



## **Pioneering Blue and Green Roof Improves the Health of the East River, Creates Jobs for Formerly Incarcerated**

### **Innovative Rooftop Infrastructure Will Reduce Pollution in the East River and Support Osborne Association's Honey Bee and Catering Businesses**

**(Bronx, N.Y.)** – The Department of Environmental Protection (DEP) and nonprofit Osborne Association today announced the installation of one of the nation's first integrated blue and green rooftop systems atop Osborne's facility located at 809 Westchester Avenue in the South Bronx. The blue and green roof will manage over 100,000 gallons of stormwater a year that falls on the rooftop of the facility and thereby improve water quality in the East River. The project was funded through a \$288,000 DEP Green Infrastructure Grant and a \$400,000 in-kind contribution from Osborne. The functional rooftop will also support a future beekeeping business, which in turn will support the organization's catering business. Osborne's enterprises employ formerly incarcerated individuals. The project was designed by Hazen and Sawyer, an environmental engineering firm.

"We are excited about this project. With this blue and green roof, everybody wins," said Osborne Association Executive Director Elizabeth Gaynes. "Our South Bronx community benefits from improved air and water quality; our social enterprise participants gain experience; and it allows us to start a new honey bee business."

"Green Infrastructure helps absorb stormwater and thereby improves the health of our local waterways," said DEP Commissioner Carter Strickland. "By helping to fund projects like the blue and green roof at the Osborne Association we hope to continue to raise awareness about stormwater management and enlist all New Yorkers in helping to protect our environment."

"Bringing innovative, green solutions to communities and organizations like the Osborne Association is always exciting work. To interact with the community in such a close way is what made this project so special," said Hazen and Sawyer VP Sandeep Mehrotra. "We're especially proud to be a part of the revival movements in the South Bronx and many other parts of the City."

The green infrastructure system controls stormwater runoff from the roof by combining "blue" detention trays that slow the flow of stormwater into the sewer system and "green" trays that contain soil and vegetation to absorb rainwater and improve air quality. The system is expected to reduce

runoff from the building's roof area by 32 percent during a typical NYC storm. Monitoring equipment has also been installed to measure the amount of precipitation that falls on the roof as well as the rate at which it enters the sewer system. This data will inform the design of future rooftop stormwater management projects.

New York City is largely serviced by a combined sewer system where stormwater that falls on rooftops, streets, and sidewalks, and wastewater from homes and businesses is carried through a single sewer pipe to treatment plants. During heavy rainfall, stormwater can exceed the capacity of the sewer system and a combination of storm- and wastewater can be discharged into local waterways. Since 2002, DEP has invested more than \$10 billion in upgrades to wastewater treatment plants and related efforts to reduce these discharges and today New York Harbor is cleaner and healthier than it has been in more than a century. However, sewer discharges continue to be New York City's top harbor water quality challenge.

By reducing the amount of stormwater entering the combined sewer system during rain events, the Osborne Association is helping to reduce the amount of pollution discharged into the East River. Thanks to efforts in the local community, this river, once highly polluted, is once again becoming a thriving ecosystem.

The combination of blue and green roof technology also ensures an ecological balance of water and vegetation on the roof that offers a perfect habitat for the organizations' bees, which live in hives located on an adjacent roof. Osborne plans to launch its honey business in 2014.

In addition to benefits for the environment and the future bee business, the blue and green roof weighs less than a traditional green roof and is less expensive to install, making it a perfect choice for nonprofits like Osborne that manage older commercial buildings that may not be able to withstand the weight of traditional green roofs. The system was installed by Rising Sun Construction LLC and will be maintained with the help of graduates from Osborne's Career Center.

The greenery of the roof also offers added layers of protection and insulation to the roof, and the Osborne Association expects to see heating and cooling bills reduced in the future.

The Osborne Association is one of 29 different partners DEP has committed funding to since the Green Infrastructure Grant Program launched in 2011. In total, DEP has committed over \$11 million to its Grant Program partners who, in turn, have contributed \$5.4 million in matching funds. Preference for grants is given to proposals that provide cost-effective stormwater controls, matching funds or other contributions, and ancillary benefits such as increased shade, decreased energy use for cooling buildings, increased awareness about stormwater management, and increased community stewardship. The Grant Program is one part of DEP's Green Infrastructure Program which aims to significantly reduce sewer overflows and improve harbor water quality through \$2.4 billion in public

and private funding for targeted green infrastructure installations as well as \$2.9 billion in traditional infrastructure upgrades over the next 20 years.

Over the past 30 years, the Osborne Association has been unparalleled in the breadth and scope of the services it provides to individuals affected by the criminal justice system. In an effort to create opportunities for people returning home from prison, and to reduce recidivism rates, Osborne launched a number of programs that eliminate employment barriers for formerly incarcerated individuals.

The Career Center, launched in 2009, offers career development and coaching, soft skills and hard skills training, environmental and financial literacy education, and job search and retention support.

Fresh Start Catering, launched in 2008, is a professional catering business that provides employment and training opportunities to graduates of Osborne Association's Fresh Start Culinary Arts Training Program on Rikers Island, as well as to other Osborne program participants.

“We are continually seeking innovative solutions for problems both large and small,” says Gaynes, who was recognized earlier this year by the White House as Champion of Change for her work to improve the lives of children with incarcerated parents. “The collaboration on our blue/green roof and the ongoing ecological and social benefits have resulted in a double bottom line for Osborne’s clients and the South Bronx.”

**About the Osborne Association:** For eighty years, the Osborne Association has offered opportunities for individuals who have been in conflict with the law to transform their lives through innovative, effective, and replicable programs that serve the community by reducing crime and its human and economic costs. The Osborne Association advocates alternatives to incarceration that respect the dignity of people and honor their capacity to change.

**About DEP:** DEP manages New York City’s water supply, providing more than one billion gallons of water each day to more than nine million residents, including eight million in New York City. The water is delivered from a watershed that extends more than 125 miles from the city, comprising 19 reservoirs and three controlled lakes. Approximately 7,000 miles of water mains, tunnels and aqueducts bring water to homes and businesses throughout the five boroughs, and 7,500 miles of sewer lines and 96 pump stations take wastewater to 14 in-city treatment plants. DEP has nearly 6,000 employees, including almost 1,000 in the upstate watershed. In addition, DEP has a robust capital program, with a planned \$14 billion in investments over the next 10 years that will create up to 3,000 construction-related jobs per year. This capital program is responsible for critical projects like City Water Tunnel No. 3 and the city’s Watershed Protection Program, which protects sensitive lands upstate near the city’s reservoirs in order to maintain their high water quality. For more information, visit [nyc.gov/dep](http://nyc.gov/dep), like us on Facebook at [facebook.com/nycwater](https://facebook.com/nycwater), or follow us on Twitter at [twitter.com/nycwater](https://twitter.com/nycwater).

Learn more at the [NYC Environmental Protection](#) website.

This is the NYC.gov news you requested for:

All DEP Press Releases

To unsubscribe please go to this link:

<https://www.nyc.gov/portal/signin.jsp>

Comment on this news service:

[http://www.nyc.gov/html/misc/html/news\\_feedback.html](http://www.nyc.gov/html/misc/html/news_feedback.html)