NYC Environmental Protection
Michael R. Bloomberg, Mayor
Carter Strickland, Commissioner

WEEKLY PIPELINE

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Water Board '49ers Flowed to Emerge as New York Giants

The year 1949 was a busy time for the New York City Board of Water Supply. Construction of the first stage of the Delaware System was in full swing and the second stage had just begun. At the same time, decades of construction delays and a dramatic rise in water consumption was testing the system's ability to meet New Yorkers' water demands.

Acutely aware that the Catskill supply would not be sufficient to meet the city's long term water needs, the Board had submitted its plan for developing the Delaware watershed to the NYC Board of Estimate in 1927. However, interstate litigation over New York's proposed use of the Delaware River along with the Great Depression delayed the start of construction until 1936. The onset of World War II a few years later slowed the work again, shutting it down completely between 1941 and 1946. Work on the

Delaware system finally resumed nearly twenty years after the proposal was first submitted.

The delays in construction would have serious consequences for

(Continued on reverse side)

Spotlight on Safety

Hazardous Waste Management

The Office of Environmental, Health and Safety (OEHS) conducts periodic assessments of DEP facilities to monitor regulatory compliance and a recent site visit provides an important lesson for us all.

New York and federal regulations (40 CFR 260) require that all materials classified for disposal as hazardous must have storage containers that are properly labeled and the storage location must be marked and inspected weekly. During a recent assessment of a DEP facility, auditors observed twenty containers stored outside, awaiting pick up for off-site disposal by a hazardous waste transporter. Although the containers were protected from the elements, and properly labeled, there were no weekly inspection checklists documenting inspection of the containers, and the sign posted in the storage area identifying the location as a hazardous waste storage area was not in compliance with the regulation.

In this particular case, the assessment revealed that most requirements were being followed but additional tasks still needed to be performed to be in full compliance. Proper hazardous waste management ensures that we are protecting the environment and the safety of employees and contractors working in the area. Proper inspection and storage of wastes will ensure that these goals are met.

You can find more information in DEP's Hazardous Waste Management Policy, or EPA's Hazardous Waste Regulations.

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

Paul Rush, Deputy Commissioner, is guest commentator this week.

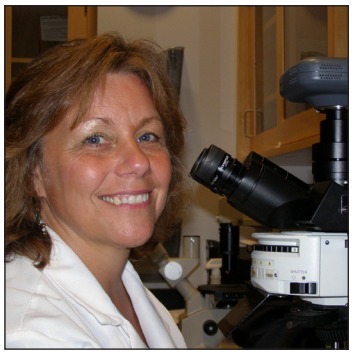
Hurricane Irene devastated areas of the Catskills and Mid-Hudson Valley communities, washing away roads, bridges and railroad tracks. In the year that has passed since the storm hit, DEP has worked with local communities to assist in recovery and rebuilding efforts while also protecting the watershed. During the storm's immediate aftermath, DEP deployed $1 million in resources—including heavy equipment, technical assistance, and materials—to help hard-hit watershed communities, while also assisting with debris removal, stream and park restoration, business recovery efforts, infrastructure repair, and power restoration for area residents. I am proud to say that just this month we have announced two major projects as part of these ongoing efforts.

None of us will ever forget those tense moments during last year's storm when we feared for the stability of the Gilboa Dam, and soon learned of the severe flooding suffered by downstream communities. Yesterday DEP announced that eleven stainless steel, pneumatic crest gates, each 20 feet in length and weighing more than 5,400 pounds, have been added to the top of the dam. These crest gates add a rigid barrier that provides added flood protection downstream of the dam and also allows us to create excess capacity in the Schoharie Reservoir by lowering the gates and releasing water. At full capacity, the reservoir can store 17.6 billion gallons of water. As part of a long-term rehabilitation and strengthening project, a 220-foot long notch was cut from the top of the westernmost portion of the dam in order to lower water levels and allow for the installation of 80 anchoring cables into the top and outer face of the dam. The cables were drilled through the dam and into the bedrock below creating an anchor which provides further support. The full scale rehabilitation of the dam will include reinforcement by 234 million pounds of concrete, reconstructing the spillway and dam face, and installing a new diversion tunnel from the Schoharie Reservoir into Schoharie Creek. The full reconstruction is expected to be completed in 2019.

Another part of our post-Hurricane Irene recovery effort involved repairing and maintaining the nearly 100 miles of city-owned roadways that surround our reservoirs in the Catskills. Earlier this month, DEP completed major improvements that will enhance safety and improve stormwater management on Route 28A, which runs south of Ashokan Reservoir from the Town of Olive to the Town of Hurley, and is one of the most heavily traveled City highways in the watershed. Turning lanes were installed at intersections to improve driver safety, and crosswalks were added to two locations to protect pedestrians. Culverts, swales and catch basins were also replaced as part of extensive drainage infrastructure rehabilitation to improve stormwater management. As part of a 2.5 mile realignment and reconstruction project, DEP also completed major structural upgrades to six bridges which included full replacement of their road surfaces. The Route 28A improvements also included an improved public access area for recreational use, featuring expanded parking at the Olive Bridge Dam located near the Ashokan Reservoir.

Recovery work following last year's storm has been an enormous undertaking that continues to this day. By working together with our neighbors, we are ensuring that we recover and rebuild to emerge stronger than ever.

Focus on the Field



As part of its comprehensive watershed monitoring program, DEP has been testing the water supply for Cryptosporidium and Giardia—two potentially harmful microbes—since 1992. Microbiologist **Lisa McDonald** joined DEP the same year, and helped launch the testing program. McDonald hails from the Albany region where she earned a biology degree at the State University and then spent six years with the New York State Department of Health

As Director of the Pathogen Laboratory at Kingston, McDonald ensures that over 700 water samples are analyzed each year from nearly 75 different sites. McDonald notes, "The work we do is very unique. We are the only lab testing the City of New York's source water for Cryptosporidium, Giardia and enteric viruses, a diverse group of viruses found in the intestinal tract of humans and animals."

Weekly samples are collected from the Kensico and New Croton Reservoirs prior to chlorine disinfection. The sites are designated as New York City's source water and are representative of the drinking water distributed to New Yorkers.

In the course of one day, McDonald's work ranges from updating lab procedures and reviewing regulations to scanning virus flasks and microscopic samples. Her most recent challenge came in June when virus analysis, a function that was previously conducted at a contract laboratory, was moved in-house to DEP's lab. McDonald attended a six-month training program to bring her up to speed on the most recent testing techniques, which she then shared with her lab colleagues.

In addition to testing for Cryptosporidium and Giardia, DEP monitors its drinking water for approximately 250 contaminants, approximately 100 of which are not currently required by regulators. DEP performs more than 330,000 tests annually from up to 1,000 sampling locations in New York City, and performs 230,000 tests in the watershed.

Outside of the lab Lisa enjoys reading, walking her Rottweiler "Blue," and spending time with family and friends. A lifelong Mets fan, Lisa passionately roots for her home team regardless of the box score.

Kudos Corner

The Bureau of Water and Sewer Operations softball team recently completed a two game sweep of the team from the New York State Department of Environmental Conservation to win the NYC Municipal Softball League championship.

BWSO 2012 Team Roster: **Jaime Berkeley , Edward Canicatti, Rafael Castillo, Carlos Constanza, Paul Corrieri, Marc Delara, Randy Dixon, Matt Dominick, Mike Esposito, Larry Gallina, Anthony Gioia, Jeff Hanover, Danny Hines, Pete LaMacchia, Tony Langone, Tom Marrama, Jorge Merced, William Meyers, Nick Minunni , Virginia Murray, Sal Muzzio, Mike Pucciarelli, Teddy Rivera, Pete Ruffino, Joe Sedita** and **Bill Meyers** (retired).

(Water Board '49ers Flowed to Emerge as New York Giants… continued)

New York City. Between 1942 and 1949 water consumption increased at an unprecedented rate and by 1949 the City was consuming more water than it could supply. Throughout the 1940's there had been abundant rainfall so that the supply of water was sufficient in spite of the increased consumption. However, there was a dramatic decrease in precipitation during the last half of 1949 and upstate reservoir storage reached a low point of only 33.4% of capacity. The situation had reached a critical point by October 14, and Mayor William O'Dwyer issued a public appeal to conserve water in order to avoid a municipal crisis.

Although some restrictive measures were put in place, such as prohibiting car washing, the bulk of the conservation campaign was carried out voluntarily. There was extensive coverage in the newspapers and on television and radio, with daily press conferences held in the offices of the Board's sister agency, the Department of Water Supply, Gas and Electricity (DWSGE). Posters were displayed in subways and stickers were distributed to raise awareness. In addition the DWSGE implemented the first ever city "water holiday" on December 16, 1949, when citizens were asked to reduce their water use as much as possible, including asking men to forgo shaving. The press exhorted the public to take notice:

"This is the day when, if you are a good citizen, you will stay away from the faucet…Perhaps the awesome spectacle of a city of bearded men will of itself frighten us into the conservation needed if we are to avoid more serious measures."

Following the success of the first water holiday, "Dry Thursdays" were instituted regularly through September 1950, when they were no longer necessary.

All sections of the populace pitched in to conserve water—a society luncheon at the Waldorf-Astoria Hotel in December 1949 was served entirely on paper products while the ASPCA shut off the water troughs for working horses, declaring that "A pail a day keeps its thirst away". Restaurants refrained from serving water with meals and hotels placed signs in visitors' rooms requesting their cooperation. The City inspected industrial plants and worked with businesses to develop processes requiring less water, for example by asking the milk industry to substitute cardboard containers for glass bottles. In addition, new regulations were implemented for industrial-size refrigeration and air conditioning units; unlike the majority of the drought restrictions these regulations became permanent.

The government knew that a drastic reduction in consumption was the only surefire way to avoid a critical water shortage while the Delaware system was still being contructed, but it didn't stop searching for opportunities to augment the supply. On January 26, 1950, a city water holiday, a semi-bearded Board of Estimate approved an application to the State to build a new reservoir at Cannonsville. In case the situation worsened, the Board of Water Supply worked feverishly to complete the Chelsea pumping plant, a stopgap measure capable of pumping 100,000,000 gallons of water from the Hudson River daily.

Due to an increase in rainfall and the success of the conservation campaign the Chelsea pumping plant wasn't needed, but having "outgrown its Catskill and Croton sources" the City warned that New Yorkers could not truly be confident in their water supply until the Delaware project was completed and supply would once again safely outweigh consumption. However, due to the tremendous public campaign, consumers saved approximately 75 billion gallons of water over nine months, safely bridging the gap until the Delaware system was brought online while also paving the way for future conservation campaigns.

Milestones

Congratulations to the following employees with 30 or more years of service: **Richard Stadnycki,** BEC, 40 years; **Martin Hirschkorn,** BWSO, 38 years; **Donna Ascione,** HR, 36 years; **John Lobro,** BWT, 35 years; **Diane Futrell,** BWT, 32 years; **William Brand,** HR, 32 years; **Randy Hooks,** Sr., BCS, 32 years; **James Montgomery,** BWS, 32 years; **Rosemary Fodera,** ACCO, 31 years; **Frank Camardella,** HR, 31 years and **Allan Marchica,** BWT, 31 years.

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