SWAT PROGRAM
TTI Presentation

Steve Costello, PE
Rod Pinheiro, PE
12/11/2017
On 01-11-17 Mayor Turner rolled out a new initiative to proactively reduce drainage problems that are not directly attributed to overflow from the bayous.
GOAL: Reduce localized drainage problems throughout the City not directly subject to riverine/bayou overbank flooding by rehabbing/upgrading the existing drainage system to improve conveyance of day-to-day storm events and expanding maintenance capabilities.

Project locations will be determined by reviewing 311 calls, nonriverine structural flooding locations, and known areas with drainage concerns. Projects will be developed by investigating and inspecting the system and developing an assessment/work plan for addressing the area(s) of highest need.

STORM SEWERS AND OUTFALLS:
Projects will include replacing collapsed outfalls and storm sewer components, upsizing inlets, replacing inlet plates with grates, re-establish roadway curbs and gutters for re-establishment of flow paths.

ROADSIDE DITCH:
Projects will include regrading of ditches, replacement of culverts not set to proper flowline and clearing.

OFF-ROAD DITCH AND DETENTION PONDS:
Projects will include clearing and grubbing, regrading and desilting, minor erosion repairs, and mowing.

Funding:
• $10 million approved for FY-17
• $9 million approved on November 2017 for FY-18
### Overall SWAT Project Distribution by Asset Type

<table>
<thead>
<tr>
<th>ASSET TYPE</th>
<th>No. PROJECTS</th>
<th>DISTRIBUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off-Road Ditch</td>
<td>67</td>
<td>40%</td>
</tr>
<tr>
<td>Roadside Ditch</td>
<td>42</td>
<td>25%</td>
</tr>
<tr>
<td>Outfall</td>
<td>35</td>
<td>21%</td>
</tr>
<tr>
<td>Storm Sewer</td>
<td>19</td>
<td>11%</td>
</tr>
<tr>
<td>Extreme Event Swale</td>
<td>2</td>
<td>1.5%</td>
</tr>
<tr>
<td>Detention Pond</td>
<td>2</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>167</strong></td>
<td></td>
</tr>
</tbody>
</table>
# SWAT Projects Cost Estimate

(As of 11/30/2017)

<table>
<thead>
<tr>
<th>SWAT Projects</th>
<th>No. of Projects</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial 22 Projects</td>
<td>22</td>
<td>$6,924,494</td>
</tr>
<tr>
<td>FY-17 Additional Projects</td>
<td>16</td>
<td>$1,699,095</td>
</tr>
<tr>
<td>FY-18 Forecast</td>
<td>61</td>
<td>$29,608,672</td>
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<tr>
<td>FY-19 Forecast</td>
<td>19</td>
<td>$TBD</td>
</tr>
<tr>
<td>To be Determined</td>
<td>49</td>
<td>$TBD</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>167</strong></td>
<td><strong>$TBD</strong></td>
</tr>
</tbody>
</table>
4007 Botany Ln.
Drainage Issues: Needs Clear and Grubbing/ Re-establishment. Ditch ID: C127-01-00-A
Off-Road Project -District D-

7300 Calais Rd. (from Calais Rd. to St. Lo Rd.)
Drainage Issues: Needs Clear and Grubbing/ Re-establishment. Ditch ID: DUNK-00-05-A, B
2440 Albright Dr. (from Leprechaun St. to Martinville Dr.)

Drainage Issues: Needs Clear and Grubbing/ Re-establishment

Ditch ID: C106-05-00-A

BEFORE

AFTER
Off-Road Project -District F-

Tanglewilde - Westmont Area (from Jeanetta St. to Westerland Dr.)

Drainage Issues: Needs Clear and Grubbing/ Re-establishment

Ditch ID: W147-00-00-A
Off-Road Project -District H-

4989 Sharman (from 610 to Kelly St.)

Drainage Issues: Needs Clear & Grubbing/ Re-establishment

BEFORE

Construction

COMPLETED
Roadside Ditch Project - District E -

531 Keith Ave. (From S. Shaver St. to Mize Rd.)

Drainage Issues: Needs Clear and Grubbing/ Re-establishment. Ditch ID: C106-08-04-A
Roadside Ditch Project - District K-

Cambridge Village Park

Drainage Issues: Culverts undersized, collapsed or not set to proper flow line
Bedford

**Drainage Issues:** Culverts undersized, collapsed or not set to proper flow line

**BEFORE**

**Construction**
Outfall Project -District A-

9719 Deanwood Street
Drainage Issues: 24-inch outfall has collapsed & fix headwall
Outfall Project  -District C-

5942 Greenmont Dr.
Drainage Issues: 36-inch outfall has collapsed and caused cave-in
Outfall Project -District D-

11906 Kirkholm Dr.
Drainage Issues: 24-inch outfall has collapsed and caused cave-in
Outfall Project - District G -

Pinesap at Terry Hershey Park
Drainage Issues: 72-inch outfall cave in

BEFORE

Construction

Construction

Completed
Storm Sewer Project -District C-

3600 Flora St.

Drainage Issues: Existing culvert/grate failure blocking proper drainage
Storm Sewer Project -District H-

Houston Ave. & North St.

Drainage Issues: High water ponding at intersection near school; re-establish culvert across intersection

BEFORE

AFTER

COMPLETED
Detention Pond Project -District F-

Bellaire West Detention Pond
Drainage Issues: Needs Clear and Grubbing/ Re-establishment

BEFORE

Construction

COMPLETED
Ideas for potential SWAT projects in your district?

Contact:

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