Working Together to Improve the NY-NJ Harbor Estuary

Contributions by Partners of the NY-NJ Harbor & Estuary Program

FISCAL YEAR 2014

The New York-New Jersey Harbor & Estuary Program's many partners share a common vision of a healthy and productive ecosystem. These public agencies, local governments, scientists, and civic organizations all make vital contributions towards improving conditions in the NY-NJ Harbor Estuary. This report highlights the financial leveraging that results from the Program's collaborative approach to improving water quality, conserving and restoring habitat, educating and engaging the public, and providing public access.

While the Program is supported with a modest amount of Clean Water Act funds each year, the collective work of all Program partners is what really enables advancement towards our common goals. Over the past ten years, New York – New Jersey Harbor & Estuary Program partners have contributed, on average, \$160 per each dollar directly allocated to the Program through the Clean Water Act. In Fiscal Year 2014, this amount was much larger: a staggering \$1,080 per Clean Water Act dollar, a large fraction of which were invested in habitat restoration and acquisition projects. Partners restored or acquired 150 acres of habitat in 2014 at a cost of approximately \$165 million, not including investments in restoration planning and post-construction maintenance.



In 2014, HEP partners invested a record-breaking \$554 million in multiple projects. Some of the largest include NYCDEP's Brookfield landfill on Staten Island (above) and Paerdegat Basin restorations in Jamaica Bay; the USACE's restoration of beach and dune systems; and NJDEP's Blue Acres acquisitions (*see Appendix*).



HUDSON RIVER FOUNDATION for Science & Environmental Research,Inc.

ABOUT THE NEW YORK-NEW JERSEY HARBOR & ESTUARY PROGRAM

The New York-New Jersey Harbor & Estuary Program (HEP), one of 28 National Estuary Programs, is a partnership established in 1987 to protect and improve the health of the estuary for all of its inhabitants.



The Program works primarily in a core area, though its full geographic scope encompasses the watershed up to the Troy dam.

The Comprehensive Conservation and Management

Plan outlines a comprehensive strategy to enable Program partners to achieve HEP's overarching goal of *establishing and maintaining a healthy and productive ecosystem with full beneficial uses.*¹ HEP provides a forum to develop and implement science-based, environmentally and economically responsible actions by convening partnerships of interested stakeholders. Other Program planning documents include an Action Plan, which identifies priorities for the next five years, and the Hudson-Raritan Estuary Comprehensive Restoration Plan, which lays out the shared vision for habitat restoration and acquisition.

FUNDING ALLOCATED BY PARTNERS

Direct funding for the Program is provided through Section 320 of the Clean Water Act (Figure 1). These funds are matched at least 1:1 by one of the Program partners. In 2014, the Hudson River Foundation provided the \$512,000 match by funding research directly relevant to HEP priorities (see Appendix).²

Clean Water Act funds supporting the NY-NJ Harbor & Estuary Program

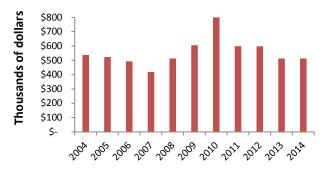
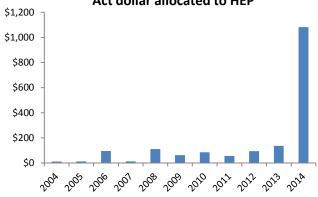


Figure 1: Clean Water Act funding for the program has fluctuated over the past decade, settling most frequently at a level of five to six hundred thousand dollars.

Direct funding for HEP is modest considering the Program's geographic scope (image at left), large population and degree of urbanization. Contributions by partners thus are critical to improving conditions in the estuary.



Partner contributions per Clean Water Act dollar allocated to HEP

Figure 2. In-kind contributions by partners increased significantly in 2014 due in large part to a number of major restoration projects and acquisitions following Hurricane Sandy. The total includes Hudson River Foundation match.

Over the past ten years, HEP partners have invested an average of over \$85 million per year (or \$160 per each Clean Water Act dollar invested; Figure 2) in projects directly benefiting the estuary. In fiscal

¹ Focal areas include water quality, habitat protection and restoration, sediment management, public access, stewardship, and education and engagement. ² Previously, the Passaic Valley Sewerage Commission provided the match for several years.

³ This amount only includes projects carried out within the core area only; upstate land acquisition by public entities would add approximately \$6.5 million.

year 2014, contributions by partners were much higher, with approximately \$554 million³ allocated to habitat acquisition and restoration, stewardship and education, public access improvements, environmental monitoring, research, planning, and other projects. This record-breaking contribution (\$1,080 for each dollar) was driven by a few large restoration projects.

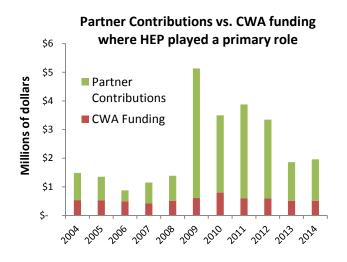


Figure 3. The top two primary contributions in 2014 were (1) the ongoing work by the NJ Harbor Dischargers Group to carry out water quality monitoring in New Jersey and (2) match contributed by HEP grantees (*see next section and Appendix*).

Partner contributions are classified in three different categories based on whether the Program has actively pursued the funds or has played a significant or support role in securing the investments. The "primary" category includes those for which the HEP

Total in 2014:	\$553,509,714
Support:	\$548,173,150
Significant:	\$3,889,137
Primary:	\$1,447,427

Director, staff, and/or committees played a central role in leveraging resources. Significant leveraging includes those projects for which the HEP Director, staff, and/or committees actively participated in, but did not lead, the efforts to leverage resources. The "support" level includes those activities for which the HEP Director, staff, and/or committees played a minor role. Counting only those projects where HEP played a primary role, partners have contributed an average of \$3 per Clean Water Act direct HEP funding, and the ratio has been generally higher in the past six years (Figure 4).

New York-New Jersey Harbor & Estuary Program Grants

One of the ways HEP directly leverages funds is through match provided by grantees. Grant-funded projects are also a critical way of helping communities experience the estuary, learn about its issues, and foster stewardship of their local environment.



Newark Back to the River Boat Tours & Walkshops were led by Ironbound Community Corporation and City of Newark in 2014.

Over the years, HEP has funded hundreds of projects through its Stewardship, Public Access, and Habitat Restoration grants programs, publications, and other projects. Since 2000, HEP has awarded close to two million dollars in grants to support a variety of projects throughout the estuary. Grantees have provided, on average, twice as much in match, bringing the total invested in these projects to over \$6 million. For more details, see the Appendix and visit the <u>HEP</u> <u>website</u>, which includes an interactive map displaying the projects as well as project summaries, reports, pictures, and materials.

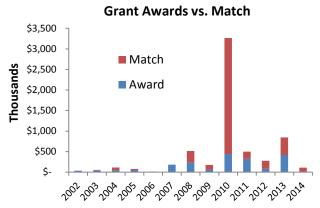


Figure 4. While match provided by grantees is typically 1:1, two projects in 2010 provided a very large match: NYC Dept. of Parks and Recreation's Bronx River fish passage projects and the Oyster Restoration Research Project's oyster reef pilots.

HABITAT RESTORATION

The NY-NJ Harbor & Estuary Program and its Restoration Work Group play an essential role in restoration planning and have contributed key funding to a number of restoration projects. Program partners meet these capital-intensive habitat restoration and conservation goals by implementing on-the-ground projects and providing long-term stewardship. Habitat

Restoration and acquisition sites

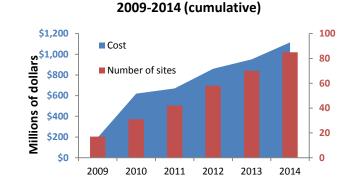
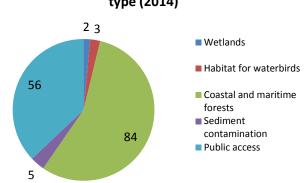


Figure 5. The amount invested in restoration and acquisition projects has grown steadily for the past five years.

restoration in the estuary is guided by the Hudson-Raritan Estuary <u>Comprehensive Restoration Plan</u>, which sets restoration and acquisition goals across twelve Target Ecosystem Characteristics. An overview and highlights of progress are provided here.⁴ In the 2015 HEP Restoration Report, it was cited that at least 85 restoration or acquisition projects have occurred in the NY-NJ Harbor Estuary between 2009-2014, totalling roughly \$1.1 billion.⁵ Over 1400 acres were restored or acquired during this period, consisting mostly of coastal and maritime forest (65% of area), public access (19%) and wetlands (15%). In addition, approximately 18 miles of rivers were made accessible to migratory species and five experimental eelgrass beds were piloted.



Acres of habitat restored or acquired by type (2014)

Figure 6. Coastal and maritime forests and public access gained the most acreage in 2014.

In 2014, 150 acres over 15 projects were restored or acquired, at a cost of approximately \$165 million.⁶ Most progress was made in coastal and maritime forest and public access. For more details, please refer to the <u>Restoration Report</u>.



Fish ladder installed by the New York City Department of Parks and Recreation at the 182nd Street dam in the Bronx River.

BE INFORMED AND STAY INVOLVED!

Learn what's going on in your estuary by subscribing to the *Tidal Exchange E-news*, visiting www.harborestuary.org, or contacting us at info@harborestuary.org. This report was produced by the New York-New Jersey Harbor & Estuary Program and written by Gabriela Munoz with assistance from Robert Pirani and Kate Boicourt.

⁴Only partial data was available in some cases and data in this report were treated slightly differently than in the Restoration Report.

⁵ Based on data provided by HEP partners, Carl W. Alderson and Justin Bowers (2012), and HEP.

⁶ A portion of this amount is not included in the leverage portion of the report because data were not available at the time of reporting to EPA.