Stormwater and Green Infrastructure Program

CSO Monitoring

In partnership with the Guardians of Flushing Bay and Temboo, the District installed sensors (turbidity and conductivity) in Flushing Creek. Sensors generated data for a few months until the equipment was vandalized in April of 2022. The team reassessed the project and identified two alternative sites: Hudson River Park at the end of West 38th Street and the mouth of the Gowanus Canal. After consultations with Temboo and potential partners, Hudson River Park Trust and RETI Center, the team

decided to pursue the Gowanus Canal site.

GI Bus Tour

After a two year hiatus, the GI bus tour resumed in 2022. As a safety precaution, the tour was capped at 35 participants. The tour included Right-of-Way rain gardens and infiltration basins, a section of the Southeast **Oueens Blue** Belt, and the Greenpoint

Tour participants looking out to a wetland

Library of the Brooklyn Public Library with multiple green infrastructure practices, such as pervious pavers, green roofs and rain water harvesting.

As usual, participants represented a variety of backgrounds, from city agency staff to New Yorkers interested in green infrastructure, including a high school student.

Stormwater Infrastructure Matters Coalition

The District assisted the Coalition and Pratt Institute in hosting the State of Water 2-day virtual

symposium. The District staff presented on the water rate structure and opportunities for incentivizing green infrastructure on private properties.

The District continued to serve on the Steering Committee, which was tasked with hiring a new program mangers in 2022. After a long process with dozens of applicants, the new program manager was hired in September. Also in September, a new Graduate Fellow began working with the Coalition, assisting with outreach and communication with

member organizations.

Green Infrastructure Outreach & Education in the Bronx

The District was awarded a grant from the NYS Pollution Prevention Institute to conduct outreach and education in 5 community districts in the Bronx. The goal of the project is to increase

awareness of laws, regulations and incentives for green infrastructure on private properties. The project is conducted in partnership with the NYC Department of Education, Bronx Council for Environmental Quality and Green Roof Research Alliance.

New York New Jersey Harbor & Estuary Program

Shino continued to work closely with the Citizens Advisory Committee (CAC) leadership team and serve as NY Co-Chair of the Water Quality Working Group. Shino also participates in the HEP CAC Diversity, Equity, Inclusion and Justice Subcommittee and the Harbor Educators Group.

Other Partnerships

The District continued its participation on the Technical Advisory Committee of the Hudson River

Park Trust, the Hudson River Estuary Management Advisory Committee and the Forest for All NYC urban forestry coalition.

Education Program

Envirothon

NYC was unable to host the Envirothon in 2022 because of the persistent high rates of COVID infection in the early part of 2022. We partnered with the Long Island Envirothon and offered one team from each borough of NYC to participate in the Long Island Envirothon. Unfortunately no team was able to take advantage of this opportunity.

Shino helped as a volunteer at the Long Island Envirothon as well as the NYS Envirothon.

Working with Schools and Partners

The District began resuming field trips with school groups and hosted an elementary school class on a seining trip to Jamaica Bay and a high school AP Environmental Science students on a field trip to Marine Park in Brooklyn. The District also served as a guest lecturer for a high school AP Environmental Science class.

The District also participated in a career panel discussion, a Math for America forum, Gowanus Blue student presentation and the Billion Oyster Project Symposium.

Urban Soils Institute

7th Annual Urban Soils Symposium

The Annual Symposium is a platform that brings together soils, our common resource with people of all backgrounds into a common space and takes soils science out of categorical thinking and creating opportunity for synergistic knowledge sharing and cross disciplinary explorations for better understanding and developing solutions for sustainability and quality of life for all beings.

Our theme in 2022 explored the metabolic processes that sustain life and that can build or rebuild the foundations of sustainability by incorporating them into our cities, industries, suburban, agricultural, traffic, and mining, and conservation areas. We started by deliberating the forces of nature and the potential repair needs in our infrastructure, research approaches, mentality, relationships, the way we seek knowledge, and how we collaborate.

The symposium features exhibits and presentations by scientists and artists. With each year, the artscience translation of soils explorations keeps getting stronger. In 2022 we had over thirty artists and scientists of diverse backgrounds translate their work through various art forms; soils through the art of science, and science of art.

The breakout sessions of the symposium were hosted by partners on Governors Island. Earth Matter NY led participants on a tour with 2 hands-on compost related activities. Institute for Public Architecture (IPA) hosted a presentation and interactive discussion on transportation infrastructure as a critical factor of Metabolism of Cities, with a specific look at how people drive material & energy flows. All of the pieces became a collective, collaborative work, highlighting and celebrating intricate known and unknown capacities and mechanisms of metabolism in soils, their cascades into our lives and built worlds, revealing our human-environment condition. This is the positivity of developing mutualistic efforts across and between diverse disciplines, sectors, backgrounds, and knowledge, to negotiate Nature back into our lives and built environments as a true repair kit for attaining optimal quality of life and sustainability.

The USI, SWALE, RUDN, Institute for Public Architecture, Earth Matter NY and the Lower Manhattan Cultural Council (LMCC) co-hosted this 2-day event at LMCC on Governors Island. After two years of virtual symposia, we returned to our in -person format. There were approximately 110 persons in attendance. We did not have the capacity

Soil Testing and Workshops

The USI resumed soil testing services in 2022

hosting monthly outdoor public soil testing events from May to September on Governors Island. These workshops are well received and a vital part of the



A presenter speaking in front of symposium attendees

Groundwork that USI does. We feel and, that this is an important way to create access for all public to gain insight and skills to understand soils and their capacities in various applications, as well as creating an easy way for them to get their soils tested, understand why it is important to test soils, and help them understand the results and the best management practices that they can implement when working with their soils. The value of this service is confirmed by the feedback we receive and so we will continue to do these workshops and hope to increase them in the future along with site visits.

The USI held 6 free soil screening events at Governors Island from April through September. Some of these events were combined with to live stream, unfortunately, and regret that, since we gained a global virtual audience over the past two years, who were looking forward to participating. We did, however, manage to make a few recordings for online viewing, and are working on creating a printed and online collection of abstracts that will be accessible to all.

workshops on what the soil testing results mean, how to collect samples and what soils amendments

can do. The USI maintained its partnership with Earth Matter, Newburgh Urban Farm and Food Initiative, GrowNYC, and Human Impact Institute.

Online Video Resources

In 2022 the USI invested in AV equipment and staff training to

create online resources. The objective was to optimize the virtual and digital platforms, expanding accessibility to educational resources for the public and connecting more practitioners, thus broadening our network and information sharing. USI staff spent 2022 learning and training in video production and editing. Content for a soils education videos series was developed and compiled. The first video in the series has been created and edited, ready for online viewing. USI YouTube channel was upgraded to increase searchability of our channel . 18 videos have been compiled and edited, with suggested playlists. 149 subscribers with all videos viewed. We have received many requests for these videos, locally and worldwide.

Urban Agriculture

The District assisted an indoor farm in completing Tier 2 AEM so that the farm can apply for NYS Grown certification. The District is also participating in the NYS Department of Agriculture & Market's Diversity & Racial Equity Network.