

Think These Upgrades Are Important? ‘Dam’ Right They Are!

Our upstate dams literally form the backbone of our drinking water supply system—impounding rivers and lakes, allowing water to collect in our reservoirs, which eventually ends up in the distribution system. Throughout the water supply system, we have 26 high hazard dams along with another 68 small dams acquired through the Land Acquisition Program. Many of these dams have been doing their job for a long time—like the Boyds Corner Dam built in 1870 and still in operation—and need to be kept in good operating condition.

The Bureau of Water Supply works every day to ensure that the dams are also kept in safe condition. “Safe dams aren’t only vital to having a continuous water supply, but they are very important



Gilboa Dam

to the DEP employees who work on these dams and the communities that live under them,” says Chief of Eastern Operations **Mark Donecker**. Should a dam even partially fail, communities in the Croton, Delaware, or Catskill watersheds

(Continued on reverse side)

Spotlight on Safety

OSHA Publishes Final Rule on Cranes and Derricks

In late 2010, OSHA published a new final rule on use of cranes and derricks in construction. The prior rule dates back to 1971. Changes in technology, safety engineering, equipment and a significant number of fatalities associated with the use of cranes in construction over the last several years, have led the United States Labor Department to undertake this rulemaking.

The final rule (effective November 8, 2010) addresses the leading causes of fatalities related to cranes, including electrocution, crushed-by/struck-by hazards during assembly/disassembly, collapse and overturning. It also sets requirements for ground conditions and crane operator

training and assessment. It is important to note that these changes apply to cranes that are used in construction activities only, and as a result will have the most impact on DEP’s capital and other construction projects. As such, it will be important that DEP Contract and Construction Managers become familiar with the new requirements. Requirements of the new rule will not apply to gantry or other cranes/hoists inside DEP facilities that are used to move materials as a normal part of their operation. They will continue to be covered under 29 CFR 1910 regulations and affiliated standards.

To learn more about Crane Safety click here [👉](#)

Commissioner’s Corner

Last week I summarized DEP’s four core functions and said I’d focus on each one as we prepare to release the strategic plan that’s been in the works now for nearly a year. Everything we do is ultimately for the benefit of the nine million people who rely on NYC Water every day—and that’s why customer service is so fundamental to DEP’s mission. By any measure, 2010 was an exceptional year for Deputy Commissioner **Joe Singleton** and the 600-strong BCS team. BCS launched a number of initiatives: wireless water meter reading online, which has revolutionized our customers’ ability to make smart decisions about their water use; paperless billing, which offers a sustainable alternative to U.S. Mail, and can save DEP hundreds of thousands of dollars; and the Water Debt Assistance Program, which provides relief to hundreds of struggling homeowners at risk of foreclosure. And that’s just the beginning. This year we’ll offer new services like a leak notification program that will alert customers when their water use deviates significantly from normal consumption, and we want to help small businesses and property owners by taking as much of the permitting process online as possible. Of course, finishing the installation of wireless meters across the City remains a top priority, and BCS is continuing its blistering pace—approximately 7,500 installations per week. In these ways and many others, DEP will follow through on **Mayor Bloomberg’s** commitment to give New Yorkers the world-class service they deserve and expect.

Severe storms that hit the city’s watershed this fall posed a number of challenges to our water supply system. Heavy rains can stir up large amounts of silt and other sediments that increase turbidity—aka cloudiness—in our reservoirs. Elevated turbidity can impair drinking water quality, not only in New York City, but in upstate towns like New Paltz that rely on our water supply. One way we mitigate turbidity in the Ashokan reservoir is by releasing water through the Ashokan waste channel, which can send some turbid water from Ashokan’s west basin into the lower Esopus



Creek. Unfortunately, these turbid releases can have short term impacts on the creek, and we are doing everything we can to end them as soon as possible. At a community meeting last week, DEP committed to ending waste channel releases within 30 days, and assessing their environmental effects. The good news is that we are making major investments—like the Croton Water Filtration plant and the Catskill/Delaware interconnect—that will essentially eliminate the need to make turbid releases when they are complete. In the meantime we are committed to making as few releases as necessary to ensure that we can meet the needs of nine million New Yorkers, towns that depend on the releases for flood protection, and the residents along the course of the lower Esopus who fish and swim in the creek and want it to be as crisp and clear as possible.

This past Thursday I attended my second meeting of the Newtown Creek Monitoring Committee (the first was last January). Groups like NCMC—especially longstanding members like **Irene Klementowicz** and **Paul Turci**, whose continuing commitment is a great service to Greenpoint and the entire city—help DEP stay connected to the communities we serve, especially those who are impacted by major capital projects—like the \$5 billion upgrade of the Newtown Creek Wastewater Treatment Plant. In addition to committing to finish Phases 2 and 3 of the Newtown Creek Nature Walk, we discussed a public-private partnership that we are developing with National Grid to use more of the methane gas that is a natural byproduct of the wastewater treatment process.

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



DEP's 23 upstate dams impound the clean, refreshing water that nine million New Yorkers rely on for healthy and affordable hydration, and basic firefighting and sanitary services that we sometimes take for granted. Construction Project Manager **Melissa Beristain** has an up-close view of exactly how DEP manages water so that it is accessible for distribution through aqueducts and city water tunnels: she manages a contract for the repair of the Kensico and Muscoot dams in Westchester County.

Beristain describes her role as a construction project manager as, "the person in charge to make sure that everything gets built on time, according to specification, and in compliance with all permit conditions" including safety measures and community relations. For example, OSHA requirements for crane operators recently changed and Beristain worked with contractors

on-site to ensure they quickly updated their safety plans for the new specifications. Another challenge was to work with the park in which the access point to Kensico Dam is located so that DEP's repairs can proceed without endangering the health and safety of visitors to the park. "It sounds general and easy but taking care of all of these considerations is incredibly challenging," Beristain says.

A trained marine environmental scientist, Beristain once dreamed of being like famed ocean explorer Jacques Cousteau. Even though her work with DEP is unlikely to ever take her to the depths of the ocean, Beristain does use skills from advanced chemistry, physics, biology, and geology courses. She also learned GIS and planning programs for nonpoint source pollution control while working for a soil and water conservation district and Westchester County, and has taken courses on project management. Close cooperation with in-house engineers and representatives from DEP contractors complement her expertise and allow her to think on her feet. Beristain has worked for DEP for 14 years and has been in her current position for six years.

In her free time Beristain enjoys mountain biking, yoga and spending time with her family.

Kudos Corner

DEP employees generously donated 527 toys to the holiday toy drive, and 969 pounds of food to the Food Bank for New York City for the Thanksgiving food collection. The number of pounds of food donated equates to 743 meals for your fellow New Yorkers. Good job everyone!

Did You Know



...that each aeration tank in the Newtown Creek Wastewater Treatment Plant requires 27.36 million cubic feet of air daily that is supplied by giant blowers? This is the same amount of air used daily by about 71,300 people breathing normally. In wastewater treatment, the process of adding air provides oxygen to microorganisms, and also keeps solids in suspension. The large blowers, pictured here, supply air needed to maintain the right dissolved oxygen content in the aerator.

Press Box

On installing smart meters "...New York City DEP is the largest water agency to move in this direction. As it heads into its final year of the project, on budget and ahead of schedule, it's giving utilities around the world ideas on how to shave costs, increase revenues and improve customer service." — StateTech Magazine article [on the success of DEP's AMR program.](#)

(Think These Upgrades Are Important? "Dam" Right They Are!... continued)

could be significantly affected by flooding.

One way the city keeps dams safe and operational is by having a robust capital program for rehabilitation. Upgrades were originally focused on the dams in the Croton Watershed—as the system and dams were older and more likely to have deficiencies than their counterparts in the Delaware and Catskill watersheds. DEP began evaluating the Croton dams in the 1980s and proceeded to rehabilitate 12 dams over the next 25 years. While the specific upgrades were slightly different from dam to dam, the overall aim was not only to extend the useful life of these dams by 50 or 100 years, but also to increase operational reliability by upgrading mechanical/electrical equipment and providing better management of inventory and releases.

To the West of Hudson, the rehabilitation of the Gilboa Dam—starting with the emergency work in 2005 and scheduled to be completed by 2016—has been the most significant rehabilitation project. As Executive Project Manager **Paul Costa** discussed, "The number one priority was increasing stability as quickly as we could and we did that by installing 80 anchors throughout the top of the dam, extending into bedrock." These anchors—consisting of bundles of 58 steel cable strands,

14 inches in diameter—were tightened after installation, which resulted in increased stability due to increased tension in the cables' strands. The last stage of the project, to reconstruct steps along the spillway, was actually just bid and will start this summer.

But Chief of Western Operations Division **John Vickers** is quick to point out that capital upgrades are only one part of the safety program for dams. "If capital upgrades are one part of the three-legged stool of making dams safe, the others are a robust inspection and maintenance program and well-coordinated emergency action plans." In fact, DEP goes way above and beyond the minimal inspection requirements by performing weekly and monthly visual observations as well as annual engineering inspections. And the agency has worked over the past several years to strengthen its emergency action plans for high hazard dams, which include communication trees and inundation maps in the case of flooding, and is constantly coordinating with local responders to keep on the same page. With our capital upgrades, inspection and maintenance program, and emergency action plans, DEP is staying well ahead of the curve to operate a safe dam system.

To see more dam upgrade work click here [.](#)

Event Calendar:

Freshkills Park Talks – Tuesday, January 25, 6:30 pm, The Arsenal (830 Fifth Avenue). Staten Island Bluebelt Director **Dana Gumb** will be speaking about Sustainable Urban Stormwater Management: The Bluebelt and Beyond. For more information, click here [.](#)

Milestones

Congratulations to **Rafik Ghali**, BWS, and his wife **Amel** on the birth of their son **Fares Ali** on November 23, 2010.

Congratulations to **Russell Hanaburgh**, BWS, and his wife **Jennifer** on the birth of their daughter **Sara** on January 7, 2011.

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