CITY OF NEWPORT

DEPARTMENT OF UTILITIES

City of Newport, Department of Utilities

Water Division

Before 1876 - Newport's Water Supply Spring and Touro Street Spring or Wells

1876 - George H. Norman starts construction at Easton Pond

1881 - Newport Water Works Company

1882 – 2nd Water System in USA to have Mechanical Filters

1910 – Newport First in New England to Practice Chlorination

1929 - Newport Water Corporation

1936 - City of Newport took over system through eminent domain

1948 – Acquired Nonquit Pond

1967 – Acquired Watson Pond

1991 – Updated Station 1 Treatment Plant Built

1910 Newport RI Water Treatment Plant

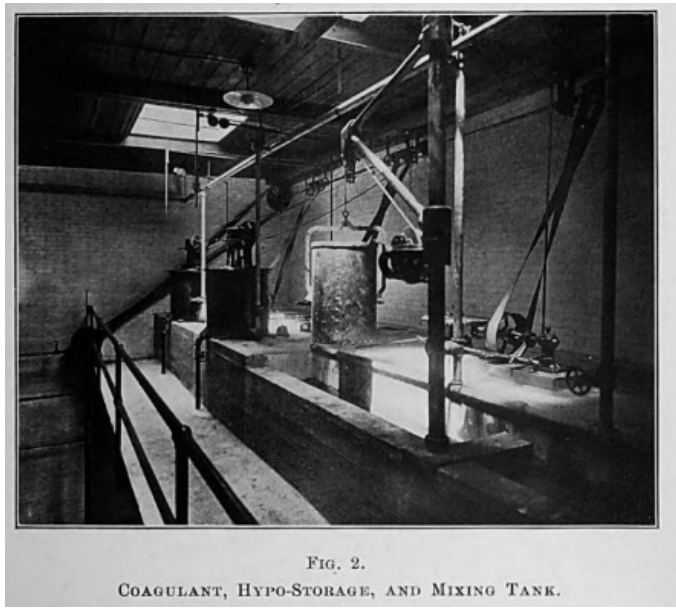


FIG. 2.
COAGULANT, HYPO-STORAGE, AND MIXING TANK.

City of Newport, Department of Utilities

Water Pollution Control Division

Late 1800s and early 1900s - Start of the Modern Combined Wastewater Collection System

1955 - Wastewater Treatment Plant “Imhoff Cone” Technology Provided Primary Treatment

1970s - Sewer Separation Program to reduce CSOs discharging to Newport Harbor

1978 – Wellington Avenue CSO Treatment Facility Constructed

1991 - Upgraded Plant to Secondary Treatment & Washington Street CSO Treatment Facility Constructed

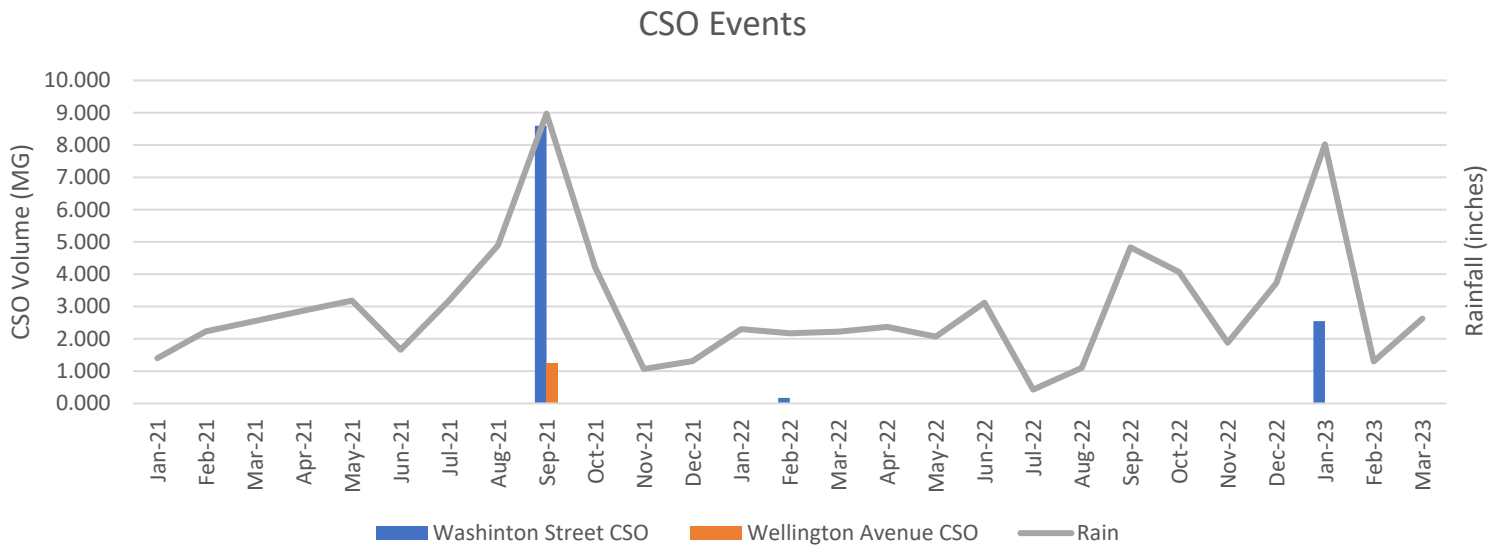
1999 - RIDEM Consent Agreement (RIA-292) CSO Control Program

2002 – Water Quality TRC limit 0.590 mg

2008 – EPA Intervention (Superseded Ongoing RIDEM Consent Agreement Negotiations)

2012 – City Submitted the System-wide Master Plan

2018 - Substantial plant upgrade including the conversion to ultra-violet disinfection



Some of the Rules and Regulations
Applicable to the City of Newport, Department of Utilities

USEPA

- Safe Drinking Water Act (SDWA)
- Clean Water Act

Rhode Island Department of Health (RIDOH)

- Public Drinking Water (216-RICR-50-05-1)
- Drinking Water State Revolving Fund (216-RICR-50-05-6)
- Certification of Public Drinking Water Supply Treatment and Public Water Supply Transmission and Distribution Operators (216-RICR-50-05-5)
- Clean Water Infrastructure Plans (216-RICR-50-05-7)
- Lead Poisoning Prevention (216-RICR-50-15-3)

Public Utilities Commission and Division of Public Utilities and Carriers Rhode Island

Commission

- Title 810 - Public Utilities Commission
- Filing of Annual Reports by Water Carriers (810-RICR-00-00-4)
- Additional Requirements for Filings of General Rate Schedule Changes

Division

- Title 815 - Division of Public Utilities and Carriers
- Rules of Practice and Procedure (815-RICR-00-00-1)
- Standards for Water Utilities (815-RICR-40-00-01)
- Rules and Regulations Governing the Termination of Residential Electric, Gas and Water Utility Service

Department of Environmental Management (RIDEM)

- Water Quality Regulations (250-RICR-150-05-1)
- Rules and Regulations for Dam Safety (250-RICR-130-05-1)
- Rules and Regulations Pertaining to Pesticides and the RIPDES Pesticide General Permit
- Regulations for the Rhode Island Pollutant Discharge Elimination System (250-RICR-150-10-1)
- Rhode Island Pretreatment Regulations (250-RICR-150-10-2)
- Rules and Regulations for Sewage Sludge Management (250-RICR-150-10-3)
- Rules and Regulations for the Operation and Maintenance of Wastewater Treatment Facilities (250-RICR-150-10-4)
- Rules and Regulations for Wastewater Treatment Facility Operators (250-RICR-150-10-5)
- Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (250-RICR-150-5-3)
- General Permit Storm Water Discharge from Small Municipal Separate Storm Sewer Systems - Regulated Small MS4s

Rhode Island General Laws

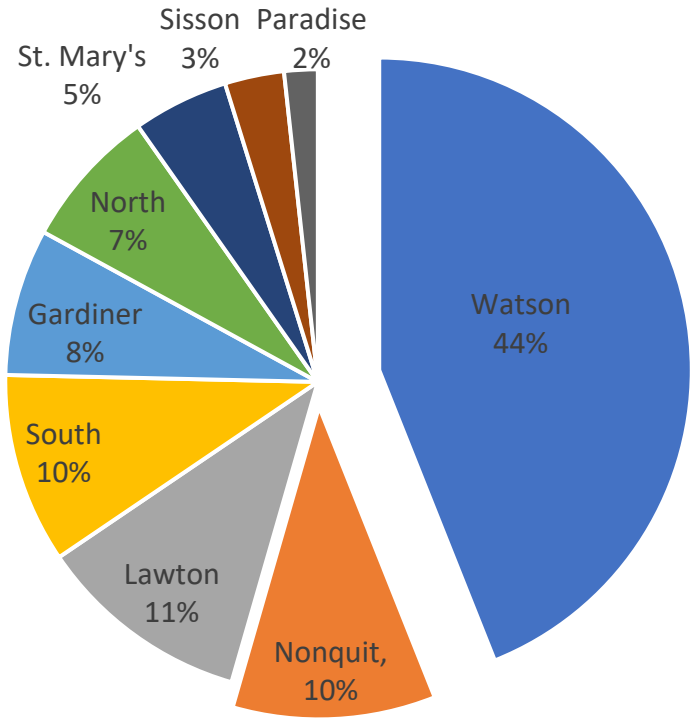
- Dam Emergency Action Plans Section 46-19-9

Coastal Resources Management Council (CRMC)

- Red Book (650-RICR-20-00-1)
- Rules and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast: 650-RICR-20-00-9
- Aquidneck Island Special Area Management Plan Coastal Development Regulations: 650-RICR-20-00-7

Water Division (NWD)

Nine Surface Water NWD Reservoirs 3.8 Billion Gallons



WTP: Lawton Valley (7 MGD) & Station No. 1 (9 MGD)

Five Water Storage Facilities

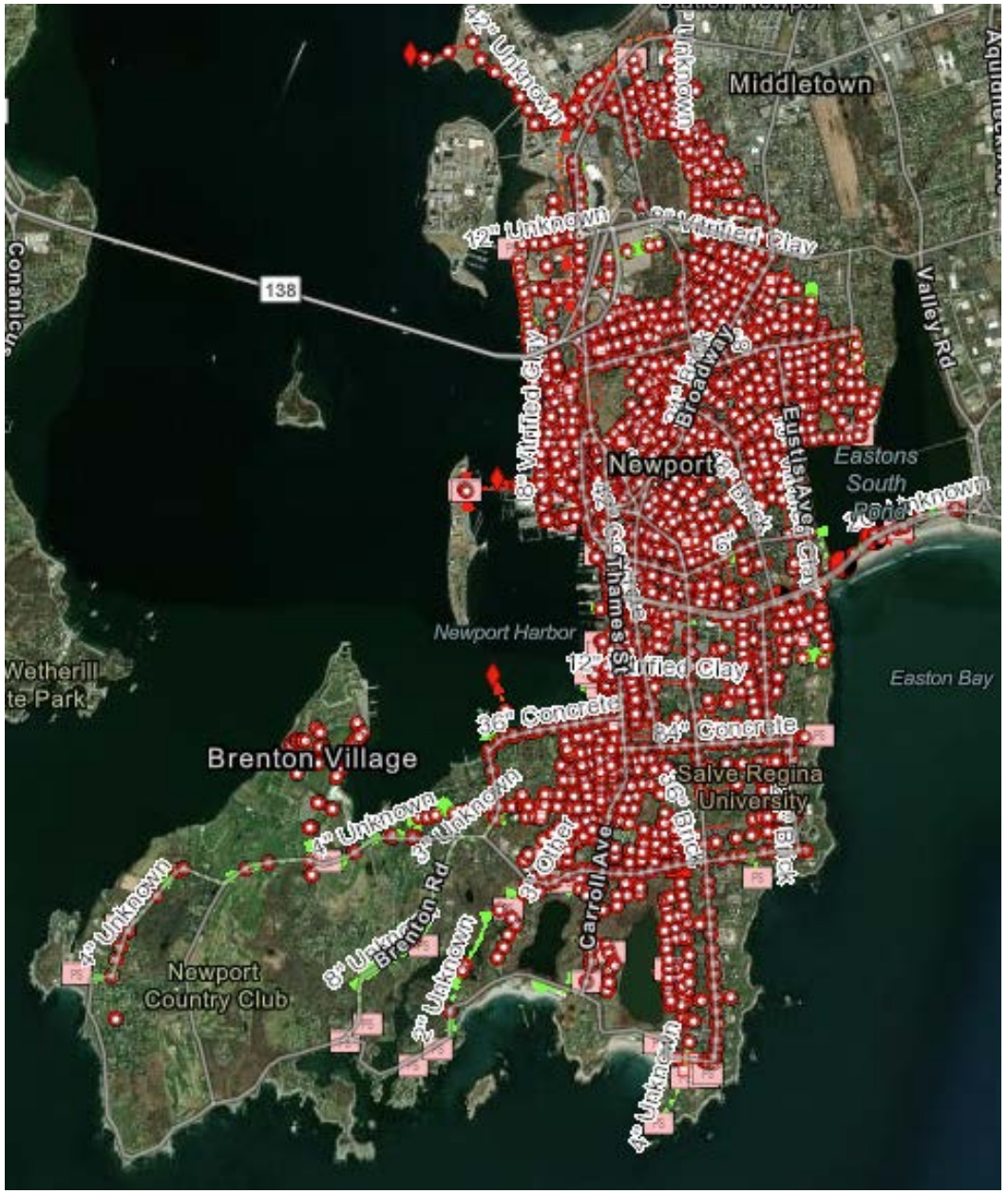
Nine Pump Stations – Five Raw Water & Four Finished Water

200 Miles of Distribution Piping

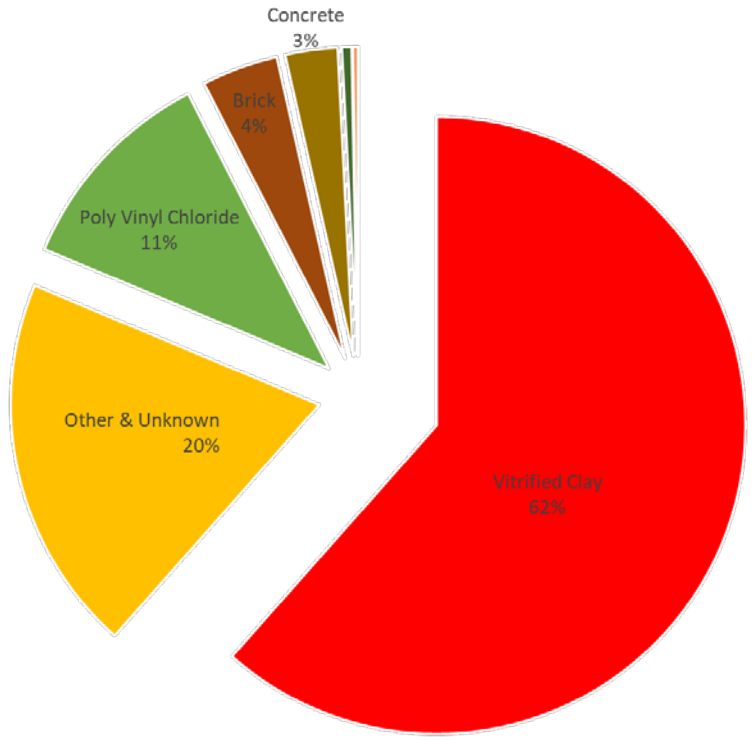
Water Pollution Control Division (WPC)

Sanitary Sewer

- Newport Water Pollution Control Facility (i.e. Wastewater Treatment Plant)
- Washington Street CSO Treatment Facility
- Wellington Avenue CSO Treatment Facility
- 16 Sewage Pump Stations
- 97 miles Sanitary Sewer Mains - Sizes Range From 4-inches to 84-inches
- Over 1,800 Sanitary Sewer Manholes



Gravity Sewer Material & Condition



Water Pollution Control Division (WPC)

Storm Drainage

- 50 miles of Storm Drain - Sizes Range From 8-inches to 72-inches
- Over 1,200 Storm Drain Manholes
- Over 2,500 Catch Basins
- Easton Beach UV Stormwater Treatment System

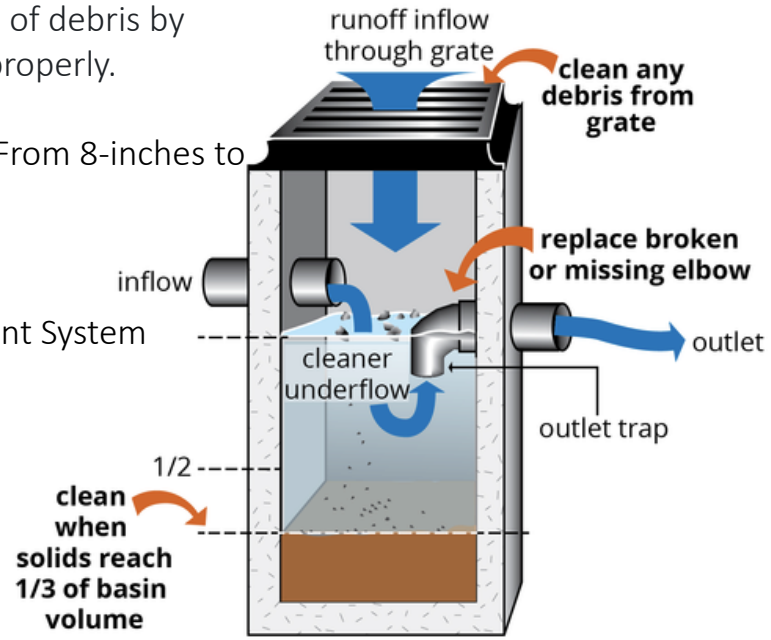
Catch Basin Cleaning

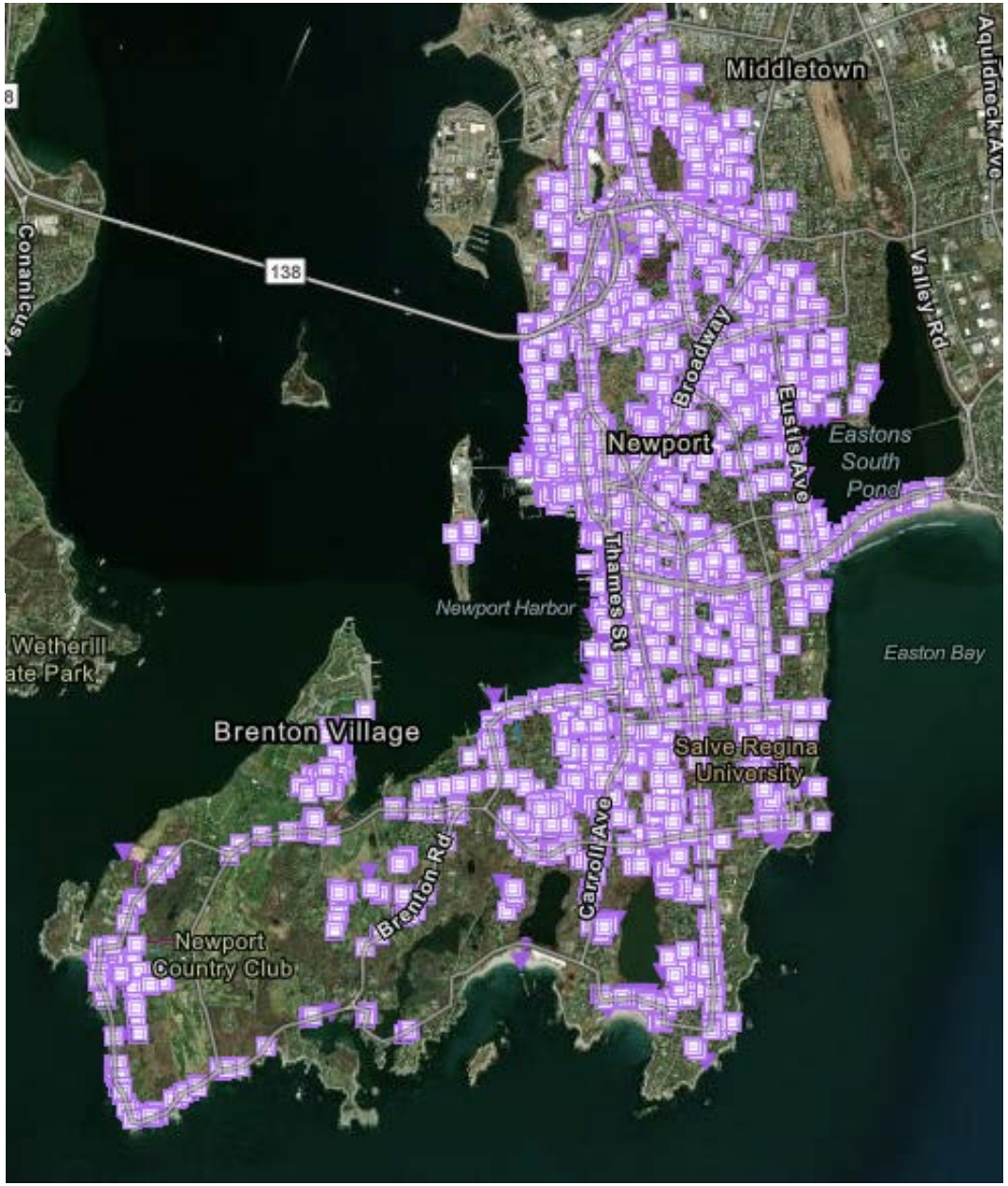
City of Newport

- Inspects every catch basin annually
- Cleaned as Needed

Residents can help keep catch basins clear of debris by disposing of leaves and other yard waste properly.

- 50 miles of Storm Drain - Sizes Range From 8-inches to 72-inches
- Over 1,200 Storm Drain Manholes
- Over 2,500 Catch Basins
- Easton Beach UV Stormwater Treatment System





Business Model

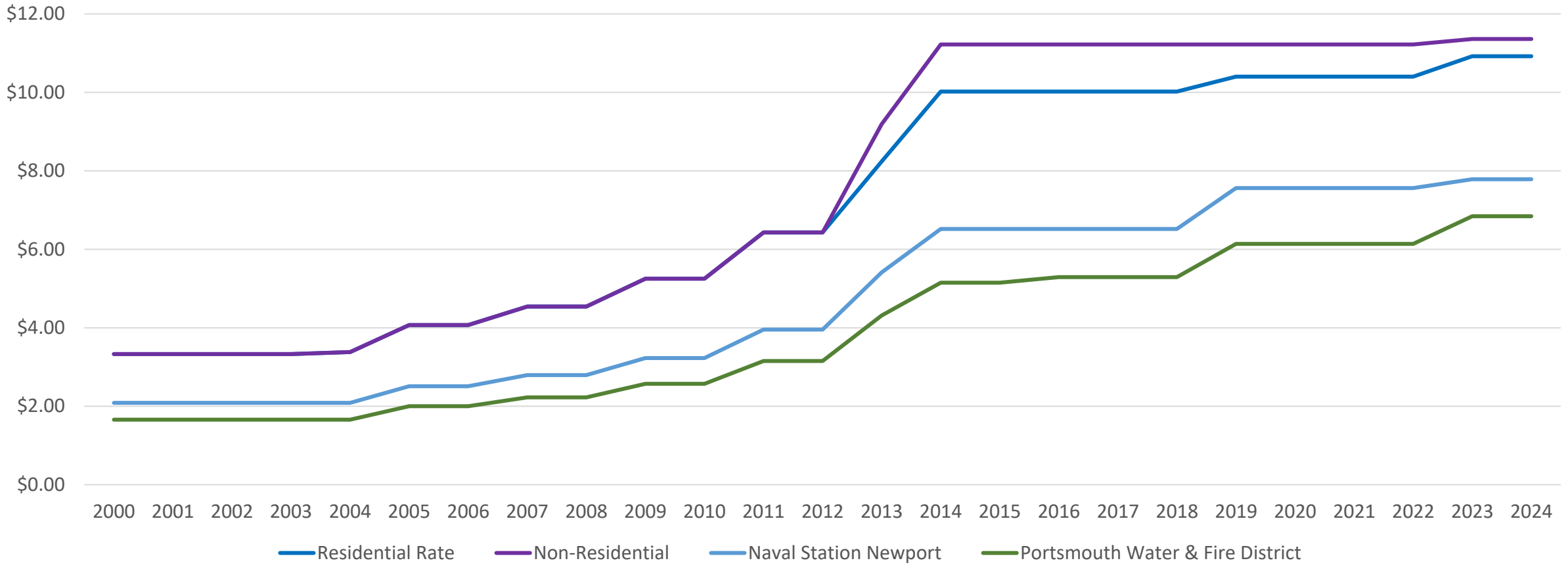
Water Pollution Control

- Enterprise Fund
  - Operates as a "non-profit" for the benefit of Newport's citizens and businesses
  - Receives **NO** financial support from General Fund
    - $400,000 Payment for City Provided Services
    - $350,000 Payment to Water Fund for Water
- Revenues
  - $12,500,000 Sewer Use Charge
  - $2,150,000 CSO Fixed Fee
  - $1,700,000 Sewage Treatment Town of Middletown
  - $1,450,000 Sewage Treatment United States Navy
  - $617,000 Water Utility "Residuals" Sewage Treatment
  - $200,000 Parking Fund Stormwater Fee
  - $50,000 Maritime Fund Stormwater Fee

Drinking Water

- Enterprise Fund
  - Regional Utility - Operates as a "non-profit" for the benefit of **ALL** Customers (Newport, Middletown and Portsmouth)
  - Receives **NO** financial support from General Fund
    - $661,699 Payment for City Provided Services
    - $617,000 Payment to Water Pollution Control Fund "Residuals" Sewage Treatment
- Revenues
  - $11,870,000 Metered Water Sales
    - $10.91 per thousand gallons Residential
    - $11.36 per thousand gallons Non-Residential
  - $4,050,304 Wholesale Water Sales
    - $7.7876 per thousand gallons Wholesale Metered Sales - United States Navy
    - $6.8419 per thousand gallons Wholesale Metered Sales – Portsmouth Water & Fire District
  - $1,956,816 Miscellaneous Fees, Charges and Penalties
  - $1,300,083 Public Fire Protection
    - $1,202.76 Annually per Hydrant
  - $580,972 Private Fire Protection
    - $1,202.76 Annually per

Water Rate History



Proposed Rates FY 2024 – True Cost of Service Rates

- Residential Rate: $10.91 Per 1,000 gallons
- Non- Residential Rate: $11.36 Per 1,000 gallons
- Portsmouth Water & Fire District Rate: $6.8419 Per 1,000 gallons
- Naval Station Newport Rate: $7.7866 Per 1,000 gallons

Drinking Water Fund - Where The Money Comes From

41.3% Residential

12.9% Non-Residential

14.1% Portsmouth Water & Fire Distrcit

7.2% Naval Station Newport

7.5% Fire Protection - Public

7.0% Meter Base Charge

4.6% Other (Rental Income, Reimbursements, Etc.)
3.3% Fire Protection – Private
2.1% Transfers From Restricted Accounts

Drinking Water Fund - Where The Money Goes

35.4% Debt Service

11.1% CIP Projects

12.1% Water Treatment

6.2% Transmission & Distribution

5.1% Chemicals

4.5% Customer Service

4.0% Source of Supply (Reservoirs)

3.9% Electricity

3.6% Administration

3.6% Insurance

3.3% City Services

2.8% Sewer Service Charges

2.6% Property Taxes
1.8% Water Laboratory

Sewer Rate History

Sewer Rates

- No Increase Sewer Use Charge
  - $19.80 per 1000 gallons
  - No Change Since FY 2019
- CSO Fixed Fee No Increase
- IPP Fees No Increase

Stormwater & CSO

- Sewer Rates Fund Stormwater Management
- Sewer Rates Fund Combine Sewer Overflow Management & Projects

Assumptions

- Projected Sewer Use 600,000,000 gallons
- Middletown: New Flow Proportional Contract

Water Pollution Control Fund - Where The Money Comes From

57.5%
Sewer Use Charge

9.9%
CSO Fixed Fee

7.8%
Middletown Sewage Use Fee

6.7%
Navy Sewer Use Fee

7.0%
Use of Net Assets

4.1%
Middletown WPCP Debt Share

2.8%
Water Fund Sewer Usage

1.6% Middletown LWFM Debt Share
0.9% Parking Fund Stormwater Fee
0.8% Disposal Permits
0.6% Pretreatment Fees
0.2% Maritime Fund Stormwater Fee
0.1% Miscellaneous

Water Pollution Control Fund - Where The Money Goes

33.6%
Contract Operations

27.6%
Debt Service

17.2%
CIP Projects

4.5%
Sanitary Sewer

3.8%
Administration

3.8%
Electricity

3.8% Stormwater

2.2% Liability Insurance

1.8% City Services

1.7% Water

Affordability of Water Stormwater and Wastewater Services

RI Infrastructure Bank Affordability Criteria

- Affordability Index = Median Household Income x Employment Rate x Population Ratio
    - Newport's Affordability Index 96% - Tier 3
        - 0% Anticipated Principal Forgiveness
        - Funding Possible Only if No Projects Remain in Tier 1 and Tier 2

EPA's Financial Capability Assessment (FCA) Guidance

- Average water and sewer bills as a percentage of median household income (%MHI) with a combined value less than 4.0 or 4.5 designated as "affordable."
- Often erroneously cited as a U.S. Environmental Protection Agency (USEPA) standard for household affordability, the guidelines as developed were intended to measure community-level *financial capability* for purposes of negotiating regulatory compliance
- 2019 Assessment indicates that there is currently a medium burden on the City and its residents
    - 46% of the City's customers, pay sewer bills in excess of the 2% household income threshold
    - 23% percent of the City's customers, pay sewer bills that exceed 5% household income

EPA's Financial Capability Assessment (FCA) Guidance Updated February 2023

- Currently updating our FCA
- 2019 -2023 will contribute to a worsening affordability
- Even with update true impact on low-income households may not be fully considered

NO Proposed Rate Changes

Residential Customer 4,100 Gallons Per Month
Efficient Water Customer 45 GPD

Customer Base Charge		= $6.01
Water Charges	4,100 x $10.91/1,000 G	= $44.73
WQP Charge	4,100 x $.0292/100 G	= $1.20
Monthly Water Bill		**= $51.94**
Sewer Charge	4,100 x $19.80/1,000 G	= $81.18
CSO Fixed Fee Charge		= $16.00
Monthly Sewer Bill		**= $97.18**
Monthly Bill Total		**= $149.12**

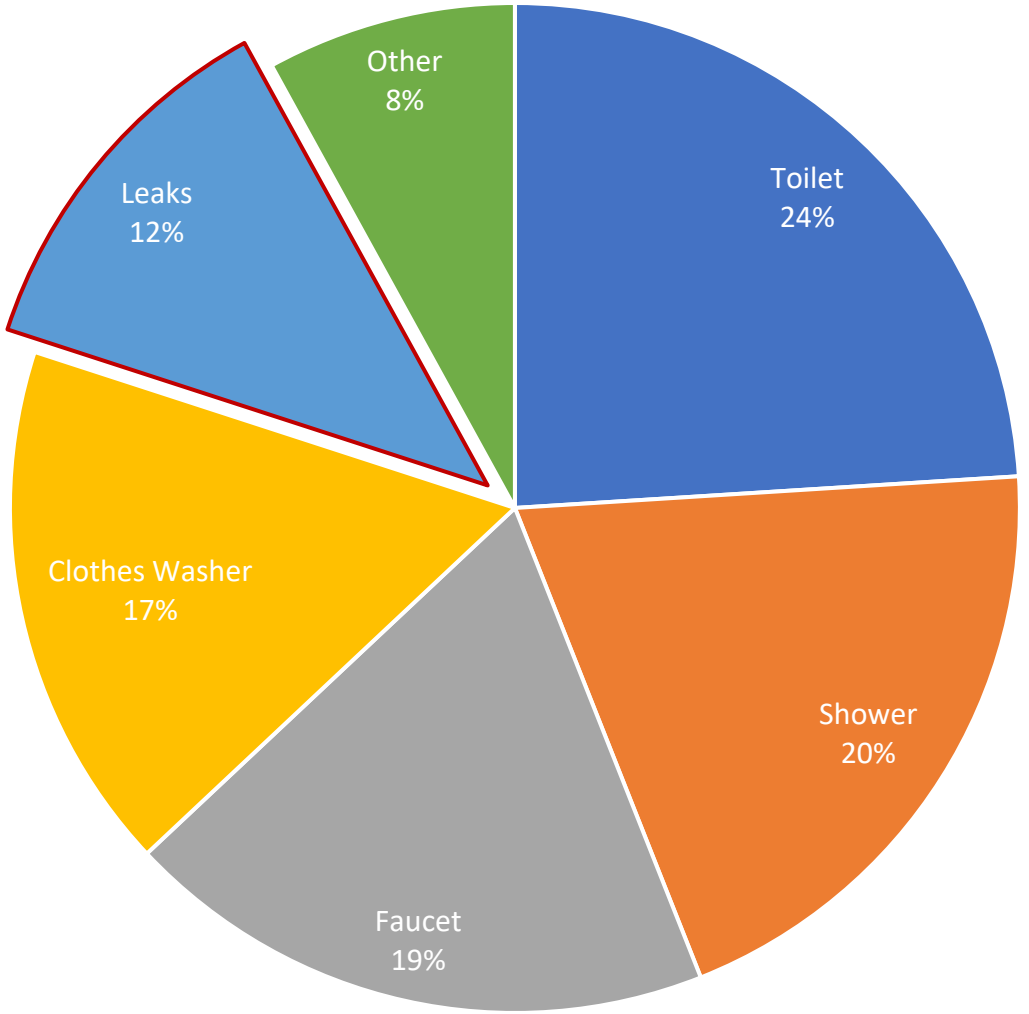
Yearly Water Bill = $623.28
Yearly Sewer Bill = $1,166.16
Yearly Total = $1,789.44

Residential Customer 7,700 Gallons Per Month
Average Water Customer 85 GPD

Customer Base Charge		= $6.01
Water Charges	7,700 x $10.91/1,000 G	= $84.01
WQP Charge	7,700 x $.0292/100 G	= $2.25
Monthly Water Bill		**= $92.27**
Sewer Charge	7,700 x $19.80/1,000 G	= $152.46
CSO Fixed Fee Charge		= $16.00
Monthly Sewer Bill		**= $168.46**
Monthly Bill Total		= $260.73

Yearly Water Bill = $1,107.24
Yearly Sewer Bill = $2,021.52
Yearly Total = $3,128.76

Residential Water Use



Newport has an Infrastructure Gap

ASCE - Rhode Island Infrastructure Grades

- Drinking Water C+, $833 million drinking water investment gap
- Wastewater C, EPAestimated$1.8billion in funding will be required

City of Newport - Underfunded or not Currently Funded (Today's Dollars)

- Drinking Water Underground Infrastructure (Pipes): $375,000,000 ($12.5 million/Year 30 Years)
- WPC Underground Infrastructure (Pipes): $360,000,000 ($12 million/Year 30 Years)
    - Wastewater Underground Infrastructure (Pipes): $250,000,000 ($8.4 million/Year 30 Years)
    - Stormwater Underground Infrastructure (Pipes): $110,000,000 ($3.6 million/Year 30 Years)
- North and South Easton Pond Dam $20,000,000 to $40,000,000
- Drinking Water Resiliency and Redundancy $12,500,000
- North End Stormwater, Flood Mitigation, and Resiliency: $50,000,000
- Lead and Copper Rule: $9,375,000 - $18,750,000
    - Proposed Lead Poisoning Prevention Act, Adds Private Service Replacement to Water Utility $25,000,000 to $35,000,000
- Almy Pond Restoration $30,000,000

Emerging Contaminants and Unknown Regulatory Standards

- Per- and Polyfluoroalkyl substances – known as PFAS: **UNKNOWN FISCAL IMPACT**

Water Distribution Supply Mains

Underground Infrastructure

Water Main Time Period & Useful Life

- 1800's – 1920's Iron
  - Typical Useful Life 100 years
- 1800's - 1960's Cast Iron
  - Typical Useful Life 65 years – Unlined
  - Typical Useful Life 120 years – Cement Lined
- 1940's -1970's Reinforced Concrete
  - Typical Useful Life 50 Years
- 1970's – Today Ductile Iron
  - Typical Useful Life 100 years
- 1990's – Today PVC
  - Typical Useful Life 75+ years

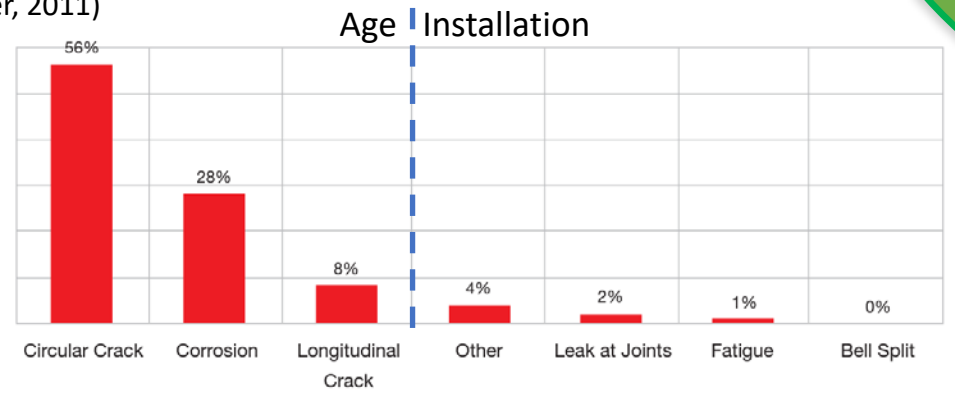
Water Main Failure Rates

- US Failure Rate 25-30 Per 100 Miles/ Year
  - (Grigg, 2007; Deb et al., 2002)
- AWWA Fully Optimized System Failure Rate 15 Per 100 Miles/ Year
  - (AWWA Partnership for Safe Water, 2011)

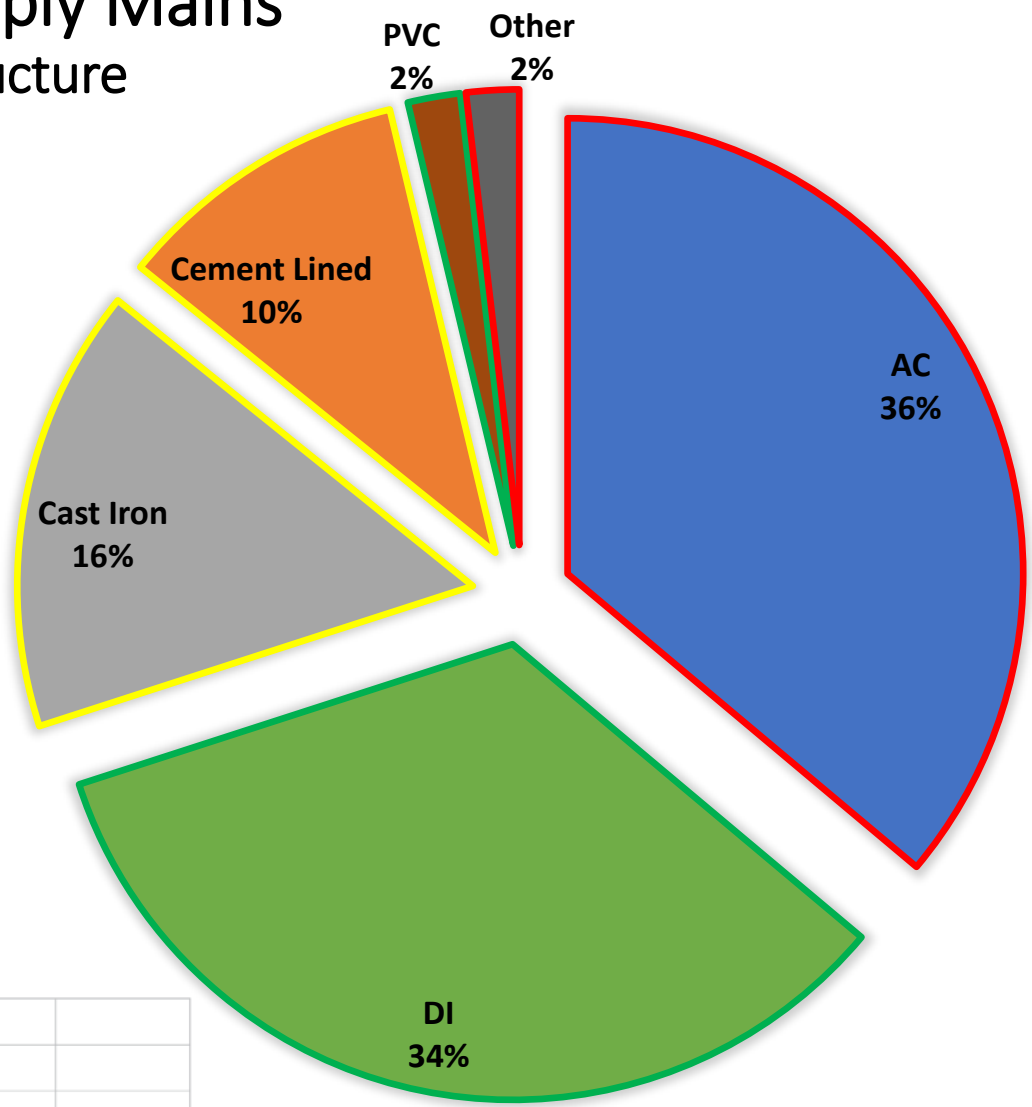
Failure versus Age

Reinforced Concrete Failures

- Installed 1960's - 60%
- Installed 1970's - 28%
- Installed 1980's - 12%

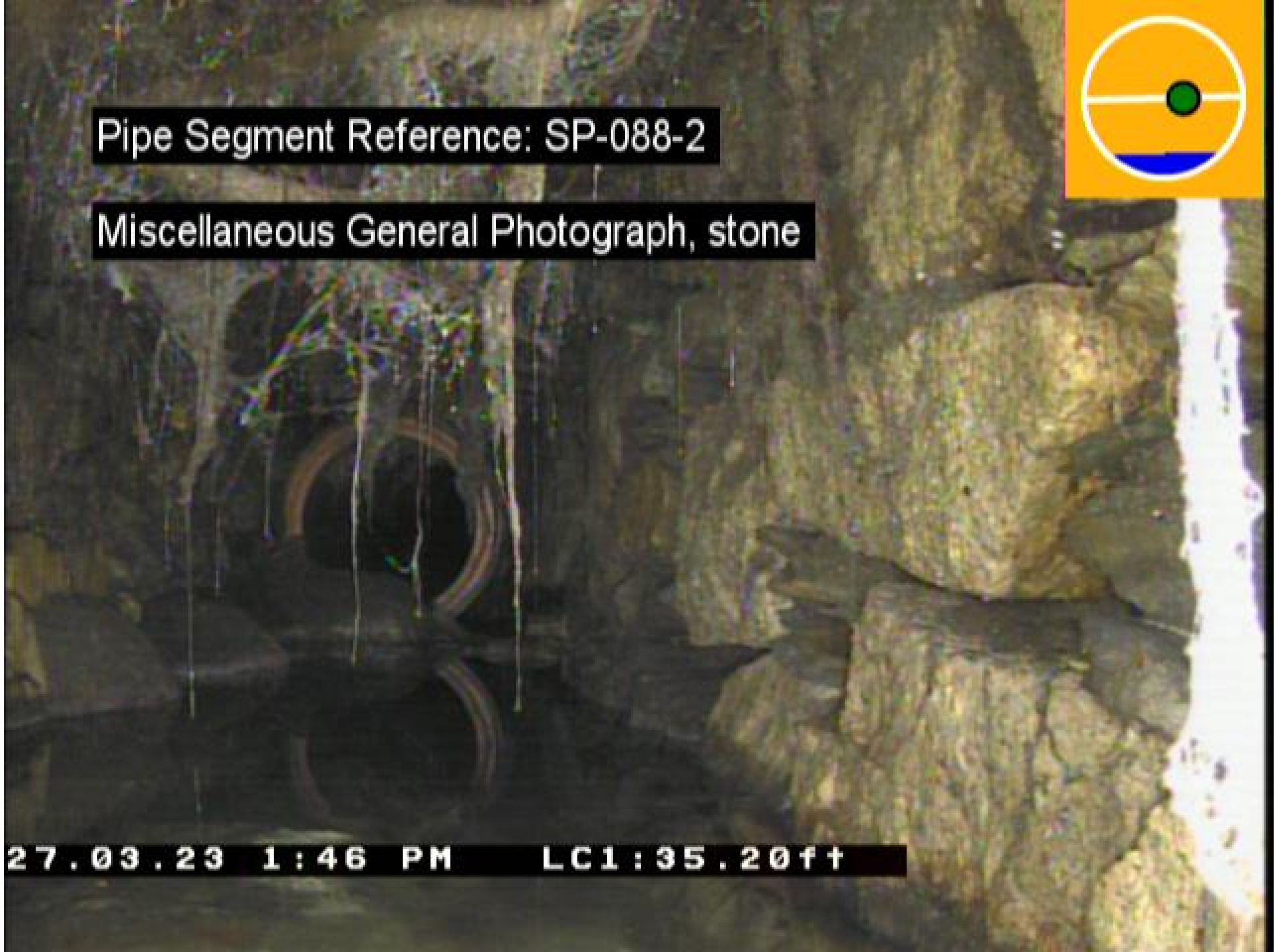


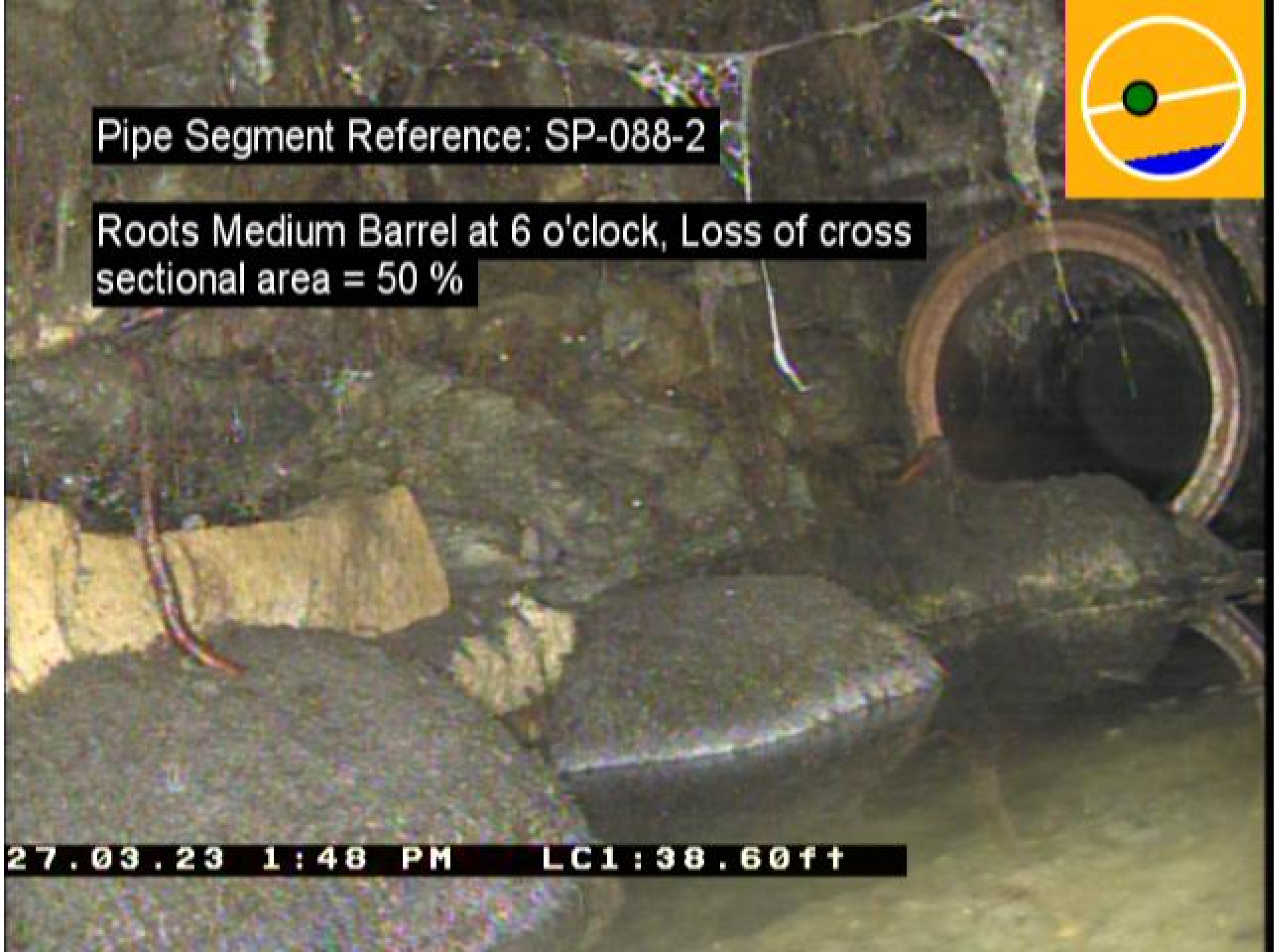
Common Failure Mode




Pipe Segment Reference: SP-088-2
Miscellaneous Material Change, Clay -PVC, Repair
27.03.23 11:21 AM LC1:25.70ft


Pipe Segment Reference: SP-088-2
Miscellaneous Material Change, Brick -Stone
27.03.23 1:42 PM LC1:28.90ft


Pipe Segment Reference: SP-088-2
Miscellaneous General Photograph, stone
27.03.23 1:46 PM LC1:35.20ft


Pipe Segment Reference: SP-088-2
Roots Medium Barrel at 6 o'clock, Loss of cross sectional area = 50 %
27.03.23 1:48 PM LC1:38.60ft


USMH: SMH-034-13
DSMH: SMH-034-17
Water Level
0000.0 F


Pipe Segment Reference :sp-060-1183
21.07.22 2:03 PM LC1:22.50ft


Pipe Segment Reference :sp-065-1289
18.08.22 1:44 PM LC1:99.60ft


Pipe Segment Reference :sp-065-1289
18.08.22 1:48 PM LC1:146.10ft


Pipe Segment Reference: SP-102-650
Miscellaneous Material Change, clay to PVC
16.02.23 1:46 PM LC1:216.80ft

Water Fund Current Recommend Capital Improvement Schedule

Water Project Title	Funding Source	Proposed FY 24	Proposed FY 25	Proposed FY 26	Proposed FY 27	Proposed FY 28	Total
Meter Replacement Program	Rates	$100,000	$125,000	$150,000	$175,000	$200,000	$950,000
Dam Rehabilitation	Rates	$850,000	$750,000	$250,000	$250,000	$400,000	$3,250,000
Water Trench Restoration	Rates	$200,000	$200,000	$225,000	$250,000	$275,000	$1,450,000
System Wide Main Improvements	Rates	$200,000	$200,000	$200,000	$500,000	$1,100,000	$2,700,000
Water Infrastructure Resilience Projects	Rates		$250,000	$750,000			
Fire Hydrant Replacement	Rates	$125,000	$150,000	$175,000	$200,000	$200,000	$1,050,000
Pump Station SCADA Project	Rates	-	-	-		$100,000	$350,000
IRP 5 Year Update	Rates	-	$100,000	-	-	-	$100,000
Reservoir Road 3MG Tank	Rates	$1,600,500	-	-	-	-	$1,600,500
Forest Ave Pump Station	Rates	$200,000	$100,000	$350,000	$850,000	-	$1,500,000
GIS Update	Rates	$100,000	-	-	-	-	$100,000
Accounting/Billing System (Share)	Rates	$126,500	$126,500	$126,500	-	-	$379,500
WSSMP 5 Year Update	Rates	-	$100,000	-	-	-	$100,000
Equipment Replacement-Water	Rates	$175,000	$400,000	$250,000	$250,000	$250,000	$1,575,000
System Wide Main Improvements	SRF	$500,000	$2,500,000	$250,000	-	-	$3,250,000
Total Water Projects		**$4,177,000**	**$5,001,500**	**$2,726,500**	**$2,475,000**	**$2,525,000**	**$18,355,000**

Capital Improvement Schedule
Some of the Underfunded or not Currently Funded Projects

Water Project Title	Funding Source	Proposed FY 24	Proposed FY 25	Proposed FY 26	Proposed FY 27	Proposed FY 28	Total
Dam Rehabilitation	Rates	$7,150,000	$7,250,000	$7,750,000	$7,750,000	$7,600,000	$37,500,000
System Wide Main Improvements	Rates	$12,300,000	$12,300,000	$12,300,000	$12,000,000	$11,400,000	$60,300,000
Water Infrastructure Resilience Projects	Rates	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$2,500,000	$11,500,00
Lead Copper Rule	Rates	$5,375,000	$5,375,000	$5,375,000	$5,375,000	$5,375,000	$26,875,000
Total Water Projects		**$27,325,000**	**$27,175,000**	**$27,175,000**	**$27,625,000**	**$2,26,875,000**	**$136,175,000**

Water Pollution Control Fund
Current Recommend Capital Improvement Schedule

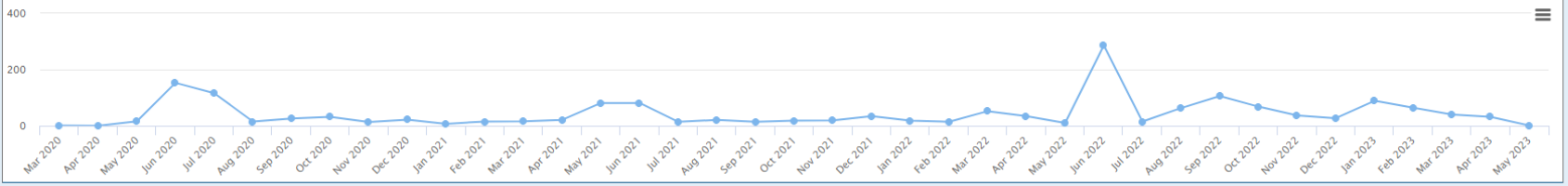
Water Pollution Control Project Title	Funding Source	Proposed FY 24	Proposed FY 25	Proposed FY 26	Proposed FY 27	Proposed FY 28	Total
Catch Basin Separation	CSO Fixed Fee	$100,000	$500,000	$100,000	$100,000	$100,000	$900,000
Storm Drain Improvements	CSO Fixed Fee	$500,000	$750,000	$750,000	$1,000,000	$500,000	$3,500,000
CSO System Master Plan Implementation	CSO Fixed Fee	$500,000	$500,000	$500,000	$500,000	$500,000	$2,500,000
Sewer Inflow & Infiltration Removal	CSO Fixed Fee	$500,000	$500,000	$500,000	$500,000	$500,000	$2,500,000
Flood Mitigation	WPC Rates	$500,000	$275,000	$350,000	$250,000	$500,000	$1,875,000
Sanitary Sewer Improvements	WPC Rates	$900,000	$750,000	$1,000,000	$825,000	$1,050,000	$4,525,000
WPC Trench restoration	WPC Rates	$200,000	$225,000	$250,000	$275,000	$300,000	$1,250,000
Equipment Replacement	WPC Rates	$550,000	$250,000	$300,000	$300,000	$300,000	$1,700,000
Total WPC Projects		**$3,750,000**	**$3,750,000**	**$3,750,000**	**$3,750,000**	**$3,750,000**	**$18,750,000**

Capital Improvement Schedule
Some of the Underfunded or not Currently Funded Projects

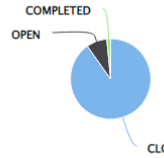
Water Pollution Control Project Title	Funding Source	Proposed FY 24	Proposed FY 25	Proposed FY 26	Proposed FY 27	Proposed FY 28	Total
Storm Drain Improvements	CSO Fixed Fee	$3,100,000	$2,850,000	$2,850,000	$2,600,000	$3,100,000	$14,500,000
Almy Pond Restoration	WPC Rates	$6,000,000	$6,000,000	$6,000,000	$6,000,000	$6,000,000	$30,000,000
Flood Mitigation	WPC Rates	$9,500,000	$9,725,000	$9,650,000	$9,750,000	$9,500,000	$48,125,000
Sanitary Sewer Improvements	WPC Rates	$7,500,000	$7,650,000	$7,400,000	$7,575,000	$7,350,000	$37,475,000
Total		**$26,100,000**	**$26,225,000**	**$25,900,000**	**$25,925,000**	**$25,950,000**	**$130,100,000**

ASSET LIFECYCLE MANAGEMENT

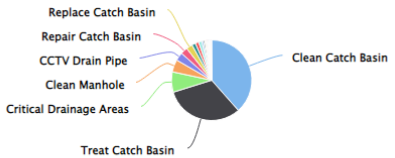
Stormwater - Work Orders Created Per Month



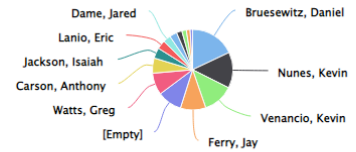
Stormwater - Work Order Status



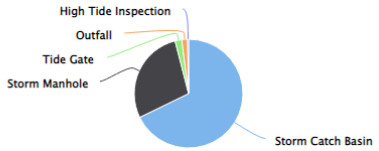
Stormwater - Work Order Type



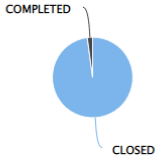
Stormwater - Work Order - Completed By



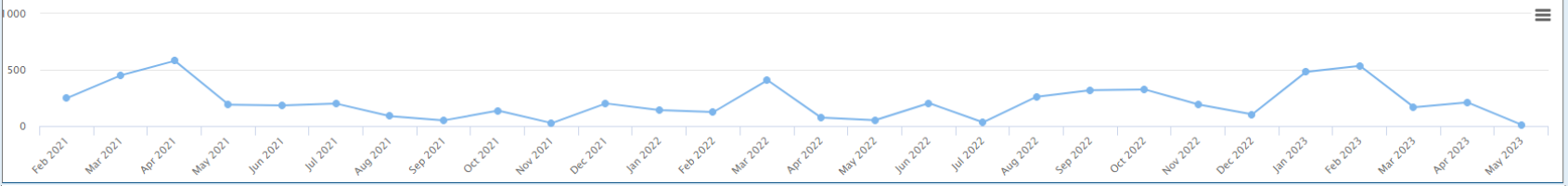
Stormwater - Inspection Type



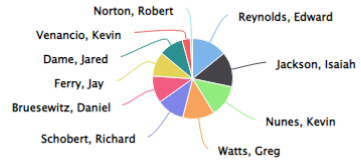
Stormwater - Inspection Status



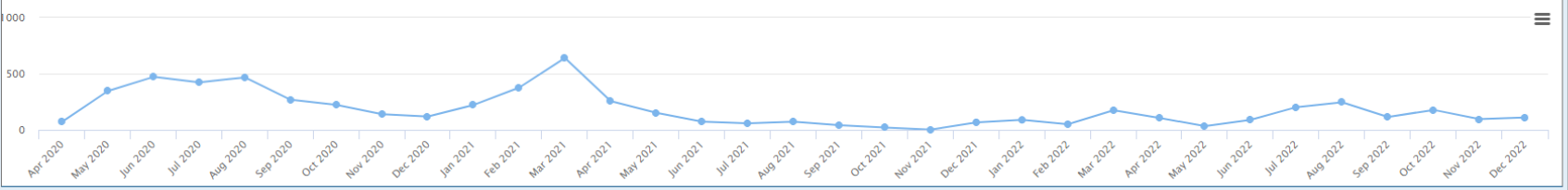
Stormwater - Inspection Created Per Month



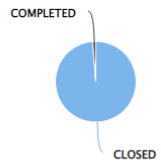
Stormwater - Inspection - Inspected By



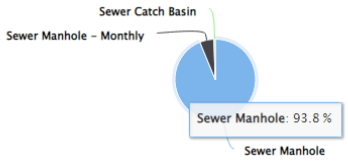
Sanitary - Inspection Created Per Month



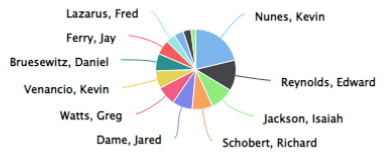
Sanitary - Inspection Status



Sanitary - Inspection Type



Sanitary - Inspection - Inspected By



WPC - Total WO Cost

$87,802.06

USD

WPC - Total WOs with Cost

104

WOs

WPC - Total Equipment Cost

$27,135.45

USD

WPC - Total Labor Cost

$30,392.62

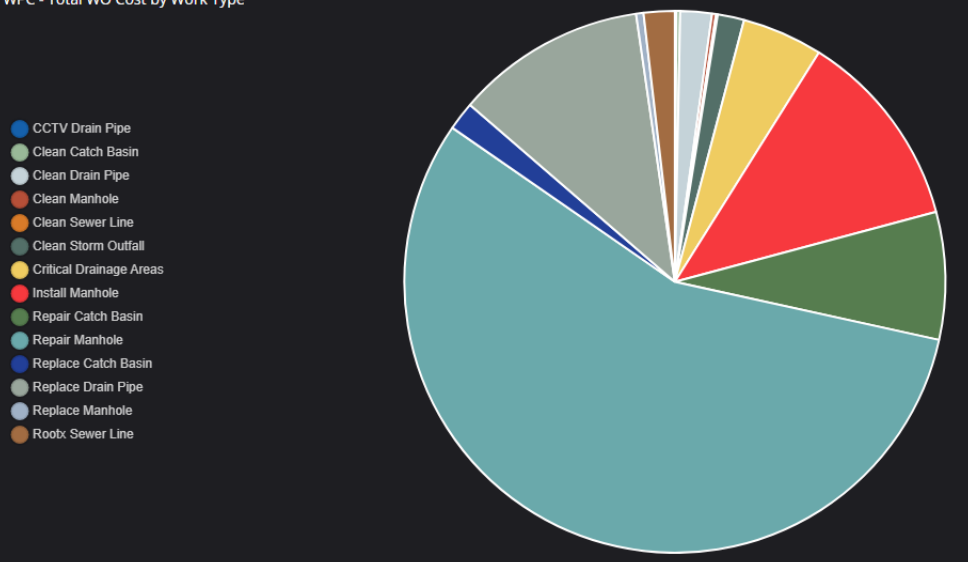
USD

WPC - Total Material Cost

$30,274.00

USD

WPC - Total WO Cost by Work Type



Work Order #: 8261 **Status:** COMPLETED

Repair Catch Basin

MILL ST

Location Details: CB-079-52

Completed By: Venancio, Kevin **Resolution:** Repaired

Date Initiated: 4/19/2023 2:15:54PM **Actual Finish Date:** 4/20/2023 3:00:00PM

Total Equipment Cost: 648.00 **Total Material Cost:** $501.21

Total Labor Cost: $848.88 **Total WO Cost:** $1,998.09

Instructions: Remove broken concrete pad. Repair bricks that need it and line the inside of the structure. Install new concrete pad with storm cover and a new curb inlet.

Assets: STORM CATCH BASIN CB-079-52

Comments: Removed old loose material, replaced with new pad . Repaired inlet

Material Details:

Description	Units	Cost
24" NEWPORT LOGO DRAIN COVER	1.00	$243.00
4' X 4' SIDEWALK PANEL WITH 24" FRAME	1.00	$225.00
High Early Strength Concrete Mix 80 lb.	1.00	$7.48
PARSON MH LINER 50 lb.	2.00	$0.00
Red Bricks	15.00	$16.05
TYPE S MASON MIX MORTAR 80 lb.	1.00	$9.68

Labor Details:

Employee	Hours	Cost
Kinsella, Zachary	8.00	$168.72
Lanio, Eric	8.00	$168.72
Schobert, Richard	8.00	$281.04
Venancio, Kevin	8.00	$230.40

Equipment Details:

Description	Hours	Cost
2500HD 4WD Pick-Up	8.00	$168.00
4WD Pick-Up	8.00	$160.00
Air Compressor	8.00	$80.00
John Deere Back Hoe	8.00	$240.00

Related Work Activities:	InspectionID:	Description:	Status:
	18537	Storm Catch Basin	CLOSED

Work Order #: 8260 **Status:** COMPLETED

Repair Catch Basin

MILL ST

Location Details: CB-079-135

Completed By: Venancio, Kevin **Resolution:** Repaired

Date Initiated: 4/19/2023 12:47:16PM **Actual Finish Date:** 4/19/2023 12:15:00PM

Total Equipment Cost: 378.00 **Total Material Cost:** $29.99

Total Labor Cost: $318.33 **Total WO Cost:** $726.32

Instructions: Repair bricks under frame and grate

Assets: STORM CATCH BASIN CB-079-135

Comments: Replaced bricks and and brought CB frame and grate to grade

Material Details:

Description	Units	Cost
High Early Strength Concrete Mix 80 lb.	2.00	$14.96
Red Bricks	5.00	$5.35
TYPE S MASON MIX MORTAR 80 lb.	1.00	$9.68

Labor Details:

Employee	Hours	Cost
Kinsella, Zachary	3.00	$63.27
Lanio, Eric	3.00	$63.27
Schobert, Richard	3.00	$105.39
Venancio, Kevin	3.00	$86.40

Equipment Details:

Description	Hours	Cost
2500HD 4WD Pick-Up	3.00	$63.00
Dump Truck	3.00	$225.00
John Deere Back Hoe	3.00	$90.00

Related Work Activities:	InspectionID:	Description:	Status:
	18536	Storm Catch Basin	COMPLETED
	Work Order:	Description:	Status:

Work Order #: 8228 **Status:** COMPLETED

Repair Manhole

FRIENDSHIP ST

Location Details: DMH-052-72

Completed By: Bruesewitz, Daniel **Resolution:** Repaired

Date Initiated: 4/12/2023 7:01:24AM **Actual Finish Date:** 4/14/2023 2:16:41PM

Total Equipment Cost: 630.00 **Total Material Cost:** $57.50

Total Labor Cost: $493.70 **Total WO Cost:** $1,181.20

Instructions: Sinkhole is forming around manhole and needs repair.

Assets: STORM MANHOLE DMH-052-72

Comments: Removed 4 inch frame and a few layers of brick and put in an 8 inch frame. Reused same cover in good condition and la inventory on drain covers at 32 inch diameter.

Material Details:

Description	Units	Cost
8" X 36" ROUND BOTTOM FLANGE FRAME	1.00	$0.00
Fast-Setting Concrete Mix 50 lb.	3.00	$18.09
Red Bricks	21.00	$22.47
TYPE S MASON MIX MORTAR 80 lb.	2.00	$16.94

Labor Details:

Employee	Hours	Cost
Bruesewitz, Daniel	5.00	$149.15
Carson, Anthony	5.00	$108.60
Lanio, Eric	5.00	$105.45
Watts, Greg	5.00	$130.50

Equipment Details:

Description	Hours	Cost
2500HD 4WD Pick-Up	5.00	$105.00
Dump Truck	5.00	$375.00
John Deere Back Hoe	5.00	$150.00

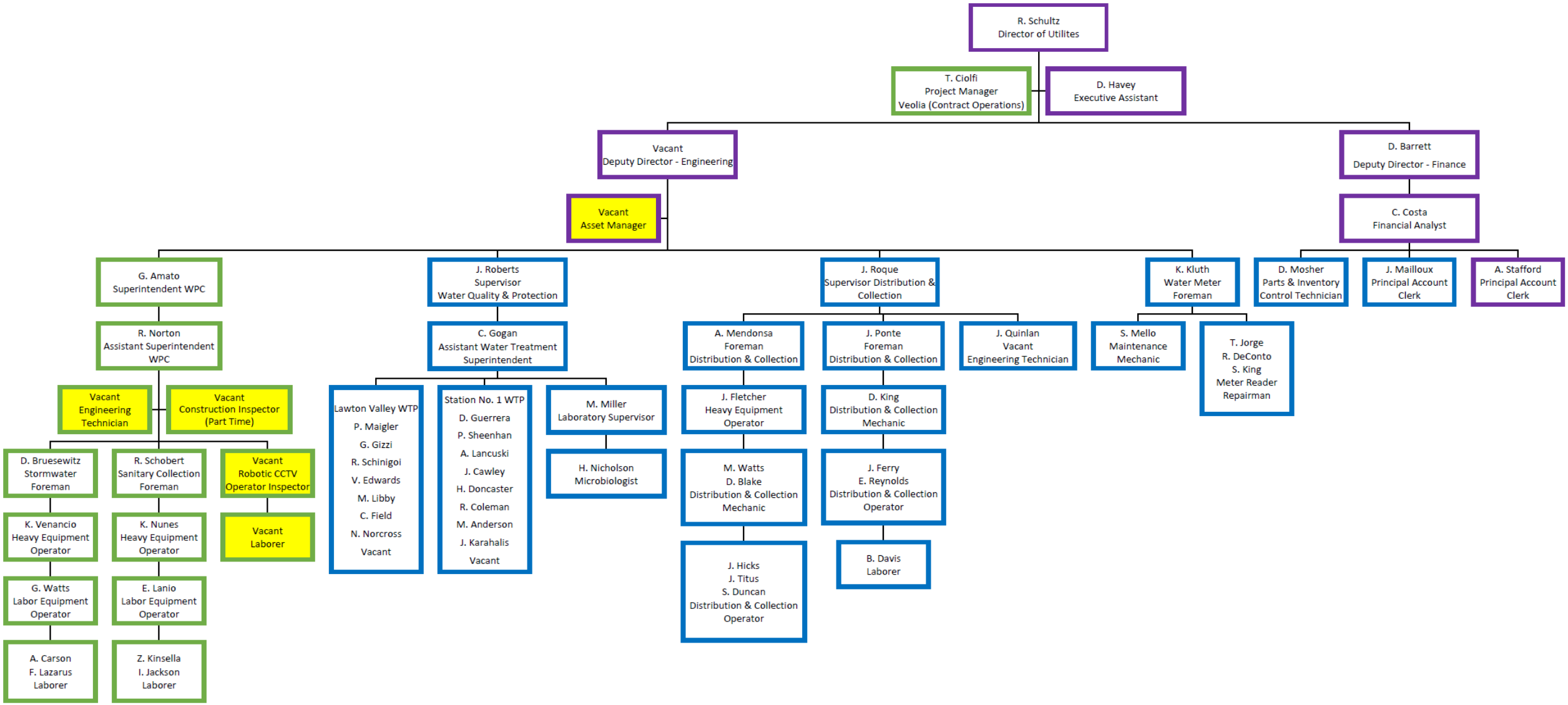
Related Work Activities:	InspectionID:	Description:	Status:
	18160	Storm Manhole	CLOSED

Self Performance

<$5,000

Contractor

$15,000 - $25,000

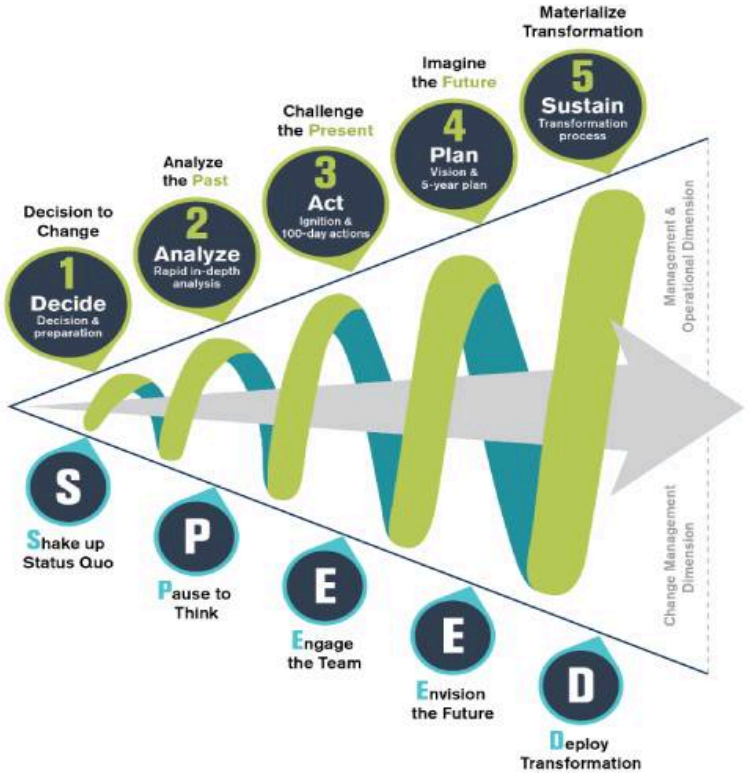

R. Schultz
Director of Utilites
T. Ciolfi
Project Manager
Veolia (Contract Operations)
D. Havey
Executive Assistant
Vacant
Deputy Director - Engineering
D. Barrett
Deputy Director - Finance
Vacant
Asset Manager
C. Costa
Financial Analyst
G. Amato
Superintendent WPC
J. Roberts
Supervisor
Water Quality & Protection
J. Roque
Supervisor Distribution & Collection
K. Kluth
Water Meter Foreman
D. Mosher
Parts & Inventory Control Technician
J. Mailloux
Principal Account Clerk
A. Stafford
Principal Account Clerk
R. Norton
Assistant Superintendent WPC
C. Gogan
Assistant Water Treatment Superintendent
A. Mendonsa
Foreman
Distribution & Collection
J. Ponte
Foreman
Distribution & Collection
J. Quinlan
Vacant
Engineering Technician
S. Mello
Maintenance Mechanic
T. Jorge
R. DeConto
S. King
Meter Reader Repairman
Vacant
Engineering Technician
Vacant
Construction Inspector (Part Time)
Lawton Valley WTP
P. Maigler
G. Gizzi
R. Schinigoi
V. Edwards
M. Libby
C. Field
N. Norcross
Vacant
Station No. 1 WTP
D. Guerrera
P. Sheenhan
A. Lancuski
J. Cawley
H. Doncaster
R. Coleman
M. Anderson
J. Karahalis
Vacant
M. Miller
Laboratory Supervisor
H. Nicholson
Microbiologist
J. Fletcher
Heavy Equipment Operator
D. King
Distribution & Collection Mechanic
M. Watts
D. Blake
Distribution & Collection Mechanic
J. Ferry
E. Reynolds
Distribution & Collection Operator
J. Hicks
J. Titus
S. Duncan
Distribution & Collection Operator
B. Davis
Laborer
D. Bruesewitz
Stormwater Foreman
R. Schobert
Sanitary Collection Foreman
Vacant
Robotic CCTV Operator Inspector
K. Venancio
Heavy Equipment Operator
K. Nunes
Heavy Equipment Operator
Vacant
Laborer
G. Watts
Labor Equipment Operator
E. Lanio
Labor Equipment Operator
A. Carson
F. Lazarus
Laborer
Z. Kinsella
I. Jackson
Laborer

Utility of the Future

Utility of the Future (UoF) is defined as a future-focused utility that provides reliable, safe, inclusive, transparent, and responsive water supply and sanitation (WSS) services through best-fit practices that allow it to operate in an efficient, resilient, and sustainable manner.

World Bank Water Global Practice's - Utility of the Future Program (UoF)

Effective Utility Management - Collaborative Effort APWA, AWWA, ACWA, AMWA, ASDWA, NACWA, NAWA, WEF, WRF and U.S. EPA



Ten Attributes of Effectively Managed Water Sector Utilities

Product Quality

- Regulatory compliance
- Service delivery

Customer Satisfaction

- Customer complaints
- Customer service delivery
- Customer satisfaction

Employee and Leadership Development

- Employee retention and satisfaction
- Management of core competencies
- Workforce development

Operational Optimization

- Resource optimization
- Water management efficiency

Financial Viability

- Budget management effectiveness
- Financial procedure integrity
- Bond ratings
- Rate adequacy

Water Resource Sustainability

- Water supply adequacy
- Supply and demand management
- Watershed sustainability

Infrastructure Stability

- Asset inventory
- Asset (system) renewal/replacement
- Water distribution/collection system integrity
- Infrastructure planning and maintenance

Enterprise Resiliency

- Recordable incidents of injury or illnesses
- Insurance claims
- Risk assessment and response preparedness
- Ongoing operational resiliency
- Operational resiliency under emergency conditions

Community Sustainability

- Watershed-based infrastructure planning
- Green infrastructure
- Greenhouse gas emissions
- Service affordability
- Community economic development

Stakeholder Understanding and Support

- Stakeholder consultation
- Stakeholder satisfaction
- Internal benefits from stakeholder input
- Comparative rate rank
- Media/press coverage
- Partnering in your community

Example Performance Measures

Customer Service

- Call responsiveness (percent): 100 X (number of calls responded to within “X” minutes ÷ total number of calls)
- First call resolution (percent): 100 X (number of calls for which problem was resolved/fixed/scheduled to be fixed at the time of the first call ÷ total number of calls)

Product Quality

- Regulatory Compliance Rate (percent)
  - 100 X (number of days in full compliance for the year ÷365 days)
- Unplanned Service Interruptions(percent)
  - 100 X (number of active account customers experiencing a service interruption of greater than 1 hour ÷ total number of customers during reporting period)

Infrastructure Stability

- (percent): 100 X (number of active account customers experiencing a service interruption of greater than 1 hour ÷ total number of customers during reporting period)

Distribution / Collection System Integrity

- Non-Revenue Water (NRW)
  - Water supplied to the network that does not return revenue to the utility, including unbilled authorized consumption, apparent losses (theft, customer metering inaccuracies, systematic data handling errors), and real losses (leakage from the pipe network and distribution storage)
- Wastewater System Integrity
  - Percent:100X (number of failures ÷ total miles of pipe)
- Noncapacity Overflow Rate
  - SSO Overflow Rate: 100X (Number of SSO ÷ total miles of pipe)
- Capacity Overflow Rate
  - CSO Overflow Rate: 100X (Number of CSO ÷ total miles of pipe)

System Renewal / Replacement

- Asset Renewal/Replacement Rate
  - Distribution or Collection Systems Replacement: 100X (Miles or pipe rehabilitated or replaced ÷ total miles of pipe)