

## A Healthier Gowanus Canal



Last week, DEP announced that the Gowanus Canal Flushing Tunnel has been reactivated after a full rehabilitation and upgrade that began in 2010. The activation of three submersible turbine pumps is bringing up to 252 million gallons of oxygen-rich water to the head of the Canal each day—or roughly 30 percent more than was possible before

the upgrade. The infusion of fresher water provided through the Flushing Tunnel has already increased the dissolved oxygen content of the water in the Canal, which will dramatically improve its aesthetics and provide a more suitable habitat for plant and aquatic life. To read more about the project, [click here](#). To view photos of the completed project, [click here](#).

## Spotlight on Safety

### National Safety Stand-Down

This week is recognized as the Occupational Safety and Health Administration's (OSHA) National Safety Stand-Down for Fall Prevention in Construction. A safety stand-down is a voluntary event where employers can talk directly to employees—in this case to raise awareness about fall hazards, the leading cause of death in the construction industry.

DEP's Bureau of Engineering, Design and Construction (BEDC) is requiring safety stand-downs at various construction sites this week and OSHA representatives will be visiting some of these sites to participate and provide fall prevention resources.

To learn more about National Safety Stand-Down week, visit [OSHA's website](#).

## Commissioner's Corner

Last week, I joined **Deputy Commissioner Paul Rush, Sean McAndrew** and **Emory Chase** from our Bureau of Engineering Design and Construction, and **Tony Van Glad**, Chairman of the Schoharie County Board of Supervisors, on a tour of the rehabilitation work at Gilboa Dam. The \$400 million project began in 2006 and is expected to be finished this fall, nearly two years ahead of schedule. Since the project began, more than 87,500 cubic yards of concrete have been added to the face of the dam, including 54,000 cubic yards that were placed in 2013 alone. Workers have also completed constructing 14 concrete slab sections below the dam's spillway, and installed post-tensioned anchors and structural concrete at the west training wall. Similar work at the east training wall is also nearing completion. In addition, an inspection gallery that was installed through the middle of the dam, all the way from the east to west training walls, will allow engineers to inspect its structural integrity more closely.

When work began on the project in 2006, a 220-foot-long by 5.5-foot-deep notch was cut from the top of the westernmost portion of the dam 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 to strengthen the dam. In 2008 work began to add a system of

rigid, movable gates that now span the 220 foot notch and provide the flexibility to release water and create excess storage capacity in the reservoir. To help further regulate water levels, last year, two temporary siphons were installed to carry water over the spillway and into the creek below. This provided work crews with access to portions of the dam that might otherwise be obstructed by water. The siphons will later be replaced by a new release tunnel, which will allow water to be released from the reservoir, around the dam, and into Schoharie Creek. The tunnel is expected to be finished by 2020.

Gilboa Dam was built from 1919 to 1927 and impounds Schoharie Reservoir, the northernmost reservoir in the City's Catskill water supply system, which at full capacity can hold 17.6 billion gallons of water. The original stone face of the dam had been damaged by years of freezing and thawing, which caused some of the stone to weaken and dislodge. Once complete, the rehabilitation project will reinforce the dam with roughly 234 million pounds of concrete, further improving its structural integrity. The new concrete face will be carefully molded to look like stone. Reconstruction of the dam is the largest public works project in Schoharie County, and one of the largest in the entire Catskills.

To see more photos of the Gilboa Dam rehabilitation project, [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. 🙌

## Summer in the City and the Watersheds



Yesterday, 72 summer interns attended orientation and today they reported to work at DEP locations across the city and the watersheds. They hail from as far away as Louisiana and North Carolina and there are also many who live right here in New York City. They represent schools including Carnegie Mellon, Columbia, Cornell, CUNY, Duke, SUNY, and Tulane and Vermont Law Schools. We hope everyone will welcome them to DEP and engage them in the important work of protecting public health and the environment.

## Focus on the Field



DEP's vast network of infrastructure includes nearly 7,000 miles of water mains and more than 7,500 miles of sewers that run under almost every street in the five boroughs and the Bureau of Water and Sewer Operations' (BWSO) nearly 1,300 employees work around the clock to ensure that the systems operate as they were designed to. This essential work is supported by a team, including **Benjamin Mancell**, that has been using Geographic Information Systems (GIS) that help to visualize and interpret data in order to identify patterns.

Mancell was born and raised in Ann Arbor, Michigan. He graduated from Eastern Michigan University with a degree in urban and regional planning but it was his minor in cartography that most influenced his decision to come to New York City. Hunter College has a well-regarded graduate program where Mancell earned a master's degree in geography with a specialization in GIS. After stints with a non-profit in the Bronx and a commercial real estate firm in Manhattan, Mancell, a GIS Analyst, joined DEP where he supports operational efforts by performing geospatial analysis and creating maps of complaints and system problems.

"Due to the sheer size and density of New York City it's not difficult

to become overwhelmed by the amount of data that is available," said Mancell. "While that can make the job demanding, it's also what makes it so interesting. By mapping the data and making it visual, patterns become evident for our engineers and planners."

Working with his colleague **Stephanie Fowler**, Mancell has worked on several infrastructure risk assessment analyses in order to identify areas with concentrations of water main and sewer breaks. As part of the team working on this effort, he also participated in the development of a methodology that allows these issues to be analyzed quickly and accurately, which also enables the bureau to estimate the cost to upgrade or rehabilitate the infrastructure.

"Performing GIS analyses that reveal spatial patterns of issues, and acting on those proactively, has been an integral part of the broader effort to optimize BWSO's resources and improve the performance of the water delivery and sewer systems," said **Debbie Close**, Chief of BWSO's Project Management Office. "Ben has a tremendous knowledge of GIS applications and his analyses and maps are always timely and of the highest quality, which has made him an integral member of our team."

Since relocating to New York City Mancell has always called Brooklyn home, and he currently lives in Ditmas Park with his wife and seven month-old daughter. Bicycling through Prospect Park helps him relax and when time permits he enjoys taking longer rides to Coney Island. He also plays a number of musical instruments and although he does not currently play in a band, he still practices the guitar and saxophone when he can.

## Extra, Extra!



Eel populations are an important indicator of water quality and experts have seen a resurgence in New York following more than \$10 billion in harbor water quality investments over the last decade. Click the photo to see a video about students from the Saint Clare and New York Harbor Schools, as well as Cub Scouts from Pack 25, counting juvenile glass eels in Staten Island's Richmond Creek Bluebelt. For those wishing to view the video outside of the office, you can watch it on our [YouTube channel](#).

## Take a Hike...



On Monday, DEP joined the Catskill Mountain Club (CMC) to announce a community hike to celebrate the opening of a new trail on City-owned land in Delaware County. The trail—which was built and will be maintained by volunteers with CMC—is located on a property known as Palmer Hill, with parking available at the existing scenic overlook site on Finkle Road in the Town of Andes. Avid hikers, community members and visitors are encouraged to celebrate the opening of the trail

on Saturday, June 7, which is National Trails Day. A short ceremony and group hike will be held at 2 p.m. The trail at Palmer Hill is the fifth hiking trail opened on City-owned land in the Catskills and is part of DEP's ongoing effort to support outdoor recreation and tourism in the Catskills by opening more of its land for low-impact recreation. For more information [click here](#).

## Blood Drive

The Greater New York Blood Program is experiencing a serious shortage due to a fall-off in donations. To help ensure that blood will be available to those who need it, DEP is hosting a blood drive at the below locations and times.

**Kingston/Catskill Area:** 51 Albany Avenue, 6/10, 12:00pm to 5:00pm; **Grahamsville Region Area:** Grahamsville Parking Lot, 6/4 and 6/5, 10:00am to 3:00pm; **Downsville Region Area:** Downsville Fire Hall, 6/11, 9:00am to 2:00pm; **Kensico/Highland Regions-Sutton Park Area:** Sutton Park-2nd Floor, 6/19, 8:30am to 2:30pm; **Lefrak:** 3rd Floor Cafeteria, 6/10, 6/11, and 6/12, 7:45am to 1:30pm.

**We welcome your feedback! To submit an announcement or suggestion, please email us at: [newsletter@dep.nyc.gov](mailto:newsletter@dep.nyc.gov)**