About Waterfront Alliance

Waterfront Alliance inspires and effects resilient, revitalized, and accessible coastlines for all communities. We are a coalition of more than 1,100 organizations, working together to bring about real change to our region’s waterways and 1,600 miles of coastline.

Estuary Explorers

Waterfront Alliance’s Estuary Explorers program was founded to educate youth about topics related to the New York-New Jersey Harbor Estuary. Estuary Explorers consists of field labs, multi-session programs, teacher residencies, and virtual resources. Youth focused programs are best suited for students in grades 6 through 12. These resources provide teachers, parents, and students with extensive background information and extension activities to both prepare for the experience and help extend and connect learning beyond the immediate activity. Our popular field labs give students the opportunity to learn at waterfronts in their own communities, often unexplored or unfamiliar to them. The one-to-two-hour lesson connects to the geography of the harbor, teaches about permeable and non-permeable surfaces, measures basic water quality parameters such as pH and temperature, and draws conclusions on how these scientific metrics observed by the students themselves factor into the coastal resilience of their waterfront.

Expanding Impacts: Estuary Explorers Year in Review 2021-2022

“Through Estuary Explorers, my students were able to act as stewards of their own local waterfront! They gained a lot from exploring the water both in the classroom and out in the field.

Samantha Soriano – IS 49 Berta A. Dreyfus”
TEACHER RESIDENCIES

Teacher residences guide teachers and their students through Waterfront Alliance’s Coastal Resilience Education Toolkit while teaching them how to implement topics on climate change and waterfront access into future lesson plans. Estuary Explorers residency programs run up to 5-weeks and are best suited for science teachers who teach 6th grade and older. All resources and materials are provided at no cost to the teachers.

Waterfront Alliance worked in close collaboration with two schools for multi-week in-depth programming. In conjunction with IS 49 Berta A. Dreyfus, we worked with the head science teacher for 4-weeks. We brought 40 students to the Stapleton Waterfront on the north shore of Staten Island for hands-on field lab programming. For many students, it was their first time visiting this waterfront site in their community.

In the Spring, Waterfront Alliance worked with the Washington Heights Expeditionary Learning School in northern Manhattan. We conducted a 4-week program beginning with indoor sessions teaching about the waterfront and climate change around New York and New Jersey using lessons out of the Coastal Resilience Education Toolkit. These lessons include: Human Impacts Game, Become an Ecological Engineer, Neighborhood Water Budget, an introductory presentation to the waterways around New York and New Jersey, and a Waterfront Field Lab. We led 50 students down to Dyckman Piers for their final session to conduct salinity, pH, and temperature tests in the Hudson River.

Quick Facts

- All materials are provided by Waterfront Alliance
- Lessons are taught directly out of the Coastal Resilience Education Toolkit (available in both English and Spanish)
- Class sizes of up to 30 students can be accommodated
- Offerings are available either in-person or virtually
COMMUNITY BASED ORGANIZATIONS AND CIVIC ENGAGEMENT

Waterfront Alliance continued to partner with various Community Based Organizations (CBO’s) around New York. Starting in early 2022, the organization began a partnership with the Bay Ridge Environmental Group. While the group hosted a trash clean up around Cannonball Park in Bay Ridge, Waterfront Alliance was able to table and talk to residents about waterfront issues that were of concern to them. This led to a later partnership for an Earth Day event at the American Veterans Memorial Pier.

More tabling was done at a clean-up event hosted by the Coastal Preservation Network (CPN) at Big Rock Beach in College Point. Educators led activities while a Waterfront Alliance staff member was interviewed by CBS News to talk about the importance of waterfront access and events such as these. Waterfront Alliance was later invited to and participated in CPN’s Family Earth Fair in June.

Partnering with CBO’s and tabling at their events has allowed for a stronger civic engagement component to Estuary Explorers. Alongside various activities, Waterfront Alliance staffers presented information on the upcoming Environmental Bond Act vote in New York State at the Hong Kong Dragon Boat Festival in Flushing Meadows Corona Park. Attendees filled out a brief survey on their experience with flooding in the community surrounding the park.

“As an educator with Waterfront Alliance, you can see just how much the lessons we teach impact the students. The programs give them a sense of place in their neighborhood and on the water, as well as a sense of purpose to protect and advocate for their local waterfronts. It’s a unique and exciting experience, for them and for us.”

Reilly Grzywacz - Waterfront Educator

“Programs like the Waterfront Alliance are much needed in our public schools. They give students a window to a world they may not otherwise have access to.”

Emmanuel Anastasiou - Washington Heights Expeditionary Learning School
This past summer, Waterfront Alliance once again partnered with the Castle Hill YMCA in the Bronx to provide hands-on activities and lessons around their waterfront. Over the course of 5-weeks, campers were led down to the Castle Hill Park waterfront to do water quality testing, model shoreline construction, and to have discussions around the ecology and the effects of climate change on the waterfront.

Waterfront Alliance began a new partnership with the Boys and Girls Club of Harlem in Hamilton Heights. Working with campers of all ages, we taught indoor sessions, exploring human impacts on the waters around New York and New Jersey, as well as exploring Waterfront Alliance’s newly released coloring book. Programs were held down at the northern portion of Riverside Park for water quality testing and to learn about the history of the Hudson River.

Using City of Water Day as an anchor event, Waterfront Alliance set up two Estuary Explorers programs as part of 50+ events across the region. Estuary Explorers was able to coordinate an In Your Neighborhood event on Roosevelt Island and joined up with New York State Parks for their Roberto Clemente State Park program. At both events, staff guided attendees through activities, such as playing with and building model shorelines, conducted pH tests, lead discussions on climate policy issues, and provided resources and handouts to all who passed by.

“I myself have learned a lot about the waterfront through our partnership with the Waterfront Alliance….The more you know, the more you appreciate your waterfront, the more you respect it, the more you’ll fight for your community.”

Sharlene Brown - Castle Hill YMCA
“This past April, we began leading a residency program with one of our partner teachers. During this program, I noticed one student who took a particular interest in almost all of the topics we were going over. Without fail, she would have her hand up for every question I asked ready with an answer. While finishing up a class one day, her teacher approached me and said this was the most he had ever seen this student participate in any subject all year. She had been struggling to engage since the start of the school year due to the isolation brought on by the pandemic, but was able to come out of her shell during our lessons. It’s that kind of reaction from students that makes me proud to teach about our waterways and the amazing environments that surround us.”

Jake Madelone - Senior Waterfront Education Coordinator

PROFESSIONAL DEVELOPMENT SESSIONS AND THOUGHT LEADERSHIP

Estuary Explorers led a virtual teachers webinar in November 2021. This webinar explored different aspects of the New York-New Jersey Harbor Estuary, the effects of climate change on the estuary, and how to incorporate lessons and activities from the Coastal Resilience Education Toolkit into the classroom. Following the presentation, an activity directly out of the toolkit was demonstrated. Around 20 teachers from across New York and New Jersey were in attendance.

Professional learning is an on-going effort at Waterfront Alliance. Looking to improve our existing lesson plans and activities, Estuary Explorers turned to other educators from around the region as part of the Harbor Educators Work Group for suggestions. Presenting to a group of experienced educators from environmental and cultural institutions, we presented the Neighborhood Water Budget activity from the Coastal Resilience Education Toolkit and demonstrated to this group of educators, with the hopes of adapting the activity for middle schoolers.

In June of 2022, Estuary Explorers was given the opportunity to judge student projects through the Billion Oyster Project’s Student Symposium. Various projects from students enrolled at the New York Harbor School were critiqued and given awards. Waterfront Alliance also presented for a second time at the Intrepid Virtual Youth Summit hosted by the Intrepid Sea, Air, and Space Museum. We led students and teachers in our permeability mapping activity.
METRICS

- Total youth engaged with – 1000+
- 100% of teachers believed the program aligned with their teaching goals
- Programs taught across all 5-boroughs of NYC
- 15 different waterfronts visited
- More than 50% of students had never visited their communities waterfront before their trip
- Successfully piloted two 4-week teacher residencies
- 200+ students engaged in multi-week programs
- 40 students in Staten Island multi-week programs
- 60 students in Manhattan multi-week programs
- 100 students in the Bronx multi-week programs
- 100% of teachers said they would participate in a future program

Looking Ahead

This upcoming year, we will

- Continue to offer and strengthen field labs and teacher residencies with existing school partners, while also expanding out to new schools
- Create new lesson plans and activities for our Coastal Resilience Education Toolkit
- Continue our new Waterfront Wednesday social media series, bringing educational content to a wider audience
THANK YOU TO OUR FUNDERS!

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