King County Infiltration/Inflow (I/I) Reduction Program: Background and 2016-2017 Work Plan

MWPAAC
October 28, 2015
Today’s Presentation

• Regional I/I program background
• MWPAAC I/I task force report out
• Overview of planned 2016-2017 I/I program activities
Regional I/I Program Background

• Program Created as part of RWSP in 1999
• Since then a number of activities have occurred including:
  – Extensive flow monitoring
  – National I/I Program Review
  – Private Property Local Agency Questionnaire
Regional I/I Program Background (cont.)

• More activities that have occurred:
  – Pilot projects
  – Benefit-cost analysis
  – Developed draft model standards, procedures, policies, and guidelines
  – Initial I/I project in Skyway
What the Region Has Learned

- I/I reduction projects can cost effectively delay or downsize a conveyance project
- I/I continues to drive capacity needs
  - 2007: ESI Sections 1 and 3 exceeding capacity before 2050
  - 2014: ESI Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11 exceeding capacity before 2060
I/I Rates System Wide
MWPAAC I/I Task Force

• Two meetings in 2015

• Objective: Brainstorm I/I program activities in addition to projects to delay or downsize conveyance system improvements that could benefit the regional wastewater system as whole by looking at long-term solution(s) to prevent and remove I/I from the entire system

• Representatives from: Alderwood Water and Wastewater District, Auburn, Bellevue, Northshore Utility District, Redmond, Seattle, and Tukwila
MWPAAC I/I Task Force (cont.)

- I/I reduction concepts identified:
  - Sewer and side sewer standards
    - Evaluation of local agencies specifications
    - Best practices assessment and report card
  - Standardized sewer and side sewer inspection program
  - Private side sewer programs
    - Inspection (title transfer, remodel, or addition)
    - Insurance
    - Grant programs
  - Local agency education/funding
    - Review of 2000-2004 I/I program work
    - WTD long-term flow monitoring strategy
    - Grant programs
Next Steps

• I/I evaluation during conveyance system capital project planning
  – Evaluation of the potential of I/I reduction to cost effectively address capacity needs during Coal Creek Trunk CSI project planning (4th qtr. 2015)

• Evaluation of system wide I/I reduction concepts
  – Develop scope of work to explore potential applicability of MWPAAC I/I Task Force concepts in regional wastewater service area (1st - 2nd qtr. 2016)
  – Conduct evaluation per scope of work (2nd – 4th qtr. 2016)
  – Review evaluation results with MWPAAC and select concept(s) to more forward (1st – 2nd qtr. 2017)
Next Step: Conveyance System Capital Project Planning

- Evaluate the potential of I/I reduction to cost effectively address capacity needs during conveyance system capital project problem definition
  - Coal Creek Trunk
  - Other future CSI projects
Next Step: Evaluation of System Wide I/I Reduction Concepts

• Concepts:
  – Sewer and side sewer standards
  – Standardized sewer and side sewer inspection program
  – Private side sewer programs
  – Local agency education/funding

• Scope of work expected to include:
  – Cost to implement concept
  – Potential for short and long term I/I reduction
  – Regional and local roles and responsibilities

• Anticipate evaluation will be done by a consultant

• MWPAAC will be consulted throughout the evaluation
Questions/Discussion

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