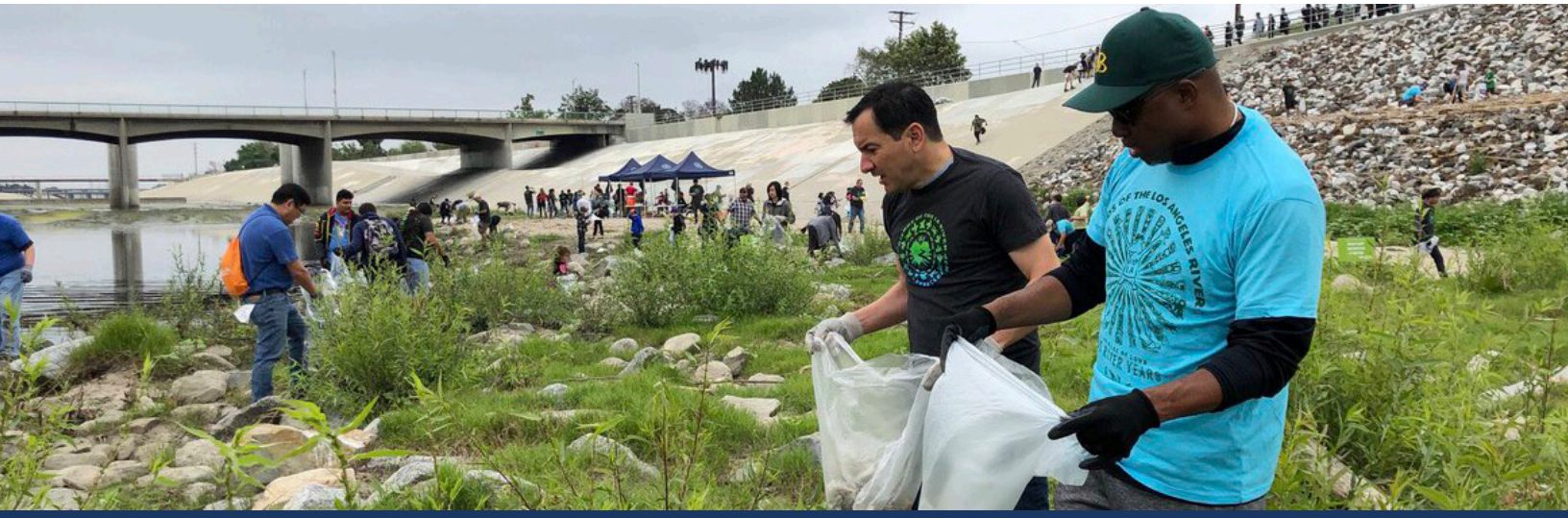
URBANWATERS

FEDERAL PARTNERSHIP

Restoring Urban Waters, Revitalizing Communities



Program Progress Report

EPA 840-R-21-001

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Introduction

On behalf of the 15 federal agencies in the Urban Waters Federal Partnership, it is an honor to share this Progress Report that highlights recent accomplishments of the national Urban Waters Program. The Urban Waters Program was established in 2011 to strengthen underserved communities' connection to their local water resources and to improve the quality of those water resources. Since then, the program has grown from a handful of pilot locations and federal partners to a robust program with 20 formal locations, 15 federal agencies and a strong network of hundreds of external partners.

The Urban Waters Program is a locally-driven, partnership-based program that connects communities to their vital waterways while supporting the goals and objectives of the Clean Water Act. This voluntary program facilitates collaboration across public and private sector organizations in boldly innovative ways to bring together the best ideas, leverage all available resources and achieve the strongest public health, environmental, economic, cultural and recreational outcomes on a local scale, where people can engage with and experience the benefits of their urban waterways.

The Urban Waters Program has the distinction of being the nation's first multi-agency partnership engaging communities at the confluence of underserved groups and diminished local waterbodies. By convening federal, state and local partners and leveraging a wide variety of resources, the program provides a highly effective and efficient way to meet Clean Water Act goals in local, urban settings. By connecting people with their vital waterways, this program facilitates an increased connection and understanding of the role and value of waterways for all communities.

I want to thank all of the federal, local, state, academic and non-profit partners and the community leaders in each partnership location who were so instrumental in achieving the successes of the past year. I look forward to even greater success in the years to come!

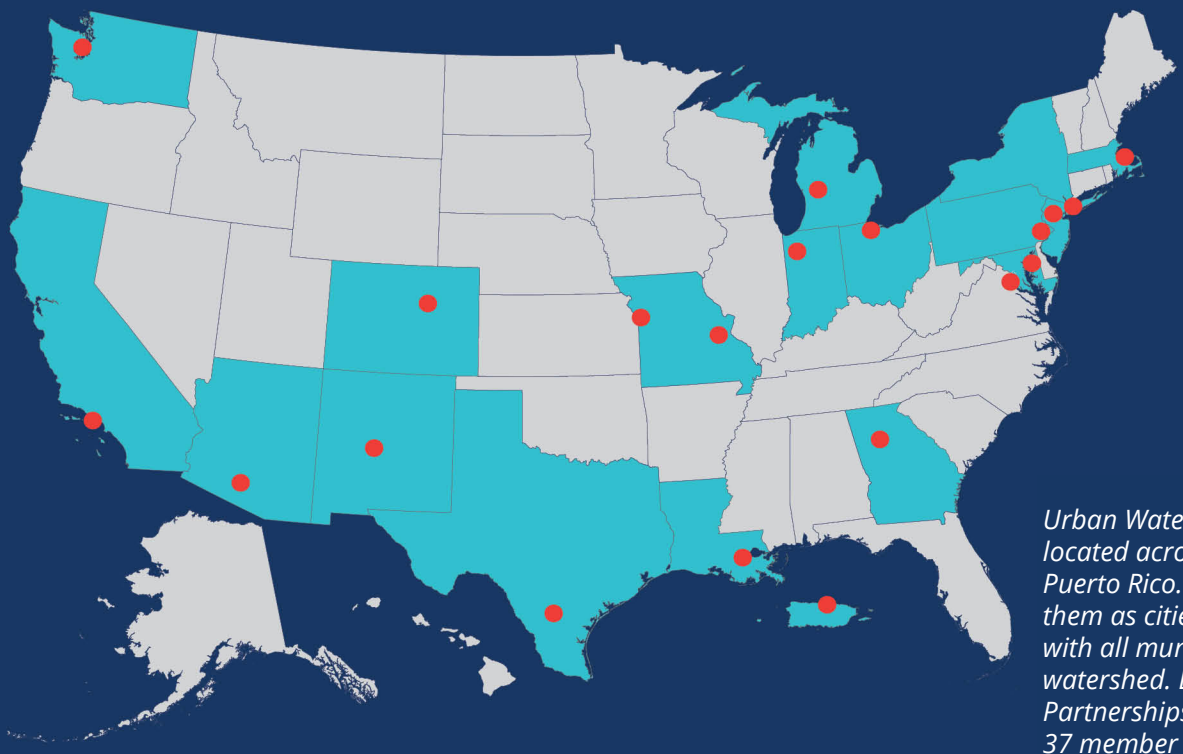
John Goodin, Deputy Assistant Administrator for Policy, Office of Water

U.S. Environmental Protection Agency

EPA United States Environmental Protection Agency

Program Results and Impact

This Progress Report summarizes the accomplishments and significant milestones of the Urban Waters Program (UW Program) working in 20 urban locations across the country.



Urban Waters Partnerships are located across the country and Puerto Rico. While this map shows them as cities, Partnerships work with all municipalities in their watershed. Local Urban Waters Partnerships have an average of 37 member organizations from diverse sectors.

The UW Program:

Funded Five Star and Urban Waters Restoration Grants

Funded watershed projects that engaged more than **30,000 volunteers** across over **270 organizations,** implementing dozens of projects across the country, which resulted in over **10,000 trees** and **20,000 marsh plants**, seeds and native grasses planted, preventing over **500,000 gallons of stormwater** from entering waterbodies.

Leveraged Funds

Urban Waters secured more than **$33 million** in grants and federal funding for projects across the country.

Facilitated Information Exchange through the Urban Waters Learning Network

More than **580 members** in the online network connected to share best practices through seven webinars, five newsletters and **700 website visitors** per month.

Achieved Watershed Improvements

Partnership locations removed **258,000 cubic yards** of contaminated sediment and soil from rivers and sites, installed **50,000 square feet** of bioswale and rain gardens and restored **155 acres of marshes**, wetlands and fields.

Environmental Results Snapshot

Data compiled below is not comprehensive of all Urban Waters 2019 activities and ongoing projects at the 20 locations. It is reflective of completed projects listed in this report. Data from projects in the initiation or planning phase are not included below.

In the past year alone, Urban Waters Locations:

Reached

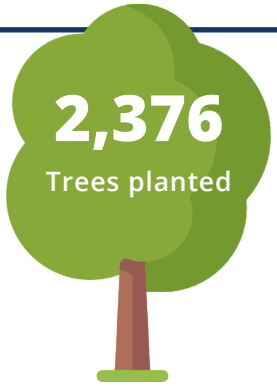
164,349 community members through education outreach events and campaigns

Removed

258,000 cubic yards of contaminated sediment and soil from rivers and sites

Installed

50,000 square feet of bioswale and rain gardens



Collected

23,139 pounds of trash and 106 pounds of recycling

150 water quality samples

Engaged

3,550 volunteers and participants at Urban Waters events

<40 new local partners in Urban Waters partners

Identified

>75 watershed-wide management recommendations

Hosted

69 community workshops

Restored

155 acres of marshes, wetlands and fields

Site Awards

Anacostia River Watershed (DC) – River Network's River Hero Award was presented to watershed leader, Dennis Chestnut

Green-Duwamish Watershed/Seattle (WA) – River Network's River Hero Award was presented to James Rasmussen

Greater Philadelphia/ Delaware River Watershed (PA, NJ, DE) - Delaware River Watershed Initiative was awarded the American Water Resources Association Integrated Water Resources Management Award

Proctor Creek Watershed/ Atlanta (GA) - West Atlanta Watershed Alliance received the Atlanta Magazine's 2019 Groundbreaker Award

Report Cards

Partners at several Urban Waters locations evaluated the well-being of their watersheds and the productivity of local efforts by creating report cards:

Middle Blue River
Anacostia River
San Antonio River Basin
Mystic River
Los Angeles County Rivers
Delaware River State of the Basin Report

These report cards mark a significant evaluation trend that may be a model for other locations in the future. Report card results will help develop a roadmap and workplan for collaborative actions to improve the Partnership watersheds and encourage partners and the community to engage in issues that affect them.

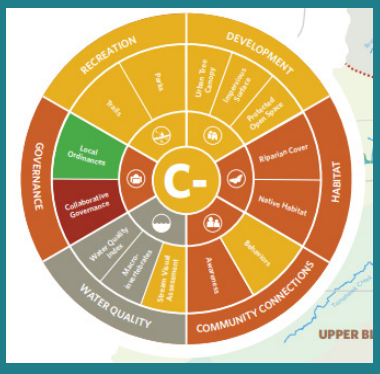


Photo credit: 2019 Blue River Report Card

Progress at the 20 Locations

Partnership locations featured in this section are organized by regional geographic location:

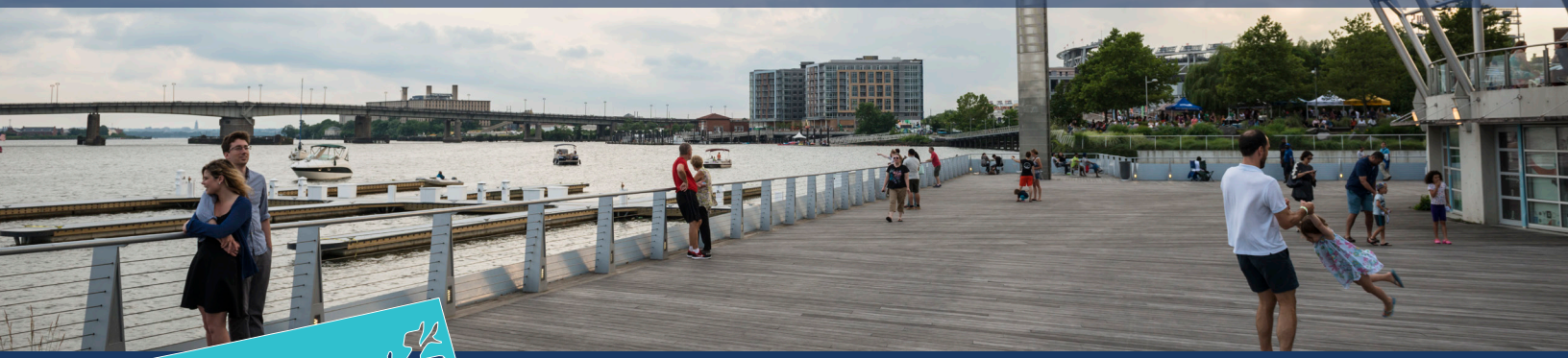
Northeast
- Anacostia Watershed Partnership - District of Columbia/Maryland
- Bronx and Harlem River Watersheds - New York
- Delaware River Watershed Partnership - Greater Philadelphia / Delaware / New Jersey
- Lower Passaic River Partnership - Northeastern New Jersey
- Mystic River Partnership - Greater Boston, Massachusetts
- Patapsco Watershed Partnership - Baltimore, Maryland

South
- Caño Martín Peña Partnership - San Juan, Puerto Rico
- Lake Pontchartrain Area Partnership - New Orleans, Louisiana
- Proctor Creek Watershed Partnership - Atlanta, Georgia
- San Antonio River Basin Partnership - San Antonio, Texas

Mid-west
- Grand River Partnership - Grand Rapids, Michigan
- Meramac and Big River Partnership - Near St. Louis, Missouri
- Middle Blue River Partnership - Kansas City, Missouri / Kansas
- Northwest Indiana Partnership
- Western Lake Erie Basin Partnership - Near Toledo, Ohio

West
- Green-Dumwamish Watershed Partnership - Seattle, Washington
- Los Angeles River Watershed Partnership - Los Angeles, California
- Middle Rio Grande Partnership - Albuquerque, New Mexico
- Rio Reimagined – Salt and Middle Gila River Watershed Partnership
- South Platte Watershed Partnership - Denver, Colorado

Anacostia Watershed Partnership District of Columbia/Maryland



Federal Leads:

Ambassador:

Erin Garnass-Holmes, Clean Water Fund

Total partner organizations:

125

Partnership Highlight

Partners accomplished an important milestone in cleanup plans for the Anacostia River, with the release of the District Department of Energy and Environmental (DOEE) Proposed Plan for the Anacostia River Sediment Project. The Proposed Plan looks at an 815-acre study area and is part of a process that will make the 9-mile tidal portion of the river and two other bodies of water safer for human and environmental health.

Key Projects

- Built new cohort of more than 20 programming partners, including the National Reentry Network for Returning Citizens. The cohort participated in six capacity-building workshops – that each attracted over 200 people – to explore how Anacostia Park programming can best support underserved residents.
- Managing a water quality monitoring program engaging 40 volunteers in monitoring dissolved oxygen, temperature and conductivity, and reaching 500 community members through forums and sharing monitoring data results.
- Managing a new Anacostia River Pool project including improving water quality; design, engineering or planning studies exploring where and how a swimming or wading facility would be possible; community engagement around pertinent restoration issues.

The Anacostia River watershed is home to 43 species of fish, some 200 species of birds and more than 800,000 people.

Bronx and Harlem River Watersheds New York

Federal Leads:

Ambassador:

Sara Powell, Natural Areas Conservancy

Total partner organizations:

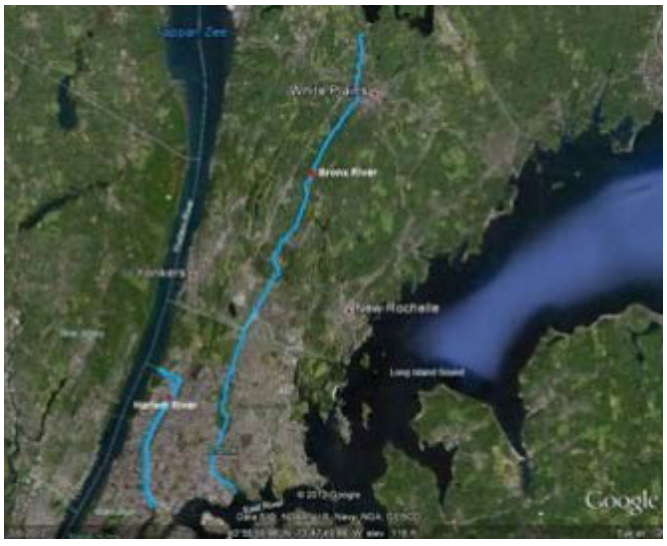
33

Partnership Highlight

The New York City Parks, a key partner, released a draft Harlem River Watershed and Natural Resources Management Plan. The plan included 14 strategies, 75 watershed-wide management recommendations, and 98 site-specific recommended actions for ecological restoration, water quality improvement, and enhanced access to the Bronx side of the Harlem River. The Plan is intended as a road map for agencies, community partners, and other stakeholders in pursuing coordinated resource protection and restoration in the watershed. The final plan will be published in both English and Spanish in 2020.

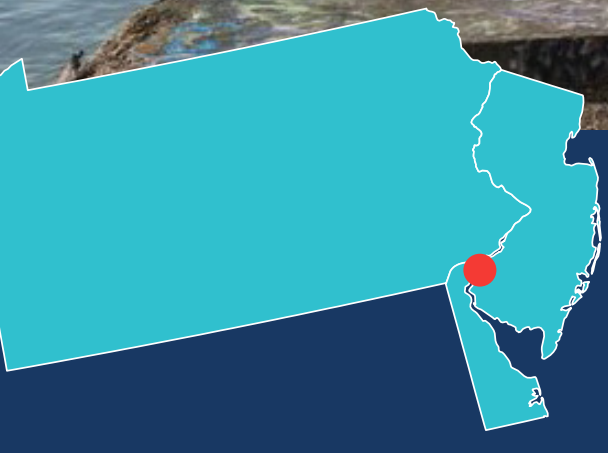
Key Projects

- Providing water and sediment quality monitoring in support of planning for a new 5-acre park on the Harlem River, which will be designed and constructed using more than $5.6 million in public funds.
- Leveraging nearly $60 million in improvements to Starlight Park on the Bronx River including the construction of three new pedestrian bridges. Efforts increased the size of the park by 11 acres, and closed a key 2/3-mile gap on the Bronx River Greenway.



The Harlem River separates the island of Manhattan from the Bronx, and connects the Hudson River and East River/Long Island Sound, while the Bronx River originates in upper Westchester County and runs through the heart of the Bronx.

Delaware River Watershed Partnership Greater Philadelphia, Pennsylvania, Delaware, and New Jersey



Federal Leads:

Ambassador:

Emily Baumbach, Partnership for the Delaware Estuary

Total partner organizations:

112

Partnership Highlight

The Urban Waters Partnership teamed with the City of Wilmington to begin the construction of the South Wilmington Wetlands Park. Funded by a nearly $3 million grant from the National Fish and Wildlife Foundation (NFWF) and National Oceanic and Atmospheric Administration (NOAA), the wetlands park will reduce flooding to the area, restore 14 acres of degraded wetlands, enhance coastal resiliency and create a new park for the community. Phase 1 construction removed 90,000 cubic yards of soil from the site.

Key Projects

- Reconnecting residents of the Waterfront South neighborhood with the Delaware River Waterfront by transforming a 5.3-acre Brownfield site, now Phoenix Park, into a park stormwater buffer that manages over 5 million gallons of water.
- Leveraged state grants of $1 million to revitalize Philadelphia's 6-acre Graffiti Pier into a waterfront public park.

The Delaware is the longest undammed river in the United States east of the Mississippi, extending 330 miles from Upstate New York to the mouth of the Delaware Bay.

Lower Passaic River Partnership
Northeastern New Jersey

Federal Leads:

US Army Corps of Engineers.

Ambassador:

Elizabeth Balladares, NY/NJ Harbor and Estuary Program

Total partner organizations:

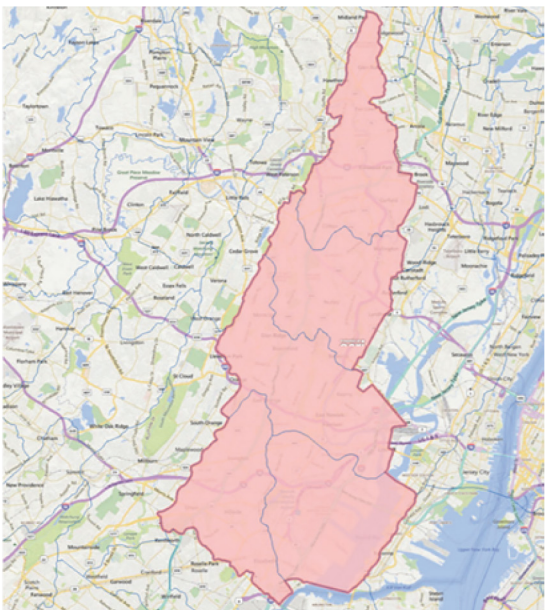
29

Partnership Highlight

The NY-NJ Harbor & Estuary Program (HEP) provided the city of Passaic with a grant to hold a series of stewardship events focused on the Passaic River and Dundee Island Park, a riverfront park. The stewardship events included a shoreline litter clean up, kayaking excursions on the river and a fishing training program. The Partnership was also directly involved in incorporating HEP's "Stopping Trash Where It Starts" initiative of reducing single use plastics into the stewardship events by providing participants with informational materials on the harmful effects of floatables and single use plastics and encouraging them to sign a plastic free pledge.

Key Projects

- Javier Laureano, U.S. EPA Region 2 Water Division Director, led a Partnership boat tour attended by 25 stakeholders representing federal, state, and nongovernmental organizations. For the first time on the river, stakeholders convened to discuss the status of the river and review major Urban Waters projects including:
  - The Diamond Alkali Superfund Site
  - The Minish and Passaic Tidal Project
  - The Dundee Island Park Expansions and Recreation Project and the future of public housing on the waterfront
- Worked with U.S. Department of Agriculture Forest Service Urban Field Station to assess stewardship attitudes and interests in the community.



The Passaic River's lower reach is a 17-mile tidal stretch from Dundee Dam in Garfield, New Jersey, to Newark Bay.

Mystic River Partnership Greater Boston, Massachusetts

Federal Lead:

Ambassador:

Darya Mattes, Groundwork Somerville

Total partner organizations:

44

Partnership Highlight

Building off of the Mystic River Watershed Eutrophication Analysis, members of the Partnership led five in-person meetings with watershed communities to discuss nutrient reduction strategies, including stormwater management retrofit programs. Following the project, the town of Arlington, built 11 small-scale infiltration trenches. The trenches are estimated to remove 35% of the total phosphorus loading from the contributing drainage area. The town plans to build an additional 18 systems and will work with the Mystic River Watershed Association to sustain projects in the future.

Key Projects

- Advancing water quality-focused stormwater management programs in the watershed, based on evidence that stormwater runoff is a major source of nutrient pollution in the Mystic River and its tributaries.
- U.S. EPA provided technical assistance to examine local development ordinances in six communities, resulting in actions to advance requirements related to stormwater runoff and quality. Together, the six communities cover approximately one-fourth of the watershed. They are home to over a quarter million people, and are estimated to collectively serve over 100,000 residents in the Mystic River Watershed, one of the most densely populated watersheds in New England.

The Mystic River Watershed is a collection of rivers, streams, lakes, and ponds that drain an area of approximately 76 square miles and 21 municipalities north of Boston.

Patapsco Watershed Partnership
Baltimore, Maryland

Agency Leads:

Ambassador:

University of Maryland

Total partner organizations:

30

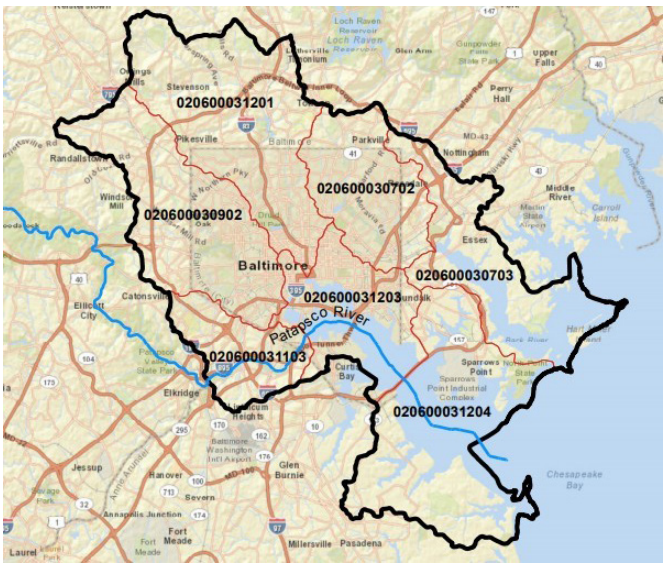
Partnership Highlight

With funding from the USDA Forest Service, the Green Resources and Outreach for Watersheds (GROW) Center events, pop-ups and workshops were visited by 695 participants, representing over 100 neighborhoods in Baltimore. 376 trees and over 39 cubic yards of mulch were given away, over $2,000 worth of native plants and 121 recycling bins were sold and 16 workshops on community greening and stormwater management were offered. The GROW Centers were a natural outgrowth of the Partnership's Green Pattern Book, a resource of strategies to help green Baltimore's vacant lands, improve water quality and implement stormwater solutions.

Key Projects

- Re-greening hundreds of vacant lots into parks, vegetable gardens and raingardens to address stormwater contamination of city rivers, community flooding and community beautification, for a total of more than 800 community managed open spaces in Baltimore.

- Facilitating the Actionable Science Flood Team, establishing a new, broad network of organizations to address the increasing frequency and severity of flooding in central Maryland. The team is working to enhance collaboration between researchers and practitioners while educating policy makers and the public about the flooding issues the area faces.



The Patapsco River flows to the Baltimore City Harbor and ultimately into the Chesapeake Bay. The watershed includes Maryland's largest population area of approximately 650,000 people.

Caño Martín Peña Partnership San Juan, Puerto Rico

Agency Lead:

Ambassador:

Ingrid Vila, San Juan Bay Estuary

Total partner organizations:

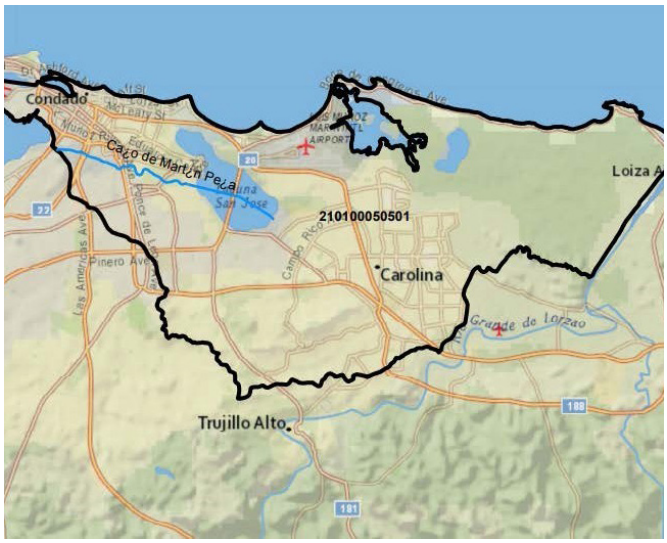
30

Partnership Highlight

The Partnership played a key role in addressing the community's needs after Hurricanes Irma and María, providing effective coordination with the Federal Emergency Management Agency and other partners. In 2018, the newly-launched Urban Waters Program Relief Efforts allowed the Partnership to expand its post-hurricane support to create short- and medium-term restoration plans in specific communities identified within the 97 square miles of the urban estuarine ecosystem known as San Juan Bay Estuary in Puerto Rico.

Key Projects

- Working with the U.S. Army Corps of Engineers and other federal, state and local partners to implement the Caño Martín Peña Ecosystem Restoration Project. The project includes rebuilding road infrastructure, relocating residents to safer housing and dredging the channel to a width of 100 feet to restore the natural hydraulic connection between the San José Lagoon and the San Juan Bay, which has been eliminated through years of backfilling, sedimentation and other factors.
- Designing a baseball field using green infrastructure to serve as water detention during community flooding events, funded by State Revolving Fund grants.
- Developing a stormwater management plan for the Caño Martin Peña District using green infrastructure in combination with grey infrastructure.



The Caño Martín Peña is a 3.75-mile long tidal channel at the heart of Puerto Rico's capital city of San Juan. It is part of the San Juan Bay Estuary, the only tropical and non-continental estuary within the National Estuary Program. 26,000 people live adjacent to the channel, 60.7% of which live below the poverty line.

Lake Pontchartrain Area Partnership New Orleans, Louisiana

Federal Leads:

Ambassador:

Rochelle Cole (ORISE) - interim
U.S. EPA, Gulf of Mexico Division

Total partner organizations:

43

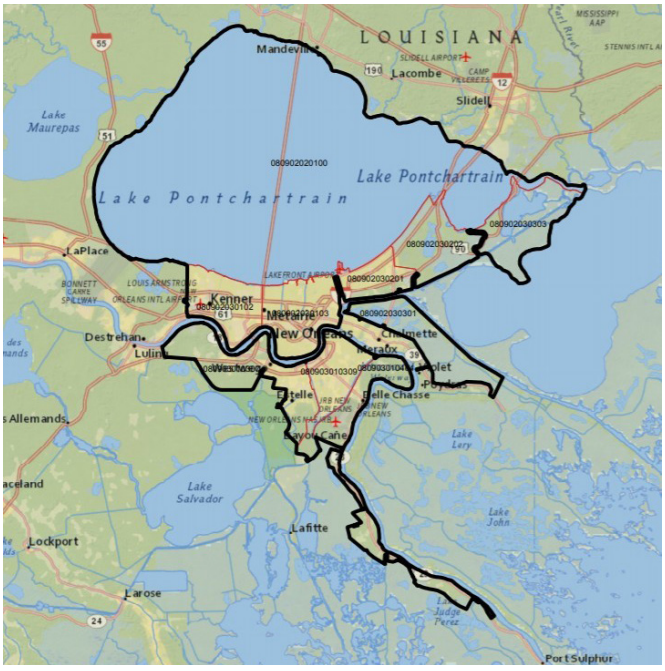
Partnership Highlight

For the first time, the Pontchartrain Conservancy deployed samplers to collect cyanobacterial-specific sampling and utilize newly developed EPA and NOAA satellite technologies (CyAN). The Conservancy collected and analyzed 148 samples over the course of June through September from both recreational and beach locations, as well as targeted boat sample locations. LSU's College of the Coast & Environment analyzed the samples for nutrients and microcystin and found that the water met the EPA recreational water quality criteria.

Key Projects

- Restoring Coastal Wetlands in Big Branch Marsh National Wildlife Refuge (BBMNWR) is a three-year project to reestablish 325 acres of marshlands with 100,000 plugs of California bulrush, and nourish maritime forests with a combination of 1,000 Sand Oaks and Live Oaks in BBMNWR.

- The Sankofa Wetland Park and Nature Trail entails the implementation of a 40-acre wetland park that increase storm water storage capacity, with the development of bald cypress and water tupelo habitat and approximately 8 million gallons of bioretention ponds. The project is located in the Lower 9th Ward of New Orleans and increases the migratory and native bird species utilizing the habitat.



At over 40 miles wide, Lake Pontchartrain is the second largest inland saltwater body in the United States.

Proctor Creek Watershed Partnership
Atlanta, Georgia

Federal Lead:

Ambassador:

Darryl Haddock, West Atlanta Watershed Alliance

Total partner organizations:

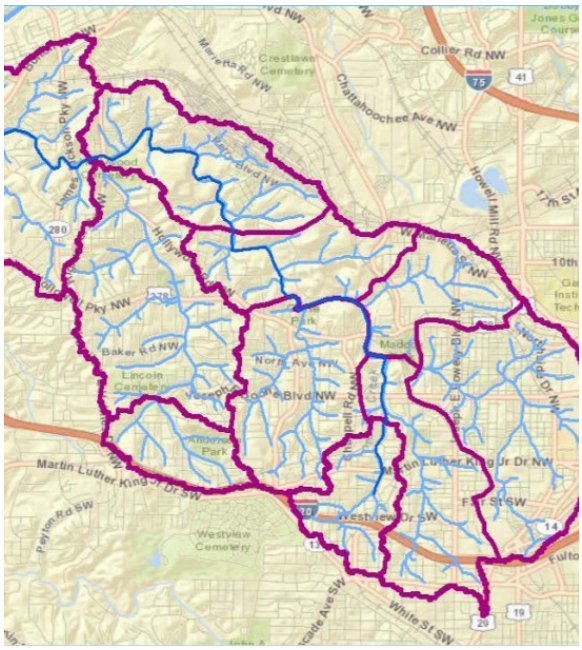
39

Partnership Highlight

The Partnership worked with Coca-Cola, the City of Atlanta, and the National Recreation and Park Association to secure five Litter Gitters and one Bandalong Litter Trap for the watershed, which collected a total of 198 pounds of trash and 106 pounds of recyclables to date. The traps are expected to collect and reduce 80% of downstream litter in the creek. See this video on the kickoff event for the trap installation.

Key Projects

- Partners U.S. Army Corps of Engineers, Mobile District and the City of Atlanta approved the recommended plan of a three-year, joint-funded feasibility study for aquatic ecosystem restoration in the Proctor Creek watershed. The plan proposes to restore 44 acres.
- Atlanta welcomed its newest green space, a 4.5-acre site that offers dramatic views of the city's skyline in a part of town that was in dire need of public green space. The groups involved signed a memorandum of understanding pledging to transform the area into a public green space and maintain it for years to come.
- Collected i-Tree Suite report data outlining estimated economic and environmental benefits to the watershed for community and developer sustainable development.
- Monitoring plan completed for Proctor Creek to provide water quality data to the city of Atlanta and the state of Georgia by collecting baseline dry and wet weather data and fish tissue data which will be used to clean up the creek.



The Proctor Creek watershed covers about 28 square miles in SW Atlanta and flows up to the Chattahoochee River.

San Antonio River Basin Partnership
San Antonio, Texas

Federal Leads:

USGS science for a changing world

Ambassador:

Julio Beltran, U.S. Geological Survey

Total partner organizations:

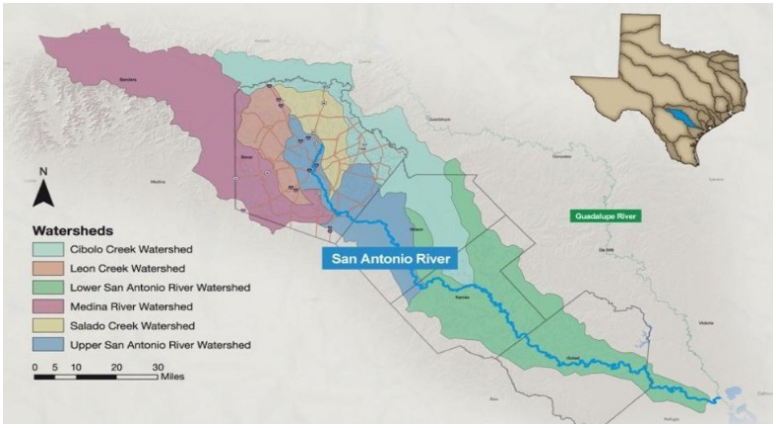
56

Partnership Highlight

USGS and EPA led Partnership efforts to partially fund the city of San Antonio's Ozone Attainment Program, since high levels of smog have the potential to negatively impact San Antonio's water quality. The Partnership has supported outreach to local communities and solicited input on the city of San Antonio's Ozone Attainment Master Plan. The plan sets forth actions to achieve EPA's ozone attainment standard of 70 parts per billion by December 2020.

Key Projects

- Published a Pre-Disaster Toolkit for Small- to Medium-Sized Communities based on seven local workshops led by EPA Region 6 across Texas that extracted and identified best practices from Hurricane Harvey response efforts.
- Leading the Mission Reach Ecosystem Restoration and Recreation project to transform an 8-mile stretch of the San Antonio River and restore significant ecological functions and values to a section of the river that had been converted to a channel for flood control.
- Tracking 201 different species of birds, some of which are endangered, through an aviary survey. Efforts support the Migratory Bird Treaty Act.



The San Antonio River Basin extends through 15 counties in south Texas. The San Antonio River, with its headwaters in Bexar County, is the basin's major river flowing 240 miles to San Antonio Bay and the Gulf of Mexico.

Grand River Partnership Grand Rapids, Michigan

Federal Leads:

Ambassador:

Matt Chapman, Grand Rapids White Water

Total partner organizations:

33

Partnership Highlight

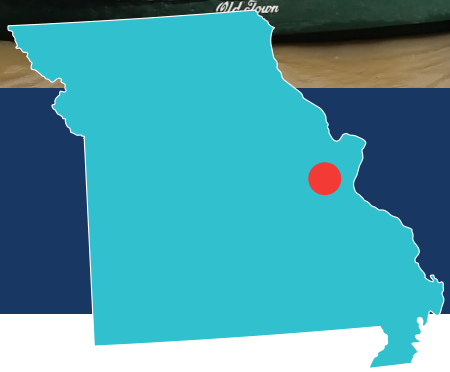
The Grand River is undergoing a major legacy conservation effort to restore 127 acres of its urban waters. The project is estimated to have a robust economic impact of $15-19 million annually, bring more than 500,000 visitors to the river per year and create 80-100 new jobs. Grand Rapids Whitewater, the lead Partnership organization, secured $4.4 million in new public and foundation funding for the its restoration efforts of the Grand River.

Key Projects

- Engaged over 2,600 residents through 40 community presentations to provide feedback on how they would like to connect with and use the river area in the future.
- NFWF Urban Waters grant allowed for 60 residential rainscaping site assessments and installation of bioswales and rain gardens, involving 22 partners, and over 200 volunteers.
- Students installed approximately 50,000 square feet of bioswale and rain gardens in the Plaster Creek and Grand River watersheds.
- Students and residents helped propagate 50,000 native plants to be used in green infrastructure installations.
- Provided maintenance on 12 acres of green infrastructure.
- Reducing bacterial and nutrient contamination, as well as addressing flooding issues due to more frequent and larger storm events.

The Grand River is the longest river in Michigan, flowing over 250 miles before emptying into Lake Michigan. The River runs through the city of Grand Rapids, which was named for the natural rapids located in the heart of the downtown area.

Meramec and Big River Partnership Southwest of St. Louis, Missouri



Federal Lead:

Ambassador:

Mary Grace Lewandowski, East-West Gateway Council of Governments

Total partner organizations:

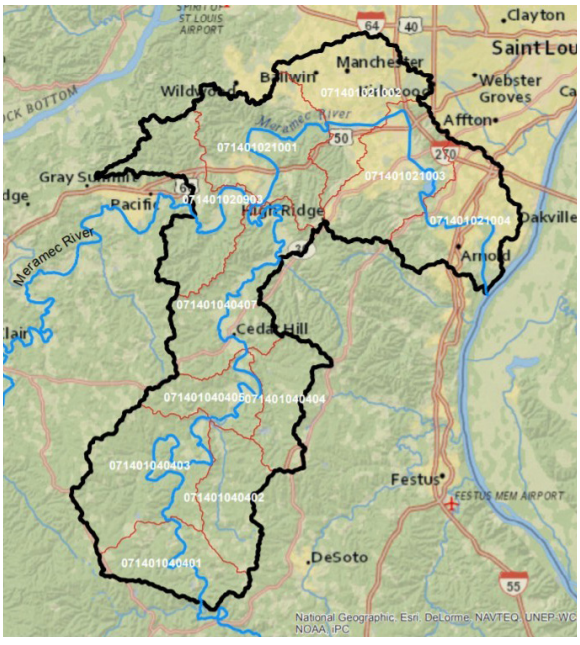
28

Partnership Highlight

U.S. EPA jointly worked with the St. Louis District and plans to continue coordination with the District in the Meramec River Basin Ecosystem Restoration Project. The ecosystem restoration project is a joint federal/state/the Nature Conservancy partnership co-funded for $2.38 million by the U.S. Army Corps of Engineers and Missouri Department of Natural Resources, providing planning through design, and ultimately construction of a cost-effective project that will protect, enhance, and restore the degraded aquatic ecosystem within the Meramec River Basin. The Agency Recommended Plan will restore approximately 1,600 acres of aquatic and riparian habitat in the Meramec River Basin at a total project cost of approximately $92.5 million.

Key Projects

- Facilitating technical input to assist the completion of the U.S. EPA Superfund treatability study along five locations on the Big River.
- Natural Resource Damage Assessment and Restoration Trustees from the U.S. Fish and Wildlife Service and Missouri Department of Natural Resources, U.S. EPA and the U.S. Army Corps of Engineers secured $24 million for bank stabilization and riparian corridor restoration.
- USACE hosted a Paddle Your Parks event with 225 fourth-graders at George Winter Park in Fenton, Missouri to learn about water quality issues.



The Meramec River is one of the longest free flowing rivers in Missouri and contains nationally significant ecological resources. The Meramec flows for over 220 miles before emptying into the Mississippi River.

Middle Blue River Partnership Kansas City, Missouri

Federal Lead:

Ambassador:

Jill Erickson, Heartland Conservation Alliance

Total partner organizations:

38

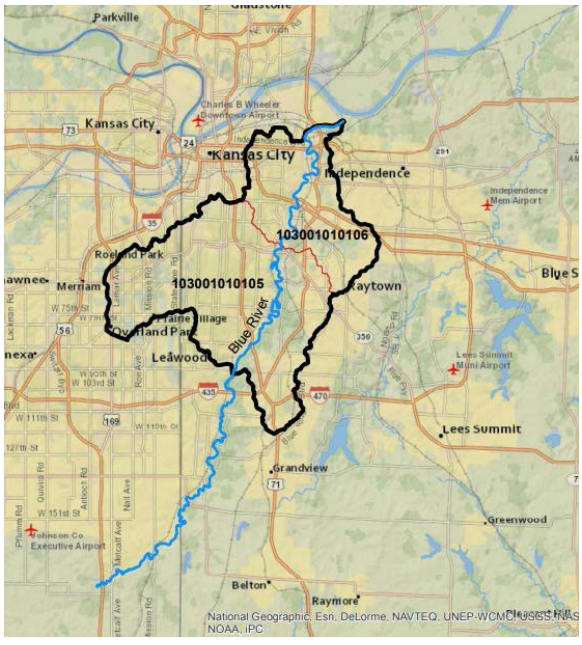
Partnership Highlight

The partnership leveraged an EPA Urban Waters Small Grant to catalyze restoration and action on roughly 18 acres of land in six action areas along the Blue River.

Through $1.2 million in funding from federal, state and local entities, the partnership restored 23 acres of wetland habitat and engaged 150 people at five community days at its Municipal Farm site and reached more than 152,000 with its Renew The Blue campaign.

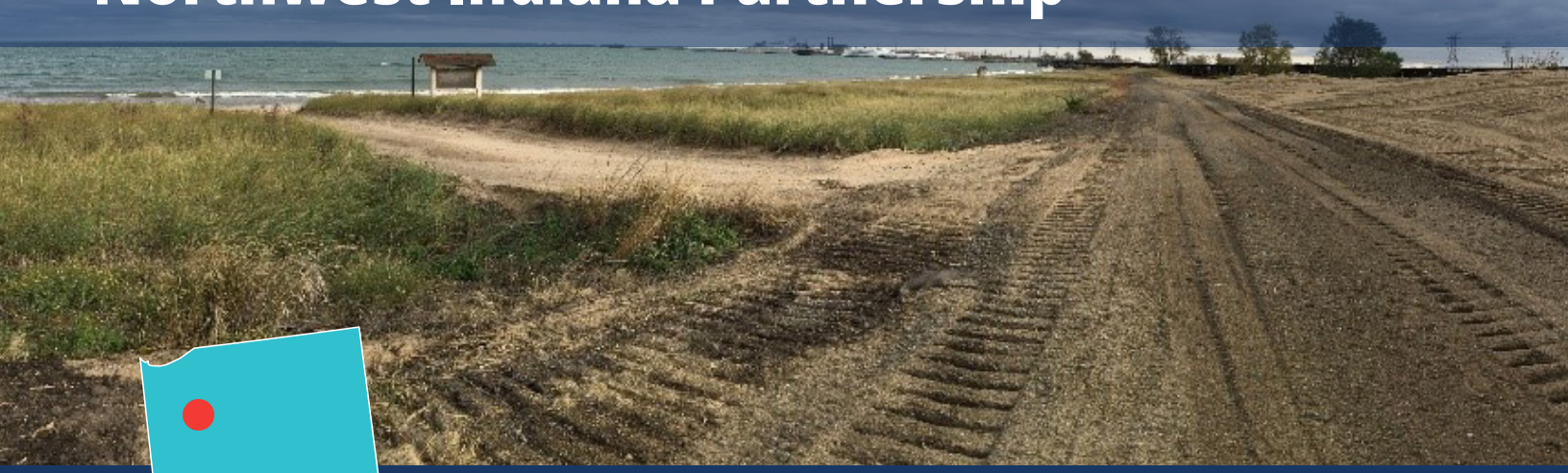
Key Projects

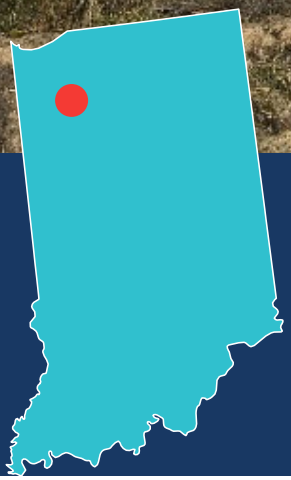
- Published the first Blue River Report Card with six indicators to determine the overall health of the river: community connection, development, governance, habitat, recreation and water quality. The river received a passing grade in its first report card evaluation.
- Graduated 50 trained stewards from four underserved communities through the Green Guard Stewardship program.
- Created a Blue River documentary including personal stories about the threats and benefits of protecting the Blue River.



Approximately 200,000 people call the Middle Blue watershed home, with that population only expected to increase.

Northwest Indiana Partnership





Federal Leads:

Ambassador:

Jennifer Birchfield, Purdue University

Total partner organizations:

70

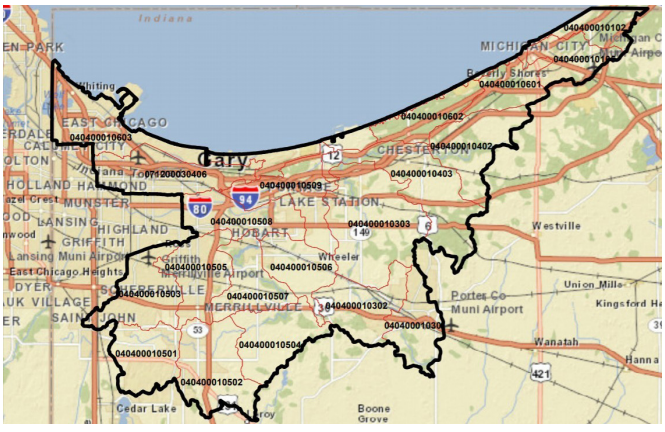
Partnership Highlight

The Partnership made significant accomplishments related to land revitalization.

- **Along Trail Creek, 24 acres of a former unregulated dump site were remediated.**
- **Near Deep River, 40 acres of farmland were converted to native grasslands to improve water quality.**
- **Along the shore of Lake Michigan, at Jeorse Park Beach, 16 acres of dune and swale habitat were restored and beach best management practices are being implemented to improve water quality.**

Key Projects

- Local partners secured nearly $3 million in grants to advance green infrastructure and streambank stabilization projects that will restore urban waters and revitalize communities.
- 168,000 cubic yards of contaminated sediment was dredged and removed from the Grand Calumet River.
- CommuniTree worked with more than 500 volunteers to plant over 2,000 trees in 10 low-income communities.
- More than 6,000 students and residents learned about local waterways and natural resources as part of partner's watershed education programs, which featured paddling with Canoemobile.



The Northwest Indiana Urban Waters Partnership region contains more than 1,200 miles of waterways, 45 miles of Lake Michigan shoreline, and over 15,000 acres of National Park land with globally rare dune and swale habitat and a range of threatened and endangered species.

Western Lake Erie Basin Partnership Near Toledo, Ohio

Federal Leads:

US Army Corps of Engineers.

USDA

Ambassador:

American Rivers

Total partner organizations:

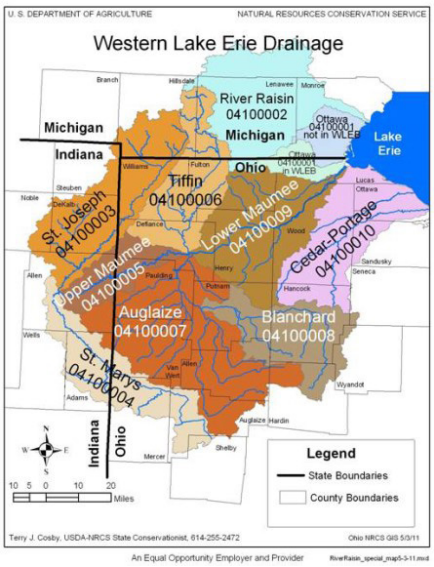
48

Partnership Highlight

With education and youth engagement as a main focus: 13 partners were able to offer four days of educational programming at three parks in the Toledo area. More than 300 people completed monitoring of Toledo area streams and entered 10 years of historical data into a new water quality database.

Key Projects

- Funding from Urban Waters grants and the cooperation of local partners helped to accomplish the following:
- The Junction Community developed an urban greening plan, implemented green infrastructure installations, and is connected to the Partnership through grant research and communication channels.
- Successful stream cleanup events hosted 1,165 volunteers and collected 22,941 pounds of trash in the Toledo area.
- Outreach events helped educate 3,249 local residents on issues and potential solutions in the Maumee River watershed.



The Western Lake Erie Basin (WLEB) is almost 6 million acres in size. The basin drains portions of 29 counties into the shallow western third of Lake Erie and is home to over two million citizens.

Green-Dumwamish Watershed Partnership Seattle, Washington

Federal Leads:

Ambassador:

Weston Brinkley, Street Sounds Ecology, LLC

Total partner organizations:

50

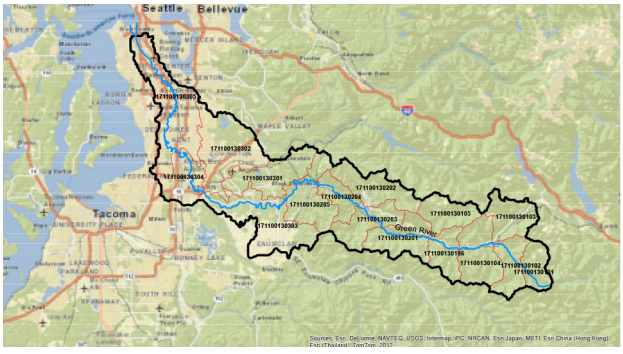
Partnership Highlight

At 45.4 acres, the largest potential site to restore shallow-water estuarine habitat on the Duwamish River is the Desimone Oxbow. Seattle University students were engaged to evaluate how green infrastructure can support salmon population recovery in the Duwamish River at the Desimone Oxbow.

The team developed three conceptual design alternatives for redevelopment, each addressing the need for shallow-water tidally inundated habitat, with two of the three designs incorporating commercial development. They also produced a summary of estuarine habitat restoration on the Duwamish containing a variety of vital factors to successful redevelopment.

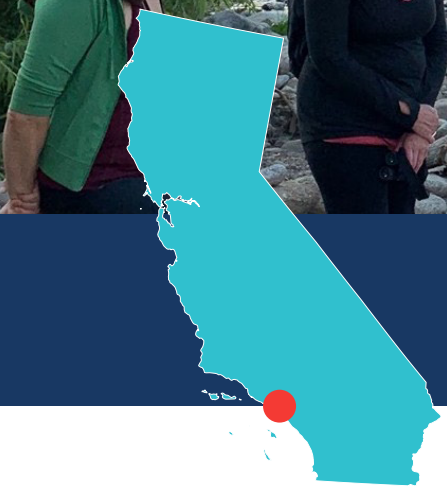
Key Projects

- Implementation of a communications strategy with local Green the Green network to organize revegetation efforts in the Lower Green River.
- Riparian Restoration Return on Investment study with American Rivers to analyze the impact that floodplain restoration projects have on property values.
- Conducted a community led air quality monitoring project, using trees and moss as air quality indicators. More than 60 moss samples from street trees were prepared for laboratory analysis, which are being analyzed for 29 different heavy metals as an indicator of air pollution.



The Green-Duwamish Watershed flows for over 93 miles beginning at the crest of the Cascade Mountains ending as it empties into Elliott Bay in downtown Seattle.

Los Angeles River Watershed Partnership
Los Angeles, California



Federal Leads:

Ambassador:

Justin Yee, National Park Service

Total partner organizations:

46

Partnership Highlight

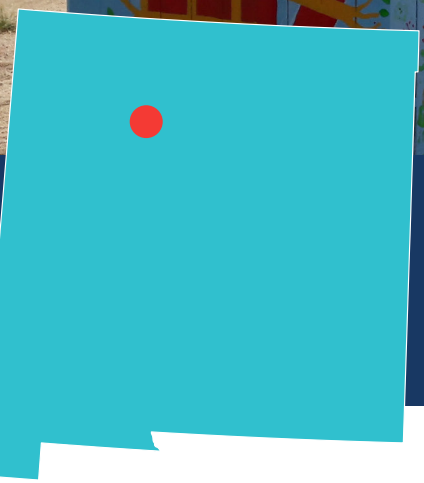
Released in 2019 and initiated by the Partnership, the U.S. Bureau of Reclamation (BoR) study on improving ecosystem services demonstrates how the riverbed of urban channels can be redesigned to provide improved habitat and fish passage. Several non- governmental partners assisted with the research study, through multiple Partnership meetings, and the BoR received valuable feedback and direction, including important parameters on species and design features. Following release of the study, Los Angeles River stakeholders received a grant to develop partial designs for a reach that includes the pilot site for this study.

Key Projects

- U.S. Department of Agriculture – Forest Service and Loyola Marymount University released the LA River StewMAP survey to better connect potential volunteers, agencies, donors and stewardship groups to convene action around watershed goals.
- Developed designs and secured brownfields remediation funding for transformation of the City's 42-acre parcel along the river called Taylor Yard G2 River Park Project.
- Finalized a strategic plan titled "Pathway to Parks & Affordable Housing Joint Development."

The Los Angeles River flows from its headwaters in the Angeles National forest to the Pacific Ocean in Long Beach. Fifty-one miles long, the river covers 870 square miles of watershed and winds through 14 cities.

Middle Rio Grande Partnership
Albuquerque, New Mexico



Federal Leads:

Ambassador:

Shelby Stimson, The Nature Conservancy

Total partner organizations:

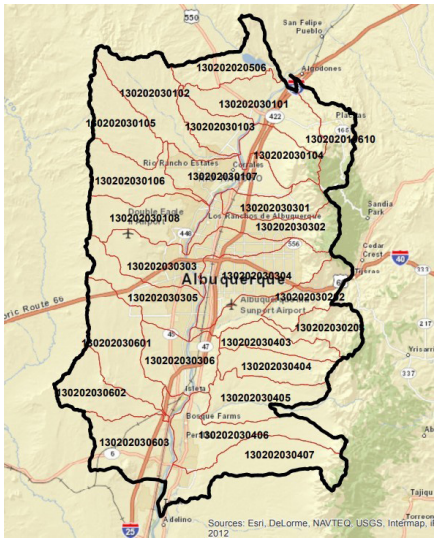
30

Partnership Highlight

Multiple Urban Waters partners completed the construction and grand opening of Albuquerque's first "Mobile Pop-up Park". This project transformed a vacant lot into a community green space with native trees and plants, benches and shade structure, sculpture art and mural walls, and rainwater catchment storage on site. The park was built to be transportable and a replicable model for other underserved communities. The location of the park was chosen to prioritize a low-income area, with the highest population density and only 3% tree canopy and green space, suffering extreme heat island

Key Projects

- Bernalillo County was awarded the $220,000 grant which will be used to install green stormwater infrastructure and low impact landscaping along recreational trails at the Valle de Oro Urban Wildlife Refuge.
- The 10-acre South Valley Health Commons site will provide a platform for five new businesses focused on health and wellness. The project also aids in stormwater management by utilizing an existing 2.5-acre storm drainage pond for an orchard with walking trails. The project promotes water conservation and building material reuse.



The Rio Grande is over 1,900 miles long, running from its headwaters in the San Juan Mountains near Creede, Colorado, and flowing into the Gulf of Mexico.

Rio Reimagined – Salt and Middle Gila River Watershed Partnership

Federal Leads:

Ambassador:

Arizona State University (interim)

Total partner organizations:

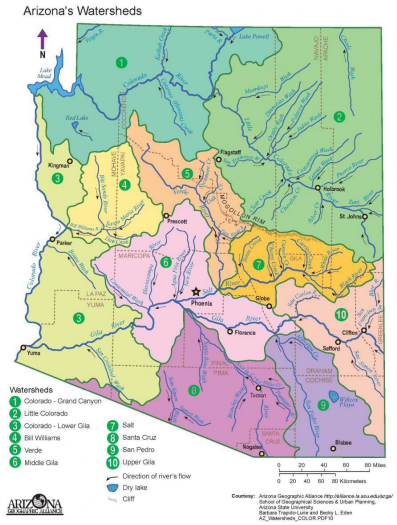
89

Partnership Highlight

In conjunction with the USACE, the Salt River Pima-Maricopa Indian Community, and the city of Mesa, the ecosystem restoration and recreation project for the approximate 14-mile reach of the Salt River would consist of approximately 5.1 miles of multi-use trails, parking lots, rest stops and interpretive signs. Implementing the plan would restore and improve approximately 1,485 acres of habitat, including 880 acres of cottonwood/willow community, 380 acres of mesquite bosque, 200 acres of wetlands, and 25 acres of Sonoran desert scrub. Additionally, about 2,600 acres of existing cover type would be improved through invasive species control. This plan would support endangered and special species recovery, improve water quality, and restore greater ecological balance in the project area.

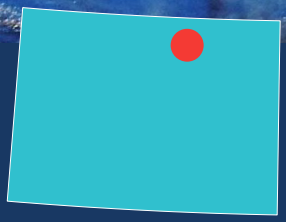
Key Projects

- Tempe Town Lake, Arizona's second-most visited public attraction, has a Master Plan with 12 zones for design, recreation and entertainment improvements with a cost of construction estimated at a total of $381 million. The success of the lake is inspiring other revitalization efforts in the river corridor.
- The Tres Rios Environmental Restoration Partnership Highlight project involves the rehabilitation of nearly 700 acres in and around the Salt River, restoring a vital wetland and riparian habitat.
- Maricopa County (MC) is updating its multi- jurisdictional Hazard Mitigation Plan, and in December 2019 EPA, FEMA, city of Phoenix, city of Tempe, and MC Flood Control District held a planning workshop to understand local jurisdictional needs. The County is using this information to update the multi-jurisdictional Hazard Mitigation Plan that is slated for release in 2020.



The Salt River and Middle Gila River Watershed includes 58 miles along both the Salt and Gila Rivers, with its headwaters from three larger watersheds: the Salt which starts west of Alpine, AZ; the Upper Gila which starts east of Baldy Mountain in New Mexico; and the San Pedro which starts in Mexico.

South Platte Watershed Partnership
Denver, Colorado



Federal Leads:

Ambassador:

Sam Haas, Peak Facilitation Group

Total partner organizations:

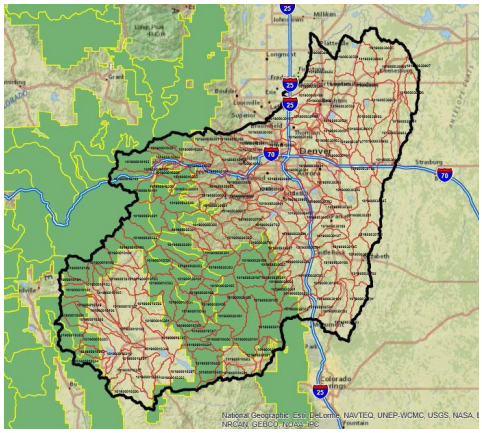
83

Partnership Highlight

The South Platte River Urban Waters Partnership funded a critical update to its local Water Quality Assessment Tool, shifting from a static platform to one that will continually update, pulling data from the Water Quality Portal. The tool provides both context and direct access to cross- jurisdictional water quality data for the Denver metro area and shows a snapshot of conditions for water quality parameters, including E. coli, contaminants of emerging concern, total dissolved solids, total suspended solids, selenium and nutrients. The tool makes water quality data easily accessible to the public, including teachers who use this data for classroom learning, and provides storylines that assist the public in taking action to improve water quality. The Partnership's Science and Data Committee is collaborating with water utilities, state, city and county entities, nonprofit organizations, academic partners and three Urban Waters Federal Partnership agencies on the project.

Key Projects

- Leveraging Urban Waters funding with U.S. Geological Survey, U.S. EPA, city county, district and private secotr funds to complete a longitudinal study of the South Platte for orthophosphate.
- Conducting the Sun Valley Green Infrastructure Study — a groundbreaking study of four different alternatives for managing stormwater that demonstrated the cost effectiveness of green infrastructure through looking at capital and 20-year maintenance cost.
- Developing a professional development unit (PDU) focused on water education. PDUs are action-learning courses designed for Denver Public School teachers for topics of student need, and this would package together a choice of tours, trainings, etc., that could improve teachers' practice when it comes to teaching students about water and engaging students on locally relevant water issues. Implementation of this course will empower students to take on critical water challenges and contribute to community discourse and decision-making regarding solutions to water issues.



The South Platte River is one of the two principal tributaries of the Platte River, flowing through the U.S. states of Colorado and Nebraska.

Five Star Urban Waters and Environmental Justice Grants

Five Star and Urban Waters Restoration Grants

The Five Star and Urban Waters Restoration Grant Program is a public-private partnership combining federal and private sector grant funding with funds from: U.S. EPA, the U.S. Department of Agriculture's – Forest Service, the U.S. Department of Interior's Fish and Wildlife Service, Southern Company and FedEx. The grants help states leverage resources and build community capacity for restorative projects that address core Clean Water Act goals.

42 projects funded by Urban Waters federal partner agencies closed in the 2019 calendar year. Non-federal project funds and grantee matching contributions leveraged total federal funding of $1.2 million at a one-to-one ratio—providing $2.4 million.

22 new grants were awarded in 2019 to address stormwater runoff and improve water quality.

2019 Five Star Statistics

564,200 gallons of stormwater runoff prevented (across 3 projects)

20,100 marsh plants, seeds, and native grasses planted

38,193 volunteers

12,898 trees planted

34 projects that directly contributed to environmental justice goals in underserved and under-resourced communities

469 organizations contributing to project goals

483 acres restored

389 jobs created

Environmental Justice Small Grants

The U.S. EPA Environmental Justice and Urban Waters programs have partnered in 2018 and 2019 to provide funding and expertise to underserved communities disproportionately impacted by clean water issues, while giving preference to projects located in qualified Opportunity Zones, as designated in the 2017 Tax Cuts and Jobs Act.

The Urban Waters program funded 10 small grants – a project for each U.S. EPA Region across the country. The small grants provide direct funding to community-based organizations and tribes for projects that help residents of underserved communities understand and address local environmental and public health issues. The 10 Urban Waters-funded projects address urban watershed issues including disaster resiliency, toxic water-based algae blooms, local green infrastructure development and watershed restoration. Visit U.S. EPA's website for additional information on the grant awards.

Five Star Project Spotlights:

Washington State Salmon Restoration

Restored 14.4 acres of riparian habitat. Improved 2 miles of riverbank through hands-on salmon recovery work. 1,671 volunteers learned how to properly plant 5,202 trees, preventing 520,200 gallons of stormwater runoff captured by new green infrastructure practices on 16 stream sites.

Anacostia Mussel Restoration Project

7,000 freshwater mussels to filter up to 26 million gallons of water annually in the Anacostia River in the District of Columbia, improving water quality conditions and aquatic biodiversity.

Lays groundwork for future mussel restoration efforts by determining suitable habitats and feasibility and educating and engaging more than 500 people in mussel propagation.

The Urban Waters Learning Network

The Urban Waters Learning Network (UWLN) provides support and opportunities for members to share successful strategies, challenges and resources from across the country to improve urban waterways and revitalize the neighborhoods around them.

The National Park Service Rivers, Trails and Conservation Assistance Program is a partner in the UWLN, and manage all funding that goes to UWLN coordinators, Groundwork USA and River Network. Groundwork USA and River Network provide assistance and guidance to U.S. EPA Headquarters and Regional staff in identifying and reviewing tools for practitioners use and providing input on potential U.S. EPA-sponsored initiatives, conferences and training opportunities.

UWLN Highlights

585 members (up from 380 in 2016)

7 webinars with **764** attendees

24 person Urban Waters Delegation at the U.S. Water Alliance One Water Summit

- Established a new communication channel on Basecamp for EJ resources and topics for the EPA PPB National Estuary Program, which encompasses 28 major coastal watersheds
- New Interactive Story Map telling the story of Urban Waters locations' history and impact

Expanded and initiated working groups on emergent themes.

The UWLN introduced two more working groups for **Anti-Displacement Strategies** and **Building Resilient Communities**. The working groups will compile existing resources and tools, identify the needs of UWLN practitioners and develop original resources addressing these themes.

National Accomplishments by Federal Partners

In the past year, the UW Federal Workgroup, with representatives from the 15 agencies in the Urban Waters Federal Partnership, reached consensus to achieve:

20 Locations in 2020

The Urban Waters Federal Partnership coordinated on the approval of the 20th Urban Waters location—the Rio Reimagined - Salt/Gila River Corridor Project in Phoenix, Arizona—first new location since San Antonio in 2015.

A unified vision for the future of the program

The federal partners finalized the report, "Sustaining the Urban Waters Program in 2020 and Beyond: New Strategies to Support the Program," which lays out a number of key programmatic adjustments and refinements that will strengthen the program moving forward.

UW Federal Partner Spotlights:

U.S. Environmental Protection Agency

Program Sustainability – The Urban Waters Program is looking to expand and diversify the funding base that supports the program through engaging new partners and strategizing how to leverage all available support in locations. The program developed a strategy, resources and tools to promote best practices for accessing non-federal resources.

Strengthening Local Responses to Natural Disasters

U.S. EPA strengthened Urban Waters Partnerships' response to natural disasters through funding from EPA's Non-Point Source Management Program, which provides technical assistance to incorporate low-impact development (LID) and green infrastructure (GI) into hazard mitigation planning.

Two Urban Waters Partnerships received funding from the U.S. EPA Non-Point Source Program. The GI/LID teams will provide technical assistance to identify suitable sites for GI/LID, suggest methods to incorporate GI/LID into existing multi-jurisdictional planning activities and hold training workshops for local communities. These efforts will enable the Partnership communities to strengthen their responses to natural disasters.

Department of the Interior

The Department of the Interior (DOI) advances the goals of the Urban Waters Program by coordinating the work of its bureaus in Urban Waters locations as well as providing national policy coordination. For example, in 2019, DOI, through U.S. Geological Survey (USGS) and U.S. Fish and Wildlife Service (FWS), invested $1.2 million in on-the-ground projects related to Urban Waters in locations across the country. Additionally, 42 staff from DOI in four bureaus (USGS, FWS, National Park Service and Bureau of Reclamation) support the day-to-day operations of the 20 Urban Waters locations. DO! also facilitated information exchange among local partners in many ways, including newsletters and facilitated meetings. DOI played an instrumental role in planning the designation event and follow-up workshop for the launch of the 20th Urban Waters location, Rio Reimagined.

UW Federal Partner Spotlights

Department of Agriculture Forest Service

The Forest Service (FS) leads U.S. Department of Agriculture engagement in the Partnership, advancing the UW Program as a multi-departmental initiative and leading interagency collaboration in five locations (Patapsco River Watershed, LA River, Northwest Indiana, South Platte River and Green-Duwamish). Staff from all three mission areas of the agency (State and Private Forestry, Research and Development and National Forest System) participate in and provide technical assistance to 13 Partnership locations. This year, FS was able to provide direct Ambassador and project funding to seven locations as well as funding the National Fish and Wildlife Foundation Five Star and Urban Waters Restoration Grants Program alongside U.S.

EPA and U.S. DOI. FS staff also provided technical assistance to UW locations through webinars, workshops and toolkits on topics such as Urban Heat Islands, Green Stormwater Infrastructure, Stewardship Mapping, Tree Planting and Maintenance and Urban Wood Academies.

DOI-U.S. Geological Survey (USGS)

USGS appropriation included **$717,000** in funds through the National Water Quality Program as USGS directed Cooperative Matching Funds (CMF) to support USGS-UWFP joint projects. USGS funded **11 UWFP projects in nine Urban Waters locations in FY19**; projects included local partner matches for a total of approximately **$1.4 million in leveraged funds**. All funded projects have buy-in from the local Urban Waters Ambassador and local partners and include a water-quality component that involves monitoring, assessment or modeling. More information about funded projects is available at USGS' Urban Waters webpage.

Through these funded projects, signifigant progress was made to install water-quality probes and gages, and collect, process and analyze surface water and groundwater samples.

Samples included organic contaminants such as per- and polyfluoroalkyl substances (PFAS) and polychlorinated biphenyls (PCBs), nutrients and sediment. Water quality parameters included temperature, pH and dissolved oxygen.

Geographic areas with projects selected for funding:

Anacostia River Watershed—Washington, DC, area
Bronx and Harlem River Watersheds—New York, NY
Delaware River Watershed—Greater Philadelphia, PA, area
Grand and Little Calumet Rivers—Northwest Indiana
Lake Pontchartrain—New Orleans, LA, area
Los Angeles River Basin—California
Lower Duwamish Waterway—Seattle, WA, area
Lower Gila River—Phoenix, AZ, area
Lower Passaic River Basin—Newark, NJ, area
Middle Blue River—Kansas City, MO, area
Middle Rio Grande—Albuquerque, NM, area
Patapsco Watershed—Baltimore, MD, area
San Antonio River Basin—Texas
South Platte River—Denver, CO, area

A Message from the Program

Through all the projects, programs and accomplishments highlighted in this report, the Urban Waters Program has helped advance water quality improvements and community connections to local waterways across the country. This success would not have been possible without the tireless contributions of federal, state, local, academic and non-profit partners, as well as our vitally important Ambassadors. For more information about the UW Program, please visit urbanwaters.gov.

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URBANWATERS FEDERAL PARTNERSHIP
Restoring Urban Waters, Revitalizing Communities

www.urbanwaters.gov

January 2021