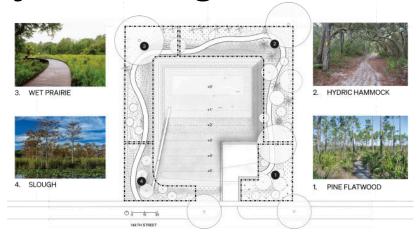






## Case Study: Good Neighbor Stormwater Park



**Problem:** Much of the City of North Miami is in a low-lying basin prone to flooding. These issues have worsened over time with climate change-induced impacts, including sea level rise. The City has proactively used grant funding, including through FEMA's Hazard Mitigation Grant Program, to purchase parcels of land that have experienced repeated flooding problems. These lots, however, sat vacant and remained flood-prone.

**The Solution/Project:** In 2018, City planners began focusing on these lots as sites for: regreening for flood mitigation, including public art, establishing native vegetation, and providing additional city amenities. They submitted a winning proposal focused on repurposing these sites to the timely 2019 Van Alen Institute's Keeping Current: A Sea Level Rise Challenge for Greater Miami initiative. The Institute then put out an international call for architects and designers to submit concepts for reimagining these spaces. Dept. Landscape Architecture and Urban Design (Dept.) provided the selected concept. A lot in the City's Sunny Acres Neighborhood that had sat untouched for 15 years since purchase was selected as the initial pilot site, and the project also called for a master plan that would outline how to replicate these ideas in other similar city properties.

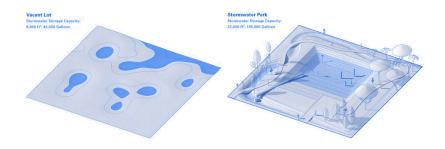
## **Project Goals:**

- Convert unused, repetitive flood loss lots into safe, usable community spaces
- Adapt to climate impacts over time, especially flooding
- Contribute to reduced local flood insurance premiums through the National Flood Insurance Program's <u>Community Rating System</u>
- Implement a project that was forward-thinking and scalable across the City
- Re-establish biomes that were originally in the City
- Provide education regarding flooding
- Create a first pilot project that was shaped by feedback from the residents in the neighborhood where it was sited

**Project Description:** The process started with project partner <u>Urban Impact Lab</u> working to gather resident feedback through the use of door-to-door surveys, workshops, and other formats of engagement (e.g., "speed dating" with project designers). Care was taken to communicate using languages that residents spoke including English, Hispanic, Haitian-Creole. These efforts especially identified that residents wanted green space and a place to walk.

At the pilot site, it was important to project partners that the park educate visitors about stormwater management and make the "invisible, visible." As a vegetated bioswale that surrounds the property fills up, a solar-powered and above-ground pipe and pump system which doubles as seating, conveys water to a stormwater retention pond.

There is a demonstration garden that recreates several of Florida's characteristic habitats, including pine flatwoods, hardwood hammock, coastal prairie, freshwater marsh, and cypress slough. Dept. collaborated with Miami-based artist Adler Guerrier to create a public art piece that uses physical markers to show water levels within the pond. The park also has pathways throughout to ensure community access and use.



**Successes and Lessons Learned:** The Park was designed to accommodate the 2-feet of sea level rise expected in the area by 2060 and has been estimated to have an increased stormwater capacity of roughly four times the volume (approximately 150,000 gallons) of the prior vacant lot. The property was also designed to accommodate the runoff from approximately 20 surrounding properties. The Park's design was a recipient of an American Planning Association's Gold Coast Excellence in Sustainability Award.

Two weeks after the park opened in December of 2019, a record rainfall event occurred in the area. The Park exceeded its design, not only by successfully capturing stormwater from surrounding properties, but also roadway runoff. Flood waters had receded by the next day. As the vegetation has continued to mature, not only has it supported the appearance of wildlife, but it has increased the capacity of Park grounds to absorb more water.

Several takeaways can be shared from the project. Public-private partnerships can be an effective way to support completion of resilience projects, and creative funding sources might need to be explored and combined. Since the project piloted new stormwater concepts in the County, it was important to engage them early on in the permitting process. Buy-in from elected officials is key and finding one to be the project advocate is crucial. It also can be very advantageous to consider how pilot projects can be scaled or replicated in other local areas. Don't be discouraged by being first out of the gate to do something innovative; it is hard to bring others along who can't immediately see the vision. Be persistent!

## **Additional Details**

Specific Location: 901 NE 144 Street, North Miami, FL 33161



Cost & Funding Sources: \$80,000 was provided by the Van Alen Institute and awarded to winning designer Dept. Landscape Architecture and Urban Design (Dept.). Dept. also donated additional unpaid time. Florida Department of Environmental Protection awarded \$50,000 in coastal resilience grant funds to the project. Native plants were donated by the Nature Conservancy. Private donations totaling \$6000 also supported the park.



Please note: The costs for projects completed in past years may not reflect present-day costs for the same type of project. Also, there may be significant regional variation in the price of materials and services.

**Project Partners:** City of North Miami, Van Alen Institute, Dept., and the Urban Impact Lab.



**Timeframe:** The project was completed in 2019. The design competition and selection of the winning design took a little over 4 months. Community engagement to inform the Park design took about 4 ½ months. Finally, implementation took 1 month.

**Project Contact:** Debbie Love, AICP; Director, Development Services Department; City of North Miami; <a href="mailto:dlove@northmiamifl.gov">dlove@northmiamifl.gov</a>



## Additional Resources:

- Debbie Love's presentation for the Working with Nature
   December 2024 symposium <u>Creating Harmony with Nature:</u>

  <u>The Good Neighbor Stormwater Park as a Model for</u>
  <u>Sustainable Urban Planning</u>, starts at 25 min:22 sec
- City of North Miami Repetitive Loss Property Vision Plan
- Georgetown Climate Center report Greauxing Resilience at Home: A Regional Vision excerpt featuring the Good Neighbor Stormwater Park as a case study
- <u>Dept. Landscape Architecture and Urban Design's profile on</u> the Good Neighbor Stormwater Park
- Case study profile, pg. 56 in the report <u>Adaptation for All:</u> How to Build Flood Resilience for Communities of Every Size

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