ASSET MANAGEMENT
STORMWATER +
Recommendations

- Improve management of stormwater assets
- Establish a Stormwater System Asset Management Plan.
- Continue or increase Community Stormwater Education
- Stormwater Stakeholder group participants support a funding mechanism that funds stormwater service as well as interest in creating an incentive system.
- City Commission should establish and appoint a Stormwater Exploratory Group to make recommendations on outstanding decisions.
2013 STORMWATER MASTER PLAN

Stormwater Asset Management and Capital Improvement Plan

Technical Reference Manual (On hold due to MS4 Permit status)
<table>
<thead>
<tr>
<th>LEVELS OF SERVICE</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>A – Complete replacement at end of effective life</td>
<td>$22,868,000</td>
</tr>
<tr>
<td>B – Extend effective life by 50% through preventative maintenance</td>
<td>$14,726,000</td>
</tr>
<tr>
<td>C - Extend effective life by 100% through preventative maintenance</td>
<td>$10,377,000</td>
</tr>
</tbody>
</table>
2013 LEVEL OF SERVICE

$3,597,000
SPENDING BREAKDOWN

Dollars

- Repairs
- Catchbasin Cleaning
- Main Cleaning
- Lift Stations
- Detention Basins
- Creek Gates
# TYPES OF INVESTMENT

<table>
<thead>
<tr>
<th>Item</th>
<th>Current</th>
<th>Level C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection</td>
<td>$40,000</td>
<td>$905,800</td>
</tr>
<tr>
<td>Preventative Maintenance</td>
<td>$0</td>
<td>$796,200</td>
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<tr>
<td>Corrective Maintenance</td>
<td>$830,000</td>
<td>$414,000</td>
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<tr>
<td>System Renewal</td>
<td>$1,537,000</td>
<td>$6,580,800</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$4,119,795</strong></td>
<td><strong>$8,696,800</strong></td>
</tr>
</tbody>
</table>
REPERCUSSIONS OF INSPECTIONS

Inspections

Corrective Maintenance

Preventative Maintenance
INSPECTIONS

Inspect all entities greater than 75 years old

- Gravity Mains
- Manholes
- Catch Basins
PREVENTATIVE MAINTENANCE

Perform rehabilitation on 10% of inspected assets

Clean 20% of inspected assets annually
CORRECTIVE MAINTENANCE

Replace 15% of assets that have reached the end of Estimated Effective Life over 10 years.
Local and Major Streets - Stormwater Operations and Maintenance Investment

Level of Service "C" by 2019

- Current
- Future

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Current</th>
<th>Future</th>
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</thead>
<tbody>
<tr>
<td>FY2015</td>
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<tr>
<td>FY2016</td>
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<td>FY2017</td>
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<td>FY2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2019</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
21\textsuperscript{ST} CENTURY INFRASTRUCTURE ASSET MANAGEMENT PILOT PROJECT
FINAL REPORT
PIPES

- Asset Length
- Material
- Size
- Shape
- Depth

- Surface Type
- Approximate Date of Construction
- Approximate Date of Last Major Rehabilitation
# Other Stormwater Entities

- Manholes
- Catch Basins
- Chambers
- Open Channels
- Outfalls
- Pump Stations
- Dam/Dykes/Levees/Ponds
- Green Infrastructure

<table>
<thead>
<tr>
<th>Location</th>
<th>Material/Type</th>
<th>Approximate Date of Construction</th>
<th>Date of Last Major Upgrade</th>
<th>Height/Depth</th>
<th>Diameter/Size</th>
<th>Capacity</th>
<th>Population Served</th>
</tr>
</thead>
</table>
QUESTIONS?

Carrie Rivette
Stormwater Manager
crivette@grcity.us
(616) 456-3057