

Bronx & Harlem River Watersheds Urban Waters Federal Partnership 2021-2022 Work Plan

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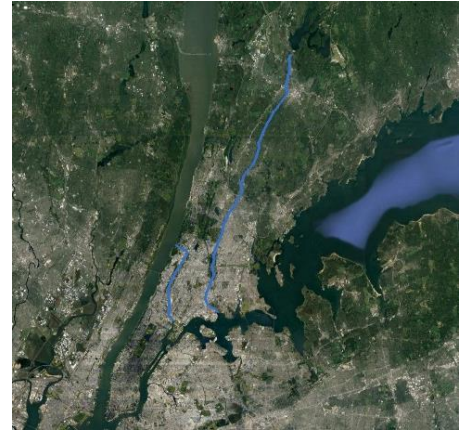
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Overview

The Urban Waters Federal Partnership (UWFP) is a federally-led initiative focused on reconnecting overburdened and economically distressed urban communities with their waterways by improving coordination among federal agencies and collaborating with community-led revitalization efforts. The Bronx & Harlem River Watersheds location in New York, NY was one of the original seven pilot UWFP locations established in 2011 – today there are 20 locations around the US.

Led by the United States Department of the Interior, the Bronx & Harlem River UWFP works to help overburdened and underserved Bronx communities reconnect to their waterways, reduce the negative impacts of urbanization on both water quality and human health, and restore impacted riverfronts and watersheds while pursuing environmental justice. An Urban Waters Ambassador works to identify and advance priority projects and coordinates agency and community involvement. The Bronx & Harlem River UWFP's Ambassador position is made possible by the sustained support of the U.S. Environmental Protection Agency (EPA). EPA funding is administered by the New York – New Jersey Harbor & Estuary Program (HEP) at the Hudson River Foundation (HRF); HEP also hosts the Ambassador position.

This workplan has been developed by the Bronx & Harlem Rivers UWFP to define goals, identify key partners and responsibilities, and summarize priority projects for calendar years 2021-2022. It is also the basis for allocating the Ambassador's time and effort as well as other contributed resources. This bi-annual workplan will be updated in January 2023 and/or as funding or new collaborative opportunities adjust Partnership priorities.



Aerial view of the Harlem and Bronx Rivers in New York City, New York; the Harlem River separates Manhattan from the Bronx, and the Bronx River originates in Westchester County before flowing through the heart of the Bronx.

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Background

The Harlem and Bronx Rivers are part of the larger Hudson River/NY-NJ Harbor Estuary and Long Island Sound systems, and as such, hold enormous potential to provide a variety of benefits to millions of people in the region.

The Harlem River is a nine-mile long waterbody that separates Manhattan from the Bronx. The Harlem is actually a tidal strait, not a true river, which connects the Hudson River in the north and another tidal strait, the East River, to the south. Once a complex system of tributaries, wetlands, and meandering shorelines, today the River has been channelized, hardened, and heavily impacted by development and industry over the last 200+ years.

The Bronx River is 24 miles long and empties into the East River/Long Island Sound. Its watershed spans both New York City (NYC) and 13 Westchester County municipalities and is 38 square miles in size. The Bronx River is the only freshwater river remaining in NYC, although it is tidal for a portion of its southernmost length below the dam at Starlight Park (approximately E 172nd Street). Like the Harlem River, the Bronx River has been negatively impacted by urbanization.

Harlem and Bronx River communities are home to an disproportionate amount of NYC's solid waste transfer, wastewater treatment, and electrical generation facilities, have among the highest obesity, diabetes, and asthma rates in NYC, and host the world's largest wholesale food distribution center, which generates upwards of 20,000 truck trips through residential neighborhoods every day. New York's 15th Congressional District, the poorest in the nation, spans the southern portion of these two watersheds.

The Bronx is home to the largest (Pelham Bay) and third largest (Van Cortlandt) parks in all of New York City. However, access to the Harlem River in particular (on both the Manhattan and Bronx sides) is severely lacking. A 2016 study by the NY-NJ Harbor & Estuary Program identified the Bronx as the highest need area in all of New York City in terms of equitable public access to the waterfront.

Partners

This UWFP location is led by Department of Interior (DOI) & U.S. Geological Survey (USGS). Key partners are listed alphabetically below.

Federal Agency Partners

Federal Emergency Management Agency (FEMA)
National Oceanic & Atmospheric Administration (NOAA)
National Park Service (NPS)
U.S. Army Corps of Engineers (USACE)
U.S. Department of Housing and Urban Development (HUD)
U.S. Department of Interior (DOI)
U.S. Department of Transportation (DOT)

U.S. Environmental Protection Agency (EPA)
U.S. Fish & Wildlife Service (USFWS)
U.S. Forest Service (USFS)
U.S. Geological Survey (USGS)

State Agency Partners

New York State Office of Parks, Recreation, & Historic Preservation (NYS Parks)
New York State Department of Environmental Conservation (NYS DEC)

Elected Officials and Local Government Partners

Congressman Adriano Espaillat's Office
Congressman Ritchie Torres's Office
NYC Economic Development Corporation (NYC EDC)
NYC Department of Environmental Protection (NYC DEP)
NYC Department of Transportation (NYC DOT)
NYC Department of Parks & Recreation (NYC Parks)
NYC Soil & Water Conservation District (NYC SWCD)
Office of the Bronx Borough President
Westchester County Bronx River Advisory Board (BRAB)
Westchester County Department of Planning

Non-Governmental & Community Organizations

Billion Oyster Project (BOP)

Bronx Council for Environmental Quality (BCEQ)
Bronx is Blooming
Bronx River Alliance (BxRA)
Harlem River Working Group
Hudson River Foundation (HRF)
Loving the Bronx
Natural Areas Conservancy (NAC)
NY/NJ Harbor & Estuary Program (HEP)
New York Restoration Project (NYRP)
Randall's Island Park Alliance (RIPA)
Rocking the Boat
Riverkeeper
South Bronx Unite
Stormwater Infrastructure Matters (SWIM) Coalition
Transportation Alternatives
Van Cortlandt Park Alliance (VCPA)
Waterfront Alliance

Goals

The Bronx & Harlem River Watersheds UWFP works to protect, restore, and revitalize the Bronx & Harlem Rivers in the New York City, New York through improved coordination among federal agencies and collaboration with community-led revitalization efforts. The partnership will use the mission, vision, and principles of the UWFP to:

- Promote clean waterways by quantifying and reducing sources of pollution to the Bronx & Harlem Rivers;
- Reconnect communities to their waterways by expanding public access to the waterfront (via parks and continuous greenways) and on-water recreation opportunities;
- Advance environmental justice and engage local communities in stewardship activities;
- Restore in-water and riparian habitats to support increased biodiversity and ecological function; and
- Conduct research and provide data in support of community objectives related to green infrastructure, watershed planning, and water quality.

Communication & Networking

To advance Partner efforts towards these goals, the Ambassador will provide support for achieving the goals of the Partnership by:

- Providing open and timely communications regarding project updates, funding opportunities, upcoming meetings and events, and useful resources;
- Coordinating among partners to reduce duplicative efforts and increase collaboration;
- Increasing community partners' organizational capacities by identifying potential funding sources, assisting with project design and/or implementation, and assessing how federal partners can provide support and technical assistance;
- Promoting efforts to engage the community in stewardship of local waterways, waterfronts, parks, and public green spaces; and
- Working to elevate the successes and ongoing work of all partners via creative outlets, including developing a Partnership Story Map with assistance from the Urban Waters Learning Network.

2021-2022 Partnership Priority Projects *(listed alphabetically)*

The projects listed below have been identified by the Bronx & Harlem Rivers UWFP partners as our shared priorities for 2021-2022. Whether specific efforts or broad areas of focus, they all have significant partner involvement and address significant concerns in the watersheds where the UWFP can make a contribution. Anticipated milestones and expected outcomes and outputs have been identified for each project.

Note: This list does not represent a comprehensive list of projects and programs of all Bronx & Harlem Rivers UWFP partners. More information on additional areas of focus for UWFP partners is found in the following 'Partnership Activities' section.

#1: Bridge Park South - expansion of Harlem River Greenway and a new waterfront park

Overview

Bridge Park South is located on the Harlem River in the Bronx, between the High Bridge and the Alexander Hamilton Bridge. This project involves development of a new nearly five-acre park, a half-mile extension of the Harlem River Greenway, and restoration/softening of the shoreline. The project involves coordination with community members and other agencies, including USGS who has been supporting the project through water and sediment quality monitoring at the site. The project will utilize more than \$5.6 million in funding from NYS DOT, New York City Council, the Office of the Bronx Borough President, and the New York State Department of State (NYS DOS).

Urban Waters Support

The Ambassador will provide support to NYC Parks by coordinating with USGS on water quality monitoring data to inform park design. Additionally, the Ambassador will work with BCEQ and other partners as they work to coordinate with State and City DOT in order to ensure equitable and safe pedestrian and bicycle access to the site.

Involved Partners

NYC Parks, USGS, BCEQ

Key Milestones

- Design timeline – 2019-2021
- Procurement – 2021-2022
- Construction – 2022-2023
- Park opens – 2023

Expected Outputs

- Water and sediment quality data from USGS to inform site design
- A community meeting during Q1 2021 to solicit input on park conceptual design
- Meetings with agency and local government officials to discuss site access

Expected Outcomes

- Five acres of new riverfront public parkland
- Half-mile extension of the Harlem River greenway
- 100 feet of living shoreline installed

#2: Measuring Success of Natural and Nature-Based Resiliency Features in the Bronx

Overview

Measuring Success is a project sponsored by the NYS DOS, with funds from NOAA and the New York State Energy Research and Development Authority (NYSERDA), to develop [a framework for monitoring natural and nature-based shoreline features \(NNBF\)](#) throughout New York State. *Measuring Success of NNBF in the Bronx* will use the newly developed framework to contribute to two Bronx & Harlem Rivers UWFP goals: restoring in-water and riparian habitats and conducting research to provide data in support of community objectives related to green infrastructure.

Four sites along the Harlem and Bronx Rivers will be monitored during Summer 2021 and 2022 by student interns who will be selected in conjunction with partners who have existing summer internship programs.

The collected data will provide site managers, community organizations, and practitioners throughout the region with information to demonstrate NNBF's capacity to provide ecosystem services, mitigate storm impacts, and contribute to community well-being both locally and across all urban waters. Supporting existing student internship programs will help nurture the next generation of environmental leadership in the Bronx.

Urban Waters Support

The Ambassador will manage this project, with support from NY-NJ HEP staff.

Involved Partners

EPA, NY-NJ HEP, NYC Parks, NYS Parks, BxRA, NAC, RIPA

Key Milestones

- Project kickoff, planning & site selection – Winter 2020/2021
- Student training & site monitoring – Summer 2021 and Summer 2022

Expected Outputs

- Coordination meetings with partners during Winter 2020/2021 and Winter 2021/2022
- Two three-day training courses held during Summer 2021 and 2022 to teach student interns how to implement the NNBF monitoring methodology
- Data to demonstrate the capacity of NNBF

Expected Outcomes

- Advancement of more effective living shoreline projects throughout the watershed, including at Bridge Park South (see Priority Project #1 above)
- Development of the next generation of environmental leaders

#3: Reducing Street Trash & Floatables

Overview

Floatable trash is a pervasive problem in urban waterways. According to EPA's Trash Free Waters program, one-third to two-thirds of litter found during beach cleanups and surveys nationwide is single-use, disposable plastic packaging from food and beverage-related goods. [HEP's Stopping Trash Where It Starts initiative](#) has found similar results in the Lower Passaic River Watershed (via a 2017 study conducted in partnership with the Lower Passaic Urban Waters Federal Partnership) and in the Bronx and Harlem River Watersheds through a second round of *Stopping Trash Where It Starts* (funded in 2018-2019 by EPA's Trash Free Waters program).

Additionally, BxRA has an initiative called [Project WASTE \(Water and Street Trash Elimination\)](#) that aims to engage local stewards in collection and assessment of trash from the Bronx River. Since 2016, BxRA has worked with more than 3,500 volunteers to remove more than 200,000 pieces of trash weighing more than seven tons from in and around the Bronx River. Recently the Alliance has also engaged with the New York City Soil and Water Conservation District to determine the feasibility and associated costs of installing and operating a Waterwheel-Powered Trash Interceptor System (Trash Wheel) on the Bronx River. Concrete Plant Park was identified as the most feasible site for a Trash Wheel, and cooperative efforts to bring this vision to life will continue in 2021.

Multiple other partners, including NYRP, RIPA, and VCPA are also engaged in efforts to develop methods and strategies for addressing floatable trash in their respective turfs.

The data our partners collect is being used to inform trash reduction strategies, focusing on targeted behavioral changes related to single-use food and beverage packaging and track down of persistent pollution sources, to improve water quality in both the Bronx and Harlem Rivers. Partnership members also serve on the Bronx Solid Waste Advisory Board that was recently reconstituted by the Bronx Borough President; this is another opportunity to use partner data to inform solid waste management strategies that will help reduce floatable pollution.

Given the increased usage of parks and decrease in funding for maintenance and seasonal parks workers due to impacts of the ongoing COVID-19 pandemic, UWFP partners are exploring options for funding to support their ongoing trash removal, assessment, and education/stewardship activities.

Urban Waters Support

The Ambassador will support ongoing street and floatable trash reduction efforts by elevating partners' successes and lessons learned to a wide audience. This could include, but is not limited to, helping to develop one-pagers in support of projects, sharing information with other UWFP locations, at conferences, and with

municipal agencies and other organizations as needed to help effect behavioral changes. The Ambassador will work with partners to identify additional capacity and sources of funding for this work.

Involved Partners

HEP, EPA, BXRA, VCPA, Bronx is Blooming, RIPA, NYC Parks, NYRP

Expected Outputs

- Presentation of data, methods, and lessons learned at local and national conferences
- Coordination with partners to produce one-pagers in support of trash reduction projects

Expected Outcomes

- Increased community awareness of the existence and impacts of floatable pollution on local waterways
- Improved condition of local waterways and parks/open spaces

#4: Starlight Park Expansion – improving shoreline resiliency, closing a key greenway gap, and increasing community access

Overview

Starlight Park is located on the Bronx River, between the Cross Bronx Expressway and Westchester Avenue. This project comprises improvements to the existing park as well as an 11-acre park extension and construction of a greenway link that is necessary to close a small but vital gap on the Bronx River Greenway. At the request of then-Congressman Serrano, DOI played a critical role in bringing together New York State and City agencies and Amtrak at the outset of this project. In 2015, the Partnership supported a successful application for \$10 million in US DOT Transportation Investment Generating Economic Recovery (TIGER) funding, which has been leveraged into an additional \$48 million for the project. The project has three stages, and when complete, will both ensure improved access to the Bronx River and green space for roughly 400,000 South Bronx residents as well as provide a safe, continuous north-south pedestrian and bike route through the Bronx.

Stage 1 will re-naturalize the hardened shoreline and re-establish salt marsh along the Bronx River for enhanced coastal resiliency. It will also convert a vacant lot along Westchester Avenue into a part of the Bronx River Greenway. This restoration work intends to reduce the vulnerability of adjacent communities from impacts of future coastal storms as well as contribute to the ecological restoration of the river.

Stage 2 will complete the spine of the greenway trail connection between Concrete and Starlight Park Parks by constructing a bike/pedestrian bridge over the river and another over Amtrak's Acela line. It also constructs a new entrance to the park via a bridge on 172nd Street and Bronx River Avenue.

Stage 3 will construct the final pedestrian/bicycle bridge at River House, linking the east and west banks of Starlight Park.

Urban Waters Support

The Partnership will continue to provide communication and facilitation support for the project as needed, particularly with regard to helping move past procedural sticking points.

Involved Partners

BxRA, NYC Parks, National Fish and Wildlife Foundation, NYC DDC, NYS DOT, US DOT, Amtrak

Key Milestones

- Groundbreaking – October 2016

- Stage 1 Construction - October 2017 to March 2020
- Stage 2 Construction - February 2019 to June 2021
- Stage 3 Construction - March 2019 to February 2020

Expected Outputs

- Meetings with partners to help coordinate action and ensure progress
- UWFP assistance as needed to resolve federal coordination issues

Expected Outcomes

- 11 acres of new riverfront public parkland
- Three new pedestrian bridges
- Completion of a critical two-thirds of a mile gap in the Bronx River Greenway
- Improved park and riverfront access for 400,000 local residents

#5: USACE Ecosystem Restoration on the Bronx River

Overview

The USACE's Hudson Raritan Estuary (HRE) Ecosystem Restoration Feasibility Study's purpose is to develop and propose ecosystem restoration projects that will address existing conditions and factors contributing to environmental degradation within the estuary. Five sites in the Bronx River watershed have been identified and each of these have non-federal sponsors that will contribute funding and support.

The five proposed project sites are:

1. **Stone Mill Dam** – installation of a fish ladder
2. **Bronx Zoo (Twin Dams)** – improvement of fish passage either via installation of a fish ladder or dam removal; invasive removal & native plantings; sediment trap; emergent wetlands
3. **Shoelace Park** – channel realignment with in-stream structures; bank stabilization; invasive removal & native plantings; sediment load reduction/rain gardens/bioretention basins
4. **Bronxville Lake** – native plantings; rip rap forebay; channel bed restoration; emergent wetlands; forested scrub/shrub wetlands; modification of rock weir for fish passage; invasive removal & native plantings; sediment dredging; sediment load reduction/vegetated swales/retention basins/rain gardens
5. **Garth Woods/Harney Road** – modification of weir for fish passage; river channel modification (15 in-stream cross vanes); shoreline softening; rain gardens/ bioretention area; invasive removal/native planting; emergent wetlands

Urban Waters Support

The Ambassador and Partnership will coordinate with USACE and project sponsors to provide community engagement and support as project design progresses on the planned projects.

Involved Partners

USACE, NYC Parks, BxRA, Westchester County Department of Planning

Key Milestones

- Final USACE report – September 2019
- Chief's Approval – May 2020
- Congressional Authorization – January 2021
- Launch of Design Process – anticipated October 2021

Expected Outputs

- Meetings with USACE and other partners to review timeline and identify how best the UWFP can support projects

Expected Outcomes

- Improved ecosystem condition
- Installation of two fish ladders & modification of three weirs to expand fish passage to 24 miles of the Bronx River
- Restoration of five acres of emergent wetland, 1.7 acres of wet meadow, 4.7 acres of forest scrub/shrub, 9.1 acres of riverbed and channel
- 11.3 acres of invasive plant species removal and native plantings

#6: Water Quality Monitoring

Overview

The Bronx & Harlem River watersheds were once varied ecosystems covered by forests, meadows, and marshes. Today, much of the natural landscape has been replaced by dense urban development, which has contributed to pollution and contamination of the waterways. While data show that both rivers have seen improvement in water quality since the institution of the Clean Water Act (for example, see [this report from USGS on the Harlem River](#)), both waterways are plagued by combined sewer overflow pollution during wet weather and legacy pollutants and floatable trash are also persistent. It is important to understand the pollution sources, types, and concentrations in order to think about possible interventions and solutions, so a major focus of multiple partners is on quantifying pollution inputs to the Harlem and Bronx Rivers as well as collecting data on the success of restoration projects.

Much of the work described below also complements or extends monitoring work by NYC DEP to characterize the condition of the Bronx and Harlem River in order to develop Long Term Control Plans (LTCP) for these waterbodies. NYC DEP's [Citywide LTCP](#) encompasses the majority of New York Harbor, including the Harlem River, and the [Bronx River has its own LTCP](#). The goal of the LTCPs is to identify the appropriate combined sewer overflow (CSO) controls necessary to achieve waterbody-specific water quality standards consistent with the Federal CSO Policy and the water quality goals of the Clean Water Act.

Water quality monitoring projects currently underway include:

HARLEM RIVER

Enterococcus transect sampling & microbial source tracking

Beginning in Fall 2017, USGS in coordination with EPA and the Interstate Environmental Commission (IEC) began sampling transects of the Harlem River to assess the distribution of enterococcus along and across the water surface as well as at depth. More samples were collected in 2019, both pre- and post-storm events. The data collected will help improve understanding of the transport of pathogens that pose a risk to human health in the Harlem River, and will help EPA more accurately model pathogen concentrations following storm events. Results will inform stakeholders and recreational users that are more likely to interact with water that may have higher pathogen concentrations due to close proximity to CSO outfalls and minimal tidal flow. Additional microbial source tracking methods will also be used at selected sites to evaluate differences in pathogen presence, type, and transport.

Water and sediment sampling at Bridge Park South

Since 2017, USGS has been working with NYC Parks, NYC DEP, and IEC to conduct water and sediment quality sampling at Bridge Park South along the Harlem River, during storm and non-storm conditions. Organic contaminants, metals, nutrients, and indicator bacteria were all sampled, and the results will be used to better inform their respective concentration ranges in an area where NYC Parks is planning for construction of living shorelines and increased waterfront access.

Continuous & storm surge monitoring at Roberto Clemente State Park

In 2018, NYC DEP installed a continuous water quality monitor at Roberto Clemente State Park to support monitoring efforts on the Harlem River. Partners are currently exploring avenues for sharing this continuously collected data. Co-located with the DEP sensor is a USGS storm surge monitoring bracket that will allow for rapid deployment of USGS monitoring equipment as needed during hurricanes or other storms. The localized storm-tide data collected from this type of deployment is critical for emergency management agencies to monitor storm impacts and make public safety decisions.

BRONX RIVER

Project Water Drop

Bronx River Alliance Project trains community volunteers to monitor *Enterococcus* bacteria through their [Project Water DROP](#) (Detecting River Outfalls and Pollutants) program. Community scientists participate by collecting water samples at 15 locations along the entire length of the Bronx River that are assessed for *Enterococcus*, which is a genus of bacteria that indicates the presence of raw sewage. Monitoring along the entire length of the river allows the Alliance to identify pollution hot spots and track down persistent sewage sources.

USGS monitoring in the Bronx River watershed

USGS has partnered with the Bronx River Alliance on a number of water quality studies to complement and extend the Alliance's water quality monitoring program, including quantification of PFAS, pharmaceuticals, and herbicides in the river and microbial source tracking (MST) work to determine whether persistent elevated fecal indicator bacteria levels are from human, domestic pet, and/or water fowl sources.

Urban Waters Support

The Partnership will continue to support the efforts of partners involved in water quality monitoring projects by complementing and extending sampling efforts (see USGS monitoring in Priority Project #1 above) and when appropriate, the Ambassador can assist in reaching out to further federal involvement, either through grant opportunities or providing technical expertise.

Involved Partners

USGS, EPA, NYS Parks, NYC DEP, NYS DEC, Interstate Environmental Commission, BCEQ, BxRA, VCPA, RIPA, Rocking the Boat

Expected Outputs

- Partner collection of data on a variety of water quality indicators
- Promotion of partner programs and monitoring results via webinars and email blasts
- Meetings with partners to provide technical and capacity building support as needed

Expected Outcomes

- Increased knowledge about local water quality issues
- Improved water quality conditions due to targeted interventions based on collected data

#7: Watershed Planning

Overview

Watershed planning has been community-driven across both watersheds for decades, and will continue to be of importance to multiple UWFP partners for the foreseeable future.

Most recently, [NYC Parks's Harlem River Watershed and Natural Resources Management Plan for the Bronx](#) (funded by the New York State Department of State's Local Waterfront Revitalization Program) was completed after multiple years of effort that built upon past planning efforts by BCEQ and others. This watershed plan is intended to serve as a road map for agencies, community partners, and other stakeholders in pursuing coordinated resource protection and restoration in the watershed. The plan provides a vision and goals for the watershed, and introduces strategies and recommendations for achieving the stated goals. Its development involved consultation with members of a Watershed Advisory Committee, comprised of 16 City, State, and Federal agencies and local NGOs.

The [Bronx River Intermunicipal Watershed Management Plan](#) was published in 2010. The Bronx River Alliance, NYC Parks' Natural Resources Group, NYS DOS, and Westchester County Department of Planning worked to gather input from more than 100 stakeholders to develop this plan, which presents ten strategies to develop an integrated framework for watershed management.

In 2019, BxRA and Westchester County Department of Planning received a \$245,000 grant from NYS DOS to update the plan, and develop a climate change resilience strategy for the river.

Urban Waters Support

The Ambassador will provide support to BxRA and Westchester County and assist with convening a geographically diverse set of stakeholders as they work collaboratively to update the Bronx River Intermunicipal Watershed Management Plan. The Partnership will also continue to support implementation of recommendations from the Harlem River Watershed & Natural Resources Management Plan for the Bronx, and will explore opportunities to be supportive of watershed planning efforts in the northern Manhattan portion of the Harlem River watershed.

Involved Partners

NYS DOS, BxRA, NYC Parks, Westchester County Department of Planning, USGS, BCEQ

Expected Outputs

- Community meetings to engage with local stakeholders and solicit input during the Bronx River Intermunicipal plan updating process
- Regular communication with NYC Parks to track implementation of recommendations from the Harlem River Watershed & Natural Resources Management Plan and provide federal assistance as needed
- Identification of watershed planning initiatives and possible federal role in northern Manhattan portion of Harlem River watershed

Expected Outcomes

- Increased community knowledge of the respective visions for the Bronx and Harlem Rivers
- Improved resiliency and ecosystem condition as both plans' recommendations are implemented

Partnership Activities *(listed alphabetically)*

In addition to the priority projects described above, there are additional Partner activities that the UWFP and Ambassador will support in 2021-2022.

Civic engagement and job training programs

Actively engaging community members in stewardship and job training programs is a focus for multiple partners, including Bronx is Blooming, South Bronx Unite, and Sustainable South Bronx.

Urban Waters Support: The Partnership will continue to support the efforts of these NGOs and when appropriate, can assist in reaching out to further federal involvement, either through grant opportunities or providing technical expertise.

Environmental advocacy

Advocating for green infrastructure, sustainable stormwater management, and investment in local green spaces is a focus for multiple partners, including BCEQ, BxRA, Riverkeeper, Loving the Bronx, Bronx is Blooming, the SWIM Coalition, and NYRP.

Urban Waters Support: Federal partners support NGO advocacy efforts by providing technical expertise and data, particularly around issues related to water quality and green infrastructure monitoring.

Environmental education

Educational environmental programming for both youth and adults is a focus for many partners, including BCEQ, BxRA, VCPA, RIPA, NYRP, BOP, Rocking the Boat, and Bronx is Blooming.

Urban Waters Support: Federal partners support NGO education efforts by providing technical expertise and data, particularly around issues related to water quality and green infrastructure monitoring.

Greenway expansions

Advocating for expansion of the Harlem River Greenway in the Bronx as well as for completion of the final pieces of the Bronx River Greenway is a focus for multiple partners, including BCEQ and the Harlem River Working Group, BxRA, Transportation Alternatives, and South Bronx Unite. Opportunities for greenway connections between Manhattan and the Bronx are also of interest to partners, including the Harlem River Working Group, Transportation Alternatives, and NYRP.

Urban Waters Support: Federal partners support NGO advocacy efforts by providing technical expertise and funding when possible. The Ambassador also supports NGO community and municipal outreach efforts by assisting with meeting coordination and communications.

Harlem River coordination and collaboration with Manhattan-based efforts

In 2012, BCEQ and its Harlem River Working Group created a vision for new and improved parks and a continuous greenway along the Bronx side of the Harlem River. There are similar planning and visioning efforts on the Manhattan side of the River led by NYC Parks, NYRP, Sherman Creek Conservancy, and other organizations, as well as ongoing work on the High Bridge that connects both sides of the Harlem River. Current and prospective public capital investments, as well as current and proposed rezoning and redevelopment efforts will play an important role in advancing (or impairing) these goals.

Urban Waters Support: The Partnership will continue conversations with community leaders and agency representatives to identify opportunities for Harlem River-wide coordination and communication in support of achieving the community's vision and goals.

On-water recreational access and programming

Multiple partners have efforts underway to reconnect communities to their rivers through programmed on-water recreational activities (e.g., kayaking and canoeing). Rocking the Boat and BxRA put hundreds of people on the Bronx River every year, and BCEQ, Van Cortlandt Park Alliance, NYC and NYS Parks, and Canoemobile actively seek out opportunities to safely put people on the water in the Harlem River watershed as well.

Urban Waters Support: The Partnership will continue to promote safe and accessible on-water recreation activities provided by local NGOs and local stakeholders, and will work with partners to identify additional resources to advance these efforts.

Oyster and living shoreline restoration

There are numerous efforts underway to restore in-water and riparian habitats to support increased biodiversity and ecological function on both the Harlem and Bronx Rivers. In 2020, Billion Oyster Project, in partnership with NYC Parks, BxRA, Rocking the Boat, and HRF, installed one of their largest oyster restoration projects in the NY Harbor region to date in Soundview at the mouth of the Bronx River. Also in 2020, NYRP installed a living shoreline comprised of oyster castles, marsh vegetation, and ribbed mussels at Swindler Cove, in Northern Manhattan on the Harlem River.

Living shoreline design and implementation is also a focus for other members of the Partnership (e.g., RIPA, NYC Parks, BCEQ, Waterfront Alliance, HEP) and securing funding to incorporate softer shorelines and restore both in-water and riparian habitat where feasible will continue to be a priority for the Partnership.

Urban Waters Support: The Partnership will assist with identifying funding sources for potential living shoreline and in-water habitat restoration projects, and provide technical support when possible (see NNBF monitoring project above).

Park and greenspace development

NYC Parks, along with BxRA, NYC EDC, and other partners, is actively working to develop new parks and renovate existing parkland in both watersheds. In addition to construction of Bridge Park South and Starlight Park (priority projects listed above), other public parks/greenspaces currently in design or construction are listed below:

Shoelace Park Link

Shoelace Park, part of the Bronx River Greenway, is undergoing a major renovation to its main pathway. The park, which runs from Gunhill Road to E 233rd Street in the Bronx, was part of the original roadbed of the Bronx River Parkway and as such, the main pathway in the park resembles a roadbed more than a recreational path. This project will make the park and greenway more accessible by reconfiguring the pathway, adding new amenities, addressing drainage issues, and reconstructing the park entrances.

Park at E 144th Street along the Harlem River

This project is currently on pause due to COVID-19 related delays. As of winter 2020, a concept design for the space is being developed, and will be presented to the community once the pause is lifted.

Bronx Point open space/extension of Mill Pond Park

In 2021, construction is expected to begin on Bronx Point, a project overseen by NYC EDC to create 542 units of permanently affordable housing and a new public greenspace on a lot immediately adjacent to Mill Pond Park

along the Harlem River. NYC Parks and BOP will be partners in the effort to connect the local community to the waterfront.

Urban Waters Support: The Partnership will support community engagement efforts during park planning processes, and provide technical support when feasible.

Reconnecting Tibbetts Brook to the Harlem River

Tibbetts Brook was once a major tributary to the Harlem River. Flowing from north to south and originating in Westchester County, the brook's flow was altered beginning in the late 1600s to support development. For nearly a century, the lower section of the stream has been redirected underground into the combined sewer system where on dry days, it flows to one of NYC's 14 wastewater treatment plants. However, during wet weather, the stream and associated combined sewage most often overflow into the Harlem River, contributing more than 560 million gallons of polluted discharge into the waterway every year. Indeed, the CSO containing Tibbetts Brook is the largest by annual volume in the entire city.

Daylighting the stream and reconnecting it to the Harlem River has been identified as a key project in NYC Parks' Van Cortlandt Park 2034 Master Plan, and has been advocated for by the local community for many years. In 2017, Friends of Van Cortlandt Park (now, Van Cortlandt Park Alliance) and BCEQ started [a broad coalition of local groups that support this project](#). In 2018, US Senator Chuck Schumer and Bronx Borough President Ruben Diaz, Jr. hosted a public rally demanding that a vital piece of land (a roughly mile-long narrow section of railroad property that has been abandoned for decades) that is owned by CSX be sold at a fair price to the city. Negotiations are currently ongoing between the City of New York and CSX for purchase of this property.

NYC DEP included daylighting of Tibbetts Brook as a baseline condition in its [Citywide LTCP](#) submitted to New York State Department of Environmental Conservation (DEC) in September 2020, noting that if implemented, the project would remove 228 million gallons of CSO from the Harlem River during a typical rainfall year.

It's likely that this project would unfold in three separate phases:

1. Restoration of wetlands in Van Cortlandt Park & construction of a new weir structure to mitigate storm-driven flooding in Van Cortlandt Park while also diverting the Tibbetts Brook baseflow from the sewer system
2. Daylighting of the stream through the currently disputed CSX property + construction of an extension to the Putnam Greenway
3. Reconnection of Tibbetts Brook to the Harlem River via pipes that travel underneath the Metro North rail lines that run along the Harlem River

Urban Waters Support: As New York City finds a way to move forward on this project, the Ambassador will identify ways that Federal partners could help by providing technical expertise and/or funding to support this project that has very strong community support.