Soil Evaluation for Green Infrastructure

New Orleans, Louisiana

SERVICES

- Geotechnical Survey
- Stormwater Management
- Green Infrastructure Design
- Infrastructure Assessment

PROJECT DETAILS

Client
Eustis Engineer, LLC

Project Contact
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Project Owner
Sewerage and Water Board of New Orleans (SWBNO), funded through U.S. EPA Office of Research and Development (EPA)

Project Address
Multiple Locations
New Orleans, LA

Date of Contract
2016

Period of Performance
Summer/Fall 2016

CEDARVILLE Contract Value
$13,740

Total Project Cost
$13,740

Managing stormwater requires a decentralized approach.

New Orleans is located in a low-lying area just above, at, or below sea level. There is an extensive pump system that pumps stormwater collected from canals during storm events and seepage from the surrounding surface water bodies recharging the groundwater table to Lake Pontchartrain; inevitably this water makes its way back towards New Orleans, only to be pumped again. This constant pumping has led to subsidence.

Disconnecting and redirecting portions of stormwater flows from the canals and pumps in New Orleans would reduce the amount of water entering the pump system and may reduce the rate of subsidence in New Orleans. Based on the soil conditions encountered and the stormwater flows that are present within each sub-watershed, there would be a variety of stormwater Best Management Practices (BMPs) for managing stormwater.

Managing stormwater requires a decentralized approach. While there may be consistent site conditions within a neighborhood and one type of BMP may be appropriate, in general the site conditions determine the BMP type. Depending on the site conditions, a stormwater BMP may provide recharge (e.g. infiltration bed), attenuation and storage (e.g. traditional detention basin), or filtration (created wetland). Each BMP would require a specific type of operation and maintenance to ensure the long-term performance of the particular facility.

Environmental Services

CEDARVILLE Engineering Group, LLC
Sustaining Communities by Design