

# ***Sewerage & Water Board of New Orleans***



## ***Green Infrastructure Plan & Projects***

June 18, 2014

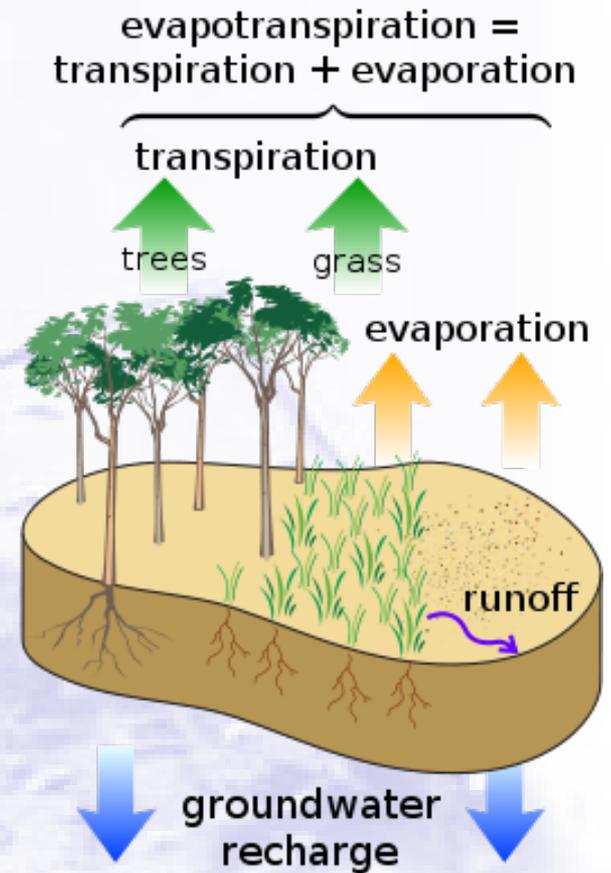
# Green Infrastructure Plan

- Per Modified Consent Decree and the LPDES Municipal Separate Sewer Storm Sewer Systems (MS4)
  - Explore and include green infrastructure projects for all of New Orleans
  - Dedicate \$500,000 per year, averaged over the next five years
- Submit Green Infrastructure Plan by April 23, 2014



# Green Infrastructure - Definition

- Use of natural process to ***infiltrate***, ***evapotranspiration*** or ***reuse*** storm water or runoff where its generated
- Multiple benefits
  - Reduction of storm water discharges
  - Mitigation of flooding
  - Rainwater harvesting
  - Reduced capital costs for storm water management



# Rain Barrels to Disconnected Downspout



# Rain Gardens to Tree Canopy



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<http://swbno.org>

# Permeable Paving



# Bioswales



# Green Roofs/Vegetated Walls



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# Green Infrastructure Plan

- The Plan describes
  - the policies guiding development of the Plan
    - Modified Consent Decrees, MS4 Permit, Greater New Orleans Urban Water Plan (*Sept. 2013*), CNO Master Plan for the 21<sup>st</sup> Century: New Orleans 2030 (*adopted Aug. 2010*) and CNO Comprehensive Zoning Ordinance (*draft*)
  - description of the principal goals and objectives for green infrastructure
  - understanding of the approach toward achieving the goals
  - establishment of performance measurements.



# Goals and Objectives

- Identifying and selecting projects that embody the principles of living with water
  - Social: community assets,
  - Economic: cost effective
  - Environmental: mitigate repetitive urban flooding
- Implementing projects that comply with GI design criteria
  - Storm water BMP Guidance Tool for Orleans & Jefferson Parishes (*Bayou Land Resource Oct. 2010*)
  - Greening CSO Plans (*EPA Mar. 2014*)
  - NORA Green



# Goals and Objectives

- Developing Partnerships to implement a regional approach to GI
  - Cooperative Endeavor Agreements
    - CNO DPW
    - CNO Parks and Parkway
  - LPDES MS4 co-permittees
  - Carrollton–Hollygrove Community Development Corp.
  - Lake Pontchartrain Basin Foundation
  - EPA Office of Research and Development



CITY OF NEW ORLEANS



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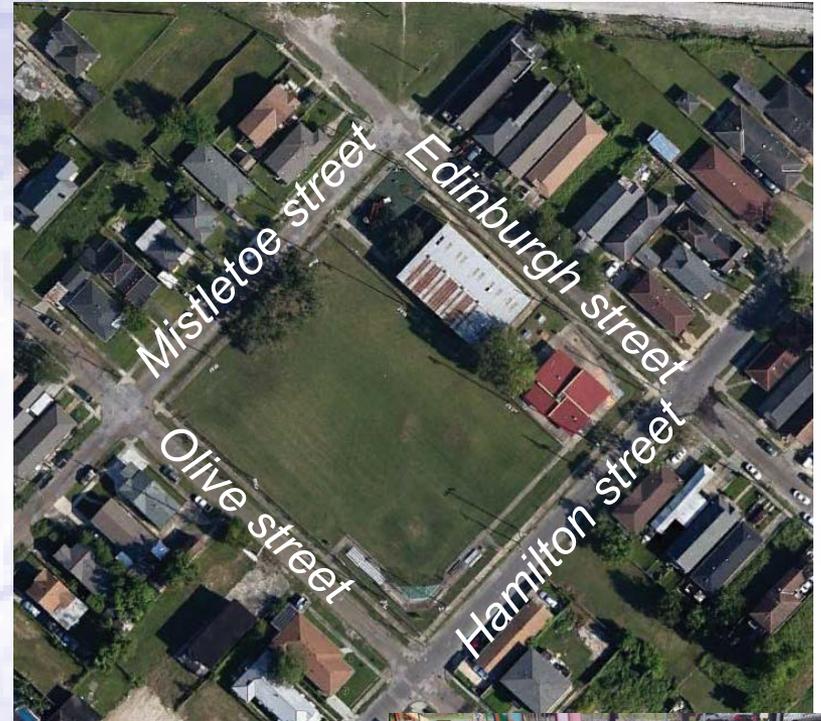
# Goals and Objectives

- Developing community outreach programs to provide education on GI practices and include the community in the decision making to ensure sustainable projects
  - Targeting education of school age children
  - Targeting resident through workshops
  - Targeting commercial businesses/professionals
  - Developing brochures, utilize websites, social media



# Conrad Park

- WEFTEC Community Service Project - YP
- Utilize Green Infrastructure
  - Reduce localized flooding
  - Improve park access
- LDEQ Beneficial Environmental Project (BEP)
- Project Budget \$11,600
  - \$5,000 WEF
  - \$5,000 plus \$2,500 in-kind donation from SWBNO





# S.T.E.M. Extravaganza

- Saturday June 21 at Dillard University
- Staff from Environmental Affairs, Engineering, Water Purification Laboratory and GSO
  - Storm Water Presentation
  - Water Treatment/Taste Testing
  - Enviroscape
  - Rain Barrel Painting
  - TREE Storm Water Game
  - Panel



# Goals and Objectives

- Inclusion of performance measurement, include monitoring of water quality, to help evaluate the siting and selection of future proposed GI projects.
  - GIS mapping
  - Monitoring and analysis of water quality
  - Tracking of community workshops/presentations



# Green Infrastructure-RFP

- RFP issued January 31, 2014
  - ATTN: Environmental Professionals, Non-Profit or Community Organizations
- Type of Green Infrastructure Projects
  1. Demonstration project on public lands
  2. Educational curriculum for local schools
  3. Workshops for educating professionals, commercial businesses, homeowners, neighborhoods



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*Re-Building the City's Water Systems for the 21<sup>st</sup> Century*