

## Special Guest Commissioner's Corner



**Pam Elardo**  
Deputy Commissioner  
Wastewater Treatment

So by now, you've probably seen food scraps being collected at various points across NYC. But have you ever wondered, where do all those scraps go? It just so happens that some of those scraps eventually arrive right at our doorstep.

When you drop off food scraps at your local green market, or put them into your [DSNY brown bin](#), you're helping to reduce the amount of organic waste that is sent to landfills. Why is that important? Organic waste that makes its way to landfills will decompose and produce methane, a potent greenhouse gas (GHG) that is 26 to 32 times more powerful than CO<sub>2</sub>. So, in short: **Wasted Food = Wasted Energy**. Yup. Let that sink in for a bit.

But, what if we could somehow take advantage of all that food scrap energy instead of sending it to a landfill? Excellent question.

Before we can take advantage of the energy in those food scraps, they need to be prepped in a specific way. That's where our partner Waste Management comes in. Some of those food scraps will be hauled to Waste Management's CORE® facility in Brooklyn. There, banana peels, egg shells, and uneaten brussel sprouts are separated from any contaminating material (basically, anything that's not food scraps). Once isolated they're then made into an energy product called EBS®, a homogenous food based energy product that is designed to have a consistency similar to a nice, thick, nutritious smoothie.

From Waste Management's CORE® facility, the EBS® is transported two miles down the road to the Newtown Creek Wastewater Resource Recovery Facility (WRRF). EBS® is a consistent enough product that we can treat it exactly like the solid portion of our incoming wastewater flow: sludge. The sludge and EBS® are mixed together and then pumped into our digester eggs. They'll stay there for



about 30 days, mixing and churning while anaerobic microorganisms convert them to biogas (methane) and carbon dioxide.

Work is underway on a project to purify this biogas and make it into pipeline quality renewable natural gas for direct in-home use. When complete, we will have a closed loop of recycling and energy recovery—taking food scraps and turning them into clean power at our local treatment plant!

Newtown Creek WRRF currently digests about 25,000 gallons of EBS® every day (in addition to over 650,000 gallons of liquid sludge). Most U.S. households generate 3 to 5 lbs of food scraps per day. 25,000 gallons of EBS® equals about 100 tons, so that's roughly 40,000 households! And, as part of [OneNYC](#), our goal is to co-digest 250 tons of food scraps per day by June 2019.

And we can take this farther. The city produces about 4,000 tons per day of food waste, half of which is from residential customers. Newtown Creek ultimately has 500 T/d excess digester capacity and we are evaluating the feasibility of similar projects at our other WRRFs.

This model of local resource recovery is a building block for sustainable, resilient communities. By capturing our byproducts and recovering their value, we are:

- reducing GHG emissions,
- creating renewable energy in our backyard, and
- reducing long-haul trucking.

Resource recovery makes the most of our treatment plants, transforming what was considered waste to resources. DSNY's 2017 Solid Waste Characterization Study found that 21 percent of household curbside waste is food scraps and, to best recover this material for reuse, it is important to leave plastics, packaging and other trash out of your DSNY brown bin. We can all help by properly separating our organics for recovery, appreciating the value of treatment plants in our neighborhoods, and spreading the word about this program!

I'd like to thank **Frank Loncar**, **Zainool Ali**, **Steve Cubero**, **Sal Scapelito**, and **Moein Karim** from Newtown Creek, and **Jane Gajwani**, **Mikael Amar**, **Ariane Brotto**, and **Jennifer McDonnell** from the Energy Office, as well as our partners from Manhattan College and Waste Management, for all their hard work on this exciting venture.

*This article originally appeared on the agency's medium account. For more stories like this, you can visit [medium.com/nycwater](https://medium.com/nycwater).*

## Spotlight on Safety

### Seasonal Flu

Seasonal influenza, or the flu, can lead to complications such as pneumonia and can be life threatening. Here are some tips to prevent the spread of germs in the workplace:

- Avoid touching your eyes, nose or mouth
- Wash your hands often with soap and warm water for 20 seconds, or use an alcohol-based hand sanitizer
- Avoid close contact with sick people

- Avoid sharing phones, computers and other equipment/supplies
- Use disinfectant wipes/spray to keep surfaces clean
- If you are sick with flu-like illness, stay home for at least 24 hours after your fever is gone without the use of fever-reducing medicine

Free flu shots are being given at various [DEP locations](#) and are also available at many pharmacies, and at your doctor's office. For more information visit the [CDC](#) and [OSHA](#) websites.

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.



## New Solar Power Opportunities



In collaboration with the Department of Citywide Administrative Services, DEP recently completed Solar Photovoltaic and Energy Storage Feasibility Studies for six DEP facilities, including the Wards Island Wastewater Resource Recovery Facility, the Catskill-Delaware Ultraviolet Light Disinfection Facility, and several others in the watershed. The studies showed over 9 megawatts of total solar PV generation potential installable over process tanks, rooftops, parking lots, and open land at these locations. In support of the ambitious OneNYC goal to achieve 100 megawatts of solar PV at City-owned properties by 2025, DEP will be moving forward with installing the systems deemed most feasible while also seeking additional opportunities for solar PV at existing and new facilities via the integration of DEP's solar-ready rooftop design guidelines.

## Welcome Aboard!



Yesterday, 17 new employees attended orientation and received an overview of the department from Director of Planning and Recruitment **Grace Pigott**, HR Specialist **Grace Franco**, Recruitment Coordinator **Briana Lomax-Day** and HR Generalist **Conor Bulger**. We hope everyone will join us in welcoming them to DEP!

**Joanna J. Brown**, **Trisha Echevarria**, **Latifah M. Glasgow**, **Chasity Harris**, and **Arvra M. Shapiro** with BCS; **Ewelina Brymas** with BEC; **Nusrat J. Begum**, **William B. Bogess**, **Yehudis Gottesfeld**, **Ahmad Hassanein** and **Philip C. Heepe** with BEDC; **MD Iqbal Hossain** and **Derek K. Sirico** with BWSO; **Kiran Akhtar**, **Gershwin Aleus-Ledain** and **Oswaldo J. Morales-Isambert** with BWT; and **Felicia M. Varlese** with Legal Affairs.

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

## Monarch Butterflies & Rain Gardens



BWSO Gardeners have discovered monarch caterpillars and butterflies again this year in rain gardens in Queens and Brooklyn. This generation of monarchs is known as a “super generation,” as they live eight times longer than their parents and grandparents and travel 10 times farther in their lifetime. Since the mid-1990’s, the population of monarch butterflies has dropped significantly due to many factors, including severe weather events and a changing climate, the use of pesticides, invasive species and a rapidly shrinking habitat. The curbside rain gardens include hardy plants to help soak up stormwater before it can enter the sewer system and contribute to overflows into local waterways. Milkweed, a favorite of the monarch butterfly, is one of the plants that is regularly included in the rain gardens. With more than 4,000 rain gardens built over the last few years, monarch butterflies will have an expanding habitat throughout the five boroughs to both reproduce and feed during their annual migration.

## Land Transfer Expands Bronx Park



**Commissioner Sapienza** recently joined with NYC Parks Commissioner **Mitchell J. Silver** to announce that a 1.2-acre parcel has been added to Barretto Point Park, bringing the total acreage of the Bronx park to 12.2 acres. This new section was transferred from DEP to NYC Parks in February 2018 and is now open to the public as a grassy area with picnic tables and views of the East River and Manhattan skyline. Prior to being transferred to NYC Parks, the land was remediated by DEP under the New York State Department of Environmental Conservation's Environmental Restoration Program. The remediation plan included excavation, soil removal, new soil cover and a demarcation layer to prevent intermixing of sub-base and subgrade layers. To ready the area for public use, Parks' staff cleared and mowed the site, installed picnic tables, a mulched path and fencing. “In a city as dense as New York, it is a rare occasion to be able to create new parkland,” said DEP Commissioner Sapienza. “We are so happy to be a part of expanding Barretto Point Park and to see this beautiful waterfront property put to good use.”