

Seabrook Stormwater and Wastewater phase I Asset Management

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Hoyle, Tanner
& Associates, Inc.

Agenda

- ▶ Introductions
- ▶ Slide Presentation
 - ▶ Public Works & Utilities
 - ▶ Asset Management Challenges
 - ▶ Seabrook's Asset Management Program



NHDES Asset Management Program

- ▶ Pre application for the SRF June 2016 for \$60,000
- ▶ August 2016 Seabrook make Priority List
- ▶ Warrant Article past by voter March 2017
- ▶ Full application completed June 2017
- ▶ Project started Summer of 2017
- ▶ May 2020 project completed with this presentation



Public Works & Utilities

▶ Elements

- ▶ Water & Sewer Systems
- ▶ Stormwater system
- ▶ Road system
- ▶ Parks & Recreation areas
- ▶ Building & facilities
- ▶ Beach and Boardwalk



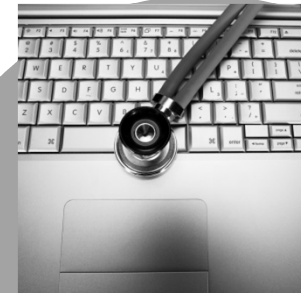
Asset Management Challenges

- ▶ Some of Seabrook's greatest challenges

Update GIS map



Comprehensive preventive maintenance



Comprehensive financial forecasting



Responding and tracking emergency response



Customer service tracking



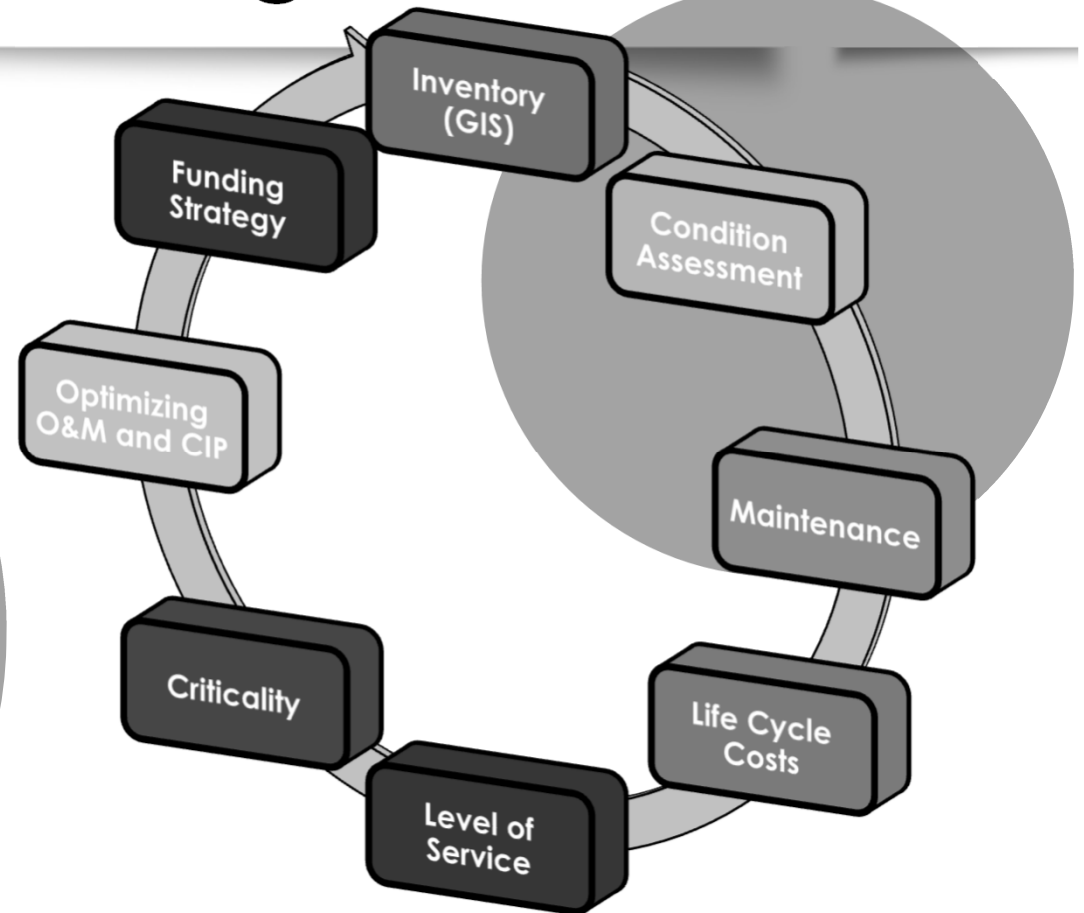
Stormwater & Wastewater Collection Systems

- ▶ Challenges facing Town of Seabrook
 - ▶ What is increasing?
 - ▶ Demand on services
 - ▶ Age of the infrastructure & equipment
 - ▶ Accountability
 - ▶ Unfunded/underfunded mandates
 - ▶ Requirements to be sustainable & resilient
 - ▶ Regulatory requirements



Seabrook Asset Management Program

- ▶ Inventory
- ▶ Maintenance
- ▶ Condition Assessment
- ▶ Criticality
- ▶ Life Cycle Costs
- ▶ Level of Service



Seabrook Inventory



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Inventory

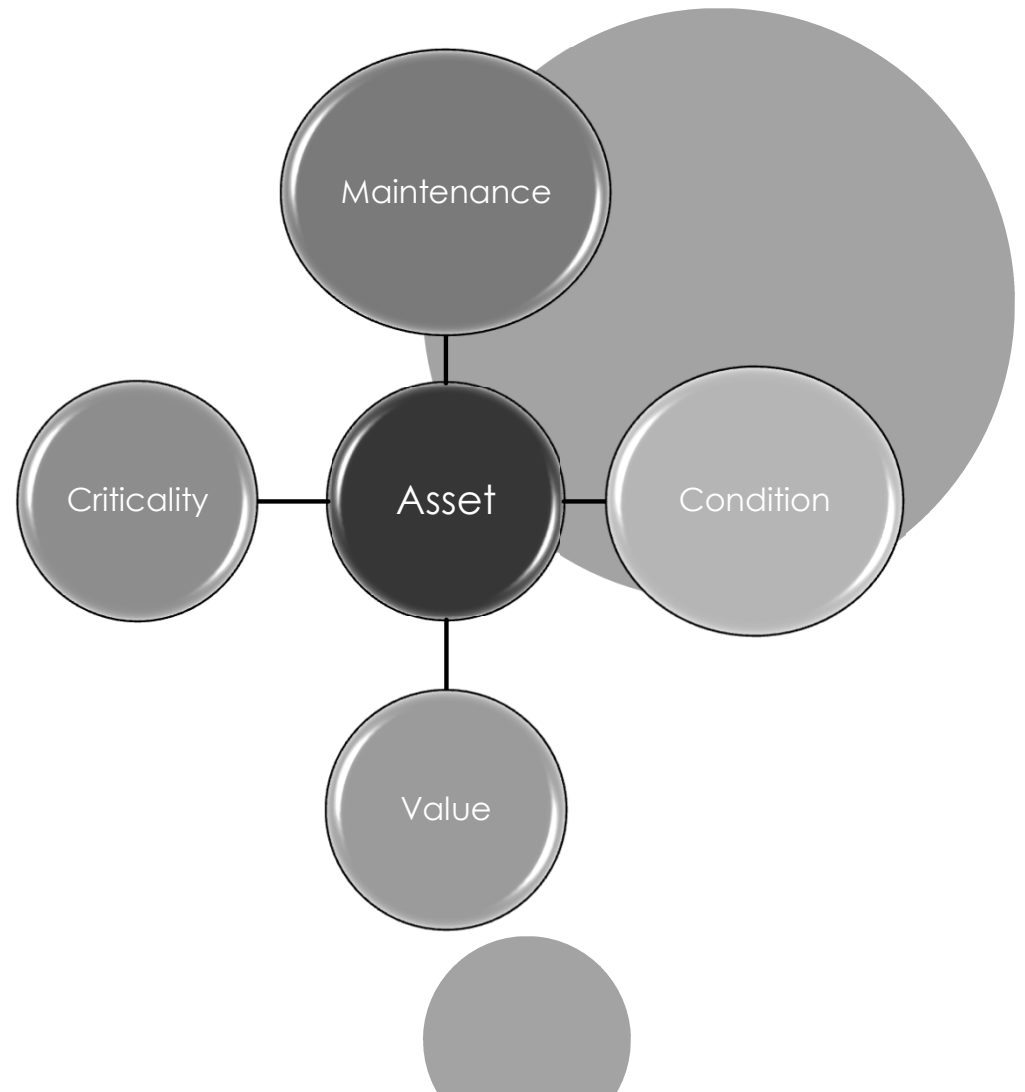
PEOPLE GIS

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Quick Asset

PeopleGIS

- ▶ Asset "Centric"
 - ▶ Data collection during maintenance forms the foundation
 - ▶ Individual asset data collected is analyzed on system-wide scale



Quick Asset

QuickAsset
CB-1183

- + OPEN CB-1183
- + ADD INLET CLEANING
- + ADD INLET INSPECTION
- + GENERATE WORK ORDER
- + CREATE NEW

WOs INSPs DOCs PICs INFO

8/21/2019

Generate Work Orders, Inspections & Update Information in the Field

Attach Pictures & Documents

Location



CB-1183

+ OPEN CB-1183

+ ADD INLET CLEANING

+ ADD INLET INSPECTION

+ GENERATE WORK ORDER

+ CREATE NEW

WOs INSPs DOCs PICs INFO

2019-08-22 swInletCleanings

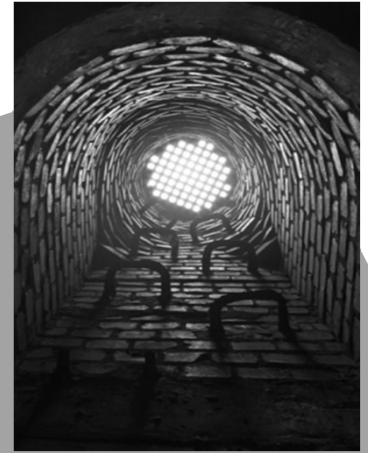
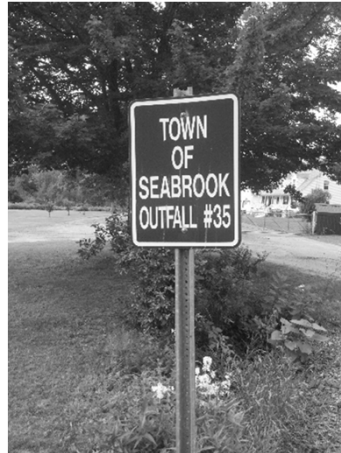
2017-04-17 swInletCleanings

Review Asset History

Asset Data and History

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Asset Management What Do We Want to Achieve.

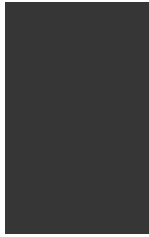
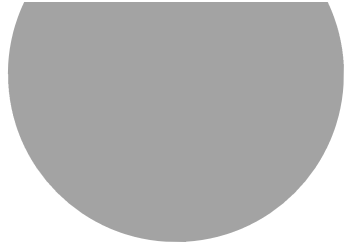


Seabrook NH SMARTER - LEVEL OF SERVICE

		Specific	Measurable	Achievable	Realistic	Time Bound
Goals	Asset Category	Objective	Measure/Units	2019 Benchmark	2020 Target	Units/Time
Customer Service	Stormwater	Public Outreach	# of Public Events held	0	1	Yearly
	Stormwater	Response time to complaints	time to respond		2	hours
	Stormwater	Public Outreach	Update Stormwater Web Site	0	1	Yearly
Operation & Maintenance	Culverts	Inspection	TBA		TBA	
	Catch Basin and Drain Manholes	Clean & Inspect	# of Units cleaned/inspection	1100	1000	Yearly
	Drainage Structures	Repairs of structure based on inspection report	# repairs		N/A	Yearly
	GIS	Maintain and Update the GIS	100% of new drainage	95% current	100% of new and continue updating old	Yearly review
	Clearing catch basin	maintaining critical catch basin clean from snow, leaves and trash	Number of flood street or calls on water in basement		2	Yearly
Inventory	Street Sweeping	Evaluate Sweep Street	Lane Miles	0	N/A	Spring
	Outfall	Dry weather inspection all MS4 outfalls	# of outfalls inspected	all	all MS4 outfalls	Yearly
	Outfall	MS4 IDDE Program Compliance Wet weather inspection	# of outfalls sampled		N/A	Yearly

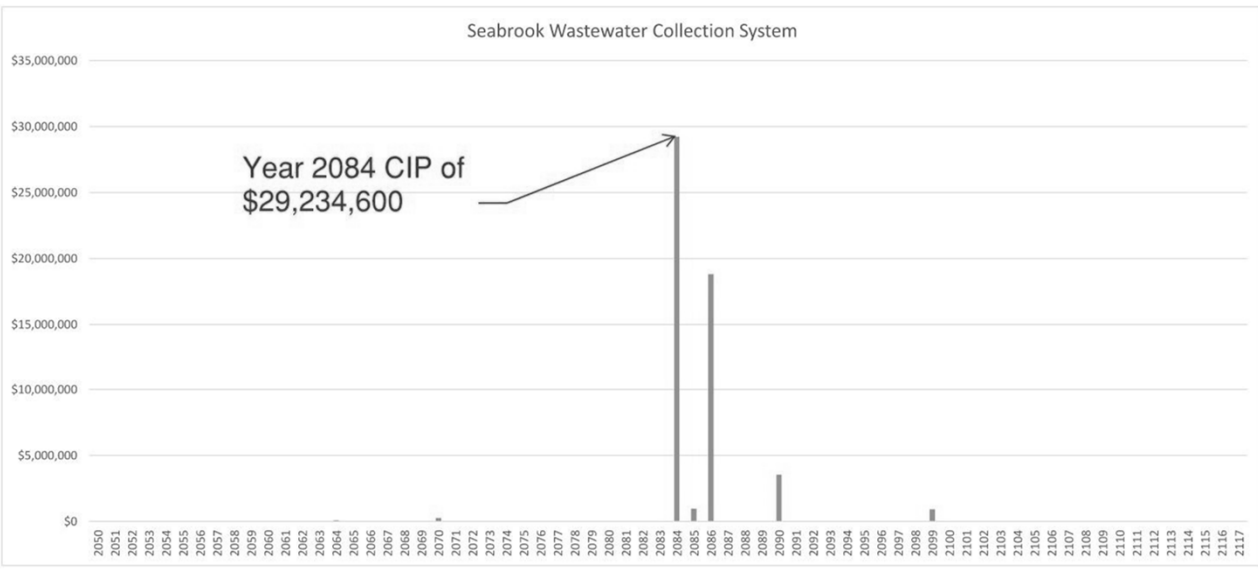
Seabrook “Level of Service”

Why Do Asset Fail.



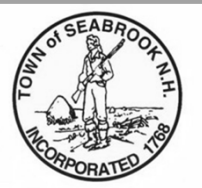
Capital Assets Investment

Seabrook Wastewater Collection System Collection System not including Pump Stations



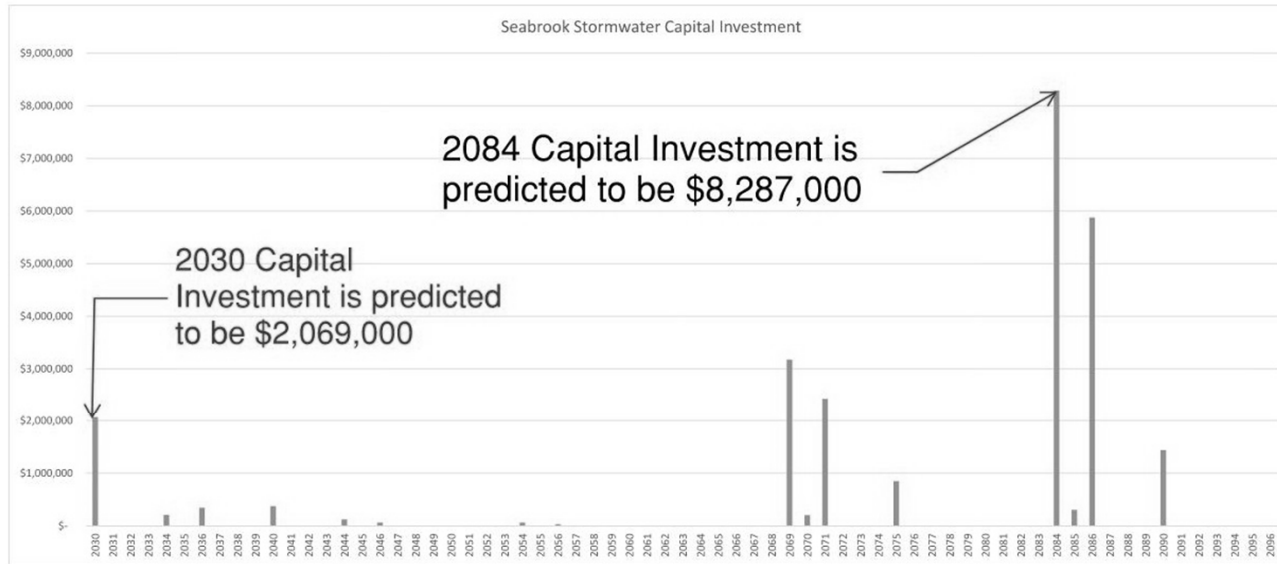
Total Replacement cost of the Collection System
Piping at Present Value is \$53,828,000

Operation and Maintenance cost if using 0.5 percent of the
replacement cost of the system would be \$269,000 per year
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Capital Asset Investment

Seabrook Capital Investment in Stormwater



Estimated value of the Storm-water Collection System is \$26,118,000

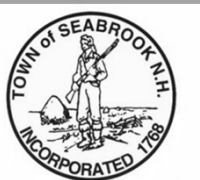
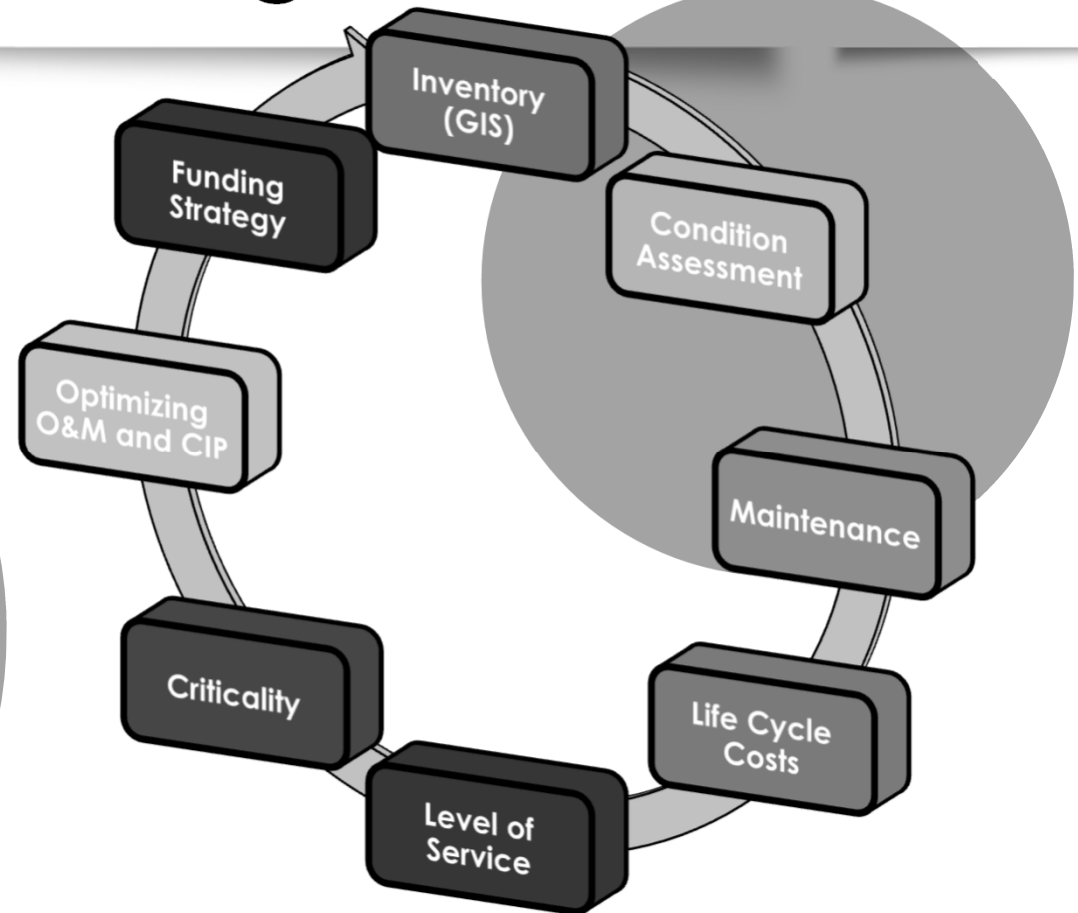
Operations & Maintenance of the Stormwater System using 0.5% of replacement cost would be \$130,600



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Seabrook Asset Management Program

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Questions

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