

Northwest Indiana (NWI) Urban Waters Partnership – 2019 Work Plan with 2018 Accomplishments

Executive Summary

Since 2011, the Northwest Indiana (NWI) Urban Waters Partnership has been working to protect, restore, and revitalize urban waterways in Lake, Porter, and LaPorte counties. Co-led by the US Forest Service (USFS), National Park Service (NPS) and US Environmental Protection Agency (USEPA), the Partnership includes more than 70 federal, state, and local partners (Appendix A). 2018 was a great year for the NWI Urban Waters Partnership as many years of hard work on key initiatives came to fruition! Highlights include:



NWI residents and visitors enjoy Lake Michigan at Indiana Dunes National Park.

- Local partners secured over \$2 million in grants, demonstrating their increased capacity to successfully obtain funding for key water initiatives.
- More than 2,000 trees were planted and maintained through the CommuniTree Program.
- Three new canoe/kayak launches were installed on waterways across NWI, bringing the total to eight, six of which are fully accessible.
- Over 4,500 students and residents paddled and learned about local waterways as part of educational programs featuring Canoemobile.
- NWI partner, Nicole Messacar received the Urban Waters Learning Network Expert Award for Environmental Education for her Trail Creek education work.
- Partners made substantial progress addressing beneficial use impairments in the Grand Calumet River AOC, including habitat restoration at Jeorse Park Beach.

Developed with input from NWI Urban Waters partners, this work plan highlights key projects that advance Urban Waters goals in Northwest Indiana, including those directly initiated by Urban Waters, as well as those driven by local partners with Urban Waters playing a supporting role. It also identifies tasks for moving existing and new initiatives forward in 2019. In 2019, NWI Urban Waters partners will build on past successes to sustain and enhance existing programs while fostering new initiatives to improve NWI communities and waterways. Contact Jennifer Birchfield at jbirchfield@pnw.edu with suggestions or requests for assistance.

Urban Waters - NWI Partnership Background

Since 2011, the Urban Waters- NWI partnership has been working to protect, restore, and revitalize urban waterways in Lake, Porter, and LaPorte counties. NWI was one of the original Urban Waters Federal Partnership locations and follows the national guiding principles: working to promote clean urban waters and to reconnect people to their waterways. NWI Urban Waters partners work together to build organizational capacities, strengthen existing water-related projects, and spur new initiatives to address challenges.

NWI Urban Waters is 70 Partners Strong!

Co-led by the US Forest Service (USFS), National Park Service (NPS), and US Environmental Protection Agency (USEPA), the NWI Urban Waters Partnership includes more than 70 nonprofit organizations, community groups, and local, state and federal government agencies (Appendix A).

The NWI Urban Waters partnership pursues the following primary goals:

- **Coordinate among partners**, including local, state, federal, and regional agencies and organizations to promote collaboration and reduce duplicative efforts.
- **Increase organizational capacities** by assisting with project design and implementation, identifying potential funding sources, and seeking expert advice.
- **Foster open and timely communications** by sending monthly e-newsletters with project updates, funding opportunities, partnership meetings, local events, and useful resources.
- **Assess how federal partners can provide support**, including technical assistance.
- **Promote efforts to engage residents** of all ages in educational, recreational, and volunteer activities that foster connections to – and stewardship of – local waterways.



NWI Urban Waters partners collaborate on a variety of initiatives to protect and restore our urban waterways.

Left: Volunteers plant one of more 2,000 native trees planted in 2018 through the CommuniTree program.

Center: USACE and partners restored habitat, one of many partner efforts to improve Jeorse Park Beach, once but no longer, among the most polluted beaches in the country.

Right: Students paddle on their local waterways as part of Canoemobile educational experiences, which served over 4,500 students and residents in 2018.

NWI Partnership 2018 Accomplishments and 2019 Tasks

Funding

2018 Accomplishments: Local Urban Waters partners secured grants totaling over \$2 million. Federal partners provided direct assistance in preparing proposals that secured over \$400,000. (These estimates are conservative and do not include the substantial in-kind and cash match leveraged by partners.) Funds benefited more than 15 communities throughout the NWI region. This increase in grant funding from previous years reflects years of Urban Waters effort to communicate opportunities and priorities, increase organizational capacities, and encourage higher quality grant applications. NPS, USEPA, and USFS were able to secure agency funds to support local priority projects, such as Canoemobile and habitat restoration in the Deep River Watershed.

2019 Tasks: Urban Waters will continue to share information about funding opportunities and help partners develop strong projects and successful proposals. Urban Waters will convene working groups address funding opportunities that require cross-organization collaboration. Urban Waters partners will support the work of the Calumet Collaborative to develop additional grant database tools.

Communication

2018 Accomplishments: The Ambassador compiled and distributed a monthly e-newsletter (plus special alerts as needed). The subscriber list grew to 425. Full partnership meetings were held quarterly, and the federal partners met once. In 2018, Urban Waters convened a series of meetings between university faculty and Urban Waters partners to encourage improved collaboration on research and student engagement. Several partners participated in regular Urban Waters national calls. At the request of several local partners, a local Natural Resource Conservation Service (NRCS) representative attended a quarterly partnership meeting and described NRCS funding opportunities.



Attendance at NWI Urban Waters quarterly meetings continued to grow in 2018.

2019 Tasks: Urban Waters will continue to facilitate communication among partners through monthly e-newsletters and quarterly partnership meetings. Partners will continue working to increase engagement with the NRCS as technical advisors for local projects. The university conservation partners group will meet as needed. The Partnership will continue to participate in Urban Waters national calls and assist with specific tasks as needed.

CommuniTree and Urban Forestry

2018 Accomplishments: Over 2,000 trees were planted by many partners through the CommuniTree program, an outgrowth of NWI Urban Waters with significant support from USFS. Communities planted nearly 800 trees and received training through a grant program administered by the Northwestern Indiana Regional Planning Commission (NIRPC). Young adults from NWI gained valuable urban forestry skills, working to plant and maintain 1,200 trees with the help of hundreds of local volunteers as part of the Student Conservation Association (SCA) Calumet Tree Conservation Corps. Nearly 400 volunteers contributed over 1,000 hours of service. Wildlife Habitat Council planted hundreds of trees on industrial lands with the help of industry employees and volunteers.

NWI partners also received trees through the Indiana Department of Natural Resources (IDNR) Community and Urban Forestry (CUF) program. CommuniTree organized a series of free workshops to increase urban forestry capacity and expertise in NWI. Lindsay Darling, Chicago Region Trees Initiative GIS and Data Specialist presented a tree Inventory workshop, and Carrie Tausher, IDNR CUF Coordinator, presented a tree ordinance workshop.



The SCA Crew helps volunteers plant a tree.



Participants practice using tree inventory software as part of a CommuniTree workshop.

I couldn't have asked for a more impactful and prodigious 8 months of my life. From working with future conservationists in the elementary schools, to local politicians...from industry veterans, to every day local citizens...the work the crew, the leaders, the locals, and the volunteers made will have a ripple effect for decades, if not a century.

-Bre'shaun Spikes, SCA Crew Leader

2019 Tasks: Tree planting will continue through NIRPC's CommuniTree grants, the SCA Calumet Tree Conservation Corps, and Wildlife Habitat Council. NWI Urban Waters partners will continue to seek sustainable funding for the CommuniTree program. Urban Waters partners will help recruit volunteers, especially through universities. Two Purdue University Northwest (PNW) interns will work to increase community engagement. Partners will work with IDNR CUF to host a Tree Steward program in NWI and coordinate additional learning opportunities. USFS will assist stakeholders in developing a CommuniTree work plan. The group will explore interest in IDNR's Tree Campus program with local universities.

Public Access

2018 Accomplishments: Dozens of partners continued to implement NIRPC'S Greenways/Blueways plan and increase access to waterways across NWI. Partners are opening the East Branch of the Little Calumet (EBLC) River to paddling after decades of limited access. Three canoe/kayak launches were installed on local waterways, including two on the EBLC and one on Deep River.



Partners celebrate the opening of an ADA-compliant canoe/kayak launch on Deep River, funded by the Legacy Foundation and others.

Many Urban Waters partners, including DLC, LaPorte County SWCD, NPS, and the Northwest Indiana Paddling Association (NWIPA) utilize the launches to provide water recreation programs, such as Canoemobile and regular public paddles on area waterways.

2019 Tasks: Urban Waters will continue to assist partners in implementing NIRPC'S Greenways/Blueways plan and to increase public access to urban waterways across NWI. A canoe/kayak launch is planned on the EBLC in the Indiana Dunes National Park at DLC'S campus. Partners will also work to install several priority launches on other waterways, including Deep River and Trail Creek.



NPS hosts regular sunset paddles on Marquette Park lagoons.

Northwest Indiana's Urban Waters Are for Everyone!

Since 2011 eight canoe/kayak launches have been installed on five waterways throughout Northwest Indiana, six of which are ADA-compliant.

Urban Waters, NPS, and other partners will work to provide American Canoe Association certification training for local paddlesport facilitators. Additional training opportunities will be provided to ensure NPS and partners can maximize use of the new launches and the Canoemobile hub. Partners will also work to identify and communicate priority locations for non-motorized boat launches. The LMCP will work with partners to develop an Indiana Coastal Communities Natural Area ADA Assessment. Urban Waters will work with partners to assess and meet the needs for other accessibility projects.

Watershed Education and Canoemobile

2018 Accomplishments: 2018 marked the sixth year of Wilderness Inquiry's Canoemobile in NWI. More than 4,500 students and residents experienced their urban waters from the seat of a 24-foot voyageur canoe. Dunes Learning Center (DLC) incorporates Canoemobile into their watershed education experiences, and LaPorte County Soil and Water Conservation District (SWCD) incorporates Canoemobile into Trail Creek Week and Kankakee River Days. Many partners worked to secure funding, coordinate logistics, and provide environmental education stations on topics such as fisheries, urban forestry, water safety, and more. NPS and USEPA provided partial funding for Canoemobile. The Michigan City High School Environmental Restoration Team, an outgrowth of the Trail Creek Week, continued restoration efforts at Hansen Park, including invasive species removal and native plantings in a swale.



Students paddle on Deep River.



USEPA Biologist, Peg Donnelley helps students assess Trail Creek water quality.

Many other partners provided water-related education to local youth and residents. For example, about 9,500 students participated in Porter County SWCD educational programs. Izaak Walton League Porter County Chapter sponsored several family nature nights at various Porter County elementary schools, engaged volunteers in citizen science through the Save Our Streams water testing program, and provided educational booths at local events. The Lake Michigan Coastal Program (LMCP) coordinated Coastal Awareness Month in June, featuring 70 events hosted by 26 organizations, including many Urban Waters partners. Urban Waters partners also participated in several educational events and festivals, such as the Hobart Water Festival. Illinois-Indiana Sea Grant and partners developed the Master Watershed Steward program, which will recruit and train volunteers for local efforts. Several Urban Waters partners contributed to curriculum development and planning.

2019 Tasks: Urban Waters will continue to contribute land-based educational stations and support partners in seeking sustainable funding for Canoemobile. Wilderness Inquiry will continue working with partners to establish a permanent Canoemobile hub to serve southern Lake Michigan with funding from NPS. Partners will support the City of Gary in efforts to increase nature connection for youth through stewardship as part of their Cities Connecting Children to Nature project. NWI Urban Waters will continue to work with Illinois-Indiana Sea Grant to recruit participants and pilot the Master Watershed Steward program in 2019.

Watershed Management Planning and Implementation



Efforts to protect and improve waterways in Northwest Indiana are generally led by local watershed groups with Urban Waters performing a supporting role. For example, NRCS provided nearly \$200,000 in 2018 for water quality protection in Porter County.

Map of Northwest Indiana watersheds.

DEEP RIVER WATERSHED PARTNERSHIP:

2018 Accomplishments: The Deep River Watershed Partnership, coordinated by NIRPC, installed two ravine stabilizations and a vegetated swale through their IDEM 319 cost-share program, conducted outreach, and completed an engineering feasibility study on modification of the Deep River dam. The City of Hobart continued work five green infrastructure projects funded through GLRI.

2019 Tasks: Urban Waters will continue to support implementation of the Deep River Watershed Management Plan, installation of green infrastructure, and improved public access to Deep River. The City of Hobart will seek funding to install an outdoor learning center and to complete a green infrastructure master plan. Partners will support efforts to modify the Deep River dam following the recommendations of the feasibility study. Lake County Parks will convert a 40-acre agricultural field to grassland with funding from USEPA.



A rain garden installed in the City of Hobart.

EAST BRANCH OF THE LITTLE CALUMET RIVER (EBLC):



Porter County Izaak Walton League opened the Carol Cook Wetland Overlook, a new unit of the Little Calumet Conservation Area.

2018 Accomplishments: Partners, including DLC, NPS, NWIPA, Save the Dunes, and Shirley Heinze Land Trust (SHLT) continued collaborating to protect and restore the EBLC and to promote paddling access. In 2018 the partners installed two canoe/kayak launches. Porter County IWLA continued wetland restoration at their Frame Property, purchased the McCloskey ravines property, and partnered with a Boy Scout troop to build an observation platform at the Carol Cook Wetland Overlook. SHLT and partners developed a strategy for protecting and restoring of wetlands along the EBLC.

2019 Tasks: Partners will continue to collaborate on a Chi-Cal Rivers Fund project to protect and restore the EBLC River and promote paddling access. Urban Waters will continue to support the implementation of the EBLC River Watershed Management Plan, the Salt Creek Watershed Management Plan, the River Use and Management Plan for the EBLC, the Wetland Protection and Restoration Strategy, and other efforts as requested by partners. SHLT will continue to acquire and restore land along the corridor and to explore a partnership with ACOE to further restoration efforts.

TRAIL CREEK WATERSHED PARTNERSHIP (TCWP):

2018 Accomplishments: The TCWP connected hundreds of youth to Trail Creek as part of the Trail Creek Week, Kankakee River Days, and the Michigan City High School (MCHS) Environmental Restoration Team, described under ‘Canoemobile and Watershed Education’ above. LaPorte County SWCD Education Coordinator, Nicole Messacar received the Urban Waters Learning Network Expert Award for Environmental Education. The award came with a scholarship to attend River Rally in California and professional graphic design consulting services.



Nicole Messacar accepts the Urban Waters Learning Network Expert Award for Environmental Education.

Michigan City finalized its 2040 comprehensive plan, and the TCWP provided input on sections relevant to Trail Creek. The Michigan City Department of Parks and Recreation completed a demonstration project at Winding Creek cove, including streambank stabilization, a bioswale, and a launch/fishing pad

featuring permeable pavers. The Michigan City Sanitary District and Alliance for the Great Lakes began convening a Storm Water Advisory Group (SWAG) to better inform stormwater management efforts; several Urban Waters partners participate in the group. The SWAG worked to recommend a green stormwater streets policy for Michigan City. Michigan City Sanitary District also worked with the Alliance for the Great Lakes to plan for the Cheney Run Wetland project to infiltrate and treat water before it enters Trail Creek and develop a land acquisition strategy to acquire land for stormwater management, conservation, and recreation.

2019 Tasks: Partners will continue to support implementation of the Trail Creek Watershed Management Plan as requested by the TCWP. Urban Waters will continue to participate in the SWAG and support partners in finalizing the design and securing the funding for the Cheney Run Wetland project and implementing the land acquisition strategy.

WEST BRANCH OF THE LITTLE CALUMET RIVER AND GRAND CALUMET RIVER:



USFWS Biologist Dan Sparks helps students examine fish and other wildlife near the Grand Calumet River. Photo courtesy of Diana Mally/EPA.

2018 Accomplishments: The City of Gary continued planning and engagement for the Gary Green Infrastructure Plan. USGS continued conducting real-time monitoring in the Grand Calumet River and studying the water quality impacts of a rain garden at Gary City Hall. Local partners have long expressed concern that the official Watershed Boundary Dataset (WBD) has inaccurate

boundaries for some NWI waterways – which could have important ramifications for management efforts and project funding eligibility. In 2018 the Indiana Geographic Information Council (IGIC) obtained a LMCP grant to correct the WBD.

2019 Tasks: The City of Gary’s Green Infrastructure/Watershed Management Team will continue to implement and update the Little Calumet River West Branch Watershed Management Plan and to explore developing a watershed management plan for the Grand Calumet River. The Gary Green Infrastructure Plan will be completed in early 2019. Urban Waters partners will work with the City of Gary on a LMCP-funded project to provide green infrastructure maintenance training to municipal staff. IGIC will work with stakeholders and contractors to correct the WBD in NWI in 2019. Urban Waters will help IGIC connect to appropriate partners and stakeholders.

Septic System Maintenance and Care Awareness

2018 Accomplishments: The Indiana DNR Lake Michigan Coastal Program (LMCP) obtained a Section 319 Grant. Through this grant, the LMCP in partnership with the Septic System Coordination Work Group (SSCWG) and others performed mapping of septic systems in the Coastal Region in partnership with NIRPC; coordinated the Good Neighbor: Neighborhood Ambassador Program, a septic system maintenance outreach and education initiative in partnership with Save the Dunes; and began preliminary work on molecular source tracking research in partnership with Indiana University Northwest. Additionally, the LMCP continued to coordinate SSCWG and 319 Grant Advisory Committee meetings throughout the year. In September, the LMCP facilitated and participated in SepticSmart Week with the help of partners across the Coastal Region.



The Northwest Indiana for Healthy Septic Systems logo developed by Save the Dunes, LMCP, and partners.

2019 Tasks: The LMCP and partners will continue work on septic system outreach and education and molecular source tracking. The Neighborhood Ambassador Program will launch in early 2019, and will enlist the help of representatives from 20 neighborhoods in the Coastal Region in an effort to raise awareness about septic system maintenance and related water quality issues. This program is of particular importance for the completion of the LMCP's 6217 Nonpoint Source Pollution Program, the success of which has important implications for not only the LMCP, but statewide.

Grand Calumet River Area of Concern (AOC)

2018 Accomplishments: Federal, state, and local partners continue to restore ecosystems and address the 12 remaining beneficial use impairments (BUIs) applicable to the Grand Calumet River AOC. Indiana Department of Environmental Management (IDEM) and the Citizens Advisory for the Remediation of the Environment (CARE) held three public learning sessions about the AOC Program and convened eight CARE Workgroup meetings, which as of July, were open to the public.

IDEM developed, and USEPA accepted, a list of sediment management projects anticipated to result in removal of six BUIs impacting the AOC. The US Army Corps of Engineers (USACE) dredged 162,592 cubic yards of sediment from the Indiana Harbor Ship Canal. Project partners worked to complete a Great Lakes Legacy Act project agreement required to dredge and cap portions of the Lake George Branch, as well as preliminary design work for an East Branch, Phase II Sediment Management Project.

Project partners continued to implement the habitat management actions anticipated to lead to removal of two BUIs impacting the AOC. This included the Dune, Swale, and GLLA Wetland Restoration Project, the Lake George Branch Wetlands Project, and the prescribed fire project, which will collectively restore nearly 1,000 acres of critical habitat by 2021.

Partners continued work to address high bacteria levels and improve habitat at Jeorse Park Beach in East Chicago. USACE and partners completed most of the planting and habitat construction for a restoration that will improve habitat and reduce nonpoint source pollution. Modeling results shared by Michigan State University and USACE experts led partners, including USGS, to study ways to *E. coli* concentrations without modifying the shoreline. To control bacteria levels, IDEM expanded a USEPA-funded gull exclusion project to Whiting beaches and implemented additional best management practices at the Hammond and Whiting beaches.

2019 Tasks: Urban Waters will continue to support restoration along the Grand Calumet River and help promote community engagement efforts such as an annual stewardship day and CARE public learning sessions. IDEM and CARE will draft management actions to address the remaining BUIs, including Beach Closures. Up to 250,000 additional cubic yards of sediment are expected to be dredged from the Indiana Harbor Ship Canal (IHSC) in 2019. Initial project work is expected to begin on the Lake George Branch of the IHSC between the BP land bridge and Indianapolis Boulevard. Project partners will continue to implement the habitat projects listed in the AOC habitat management action list and work to plan and develop the remaining sediment projects listed in the AOC sediment management action list. USACE and partners will finalize planting and habitat construction at Jeorse Park and the monitoring and maintenance. Urban Waters will continue to help partners identify and implement best practices to restore habitat and improve water quality at Jeorse Park and other AOC beaches.



Habitat Restoration at Jeorse Park Beach completed by USACE and other partners.

Appendix A. Northwest Indiana Urban Waters Partners as of 2018.

Federal Partners	State, Local, and Regional Government
<p>Corporation for National and Community Service U. S. Department of Agriculture -U. S. Forest Service -Natural Resource Conservation Service U. S. Department of Housing and Urban Development U.S. Department of Interior - Bureau of Reclamation - Fish and Wildlife Service - U.S. Geological Survey - National Park Service U. S. Department of Transportation U. S. Department of Commerce - Economic Development Administration - National Oceanic and Atmospheric Administration - National Weather Service U. S. Department of Defense - Army Corps of Engineers U. S. Department of Homeland Security - Federal Emergency Management Agency U. S. Environmental Protection Agency</p>	<p>Indiana Department of Environmental Management Indiana Department of Health Indiana Department of Natural Resources - Community and Urban Forestry - Lake Michigan Coastal Program City of East Chicago City of Gary City of Hammond City of Hobart City of Michigan City City of Valparaiso/Valparaiso City Utilities Indiana Dunes Tourism Lake County Health Department LaPorte County Parks and Recreation LaPorte County Soil & Water Conservation District Porter County Soil & Water Conservation District Northwestern Indiana Regional Planning Commission Porter County Health Department Porter County Parks and Recreation Town of Chesterton/ Stormwater Utility Town of Highland Town of Lake Station Town of Munster Town of Merrillville</p>
<p>Alliance for the Great Lakes Association for the Wolf Lake Initiative Audubon Society Blue Green Alliance Cardno Chicago Wilderness Coffee Creek Watershed Conservancy Davey Resource Group Delta Institute Dunes Learning Center Gaylord & Dorothy Donnelley Foundation Graf Tree Care Haas and Associates Engineering Hodge Tree Care Illinois-Indiana Sea Grant Indiana Geological Information Council Indiana University Northwest Izaak Walton League of America Legacy Foundation</p>	<p>Miller Spotlight National Parks Conservation Association Northwest Indiana Forum Northwest Indiana Paddling Association Northwest Indiana Public Service Company Northwest Indiana Steelheaders Openlands Purdue University/ Purdue University Northwest Save the Dunes Shedd Aquarium Shirley Heinze Land Trust Student Conservation Association Gabis Arboretum The Field Museum The Nature Conservancy Unity Foundation Wilderness Inquiry Wildlife Habitat Council</p>