

LS

Stormwater Program Scenarios

Public Works Committee

August 15, 2016

Discussion Items

- Stormwater program goals
- Examination of existing and proposed levels of service (LOS)
- Capital Improvement Program (CIP)
- Next steps

Definitions

- ◊ EPA – Environmental Protection Agency
- ◊ NPDES- National Pollutant Discharge Elimination System – EPA driven program
- ◊ IDDE – Illicit Discharge Detection and Elimination - EPA driven program
- ◊ CIP- Capital Improvement Program
- ◊ FTE – full time equivalent staff
- ◊ BMP -Best Management Practice
- ◊ LOS- Level of Service

Program Goals

- Improve reliability of existing system through increased maintenance including proactive efforts
- Expand implementation of regulatory water quality plan including infrastructure improvements, public education and staff training
- Construct capital projects that continue to address problem areas

Existing Stormwater Program Level of Service, LOS

Public Works Operations (PWO):

o Staffing priorities:

1. Potholes
2. Island maint.
3. sweeping
4. mowing
5. weed eating
- 6. Stormwater**
7. pavement
8. R/W misc.

Existing Stormwater Program Level of Service, LOS

- After a significant rainfall several crews check and clean known blockage points in stormwater system
- Current reactive responses:
 - Respond to customer inquiries
 - Patch failing stormwater system
 - Jet clean stormwater lines per problems reported
 - (on-call contract as needed)

Existing Stormwater Program Level of Service, LOS

Public Works Engineering (PWE):

- Support CIP projects for roads and WU
- Reactive response to customer requests
 - Floodplain, Structural flooding, nuisance flooding, & stream instability
- Engineering support to PWO
- Management of CIP Stormwater bond projects
- Assist with development review on large/complex development projects
- Environmental permitting for City/CIP projects
- Implementation of changing regulations, currently NPDES & floodplain maps
- Assist codes department on environmental cases

Existing Stormwater Program Level of Service, LOS

Public Works Operations (PWO):

2014 & 2015 avg. 2.6 FTEs includes:

- o 3 person crew, & supervisor
- o Stormwater as lower priority crew, often pulled to backfill higher priority needs.
- o PWO historically as many as 35-40 FTEs, 26 FTEs currently including transfers from Landfill

2017 FY PW budget stormwater services:

- o PWE 2 FTEs, PWO 4.74 FTEs; Total 6.74 FTEs (budgeted)
 - o PWE 1.2 FTEs; PWO 2.6 FTEs; Total 3.8 FTEs (actual)
- o 714 k, includes equipment & materials

Scenario #1 level of service

- o Create PWO stormwater crew, (staff expansion)
- o Limited proactive stormwater system maintenance
- o Proactive stormwater system inspection
- o Decrease work order response time
- o Increase NPDES regulatory compliance
- o Small CIP projects (10K)
 - o Designed and built in house

Scenario 1:

- o PWE 4.25 FTEs, PWO 3.2 FTEs Total 7.45
 - o PWO includes 4 new positions for Stormwater crew
 - o PWE includes 3 new positions for SW engineering support
 - o Transfer 2 existing PWE staff
- o \$ 1.17 M, includes staff, contracts, equip. and materials

Scenario #2 level of service

In addition to scenario #1 LOS:

- o Small stormwater system repairs (25K)
 - o Reduce contract work issued
- o Structure inspection program increased
- o Increase in-house design of small CIP projects
- o Increase water quality w/ NPDES, IDDE inspections and enforcement
- o Scenario 2:
- o PWE 5.5 FTEs, PWO 6.4 FTEs; Total 11.9 FTEs budget
 - o PWE 6 FTEs, PWO 8 FTE's; Total 14 FTEs (actual)
- o \$ 2.06 M, includes staff, contracts, equip. and materials

Scenario #3 level of service

In addition to scenario #2 LOS:

- o Water quality programs
- o Medium CIP projects (100K)
 - o Designed and built in house
- o Failing stormwater system replacement program
- o NPDES /IDDE improvements

Scenario #3 level of service continued

In addition to scenario #2 LOS:

- o Environmental permitting resource
- o Best Management Practice, (BMP), Water quality measures adopted and implemented
- o Scenario 3:
- o PWE 6 FTEs, PWO 9.6 FTEs; Total 15.6 FTEs budget
- o PWE 6 FTEs, PWO 12 FTEs; Total 18 FTEs actual
- o \$ 3.2 M, includes staff, contracts, equip. and materials

Overview of Scenarios

SCENARIO	STAFF FULL TIME EQUIVALENTS -FTE	EQUIPMENT FIRST COST	STAFF AND MATERIALS ANNUAL COST	START UP TOTAL COSTS	Typical level of service
1	7.45 9 staff	\$292,000	\$883,741	\$1,175,471	Increase customer service response Work order response time lowered Proactive inspections Reduced reactive response
2	11.9 14 staff	\$567,039	\$1,494,348	\$2,061,387	Dedicated customer service team NPDES reviews conducted System inspection program Small system repairs as schedule allows
3	15.6 18 staff	\$1,018,078	\$2,234,655	\$3,252,733	Water quality programs NPDES internal audits Systematic small system repairs Environmental permitting program

Capital Improvement Program, (CIP)

- o Allow 20% of CIP budget for soft costs
- o Soft costs include staff or consultants to manage, survey, design, administer contracts, test materials, and inspect capital projects.
- o For budget of \$3 million per year
- o \$0.5M for soft costs (approx. 5 staff)
- o \$2.5M for construction

Increase over FY 2017 in addition to Scenario #3:

- o PWE 5.0 FTEs
- o \$ 3.0 M, includes staff, contracts, equipment and materials

Next Steps

- o Direction per:
 - o Stormwater program goals
 - o Level of service desired
 - o CIP priorities
- o To refine LOS & CIP scenarios

o Questions?