

Houston, We Have A Reservoir Reading!

A look inside the BWS Water Supply Control Center

Managing New York City's water supply is no small feat. The City's drinking water comes from the Croton, Catskill and Delaware watersheds that comprise a 1,972 square mile area that includes 19 reservoirs and three controlled lakes, with a storage capacity of 580 billion gallons. The public sees a daily snapshot of reservoir levels [on DEP's website](#) - a graphic captures the current levels, and compares it to the normal reading for the day. But how to manage it all? Information technology is one of the many tools used to manage water supply and determine at reservoir levels. We can get a glimpse of that technology at DEP's Water Supply Control Center (WSCC) an amazing component of DC **Paul Rush's** Bureau of Water Supply.



handle the operation, projection, and analysis of the West of Hudson Reservoir System consisting of 6 reservoirs that provide 90% of New York City's daily water consumption. WSCC operates on a 24-hour basis. Staff continuously monitors water supply conditions, while tracking meteorological and hydrological conditions to maintain a balanced reservoir system all year long. In addition to water supply, their responsibilities include monitoring upstate wastewater treatment plants, as well as all DEP facilities within the Western Operations Division.

(Continued on reverse side)

The WSCC is managed by **Bradley Dromazos**, Deputy Chief of Reservoir Operations. Dromazos, Supervisor **Chris Russo**, Computer Specialist **Andrij Cade**, and front-line staff

Commissioner's Corner



Alan Cohn, Director of Climate Change Planning, and the climate change team at BEPA are working hard to keep DEP on the cutting edge, so that our water system can adapt to drought, increased torrential rains, rising sea levels, or whatever else the future could bring.

Thanks to ingenuity and years of hard work, we achieved an important milestone for water quality this week. On Friday, State DEC Commissioner **Pete Grannis** and I announced that our wastewater treatment plants are aggregate meeting a monthly Clean Water Act standard for removal of pollutants from the 1.2 billion gallons of wastewater that we treat every day. This is a great achievement for the entire agency, and particularly for everyone in BWT and BEDC. Newtown Creek Superintendent **Jim Pynn** and his entire team at Newtown Creek deserve special recognition for achieving this milestone with only 2/3 of \$5 billion in capital work complete. Congratulations!

Last Thursday and Friday, DC **Angela Licata** led the agency's participation in the Climate Change Impacts on Water: An International Adaptation Forum that brought together more than 200 key policy and climate experts, water system executives, scientists and subject leaders from around the country and the world to discuss the impacts of climate change on water utilities, and how we can plan to cope for what could be significant changes.

On Sunday, Red Hook Superintendent **Bob Rickey** and BWT's Chief of Training and Development **Walter Dobkowski** gave me a 3.5 hour crash course in wastewater treatment, explaining the flow of wastewater through interceptors, cyclone degritters, primary treatment, aeration and disinfection, and finally through solids handling. It was a great course—and Bob and his team do a great job keeping the Red Hook plant running in top shape.

Thanks to help from DDC Commissioner **David Burney** and the team at DDC, DEP/BWSO activated a new 48" trunk water main on Clove Road yesterday, which is connected to a new 72" water main installed as part of the project. I was joined at the event by BWSO Deputy Commissioner **Jimmy Roberts**, DDC Assistant Commissioner **Thomas Wynne** and Staten Island Deputy Borough President **Edward Burke**. This marks completion of water main installation on Clove Road, which started in January 2008. The main ensures a more reliable water supply system for Staten Island. It replaces a century-old main that required frequent repairs.

Spotlight on Safety

Safe Lifting

According to the U.S. Bureau of Labor Statistics, there were approximately 222,290 back injuries in the workplace in 2008. It is important to remember the key elements of proper lifting.

Preparing to Lift

- Protect your hands and feet by wearing safety gear.
- Determine your ability to handle the load.

Making the Lift

- Center the load between your legs or shoulders; keep your back straight.
- Keep the load close to your body.

Moving the Load

- Don't twist your body - move your feet.
- When lowering your load, bend with the knees.

Follow these rules of lifting and you will give your back a break rather than breaking your back.

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.

NAME THE BREAKOUT ROOMS CONTEST!

Thanks to the 79 DEP staff who submitted entries to name the new breakout rooms on the 19th floor. The winner will be announced in the Feb 9 issue of Weekly Pipeline.

Focus on the Field



Ravi Basant, P.E., Bureau of Wastewater Treatment (BWT) under DC **Vincent Sapienza**, has been the Superintendent of the Tallman Island Wastewater Treatment Plant (WWTP) since January 2009, bringing to the position many years of experience. He was an engineer for two major companies in his native Guyana, where he earned his Bachelor's Degree in Mechanical Engineering, then a Master's from the City College of New York. From 1996, until becoming Superintendent, Ravi worked at the Jamaica WWTP where, as Senior Stationary Engineer Electric, he was active in the upgrade of the treatment facility, contributed to operational and EHS (Environ-

mental Health & Safety) issues, and since 2003 has been teaching a High Voltage operator safety class to new engineers.

Ravi was eager to talk about the construction upgrade underway at Tallman Island, the 80 MGD (million gallons a day) plant servicing the northeast section of Queens. Ravi explained that, "It involved full basic step-feed BNR (Biological Nitrogen Removal) to reduce nitrogen discharges that impact the Upper East River and Western Long Island Sound." "To achieve BNR improvements, modifications are being made to the aeration tanks, e.g., new blowers, new baffle walls, mixers and diffusers, new RAS and WAS (Return Activated Sludge and Waste Activated Sludge) pumps, and using a DCS (Distributive Control System), computerized flow meters on aeration tanks to control air volume and DO (Dissolved Oxygen) to optimize nitrogen removal." Although on call 24-hours a day, Ravi makes the time to relax with his family, attend church, and read.

Milestones

Congratulations to **Philip Bavaro**, HR&A Facilities Management, on the birth of his son born 01/04/10, and to **Milton Apotsos**, BWSO, on the birth of his twin boys born 01/21/10.

DEP: Then & Now



Then: A sandhog remixing concrete for the tunnel lining in the Rondout Reservoir diversion tunnel. DEP and its predecessor agencies made concrete in their own plants up through Stage 1 of City Tunnel No. 3. Photo taken 07/14/1939.



Now: Although no longer made by DEP, concrete was still remixed in the tunnel for the Brooklyn and Queens portions of City Tunnel No. 3 — Stage 2. For the Manhattan portion, concrete was pumped directly into the forms for the tunnel lining from the surface. Photo taken 04/2007. (Photo by Ted Dowey)

Ask Cas

askcas@dep.nyc.gov

Q. In last week's issue, the story on water main breaks contained the following quote "You don't select the time of a water main break, it picks it for you." Is there a plan in place for proactive maintenance? Water mains over some age or other criteria should be candidates for replacement before the "event." Years have been spent on GIS mapping to enhance this process. Replacement of the main before it breaks is much more efficient in use of resources and less costly.
- **Merv Frankel** Technical Project Manager – OIT

A. Merv—You're right that preventive maintenance is often the most efficient and cost-effective way to keep a network like the water system running well. BWSO's capital program unit uses age, failure, and leak detection as factors in the overall decision making process on where capital monies are finally allocated. The GIS mapping we've done is enabling us to pinpoint potential areas of concern in the distribution system and assess whether repairs or more significant work is needed.

Did You Know?

...sludge vessels have been a part of the City's sludge transportation and disposal system since the late 1930's. The Federal Work Projects Administration (WPA) funded and built the first three motorized sludge vessels; the three newest vessels being commissioned will be fully funded through federal stimulus dollars.

(Houston,... - continued)

The WSCC views various data points and gathers real time information in many areas including reservoir elevations and water quality. The information is part of the decision-making framework used and circulated through DEP as well as outside agencies, like the National Weather Service, for planning and forecasting. "Given the opportunity, I'm always proud to show off the WSCC and its

staff. Time and time again, from conducting daily reservoir operations, to performing emergency call-outs in response to facility alarms, to disseminating vital information, the staff and system have proven to be one of our greatest assets in the Bureau's mission to provide a safe reliable supply of drinking water to the City," said **Tina Johnstone**, Director of Operations, BWS.

Event Calendar:

Winter Jam 2010 Saturday, February 6, 2010
11am-4pm - Central Park, Bandshell

February is African-American Heritage/Black History Month. The DEP Diversity Committee has put together an array of activities, including lunchtime films, a fashion show and a display of African art. Click here for more information on planned activities, as well as a calendar of Citywide events.

Corrections

Then & Now: The "Now" photo was of the dividing weir of the Ashokan Reservoir. The 1/26/10 online version of Weekly Pipeline is updated with the correct photo.

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