



Regional I&I Reduction Program Implementation

NEW Water TAC Meeting, Green Bay, WI // April 24, 2023



Meeting Agenda

- Meeting Objectives
- Technical Assistance – Planning and Next Steps
- Educational Assistance – Planning and Next Steps
- Overview of 2023 activities



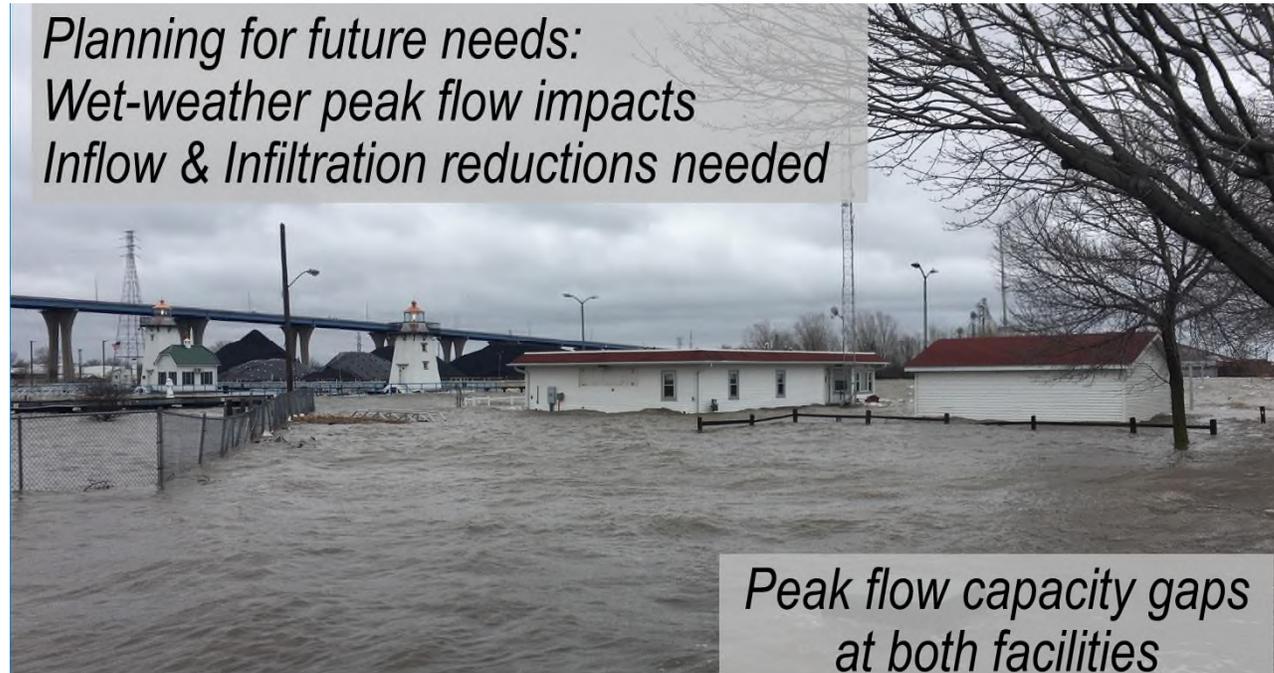
Meeting Objectives

- Discuss possible options for Technical Assistance and Education Assistance items for the Regional I&I Program
- Solicit feedback from the Technical Advisory Committee (TAC)
- See what I&I program implementation activities are planned for 2023



Why is a Regional I&I Reduction Program Needed?

- Excessive I&I takes up capacity in the NEW Water system, which can inhibit economic development, and community growth
- Excessive I&I increases risk for basement backups and SSOs





Regional I&I Reduction Program Elements: Technical Assistance

1. Ordinances
2. Private Property I&I (PPII) Reduction Program Development and Administration
3. I&I Investigations
4. Flow Monitoring
5. Flow Data Evaluations
6. Design Standards / Example Procedures
7. Collaboration Meetings
8. Work Plan Guidance Documents and Templates

Interactive Feedback

NEW Water will be using Menti to help collect feedback during our discussion. In order to participate, please do the following:

1. Bring your smart phone. We will have a laptop available during the meeting if you do not have a smart phone with you for the meeting.
2. Log onto NEW Water's WIFI if necessary
3. Access [menti.com](https://www.menti.com)
4. Wait for further instructions



How well does your ordinance address I&I?

1. Do you know what your ordinance says about I&I on private property and are you enforcing against it?
2. Does your ordinance give you the authority to conduct clear water inspections on private property, including laterals?
3. Does your ordinance give you the authority to require that private property owners complete repairs to address clear water?



Ordinances: Possible Options

1. Municipality writes its own ordinance
2. NEW Water provides guidance on ordinance language
3. NEW Water provides a template ordinance for municipal customers
4. NEW Water ordinance updates include performance and private property I&I removal requirements



PPII Reduction Program Development and Administration: Possible Options for Involvement

1. No involvement from NEW Water
2. Guidance from NEW Water but locally-led program
3. NEW Water program includes requirements to address PPII
4. NEW Water-controlled program



PPII Reduction Program Development and Administration: Possible Options for Timing

1. One year
2. Three years
3. Five years
4. No interest in PPII



I&I Investigations: Possible Options

1. NEW Water is not involved; the municipal customers do this on their own
2. NEW Water provides investigations and municipal customers evaluate the findings and decide how to proceed
3. NEW Water provides investigations and NEW Water evaluates the findings and provides recommendations for next steps
4. NEW Water provides investigations and NEW Water evaluates the findings and provides required next steps



Flow Monitoring: Possible Options

1. NEW Water is not involved; the municipal customers do this on their own.
2. NEW Water provides and places flow monitoring equipment. Collected data is provided to the municipal customer.
3. NEW Water contracts with a flow monitoring provider for metering services in the municipal service area. All municipal customers can access this service but will be billed by NEW Water.



Flow Data Evaluation: Possible Options

1. NEW Water is not involved; the municipal customers do this on their own
2. NEW Water provides the data to the municipal customers, who do their own evaluation
3. NEW Water evaluates the data and provides conclusions and recommendations
4. NEW Water evaluates the data and provides conclusions and required next steps



Design Standards / Example Procedures: Possible Options

1. Standard Operating Procedures

- Flow Monitoring
- Flow Data Evaluation
- Lateral inspections
- Building inspections
- Data Management
- Construction Field Inspection Management
- Lateral CIPP Warranty Acceptance Criteria
- I&I Reduction Evaluations
- Smoke Testing
- Dye Testing

2. Standard Specifications

- Lateral Televising
- Lateral CIPP
- Mainline CIPP
- Manhole Renewal

3. Standard Detail Drawings for Bid Documents

4. Other?



Collaboration Meetings (Milwaukee MSD Example)

- How often?
 - Technical Advisory Team (TAT) meetings every month
 - PPII-specific workshops one to two times each year
 - Quarterly brown bag presentations on specific topics
 - Annual workshops for CMOM and Construction Inspection (not specific to PPII)
- With whom?
 - TAT meetings are with municipal and regulator representatives
 - Workshops and brown bag presentations are open to everyone
- What topics?
 - Best practices for construction inspection
 - Best practices for flow monitoring and I&I reduction evaluations
 - Case studies of projects completed through the PPII program

Possible
additional
benefit:
Continuing
Education
Credits



Discussion: Collaboration Meeting

- How often?
- With whom?
- What topics?



Work Plan Guidance Documents and Templates

- Example: Milwaukee MSD PPII Work Plan Template



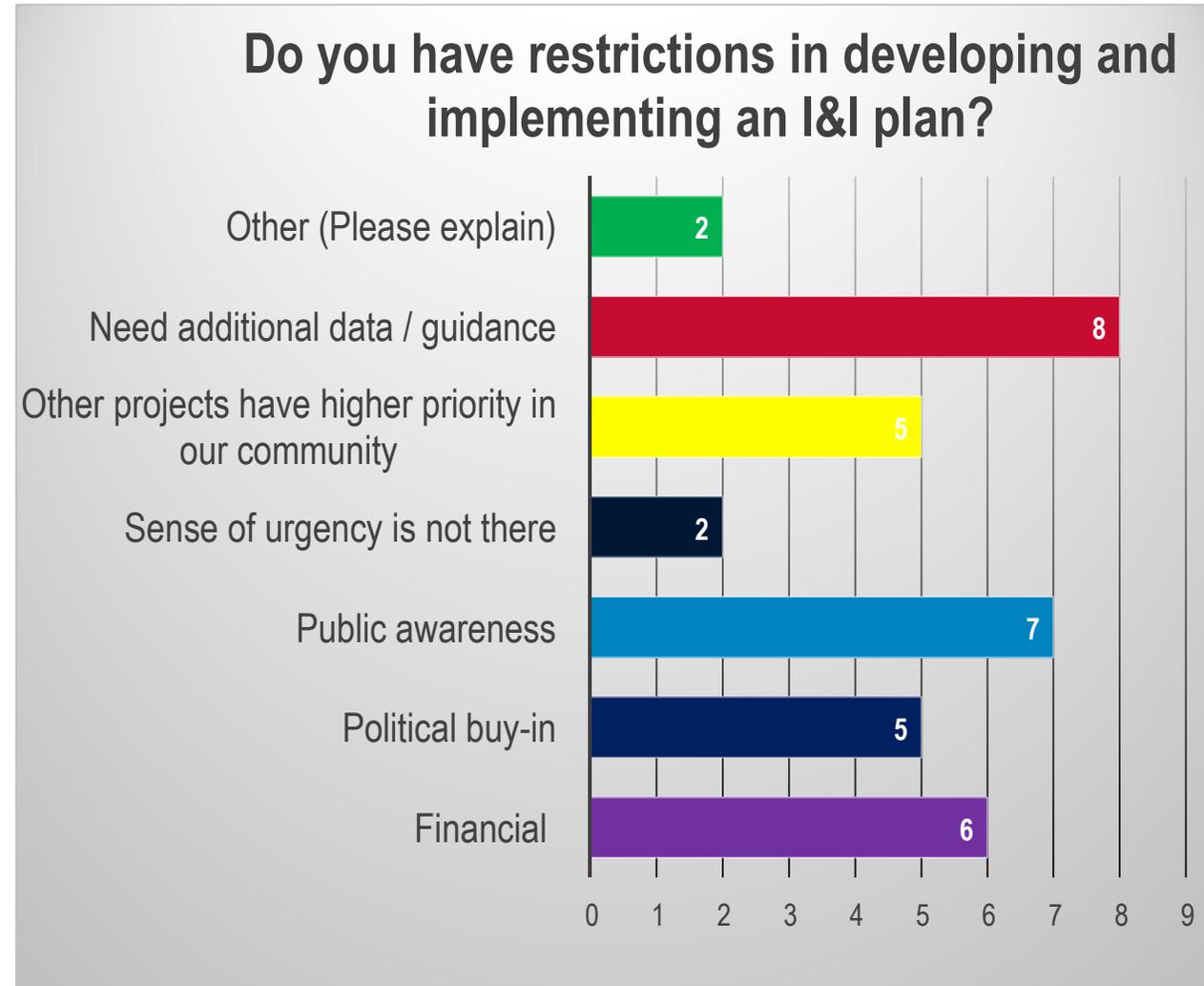
Technical Assistance: Next Steps

- Summarize feedback from this meeting
- Review, revise, and expand on Technical Assistance section of the Framework document
- Present refined Technical Assistance section with TAC to solicit feedback
- Finalize Technical Assistance element of the Regional I&I Reduction Program and start creating content and providing services



Regional I&I Reduction Program Elements: Educational Assistance

- How can educational assistance help overcome these barriers?
 - Public Awareness
 - Political Buy-In
 - Sense of urgency
- What kind of assistance would you like from NEW Water?



Educational Assistance – Lead in to Interactive Workshop

NEW Water would like to set goals related to specific audiences for our Regional I&I Reduction Educational Assistance Program

- In the following slides, please review suggested goals for each audience. Do you like any of them? If not, do you have any ideas for goals? Please think about this in advance of our April 24 meeting.
- During our interactive meeting on April 24, the following slides will be posted around the room. You can:
 - Add any additional goal suggestions to the list for each intended audience
 - Offer feedback to identify reasonable near-term and long-term goals for each intended audience
 - Identify goals you like best for each intended audience.

Your feedback from this session will help NEW Water develop a strategy to achieve the desired goals.



Regional I&I Reduction Program Elements: Educational Assistance

Audience: **Municipal Elected Officials**

Goal example: Basic understanding among elected officials of I&I problems in my municipal system

Goal example: 100% understanding among elected officials of I&I problems in my municipal system, and the impacts to the regional wastewater system

Goal example: Achieve 100% support of my elected board to move forward with ordinance changes, and funding to address I&I

- General

- Include Private Property

Your Goal (Write your goal here!):



Regional I&I Reduction Program Elements: Educational Assistance

Audience: Residents

Goal example: *Targeted, basic understanding among “identified” residents of how their behavior impacts I&I problems in my municipal system*

Goal example: *Instill a sense of urgency among residents that something needs to be done about I&I at their home, and in their community*

Goal example: *Residents understand very clearly what they can do to reduce I&I and education has been compelling enough to do something about it*

Your Goal (Write your goal here!):



Regional I&I Reduction Program Elements: Educational Assistance

Audience: **State Elected Officials**

Goal example: Basic understanding of I&I impacts to the regional shared wastewater system

Goal example: Instill a sense of urgency that funding is needed to achieve I&I reduction

Goal example: Pass favorable legislation to help I&I reduction

Your Goal (Write your goal here!):



Regional I&I Reduction Program Elements: Educational Assistance

Next Steps:

- Use feedback to generate a communication plan to include each intended audience
- Present communication plan to Technical Advisory Committee to solicit feedback
- Finalize communication plan and start creating content for educational purposes

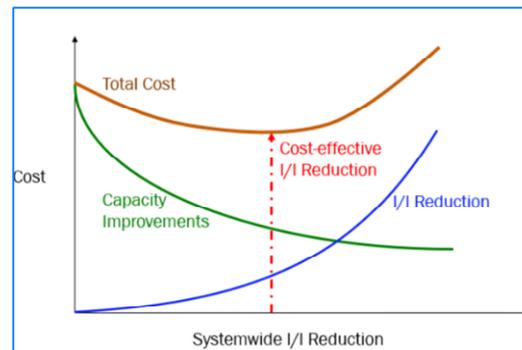
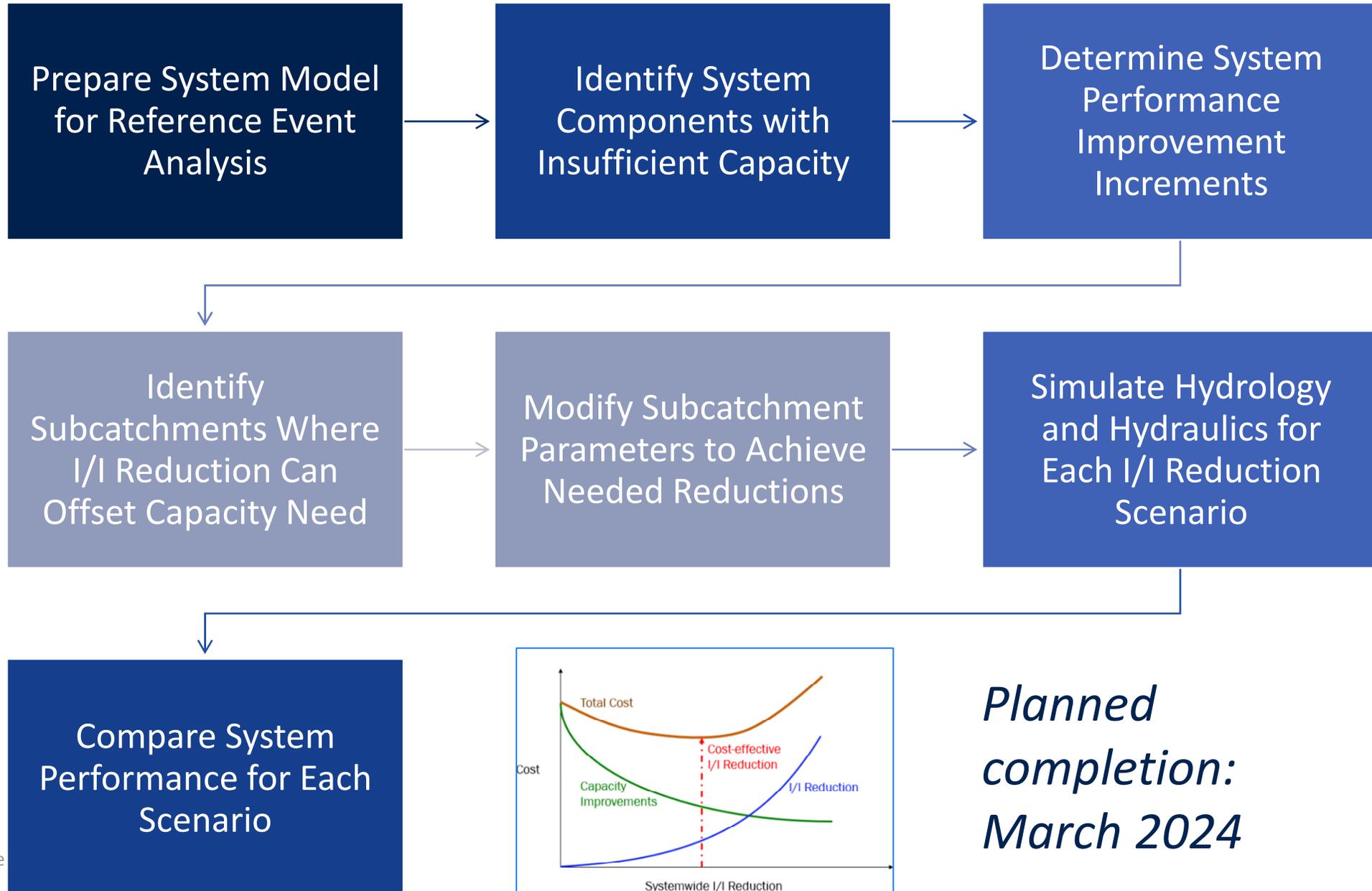


Regional I&I Reduction Program:

Implementation Timeline and Anticipated Costs

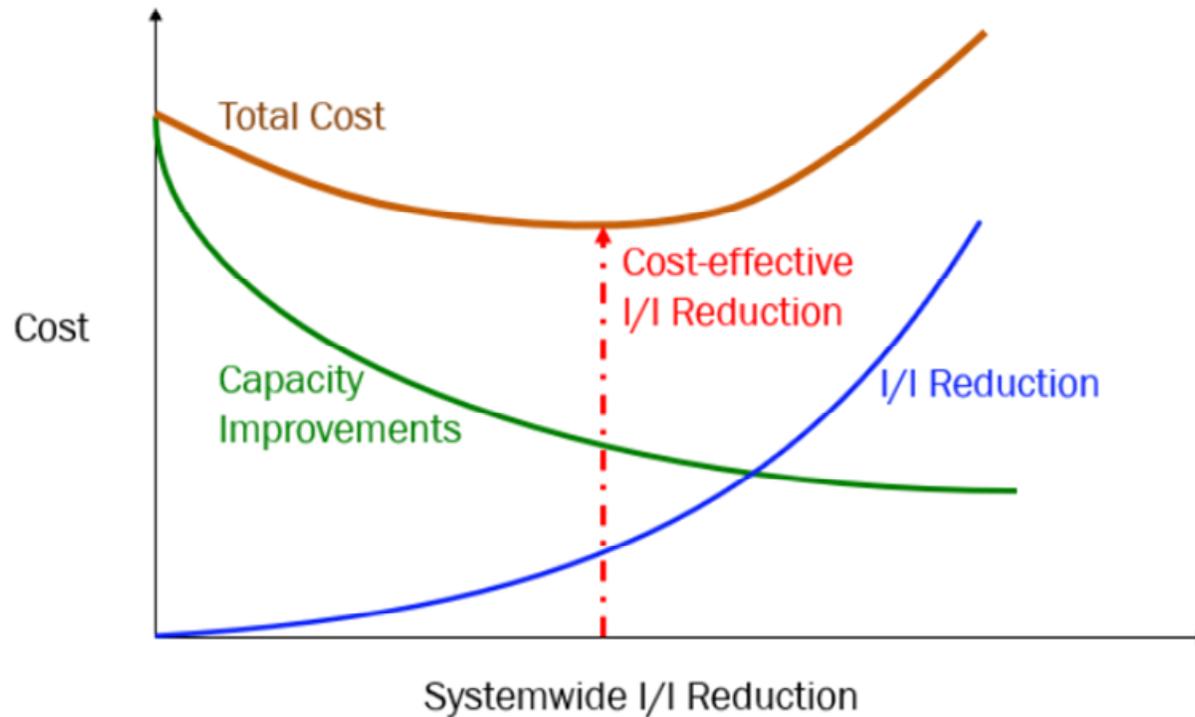
	2023	2024	2025	2026	2027	2028	2029
Task Name	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Program Formation Activities							
Collection Systems Model Update							
Refine I&I Program							
Define Level of Service							
Identify Areas with Excessive I&I							
Capacity and Financial Impact Evaluation							
Regional I&I Program Guidance							
Flow Monitoring Plan							
Financial Support Plan							
Education Materials Development							
Sewer Use Ordinance Change							
Technical Guidance Development							
Subtotal	\$202,000	\$70,000	\$65,000	\$105,000	\$85,000	\$0	\$0
Annual Program Activities							
Municipal Customer Outreach							
District Program Management							
Monitoring Program Implementation							
Technical and Educational Support							
Analysis of I&I Conditions							
Compliance Communication							
Subtotal	\$30,000	\$245,000	\$245,000	\$245,000	\$270,000	\$300,000	\$300,000
Financial Support to Municipal Customers						To be determined	
TOTALS	\$232,000	\$315,000	\$310,000	\$350,000	\$355,000	\$300,000	\$300,000
Notes:							
Estimated costs are based on January 2023 dollars							
Estimated costs are only for external costs; costs for NEW Water staff and municipal customers are not included							

System Wide Financial Impact Evaluation Process



*Planned
completion:
March 2024*

Total Cost Analysis for Given Level of Service



- Build Capacity Solutions
 - Conveyance
 - Storage
 - Treatment
- I/I Reduction
 - What does it cost?
 - What are the expected results?

Next Steps

- Financial Impact Evaluation
- Flow Monitoring Plan
- Upcoming TAC Meetings and Tentative Timing and Topics:
- TAC Meeting #2 (June): Level of Service, Compliance Triggers, and I&I Volume Standard
- TAC Meeting #3 (Sept): Financial Assistance and Financial Impact Evaluation Results
- TAC Meeting #4 (Dec): Flow Monitoring Plan and Proposed Tributary Areas to Flow Meters

