

An Annual Spring Challenge: Water We To Do About All This Rain?

We know that April showers bring May flowers, but for DEP, spring's wet weather can have a much more immediate effect than encouraging the blossoms in our neighborhoods and parks. From the reservoirs to the Catskill and Delaware watersheds to New York Harbor and beyond, rain and snowmelt affect the quality and quantity of New York City's drinking and receiving waters.

The spring is a busy period for DEP's upstate water supply operation, or as Deputy Chief of Reservoir Operations **Brad Dromazos** says, it's a time that requires slightly more micromanaging than average. "The rain will increase the storage in our reservoirs from surface runoff and additional melting of all the snow in the mountains at this time of year." Especially if there is a significant storm, Brad and his team may change their operations to



maintain balanced reservoirs. Rain and surface runoff can also affect water quality by increasing turbidity. Brad says, "We definitely keep an eye on the weather. To make sure we can send the best quality water to the city we need to know where we were, where we are, and where we're going."

In the five boroughs, increased rain presents a different set of challenges. New York City receives on average 49.7 inches of precipitation each year, though we've received as much as 80

(Continued on reverse side)

Spotlight on Safety

Give Me Some Room Please!

OSHA's walking and working surfaces standard (also known as Slips, Trips & Falls) for general industry workplaces regulates most areas where employees may work or move in the workplace. Walking/working surfaces include ladders, wall and floor openings, scaffolds and aisles. Whether they are in an industrial setting or an office space, aisles are highly trafficked walking areas and potential safety escape routes. Regulations (29 CFR 1910.22 (b)) dictate that permanent aisles and passageways must be appropriately defined as aisle space.

In industrial settings the requirement for aisles are more specific.

In terms of width, industrial aisles should be at least three feet wider than the largest equipment that has to pass through them or, at minimum, four feet. Aisle markings must be clearly visible. Walking and working surface non-compliances are among the top 5 findings that OEHS auditors observe when they conduct facility assessments.

It is also important to consult with FMC and become familiar with the Department of Citywide Administrative Services Space Standards for City Agencies if you are planning renovations or to move or rearrange workstations. For the full article, click here.

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

Our strategic plan commits DEP to provide more than one billion gallons of high-quality drinking water, and treat 1.3 billion gallons of wastewater every day, at the lowest possible cost to New Yorkers. Running the water and sewer utility for nine million people takes resources, and our nearly 6,000 employees and \$14 billion capital program demonstrate that **Mayor Bloomberg** is willing to commit the resources needed to get the job done. But each of us has an obligation to do our jobs as cost-effectively as possible, and at the same time, deliver the world-class services that our nine million customers—including 835,000 who pay the bills—expect and deserve.

We took an important step in that direction last Friday, when I proposed a 7.5% water rate increase for fiscal year 2012—a 35% reduction from the 11.5% increase that was projected only one year ago (view the presentation here). No water rate increase will be easy for New Yorkers to bear—particularly in these difficult economic times. But 7.5% is the smallest rate increase that DEP has proposed in six years, and it was possible in large part because DEP has tightened its belt: we achieved \$75 million of budget savings last year, and we'll cut more than \$50 million of recurring expenses in Fiscal Year 2012. We are also offering a one-time 2% discount to customers who sign-up for paperless billing and pay their bills online through direct debit.

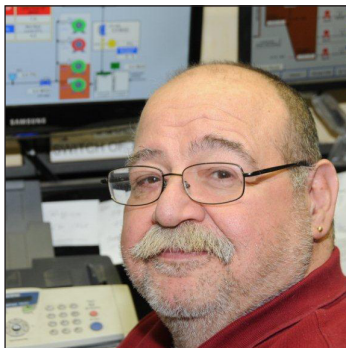
To be sure, cost cutting isn't the whole story; we also benefitted from strong revenues because of last summer's record heat, and we continued to benefit from lower-than-expected interest rates to fund our massive capital program. But the entire agency's effort to heed Mayor Bloomberg's call to do more with less is starting to show results, and each of our nearly 6,000 colleagues can share in the credit. Thank you for your hard work.

Our hardest work still lies ahead. This year we will continue to drive-down operating costs through performance management, including H2OStat, the new program we've



launched to focus on productivity and operational efficiency. And with innovative initiatives like the NYC Green Infrastructure plan, we'll seek state and federal approval for solutions to difficult problems like CSOs with affordable, sustainable solutions that can save New Yorkers billions over the long term. To succeed, we'll need every DEP employee and contractor in every division to pitch-in with the hard work and creativity that has always characterized DEP's approach to the tremendous environmental challenges and responsibilities we face.

Speaking of creativity, last Thursday, we announced a landmark agreement on a new framework for releasing water from our Delaware Reservoirs that will help fisheries and enhance flood protection downstream. Water in the Delaware Basin is jointly managed by a number of states pursuant to a 1954 Supreme Court Decree, and the new agreement is the product of extensive discussions that were made possible by DEP's cutting-edge Operations Support Tool that is giving us unprecedented forecasting capabilities. New Jersey DEP Commissioner **Bob Martin** called the new interim plan "a perfect example of agencies working together and across state lines to reach a goal that is good for the entire region, one that is consistent with good water supply practices." Read more about it here. Special thanks to Deputy Commissioner **Paul Rush**, **Thom Murphy**, **Jim Porter** and **Tina Johnstone** for their tremendous work that is keeping DEP on the cutting edge of water-resource management.



With more than 33 years at the Bureau of Wastewater Treatment, **Frank Ivone** has seen more than his share of pumps and pipes. A New York native, Frank has worked in DEP in Brooklyn, Queens, and Wards Island. He had his start as an oiler and was responsible for keeping equipment in good operating condition. Since 1987, he has been a stationary engineer (electric). For more than a decade, Frank has worked “the Watch” at the Tallman Island Wastewater Treatment Plant, meaning that he primarily supervises night and weekend shifts. Frank reports to Plant Superintendent **John Ahern**, ensuring that the plant runs efficiently, safely, and in compliance with its operating permits. The plant is currently

undergoing a major capital upgrade for nitrogen removal, requiring Frank to coordinate with various contactors.

“Most people are not aware of what happens to wastewater after a toilet is flushed, or a heavy rainfall,” Frank mentions as he shows the computer screen that shows flow to the plant. “Run-off from a storm can exceed the Tallman Island plant’s treatment capacity, and some of the flow is diverted to combined sewer overflow storage, either at the Flushing Bay CSO facility or at the Alley Creek CSO facility.” In the case of the Flushing Bay CSO facility, sewage and runoff flow into one of 15 holding tanks for temporary storage. The tanks can store 26 million gallons, and another 15 million gallons of flow can be stored in nearby sewers. Instead of flowing into Flushing Creek, those 41 million gallons are eventually pumped by Frank to the Tallman Island plant for treatment.

Frank enjoys repairing and rebuilding old motorcycles. In the motorcycle world that includes “choppers” and “dressers,” a 25-year old “classic” Harley Davidson is his favorite to tinker with and own.

Did You Know?

... that there was a wastewater treatment plant on Hart Island that operated from 1942 to 1974? Hart Island, located in the Bronx on the Long Island Sound, is 101 acres, measuring approximately one mile long and one-eighth to one-third of a mile wide. It had a design capacity of 1.5 million gallons a day, but average flow was usually almost one million gallons a day. Sewage treatment included bar screens, sedimentation, chlorination, sludge digestion, and sludge drying beds.

The Hart Island plant was the last of the small wastewater treatment plants in the five boroughs that the city operated. During the peak in the 1940s, the city ran small plants in Manhattan at Canal Street and at Dyckman Street; in Queens in the Neponsit and Hammels neighborhoods of the Rockaways; and in Staten Island at Cromwell Avenue and in the Oakwood Beach section. As the wastewater treatment and collections systems were built out during the 1950s and 1960s, the need for these small facilities no longer existed, as their flows were re-routed to larger plants. Flow treated at Hart Island was eventually conveyed to the Hunts Point plant by a force main under Eastchester Bay.



The island is not open to the public. The Department of Correction maintains and operates the City Cemetery, commonly called Potter's Field.

- Q. When I fill up a glass of water straight from the tap, it always looks foamy. If the water then sits, it goes away quickly. Should I be worried?
- A. Air becomes trapped in the water as it makes its long trip from the upstate reservoirs to the city. As a result, bubbles of air can sometimes cause water to appear cloudy or milky. This condition is not a public health concern. The cloudiness is temporary and clears quickly after water is drawn from the tap and the excess air is released.

(An Annual Spring Challenge... continued)

inches in 1983. New York City’s many impervious surfaces, including pavement, rooftops, and parking lots, prevent rain from absorbing into the ground. And since most of New York City has combined sewers that transport sanitary waste and stormwater runoff to wastewater treatment plants, more rain means a higher volume of wastewater. New York City’s wastewater treatment plants can treat approximately double the average dry weather flow, but heavier rainfalls can surpass the system’s capacity and trigger combined sewer overflows. Consistent upgrades to our network of treatment plants have resulted in the cleanest New York Harbor in a century, but building new infrastructure to adapt to weather conditions can be an expensive solution to an occasional problem.

Instead, the NYC Green Infrastructure Plan proposes ways to capture and store rainwater where it falls, often through natural ecological processes.

Project Manager for Green Infrastructure Partnerships **Mikelle Adgate** describes green infrastructure as a way to use rainwater as a resource instead of thinking of it as waste. “Green infrastructure installations use rain to nourish plants, which not only brings aesthetic improvements, but improves air quality too,” she says. For example, households with lawns and gardens can devote as much as 40% of their water use to landscaping; rain barrels that connect to your home’s downspout hold rainwater for later use, which reduces surface runoff and household water consumption. And when rain absorbs into the ground of streetside infiltration swales and enhanced tree pits planted with native plants, April showers really do bring May flowers—even here in New York City. “The GI Plan is truly a collaboration between many city agencies and DEP offices. We see it as the future of stormwater management.”

Kudos Corner



A construction milestone was reached recently at the Cat/Del UV Plant with the installation of the last of the plant’s 56 UV units. Installation of the first unit began in September 2010. Completion of this phase of the project took six months.

Take our Daughters and Sons to Work Day

April 28 is Take our Daughters and Sons to Work Day. Don’t forget to register your 8-18 year old child

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