# **Drainage Pump Station 01 Watershed**

**Drainage Upgrades & Green Infrastructure Project** Phase I: Stormwater Parks and Lots



# **Overview**

The project area includes nine New Orleans neighborhoods: Broadmoor, Central City, Garden District, Lower Garden District, Irish Channel, St. Thomas Development, Touro, East Riverside, and Milan. These neighborhoods are located between the Central Business District and Uptown and within the Drainage Pump Station 1 (DPS 01) drainage district. Properties in these neighborhoods experience frequent localized flooding and repetitive losses due to regular weather events. The project area is bound by Broad Street to the north, Martin Luther King Boulevard and Melpomene Street to the east, Tchoupitoulas Street to the south, and Louisiana Avenue and Toledano Street to the west.

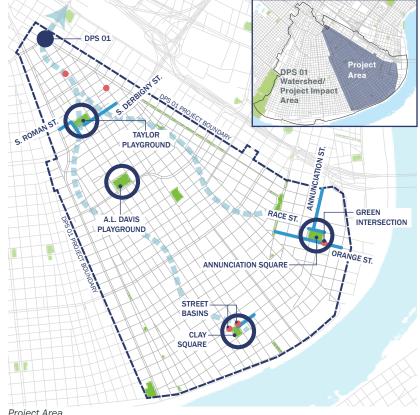
Implementing green infrastructure, along with new pipe drainage connections throughout the project area, will provide widespread benefits to the project area and the adjacent upriver neighborhoods.

# Phase I

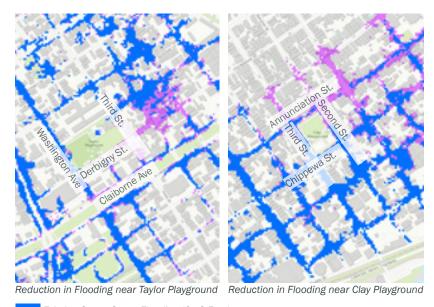
Phase I of the project will design and implement green infrastructure to manage stormwater on selected vacant lots and public parks. The four fields in the public parks will have subsurface storage, the two vacant lots in the study area will have surface storage. Each is designed to collect water off of the streets and temporarily store the water, thus relieving pressure on the pumping system. In addition to lots and parks, three green intersections, two of which include street basins, are included in the project.

# **Funding**

The City of New Orleans has secured \$50 million in Federal funding from FEMA through the Hazard Mitigation Grant Program (HMGP) to implement green and grey infrastructure in the project area to alleviate localized flooding. Green infrastructure will serve to detain stormwater, thereby allowing the existing drainage system to function more effectively.



Project Area

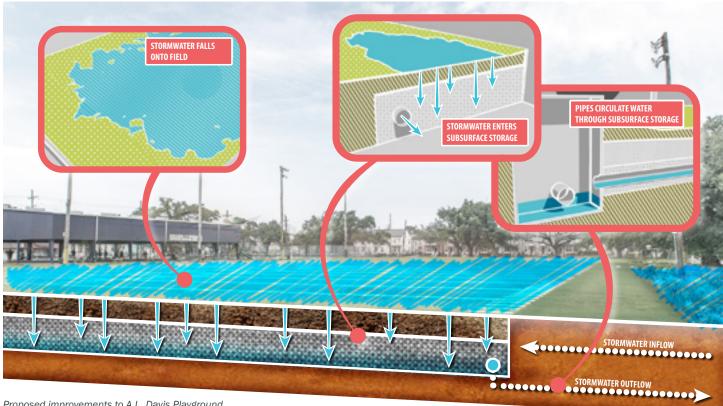


Existing 2-year Storm Flooding (0 - 2 Feet)

Eliminated Flooding in the 2-year Storm

# Why Green Infrastructure?

- Temporarily stores stormwater to reduce localized flooding
- Infiltrates water into the ground to stabilize soils
- Improves water and air quality
- Reduces the stress on the pumps and pipe drainage system



Proposed improvements to A.L. Davis Playground

#### Issues

The project's main issues in the study area include frequent and intense rain storms that occur several times a year, aging infrastructure, both of which contribute to localized flooding causing property damage. As is the case in most urban areas with intense rainfall events, older and undersized catch basins, pipes, and pumps cannot keep up with the amount of stormwater runoff entering the drainage system. Upgrading these infrastructure facilities is costly and highly disruptive. The opportunity arose to better neighborhoods to become more resilient urban environments by implementing both green and grey infrastructure.

Capital Improvement Program: The City and Sewerage and Water Board of New Orleans are working together to implement an unprecedented capital improvement program to restore the City's damaged infrastructure. Using a combination of local and Federal funds, the \$2B program will be the most comprehensive that our region has seen in a generation. Work will include more than 200 individual projects and consist of repairing all or portions of about 400 miles of roadway. For more information about the Capital Improvement Program, please visit roadwork.nola.gov.

# **Benefits**

The stormwater parks and lots were designed to maximize the amount of stormwater that is captured and managed in the project area. The parks are designed to capture water that falls on them, as well as stormwater from the neighborhood that typically floods streets. The water will be temporarily directed into subsurface storage and then eventually flow into the City's drainage system. Because of the green infrastructure design, residents will be able to use the park's fields more quickly after storm events.

The stormwater lots are designed to take water off the street and temporarily store it on the lot and then release the water into the drainage system after a maximum time of 48 hours, thus preventing the breeding of mosquitos. These lots, when not storing water, will improve the visual character of the currently vacant land, as well as reduce localized flooding.

### Contact:

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