

Learning Places Fall 2017

SITE REPORT #2

Gowanus Conservancy Site Visit



Picture taken from the Gowanus Canal Conservancy 2016 Annual Report

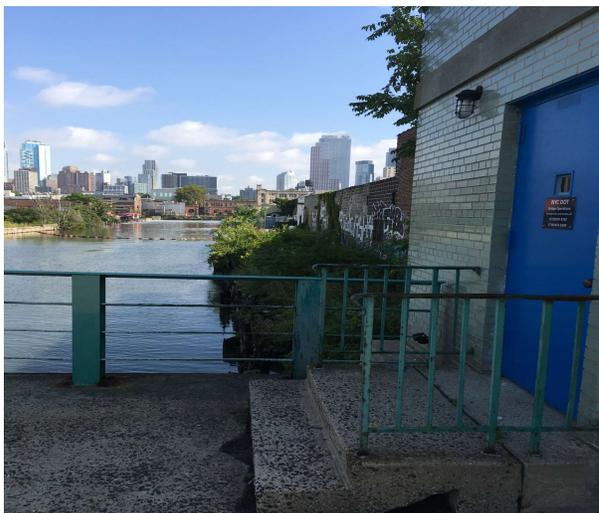
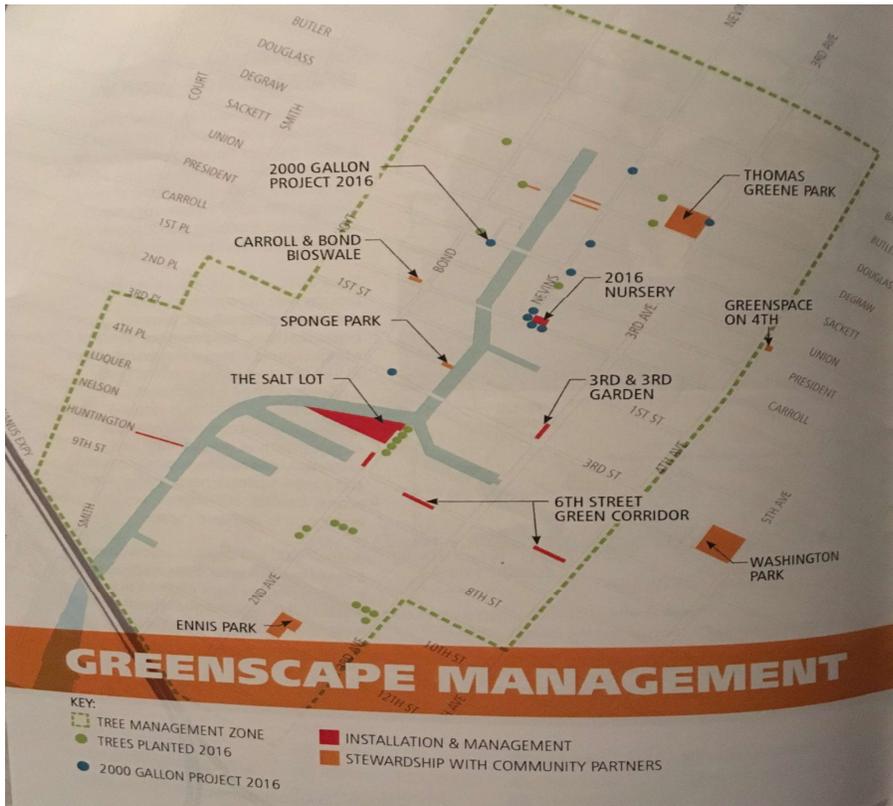
Lisa White

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INTRODUCTION AND PRE-VISIT REFLECTIONS

Prior to visiting the Gowanus Canal with the Conservancy, I reflected on what I learned from previous visits and discussions with Joseph Alexiou. During class discussions we learned about how the Gowanus is currently zoned and what its future zoning will be as well as how the Gowanus became polluted. I expect the Conservancy will further expound on the Gowanus pollution and efforts that are currently put in place to clean up the canal.

SITE DOCUMENTATION:



Union Street Bridge; Picture of the Gowanus Canal's Water Treatment Plant



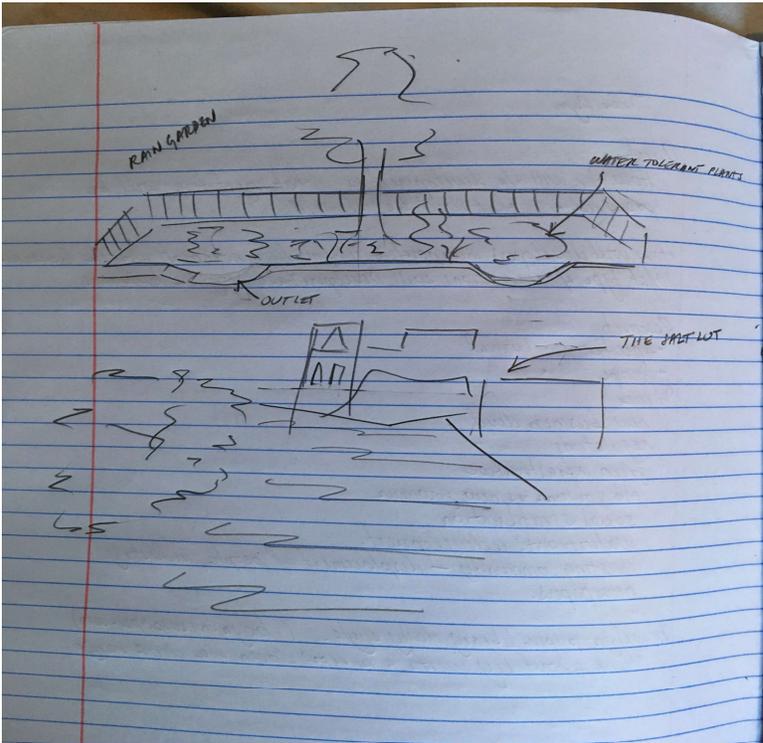
Sponge Park; Currently maintained by DEP



Bioswales along new luxury development



The Salt Lot; the hub of GCC's stewardship and education programs



Sketch 1: Depiction of a Bioswale;

Sketch 2: The Salt Lot; The hub of GCC's stewardship and education programs

ANALYSIS:

During our walking tour with The Gowanus Canal Conservancy our Environmental Steward, Christine, talked about green infrastructure and how it can assist in decreasing sewage overflow by creating Sponge Parks and Bioswales. This intrigued me because for so long I would see these types of gardens but never understood its usage except for its aesthetic purpose.

In 2012 The New York City Department of Environmental Protection (DEP) and Conservation (DEC) signed a ground-breaking agreement to reduce combined sewer overflows by using a hybrid green and gray infrastructure approach. DEP began building rain gardens (bioswales) to help create a sustainable city and found its benefits would be more than just beautifying the neighborhoods. The DEP also found that bioswales would purify the air, reduce temperature during hot weather, improve street drainage, and reduce puddles and ponds.

Rain garden looks very similar to a street tree pit or a small garden, but have some key differences. The differences are:

- **Curb inlet** – Allows water to flow into the garden as it flows down the curb toward a catch basin
- **Outlet** – Larger rain gardens have an outlet. As the rain garden fills to its capacity, water can exit through outlets and continue into a catch basin on the corner of a street
- **Stone Strip** – The strip allows people to step out of their cars without damaging the plants
- **Plants** – All rain gardens have plants and grasses selected to withstand New York City streets
- **Soil** – the soil is graded to allow water ponds in the center of the rain gardens
- **Tree Guard** – All rain gardens have tree guards around them to protect the plants and keep people and dogs from walking inside them
- **Trees** – DEP plants trees in rain gardens to benefit neighborhoods by lowering temperatures in hot summer months, improving air quality, and provide a habitat for birds and butterflies (The City of New York, 2017)

Even though the benefits of Bioswales are important to address the issue of global warming. Some residents in all counties of the city are protesting the installation of bioswales. Over the past five years the city has built 3,000 bioswales in Brooklyn, Queens, and the Bronx but an outcry from citizens complain the rain gardens are unsightly and aren't built with community consultation. Residents complain these rain gardens are nothing more than fancy garbage collectors.

Currently the DEP is responsible for maintaining the rain gardens but not have the manpower resulting in New York City streetscapes becoming garbage sites and mosquito nesting grounds. Ironically the Conservancy also feels this disdain but not for the same reasons. The Conservancy understands the benefits of bioswales and their importance in correcting our eco-system but find that poor maintenance of the rain gardens leads to negative perceptions by residents. To counteract this negative image the DEP has collaborated with Million Trees NYC to host BioswaleCare workshops for New York City residents to learn how to care for street trees and Right-of-way Bioswales in their neighborhoods. The

Conservancy is now working with the Green Infrastructure Program to become the stewards for the Gowanus Canal to further push the Gowanus Greenscape Vision of green infrastructure.

KEYWORDS/ VOCABULARY (these must be words you learned on this walk such as specialized vocabulary, city agencies, names of businesses or significant people – they must be specific to the topic of the walk) *5 keywords required per site visit

1. Bioswales
2. Superfund
3. Green Infrastructure Plan
4. DEP
5. DEC

QUESTIONS for FURTHER RESEARCH: (these should follow directly from your analysis section and be complex and specific enough to serve as the basis of a research project; do not include questions you can answer with a quick google search)

1. What are the future plans for green infrastructure in the Gowanus?
2. How do we get developers to become eco-conscious in the Gowanus?
3. Who will be responsible for keeping the canal clean after remediation is complete?

Works Cited

NIR, S. M. (2017, March 23). *To the City, a Pollution Fighter. To Some Residents, an Eyesore*. Retrieved from nytimes.com: <https://www.nytimes.com/2017/03/23/nyregion/bioswale-rain-gardens-new-york.html>

The City of New York. (2017). *Rain Gardens*. Retrieved from nyc.gov: <http://www.nyc.gov/html/dep/html/stormwater/rain-gardens.shtml>