricultural practices can increase nutrient and sediment loadings to the nearshore, and
- Shoreline hardening can disrupt habitat and alter nutrient and contaminant runoff

A number of **other factors** could be contributing. Among those listed in the rfp as examples are:

- Failing septic systems
- Grey-water discharges
- Inadequate pump-out stations for recreational boats
- And even invasive species

So far, control strategies have been inadequate to provide the degree of stream and lake restoration needed for the protection and maintenance of the Great Lakes. However, the implementation of **agricultural best management practices**, or **urban stormwater management practices**, or other **best management practices in the watersheds** can have multiple benefits, such as reductions in runoff of nutrients, soils, and pesticides.

Ultimately, we would like to see a number of outcomes. Among them are

- Healthy, self-sustaining nearshore aquatic communities dominated by native species
- Human activities that are conducted to ensure that various habitats are able to sustain the health and function of natural communities.
- Human use and enjoyment of nearshore areas unimpeded by elevated levels of bacteria, nuisance algal growths, or other potential risks to human health
- Bathing beaches that are safe for swimming throughout the swimming season
- Significant and meaningful reductions in the loadings of sediment, nutrients and pollutants into tributaries through implementation of management practices
- Information about the nearshore areas that is readily available to decision-makers
- And we would like to understand the causes of nutrient-related impairments of the nearshore biological communities in order to better target restoration activities.

To help move the status of the Great Lakes nearshore areas toward these desired Outcomes, the Great Lakes Restoration Initiative is requesting proposals for projects in nine program areas, which cluster into four main groupings. I am referring here to the Table on page 12.

- Programs areas 1 through 4 are related to swimming beaches, i.e., develop and employ forecast and nowcast models; conduct beach sanitary surveys and implement clean-up actions; communicate beach status to the public; and improve rapid testing for bacterial levels.
- Programs areas 5 & 6 relate to cause and effect linkages. 5 is focused on linkages between the health of coastal conditions and measures of human disturbance of the watershed; and 6 relates to linkages between nearshore impairments and their causative agents.
- Program areas 7 and 8 are related to watersheds restoration and nonpoint source remediation. 7 focuses on Total Maximum Daily Load development and implementation for nutrients and other non-toxic substances, and 8 focuses on watershed best management practices.
- Program area 9 recognizes that very good ideas may come forward for advancing the Great Lakes nearshore areas toward the outcomes and outputs listed in the rfp, but that such projects might not fit well within one of the other 8 programs. The focus here is on restoration or remediation actions, or as we say, “on the ground” projects.

I would also draw your attention once again to the rfp under Section V. **Application Review**, on page 31, the last paragraph under section A. **Strategic Approach**. This paragraph is directed toward proposals in the Nearshore Health and Nonpoint Source Pollution focus area that are part of a larger, comprehensive plan. Specifically, please note that “. . . the project may receive a higher score to the extent that:

- Impairments have been identified
- Causes for those impairments have been established
- Solutions for the remediation of the impairments have been identified
- Broadly supported implementation activities have been designed
- And there is potential for significant measurable results

Finally, I would reiterate the recurring mantra for the Great Lakes Restoration Initiative, that is, **Action, Urgency and Accountability**. We at EPA are setting up an accountability system to track funding recipients, projects and outcomes, but we urge you, as you prepare proposals, to pay close attention to the characteristics of **Action** and **Urgency** for the Initiative.

With that introduction, I would be happy to address any additional questions.