Council of Infrastructure Financing Authorities

2020 SRF Workshop Online Edition

Asset Management

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December 7, 2020
Agenda

Purpose
Provide an overview of the progress of NY's Asset Management Pilot Program (Phase I) for wastewater infrastructure and the proposed approach to the Phase II Pilot.

Outcome
• Familiarity with Asset Management.
• Understanding of NY's planned next steps.
Terminology

What is Asset Management?
Asset management is a tool that municipalities can use to manage current and plan for future infrastructure investment.

What is an asset?
An asset is any component that is necessary for the conveyance or treatment of wastewater.
Phase I
Background
Drivers for Asset Management

- In 2011, NY experienced two extreme weather events: Hurricane Irene and Tropical Storm Lee. Both occurred within 2 weeks of each other with significant impacts in upstate/central NY.

- In 2012, the NY Metropolitan area and Hudson River Valley (~14 million in NY alone) was severely impacted by Superstorm Sandy. Congress appropriated $60B to assist with recovery
Drivers for Asset Management

• 2100 Commission was formed by Governor Cuomo to evaluate vulnerabilities in critical infrastructure, including wastewater, and recommended actions to improve their strength and resiliency against extreme weather events

• Commission recommended the state should assist with the development of asset management plans
Participants Selected for Phase I

- Town of Bethlehem
- Town of Carmel
- Village of Dolgeville
- Village of Greenport
- Village of Honeoye Falls
- Onondaga County
- Village of Vernon
- Washington County
- Village of Westfield
- City of Yonkers
Key Outcomes of Asset Management

- Saves municipalities money
- Reduces rate of non-compliance
- Promotes resilience
- Reduces risk of emergency conditions
- Improves transparency to rate payers
- Supports municipal decision making
- Protects State water grant investments
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Inventory and Risk

Legend:
- Sewer Network Structures
- Sewer Valves

MANHOLE RISK SCORE (1-100)
- 1.00-29.99
- 30.00-59.99
- 60.00-100.00

PRESSURE PIPE RISK SCORE (1-100)
- 1.00-29.99
- 30.00-59.99
- 60.00-100.00

GRAVITY PIPE RISK SCORE (1-100)
- 1.00-29.99
- 30.00-59.99
- 60.00-100.00

1 Inch = 300 Feet
POTW Infrastructure is Expensive!

- City of Yonkers: $867
- Onondaga County: $585
- Town of Bethlehem: $438
- Washington County: $153
- Village of Westfield: $106
- Village of Greenport: $51
- Town of Carmel: $46
- Village of Honeoye Falls: $37
- Village of Vernon: $29
- Village of Dolgeville: $20

Total: $2.3 Billion
Climate Change Affects Planning
Phase II Proposal
Overview and Objectives of Phase II

**Goal:** To build off the success of Phase I and develop engineering expertise, while expanding the number of municipalities with asset management programs (AMPs).
Supporting Tools

IBM Maximo
- Stores all asset information;
- Improves management practices;
- Adds transparency.

AM Guide
- Sets minimum requirements;
- Identifies best practices;
- Includes detailed instructions and supporting “toolboxes.”
IBM Maximo – Asset Information Fields

Asset Information

- Asset: AS1017 – Screw Conveyor
- Process Location: RFHWGRS → Screw Conveyor
- Primary Process: Headworks
- Physical Location: Primary Treatment Building

Asset Costs

- Replacement Cost: $350,000.00
- Current Value: $0.00
- Replacement Cost Index Year: 2017
- Estimation Class: 5

Address Information
Advisor
Request for Proposals (RFP)

- Asset management expert
- Train Firms, manage and track progress
- Review AMP submissions for completeness
- Develop training program for NYS

NYS would be contracting directly with the Advisor.
Engineering Firms Request for Qualifications (RFQ)

- Preselect up to 10 Firms
- Develop AMPs and assist with initial implementation
- One AMP at a time for a total of three
- Submit final materials to the Advisor

NYS would be contracting directly with Firms.
Municipalities Request for Applicants (RFA)

- Maximize the number of participants
- Select up to 30 municipalities
- Prioritize small POTWs (≤1 MGD)
- No monetary cost to municipalities

NYS would be selecting the Municipalities.
Small and Large POTWs

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Legend
Design Flow
- < 0.5 MGD
- 0.5-1.0 MGD
- 1.0-5.0 MGD
- 5.0-20.0 MGD
- >20.0 MGD
- DEC Regional Boundary
Impact of Phase II

- Additional 30 POTWs with AMPs (5% of State)
- An estimated $700M of additional inventoried infrastructure
- Prepared to offer funding prioritization to municipalities with AMPs
- Ten qualified engineering firms ready to advance AMPs across NYS
- Widely available AM training for NYS
- State preparedness to meet Federal SRF requirements
- Guidance vetted by representatives of the engineering community
- Framework for future SPDES permit requirements

NYS can be an Asset Management Trailblazer!
Questions? Suggestions? Ideas?