

INFILTRATION AND INFLOW (I/I) CONTROL PROGRAM

REGIONAL INSPECTOR TRAINING AND CERTIFICATION PROGRAM DEVELOPMENT

EVALUATION OF INFLOW AND INFILTRATION
REDUCTION CONCEPTS PHASE 2

MWPAAC ENGINEERING AND PLANNING
SUBCOMMITTEE

SEPTEMBER 2, 2021



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

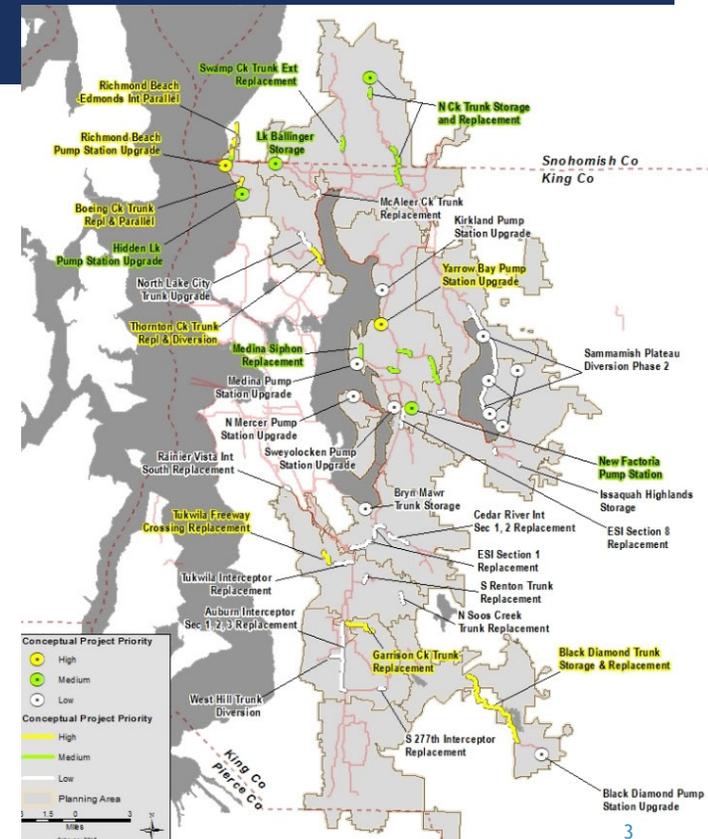
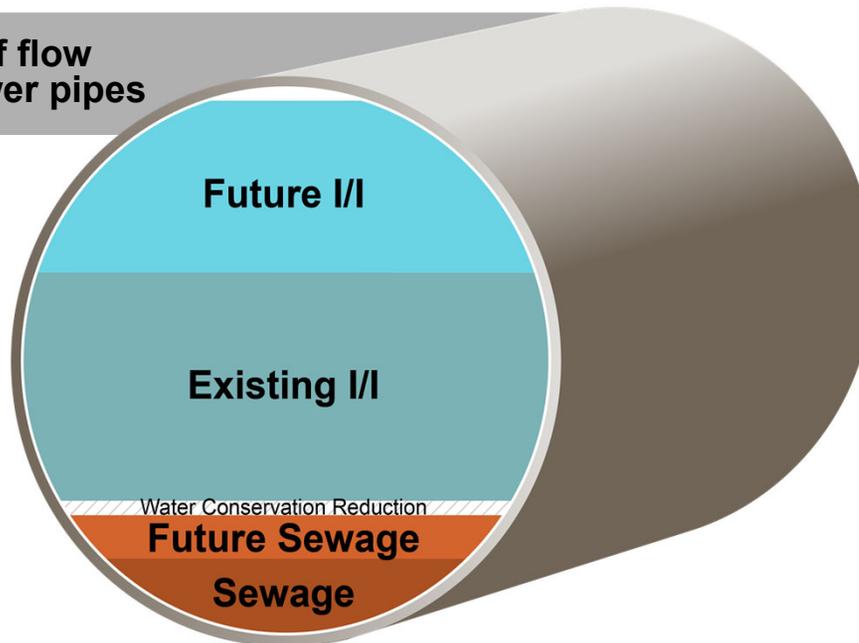
MEETING PURPOSE

- **Provide input on Inspector Training and Certification Program Concept**
- **Introduce interest survey to be sent after the meeting**

I/I IN THE REGIONAL WASTEWATER CONVEYANCE SYSTEM

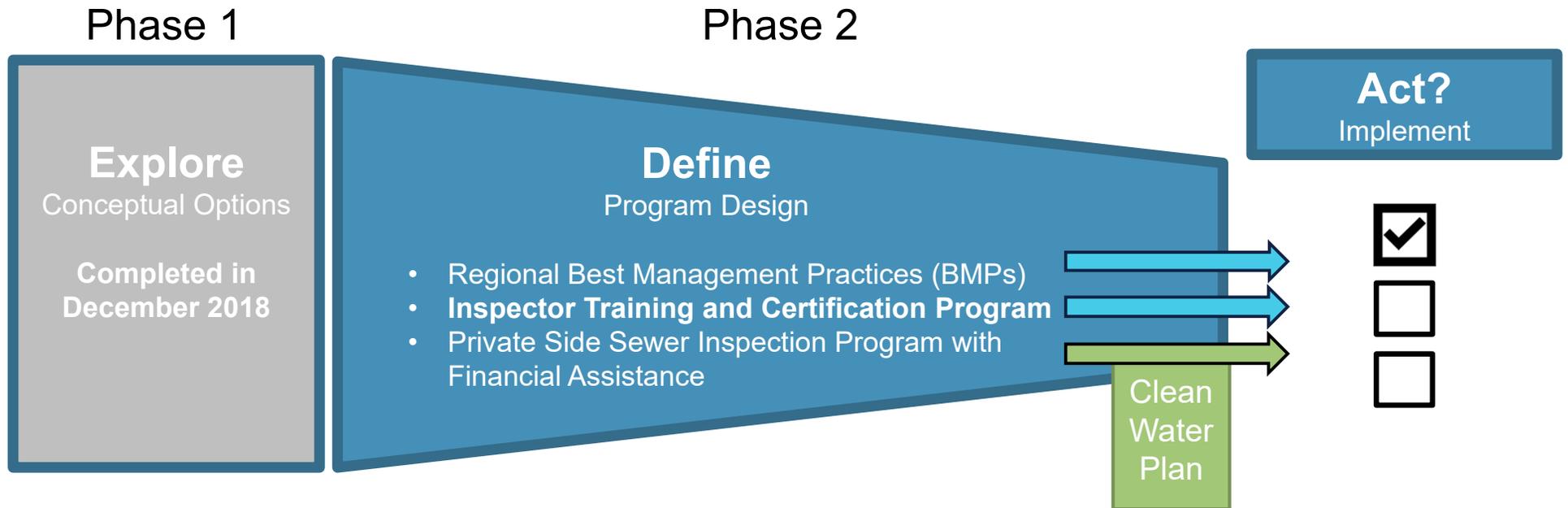
Infiltration and inflow (I/I) is stormwater and groundwater that enters the sewer system

Components of flow in regional sewer pipes



2017 Conceptual Conveyance System Improvement Projects

OVERVIEW OF CURRENT I/I WORK



INSPECTOR TRAINING AND CERTIFICATION PROGRAM CONCEPT

DRAFT TECHNICAL MEMO

- **Available for your review – draft technical memo on County I/I Program website:**
<https://kingcounty.gov/services/environment/wastewater/ii/resources.aspx>

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1. Introduction
2. Inspector Training and Certification Program
3. Example Training and Certification Programs
4. Program Scope Considerations
5. Eligible Requirements for Training and Certification
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INSPECTOR TRAINING AND CERTIFICATION PROGRAM CONCEPT GOALS

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- **Goals, objectives and success factors**

- **Revised goal** - all component agency sewer inspectors (staff or contractors) are consistently trained and certified to inspect side sewers and laterals of the sanitary sewer system and enforce proper installation, rehabilitation, and repairs to reduce I/I.
- **Revised success factors**
 - Have 100% of side sewer inspectors trained and certified within 3-5 years of program launch.
 - Reach agreement among majority of local agencies to participate in program development and meet training and certification requirements.

Task Force proposed revised goals, success factors and expanded description of benefits.

INSPECTOR TRAINING AND CERTIFICATION PROGRAM CONCEPT

EXAMPLE TRAINING AND CERTIFICATION PROGRAMS

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- **American Public Works Association (APWA) Certified Public Infrastructure Inspection Program**
- **National Association of Sewer Service Companies (NASSCO) Inspector Training Certification Program**
- **Louisville, Kentucky, Metropolitan Sewer District Training Classes and Certification Programs**

INSPECTOR TRAINING AND CERTIFICATION PROGRAM CONCEPT

PROGRAM CONCEPT CONSIDERATIONS

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- **Voluntary approach proposed; acknowledges labor union and legal implications**
- **Minimum inspection requirements not pursued as the County cannot dictate how local agencies construct, maintain and operate their facilities**
- **Five training and examination topics proposed in Table 42. Proposed Inspector Training Module Topics; fully online for flexibility; total of 12 hours proposed**

Task Force agreed with voluntary approach and proposed reduction to 7 hours of training and 1 hour exam

INSPECTOR TRAINING AND CERTIFICATION PROGRAM CONCEPT

TRAINING AND EXAM TOPICS

Introduction
to Program

Inspection
Methods
and
Standards

Testing
Standards

Construction
Best
Management
Practices

Safety
Issues and
Customer
Service



EQUITY IN
COUNTY PRACTICES

Task Force proposed removal of Safety Issues
and Customer Service Module.

INSPECTOR TRAINING AND CERTIFICATION PROGRAM CONCEPT

ELIGIBLE REQUIREMENTS FOR TRAINING AND CERTIFICATION

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- **Minimum qualifications for inspectors to be eligible for training and certification proposed**
 - **Graduation from high school supplemented by college-level courses related to inspection work, and**
 - **Documented minimum of 5 years of experience in field or office engineering work involving sewer construction, repair and/or rehabilitation work**
- **Certification examination and recertification requirements**
 - **Minimum passing grade and certificate**
 - **Test-out option**
 - **Equivalent certification should be recognized**
 - **5-year recertification frequency**
- **Online training and online exam**

INSPECTOR TRAINING AND CERTIFICATION PROGRAM CONCEPT

ROLES, RESPONSIBILITIES, AND RESOURCES

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- **County proposed to be program sponsor and would cover set-up and administration costs**
- **Participating sewer agencies would send inspectors with responsibility over side sewers and lateral to the training and exam, and the agency would cover the staff cost**
- **County expects to request commitments of participation from sewer agencies to support County funds are appropriately spent**

Task Force proposed engaging more sewer agencies and specific roles within agencies as well as better defining success.

INSPECTOR TRAINING AND CERTIFICATION PROGRAM CONCEPT

PROGRAM COSTS

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- **County would sponsor and fund program. Funding not yet secured.**
 - \$295,000 (2021\$) per year; likely to be lower after initial group of inspectors are trained
 - \$770,000 one-time cost for "camera-ready" training and exam content and program set up
- **Cost for inspector attendance and tracking of inspector certifications and use of certified inspectors would be covered by component agencies.**
 - Different for each agency ~ (# inspectors * # hours of training * inspector rates) + (hours to schedule and monitoring certifications * administration rates)
 - One-time "set up" costs associated with internal agency discussions, commitments to participate, etc.

INSPECTOR TRAINING AND CERTIFICATION PROGRAM CONCEPT

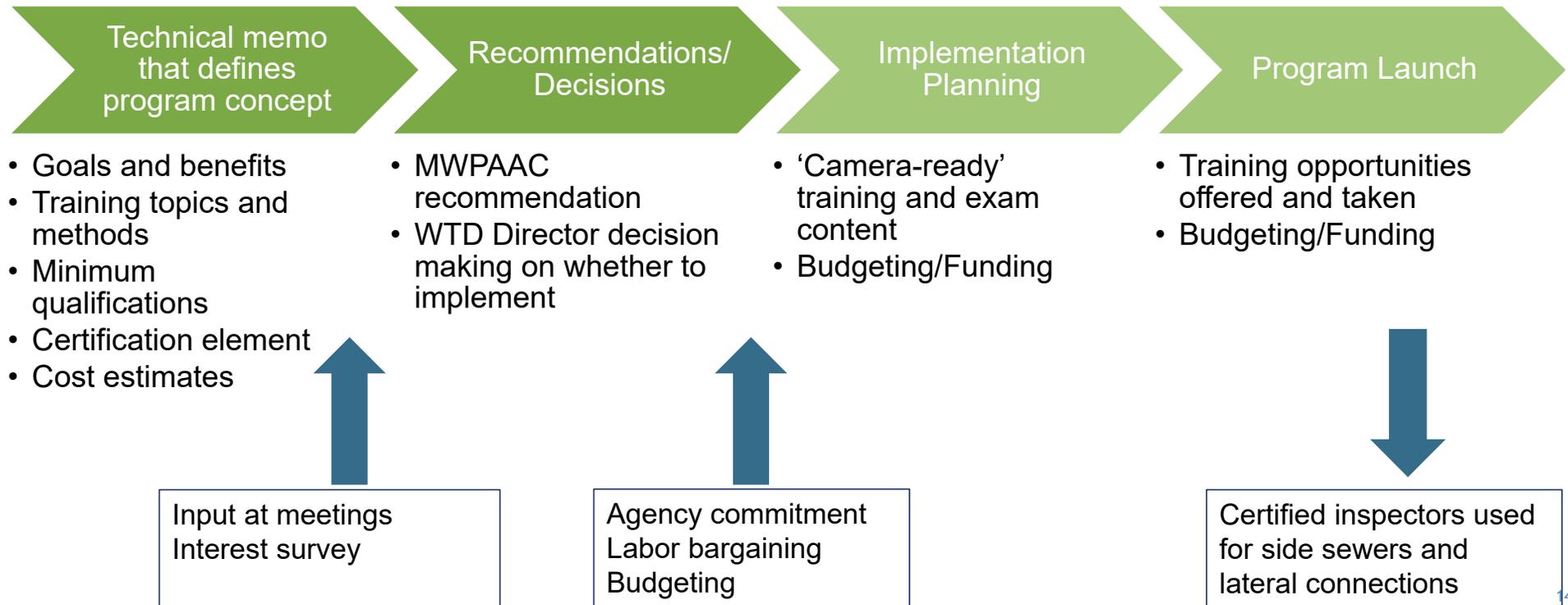
NEXT STEPS FOR IMPLEMENTATION

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- **WTD actions:**
 - **Coordinate with component agencies to get commitments in place and establish legal authorities**
 - **Secure funding for implementation of the program**
 - **Initiate a consultant contract to complete implementation planning and to result in a ready-to-implement training and certification program**
 - **Implement the program**
- **Local agency actions:**
 - **Review the impact on each agency's resources and labor union agreements prior to, and in preparation for, program implementation.**
 - **Acknowledge an interest in participation and formalize that commitment.**

NEXT STEPS FOR IMPLEMENTATION



LOOKING AHEAD



INTEREST SURVEY



A short survey will be distributed to gauge

- Interest in implementation
- Barriers to participation
- Number of inspectors possibly participating

The Project Team highly encourages having internal discussions before completing the survey

Survey Guidelines

- Completed by a General Manager, Public Works Director, or equivalent employee
- One response per agency

Deadline 11:59PM September 30th, 2021

THANK YOU

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END