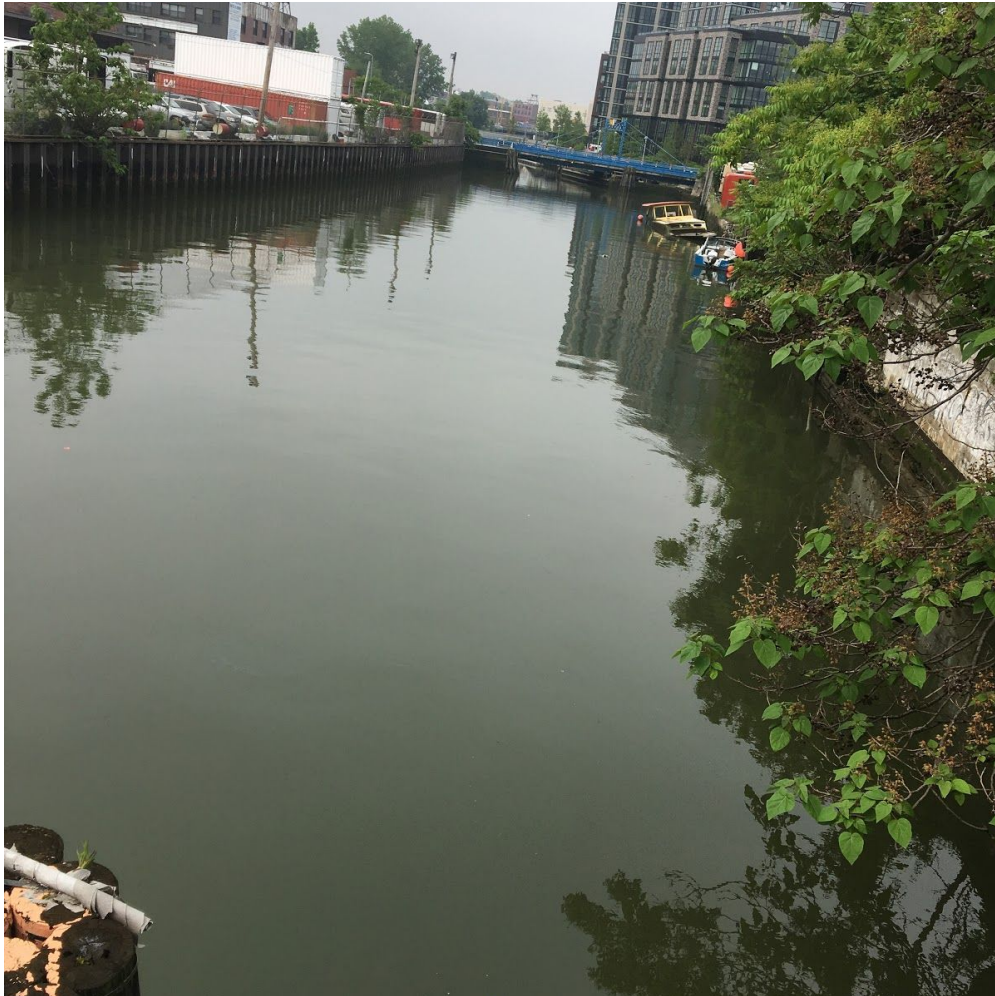


Learning Places Fall 2017

SITE REPORT #1

Gowanus



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INTRODUCTION

I always thought that redevelopment of an area is always a positive thing, where new buildings are built, new jobs are created, and the neighborhood itself will gain new, fresh people, adding to the existing one. However, that is not the case, in Gowanus. Our class took an interest journey to the Gowanus and did research about the area, and I learned that redevelopment comes with a price. To understand Gowanus, we need to look at its history, and the effects of gentrification in these modern years. The Gowanus is area that is located on top of the Canal that it is named after, the Gowanus Canal, in Downtown Brooklyn.

Gowanus Canal was originally built by the Dutch who first settle in the nearby swamp area. They constructed the channel in order to power three major mills, which were used for agriculture purposes. During the industrial revolution later, a demand for coal as the major energy source causes the canal to be redevelopment into an industrial zone, and with a side effect of dumping coal tar into the canal itself. The city later then develop the combined sewage system in Brooklyn, where the drainage and sewage system goes through the same pipelines, which causes a situation called combined sewage overflow to pollute the canal even further.

Today, Gowanus is now considered by the government to be a superfund site, where the cleaning of the canal and redevelopment of the nearby areas are planned. We then now see the impact of these redevelopments within the canals, and both positive and negative impact from it.

Bioswale - a natural bio sponge



On our visit to Gowanus, one of the interesting thing I learn is that these new bioswale are placed nearby. This is the first time where I learn such structure are designed to absorb stormwater and serves as a way to reduce the load on the CSO in case of a large flood. The above picture is a bioswale that we visited, and one of the problems that is seen here is that a bioswale that is not maintain can potentially become another dumpsite for garbage. However, if well maintained, good amount of vegetation can be grown and produce a nice green environment.

Gentrification - redevelopment of the neighborhood

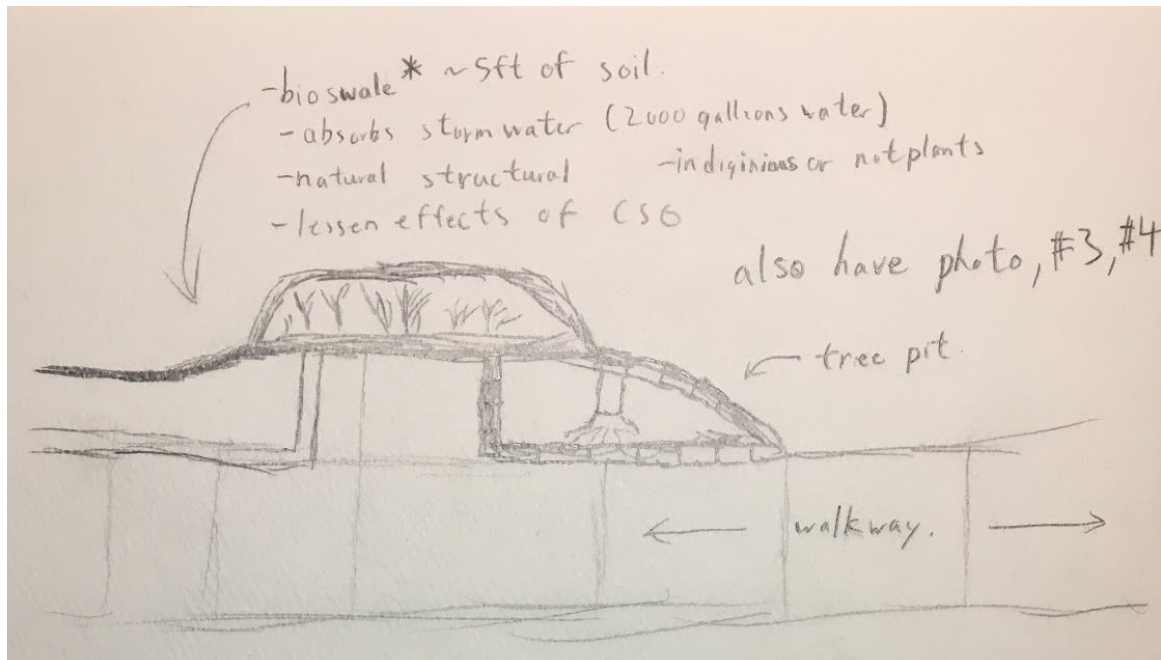


The above picture shows the difference between the recent new luxury condo that was built on the right side of the photo, and the local old building on the left side of the photo. As shown, this street shows a contrast between the old and new, like a boundary between the rich and the poor. It shows that these redevelopments have brought new buildings to the neighborhood, but did not contribute to the street or the neighborhood itself. Perhaps the luxury condo can draw in new middle to high class people, but will they truly benefit the neighborhood? Only time will tell.



The above picture shows an empty area that is currently on sale, but you can see that the local neighbor has put up these signs showing the tragedy that occurs in this area. It's as if the local developments has ignore the problems, and the locals has use this chance to increase awareness of what's going on in this neighborhood. This is just another example of problems that was brought along with gentrification and redevelopment.

SITE DOCUMENTATIONS



The above sketch is a layout of the first bioswale that we visited. I feel like it made an impact on me due to the fact that such a system is design to be self sufficient and at the same time, able to allow green life to grow, as a natural area rather than artificially absorbing the water using more machinery.

This sketch shows some features of an old building in the neighborhood, with a distinct architectural feature of having a cornice and lintel, along with some old brick bonds. These building are originally design for industrial workers for housing purposes, but was later remodel into expensive residual buildings.

GENERAL NOTES:

Gowanus Canal

- 1.8 miles long
- 100 ft wide
- blackish water
- fresh mix salt
- wash
- power mills originally
- industrial revolution
- powered by coal
- cause pollution (coal tar)
- seeps into the canal (~10ft?)
- 100+ years
- combine sewage over flow (CSO) - pumping station (1800s)
- when over flow, causes pollution
- 400m gallons, raw sewage
- 27b. sewage in NYC
- spruces
- blue crabs
- jellyfishes
- mostly small
- flushing tunnel
- pumps in oxygen rich water from NY harbor
- 2015, add 3 more turbines
- super fund 200
- fix polluted area
- states 2016, plan on finish by 2022
- also have photo, #3, #4
- tree pit
- walkway
- inlet out let (photo #5)
- improvements/perkins
- allow/disallow water
- inlet out let (photo #5)
- condos
- zone 1 flood plane rezoning requirements
- 700 new units
- 40ft public esplanade
- new problems; more CSO
- 2 bay (?) wide houses
- while food
- brown field site
- polluted site
- LEED certified system
- solar panels/sund turbine

- Gowanus Canal
- Superfund Project
- cleaning of the Canal
- program by government
- cleaning polluted site
- potentially responsible party(s)
- pay for the clean up
- life cycle
 - inspection/preliminary inspection
- remedial investigation F.S.
- cost sampling
- remedial design phase
- five-year review
- check by EPA (Environmental Protection Agency)
- Reuse
 - Reduce contaminations greatly.
- Thursday
- Question of Research Project
- Complete Read / do Blog by Thursday

- Natalie
- short video
- 3 major contamination
- Manufacture gas plant
- coal tar
- CSO (Combined Sewage Overflow)
- Downtown Brooklyn (2007-08 film)
- 2007, Downtown Brooklyn Development
- Change in zoning
- Gentrification plan(?)
- more diverse stores(?)
- Joe Chan
- Downtown Brooklyn Partnership
- Community did not approve
- went through the plan anyways(?)
- didn't know
- 2007
- recession happen
- change to condos
- real estate
- doesn't bring jobs

INSIGHTS/DISCOVERIES

As a natural trained engineer, the problem of gentrification was a new concept to me. It is part of my major to learn how to calculate and construct a building that it falls under all kinds of regulation to ensure the safety of the people, however, it has never occurred to me that not only, when buildings are built not following the correct regulations, can hurt people, but even buildings, when built correctly, can hurt a neighborhood.

I always thought that the redevelopment of an area is a positive thing, where old neighborhoods are able to receive new buildings and local landowners are able to make money of the new changes, and local neighborhood grow to accept its new neighbors. However, we've seen that in Gowanus, these changes are not a good thing. While new changes might bring new people to the neighbor, having the changes occurring too rapidly will destroy the local business, as seen in Gowanus. Also, the choice of structure is another problem, where luxury condos and residence does not create new jobs, but will create more sewage problems as well.

On top of that, the local polluted condition of the canal and its historical periods of CSO, along with how developers are trying to sell luxury housing in nearby areas has caused some major concerns in the neighborhood, while the superfund project at the same time, is trying to clean up the canal to a certain degree.

KEYWORDS/VOCABULARY & DEFINITIONS

bioswale: landscape elements designed to concentrate or remove silt and pollution from surface runoff water. They consist of a swaled drainage course with gently sloped sides (less than 6%) and filled with

vegetation, compost and/or riprap.

gentrification: The process by which an (urban) area is rendered middle-class.

Combined sewage overflow: A combined sewer overflow (CSO) is the discharge from a combined sewer system that is caused by snowmelt or storm water runoff.

Indigenous : Born or produced naturally in a land or region; native or belonging naturally *to* (the soil, region, etc.). (Used primarily of aboriginal inhabitants or natural products.)

Superfund project: The Superfund program is part of a Federal government effort to clean up land in the United States that has been contaminated by hazardous waste and that has been identified by the US Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or to the environment.

QUESTIONS for Further RESEARCH

1. Will the superfund project be sufficient to clean the Gowanus canal?
2. Will the new influx of the middle class actually bring a positive change to the neighborhood?
3. Is it possible for the developers to show concerns for local small business owners, where they are able to receive actual help?

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