

Mead
& Hunt



West Basin Outfall Improvements

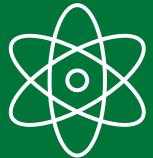
Town Hall

February 10, 2026

West Basin Outfall Improvements Town Hall



Project Description



Project Locations



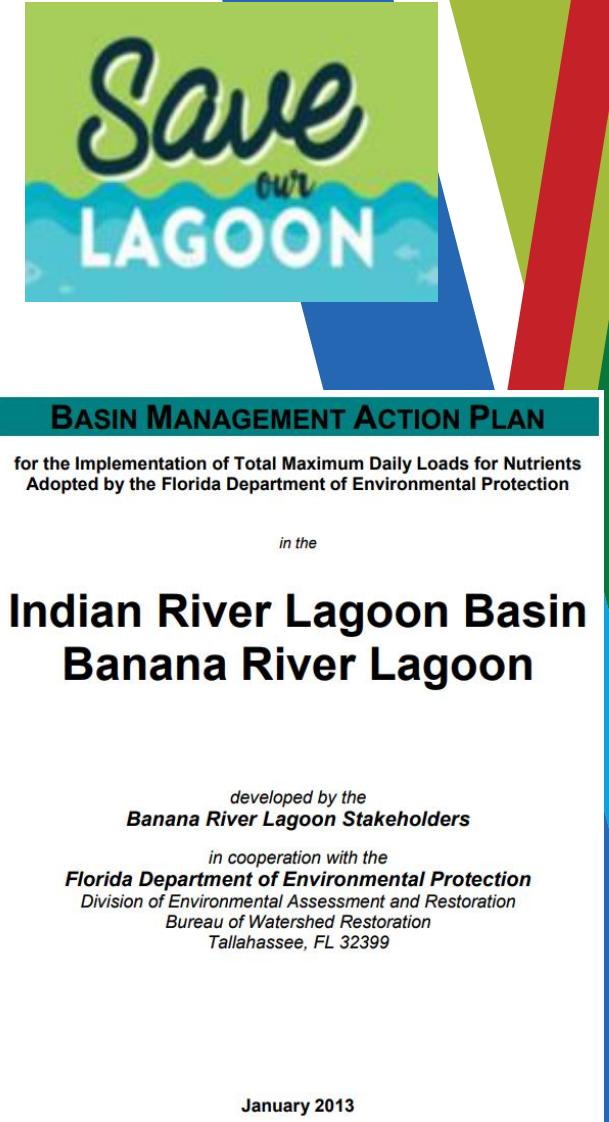
Proposed Improvements



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



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**

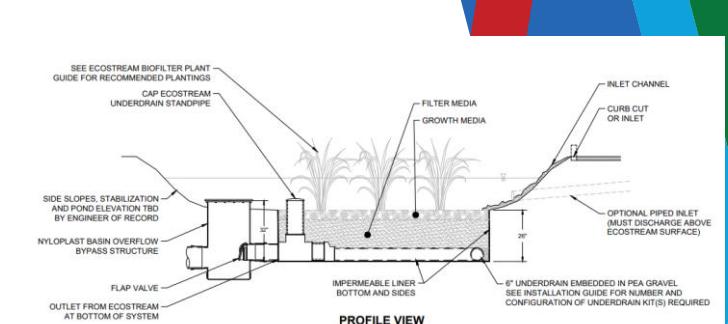
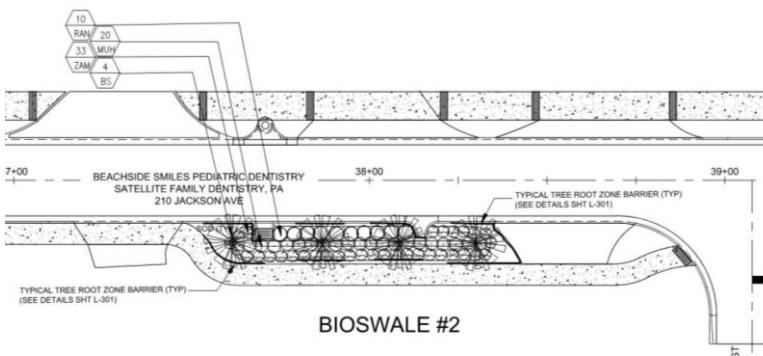
- Repairs/Replacements
- Outfall Pipe Linings
- Outfall Backflow Preventor Installations
- Outfall Manatee Exclusion Device Installations
- Outfall Pipe Cleaning

- **Inlet Improvements**

- Repair
- Inlet Basket Installations
- Inlet Signage

Proposed Improvements – Surface Bioswales

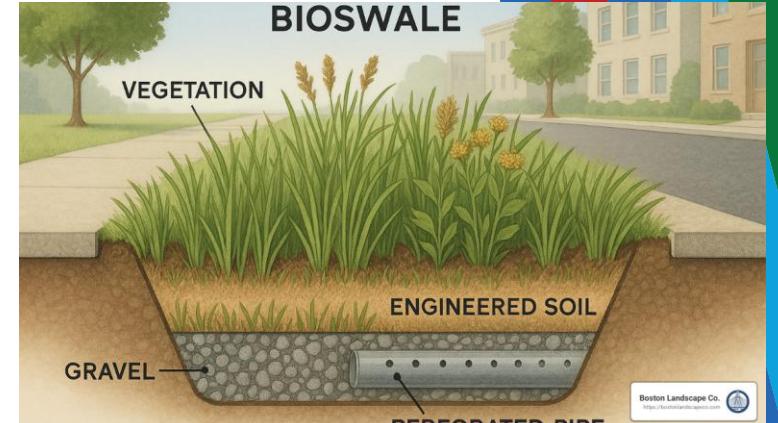
- Shallow depressed planted areas to treat/infiltrate stormwater runoff
- Behind curb, in front of sidewalk, in resident-maintained area
- Curb modified with flumes to direct first flush to bioswale
- Layers of gravel and engineered soil (BAM)
- Overflow and underdrain features to retain stormwater
-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



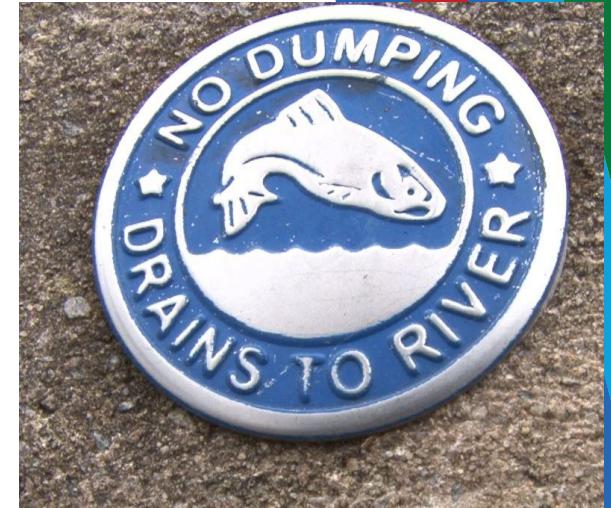
Proposed Improvements – Outfall Pipe Improvements

- 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