# Great Lakes Protection Fund

## Request for Preproposals:

## A Call for People, Ideas and Projects

**Submission Deadline: April 23, 2018**

Visit the [RFP page](#) on our website for forms and additional resources.

# Call for People, Ideas and Projects

## Supplemental Request for Preproposals

### Summary

The Great Lakes Protection Fund seeks to support a suite of **action-oriented projects to design, deploy, and evaluate new prototype solutions** to important challenges facing our ecosystem:

- increasingly large rain events,
- under-investment in water infrastructure,
- nutrient pollution and harmful algae blooms,
- threats posed by potential and existing invasive species, and
- adapting to the demographic and economic changes in our region.

These challenges are at the root of impairments to water quality, altered flow regimes and detrimental shifts in the ecology of the basin.

The Fund believes that advances in real-time management of water, in integrating natural and built water management systems, in designing pay-for-performance financing, and in machine learning and autonomous control can be combined to create new solutions to these big challenges. The Fund seeks teams to use these strategies to **demonstrate improvement to ecosystem health** and achieve growing impact by the time Fund support expires.

Like all Fund-supported work, these projects should be **collaborative efforts** that test scalable regional actions to protect and restore Great Lakes health. The most successful prototypes will combine technologists, conservation leaders, water managers, academic talent, and commercial partners as members of a team well-positioned to advance their strategy and drive change at the scale necessary to create system-wide impact.

We are looking for project teams that will try something new, engaging people who have never likely teamed up before, and build solutions that makes better sense to everyone. Showing how these strategies can be done, in real places, is more powerful than desktop research, policy analysis, or planning activities alone.

**If you are interested** in participating in a project, being an expert reviewer, or offering advice to the Fund or a project team, enter your information into our talent bank survey. If you want to explore an idea—even if it may not seem to fit with this request—or discuss a potential project, email us at startaconversation@glpf.org. Conversations are encouraged in advance of submitting preproposals.

The Fund will not support advocacy campaigns, public works projects, compliance obligations or lobbying.

**Three page preproposals are due by 8:00 AM, April 23, 2018**. The Fund will review preproposals upon receipt, and early submissions are encouraged. In May 2018, selected teams will be asked to submit a more detailed proposal due in late June 2018. Funding decisions are expected in September 2018.

## Background

The Great Lakes Protection Fund's most recent consultant-led [enquiry](#) (232kb pdf) asked Great Lakes leaders and other experts to identify critical, unsolved challenges that demand new strategies. Five top-tier issues were identified: **a changing climate, deteriorating and outdated water infrastructure, nutrient pollution, demographic and business shifts in the Great Lakes Region,** and **aquatic invasive species**. These issues threaten the ecological integrity of the Lakes—driving impaired water quality, alter flow regimes, and harmful changes to the basin's biota. Perhaps more importantly, solving them represents a significant opportunity to build the future we want here.

In response to that enquiry, the Fund has invested $7.6 million in eight new project teams involving over 75 collaborating organizations to tackle these challenges. The strategies are:

- building business models to restore soil health—capturing water, reducing nutrient inputs, and improving crop yield;

- exploring how to recover phosphorus so that it does not enter streams and can be re-used on crop land;

- developing new water infrastructure investments that better engage communities, support nature-based and "smart" technologies, and are less expensive to finance;

- testing new management schemes for sediment management to reduce dredging costs while expanding ecosystem services;

- developing new approaches to advance conservation on agricultural lands operated by lessees; and

- using machine learning, real time data, and Internet of Things (IOT) devices to reduce toxic air emissions that impact our Lakes.

These investments are a start on building a set of solutions to these critical challenges.

## What We Seek

Experts advise the Fund that solutions which combine new technology, demonstrated customer or user interest, and the potential to show growing ecosystem impact are ripe for GLPF investment. The examples presented below intend to spark ideas, initiate conversations and produce inquiries. For illustration purposes, they could include (but are not limited to):

- Using **IOT-driven controls to improve the value and performance** of already built or planned water infrastructure. The Fund encourages teams to propose projects that test new systems to manage run-off and/or test new business and operating models that drive adoption of these systems.

- Extending IOT-driven and other **active runoff management to rural areas**. The Fund encourages collaborations to test how such strategies can work at the scale required to reduce precipitation-driven nutrient releases in agricultural landscapes.

- Networking and **focusing existing technology development incubators** on the specific needs of the Great Lakes. The Fund welcomes ideas on how these currently independent initiatives can

better address the ecological health of the Great Lakes and how their product lines can be better deployed for ecosystem benefit.

- Testing a pay-for-performance-supported **decentralized watershed management scheme** that links remotely managed water storage (sumps, retention basins, drain networks) to sensors and an operating plan to improve the health of the basin's water resources.

Please see our [supplemental resources](#) for additional illustrative project ideas.

## Criteria

The Fund will evaluate individual preproposals to assess how they:

**Drive positive ecosystem impact:** Projects should be focused on the health of the Great Lakes ecosystem. It is important for the project team to identify, as clearly as possible and as early as possible, the specific ecological improvement that will result from the proposed project. Results should be measureable, the team should identify leading indicators of success, and identify how the basin will benefit.

**Have regional consequence:** The Fund supports regional actions, even if the work is prototyped in one location before being more broadly deployed. The action being tested should have clear regional value. Teams should articulate the expected regional impact of the work proposed, and seek the support necessary to engage key regional audiences in designing and executing pilot activity.

**Have a credible theory of change:** The Fund will look for evidence that the work proposed is credible, practical and likely to lead to the results proposed. The Fund will look for projects that take a systems approach to the work proposed. Key elements could include: embedding the work in a watershed context, a focus on reversing hydrologic alterations, creating resilience in natural systems, consideration of modularity and reversibility, and a clear emphasis on ecological improvement outcomes rather than (or at least in addition to) intermediate behavioral or volumetric changes as the purpose of the work.

Project teams should ensure that demonstration or pilot settings are creating products for customers elsewhere, and emphasize who will use the results of those pilots. We will look for project teams that are working to influence behavior across the set of actors necessary to affect the health of the basin.

Projects that rely on a "create and disseminate" approach—developing an analysis without the involvement of the basin-wide community of potential users and then distributing reports, software or samples—are not encouraged.

**Are collaborative efforts:** The Fund typically supports multi-institution and multi-sector project teams that include the full range of people relevant to their project's expected outcome, work plan, and strategy. These might include engineers, hydrologists, aquatic ecologists, biologists, management professionals, government agency staff, and individuals and institutions that will test the prototypes. Teams will also include community leaders, property owners, and others to ensure diverse and deep connections to the solutions and to the communities that will adopt the results. While the exact structure of this collaboration is up to the team, we will assess the team's ability to successful engage the full range of stakeholders needed.

(At this preproposal stage, it is not a requirement to have commitments from all participating institutions. The Fund does expect full commitments at the full proposal stage.)

Projects could be financed with outright cash grants, convertible grants, debt, equity or some combination.

## Eligibility

The Great Lakes Protection Fund can support a wide variety of applicants. Non-profit organizations (including environmental organizations, trade associations, and universities), governmental agencies, individuals, and for-profit businesses are eligible for Fund support. Successful applicants must maintain open access to certain project data, records and information.

All applicants must show that the proposed work has clear public benefit and that any related financial benefits will accrue to the public good. Government agencies must show that Fund support is not being used to replace or duplicate funds. The Fund will not support advocacy campaigns, litigation or compliance obligations.

## Content of Preproposals

We strongly encourage you to start a conversation about your project idea prior to submitting a preproposal by calling Simon Bélisle, Project Development Manager, at 847-425-8193 or by sending an email to startaconversation@glpf.org.

Preproposals should include an applicant cover sheet, three pages of narrative (including the project budget), and a copy of the project manager's resume in a single pdf file.

**Please email preproposals to preproposal@glpf.org no later than 8:00 AM CDT, April 23, 2018**. The Fund will begin review upon receipt. In May 2018, the Fund will invite more fully developed project proposals from a subset of teams. Fund staff and other technical experts will review these full proposals prior to a funding decision by the Fund's board of directors.

In your preproposal, please address the following issues:

### Ecosystem Impact: What you hope to achieve

Discuss what will change during the course of the project and identify specifically how the Great Lakes will be improved when you or others take the work to scale. Describe what innovation you will create and identify the new action or behavior you expect to pilot. Detail the audiences that your work is intended for (emphasizing those beyond your pilot location) with specifics about why your audiences see value in the work and how the team will actively engage those audiences. Explain how the products or approaches you create will be adopted elsewhere and drive regional ecosystem impact.

### Your Strategy: How you plan to do the work

Outline the work to be carried out. Discuss why you believe that approach will work. Include a project timeline that contains the major interim objectives. Show how the work will lead to the expected outcomes

identified above. Describe who will use the strategies you're testing and identify their role in designing the test of the innovation you will create.

**Your Team: Who you will involve**

Identify the project team members (those supported by the request, by other funding sources, and volunteers), and indicate their roles, responsibilities and qualifications. By the time a full proposal is submitted (and ideally before) the team should reflect meaningful collaboration among all interests affected by the project, especially non-expert audiences, and include members from entities that will ultimately use the tools and approaches developed.

**Resources: What you will require to do the work**

Present the estimated costs of the proposed work in summary categories: personnel, equipment and supplies, travel, consultants, overhead, etc. The Fund will support overhead costs at a maximum of 15% of project costs. Identify the type and amount of support requested of the Fund. Identify how other monies will be raised to support the proposed work. Identify any other resources you require to do the work.

Projects could be financed with outright cash grants, convertible grants, debt, equity or some combination.

Visit the Fund's website to find [Frequently Asked Questions and Illustrative Projects](). You can also explore the Fund's [general funding guidelines](), and find how to reach us with ideas that may not easily fit within this request.

## CALENDAR

*February 2018*
Request for Preproposals

*April 23, 2018*
Preproposal Submissions Due at 8:00 am CT

(Note—Preproposals will be reviewed as received. Early submissions are strongly encouraged so that staff may provide feedback on project ideas, team membership, etc.)

*May 2018*
Full Proposals Invited

*Summer 2018*
Full Proposal Review and Revision

*September 2018*
Announcement of Awards

## About the Great Lakes Protection Fund

The Fund's mission is to identify, demonstrate and promote regional action to improve the health of the Great Lakes ecosystem. It is the nation's first ecosystem endowment and was created by the governors of the Great Lakes states in 1989. The Fund provides financial support to teams that undertake collaborative projects in support of its mission. The Fund makes grants, issues debt and can take equity positions in those projects. The Fund does not support lobbying, litigation, advocacy, public works projects, or compliance obligations. The Fund has invested over $81 million in 271 projects, involving over 1000 collaborating institutions. More at glpf.org.