

## An Enduring Legacy: The New Deal's 'Water Waste Force'

Unemployment was at an all-time high of 25% and families were struggling to meet basic needs like food and shelter; banks and businesses were failing and homelessness was not uncommon. This was the state the country was in when Franklin Delano Roosevelt began his first term as president in 1933 at the height of the Great Depression.

In response to these worsening conditions, Roosevelt implemented a series of economic programs known as the "The New Deal" that aimed to provide relief, recovery and reform to a country that was suffering. One of these programs



was the United States Works Progress Administration (WPA)—the largest of all the New Deal programs—which was created in 1935 to improve the economy and boost morale by employing millions of skilled and unskilled workers to carry out public works projects.

The Department of Water Supply, Gas and Electricity (DWSGE), a DEP predecessor agency, immediately

(Continued on reverse side)

## Spotlight on Safety

### From the EHS Director's Desk

From time to time, the *Spotlight on Safety* column will feature a few words from one of DEP's EHS Directors. It helps keep the focus on how operations are implementing EHS policies and best practices. This week, a few words on recycling from BWT's EHS Director, **Bill Yulinsky, P.E.**:

"The Bureau of Wastewater Treatment has been removing waste from used water for years, and the improvements in the quality of the waterways around the city have been significant. In one sense, used drinking water is being recycled to make waterways safe for boating, fishing and other recreational activities. Recycling is not new to us.

"Like the rest of the agency, BWT has been disposing of its universal waste and used oil so that it gets recycled, and has also been recycling scrap metal from its operations. So it was just a natural progression

for BWT to be separating mixed papers, cardboard, bottles, cans, and foil—the same things we all separate from our trash at home—at its wastewater treatment plants and collections crew quarters.

"In June, the agency submitted its recycling program to the Department of Sanitation, meeting the obligation under Local Law 36 (2010); you can find the agency's recycling plan on Pipeline, under Health & Safety.

"And one last word about my own recycling pet peeve—reuse manila envelopes, file and hanging folders, and save 3-ring binders. Discarding them is a waste of our natural resources, is expensive, and they can often be reused. And don't forget to recycle your soda cans and bottles as well.

"Remember: Reduce, Reuse, Recycle."

## Commissioner's Corner

The drumbeat of positive green infrastructure news continues. Last week, DEP unveiled green infrastructure projects totaling \$1 million at the Bronx River Houses, a NYCHA housing complex. The event was attended by NYCHA Commissioner and Environmental Coordinator **Margarita López** and Bronx River Houses resident **Cecilia Rivera**. This project is fantastic on so many levels. First, unlike several of our other projects to date that focus on one type of source control, the installation here included several types of green infrastructure: a blue roof, rain gardens, and a stormwater chamber and perforated pipe system below two different parking lots. Together, this will capture approximately 32,000 gallons of stormwater per rain event and help reduce runoff entering our combined sewer system and discharging into the Bronx River. We have installed extensive monitoring equipment so that the lessons learned from this site can be applied elsewhere. Second, it is exactly these types of interagency partnerships that are needed for our NYC Green Infrastructure Plan to succeed over the next 20 years. Our Green Infrastructure Task Force is specifically tasked with developing when and where we build green infrastructure so that we minimize construction disruption and get the most bang for the public buck. Third, the community was involved from the beginning as meetings were held to inform the residents before the project started and community feedback helped improve the original design. The community response has been overwhelmingly positive. Watch a great clip of the event here. A special thanks to Wet Weather Planning and Water Quality Policy Director **Julie Stein** for managing this program, along with Deputy Commissioner **Angela Licata**, **John McLaughlin** and **Erin Morey** in BEPA.

And yesterday, DEP launched the second round of the widely popular Green Infrastructure Grant Program. This year, we are making \$4 million available, up from \$3.8 million that was awarded to last round's 13 winners out of 52 that applied. Private property owners, businesses, and not-for-profit or-



ganizations are all eligible to submit applications by February 15 for green projects like green roofs, rain gardens, rainwater harvesting, and right-of-way bioswales. If you know someone who might be interested in applying for a grant, please point out our website for the online application and tell them to attend one of our three grant workshops. What makes this program so exciting is that it really taps into the environmental spirit of New Yorkers who are looking to see how they too can be part of the solution. Whether installing a rain barrel or putting in a blue roof, we all have the ability to help clean up the city's waterways.

Our talented workforce is our greatest asset and it is always good to take a moment to note that. Last week we honored hundreds of DEP employees at Employee Recognition Day, attended by DC37 Executive Director **Lillian Roberts**, **Kimberly Vann** from the Organization of Staff Analysts and representatives from several local unions. A total of 593 employees were recognized for longevity, meaning they have been at DEP for at least 15 years—with recently-retired **Henry Aurdahl Jr.** from BWT topping the list at 49 years! Another 255 managers and non-managers had perfect attendance this past year, and we honored 1,560 employees for their planning and recovery efforts for the North River fire and Hurricane Irene. All of these employees, as well as those not specifically recognized at this event, make the agency proud because of their professionalism and dedication. New Yorkers are lucky to have you working every day on their behalf.

Happy Thanksgiving to everyone and their families. Just make sure to wash all the turkey down with NYC Water!

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.

## Focus on the Field



During the time when the Works Progress Administration was in existence in the mid-1930s, water consumption in New York City was about 900 million gallons a day. Although population growth has increased demand for housing, energy, and transportation, since 1990 total water consumption has been declining and is lower today than it was 50 years ago.

During the 19-year period that **Warren Liebold** has been with DEP, he has witnessed dramatic changes in water use in New York City. As Director of Metering and Conservation in the Bureau of Customer Services, Liebold has a unique vantage point. Liebold's background in biology and environmental science, and his previous work in the energy efficiency arena have made for a good fit at DEP.

For water conservation, new technology and retrofitting—coupled with behavior-changing education—resulted in water and energy savings. For example, in 1994, DEP launched the world's largest toilet rebate program in response to increasing water use and wastewater flows.

Liebold said, "It's rare to see the macro impact of a policy in real time but so many toilets and showerheads were being replaced that we could see dry weather flow at several wastewater treatment plants and citywide consumption moving downward every month during 1995 and 1996."

More recently, Liebold has been managing the Automated Meter Reading project that went from startup to over 90% completion in less than three years. AMR has essentially eliminated estimated bills except for customers who are not connected to the system.

A lifelong New Yorker, Liebold enjoys reading, movies, and seeing independent theater in his spare time. He has also visited New Mexico several times and enjoys its landscape, art, food, and diverse cultures.

## Kudos Corner



The Thanksgiving holiday food drive was successful, and BWS was able to deliver twice as many food donations as originally planned. In the past, most of this food was distributed to food banks within NYC. This year, DEP employees sent the donations upstate to help those recovering from the recent severe weather. You can read about the donation deliveries here [👉](#) and here [👉](#). Thank you to everyone who contributed, especially to the staff who worked on collecting, sorting, and assembling the food bags—including **Tania Blahitka** (pictured above), **Maria Mannino**, **Danielle McCutcheon**, **Bridgette Pineiro**, **Michele Snyder**, **Kathy Steen**, **Mary Van Steenburg**, **Danielle Cantwell**, **Patricie Drake**, **Francine Melodia**, **Jody Gozza**, **Marty Houck**, **Carla Paltridge**, **Arlene Weissman**, **Victoria Drescher**, **Brian Handy**, **Michele Snyder**, **Charlie Laing**, **John Staby**, **Vito D'Aquino**, **Robert Campbell**, **Dave Stretch**, **Thomas Connors** and **Kathy Steen** of BWS, and **Shanaz Hussain**, **Abdul Jabbar**, and **Lakeisha Bradford** of BCIA. Special thanks to **Donna Nicholas**, BWS, and **Helene Amato**, BCIA for overseeing all the coordination. Great job everyone!

## (An Enduring Legacy: The New Deal's 'Water Waste Force'... continued)

applied to take on WPA employees who were greatly needed for a variety of projects. In the first year of the program, the average number of WPA workers employed by the department each month was about 2,100. This force consisted of 1,490 laborers, 593 skilled mechanics, and 52 draftsmen and clerks. The types of projects that the WPA employees worked on varied but the most common ones included making repairs to department buildings, pumping stations and gatehouses; erecting and painting fences; and building garages and repair yards. Another important project that WPA workers were involved with was a large scale real estate survey of NYC that was instrumental in the department's expansion of the water supply system.

However, of all the work that was carried out by WPA workers, the most ambitious was the DWSGE's effort to assemble a water waste force that would travel to thousands of houses and buildings all over the five boroughs to determine how the millions of gallons of unmetered water delivered to the city each day was being used, and more importantly, to identify where water was being wasted due to leaky fixtures.

The water waste force got its start in 1934, with 230 department employees and 270 employees furnished by the Temporary Emergency Relief Administration (TERA)—a WPA-predecessor program created by President Hoover in 1932. Those employees worked quickly and by the fall of 1935 a whopping 473,067 buildings—about 80% of the total number of unmetered buildings in NYC—had been examined.

Despite this achievement, as soon as the WPA forces became available in late 1935, the DWSGE decided to re-survey all the buildings. This was because WPA workers were more skilled and included people who were inspectors by trade. These new inspections were also a great success and by the end of 1936, 40% of all unmetered buildings had been re-inspected and subsequently water consumption was reduced. Despite this achievement, the agency acknowledged that these leak surveys would only continue to be effective if they were sustained over time, which would be difficult to do long-term. However, until a more permanent solution, like wide-spread metering, could be implemented, the water waste task force was a very effective and immediate answer.

Any doubt about the value of this program quickly disappeared when New York was hit by a severe drought in 1939 that would persist on and off for the next three years. The drought, which was caused

by a lack of rainfall, was so severe that by October 1939 the demand for water actually exceeded the dependable supply available. In other words, if the drought persisted and consumption was not reduced, the reservoirs would have been depleted for the first time in city history.

In order to get the word out about the severity of the water shortage and the need for inspections, the department embarked on a massive conservation campaign urging the public to conserve water and check for leaky fixtures. By 1940 an astounding 2 million pamphlets describing the situation were distributed to schools and businesses across the city and over 35,000 posters were displayed in subway cars and distributed to civic organizations. This publicity campaign coupled with the WPA inspection project brought about fantastic results—between 1939 and 1940 water consumption was reduced by 75.7 million gallons per day.

One of the reasons that the water conservation campaign and WPA inspections were so effective was because of the department's decision to attach the campaign to the war relief effort. DWSGE campaign posters of the time, which were made by the WPA War Services group, blared: "Your Wartime Duty! Don't Waste Water." They also encouraged people to make repairs to leaky fixtures that were identified by the WPA water waste force. New Yorkers took this message seriously and made a real effort to reduce their water use. Many even wrote letters to the department to report instances of water misuse, with some claiming that those who didn't cooperate were actually spies trying to sabotage the city.

The WPA inspection project continued until 1942, when changes to the WPA worker requirements prohibited employees from "canvassing" private buildings and homes. In 1943 the entire WPA was disbanded by Congress as unemployment rates dropped, making the agency unnecessary. The department soon realized that without the WPA, manual inspections would be impossible to sustain. Thanks to the unprecedented amount of statistical information gathered and analyzed by the WPA about the city's water use and waste habits, the department was able to come to the conclusion that more metering would be the most efficient way to continue to reduce water waste. Although large-scale meter installations of NYC buildings did not begin until decades later, the information gathered by the WPA was vital for planning future metering projects.

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