

Delaware Interconnect Is the Cats(kill) Meow

hroughout the history of the Catskill watershed, the Bureau of Water Supply has striven to mitigate the impacts of turbid water in a system that serves more than nine million residents. Completed in 1915 and responsible for transmitting water 92 miles from the Ashokan Reservoir, the Catskill Aqueduct represents critical infrastructure that New York City would have difficulty doing without. Nevertheless, turbid water often

poses a significant challenge to the daily operations of the water supply, and shutting down the Catskill Aqueduct during periods of high turbidity in Ashokan might prove to be the most effective way to control turbidity impacts on the complex water supply system.

Turbidity is a measure related to the transparency of water, the cloudy, opaque appearance of water that



often results from a high concentration of individual suspended particles. One operational option that can be implemented to control turbidity is the Ashokan Release Channel, which releases water from the reservoir prior to an expected runoff event. Placed in service in 1915, the reservoir holds 127.9 billion gallons at full capacity. The reservoir is composed of west and east basins

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Spotlight on Safety

Fall Protection

With more than \$10 billion in active construction projects, and responsibility for a sizeable water and wastewater treatment infrastructure, DEP's responsibility for the safety of its workers and contractors is significant. In the United States alone, falls represent the number one cause of death at construction sites.

OSHA recently cited a Connecticut contractor for willful and serious safety violations in connection with a fatal fall at a Stamford work site **()**. Employees were installing metal roofing onto a prefabricated structure when one of them fell 35 feet to his death. Upon investigation, OSHA found that workers lacked proper fall protection and the safety harnesses of three of the four workers, including the victim, were not tied off to anchorage points, and the fourth employee's lanyard was too long to have protected him anyway. The company received proposed fines of more than \$51,000 for willful neglect of their responsibility to provide a safe and healthful workplace for its employees.

Ongoing awareness of fall hazards, adequate training, proper equipment and enforcement of fall protection regulations are all critical to prevent falls.

For more information on Fall Protections Λ .

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.

Commissioner's Corner



In order to perform its essential functions, DEP relies upon a positive, collaborative working relationship with legislators, community organizations, and regulatory agencies. One positive development is our growing collaboration with utilities across the state, organized under the New York Water Environment Association. Last week NYWEA sponsored a conference in Albany where New York utilities could learn from each other and also discuss regulatory matters with representatives of the New York State Department of Environ-On mental Conservation (DEC). behalf of DEP, I participated in a panel on stormwater controls and discussed the historic agreement DEP reached with DEC last March to rely upon green infrastructure and adaptive management as part of the solution. While in Albany, Associate Commissioner Matthew Mahoney, General Counsel John Rousakis and I met with State Senator Tom Libous of Broome County to explain our concerns about the impact of hydraulic fracturing upon the unfiltered drinking water supply for more than nine million New Yorkers and the importance of DEC's ban on drilling in the watershed. We also met with other legislators regarding potential new regulatory requirements, and emphasized our interest in finding the best solutions for all New Yorkers.

Our sharing of best practices with other utilities shows that DEP is leading the way with regard to our comprehensive program to proactively clean and manage our sewer and water distribution network. Our program is a team effort that involves a robust 311 complaint routing system, prompt response with appropriate equipment such as vactor or flusher trucks, accurate reporting of field conditions, more in-depth investigations using pole cameras and "smart" manhole covers, analysis of trends and conditions, and proactive resolution of issues at a very early stage.

Our crews are the key to this program, and we continue to innovate the way we train our workforce. On Friday, I had the opportunity to meet the first class of apprentices at the new BWSO Training Center at Queens Repair with Deputy Commissioner James Roberts, BWSO Director of Field Operations Tasos Georgelis, BWSO EHS Director Karen Marino and COO Kathryn Garcia. This facility is fully equipped with all of the features of a real city street: mock sewers, catch basins, hydrants, and all of the accompanying hoods, hangers and valves, giving apprentices the hands-on instruction in maintenance and repair tasks needed by crews in the field. I wish the current apprentices the best of luck as they begin their careers with DEP. We are looking forward to tracking their progress, and in seeing improvements in our service delivery.

Lastly, this week BWSO is welcoming back Tim Daly as Deputy Manager for Operations of the Croton Water Filtration Plant. Tim comes to us from Long Island American Water, where he served as operations manager for the past five years. Before that, Tim worked for BWSO in an EHS capacity. Tim's addition substantially elevates Croton's operations program, bringing a solid combination of management, operational expertise and EHS insight. Please help us welcome Tim back to a rejuvenated career with DEP. This week, DEP also welcomed Chris Gilbride as DEP Director of Communications (and Weekly Pipeline Editor-in-Chief). Chris joins the agency after eight years with the Bloomberg Administration, previously with the Department of Transportation and Office of Emergency Management. Bringing the perfect combination of experience and expertise, Chris will be a tremendous addition to DEP and will continue to strengthen the way that we engage with the public and the press. Please join me in welcoming Chris to this exciting endeavor.

Focus on the Field



No large capital project would ever finish on time without the Bureau of Engineering, Design, and Construction's Permit Resource Division (PRD). Here, Senior Program Manager Phil Simmons works to provide on time and on budget capital project delivery through streamlining and managing permit identification, acquisition, and compliance. Since joining DEP in 2010, Phil has supported a variety of capital projects by tracking and developing permit applications, acting as a regulatory liaison, and helping to ensure our projects are in compliance with environmental regulations.

regulations. y Today, Phil spends the majority of his time supporting the Water For

the Future (WFF) program, specifically on permits regarding the Rondout-West Branch Tunnel repair. As Senior Program Manager, Phil is responsible for the coordination, identification, acquisition, and compliance of permits for this project. This means he spends most of his time acting as the link between DEP's in-house design team, our consultants, and requlators to ensure that the appropriate information is communicated so projects remain on schedule. Phil has been working on the permits for this particular aspect of the program for more than a year and half. As additional WFF projects come on line, he will support those, as well, while also working with the PRD team.

"I enjoy working at DEP because of our mission, as well as the large scale and complexity of our projects," Phil said. Indeed, the repair of the Delaware Aqueduct will cost more than two billion dollars and take more than a decade to resolve.

When not at work or busy with his young children, Phil enjoys hiking and canoeing.

Milestones

Congratulations to the following employees: Jim Pynn, BWT, 38 years of service; Peter Spisso, BWT, 34 years of service, Stephen Kaufer, BEDC, 32 years of service; Adedoyin Oduba, BEC, 32 years of service; Dennis Delaney, BWSO, 31 years of service; Gerard Tangredi, BWSO, 31 years of service, Vassilios Zoumboulias, BPS, 31 years of service.

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For more information contact DEP's Citytime Help Desk (718) 595-3541. You can also email NYCDirectDeposit@dca.nyc.gov or call (212) 487-2106 for further information.

Kudos Corner



GREEN TEAM: DEP staff presented a panel discussion on Greener Greater Compliance at the BuildingsNY 2012 expo. Attendees got to hear experts in water metering and conservation, noise control, fuel oil conversion and wastewater discharge. **Charles Sturcken, Geraldine Kelpin, Pravin Patel** and **Warren Liebold** were all presenters.

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separated by a dividing weir, with the spillway for reservoir overflow located in the east basin. The Release Channel is a concrete canal that conveys water from the reservoir to the lower Esopus Creek. Operating the channel increases the reservoir's ability to capture storm runoff by reducing the volume of water contained in the west basin. Additionally, operation of the Release Channel can be used to prevent or reduce the spilling of turbid water from the west basin into the generally higher quality east basin. Despite the significant benefits of operating the Release Channel, controlling turbidity in the Catskill System remains a challenge.

Enter the interconnection of the Catskill and Delaware Aqueducts, a crucial construction project that will allow the diversion from Ashokan to be stopped by connecting the Delaware Aqueduct to the Catskill Aqueduct. NYC is one of only five large cities issued a Filtration Avoidance Determination (FAD) by the EPA, and has made a substantial commitment to studying turbidity as part of maintaining an unfiltered supply of drinking water. The Catskill Turbidity Control Program represents a key component of maintaining the FAD, and the phased study of operational alternatives ultimately led DEP to conclude that the ability to stop the diversion of turbid water from Ashokan is the best approach to controlling Catskill turbidity. This strategy relies on the interconnection of the Catskill and Delaware Aqueducts.

The Town of Gardiner, eight miles south of New Paltz, is where the two aqueducts cross-and where this essential construction will take place. The design phase is near 100% complete, and construction is scheduled to begin in 2013. At the time of the Delaware Aqueduct's construction in 1944. engineers built Shaft 4, essentially as a placeholder in anticipation of the future need to connect the two aqueducts. The Catskill lies closer to surface level, while the Delaware is several hundred feet below. The existing Shaft 4 facility will accommodate construction of several 48-inch pipes, and new valve and distribution chambers are needed to connect the two aqueducts. This project is scheduled to be completed in 2015. As articulated by Todd West, Director of Planning and Administration for BWS. "It's pretty ambitious because we're going from a pressurized Delaware Aqueduct into an unpressurized Catskill. There's been a lot of thought put into how the valves need to be operated."

This project will allow for up to 375 million gallons per day of Delaware water to be diverted into the Catskill Aqueduct, allowing the Catskill System at Ashokan to be shut down. When considering the importance of this project in helping to maintain a reliable source of high quality drinking water, it's not difficult to connect the dots—or perhaps more appropriately, to "interconnect" them.

We welcome your feedback! To submit an announcement or suggestion, please email us at: <u>newsletter@dep.nyc.gov</u>. ()