



West Basin Outfall Improvements

Town Hall

February 10, 2026

West Basin Outfall Improvements Town Hall



Project Description



Project Locations



Proposed Improvements



Open Discussion

Project Description

- **Goals:**

- Improve stormwater treatment
- Help to reach the required BMAP pollutant load reductions
- Repair and renew stormwater infrastructure
- Reduce risk and improve resiliency to flooding

- **Funding:**

- \$1,320,768 FDEP Water Quality Grant
- \$330,192 City match

- **Schedule:**

- Design/permitting through summer 2026
- Bidding/contractor selection, fall 2026
- Construction, winter 2026 through early summer 2027



BASIN MANAGEMENT ACTION PLAN

for the Implementation of Total Maximum Daily Loads for Nutrients
Adopted by the Florida Department of Environmental Protection

in the

Indian River Lagoon Basin Banana River Lagoon

developed by the
Banana River Lagoon Stakeholders

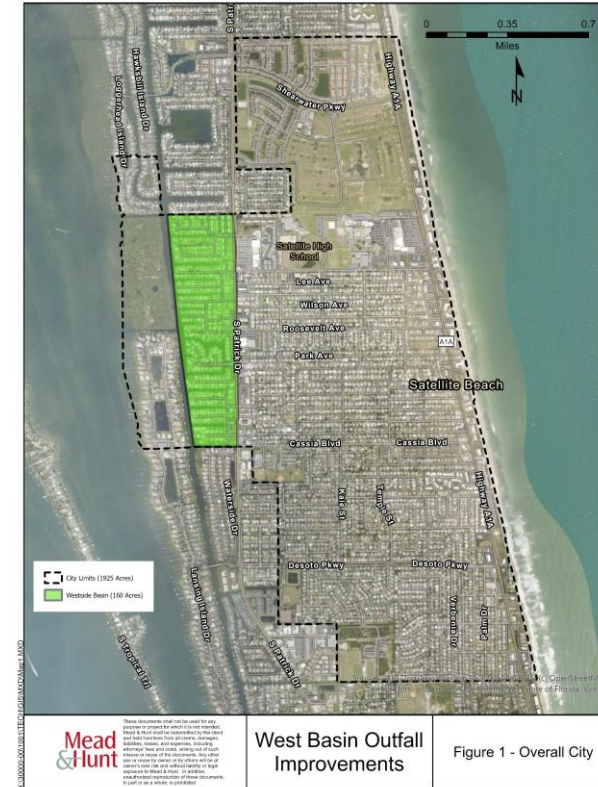
in cooperation with the
Florida Department of Environmental Protection
Division of Environmental Assessment and Restoration
Bureau of Watershed Restoration
Tallahassee, FL 32399

January 2013

Project Location - Overall

- **Westside Basin**

- 1 of the 9 City primary drainage basins
- Portion of City area west of S. Patrick Dr.
- Excluding Tortoise, Lansing and Samsons Islands
- 160 acres or ~8% of City
- Limited to no existing stormwater treatment
- 43 stormwater outfalls directly to Banana River



Project Locations – Specific North

- Location Selection Criteria
 - Stormwater confluence areas
 - Outfalls found in need of repair or replacement
 - Areas with apparent available space to construct improvements
 - Areas that have lesser impact to residential property use
 - Outfalls that could benefit by backflow devices



Project Locations – Specific South

- **Selection Criteria**

- Stormwater confluence areas
- Outfalls found in need of repair or replacement
- Areas with apparent available space to construct improvements
- Areas that have lesser impact to residential properties
- Outfalls that could benefit by backflow devices



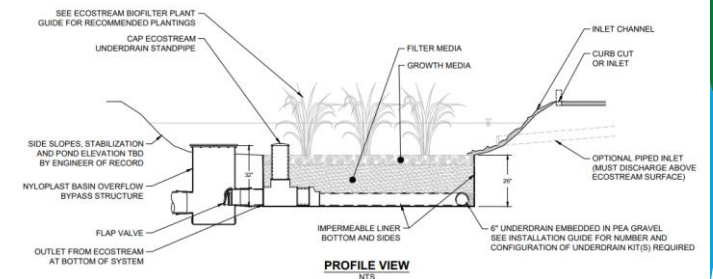
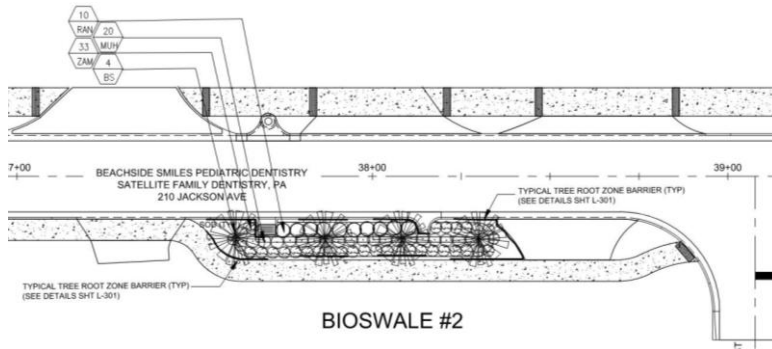
Proposed Improvements

(listed in order of higher to lower construction impact)

- **Surface Bioswales**
- **Outfall Pipe Improvements**
 - Repairs/Replacements
 - Outfall Pipe Linings
 - Outfall Backflow Preventor Installations
 - Outfall Manatee Exclusion Device Installations
 - Outfall Pipe Cleaning
- **Inlet Improvements**
 - Repair
 - Inlet Basket Installations
 - Inlet Signage

Proposed Improvements – Surface Bioswales

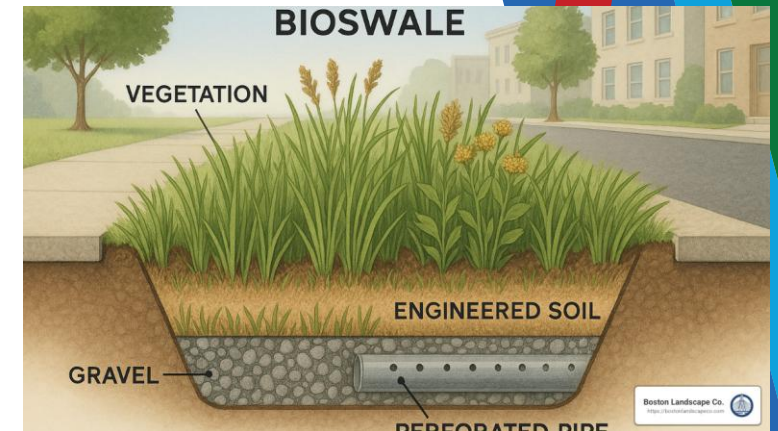
- Shallow depressed planted areas to treat/infiltrate stormwater runoff
- Behind curb, in front of sidewalk, in resident-maintained area
- Curb modified with flumes to direct first flush to bioswale
- Layers of gravel and engineered soil (BAM)
- Overflow and underdrain features to retain stormwater
- Planted with grass or certain landscape plants



Proposed Improvements – Surface Bioswales

- **Challenges:**

- Existing underground utilities, including resident irrigation
- Desired on both sides of streets so to capture flow from both curbs
- Areas will not be available for parking or other access
- Will retain water for short durations after storms
- Optimum locations limited to adjacent to inlets
- Require maintenance



Proposed Improvements – Outfall Pipe Improvements

- Repairs/Replacements
- Outfall Pipe Linings
- Outfall Backflow Preventor Installations
- Outfall Manatee Exclusion Device Installations
- Outfall Pipe Cleaning
- Challenges:
 - Access between homes
 - Impacts to yards, irrigation, landscaping, fences, etc.
 - Tree roots
 - Resolution of illicit discharges
 - Access to seawalls
 - Dust, noise, vibration, etc.



Proposed Improvements – Inlet Improvements

- Repair
- Inlet Basket Installations
- Inlet Signage
- Challenges:
 - Impacts to curbs, driveways, yards, etc.
 - Inlet replacement of nonstandard size inlets
 - Baskets require consistent maintenance



Discussion

- Thank you for your attendance
- Questions
- Concerns

