

Status Update Regional Infiltration/Inflow (I/I) Control Program

February 7, 2019

Nicole Smith, King County WTD

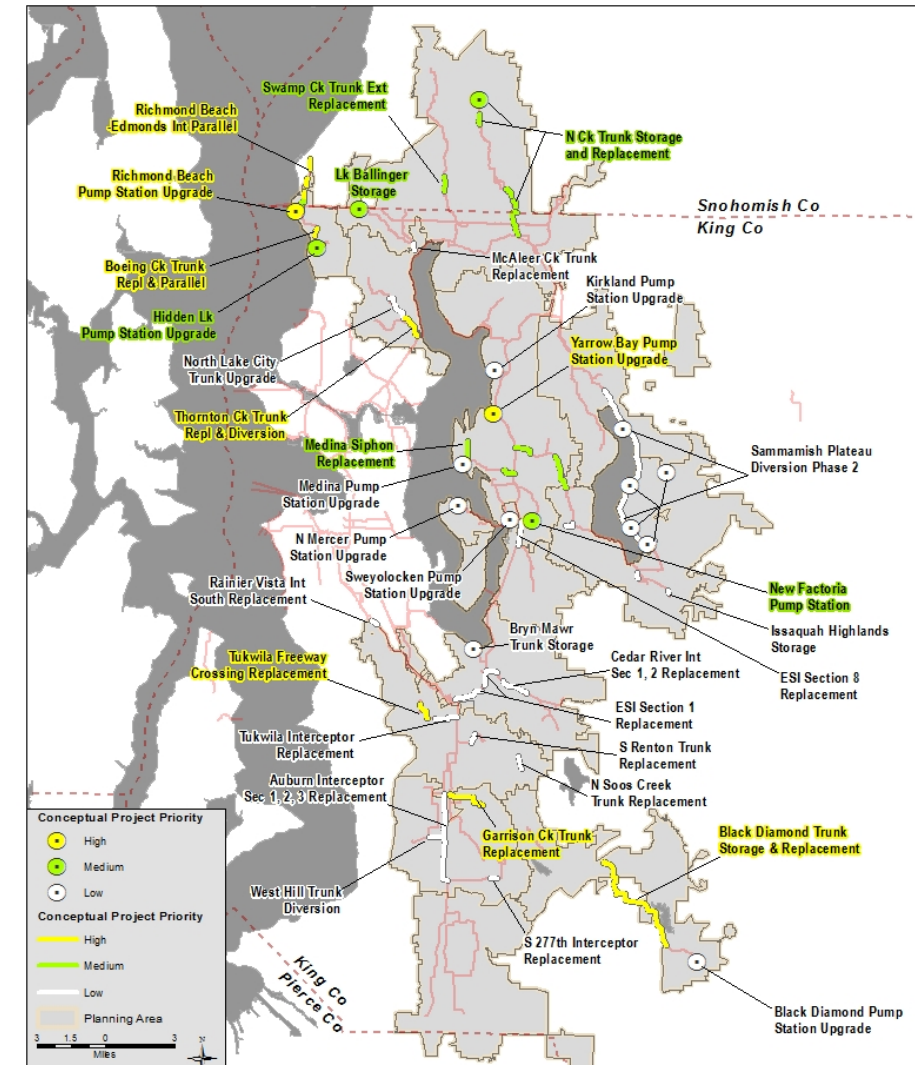
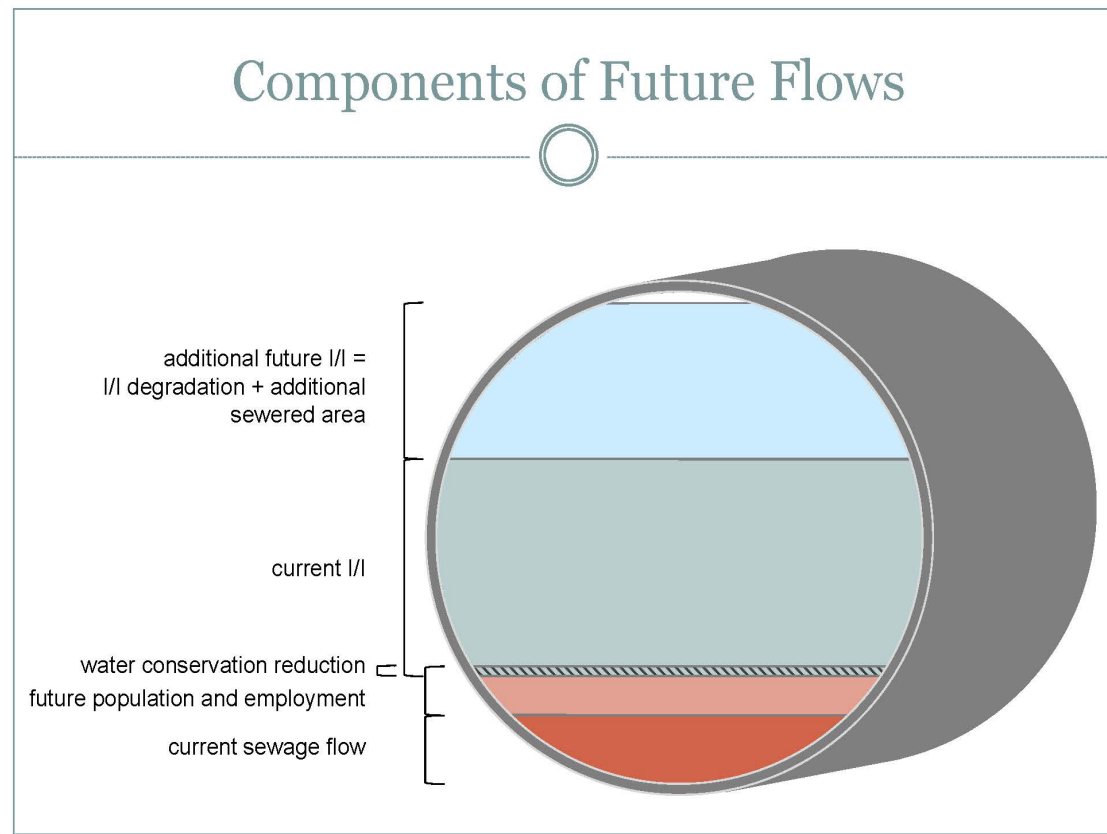


King County

Department of Natural Resources and Parks
Wastewater Treatment Division

I/I in the Regional Wastewater System

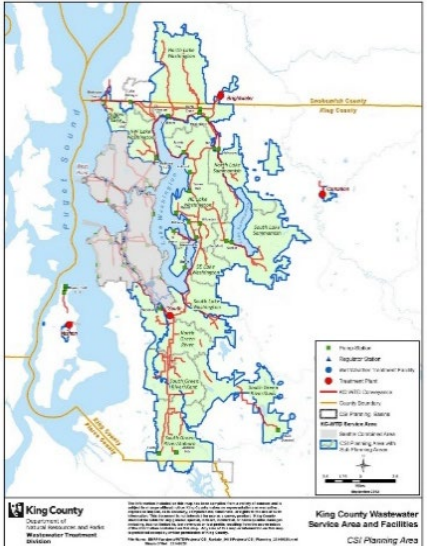
- Studies show 50-70% of I/I is from private side sewers
- As much as 3/4 of pipe capacity used up by I/I at peak flow



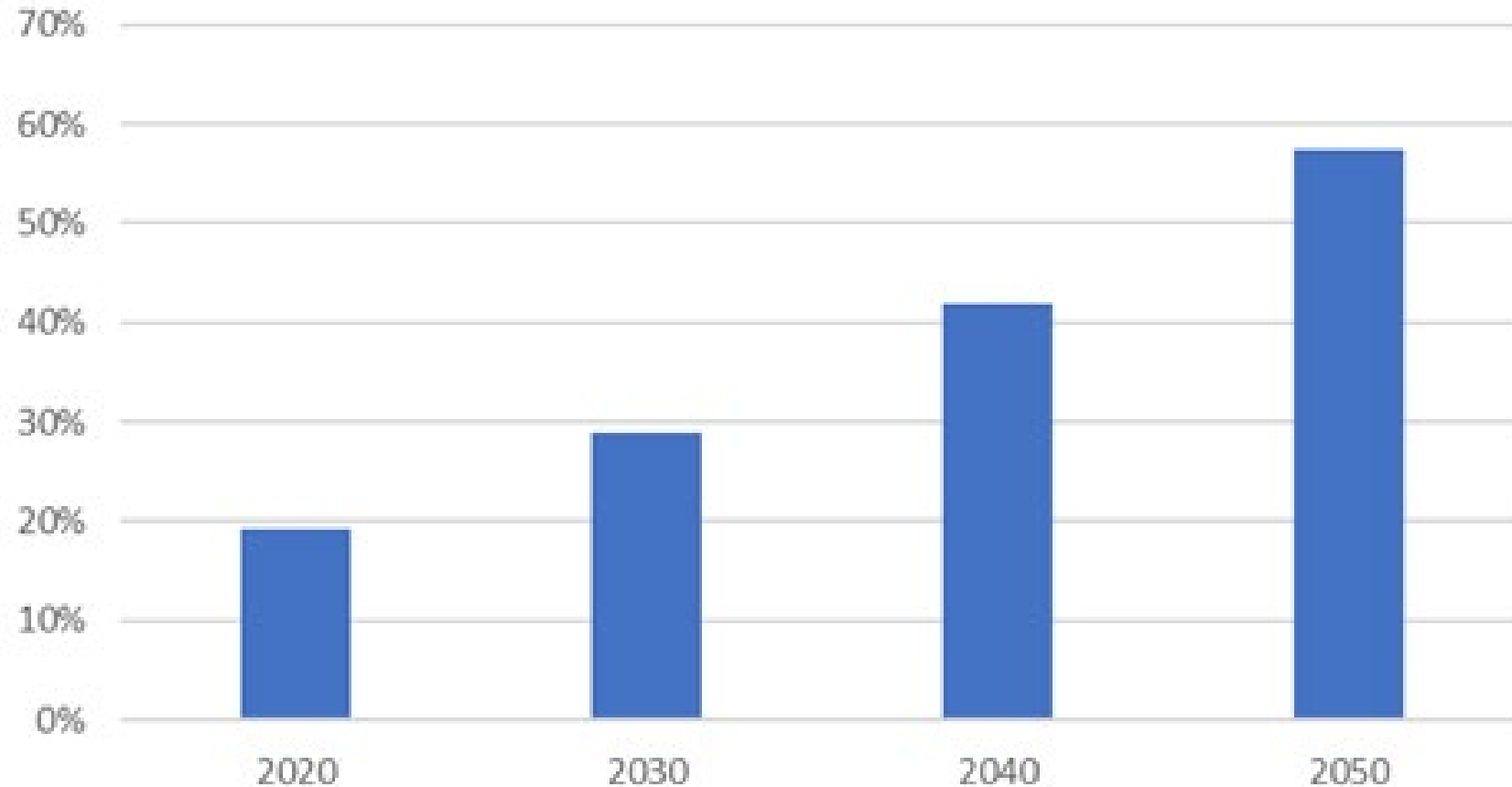
Planned Conveyance System Improvement Plan Projects

SEPARATED WASTEWATER COLLECTION SYSTEM COMPONENTS

	Side Sewers	Local Agency Sewers	King County Conveyance
Ownership	Private	City/Sewer District	King County
Diameter	4-6 inches	8-20 inches	> 20 inches
System Length	No estimate	5,200 miles	390 miles
Influence on I/I	High	Low	Low



Estimated percentage of KC laterals older than 75 years



Source: 2016 King County Housing Stock Analysis

Where has the Regional I/I Program been?

In 2015-2018, explored and evaluated I/I Program concepts to:

- Prevent or reduce future I/I
- Reduce existing I/I
- Reduce scope of future conveyance projects in the separated sewer portion of the regional wastewater system

Explore and Evaluate I/I Concepts

- Reviewed existing sewer standards, inspection programs and private side sewer programs
 - Reviewed national case studies and best practice
 - Described and evaluated conceptual options
 - Recommended conceptual options to move to further evaluation
- Technical memos will be available at:
- <https://www.kingcounty.gov/services/environment/wastewater/ii/resources.aspx>

Outcomes of Evaluation

MWPAAC recommended concepts for further evaluation:

1. Regional BMPs

Standardization of 3-5 regional BMPs spanning new construction, repair, rehabilitation, and/or demolition for use by local agencies.

2. Inspector Training and Certification

Development and/or hosting of regional inspection training and a certification program on both new and existing construction inspections.

3. Private Side Sewer Inspection Program with Financial Assistance

Development of private side sewer inspection program triggered by property transfer and/or potential other method along with a grant/loan program to mitigate financial burden on disadvantaged ratepayers.

Further Define 3 Concepts

- Program goals and critical success factors
- Details on major program components
- Roles and responsibilities
- Method of benefit evaluation
- Costs and funding
- Key considerations e.g. impact to local agencies
- Barriers to implementation and mitigation measures
- Lessons learned from similar programs at other utilities

Major Tasks in Draft Scope of Work

- Develop Program Goals, Methods and Background Information
- Develop and evaluate options for major components of each program type
 - Regional BMP
 - Inspector training and certification
 - Private side sewer inspection program including financial assistance
- Develop implementation plans for chosen programs

Develop Program Goals, Methods and Background Information

- See Task 4000

Regional BMPs

Set goals

Identify critical success factors

Mitigation measures for implementation barriers

Outline for program development

Inspector Training and Certification

Set goals

Identify critical success factors

Mitigation measures for implementation barriers

Outline for program development

Private Side Sewer Program with Financial Assistance

Set goals

Identify critical success factors

Mitigation measures for implementation barriers

Background info collection

Method to evaluate benefits

Outline for program development

Develop and evaluate options for major components of each program type

- See Tasks 5000 through 8000
 - Details on major program components
 - Roles and responsibilities
 - Costs and funding
 - Benefit evaluation
 - Key considerations
 - Legal and political implications
 - Property owner impacts
 - Local agencies impacts
 - King County WTD impacts
 - Equity and social justice

Develop implementation plans for recommended programs

- See Task 9000
- Prior to initiating, there is a decision point
- Scope does not include implementation itself

Next Steps

- Receive your comments by February 20
- Revise scope of work and amend contract



Contacts:

Nicole Smith, Planner/Project Manager

Nicole.Smith@kingcounty.gov

206-477-8554