

An Excerpt from the Final Report on

# **AN ENQUIRY FOR THE GREAT LAKES PROTECTION FUND**

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Prepared for:

The Great Lakes Protection Fund

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## **INTRODUCTION**

In September of 2009, the Great Lakes Protection Fund hired Tracy Mehan of The Cadmus Group to undertake an enquiry project in an effort to gain perspective on the perception of the Fund's work within the Great Lakes community. The following Executive Summary and Conclusion are a portion of the final report and are unedited. Appendix A contains a list of name of those who were interviewed, and Appendix B is the background document provided by the Fund.

## **EXECUTIVE SUMMARY**

The Great Lakes Protection Fund (GLPF) undertook an enquiry of a broad array of stakeholders and partners with the intention of determining their understanding and perception of the GLPF's work and contributions since its inception. The GLPF hoped to better understand which activities have had the most impact on Great Lakes policy and practice, what might be done to enhance the positive benefits of its staff's work and that of its grantees and project teams, and how a strategic communications plan and activities might further its mission.

Forty-one individuals, all active in or knowledgeable of at least some Great Lakes ecosystem and basin matters, were interviewed by a contractor for the GLPF. All were provided background information and a copy of the questions to be discussed in advance of the interview, although 12 interviewees indicated they did not review the background information prior to their interviews.

The list of interviewees was developed by the GLPF staff and board members working jointly with the GLPF contractor.

Interviewees who were familiar with the work of the GLPF, had received grants or had participated on project teams were very positive about its unique character as a regional endowment, providing innovative leadership on cutting-edge issues and able to move into policy space that other institutions cannot or will not go. They appreciated the GLPF's willingness to take risks and catalyze important work.

Several interviewees noted that the GLPF is nimble, capable of addressing issues of basin-wide concern through its ability to mobilize expertise around issues and link that expertise to the governmental (i.e., gubernatorial) leadership in the region.

The most recognized and applauded work of the GLPF, noted by most interviewees, is its work on the constellation of grants, project teams and other work products focused on invasive species and ballast water technologies as well as that grouped around water management and the newly ratified interstate compact on the Great Lakes.

Twenty-three interviewees identified invasive species/ballast water as having the most meaningful impact on Great Lakes policy and practice. Twenty-one named the interstate compact/water management (i.e., quantity) work as most meaningful. Interviewees usually provided two or three answers to this question.

Six interviewees identified the GLPF's work on natural flow regimes and related work on hydropower and dams as the third category of work that has been most meaningful.

Eight interviewees could not identify any of the GLPF's work as having any meaningful impact due to a lack of knowledge or information. Four of them had not had an opportunity to review the background paper provided in advance of their interviews.

Reflecting the saliency of these same issues, seventeen interviewees named the GLPF's work product on invasive species/ballast water as actually having been adopted, improved or used by end-users. Eleven named the interstate compact /water management in this category, and nine mentioned natural flow regime/dams. A variety of other project work (e.g., community foundations) was also noted by individual interviewees.

The paramount trait or characteristic of successful GLPF projects is the interdisciplinary or collaborative nature of the project teams in terms of both academic disciplines and the mix of researchers and practitioners in the field. Active participation of stakeholders on the ground and the linkage of science and implementation were noted as hallmarks of the best projects, along with a systems approach to solving problems at the scale of the Great Lakes ecosystem and region.

As a neutral convener, the GLPF can integrate expertise, even among adverse parties. Many interviewees saw great value in the broader activities of the GLPF outside the traditional grant-making process, which, in effect, help develop a community of policy and practice and networking opportunities in the region. This includes preparing white papers on challenging topics, convening of face-to-face discussions and the like. Some also expressed the view that these dialogues can lead to useful ideas for future requests for proposals (RFPs).

In terms of enhancing or optimizing the effectiveness of the GLPF's project teams, including the dissemination or diffusion of their work, those interviewed had a harder time identifying useful suggestions. In general, they pointed to the need for greater investment of staff time and resources in the design, training and management of the teams as well as in the subsequent promotion or dissemination of their work products at professional conferences, Web site upgrades, webinars, periodic reports and formal communications plans—all of which might be incorporated into future RFPs, terms of engagement or grant awards. They also noted the usefulness of convening follow-up workshops or conferences if a body of work emerges from grant making over time.

Involving end-users or stakeholders in the design of projects and teams, up front, is another suggestion mentioned by respondents.

Noting a perception of opacity, many interviewees felt that the GLPF and its mission would benefit from a proactive effort at communications and outreach to increase knowledge and accessibility of its programs and work products.

Given the inevitable compartmentalization of knowledge in an era of specialization, many expert-interviewees confessed to a lack of understanding or current knowledge of the overall body of the GLPF's work. They believe that expansion and greater utilization of its Web site would be very helpful, as would more electronic or printed updates, newsletters or reports. Targeted audiences should include the governors themselves as well as interested agency officials and staff members.

Nevertheless, interviewees generally appreciated the sensitivity of increasing the public profile of the

GLPF without appearing to engage in self-promotion, especially given financial constraints and its status as an institution capitalized by Great Lakes state taxpayers under the stewardship of the region’s governors.<sup>1</sup> Still, they generally recognized the need for the GLPF to make a greater effort at becoming more proactive, accessible and transparent in terms of engaging stakeholders and communicating its work product in a way that encourages understanding and adoption in the Great Lakes community and beyond. Communications and outreach should be viewed primarily in functional terms related to the mission of the institution.

Interviewees identified a number of emerging issues for the GLPF to consider in the years ahead. However, 13 interviewees reaffirmed its involvement in issues relating to invasive species and ballast water going forward. And 10 interviewees identified implementation of the new interstate compact and related water management (i.e., quantity) as issues they believe will require more work and support in the years ahead. Thus, a total of 23 interviewees embraced continued or expanded work on existing GLPF priority issues as important areas for the foreseeable future.

Energy, including the nexus of water and energy, was mentioned by nine interviewees as an emerging issue, and climate adaptation, as opposed mitigation, was identified by eight interviewees.

Interestingly, 10 interviewees referred to a variety of emerging issues that can be bundled under the heading of governance, defined broadly to include relationships within civil society as well as more formal governmental institutions. Several interviewees felt that the lack of good governance models is as much of a limiting factor for the future progress of Great Lakes restoration as is the lack of science or technology. In this sense governance is broader than regulation but certainly includes it.

## **CONCLUSION**

Interviewees basically recognized that the GLPF has had significant impact in advancing ballast water controls, slowing the introduction of invasive species, launching and supporting the process that led to the recent Great Lakes interstate compact and supporting the process with projects that advanced the science and practice of water resource management. They further identified that the GLPF is a unique institution that creates value not only in its grant-making, but also in its activities to explore new issues, convene experts and promote new communities of practice.

Among the factors that have made these and other GLPF-supported efforts successful are talented, multi-sector, interdisciplinary project teams, including those who need to do the work being explored; support of risk-taking and encouragement of team members to operate outside their “comfort zones”; an action-orientation and a focus on outcomes; and a willingness to move on issues or problems before they become intractable, even if not fully understood.

Interviewees said that these efforts build on GLPF strengths such as being nimble, collaborative and tolerant of failure in the face of tough technical or policy challenges. They also noted that the GLPF is

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<sup>1</sup>Interviewees sometimes described the GLPF as a “tax-supported” entity, which revealed a lack of appreciation of its status as a publicly capitalized, private corporation. The original public investment of \$81 million has generated approximately \$140 million of income. This income has been used for regional grants (\$57 million), payments to member states (\$41 million), growing the endowment (to \$105 million) and operations. No tax funds have been expended by the GLPF. This issue of the identity or brand of the Fund may merit attention in future communications plans or strategies.

vigilant for the “next big thing,” anticipates future opportunities or needs and embraces systems thinking and team-building. They used terms such “catalyst” and “transformational” to characterize the GLPF’s role in Great Lakes ecosystem management.

Although at times the GLPF’s entrepreneurial culture, with its focus on action and results more than process, can give rise to concerns or anxieties, those reactions are due primarily to a perceived opacity and a lack of understanding by various stakeholders who may not have sufficient information or the opportunity to fully understand its work and objectives. This, in turn, led some interviewees to urge the GLPF to pursue greater openness and accessibility.

With the exception of invasive species/ballast water and the interstate compact/water management initiatives, interviewees were generally most familiar with GLPF projects that were in their own fields or areas of interest. Interviewees who worked in fields in which the Fund had not been recently active, or was focused on restricted geographies or topics outside the interviewees’ primary scope of interest, appeared to know less about that work.

This knowledge or information deficit, leading to a perception of opacity, may be the result of the inevitable compartmentalization of various fields of expertise and practice. It highlights the need for greater diffusion or dissemination of information about the ongoing work of the GLPF to the broader community, not just specific end-users of a particular project.

Interviewees who believed the GLPF should more actively enhance transparency and make its work more accessible were also sensitive to the need to move carefully so that the institution did not appear to be engaging in self-promotion, taking credit for the work of grantees and project teams or operating contrary to the policies of the region’s gubernatorial leadership. Nevertheless, there was substantial agreement that the GLPF could do more to promote the results of supported efforts and to tell its story. There is a basic tension arising from the unique position that the GLPF occupies. It is both a publicly capitalized institution with close ties to the political leadership in the region and one designed to pursue strategic and innovative approaches to Great Lakes restoration. Given its finite resources, the GLPF will always have to focus on one priority or more over others. Some degree of tension must always be assumed. No amount of engagement, outreach or transparency will completely eliminate criticisms or concerns given this fundamental reality.

Many issues that interviewees identified as “emerging”—invasive species, ballast water, water/flow management—are those that the GLPF has been working on for more than a decade. Actions to address invasive species and manage water withdrawals were pioneered by the GLPF and have been or are being adopted by a broad suite of customers including the shipping industry, governments and conservations groups. Moreover, with three major exceptions—energy, climate adaptation and governance—many of the issues identified as emerging by the interviewees were also noted in the background paper provided to them.

The energy topics identified by interviewees generally intersected with issues implicating climate mitigation issues, which have been controversial in the region. It is unclear whether climate adaptation, as opposed to mitigation, will be less controversial, although discrete, related matters such as water conservation, forest hydrology and non-point source pollution can be and have been addressed in their own right.

Governance issues, especially those beyond purely governmental matters, have been at the core of some of the GLPF work in the past, but there appears to be some appetite to explore this theme more directly.

The interviewees also identified several emerging issues that may require less science and more resources for implementation than the GLPF can muster at the present time.

In summary, the overwhelming view of the GLPF expressed by the interviewees in this enquiry was positive. To the extent that interviewees expressed concern or lack of understanding, it was with the aim of encouraging more proactive engagement and outreach with the broader Great Lakes community, which will enhance transparency, accessibility, and the ongoing work of restoring the Great Lakes ecosystem.

## **APPENDIX A. LIST OF INTERVIEWEES**

### **AN ENQUIRY FOR THE GREAT LAKES PROTECTION FUND**

Jon Allan, Executive Director of Environmental Policy & Intergovernmental Affairs, Consumers Energy Company

Jack Bails, Chair, Board of Directors, Alliance for the Great Lakes, formerly Vice President with Public Sector Consultants

Mark Bain, Assistant Professor of Systems Ecology, Cornell University

Bruce Baker, Deputy Administrator, Water Division, Wisconsin Department of Natural Resources

Jon Bartholic, Director, Institute for Water Research, Michigan State University

Kate Bartter, Associate Director, Ohio State University, Institute for Energy & Environment

Milos Barutciski, Bennett Jones (Toronto)

Scott Bernstein, President, Center for Neighborhood Technology

Senator Pattie Birkholtz, Michigan State Senate

Timothy H. Brown, President, Wabashco, LLC & Partner, Forest Hill Energy, LLC

Allegra Cangelosi, Senior Policy Analyst, Northeast Midwest Institute

Mark Coscarelli, Vice President, Public Sector Consultants

William Creal, Chief, Water Bureau, Michigan Department of Environmental Quality

Cameron Davis, Senior Advisor to the Administrator (Great Lakes), U.S. Environmental Protection Agency

Kyle Dreyfuss-Wells, Manager, Watershed Programs, Northeast Ohio Regional Sewer District

Tim Eder, Executive Director, Great Lakes Commission

George Elmaraghy, Chief, Division of Surface Water, Ohio Environmental Protection Agency

Marc Gaden, Ph.D., Communications Director & Legislative Liaison, Great Lakes Fishery Commission

Stephen Galarneau, Lake Michigan Coordinator, Office of the Great Lakes, Wisconsin Department of Natural Resources

Gary Gulezian, Director, Great Lakes National Program Office, U.S. Environmental Protection Agency

Henry Henderson, Director, Midwest Program, Natural Resources Defense Council

Mary Jo Kealy, Ph.D., Senior Principal Technologist, CH2MHill

Jolie Krasinski, Program Officer, Illinois Clean Energy Community Foundation

George Kuper, President, Council of Great Lakes Industries

David Lodge, Professor & Director of the Center for Aquatic Conservation, University of Notre Dame

Tim McNulty, Associate Vice President for Government Relations, Carnegie Mellon University

Dick Munson, Senior Vice President, Recycled Energy Development

Will Murray, Independent Consultant

David Naftzger, Executive Director, Council of Great Lakes Governors

Tammy Newcomb, Research Program Manager, Fisheries Division, Michigan Department of Natural Resources

Jim Nicholas, Director, Michigan Water Science Center, U.S. Geologic Survey

Sam Passmore, Environmental Program Director, Mott Foundation

Jeff Reutter, Director, Ohio Sea Grant & Chair, Council of Great Lakes Research Managers  
(International Joint Commission)

Paul Seelbach, Ph.D., Institute for Fisheries Research (University of Michigan), Michigan Department of Natural Resources

Kevin Shafer, Executive Director, Milwaukee Metropolitan Sewerage District

Sam Speck, Member, U.S. Section, International Joint Commission

David Ullrich, Executive Director, Great Lakes-St. Lawrence Cities Initiative

Mark Van Putten, ConservationStrategy LLC

William Weeks, Director, Conservation Law Clinic, Indiana University

Gary Whelan, Manager, Fish Production & Habitat Management, Fisheries Division, Michigan Department of Natural Resources

Charles Wooley, Deputy Regional Director, Region 3 (Great Lakes), U.S. Fish & Wildlife Service

Don Zelazny, NY Department of Environmental Conservation & Great Lakes Commission



## **APPENDIX B. BACKGROUND PAPER**

### **Background on the Great Lakes Protection Fund, November, 2009**

*This background paper is provided as an information tool for the benefit of the prospective interviewee for the enquiry being conducted by G. Tracy Mehan, III, Principal, The Cadmus Group, Inc., and former board member of the Fund and is not intended to bias his or her responses in anyway. It is presumed that he or she will rely on his or her own independent experience and judgment relative to the Great Lakes Protection Fund and its grantees. For further information, see [www.glpf.org](http://www.glpf.org).*

The Great Lakes Protection Fund is a private, not-for-profit corporation formed in 1989 by the Governors of the Great Lakes States. The Fund's \$81 million permanent endowment—that cannot be spent—was contributed by seven of the Great Lakes States. That endowment generates income to:

1. Support regional project teams testing new ideas; and
2. Provide a permanent, discretionary revenue stream for each state to use for its own Great Lakes priorities.

The states provided the endowment funds so the Fund could support activities consistent with the purposes of the Great Lakes Water Quality Agreement, but only activities that are not clearly state or federal responsibilities. The Fund's mission is to “identify, demonstrate, and promote regional action to protect and restore the health of the Great Lakes Basin ecosystem.” Consistent with the Governors' leadership and priorities, it supports collaborative, multi-sector, multi-institution teams to create, test, and deploy new, more effective means to solve Great Lakes problems.

Since 1989, the original \$81 million endowment, now worth over \$100 million, has produced over \$140 million in earnings. In turn, those earnings have supported 223 projects, awarding more than \$56 million to regional project teams. The Fund has also provided over \$44 million of additional support directly to its member states for their discretionary uses.

### **Results**

Fund-supported teams have completed work on 210 projects, testing ways to best accomplish the Governors' priorities. They have had significant impact on the health of the Lakes and the ability of the private and public sectors to benefit the basin ecosystem.

To illustrate the range of project outcomes, Fund-supported teams have:

- Designed, installed and tested the world's first ballast water filtration system on a working vessel;

- Developed and demonstrated the first set of protocols to evaluate the effectiveness of ballast water treatment—on ship, on the shore, and in the lab;
- Developed, verified, and used the first set of methods to evaluate “hatch-out” of organisms that remain in ballast tanks after water is discharged;
- Designed and deployed the first remote monitoring technologies to track water levels, pumping activity, and water chemistry in ballast tanks while ships are underway;
- Supported the design, development and launch of 38 local environmental grant-making programs that leveraged Fund support 15-fold by raising nearly \$10 million in funds for coastal community foundations in all Great Lakes states and the Province of Ontario;
- Restored more natural flows in over 1500 miles of basin rivers through collaborative re-operation of more than 100 hydroelectric facilities;
- Removed more than a dozen dams in rivers that feed the lakes;
- Designed, deployed and evaluated the first series of two-stage drainage ditches to restore natural flows and riparian cover in agricultural landscapes;
- Created and deployed a series of planning and assurance tools—including whole farm planning, nutrient yardsticks, rotational grazing guidance, and BMP warranties—used by hundreds of farms to remove sediment and nutrients from basin waters;
- Designed, deployed, evaluated and exported a water quality trading system that removed nutrients from the Great Lakes and became the basis for the national strategy on water quality trading;
- Deployed the first rain barrels in an urban setting in the United States, beginning a movement that continues to grow in the basin and beyond;
- Developed and tested modeling frameworks and measurement tools that track/estimate/predict how changed water uses lead to improved hydrological and biological conditions;
- Created and sustained the forum for the design and development of what became the Great Lakes St. Lawrence River Basin Water Resources Compact and associated Regional Agreement, providing over \$1 million for expert advice, travel support and staff time;
- Developed the criteria for sustainably managed forest lands, certifying over 700,000 acres in New York state, and leading to certification of over 10,000,000 acres in basin states, adding to previously certified lands in Minnesota and Pennsylvania, protecting the lakes with improved land management;
- Designed, launched and sustained the Great Printers’ Project removing volatile organic compounds from the region’s air, well in advance of regulatory requirements.

By design, these leadership teams not only take some new and innovative action, but just as important, their accomplishments continue to grow over time. Each project is designed to share not only its results, but also its methods, its approaches and its shortcomings, engaging a larger set of customers that replicate work across the basin and beyond. Further, every project is a team effort, typically involving institutions in many of the Great Lakes States, helping to attract additional on-going financial support.

### **An Action Orientation: Learning by Doing**

The Fund provides seed capital to collaborative teams that test innovative regional actions to make the Great Lakes healthier. Teams try things and learn by doing. The Fund is large enough to sponsor these early demonstration efforts, but too small to take these efforts to scale. The Fund was instead designed to pilot efforts that attract future support from government and the private sector.

By taking concrete action, and showing what works, Fund-supported teams seek to explore how the Great Lakes can be protected more effectively and cost-efficiently. This action has sometimes been trying a technology or management approach—such as ballast filtration or BMP insurance. Sometimes the action has been “virtual”—like the water withdrawal war games conducted in confidence for the member Governors as they began considering the Great Lakes Compact for water withdrawal management. Sometimes the regional action is enabled by the development of technologies, scientific, policy or legal research—such as the genetic tools in development that will identify invasive organisms in ballast tanks or in the wild in real time.

The Fund intends that successfully piloted lessons become new choices available to not only governments, but also the economic actors and citizens whose day-to-day decisions impact the health of the basin ecosystem.

### **Engagement, Collaboration, and Ownership**

A longstanding feature of the regional efforts supported by the Fund is the requirement that all affected parties be involved in the work. There are two reasons for this. First, the best solutions are designed when, as management expert Peter Senge says, “The whole system is in the room.” When problems are viewed from multiple perspectives, the team is likely to focus on root causes, not symptoms. The solutions they

create can address root causes, meet multiple objectives, are more robust, and are more likely to be implemented at a scale that matters. The second reason is that the most important users of the funded work are generally not in the locations where pilot projects take place. The involvement of those users is critical to ensure that the team designs its approaches to get to a scale that affects the entire Great Lakes system.

The body of work supported by the Fund's regional grant-making has included over 800 institutions and involved thousands of individuals. In our current portfolio, project teams include over 70 different institutions and hundreds of individuals.

For example, Fund projects have included:

- Members of the U.S. delegation to the International Maritime Organization, which successfully pushed for international standards for ballast discharges and tightened U.S. controls on foreign Great Lakes shipping;
- Congressional and committee staff that have played a role in the development of ballast treatment, Great Lakes appropriations, State Revolving Fund, and other related statutes;
- Experts that have played central roles in the design of federal policy on water quality trading and development of related administrative rules in three Great Lakes states;
- River advocates that used the model of “collaborative re-licensing” throughout the country;
- Experts that helped shape Michigan’s new groundwater and surface water withdrawal statutes;
- Great Lakes carriers who have adopted the most aggressive ballast control practices on all their vessels;
- State officials that launched a variety on pollution prevention, technical assistance, and regulatory relief programs that reward “beyond compliance” performers;

Another benefit of broad collaboration is that the people doing the work, own the work. The Fund has consciously chosen to limit any “branding” of these efforts as products of the Fund, choosing instead to see ownership and credit flow to the project teams and their own institutions. The Fund sought to promote adoption of the tools that have been created.

## **A Unique Niche, An Evolving Program**

The Fund was created by the Great Lakes Governors to support efforts that transcend state boundaries, but are not federal responsibilities. It was explicitly designed to provide supplemental resources, not to assume federal responsibilities, or replace government support for Great Lakes initiatives if such support is reduced or curtailed. It is also forbidden from supporting litigation, lobbying, regulation or enforcement activities. As noted above, the role of the Fund is to provide angel investment in innovative regional action.

The purposes of the Great Lakes Water Quality Agreement serve to guide the Fund's programming. That agreement commits to "restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem."

As such, the Fund's vision for the Great Lakes Basin ecosystem is:

- That the waters of Great Lakes, and the basin they drain:
  - Have water present at the right places, in the right amounts, at the right times;
  - Are free of toxic substances and other materials that cause harm or nuisance conditions; and,
  - Support self-sustaining populations of native and naturalized species, and are free of harmful exotic species.
- That these waters are sustained by:
  - An economy that uses them to benefit the ecosystem;
  - Governments that support positive Great Lakes outcomes; and,
  - Citizens that chose to protect and restore the basin ecosystem.

While all Fund-supported work takes or empowers action by a collaborative team, the particular strategies being explored have evolved over the years. Teams have explored strategies as varied as how to: prevent toxic pollution, prevent biological pollution, restore natural flow regimes, better manage the movement of water across and through land, restore natural communities, harness the power of markets to create environmental quality and better manage the consequences of water withdrawals. This is because certain strategies are more ripe for testing than others at any particular time. Ripeness is a mixture of an availability of credible science, capable project teams, Fund resources, and a viable exit plan—where the private or public sector replaces Fund support as the work goes to scale.

For example, the Fund exited the ballast treatment technology space when industry spotted the market and began developing and marketing treatment systems. The Fund exited the support of prototype pollution prevention technical assistance programs when states launched their own programs.

No matter what particular strategy is tested, they all explore how economic, governmental and citizen interests can act to achieve the outcomes of physical, chemical and biological integrity of Great Lakes basin waters.

### **The Future and How You Can Help Shape It**

The Fund routinely seeks expert advice in preparing its programming. Several hundred experts have helped shape what we do and how we do it. Building on that advice, the Fund expects to add significant value to Great Lakes work in the next five years. In particular, we anticipate supported project team will create:

- New feedback systems that can connect users of Great Lakes resources to the consequences of their choices in real time;
- Advanced design tools that prevent physical, chemical and biological problems before they occur;
- Integrated water assessment and management frameworks that link previously disconnected parts of the hydrologic cycle (use and discharge, surface and groundwater, etc.); and,
- Methods to link and manage the energy impacts of water and water impacts of energy.

Our current portfolio of supported work is moving forward in many of those areas.