



**Environmental
Protection**

Michael R. Bloomberg, Mayor
Cas Holloway, Commissioner

WEEKLY

PIPELINE

November 16, 2010

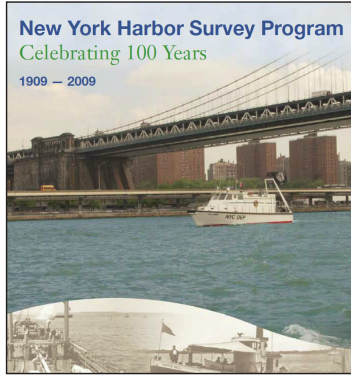
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Survey Says: Harbor is Cleaner Than Ever

In 1609, a ship belonging to the East India Company sailed into what is known today as New York Harbor. Commissioned by the Dutch, the *Half Moon* was captained by the English explorer Henry Hudson who was on a quest to find an eastern passage to China. Three hundred years later, the *Hattie Bell* was also on a scientific quest in New York Harbor, but this was part of a new study of wastewater discharges and her crew was conducting water quality surveys.

Now, 100 years after the city began monitoring the quality of New York Harbor, DEP has published the *New York Harbor Survey Program: Celebrating 100 Years, 1909-2009*.

Throughout its history, New York City has been intimately connected with water. The first European settlers relied on water for transportation and sustenance. Industrial development took advantage



of the natural, deep-water harbor and commerce flourished. Progress, however, came with a catch. Initially, tides and natural flushing action of the harbor allowed waste generated by the ever-growing population and industry to disperse naturally. However, by the mid-to-late 1800s, this natural flushing was overwhelmed by the sheer mass of humanity.

(Continued on reverse side)

Spotlight on Safety

WINTER WONDERLAND or Winter Hazard Trap?

Winter Hazard Awareness Week is held every November to remind everyone to follow winter safety tips. For example, preventing slips and falls is a major concern when outdoor surfaces are wet or icy. In addition, automobile accidents are the leading cause of deaths and injuries during and after winter storms. Roads can get extremely icy from an inch or less of snow, freezing drizzle and patchy black ice.

Take these steps to reduce accidents:

- **Wear appropriate winter footwear** with nonslip soles on wet, icy, or snowy days.

- **Be careful when walking on wet, icy, or snow-covered surfaces.** Walk slowly and carefully slide your feet on slippery surfaces.
- **Hold onto the railing** when using outdoor stairways or walkways.
- **Be especially careful when carrying** equipment and materials by carrying less and holding it closer to the center of your body.
- **Wipe feet when entering a building** so that wet soles won't cause slips on indoor flooring.
- **Limit your injuries if you slip** and start to fall by bending your elbows and knees and using your legs and arms to absorb the fall.
- **Slow down before your vehicle begins to slip and slide.** Remember, snow and ice cause accidents, but vehicle speed kills.

For the complete article click here.

Commissioner's Corner

The response from last week's Pipeline honoring our veterans was tremendous. A few coworkers shared personal stories that were inspiring and touching. It was another reminder about the sacrifices that they and their families have made. Thank you all.

DEP has recently taken major strides on two of **Mayor Bloomberg's** signature issues: making government more efficient and our city more sustainable. On Thursday, DEP launched paperless billing, an optional program for customers to receive quarterly bills electronically instead of by mail. We accelerated implementation at the suggestion of Deputy Mayor **Stephen Goldsmith**, who is working with agencies to improve customer service and reduce government spending. Paperless billing achieves both: for every customer who signs up, DEP will save approximately \$2 each year on postage, paper and overhead. That might not sound like much, but it adds up quickly when you have 835,000 customers. If just 10% of our customers go paperless, we'll reduce billing costs by \$170,000 per year—real savings that will help us keep water rate increases low. And paperless billing is great for the environment too; it's the greenest way to keep current on your water bill. Special thanks to Deputy Commissioner **Joe Singleton**, and his team in BCS, including Quality Assurance Manager **Seshadri Aiyar**, CIS Project Leader **Lazar Mikhly** and Policy Analyst **Phil Young**. Anyone interested in signing up can click here.

On the sustainability front, DEP issued a Request for Proposals that asks private companies to submit cost-effective plans on how to reuse the more than 1,200 tons of sludge that we process every day (read the New York Times story here). Since we terminated our contract with the New York City Organic Fertilizer Company to reduce costs, we have been land filling sludge in Virginia and Suffolk County. Back then, we committed to seek proposals that would use sludge as a resource, rather than treating it



as waste. Sludge is used around the country as soil conditioner for parks, farms, lawns, and golf courses; to produce clean energy; and has other potential applications, including asphalt-paving mix. We expect to have a new contract in place by 2013, and we look forward to choosing the best submission that achieves Mayor Bloomberg's vision of a greener, greater New York.

Sustainable wastewater treatment techniques are not new at our 14 treatment plants—in fact, DEP and its predecessor agencies have led the way using natural processes to treat wastewater for more than 100 years. On Wednesday, we released the 100th anniversary edition of the annual Harbor Survey report, which details the rebirth of New York Harbor. It is an impressive recounting of how far we have come. Massive investments, spearheaded by DEP and its predecessors, have reclaimed our harbor, which is cleaner and healthier today than at any point since we started taking measurements in 1909. Thanks to BWT Air, Energy and Harbor Water Quality Chief **Luis Carrio** and Marine Sciences Section Chief **Beau Ranheim**, for managing our annual Harbor Survey program, and Education and Outreach Deputy Director **Kim Estes-Fradis**, for her tremendous work on the centennial edition. Everyone working at DEP today, and generations of retirees can take credit for the success we have achieved; thank you all, and let's work hard to continue DEP's legacy and continuing role as a leader in protecting public health!

At DEP, everyone is responsible for safety. If you or anyone on your team is concerned about your working conditions, it's okay to ask your supervisor or your bureau's EHS liaison how they can help. If you've still got questions, you can call the EHS Employee Concerns Hotline. It's DEP's responsibility to acknowledge and fix unsafe situations, procedures, and practices. With your help, we'll not only get the job done, we'll make it safer for ourselves, our coworkers, our families, and our city.

CALL (800) 897-9677 OR SEND A MESSAGE THROUGH PIPELINE. HELP IS ON THE WAY.

Focus on the Field



Island plant began operation of nitrogen-removal systems, which require constant monitoring by Moltz and his colleagues. “By discharging a high quality effluent, I am part of a team helping to improve the quality of life for all New Yorkers,” said Moltz.

Moltz is a mechanical and environmental engineer who started his career at DEP in 2000. He reports to Administrative Engineer **Peter Pianelli**. As for his daily tasks, Moltz’s most daunting challenge is performing his duties while the Wards Island plant is undergoing a major capital reconstruction. “Maintaining plant operations through the construction process and continuing to meet changing limits throughout that process has been challenging, but we are meeting the requirements,” said Moltz.

When Moltz is not at the Wards Island Plant, he devotes most of time to his wife **Kristin** and two children. Together, they enjoy exploring nature by hiking, canoeing, and biking. Steve actually bikes to work on many days of the year.

New York City has the cleanest harbor water in a century thanks to significant capital investments and the proficient operators in BWT. As the health and vitality of NYC harbor continues to improve, DEP relies on people like **Steve Moltz**, Process Control Engineer for Wards Island Wastewater Treatment Plant, to continue innovating.

Moltz is responsible for ensuring that the physical, chemical and biological processes at the plant optimally treat more than 200 million gallons per day of wastewater. Each day, he assesses a wide array of analytical data and field conditions to determine how the system should be adjusted to cost-effectively meet our goals. Recently, the Wards

Milestones

Congratulations to **Nancy Levine** BEC, on the marriage of her daughter **Brooke** to **Justin Ruchefsky** on Saturday, November 6, 2010.

DEP: Then & Now

Then: The *Hattie Belle* was the first vessel used by the Harbor Survey program. The vessel began initial assessments around Manhattan in 1906, and was used to collect the first analytical data for the survey in 1909. Many waterways were found to be highly polluted.



Now: The Harbor Survey Vessel *Osprey* is a purpose-built research vessel commissioned in 1991. The vessel, staffed by BWT’s Marine Sciences crew, is equipped with a modern laboratory. A smaller survey vessel, the *Kestrel*, is also used to collect samples in shallow parts of Jamaica Bay. The waters surrounding the city are cleaner now than they have been in 100 years.



Press Box

“New York recently unveiled a grand plan to clean up its waterways. Instead of spending billions on new tanks and pipes (ie, “grey infrastructure”), which take years to build and never quite address the problem, the city intends to invest in “green infrastructure”, such as roofs covered with vegetation, porous pavements and kerbside gardens. The scheme involves a fundamental shift in approach: instead of treating rainfall as waste to be whisked away as quickly as possible, New York will let it sink usefully into the ground: thereby helping to make the city greener, improve air quality, raise property values, increase jobs and lower water and energy costs.” – *The Economist*; November 11, 2010.

Did You Know?

...that New York Harbor has played an important role in national defense and military history. Fort Hamilton, in Brooklyn, has served the U.S. military continuously since it opened in 1831 and was a major embarkation center for troops setting sail in World Wars I and II.

(Survey Says: Harbor is Cleaner Than Ever... continued)


In the late 1800s, the city took the first steps to manage the collection, treatment and disposal of wastewater and to restore the harbor. At the turn of the 20th Century, engineers and scientists from the newly formed New York Metropolitan Sewage Commission began to characterize wastewater discharges and develop recommendations to improve sanitary conditions. This effort led to the establishment of the New York City Harbor Survey Program in 1909. The scientific research and the data it provided resulted in the development of the first master plan to quantify, investigate and develop solutions to address pollution in the harbor.

For the last 100 years, the city has invested billions of dollars to build and upgrade 7,400 miles of sewer lines, 95 pumping stations and 14 wastewater treatment plants located in all five boroughs that treat an average of 1.3 billion gallons of wastewater that New Yorkers generate every day. The city has also invested in the construction of four CSO retention facilities—two of which, Paerdegat and Alley Creek, will come online shortly—that reduce the discharge of combined sewer overflows into surrounding water-

ways. These facilities hold combined sewer flows from sanitary wastewater and stormwater until rain events subside and then send the combined flow to wastewater treatment plants for processing. According to BWT Air, Energy and Harbor Water Quality Chief Luis Carrio, “This investment to protect public health and enhance the quality of the receiving waters has resulted in the harbor being the cleanest it has been in the last century.”

Although the *Hattie Belle* no longer collects water quality samples from the original 12 monitoring stations around Manhattan today, the harbor survey vessel *Osprey* and its Marine Sciences staff collect 39,300 samples a year and analyze data from 65 stations harborwide, and up to 85 within a few years. Marine Sciences staff validates the efforts of the dedicated engineers and scientists who have developed and implemented New York City’s master plan of wastewater collection and treatment started with the first harbor water quality survey one hundred years ago. And with new recently announced initiatives like the NYC Green Infrastructure Plan, we know the next 100 years will be even better.

DEP Thanksgiving Holiday Food Drive

Thank you to all who have donated to the Thanksgiving Holiday Food Drive. If you haven’t yet done so, there is still time to make a contribution. The last day for food collection is Wednesday, November 17. For more information on the food drive, please [click here](#) .

We welcome your feedback! To submit an announcement or suggestion, please email us at: newsletter@dep.nyc.gov. 