EXECUTIVE SUMMARY

A New Approach to Lake Basin Planning: Lake Ontario & Green Bay

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In the face of major threats to the Great Lakes including invasive species, incompatible development and climate change, how do we plan effectively for the conservation and restoration of the Great Lakes?

The Nature Conservancy has developed a planning process that allows us to engage the expertise and experience of local and lake-wide partners to develop and implement conservation strategies. We have utilized the Conservancy's Conservation Action Planning (CAP) process as a framework to integrate data and expert knowledge in a common agenda for conservation. In this way, we seek to extend what the Conservancy can accomplish by enlisting our partners in the effort to define a common vision and to pool resources to achieve it.

We are currently utilizing this planning process on Lake Ontario and in the Green Bay watershed on Lake Michigan's western shore.

Desired Outcomes

- Apply the Conservancy's landscape approach to the conservation and restoration of healthy ecological systems in the open waters of two Great Lakes.
- Work across state and international boundaries to engage partners and communities in defining agendas for action that can serve as platforms for attracting federal, state/provincial and private resources to implement a common plan.
- Green Bay and Lake Ontario can serve as templates for similar approaches to conservation in other Great Lakes and in large lake ecosystems elsewhere around the globe.

Key Strategies

Lake Ontario:

- Work with partners to identify priority watersheds and coastal reaches for application of the strategies identified in the lake-wide planning process facilitated by The Nature Conservancy and the Nature Conservancy of Canada. (2008 – near completion)
- With partners, select and apply criteria to guide land protection in priority watersheds and coastal reaches. (2008)
- Collaborate with scientists and agency practitioners to identify and field-test techniques of integrated pest management for control of aquatic invasive animals. (2008-2010)
- Act as the catalyst for an effort to "step down" global models of climate change to predict impacts of lower lake levels on coastal wetlands and species of Lake Ontario. (2008-2012)
- Cooperate with state and federal agencies, nongovernmental organizations and private landowners to implement a regulation plan for Lake Ontario-St. Lawrence River that restores natural periodicity of water levels and flows. (2008-2010)
- Clarify how the Conservancy can contribute to restoration of native fisheries and implement the appropriate actions. (2008-2015)
- Participate in a basin-wide effort to identify and conserve stopover sites for migrating birds and integrate protection of these sites with other actions in priority watersheds. (2009-2012)

Key Strategies (continued)

Green Bay:

- Create a self-sustaining partnership to develop, implement and monitor strategic activities that will achieve the objectives of the conservation plan. (2008)
- Protect all current coastal wetlands and those lands that will become coastal wetlands due to declining water levels of the bay, and restore the wetland communities and hydrological connections to all high priority coastal wetlands. (2020)
- Protect the open water systems of Green Bay that provide the highest habitat values. (2030)
- Increase or maintain a naturally sustaining population of northern pike and lake sturgeon from all tributaries of Green Bay (by 2060 for lake sturgeon) and double the populations of island-dependent colonial nesting birds that are of conservation concern. (2040)

Key Questions

- How do we most effectively integrate the current state of biodiversity health and/or threats posed by tributary watersheds into the overall plan, while remaining focused on large-scale conservation strategies?
- How do we create strategies and conservation tools that can be exported to large freshwater systems around the world, that have the ability to recognize the unique conditions and interrelationships of their ecological processes and systems?
- What strategies will we employ to maintain hydrologic processes and connectivity, recognizing both the natural needs of the species and ecological systems, and the needs of our human communities?
- How do we help communities understand the economic and social impacts of clean, healthy and productive waters? How do we develop economic links or incentives to support conservation action?
- What types of strategies can be used to encourage native biodiversity (especially keystone species and high quality natural communities) as we learn to co-exist with certain types of non-native invasive species?
- How do we create and maintain a network of protected sites that are ecologically functional, connected, and resilient to the impacts (which are yet unclear) of climate change?
- What relationships do you have with partners or potential partners in Lake Ontario or the Green Bay watersheds that could be helpful in implementing these plans?