Restoring the Wetlands at Max Brandon Park Final Report
Award # 3002903660

Fresh of the heels of the adoption of Imagine Flint, the City of Flint’s first official comprehensive master plan since 1960, the GLAA-C project for Max Brandon Park provided the City an opportunity to demonstrate an immediate master plan project to the community. A plan that is ripe with innovative strategies, the City can now highlight a specific project in particular that encompasses many of the principles laid out in the master plan, specifically Social Equity & Sustainability and Adapting to Change. Through a community driven planning process, it was heavily acknowledged that extra attention to Flint parks was needed. Additionally, thinking differently about how the City operates and maintains its parks in sustainable ways was also very much a public concern. By possessing over 60 parks that contain over 1,600 acres of mow able turf, the City of Flint faces many challenges to provide quality, public spaces for its residents. Adapting to non-traditional methods of park maintenance is a necessity, but throughout the master planning process this notion was met with a great amount of controversy and public resistance. It was this public discomfort and hesitation that prevented the City from incorporating aggressive techniques and recommendations into the final master plan document, and provided a “red-flag” to city planning staff that additional public outreach and education was needed on this topic prior to launching implementation.

It was a result of these processes that led planning staff to research and seek support on ways in which to exhibit new systems applicable to Flint parks and respond to community concerns in earnest. Capturing the “buy-in” of Flint residents would allow the city to eventually formalize sustainable practices to integrate within the parks system. Identifying Max Brandon Park as a potential site was the first step in this process. Sitting at 107 acres, Max Brandon Park is an ecological gem, especially unique within an urban area such as Flint. The park is the city’s second largest and lies within multiple severely distressed neighborhoods. It’s very important to note these characteristics, as this demographic has traditionally been a overlooked one in planning processes, even more so the case in Flint. As staff worked through the process and selected a site, not only was Max Brandon a perfect fit for its environmental features, but it was the socio-economic conditions as well that provided the project with an added behavioral impact element to address. The project would provide Flint residents with little or no exposure to sustainability, education on urban ecology. This is especially true for the nearly 10,500 low-income, African American residents, 29% of whom are under 18, that reside near the park.
**Process**

Partnering with an existing community group, The Friends of Max Brandon Park, planning staff engaged over multiple meetings with group members. Feeling continuously strained, with no sort of park improvements occurring, and dis-engaged with prior city parks staff, current planning staff saw this as an excellent occasion to transform that relationship and mend those concerns. Recognizing an opening to addresses inefficient mowing and park maintenance, staff sought out additional support form a local community development corporation, and an active living based foundation in Flint. With this strong support system in place, all parties thoroughly vetted and provided input on the application to the Graham Institute through the GLAA-C initiative. This type of engagement and collaboration provided ripe conditions to counter any potential political or adversary sentiments destined to arise. It also documented tremendous institutional relationships, which paid off throughout the project.

From that dialogue, an application was submitted and grant awarded for restoring the wetlands and supporting the development of an eco-park in Max Brandon Park. The ultimate goal of the project was to improve the park eco-system and use it as a model to teach about the importance of healthy natural environments in our City. The development of an Eco-Park also will allow the City to demonstrate various sustainability projects outlined in the Master Plan and gain support for further park naturalization from apprehensive residents. More importantly, the development of the eco-park -- involving extensive community engagement -- can help us build an urban ecology movement in a city better known for its blight.

**Resources and Support**

Work soon began on the project with multiple obstacles arising that delayed the overall progress. Perhaps the most frustrating impediment for planning staff was the lack of coordination with fellow city staff (eg. Parks and Recreation, Public Works and Utilities) that was relevant to implement the wetland restoration work. Lack of capacity at the city has been on-going problem, with severe budget cuts leading to diminished staffing levels. A challenge that also arose was the increased hesitation and disdain from the local Friends of Max Brandon group in regards to removing vegetation in/around the wetland. Fear of disturbing the natural ecological setting was a belief that was raised on many occasions. To address these concerns, planning staff sought out best practice manuals/guidebooks to help simplify this conversation. Staff approached GLAA-C for support and potential resources. Numerous documents were provided, some more helpful than others, but in particular there were three that served as great tools for our staff and were used frequently:

- A resource to identify invasive species in Max Brandon Park and appropriate removal strategies. Meeting the Challenge of Invasive Plants: A Framework
for Action:

- Metrics to monitor and quantify the net positive impact of the wetland on Max Brandon Park’s ecosystem.

And handouts provided to communicate the benefits and specifics of integrating sustainable techniques and their relationship to Max Brandon Park.

Outcomes

After overcoming a series of initial challenges, a tremendous amount of progress was made over a four month period in early summer. Beginning in July, the City’s Parks and Recreation department was dissolved into the department of Planning and Development. This transition provided project staff direct oversight of all activities and responsibility. Thus a massive gap was bridged allowing more seamless work to occur. Also in July, the City entered into a 2-year pilot agreement with Genesee County Parks to oversee maintenance in the park. Having this added capacity with a willingness to support the project provided a positive development that has evolved and will aid future work in the park and other city parks.

The most substantive outcome from the GLAA-C support however was the awarding of a second grant from the Ruth Mott Foundation to further back the goals of wetland restoration
and eco-park development. The City applied for and was awarded a two-year, $75,000 grant to build off the initial GLAA-C funded work. This incredible support was not planned, nor was it aggressively sought after by the city. Staff at the Foundation gained awareness of the on-going work at the park and asked staff to apply to further this innovative vision for Max Brandon Park. This type of active participation from the Foundation was truly something unforeseen.

Of course the most noticeable outcome from the GLAA-C project is the physical change that has occurred throughout the park. As the pictures demonstrate in the attachment, the wetland area was opened up considerably through the proper and necessary removal of numerous amounts of vegetation, much of which contained invasive species. This work generated sight-lines for the first time in decades, and allowed the public to witness the actual wetland and view its unique characteristics. The majority of Flint residents had always observed the signage noting a wetland was present, but never fully saw the actual wetland.

During this extensive removal of vegetation, an unexpected problem came to light. A large culvert, responsible for receiving rainwater from the numerous swales throughout the park and discharging into the wetland, was found to be significantly broken leaving it non-operational and thus leaving the wetland to be functioning at considerably lower levels than the original design intended it to be. This discovery, not initially known when applying for the GLAA-C support, was quite the development. This find has begun to answer some additional questions staff has had regarding the lack of consistent water flow to the wetland and the overwhelming flooding that occurs after heavy rain events. Support from GLAA-C enabled us to repair and perform maintenance on the culvert that drains the central East portion of Max Brandon Park into the wetland area located in the central West portion of the park. The 21” diameter concrete culvert is approximately 200’ long with an access structure approximately in the middle. The structure was dug up and a new structure installed with a sump in the bottom and a manhole cover on the top. Approximately 40’ of ditch on each end of the culvert was cleaned out and the ditch on the east end of the culvert filled with large stone to help stop sediment and debris from flowing into the culvert.

Next Steps

Even with the incredible support provided by GLAA-C there remains a sizable amount of work needed to be done to fully restore the wetlands and develop a true eco-park at Max Brandon. Unplanned circumstances such as the inoperable culvert that was discovered dealt a minor blow to the timeliness and efficiency of the project. Additionally, the partnership with Genesee County, while positive, has slowed down processes and presented staff with an added layer of administrative approval to navigate through. That being said however, the substantial two-year commitment from the Ruth Mott Foundation has enabled us to expand our original scope of work and provides solid financial footing to ensure the project moves forward.
Flexibility throughout the project from the GLAA-C staff has been a blessing. The ability to shift funds from the initial budget to handle the culvert issue that arose has allowed us to fully focus on addressing the capital improvements necessary to adequately ensure a functioning ecosystem. With mention of this support from the foundation, it’s important to document the ongoing work being done and expected outcomes after year 2:

- Continued observation of the parks drainage system through the development of a plan to minimize stormwater runoff
- Continued thinning and removal of invasive species in/around the wetland
- Planting of native species in/around the wetland
- Construction of boardwalk and overlook in wetland area
- Installation of interpretive signage regarding wetland and park ecology features
- Engagement of community members and youth through integration of ecology curriculum
- Crime Prevention Through Environmental Design implementation throughout park to reduce crime and improve safety perceptions
- Installation of cistern to provide raw water source for native vegetation
- Recruitment and training of eco-park stewards

Ultimately, the outcomes noted above will work towards addressing the original concern at hand: The City of Flint integrating new, innovative mechanisms into City parks to help reduce the long-term maintenance costs, implementing sustainable strategies recommended in the master plan, and educating the importance of these to community members. The new Max Brandon eco-park can serve an integral role in improving the City’s ecosystem by removing pollution, strengthening the habitat of local wildlife, and filtering and cleaning water. These sustainability projects and education components would expose a new Flint audience to concepts and provide an ideal outdoor classroom in order to learn about urban ecology, potentially inspiring a whole new generation of residents to think different about their surroundings and serving as a multiplier effect.
Storm catch basins located around the wetland were cleaned, removed of debris blocking flow, and jetted to ensure full capacity and efficiency.

Images of existing state of wetland area prior to invasive removal

Images of current state of wetland area after overgrowth removal
Swales functioning properly after a heavy rain event. These swales are located throughout the park and are part of an integrate network that funnels into the wetland by virtue of a large culvert.