Celebrating 10 years
A Decade of Partnership in Great Lakes Restoration

During the past decade, five federal agencies and ArcelorMittal have partnered with the National Fish and Wildlife Foundation (NFWF) to coordinate and leverage funding for ecological restoration in the Great Lakes basin. Known as Sustain Our Great Lakes (SOGL), this innovative public–private collaboration is celebrating its tenth year, and we are pleased to present this report as a way to commemorate that milestone.

Since 2006, SOGL has awarded 245 grants to 128 organizations, directing more than $113 million to on-the-ground restoration projects. From providing lake sturgeon access to historic spawning habitat on the Menominee River, to re-establishing wild rice beds in the St. Louis River estuary, to improving hundreds of acres of coastal wetlands in the Maumee River Area of Concern, the program has helped support many of the most exciting restoration efforts in the basin during the past decade. The following pages summarize those achievements, with a focus on the four priority issues that have guided our investments: aquatic connectivity, stream and riparian habitat, wetlands, and shoreline habitat.

As we reflect on the first decade of the program, we also look to the future. In the next ten years, we will strive to expand program participation by engaging new partners on both sides of the U.S.–Canada border. We will increasingly rely on cutting-edge science to identify where strategic investments can effectively address emerging and intensifying threats across the basin. We will aim to strengthen monitoring efforts to demonstrate the ecological outcomes of funded projects. As we enter our second decade of investment, we are eager to build on the progress of the past ten years to move us even closer to our goal of a clean, healthy and prosperous Great Lakes basin.

Sunset at Minnesota’s Cascade River State Park, on Lake Superior. Photo by Todd Hogrefe/NFWF
BACKGROUND: THE GREAT LAKES

An unmistakable feature from land and air, the Great Lakes comprise the largest chain of lakes in the world. They contain more than 20 percent of the earth’s surface freshwater and 95 percent of the surface freshwater in the continental United States.

A Diversity of Habitats
Spanning more than 295,000 square miles, the basin includes an immense network of streams, lakes, inland wetlands, coastal marshes and forests. These habitats support more than 3,500 species of plants and animals, including more than 200 globally rare species and 46 species found nowhere else in the world. The Great Lakes basin provides the diverse habitats needed by more than 180 fish species to complete their life cycles.

A critical stopover region for more than 350 migratory bird species, the basin provides resources to sustain hundreds of millions of birds along their migratory routes each year. The diverse habitats of the basin provide numerous other critical ecological services, including water filtration and storage, flood control, nutrient cycling and carbon storage.

An Economic Powerhouse
With a rich tradition of agriculture, commercial and sport fishing, industrial manufacturing, and tourism and recreation, the Great Lakes’ economic activity surpasses that of most developed nations. The lakes and their waterways transport bulk cargo from the basin to the markets of the world; since 1959, more than 2 billion metric tons of iron, coal, steel, oil, grains and other products have been shipped over the lakes. One-third of the land in the basin is used for agriculture, which is an area larger than each of the Great Lakes states except Minnesota. Tourists spend hundreds of millions of dollars each year in the basin, with more than 60 million people annually visiting the many parks that dot the lakes’ shores. The lakes also support a world-class fishery, valued at more than $7 billion annually.

Threats
Despite their importance, the Great Lakes and the broader basin have been significantly degraded by human activity over the past two centuries. Habitat loss and fragmentation, invasive species, and biological and chemical pollutants present substantial environmental challenges that impair water quality, threaten wildlife populations, and jeopardize the health and economic vitality of the region. Efforts to reduce pollution and restore habitat have expanded dramatically over the past 30 years, yet a legacy of contaminated sediments, degraded water quality, and habitat loss and fragmentation continues to negatively impact the lakes and the basin as a whole. Restoration efforts have accelerated recently, thanks to an infusion of funding and strong leadership in Great Lakes communities. Working in coordination with a broad set of partners committed to Great Lakes restoration, SOGL is addressing many of the challenges facing the basin.

NASA’s Aqua satellite captured this Great Lakes image. A kayaker paddles near Sand Island in Lake Superior.
The mission of Sustain Our Great Lakes is to sustain, restore and protect fish, wildlife and habitat in the Great Lakes basin. SOGL advances this mission by leveraging funding, building conservation capacity, and focusing partners and resources toward key ecological issues.

Administered by NFWF, the program is a binational, public–private partnership. It receives funding and other support from ArcelorMittal, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S.D.A. Forest Service, the National Oceanic and Atmospheric Administration, and the U.S.D.A. Natural Resources Conservation Service.

SOGl achieves its mission primarily by awarding competitive grants for on-the-ground habitat restoration. The program offers funding annually, and grant awards range from $25,000 to $1.5 million. Eligible recipients include nonprofit organizations, state, tribal and local governments, and educational institutions. Funding priority is given to projects that address at least one of the program’s four focal issues, which include restoring aquatic connectivity, stream and riparian habitat, wetland habitat, and shoreline habitat.

History of the Program
In 2006, to advance the goals of the Great Lakes Regional Collaboration’s strategic plan and the Great Lakes Water Quality Agreement, the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, U.S.D.A. Forest Service, National Oceanic and Atmospheric Administration, and U.S.D.A. Natural Resources Conservation Service partnered with NFWF to pool and leverage their resources for Great Lakes habitat restoration. In 2007, the world’s leading steel company, ArcelorMittal, joined this group as the sole private funding partner. The result of this unique public–private collaboration is SOGL.

In 2009, President Obama announced the Great Lakes Restoration Initiative (GLRI), which has since directed hundreds of millions of dollars annually to accelerate efforts to protect and restore the Great Lakes. Federal agencies have entrusted SOGL with administering several million dollars of GLRI funding each year, which has been a primary driver behind the significant growth of the program. By securing new partners and funding sources, SOGL has significantly increased its capacity to support on-the-ground habitat restoration and advance the goal of enhancing and restoring the ecological integrity of the Great Lakes and surrounding region.

Lesser yellowlegs is one of many shorebirds found along the water’s edge in the Great Lakes region. The cliffs at Tettegouche State Park in Minnesota, on Lake Superior. Photo, right, by Todd Hogrefe/NFWF
“The longer Sustain Our Great Lakes is around, the more leaders around the nation are looking at it as the standard for how public agencies and private partners can drive hard-to-achieve, real on-the-ground and in-the-water results to save freshwater communities.”

– Cameron Davis, EPA Senior Advisor on the Great Lakes
PROGRAM ACHIEVEMENTS

$113,687,838
dedicated by SOGL and grantee organizations
toward ecological restoration

$54.8 million
awarded in grants
by SOGL since 2006

$58.8 million
committed by grantees
as match since 2006

33,184
acres of habitat
restoration

1,698
miles of fish
passage
restoration

198
miles of stream
and riparian habitat
restoration
Locations of the 245 projects supported by SOGL since 2006.
More than 180 species of native fish inhabit the Great Lakes basin, and many of them require passage between lakes, large rivers, small tributaries, and wetlands to complete their life cycles. The movements of these fish and other aquatic organisms are vital to natural population dynamics, as well as the transport of energy and nutrients throughout aquatic systems.

Today, however, more than 170,000 dams and road–stream crossings in the basin act as passage barriers to the movement of aquatic species, and many Great Lakes fish are unable to access a majority of their historic spawning habitats.

The restoration of aquatic connectivity is a focal issue for Sustain Our Great Lakes. By supporting the removal of passage barriers and the installation of passage structures, SOGL is helping reconnect many of the most important aquatic habitats in the basin.

This work is generating important benefits for the ecological health of the region. In addition to restoring connectivity, it is improving habitat for many species by restoring more natural temperatures, hydrology, and by reducing sediment inputs downstream. As a result of these efforts, people in the basin are enjoying improved water quality, a reduced risk of property damage due to flooding, better recreational opportunities, and the economic benefits of improving a fishery valued at more than $7 billion per year.

Northern pike is one of the many species that require passage between wetlands, streams and open water.
Great Lakes rivers and streams provide habitat for a vast assemblage of fish, mollusks, insects and other wildlife. Some species use tributaries for all stages of their life cycles, whereas others may use them only as spawning and nursery habitat. In all cases, however, healthy tributaries are necessary to sustain populations of many aquatic species. In addition, rivers and streams in the basin provide drinking water for millions of people, are conduits for nutrient transfer, and provide opportunities for economically important activities such as boating and angling.

The restoration of stream and riparian habitat is a focal issue for Sustain Our Great Lakes. By supporting projects that restore hydrology and other physical processes, place in-stream habitat structures, control invasive species, and stabilize stream banks, SOGL is helping to restore many of the most important stream and riparian habitats in the basin.

The stream and riparian restoration supported by SOGL is creating significant benefits for the ecological health of the basin. Projects funded by the program are restoring more natural flow rates and water temperatures, improving habitat structure and complexity, reducing bank erosion, and decreasing sediment loading. As a result of this work, residents of the basin are enjoying improved water quality, better recreational opportunities, and healthier fish populations that support a multi-billion dollar fishing industry.

Fall colors saturate riparian habitat in Michigan’s Upper Peninsula.

**PROJECT SPOTLIGHT**

In-channel Large Woody Debris and Riparian Forest Restoration

**Grant Recipient:** Bayfield County Land and Water Conservation Dept.

**Grant Award:** $114,200

**Project Location:** Whittlesey Creek, in Ashland, Wisconsin

**Description:** The Bayfield County Land and Water Conservation Department, in partnership with the U.S. Fish and Wildlife Service, restored 1.25 miles of Whittlesey Creek by installing over 400 logs in the stream channel and planting 15 riparian acres with conifer seedlings. Log placement increased pool and riffle habitat and improved in-stream habitat complexity. Conifer plantings slowed runoff, improved water quality, and provided natural stream structure and cover. This work was a critical component of coaster brook trout and aquatic invertebrate habitat restoration and also complemented restoration projects completed in upstream reaches of Whittlesey Creek.

Engineers place logs into Whittlesey Creek in Wisconsin. Photo by Bayfield County Land and Water Conservation Department

106 grants awarded for stream and riparian work

$21.4 million invested in restoration projects

198 miles of stream and riparian habitat restoration
Great Lakes wetlands span a diverse collection of habitats, ranging from small, forested vernal pools less than an acre in size to vast coastal marshes that can cover more than 1,000 acres. These wetlands provide critical habitat for wildlife, including breeding habitat for amphibians, spawning and nursery habitat for fish, stopover habitat for migrating waterfowl and shorebirds, as well as nesting and foraging habitat for resident birds. However, the Great Lakes basin has lost more than 50 percent of its wetlands; in some areas, coastal wetlands have declined by as much as 95 percent. Those wetlands that remain are often degraded due to invasive species, hydrological alteration, and lack of connectivity with adjacent waters.

Wetland habitat restoration is a focal issue for Sustain Our Great Lakes. By supporting work that includes the control of invasive species, restoration of more natural hydrology, reestablishment of native vegetation, and reconnection with adjacent waterways, SOGL is helping to restore many of the most important wetland habitats in the basin.

Wetland restoration projects supported by SOGL are providing many species of conservation concern with the matrix of habitats needed to complete their life cycles. In addition, people in the basin are benefiting from the ecosystem services wetlands provide, including collecting and storing stormwater, reducing flooding, and improving water quality by filtering sediment and pollutants.

Wetlands at Seney National Wildlife Refuge in Michigan.
The Great Lakes basin encompasses more than 10,000 miles of shoreline, which support many globally significant natural communities. Shoreline habitats provide critical stopover areas for many waterfowl and shorebirds during migration. Additionally, seven federally threatened and endangered species depend on Great Lakes shoreline habitat, and some, including the Pitcher’s thistle and dwarf lake iris, occur nowhere else in the world. Despite their importance, shoreline habitats in the basin are being lost and degraded due to development and fragmentation.

Shoreline habitat restoration is a focal issue for Sustain Our Great Lakes. By supporting projects to control invasive species, restore hydrology and other physical processes, reduce shoreline fragmentation, and protect and monitor imperiled coastal species, SOGL is helping to restore many of the most important coastal resources in the basin.

Through a combination of restoration and protection efforts, shoreline work supported by SOGL is helping to increase populations of several imperiled species, such as the Great Lakes piping plover, Pitcher’s thistle, and Michigan monkeyflower. Shoreline projects also help improve the condition of productive near-shore waters that provide critical fish spawning and nursery habitats. In addition, they help ensure that coastal habitats retain the unique beauty and recreational values that have made them major economic drivers for many communities across the basin.

A piping plover on the shores of Lake Michigan.

### PROJECT SPOTLIGHT

**Full Scale Invasive Plant Control in Eastern Lake Michigan**

**Grant Recipient:** The Nature Conservancy  
**Grant Award:** $1,020,432  
**Project Location:** Along Lake Michigan’s eastern shoreline  
**Description:** The Nature Conservancy and several partners worked to control invasive plant species that pose major threats to sand dunes, coastal wetlands, and coastal forest communities along the 505-mile eastern shoreline of Lake Michigan. As part of the Michigan Dune Alliance, the project extended the Early Detection/Rapid Response program to locate and treat early-stage invasive plants; expanded efforts for full control of mid-stage invasives along the coast; and focused treatment of the late-stage invasive *Phragmites australis* and garlic mustard at high-biodiversity sites with small infestations.  

A fully restored **parabolic dune system** and the interdunal wetland complex. *Photo by Shaun Howard/The Nature Conservancy*  

<table>
<thead>
<tr>
<th>34</th>
<th>grants awarded for shoreline restoration</th>
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<tbody>
<tr>
<td>$9.7 million</td>
<td>invested in shoreline restoration projects</td>
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<td>4,160 acres</td>
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SOGL partners place a high priority on evaluating the performance of the program. Assessing grant outcomes and program administration is important for tracking progress, increasing the effectiveness of program investments, and improving grant-making practices. To help address these needs, SOGL partners commissioned a third-party program evaluation, completed by the Headwaters Group Philanthropic Services, Edward W. Wilson Consulting, and Coastal Restoration Consultants, Inc. Conducted in 2012 and 2013, the evaluation covered grant-making activities from 2006 through 2011. The final evaluation report can be found at www.sustainourgreatlakes.org/third-party-program-evaluation.

Selected Findings

- **Program Management:** More than 90 percent of survey respondents indicated that SOGL communicates effectively with the grantee community, and grantees find SOGL webinars especially useful.

- **Socioeconomic and Community:** The $20.7 million invested by SOGL from 2006 to 2011 created up to an estimated 600 jobs and generated local economic activity on the order of $45 million.

- **Ecological:** Mapping and eradicating early-stage invasive plants was considered to be a more effective use of SOGL funds than “weed bashing” projects that sought to control widespread infestations.

Recommendation Examples

- **Recommendation:** Relax the need to apply at least 90 percent of grant funding to on-the-ground work.
  
  **Response:** Recent RFPs indicated that funded projects will typically apply at least 70 percent of grant funding to on-the-ground habitat improvement work, with the option of using the remaining funds for planning, permitting, final design, engineering, monitoring, outreach or education.

- **Recommendation:** Require long-term monitoring plans and increase funding for monitoring activities.
  
  **Response:** Recent RFPs indicated that each proposal should describe a long-term monitoring plan outlining: 1) metrics to track progress; 2) the approach for establishing baseline conditions; and 3) plans for post-implementation monitoring. Applicants are encouraged to direct approximately 5–10 percent of the project budget toward monitoring needs.

- **Recommendation:** Encourage grantees to conduct active re-vegetation following invasive species control or to justify why active re-vegetation is not necessary.
  
  **Response:** Recent RFPs indicated that to be competitive, applications proposing invasive species control must demonstrate how native vegetation will be re-established at the project site(s).
Social media and other web-based content have helped SOGL expand its role in sharing information with grantees, partners, stakeholders, and anyone else interested in learning more about Great Lakes issues and the role SOGL plays in restoring the ecological integrity of the Great Lakes and the basin.

2,213 Twitter followers
836 Facebook likes
2,517 subscribers to email list
3,501 webinar, workshop participants

Follow us on Twitter @SOGL
Like us on Facebook
www.sustainourgreatlakes.org

A fisherman casts a fly on a Michigan river.
Since 2006, SOGL has awarded 245 grants to 128 organizations across the basin. The following list shows the organizations SOGL has funded, the number of projects awarded, and the total grant value awarded to each organization by state or province.

**Illinois**
- Alliance for the Great Lakes (2) .................................. $179,489
- BOLD Chicago Institute (2) ........................................ $108,664
- Chicago Park District (1) ........................................... $475,000
- City of Chicago (1) .................................................... $35,000
- Field Museum of Natural History (1) ............................ $156,350
- Fishin’ Buddies (1) ..................................................... $32,000
- Forest Preserve District of Cook County (1) .................. $100,000
- Friends of the Forest Preserves (2) ............................... $254,754
- Lake County Forest Preserve District (2) ....................... $1,072,157
- Lake County Stormwater Management Commission (2) .... $129,000
- National Audubon Society (1) ...................................... $100,000
- South Suburban Mayors and Managers Association (1) .... $100,000
- The Nature Conservancy (2) ......................................... $173,000

**Michigan**
- Alger Conservation District (2) ..................................... $250,000
- Barry Conservation District (1) .................................... $43,000
- Calhoun Conservation District (1) ................................. $168,354
- City of Rochester (1) .................................................. $750,000
- Clinton River Watershed Council (1) .............................. $45,000
- Common Coast Research and Conservation (1) ............... $50,940
- Conservation Resource Alliance (9) ............................. $5,115,673
- Delta Conservation District (1) .................................... $50,000
- Downriver Community Conference (1) ......................... $500,000
- Ducks Unlimited (2) .................................................. $2,283,823
- Friends of the Detroit River (1) ..................................... $40,000
- Grand Traverse Band of Ottawa and Chippewa Indians (1) $56,913
- Grand Traverse Bay Watershed (1) ............................... $47,600
- Huron Pines (11) ...................................................... $3,330,955
- Lake Superior State University (3) ............................... $458,007
- Macomb County Public Works Office (1) ....................... $32,500
- Manistee County Government (1) ................................ $90,000
- Mason-Lake Conservation District (1) ............................ $424,888
- Michigan Department of Agriculture and Rural Development (1) $152,000
- Michigan Department of Natural Resources (2) .............. $850,058
- Michigan Nature Association (1) ................................ $35,000
- Michigan State University (3) ..................................... $310,199
- Monroe County (1) ................................................... $40,000
- Muskegon River Watershed Assembly (2) ...................... $77,210
- Niles City (1) ........................................................... $250,000
- Oakland Land Conservancy (1) .................................... $64,800
- Oceana County Road Commission (1) ......................... $70,000
- Partnership for MEANDRS (1) ................................... $20,000
- Regents of the University of Michigan (4) ...................... $1,150,009
- River Raisin Institute (1) ............................................ $37,400
- Saginaw Basin Land Conservancy (1) ....................... $150,000
- St. Clair County (1) ................................................... $1,039,500
- Stewardship Network (1) ........................................... $124,840
- Superior Watershed Partnership (1) ............................. $50,000
- The Nature Conservancy (11) ....................................... $4,665,839
- Tip of the Mitt Watershed Council (1) ......................... $50,781
- Trout Unlimited (3) ................................................... $439,750
- Upper Peninsula Resource Conservation and Development Council (3) $758,160

**Indiana**
- Elkhart County Drainage Board (1) .............................. $68,000
- Indiana Department of Natural Resources (1) ................. $121,000
- LaGrange County Community Foundation (1) ................ $270,000
- Portage Parks Department (1) .................................... $70,000
- Save the Dunes Conservation Fund (2) ......................... $89,072
- Shirley Heinze Land Trust (6) ..................................... $343,615
- The Nature Conservancy (3) ....................................... $568,960
Brook trout rely on clean, cold streams throughout the Great Lakes basin.
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<thead>
<tr>
<th>Organization</th>
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<td>Douglas County Land and Water Conservation Department</td>
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<td>Ducks Unlimited</td>
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<td>Lakeshore Natural Resource Partnership</td>
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<td>Manitowoc Parks and Recreation Department</td>
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<td>Milwaukee Community Service Corps</td>
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<td>River Revitalization Foundation</td>
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<td>University of Wisconsin-Green Bay</td>
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<td>Multiple states Stewardship Network, IL/IN/MI/Oh/ON/WI</td>
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<td>Field Museum of Natural History, IL/IN</td>
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Friends of the Forest Preserves, IL/IN (1) .................................................. $500,000
Izaak Walton League of America, IL/IN/MI/MN/NY/OH/PA/WI (2) .................. $90,000
Lake County Forest Preserve District, IL/WI (2) ........................................ $1,271,346
Blue Heron Ministries, IN/MI (1) .............................................................. $200,000
IPM Institute of North America, IN/MI/OH (1) ........................................... $233,974
The Nature Conservancy, MI/OH (2) ................................................................. $1,679,349
River Alliance of Wisconsin, MI/WI (2) ....................................................... $4,383,495
Minnesota Land Trust, MN/WI (1) .............................................................. $159,504
Bird Studies Canada, NY/ON (1) ............................................................... $41,530

Bayfield, Wisconsin and Basswood Island on Lake Superior. Photo by Todd Hogrefe/NFWF

NFWF CONTACTS

Todd Hogrefe, Great Lakes Program Director
todd.hogrefe@nfwf.org
612-564-7286

Caroline Oswald, Great Lakes Program Manager
caroline.oswald@nfwf.org
612-564-7253

PARTNERS

ArcelorMittal
U.S. Environmental Protection Agency

U.S. Fish and Wildlife Service

U.S.D.A. Forest Service

National Oceanic and Atmospheric Administration

U.S.D.A. Natural Resources Conservation Service
This report is a publication of the Sustain Our Great Lakes (SOGL) program, a collaboration of the National Fish and Wildlife Foundation, ArcelorMittal, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S.D.A. Forest Service, the National Oceanic and Atmospheric Administration, and the U.S.D.A. Natural Resources Conservation Service. To learn more about the program, please go to www.sustainourgreatlakes.org.