EPA United States Environmental Protection Agency

brownfields

Success Story

UNCOVERING A LONG-BURIED PRIZE IN DOWNTOWN YONKERS: "DAYLIGHTING" THE SAW MILL RIVER

In Yonkers, New York, an EPA Targeted Watershed grant is helping to return long-buried sections of the Saw Mill River to the surface as part of a multi-billion dollar, area-wide revitalization effort that includes restoration of brownfields along the river.

HIGHLIGHTS

The Saw Mill River Coalition (established by Groundwork Hudson Valley) forged relationships with public works departments, private developers, and professional water quality researchers to focus on water quality issues and develop corrective strategies.

The EPA grant has enabled the Coalition to pursue uncovering selected portions of the river that have for nearly a century been piped underground—an effort referred to as "daylighting" the river.

Goals under a planned, area-wide revitalization effort include a new, minor-league ballpark as well as new housing and retail development.

Floating trash and other debris collect along the Saw Mill river

EPA's Brownfields and Land Revitalization program and the National Park Service Rivers, Trails, and Conservation Assistance (RTCA) program have had a successful 12 year partnership with Groundwork USA. Groundwork USA is a network of independent non-profit organizations called Groundwork Trusts focused on stabilizing and revitalizing their communities through projects and programs that improve their environment, economy and quality of life.

Similar to the community led efforts of the Brownfields Program, the Urban Waters initiative is an effort to restore and protect urban water bodies and adjacent lands. U.S. EPA's goal is to integrate and leverage existing programs to foster increased understanding and a sense of

ownership of waters and surrounding land in communities across the country. This is especially important as urban waters impact large populations and land-use decisions have far-reaching implications.


Portions of the Saw Mill river were covered in the early 1920s.

The Saw Mill River Project

The Agency's commitment to restoring urban waters is evident in cities like Yonkers, New York, where a Targeted Watershed grant of nearly $1 million awarded in 2007 is helping to return long-buried sections of the Saw Mill River to the surface as part of a multi-billion dollar, area-wide revitalization effort. This grant was awarded to Groundwork Hudson Valley, a non-profit environmental organization located in Yonkers. The organization had already established the Saw Mill River Coalition in 2001 to improve the area's water quality, encourage sustainable land use, restore habitat and biodiversity, promote recreational opportunities, and raise awareness of the river's history and significance. Among its many areas of assistance, the EPA grant has enabled the Saw Mill River Coalition to pursue one of its primary goals: uncovering selected portions of the river that have for nearly a century been channeled into large underground pipes—an effort referred to as "daylighting" the river, or bringing the river back to the light of day. Along with the EPA grant, a combination of public and private funding will be used to finance this project.

Saw Mill River History

In the early 1920s, in response to Yonkers' burgeoning development and rapidly expanding population, the U.S. Army Corps of Engineers (USACE) covered up sections of the Saw Mill River to allow flood mitigation—as well as to protect citizens from what was becoming a dangerously polluted waterway. The last mile of the Saw Mill before its confluence with the Hudson runs almost entirely underground, with scant portions visible between some buildings and under the train station.

Pollution levels in the Saw Mill River, caused by the area's industrial past as well as rampant, illegal dumping and sewage overflows during flooding events, remained hazardous through the 1990s. While areas of the river are home to wood frogs, eastern painted turtles, rainbow trout, redbreast sunfish, egrets, and herons, research conducted by the U.S. Geological Survey (USGS) in the 1990s revealed that the Saw Mill contained the highest concentration of metals of all sites in the USGS' National Water-Quality Assessment Program. A more recent evaluation in 2007 conducted by the Coalition also found elevated levels of human fecal coliform bacteria in two municipalities; sources are still under investigation. Portions of the river have for decades been a dumping ground for trash, tires and appliances; some of the river's most scenic stretches are choked with plastic containers, fast food wrappers and bottles.

Reduction of those contamination levels has been a high priority for more than a decade. In 1999, in a collaboration with Westchester County, the USACE began a review of the river that resulted in an Ecosystem Restoration Study in 2003.

Extending more than 23 miles, the Saw Mill River begins as suburban wetland outside of Chappaqua, New York; then runs south through 12 municipalities and along 16 miles of Saw Mill River Parkway before emptying into the Hudson River in downtown Yonkers, the state's fourth-largest city.

The Saw Mill River Coalition picked up where these efforts left off, finalizing an Action Plan that included a list of priority problems, strategies for addressing them, and specific tasks. The Coalition has taken a three-pronged approach: 1) cleanup of selected areas along the river, combined with an outreach campaign to reduce dumping and increase awareness of the importance of the Saw Mill's restoration; 2) restoring critical watershed and riverbank areas to ensure uninterrupted river flow and flood prevention; and 3) addressing ongoing development pressures and poor land-use planning, by helping municipalities incorporate river protection into their decision-making processes.

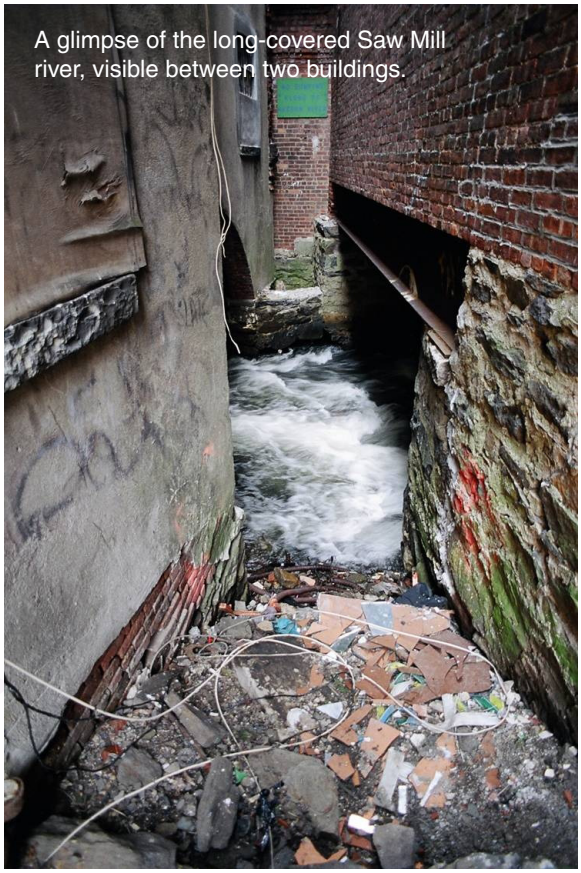
Working Partnerships

With assistance from the EPA grant and collaboration from its member stakeholders, including the New York State Department of Environmental Conservation (NYDEC), the Coalition has pursued its Action Plan. A partnership with Manhattan College created a comprehensive water quality monitoring program, and an inter-municipal agreement signed by affected cities and towns is protecting the Saw Mill River from further damage. The Coalition established a working relationship with public works departments, private developers, and professional water quality researchers, to focus on fecal coliform and other water quality issues and develop corrective strategies in the affected municipalities. A collaboration with high school students developed an "anti-trash/floatables" campaign that uses signage, volunteer cleanups, and public outreach to repair some of the damage done by dumping and improve public awareness. And through meetings, seminars, workshops and publications (including its own website), the Coalition has provided information to municipal staff and decision-makers to improve land-use planning decisions, create models for stormwater management, and integrate river protection measures into development plans.

Project in Motion

A groundbreaking ceremony for "daylighting" of the Saw Mill River was held in December 2010. Eventually, uncovering of long-buried sections and restoration of the Saw Mill River will allow development to proceed on a $3.1 billion revitalization project for downtown Yonkers. Plans under this project include a new minor-league ballpark as well as new housing and retail development. The soon to be exposed areas of the Saw Mill River are a major component of this revitalization, as are the efforts by the Coalition to clean up the river and protect it from further contamination.

"We've really made a dent in improving water quality in the Saw Mill River," explains Ann-Marie Mitroff, Director of River Programs with Groundwork Hudson Valley. "We're involving people across multiple sectors—from religious groups, service organizations such as Rotary clubs and girl scouts, to kayaking and nature groups—in being stewards in their environment. This is basically about bringing the Saw Mill River 'back to the light' and in the process, renewing the river experience for people in the middle of an urban environment."



A glimpse of the long-covered Saw Mill river, visible between two buildings.

URBAN WATERS

Urban environments, particularly in underserved communities, are typically characterized by paved or covered "impervious" surfaces, working waterfronts with industrial facilities, abandoned industrial sites, and other underutilized or contaminated lands. These characteristics, in combination with aging and inadequate storm water management infrastructure, generate excess and untreated runoff that transports sewage and hazardous wastes into local water bodies. Urban patterns of historical development often make waterways inaccessible to adjacent neighborhoods. Lack of access to waterways limits the ability of communities to connect and participate in restoring waterways as healthy living ecosystems and reap the benefits of living close to the water in the city. Addressing these issues to ensure healthy and accessible urban waters can help grow local businesses and enhance educational, recreational and social opportunities in nearby communities.

EPA is learning from community efforts already underway and supporting communities as active participants in the restoration and protection of urban waters. EPA works to increase access to waterways, which promotes a sense of public ownership of water resources and integrates environmental goals with other pressing priorities like economic development, education, job creation, and greenspace creation and preservation.

URBAN WATERS RESOURCES

www.epa.gov/urbanwaters

Watershed Planning and Management

- Managing Wet Weather with Green Infrastructure - *cfpub.epa.gov/npdes/home.cfm?program_id=298*
- Directory of EPA Watershed Publications - *water.epa.gov/type/watersheds/publications.cfm*
- Key EPA Water Internet Tools Course - *www.epa.gov/owow/watershed/wacademy/epatools*
- Watershed Central and Wiki - *wiki.epa.gov/watershed2*

Water Quality and Pollution Prevention

- EPA Enforcement and Compliance History Online - *www.epa-echo.gov/echo*
- Nonpoint Source Pollution - *www.epa.gov/owow_keep/NPS/index.html*
- Water Quality Assessment Tools and Models - *water.epa.gov/scitech/datait/models/index.cfm*

Community Information

- Groundwork USA - *www.groundworkusa.org*
- National Park Service Rivers and Trails Program - *www.nps.gov/ncrc/programs/rtca*
- Adopt Your Watershed - *www.epa.gov/owow_keep/adopt/index.html*
- Community Culture and the Environment A Guide to Understanding a Sense of Place - *www.epa.gov/care/library/community_culture.pdf*
- EPA Smart Growth - *www.epa.gov/smartgrowth*
- Surf Your Watershed - *cfpub.epa.gov/surf/locate/index.cfm*

Outreach Development

- Coastal Urban Waters Toolkit - *www.epa.gov/owow/oceans/debris*
- Getting In Step: A Guide for Conducting Watershed Outreach Campaigns - *www.epa.gov/owow/nps/toolbox/guide.htm*
- Non-Point Source Toolbox - *www.epa.gov/nps/toolbox*

Funding

- Brownfields Grants to Support Assessment/Cleanup of Contaminated Property, Environmental Workforce Development and Job Training Grants, and Targeted Brownfields Assessments - *www.epa.gov/brownfields/grant_info/index.htm*
- Catalog of Federal Funding Sources for Watershed Protection - *cfpub.epa.gov/fedfund*
- Sustainable Finance Website - *www.epa.gov/owow/funding/trainings.html*
- Watershed Funding Resource Directory - *water.epa.gov/aboutow/owow/funding.cfm*

Case Studies

- Case Studies for Stormwater Management on Compacted, Contaminated Soils in Dense Urban Areas - *www.epa.gov/brownfields/tools/swcs0408.pdf*
- Urban Agriculture on Brownfields Website - *www.epa.gov/brownfields/urbanag*
- Targeted Watershed Grant Case Studies - *water.epa.gov/grants_funding/twg/initiative_index.cfm*

For more information on the Saw Mill River Project, and on other brownfields related Groundwork projects, contact Groundwork Hudson Valley at 914-375-2151, or visit the Groundwork Hudson Valley web site at: *www.groundworkhv.org.*

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Groundwork Hudson Valley
Saw Mill River Project

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