

Evaluation of I/I Reduction Concepts

MWPAAC Engineering and Planning Subcommittee

August 2, 2018

Introduction

The Inflow and Infiltration (I/I) Program agenda item on August 2, 2018, will include a presentation and facilitated discussion to determine which, if any, I/I program frameworks should be developed into implementation plans for I/I reduction in the region. The program frameworks suggested for implementation planning will be part of a recommendation of the E&P subcommittee to MWPAAC.

I/I Discussion Agenda

- I. Purpose and Possible Outcomes
 - a. Purpose:
 - 1) To choose program frameworks to move forward to implementation planning, and, 2) To develop a recommendation to MWPAAC.
 - b. Possible outcomes: Major components of a recommendation to MWPAAC identified and next steps to refine recommendation identified.
- II. Background Context to Prepare for Facilitated Discussion
 - a. Implementation planning overview
 - b. Review E&P input from June 2018 meeting
- III. Facilitated Round Table Discussion
- IV. Next Steps and Wrap Up

Supporting Materials

Please review the following attachments in advance of the August meeting:

- **Table 1. Possible Program Frameworks for Implementation Planning.** This table provides a summary of program frameworks the E&P committee requested at the June 2018 E&P meeting be moved ahead to implementation planning.
- **Table 2. Possible Program Frameworks not for Implementation Planning.** This table provides a summary of program frameworks the E&P committee requested at the June 2018 E&P meeting *not* be moved ahead to implementation planning.

Table 1. Summary of Possible Program Frameworks for Implementation Planning			
Implementation Option	Program	Short Description	Input/Rationale from E&P Committee
Approach to Common Side Sewer Standards			
Option 1	Focused regional BMP standardization	<ul style="list-style-type: none">Identify 3–5 BMPs that all agencies agree should be a regional standard; document on the WTD’s regional I/I website.Voluntary or mandatory adoption and implementation of BMPs needs to be defined in implementation planning.	<ul style="list-style-type: none">At the June 7, 2018, meeting, seven members in support of moving forward.Consider for implementation planning as a standalone option.Consider as a part of a package option of 1/4/7/9.This option addresses the prevention of I/I, not the reduction of existing I/I.
Standard Regional Inspection Training			
Option 4	Regional inspection training program with certification	<ul style="list-style-type: none">Develop inspector training modules comprised of slides, informational materials and videos posted on WTD’s regional I/I website.Implementation planning is expected to identify an outside organization/association (e.g., National Association Of Sewer Service Companies) to set up and/or conduct the program.Conduct live trainings annually at various locations with an emphasis on hands-on activities.Provide a certification for attendees; consider regional tracking of attendees/certifications.Voluntary or mandatory attendance and certification of local agency inspectors is to be defined during implementation planning.	<ul style="list-style-type: none">At the June 7, 2018, meeting, two members in support of moving forward.Consider for implementation planning as a standalone option.Consider as a part of a package option of 1/4/7/9.Inspections for both new and existing construction would be needed for a successful training program.
Private Side Sewer Inspection Program			
Combined Option 6, 7, 8, 9	Private side sewer inspection program triggered by property transfer and time frame with grant/loan program	<ul style="list-style-type: none">Side sewer inspections and repair triggered by point of sale. A requirement that properties are inspected within a certain time frame regardless of sale will also be considered during implementation planning.Side sewer inspection includes an exfiltration test and internal inspection. Role of property owner’s contractor at utility inspector to be defined during implementation planning.Certifications will be provided to inspected properties, and will remain valid for a specified time frame (e.g., 20 years).Changes to county and/or local agencies ordinances, codes, and standards would be required prior to program implementation.Implementation planning would consider administration that is WTD-driven, local agency-driven, and a hybrid of (both local and WTD administration.Implementation planning will consider inspectors that are employed by WTD, local agencies, and independent contractors.Incorporation of a grant and loan program with a side sewer program is expected. Implementation would assume that a grant or loan program will be administered regionally by WTD.	<ul style="list-style-type: none">Option 6<ul style="list-style-type: none">At the June 7, 2018, meeting, two members in support of moving forward.Consider adding a time element trigger to Option 7 and removing Option 6 for further implementation analysis.Option 7<ul style="list-style-type: none">At the June 7, 2018, meeting, six members in support of moving forward.Consider for implementation planning as a standalone option.Consider as a part of a package option of 1/4/7/9.Recommend combining with Option 8 and considering one detailed implementation analysis option that would include a variety of administrative options (WTD-driven, local agency-driven, and hybrid (both)).Include a time trigger for inspection as well as point of sale.Cost could be wrapped into the customer’s costs of buying a home/mortgage.Need to consider those who have had their side sewers repaired at their own cost.Option 8<ul style="list-style-type: none">At the June 7, 2018, meeting, six members in support of moving forward.Recommend combining with Option 7 and considering one detailed implementation analysis option that would include a variety of administrative options (WTD-driven, local agency-driven, and hybrid (both))Include a time trigger for inspection as well as point of sale.Option 9<ul style="list-style-type: none">At the June 7, 2018, meeting, five members in support of moving forward.Recommend combining with Option 7 as the program by definition is to be developed in conjunction with a private side sewer point of sale program.Consider as a part of a package option of 1/4/7/9.Consider another financial institution providing funding – not just King County.

Table 2. Summary of Possible Program Frameworks Not for Implementation Planning			
Implementation Option	Program	Short Description	Input/Rationale from E&P Committee
Approach to Common Side Sewer Standards			
Option 2	Scalable BMP program	Develop a full list of best-in-class BMPs, perform a gap analysis at individual agencies, and develop plans for BMP adoption and implementation at each agency.	<ul style="list-style-type: none"> At the June 7, 2018 meeting, members generally expressed a desire to remove from further consideration. One comment regarding keeping the option in “parking lot”.
Standard Regional Inspection Training			
Option 3	Voluntary regional inspection training program	Develop inspector training modules comprising slides and a materials handout posted on WTD's website as a regional resource; develop videos and hands-on training materials. Conduct a live training session within the region (attendance voluntary).	<ul style="list-style-type: none"> At the June 7, 2018 meeting, members generally expressed a desire to remove from further consideration. General consensus to remove due to the voluntary nature of the program.
Regional I/I Support			
Option 5	Regional I/I support by WTD	WTD acts as a regional resource providing rainfall simulation toolkits, smoke testing kits, flow monitors, and rain gauges. WTD administers preferred vendor contracts to help agencies perform services (e.g., manhole and CCTV inspection, etc.).	<ul style="list-style-type: none"> At the June 7, 2018 meeting, members generally expressed a desire to remove from further consideration. One comment suggesting Options 1 and 5 be linked for standardization. General statement that King County could be a clearing house for expertise.
Grant/Loan Program			
Option 10	Grant/loan program without inspection	This grant and loan program is administered regionally by WTD, and is available for property owners to use to voluntarily inspect, replace, and/or repair their private side sewers.	<ul style="list-style-type: none"> At the June 7, 2018 meeting, members generally expressed a desire to remove from further consideration. There was only one person in support for keeping as standalone.