



GREAT LAKES PROTECTION FUND

**A WORKING PAPER:**

**DEVELOPING NEW FINANCING PRODUCTS  
FOR ECOSYSTEM RESTORATION**  
*(version 2.1)*

DECEMBER, 2005

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*The Fund expects to launch new projects in this area in 2006. We want feedback on the concepts presented, new ideas to consider, and to build a cadre of potential project team members. This paper is a work in progress. It has been, and will be continuously revised as ideas and comments are received. Please check [our site](#) frequently for updated versions.*

The [Great Lakes Protection Fund](#) is interested in supporting efforts to develop and test new means of financing the ecological restoration of the Great Lakes. The Fund seeks project concepts and project team members for this initiative.

The Opportunity:

The [President's Great Lakes Regional Collaboration's Strategy to Restore and Protect the Great Lakes](#) identified over \$20 billion in investments necessary to begin work on high priority restoration opportunities in the next five years. At a minimum, the state and local share of these funds will approach nine billion dollars. Because Congress is already faced with a large fiscal deficit, the total state and local share is likely to be much higher.

Of the above amount, over 85% is dedicated to capital projects such as wetland creation, stream restoration, sewer construction and repair, upgrading or repairing drinking water infrastructure, and constructing manure handling and treatment systems. In addition, many one-time projects, such as dam removal or sediment clean-up, are also necessary steps in a basin-wide restoration program. The Fund wishes to develop new ways to finance these kinds of projects.

The Collaboration identifies two types of capital projects. One type creates green, or natural, infrastructure. These efforts restore damaged wetlands, improve the condition of rivers, and protect habitat. The Collaboration has identified that over \$350 million is necessary to meet just the priority needs for each of the next five years. Those needs include restoring over 100,000 acres of wetlands, re-building over 65,000 of riparian habitat, improving hydrologic integrity in at least two tributary watersheds, and protecting 10,000 acres of coastal and upland habitat *in each year* of a five-year start up phase. Further, the Collaboration has indicated that returns from these investments will include: healthier, self-sustaining fisheries; healthier rivers and streams; the continued presence of native species and natural communities; and enhanced resistance to invasions by nonnative species.

The other type of capital project creates “built” infrastructure in the form of pollution control and drinking water treatment facilities. These efforts are traditional construction projects for sewer systems, treatment plants, and other public works efforts. Because of the age of cities in the Great Lakes, the Collaboration estimates that approximately \$3.3 billion is required to support just the priority efforts in each of the next five years. The vast majority of these funds would be used to address discharges from older, combined sewer systems that do not have capacity to carry both sanitary and storm water flows. The Collaboration expects that these investments will reduce the health risks faced by bathers, swimmers and others that recreate on the Great Lakes, as well as reduce bacteria loads that must be treated by drinking water suppliers.

The Collaboration goes on to report that \$150 million is needed each year to begin removal of contaminated sediments at the [Areas of Concern](#) designated by the International Joint Commission. [These Areas](#) are among the most contaminated sites in the basin and remain a source of toxic pollutants that contaminate the water, the fish, and basin wildlife, which—in turn—present a health risk to basin residents. Removing and safely disposing of these contaminants, which are typically buried in the bottom sediment in harbors, is viewed as a key step in eliminating fish consumption advisories, and restoring economic health to these shore communities.

The Fund is interested in supporting the design and field-testing of new financial tools that can be used to support this restoration program. The Fund is not interested in supporting academic or advocacy research that results in papers or reports that highlight what others might do in a perfect world. Our emphasis is on financing action-oriented teams who will try new approaches and lead by doing. As illustrations:

- As Areas of Concern are restored, the values of nearby properties are likely to increase. A project team could attempt to finance a restoration project by using tax increment financing techniques—using a portion of the future increased tax revenue to re-pay locally issued bonds. This team would create a road map usable by other local units of government to help finance ecological restoration. Such a project could scope how to create ecosystem service districts, the mechanisms associated with tax increment financing, and model approaches for various impairments including sewer infrastructure, dredging, and wetland restoration.
- A project team could design and deploy a product that allows basin states to hold one another's restoration bonds exempt from each other's state taxes, enlarging the pool of buyers for those bonds. Such an effort would also explore how these bonds might be bundled into other financial products, further increasing demand.
- A project team could design, price, and offer performance bonds for ships entering the Great Lakes to ensure that those vessels that adequately control the release of exotic species through ballast water, sea chests, hulls and anchor chains have lower costs of doing business in the basin.
- A project team could design and test one or more financial intermediaries that provide access to capital markets for entities undertaking restoration efforts. Such entities could be thought of as “restoration-based” [community development financial institutions](#). Such an institution could aggregate funds from the capital markets, political subdivisions with bonding authority, or appropriations, and provide a set of services that might include micro-finance for not-for-profits or landowners to carry out restoration actions, create a portfolio of loans to share risks, or hold revolving loan fund capitalization grants.
- A project team could design and test financing and project development techniques that entities such as port districts, utilities, and other existing units of government could use to support restoration activities. Such a project might include an inventory of these public entities, the duties they have to promote ecosystem integrity, the capacities they have to finance those obligations, and the opportunities exist to improve their effectiveness.

#### The Need:

World class, innovative leaders are needed to design and carry out this work. Project concepts that are more powerful than the above examples are particularly welcome.

The Fund is positioned to support teams of these leaders to explore a set of different strategies. Project teams generally include all of the interests affected by a problem and involved in its resolution. Typically, a Fund-supported team has a dozen or more active members. Team members are experts in one or more of the areas that the project is addressing. In this case, the Fund expects that teams will have members with solid legal and financial expertise, engineering and scientific expertise, and solid experience with the communities where the restoration work needs to occur.

While, the exact composition of the project team depends on the exact nature of the work undertaken, the most critical position is that of project manager. This individual manages the work of the team. She (or he) is the “face” of the project, should be people-oriented in their style, outcome-oriented by nature and committed to building products that are both new and tangible. This is the individual responsible for ensuring that the “orchestra of virtuosos” that is the project team stays on task.

#### Next Steps:

If you are interested in participating in designing the next generation of financial products for ecological restoration—nominate yourself as a team member. If you know of someone else who can play an important role in this work—nominate him or her. Please send your resume and a short description of what you’d like to do (one or two pages please) to [finance@glpf.org](mailto:finance@glpf.org).

If you have a specific project idea, please send a summary to the above address. We also welcome reactions to this paper, especially advice on how to improve it. However, we are particularly interested in what you new product you could create, your target market, the environmental problem you hope to solve, a sense of your approach, the team you will use, the resources you lack, and an estimate of the financing you require. Use whatever format you feel best conveys your idea, but keep your concept paper to five pages or less.

Team member nominations and project concepts are welcome at any time, but will be most useful if received by January 16, 2006.

The Fund expects to support a number of projects related to this idea in 2006. As a general guideline, a typical Fund project: involves a team of 10 to 12 experts usually from a range of organizations (private sector, non-governmental organizations, academics, and governmental organizations); produces results in the first few months and wraps up work in 24 to 36 months; and requires \$275,000 to \$500,000 in financial support. Smaller projects are sometimes supported, but most small requests reflect ideas that are not ready to get to the scale required.

#### Tentative Timeline:

Idea generation, team member nominations, project concepts	ongoing
Team building, project design	through February 06
Proposal development	through April 06
Review and modification	through May 06
Project launch	June 06