

INFILTRATION AND INFLOW (I/I) CONTROL PROGRAM

INSPECTOR TRAINING & CERTIFICATION PROGRAM INTEREST SURVEY

EVALUATION OF INFLOW AND INFILTRATION
REDUCTION CONCEPTS PHASE 2

MWPAAC

OCTOBER 27, 2021



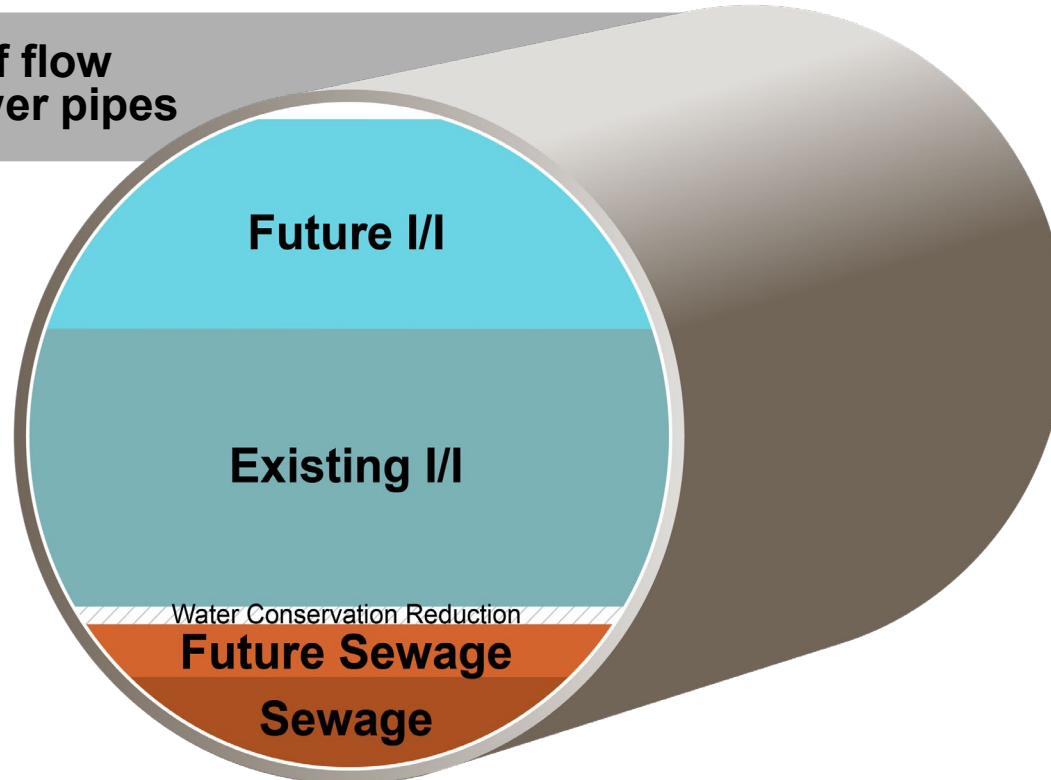
King County

Department of Natural Resources and Parks
Wastewater Treatment Division

I/I IN THE REGIONAL WASTEWATER CONVEYANCE SYSTEM

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

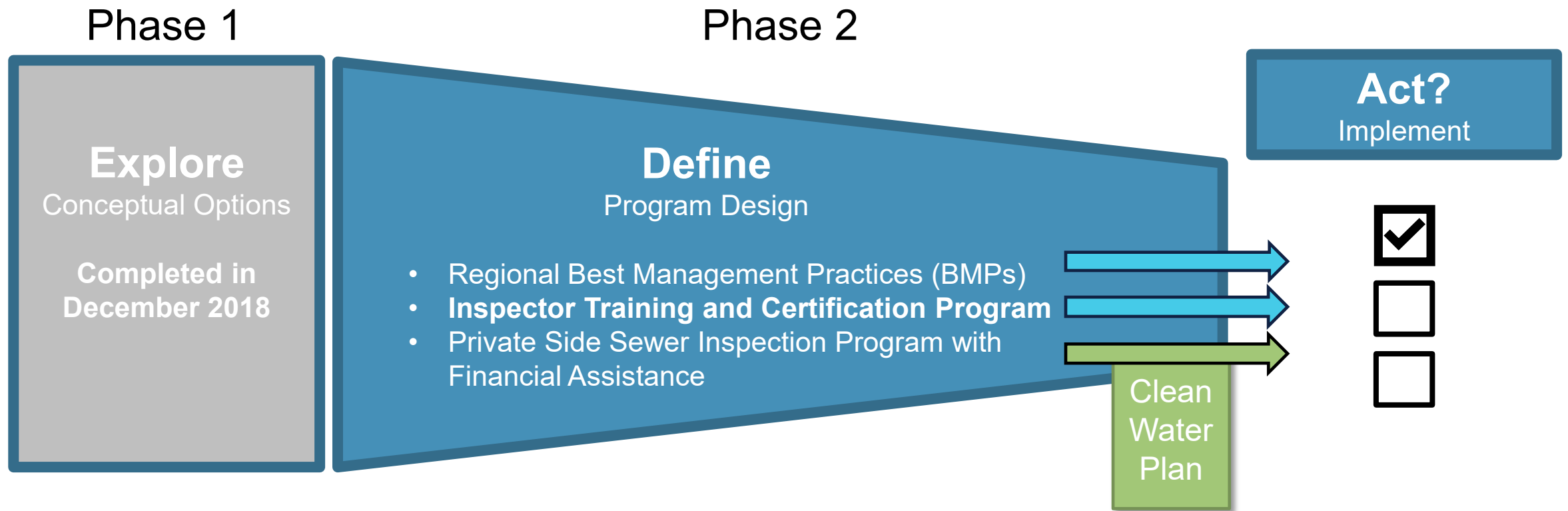
**Components of flow
in regional sewer pipes**



2017 Conveyance System Improvement Plan estimates \$1.7 billion in improvement costs through 2060

Higher levels of I/I removed would be associated with higher avoided capital costs on conveyance improvements

OVERVIEW OF CURRENT I/I WORK



OVERVIEW OF PROPOSED INSPECTOR TRAINING & CERTIFICATION PROGRAM



A new tool in the I/I reduction toolbox

Program 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.

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.

OVERVIEW OF PROPOSED INSPECTOR TRAINING & CERTIFICATION PROGRAM

Qualifications

- Graduation from high school supplemented by college-level courses related to inspection work
- Documented minimum of 5 years of experience in field or office engineering work involving sewer construction, repair and/or rehabilitation work

Training

- 7 hours of online training in the following modules:
 - Introduction to program
 - Inspection methods and standards
 - Testing standards
 - Construction best management practices
 - Safety issues and customer service

Certification Exam and Recertification

- 1 hour online exam
- Minimum passing grade and certificate
- Test-out option available
- Equivalent certification should be recognized
- 5-year recertification frequency

Roles & Responsibilities

- County – proposed program sponsor/administrator and would cover cost to set-up and administer program
- Participating sewer agencies – inspector training participants and would cover cost of staff time to participate

INTRODUCTION TO INTEREST SURVEY



A short survey was distributed to MWPAAC agencies to gauge

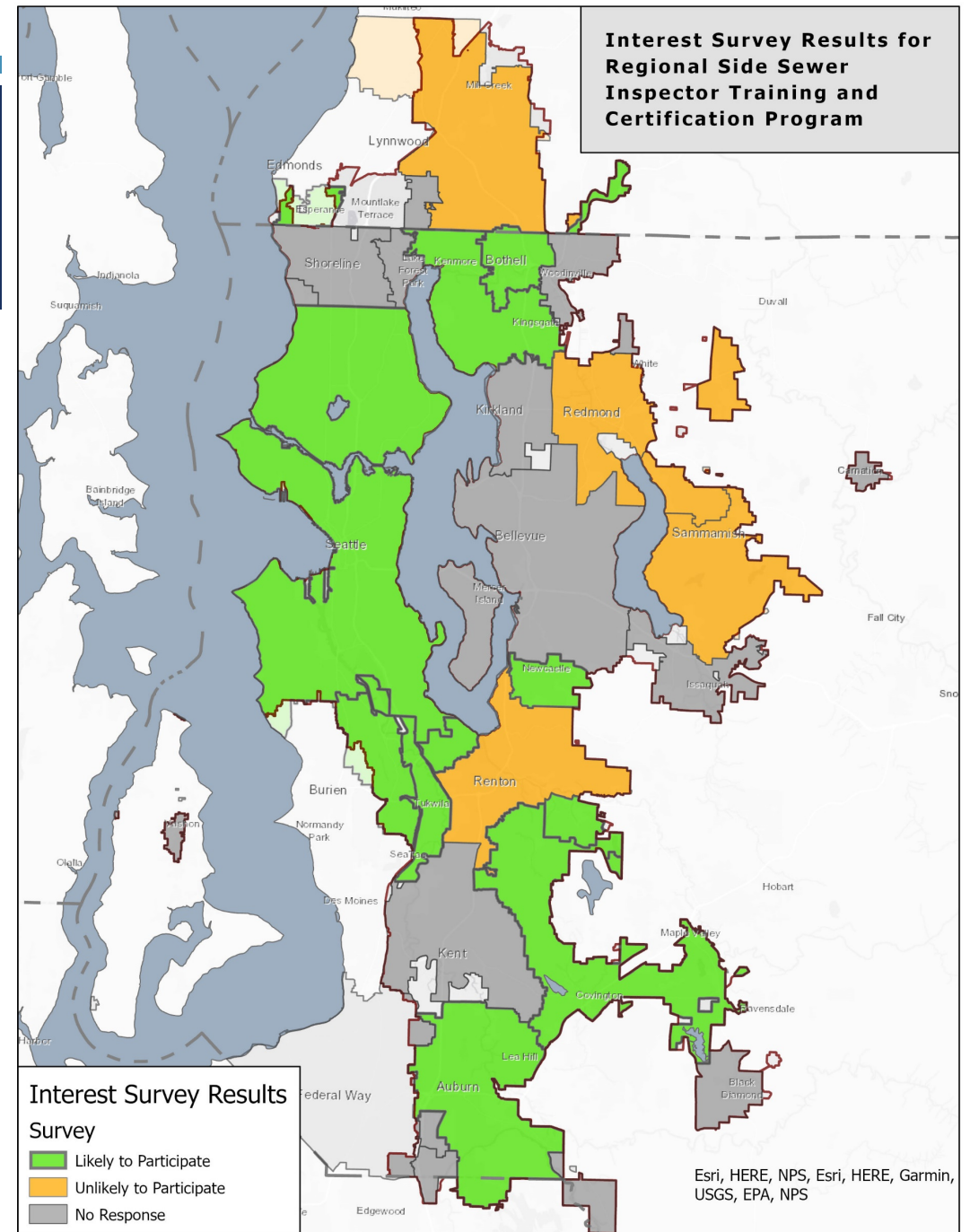
- Interest in implementation
- Barriers to participation
- Inspector pool information
- Interest in an inspector-in-training program

Survey Information

- Completed by a General Manager, Public Works Director, or equivalent employee
- **Completed by 17 MWPAAC agencies**

SURVEY RESPONDENTS

1. Alderwood Water & Wastewater District
2. City of Auburn
3. City of Bothell
4. Cedar River Water & Sewer District
5. Coal Creek Utility District
6. Cross Valley Water District
7. Northeast Sammamish Sewer & Water District
8. Northshore Utility District
9. Olympic View Water and Sewer District
10. City of Redmond
11. City of Renton
12. City of Seattle
13. Sammamish Plateau Water & Sewer District
14. Skyway Water and Sewer District
15. Soos Creek Water & Sewer District
16. City of Tukwila
17. Valley View Sewer District



SURVEY RESULTS – IMPORTANCE & NEED

What is your agency's opinion on the need of the Program to regional I/I control?

- **16 respondents (89%) indicated that there is at least some need for the program**

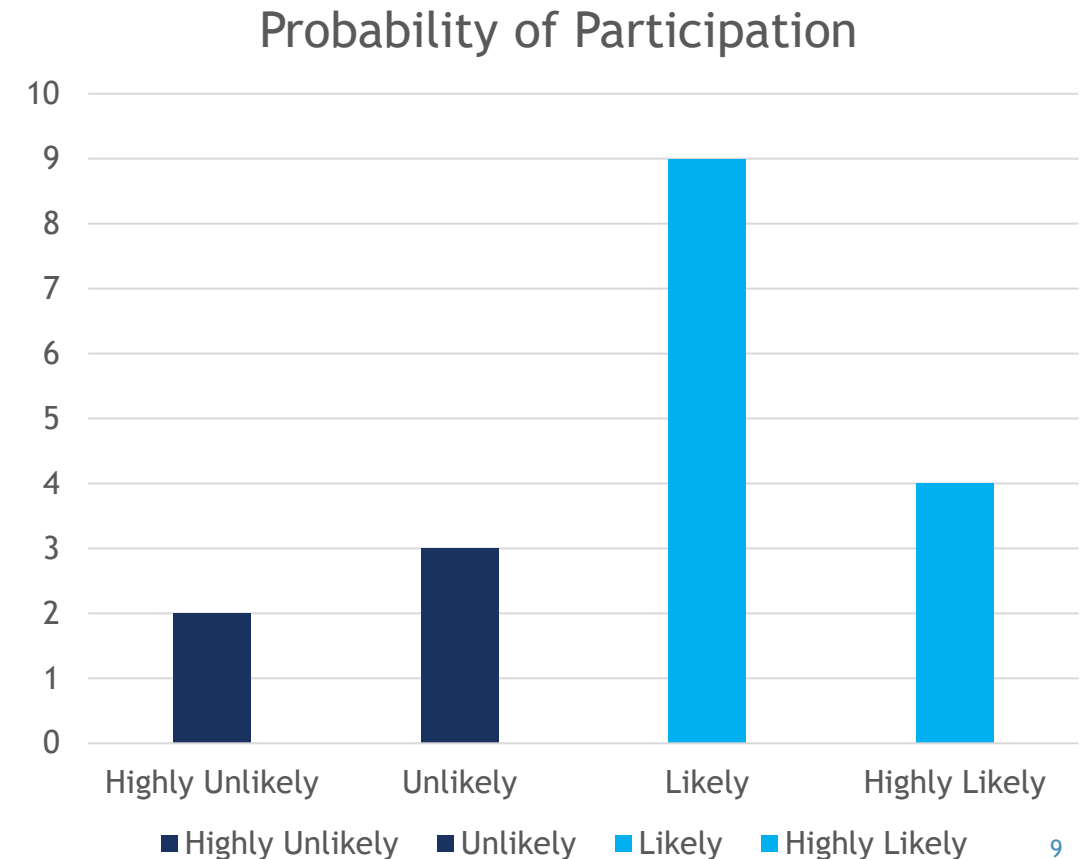
What is your agency's opinion on the importance of the Program to regional I/I control?

- **17 respondents (94%) indicated that the program was at least somewhat important**

SURVEY RESULTS – INTEREST

What is the probability that your agency will participate in the Program if it is implemented?

- 13 respondents (72%) indicated that it is likely or highly likely that their agency would participate



SURVEY RESULTS – BARRIERS

What barriers stand in the way of your agency's participation in the Program?

- 7 respondents (39%) indicated that **budget** is a barrier
- 11 respondents (61%) indicated that **staffing capacity** is a barrier
- 1 respondent (6%) indicated that **labor unions** are a barrier
- 5 respondents (28%) indicated that there is a **duplicative existing agency training**
- 4 respondents (22%) indicated in the comments that there were **minor or no barriers** to their agency

SURVEY RESULTS – INSPECTOR INFORMATION

How would you classify the inspectors you employ or use for side sewer inspection work?

- **17 respondents (94%) indicated that they employed in-house staff inspectors**
- 1 respondent (6%) indicated that they employed contracted or 3rd party inspectors

How many inspectors do you employ or use for side sewer inspection work?

- 3 respondents (17%) indicated that they employed 6 or more inspectors
- **14 respondents (78%) indicated that they employed 1-5 inspectors**
- 1 respondent (6%) did not indicate a number or range

How would you describe the sentiment of your inspectors towards the potential Program?

- 4 respondents (22%) indicated that inspectors opposed the program
- **8 respondents (44%) indicated that their inspectors expressed neutral sentiments towards the program**
- **6 respondents (33%) indicated that their inspectors expressed favorable sentiments towards the program**

SURVEY RESULTS – INSPECTOR IN-TRAINING PROGRAM

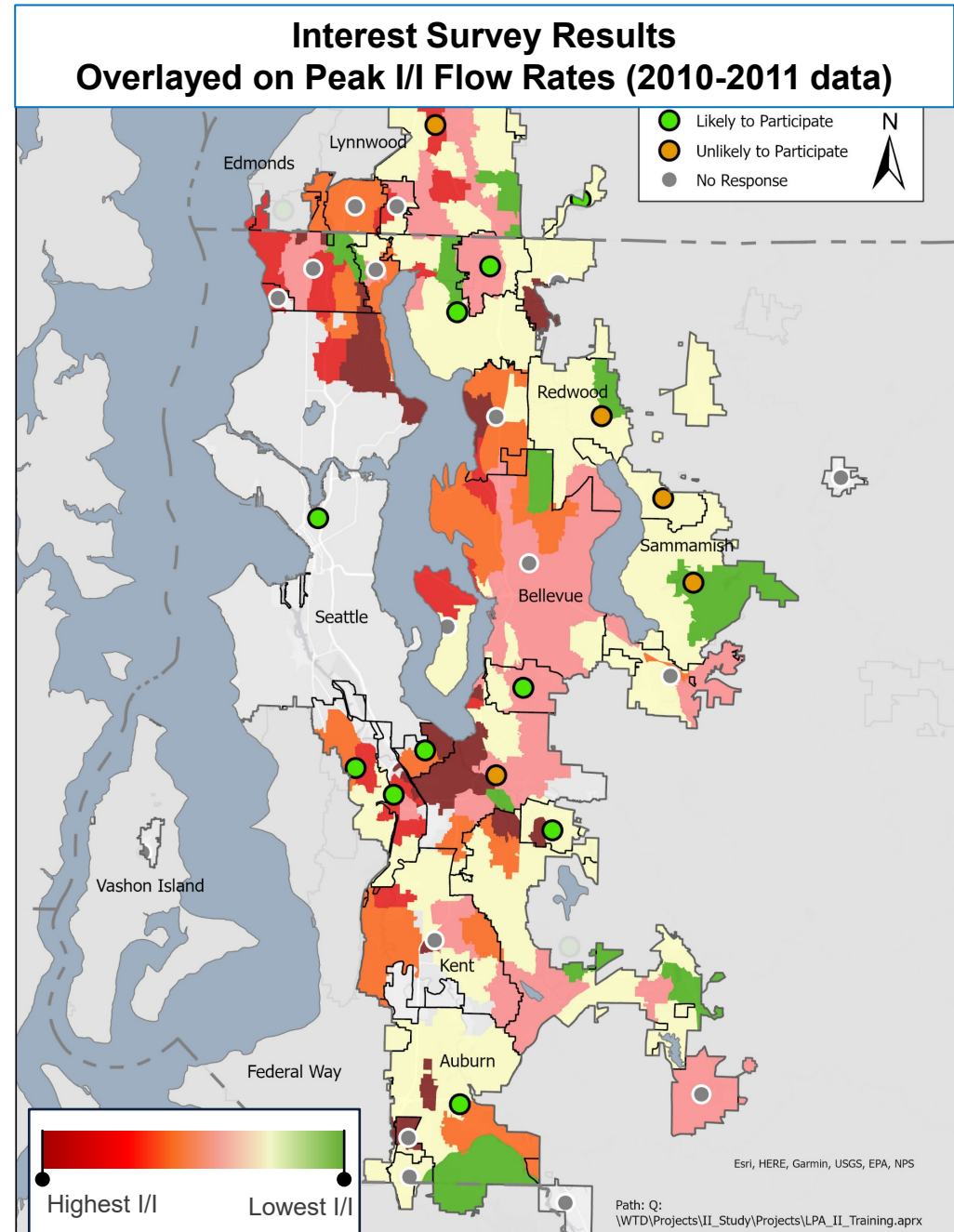
What is your agency's interest in exploring in the future an additional regional program to train and prepare individuals to become side sewer inspectors and develop the inspector pool i.e. inspector in-training program?

- 5 respondents (28%) are uninterested
- **13 respondents (72%) are interested**

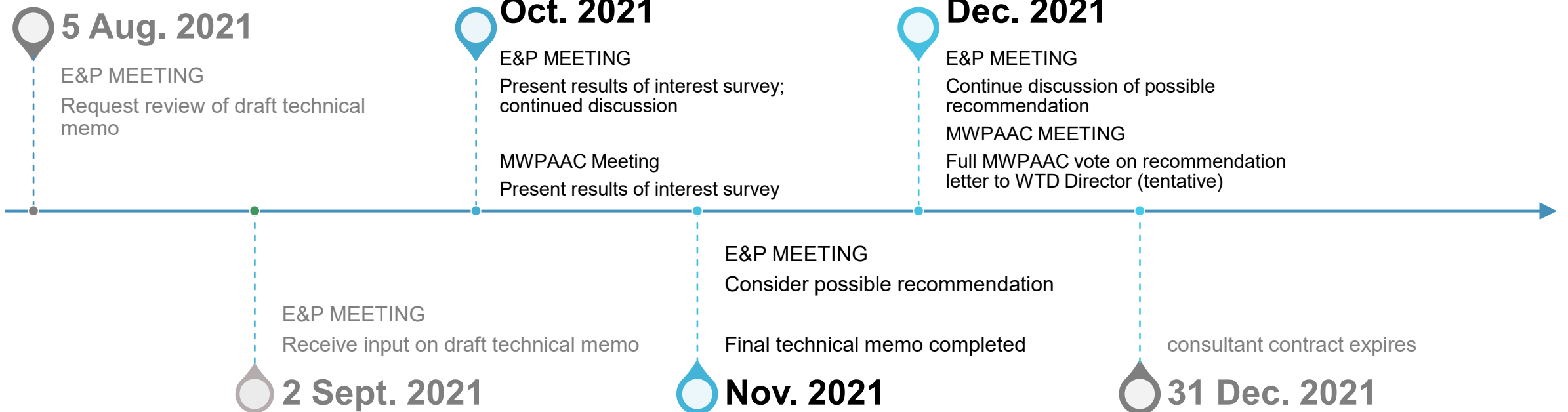
TAKEAWAYS

Majority of respondents stated:

- The program is important to regional I/I control
- There is a need for the program to support regional I/I control
- It was likely that their agency would participate if the program is implemented
- Their agency's inspectors expressed neutral sentiments towards the program



LOOKING AHEAD



THANK YOU

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