

# Mitigate, Enhance, Preserve, Educate - The Impact of Development on the Graniteville Wetlands

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## Introduction

This project focuses on the development of a BJ's Warehouse on the North Shore of Staten Island. The construction is operating on Graniteville Wetlands, which pose a threat to vulnerable communities, putting them at risk of flooding.

## Project Goals

- Create digestible visual maps of wetland size, BJ's development, and flooding risk.
- Educate community members with tools to hold developers accountable for the preservation of wetlands.
- Analyze the social demography of the neighborhood to properly identify the at-risk community.

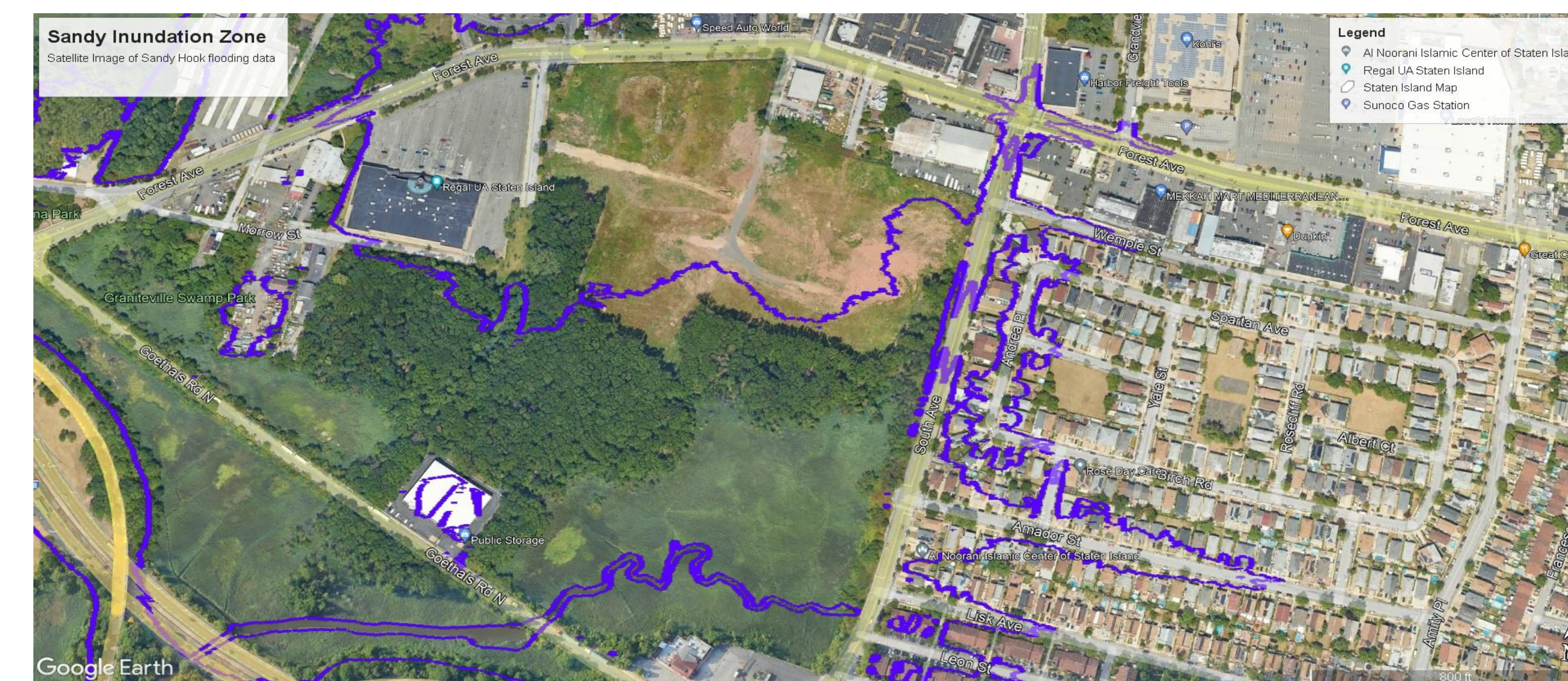
## Method

- Examined and identified vital details from South Avenue Retail Development – Final Environmental Impact Statement (regarding the proposal project).
- Traced and calculated the size of wetlands with Google Earth Pro using satellite images.
- Collected the social and economic background of the Graniteville neighborhood.
- Designed a website to educate and empower residents as scientists to inform developers about the mitigation of wetlands.

## Future Directions

- Collecting additional data about the Old Place Creek Tidal Wetlands Area in Staten Island's decreasing wetlands due to building.
- Work with Community members to build an awareness of the importance of wetlands preservation within the approved establishment.
- Working with Flood Watch at the ASRC to record rain fall data within Graniteville.

## Maps and Background



## Results

- The historical Staten Island map had 1,140.67 acres of wetlands compared to Graniteville's size of 62.68 acres.
- The size of the development site is 28.3 acres, reducing the size of the Graniteville wetlands to 34.38 acres. However, the total regulated wetland area on the plan site is 6.94 acres. Estimating the total area of the Graniteville wetland at 41.32 acres.

## Reference

- <https://www.nyc.gov/site/planning/applicants/env-review/south-avenue-retail-development.page>
- <https://floodhelpny.org/en/profile/f9b4194c-fcc2-47fc-a3af-2b895d1458d5>
- <https://www.google.com/earth/versions/>

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