Overview of Storm Water Program Discussions

Public Works Committee July 18, 2016

# **Existing System Statistics**

O The public storm sewer system consists of

- 262 miles of pipes and box culverts
  - Includes at least 116 miles of corrugated metal pipe (CMP)
- 12,000+ inlets/manholes/structures
- Ø 3 detention basins
- 9 4 green infrastructure sites
- Ourrent maintenance budget = \$472,000

  - \$231,000 for materials and contractual services
  - O Typically reactive rather than proactive program
  - Included in Public Works Operating budget
  - O General Fund revenue

### **Program Goals**

Improve reliability of existing system through increased maintenance including

- Ocompleting inventory of system conditions
- Identifying, prioritizing and implementing system repairs and improvements
- Expand implementation of regulatory water quality plan including infrastructure improvements, public education and staff training
- Construct capital projects to continue to address problem areas
- Oblicate funding source(s) to implement program

# Maintenance, Regulatory and Technical Program

#### **Maintenance Functions**

- Or Respond to Customer Service requests & complaints
- Regular inspections of facilities for function and condition; maintain condition inventory
- O Clean and maintain public system infrastructure
- Identify and complete small repair and replacement projects
- Project planning for larger repairs and replacements

#### Maintenance



#### **Storm Sewer Issues**



#### Green Infrastructure



# Regulatory/Technical Functions

- Water Quality
  - Implementation and enforcement of National Pollutant Discharge Elimination System (NPDES) permit requirements – new, more stringent permit is in review process now
- Technical
  - Ploodplain management
  - O Capital project planning and budgeting
  - O Customer service response
  - O Support to maintenance staff

#### **NPDES** Permit

Permit requires City to comply with 6 Minimum Control Measures

- Public Education and Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- O Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention/Good Housekeeping

# **Regulatory Compliance**



# Capital Improvement Program

# 2013 Capital Projects Estimates

STORMWATER SYSTEM NEEDS					
Subcategory	Estimated Costs				
Remaining Structure Flooding Locations	\$ 13,118,000				
Public Projects from Master Plan	\$ 30,945,000				
Replacement of existing CMP in Public System	\$ 54,827,000				
Public Channel Reconstruction/Rehabilitation	\$ 5,312,000				
Enclosing Private Channels as Public Facilities	\$ 6,655,000				
Expanding Public Drainage System for Private	\$ 4,891,000				
Problems					
Stabilization of Private Channels	\$ 4,271,000				
Total	\$ 120,019,000				

# **Capital Improvements**

- O Structure flooding
- OCMP replacement in existing system
- Policy discussion needed on issues such as
  - O Streambank erosion
  - O Unimproved ditches
  - Yard flooding

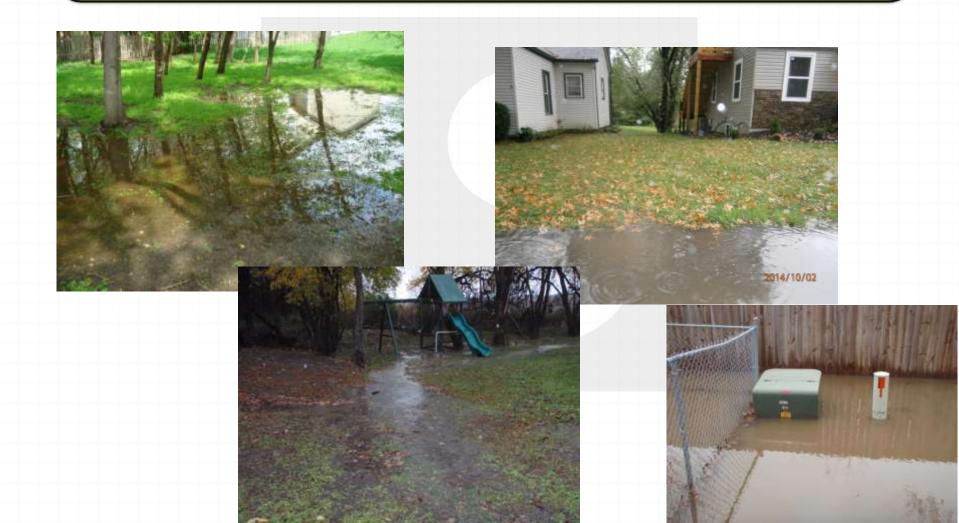
#### **Streambank Erosion**



# **Open Ditches**



# Yard Flooding



# Funding

# **Potential Revenue Sources**

Source	Туре	Current Level	Increments/Max	Stackable	Voter Approval Required
Parks and Storm Water Tax	Sales	1/4 cent	1/8, 1/4, 3/8, 1/2 Cent. Max 1/2 cent	No	Yes
General Sales Tax	Sales	1 cent	1/2, 7/8, or 1 cent	Yes	Yes
Capital Improvements Sales Tax	Sales	1/2 cent	1/8, 1/4, 3/8, or 1/2 cent	Yes	Yes
General Property Tax Levy	Property	\$0.9063	\$1.00 Max	N/A	Yes
Use Tax*	Sales		Same as Current Sales Taxes	N/A	Yes
Storm Water Utility**	Fee or Tax				Yes

\*The use tax would capture taxes from out-of-state sales for existing sales taxes.

\*\*The storm water utility could be established in a number of ways from utilizing many different calculation techniques.

For Capital Improvements G.O. Bonds would also be an option

#### **Revenue Amounts**

O For purposes of calculating revenue:

- I cent sales tax generates \$14,000,000 per year.
- I cent property tax levy generates \$180,000.00 per year.
- Use tax estimated to generate approximately \$900,000 per year.

# **Policy Issues**

# **Public Improvement Policy**

From 2004 Citizens' Stormwater Task Force policy

- "It is recommended the City invest in improvements to public infrastructure to correct problems due to:
- An inadequate public drainage system that met standards in effect at the time it was constructed but that does not conform to current standards.
- An inadequate public drainage system that was not designed or constructed in accordance with the standards in effect at the time the system was constructed."

# Public Improvements (cont'd)

- "It is recommended the City establish a prioritization system for capital projects to address problems according to the following general priority categories:
- System deficiencies identified by the City's master plan that cause flooding of homes, businesses or other structures.
- System deficiencies that cause street flooding to the extent that access for emergency response vehicles is impeded.
- System deficiencies identified by the City's master plan that cause erosion in open channels that may threaten the stability of existing structures.
- System deficiencies identified in the City's master plan that result in damage to private improvements such as landscaping and fencing."

# "Private" Problems Policy

- "It is recommended the private property owner address all problems not due to deficiencies in the public drainage system including, but not limited to:
- Structure constructed below adjacent street grade without provisions to divert local drainage to protect the structure
- Walkout basement that was constructed on a flat lot ("forced walkout"). The home builder may also be involved in this situation.
- Lower level building openings that were added after the original construction
- Overflow from open channels where property is adjacent to a regulatory floodplain
- Overflow from open channels where a structure has been built close to the channel bank
- Structure constructed in a floodplain before regulations restricting such projects were in place
- Erosion of open channels on private property
- O Lot-to-lot local drainage problems"

# **Policy Question**

O Should policy change so that "private" stormwater problems are corrected by City Programs?

#### Considerations

- Ø Benefit to public/community
- Individual responsibility for due diligence
- O Legal issues with use of public funds on private property
- Level of funding adequate to address lower level priorities in reasonable amount of time

# Questions