

**Summary of Engineering and Planning (E&P) Subcommittee April 5, 2018 Meeting  
for MWPAAC General Meeting on April 25, 2018**

**Infiltration/Inflow (I/I) Reduction Concepts Program Update – Discussion on I/I Frameworks and Evaluation Criteria**

Nearly ¾ of the peak wastewater flow in King County’s sewer system enters the pipes through infiltration and inflow, primarily through side sewers connected to the public sewers. Over the past two years, WTD and E&P have been exploring concepts to reduce I/I so that the capacity in the existing system can be used for growth of future wastewater flows and to reduce the need for or size of future conveyance system improvements.

Continuing the discussion of potential I/I reduction concepts introduced at the March 2018 E&P meeting, the component agencies offered their opinions of which concepts merited additional analysis. Fourteen concepts in the categories of region-wide side sewer standards and inspection training, interagency support to identify and manage I/I, side sewer inspection and repair programs, and side sewer grant/loan programs were considered. The ten concepts listed below were selected for evaluation.

Frameworks for Evaluation		
	Framework Name	Short Description
Approach to Common Side Sewer Standards		
	Focused standardization of regional BMPs	Identify 3 to 5 BMPs that all agencies would agree should be standard across the region. Document BMPs on the regional website. Agencies would voluntarily implement BMPs.
	Develop scalable BMP program for individual agency implementation	Develop full list of best in class BMPs, perform gap analysis at individual agencies, and develop plans for BMP adoption and implementation at each agency.
Standard Regional Inspection Training		
	Develop regional inspection training program	Develop Inspector Training modules consisting of slides and handout materials posted on the County website as a regional resource. Use of materials would be voluntary. Develop videos and hands-on training materials. Conduct a live training session within the region. Attendance would be voluntary.
	Develop regional inspection training program with certification	In addition to the Training Program above, provide a certification for attendees; conduct training annually at various locations, consider coordinating with an outside organization to implement the program.
Regional I/I Support		
	Provide I/I resources and vendors to the region	County to act as a regional resource providing rainfall simulation toolkits, smoke testing kits, flow monitors, and rain gauges. -The County would administer preferred vendor contracts to assist agencies in performing services such as manhole inspection, CCTV inspection, and other inspections.

Frameworks for Evaluation		
	Framework Name	Short Description
Regional Side Sewer General Inspection Program		
	Inspection program mandated by the component agencies	<p>The program would be administered by the component agencies. Component agencies would require all properties to be inspected within a certain time frame, such as 10 years.</p> <p>The actual testing (exfiltration) and inspection (internal CCTV) would be completed by a contractor hired by the property owner in the presence of the inspector. Certifications would be provided to inspected properties that would be valid for a specified time such as 20 years.</p>
Point of Sale Side Sewer Inspection		
	Inspection program triggered by transfer of property	<p>Side sewer inspection would include an exfiltration test and internal inspection completed by the property owner's contractor in presence of inspector</p> <p>The program would be overseen by the component agencies. Certifications would be provided to inspected properties that would be valid for a specified time such as 20 years.</p>
	Inspection program, managed and implemented by King County, triggered by transfer of property	<p>Side sewer inspection would include an exfiltration test and internal inspection completed by the property owner's contractor in presence of inspector</p> <p>The program would be overseen by King County. Certifications would be provided to inspected properties that would be valid for a specified time such as 20 years.</p> <p>King County crew would conduct inspections.</p>
Grant/Loan Program		
	Develop a grant/loan program in conjunction with inspection programs	<p>Would support successful implementation of other side sewer programs such as the general inspection and point of sale programs.</p> <p>A grant or loan program would help manage ESJ concerns, and assumed to be administered regionally by WTD in conjunction with a private side sewer and point of sale inspection program.</p>
	Develop a grant/loan program independent without implementing a regional inspection program	Administered regionally by WTD and would be available for property owners to use to voluntarily inspect, replace, and/or repair their private side sewers.

The next step will be to evaluate these concepts and programs based on effectiveness, legal implications, political considerations, property owner considerations, local agency impacts, WTD impacts, and equity and social justice. E&P will review these evaluations, solicit feedback from their agencies, and recommend implementation of one or more programs at full MWPAAC later this year.

### Questions?

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