### **Collection System Management**

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### **Presentation Outline**

- Brief Background
- Permit Requirements
- Asset Management and Funding





# Collection System / SSO 101



https://www.arcgis.com/apps/MapJournal/index.h tml?appid=84189fa3a642425280b6b95a1da98242





<u>https://emedia.rmit.edu.au/dlsweb/Toolbox/plumbing/toolbox12\_01/units/c</u> pcpdr4001a\_sanitary/00\_groundwork/page\_002.htm



### Maintenance Avoids...





### SSO by Cause





https://www3.epa.gov/npdes/pubs/ssodesc.pdf



### Collection System Requirements in NPDES permits

### **Immediate Reporting**

- Marine/Fresh water overflow –Includes DOH/LHJ
- Discharge to MS4
- Any failure of sewage system





### **Other Requirements**

• O&M Manuals must include collection system components

Annual Wasteload Assessments

 I/I Investigations, as necessary –85% Hydraulic Capacity Trigger



### Wasteload Assessments

Influent Monthly Average Loading & Peak Daily Flow (From Monthly DMR)							
Month		Avg flow (mgd)	Peak flow (mgd)	BOD (lbs/day)	TSS (lbs/day)		
January		0.285	0.377	358	514		
February		0.283	0.404	440	414		
March		0.260	0.286	427	476		
	April	0.254	0.278	467	337		
	Мау	0.229	0.267	488	614		
	June	0.204	0.218	366	347		
	July	0.199	0.233	479	431		
August		0.198	0.223	402	376		
September		0.204	0.240	380	371		
October		0.198	0.242	401	370		
November		0.201	0.224	397	310		
December		0.233	0.269	534	515		



### Maximum Monthly Average Data for the Last Three Years

Year	Flow (mgd)	BOD (lbs/day)	TSS (lbs/day)
2015	0.285	534	614
2014	0.313	700	716
2013	0.444	626	647



### **I/I Investigation**



http://www.dedham-ma.gov/departments/engineering/sewer-system/inflow-and-infiltration-i-i





### **Requirements for Funding**

## Fiscal Sustainability Plan

The minimum required elements of an FSP are:

- 1. An inventory of critical assets that are part of the system.
- 2. An evaluation of the condition and performance of the critical assets.
- 3. A plan to maintain, repair, and replace the critical assets and to fund those activities.
- 4. A process to evaluate and implement water and energy conservation efforts as part of the plan to maintain, repair, and replace the assets.



### When? Who? How?

- Condition of receiving a SRF loan
- Borrower responsible
- Self Certification
- FSP Development is eligible!





### **Implementation Philosophy**

The Essence of Asset Management

- What have you got?
- When will it break?
- What are you going to do then?





### **Fiscal Sustainability Plan Certification**

Due to amendments to the Clean Water Act in 2014, recipients of funding from the Clean Water State Revolving Fund (CWSRF) for projects involving a publicly owned treatment works must certify that they have prepared a Fiscal Sustainability Plan (FSP) or another plan(s) that contains at least the minimum required elements of a FSP listed below.

The FSP requirement applies to all wastewater or stormwater facility construction or design/construction projects funded in-part of in-full with CWSRF loans. The FSP must cover the entire system for which funding is provided. By "entire system", Ecology means the following:

- If funding is only for a collection system, then the FSP must cover the entire collection system.
- If the funding is only for a treatment system, then the FSP must cover the entire treatment system.
- If funding is for both a collection system and a treatment system, then the FSP must cover the entire collection system and the entire treatment system.

The minimum required elements of a FSP are:

- 1) An inventory of critical assets that are part of the system.
- 2) An evaluation of the condition and performance of the critical assets.
- 3) A plan to maintain, repair, and replace the critical assets and to fund those activities.
- 4) A process to evaluate and implement water and energy conservation efforts as part of the plan.

Recipients of a CWSRF loan for wastewater or stormwater facility construction or design/construction projects must complete this certification and submit it to Ecology prior to loan signing.

Check one of the following boxes and provide the additional information requested below.

- By checking this box, the recipient certifies that a plan(s) that contains at least the minimum required elements listed above has been developed and is being implemented. In addition, the recipient agrees that Ecology staff may review the plan(s) during site visits or inspections.
- By checking this box, the recipient agrees to develop and implement a Fiscal Sustainability Plan or another plan(s) that contains at least the minimum required elements listed above by the completion date of the CWSRF-funded project. Upon development of the plan(s), the recipient agrees to recomplete and resubmit this certification as an agreement deliverable. In addition, the recipient agrees that Ecology staff may review the plan(s) during site visits or inspections.

### **Recipient Name:**

### Project Name:

Application Number (EAGL):

System the FSP Addresses: Collection; Treatment; Both Collection and Treatment

Recipient Contact Name and Title:

Recipient Contact Phone # and Email Address:

Date:

**CWSRF Fiscal Sustainability Plan Certification** 





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