

Water, Sewer, & Stormwater FY19 Budget Work Session

May 16, 2018



Overview of Tonight's Meeting

- Introduction
 - Brian Goetz – Deputy Public Works Director
 - Peter Rice – Public Works Director
 - David Hyder – Rate Consultant, STANTEC
- Highlights of FY18
- Proposed FY19 Water Budget
- Proposed FY19 Sewer Budget
- Proposed FY19 Stormwater Budget and Funding
- Proposed FY19 Water and Sewer Rates
- Discussion

Enterprise Funds – Portsmouth Water



- Bellamy Reservoir
- Madbury Water Treatment Facility
- 6 Wells
- 3.0 to 5.5 Million Gallons per Day
- 173 Miles of Pipe
- 872 Public Fire Hydrants
 - Portsmouth – 687
 - Newington – 87
 - Greenland – 67
 - Rye – 19
 - New Castle - 12
- 2,612 Valves
- 3 Storage Tanks
- 8,075 Metered Customers



Enterprise Funds – Pease Tradeport Water



- 3 Wells (Haven out of Service)
- 2 Storage Tanks
- 1 Treatment Facility (Carbon Filters)
- Booster pumps from Portsmouth system
- 0.4 to 1.1 million gallons per day
- 17 Miles of Pipe
- 168 Public Fire Hydrants
- 228 Valves
- 2 Storage Tanks
- 130 Metered Customers



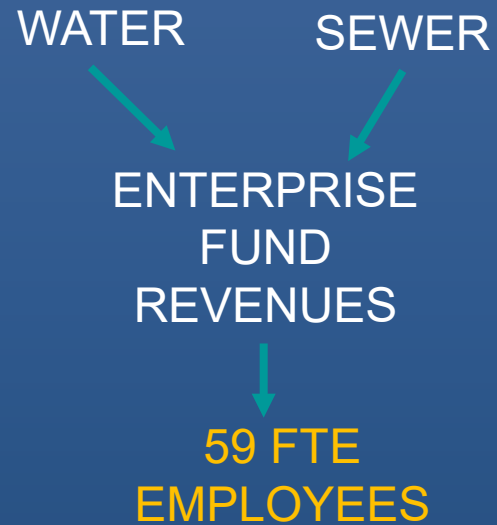
Enterprise Funds - Sewer



- 115 Miles of piping
- 20 pumping Stations
- 1,650 Manholes
- Two Wastewater Treatment Facilities
- 6,342 Customers



Proposed Water, Sewer, Stormwater Position Summary Schedule



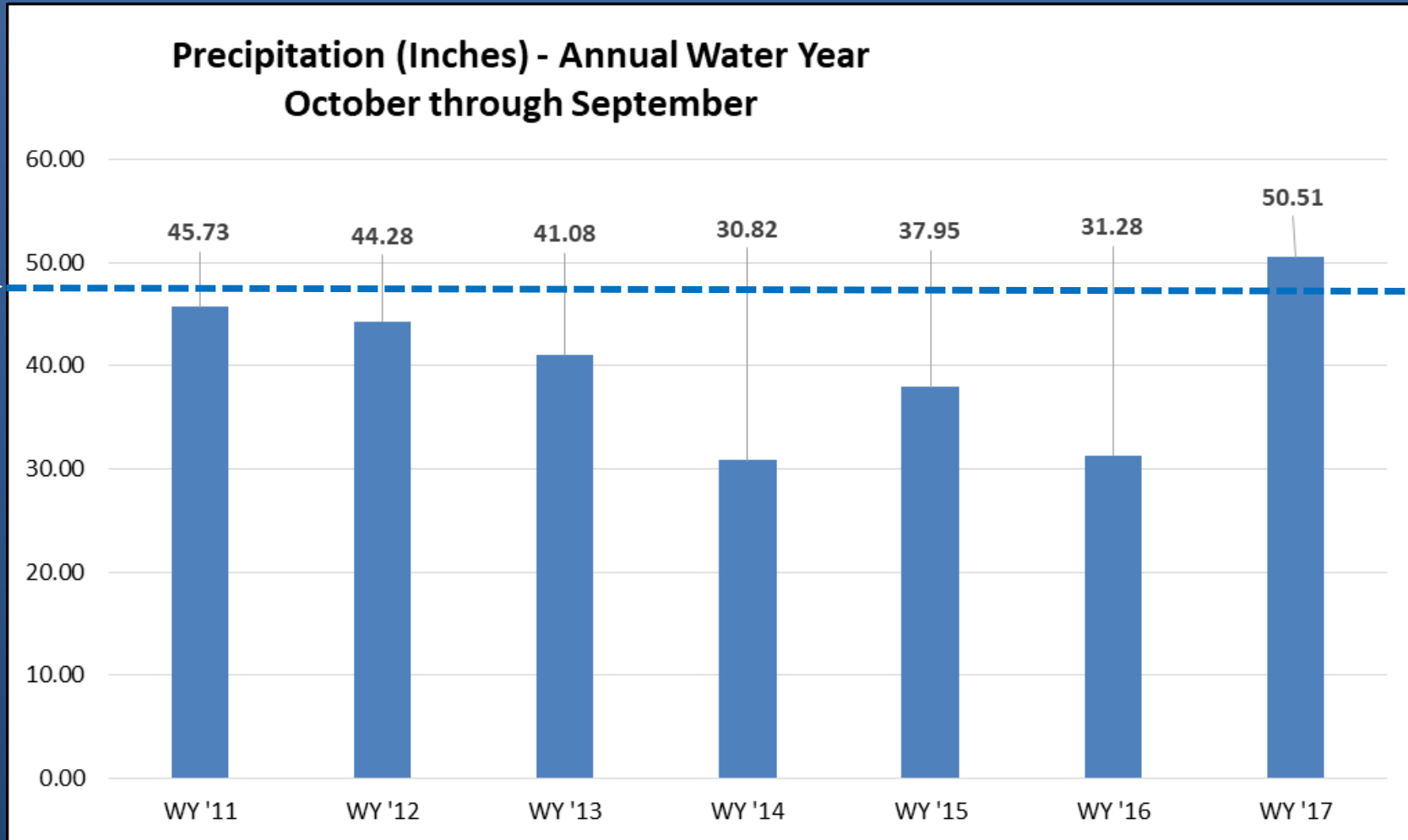
* Many Shared Positions between
Water, Sewer, Stormwater, Highway and Parking/Transportation

Highlights



Finally Out of The Drought!

**Precipitation (Inches) - Annual Water Year
October through September**



Average
Precipitation: →
47 inches

New Greenland Well Building Construction



New Well in 2015



Pump Station replacement in 2017

Madbury Well #5 Permitting



Madbury Well #5 Permitting - Ongoing
Madbury Public Hearing – February 2017

Drinking Fountain Installations



Tennis Courts



Parrott Avenue Ballfields

Fire Hydrant Painting Project – 535 hydrants painted in 2017



COLOR	CLASS	AVAILABLE FLOW @ 20 psi residual
BLUE	AA	1500 GPM or more
GREEN	A	1000-1499 GPM
ORANGE	B	500-999 GPM
RED	C	Below 500 GPM

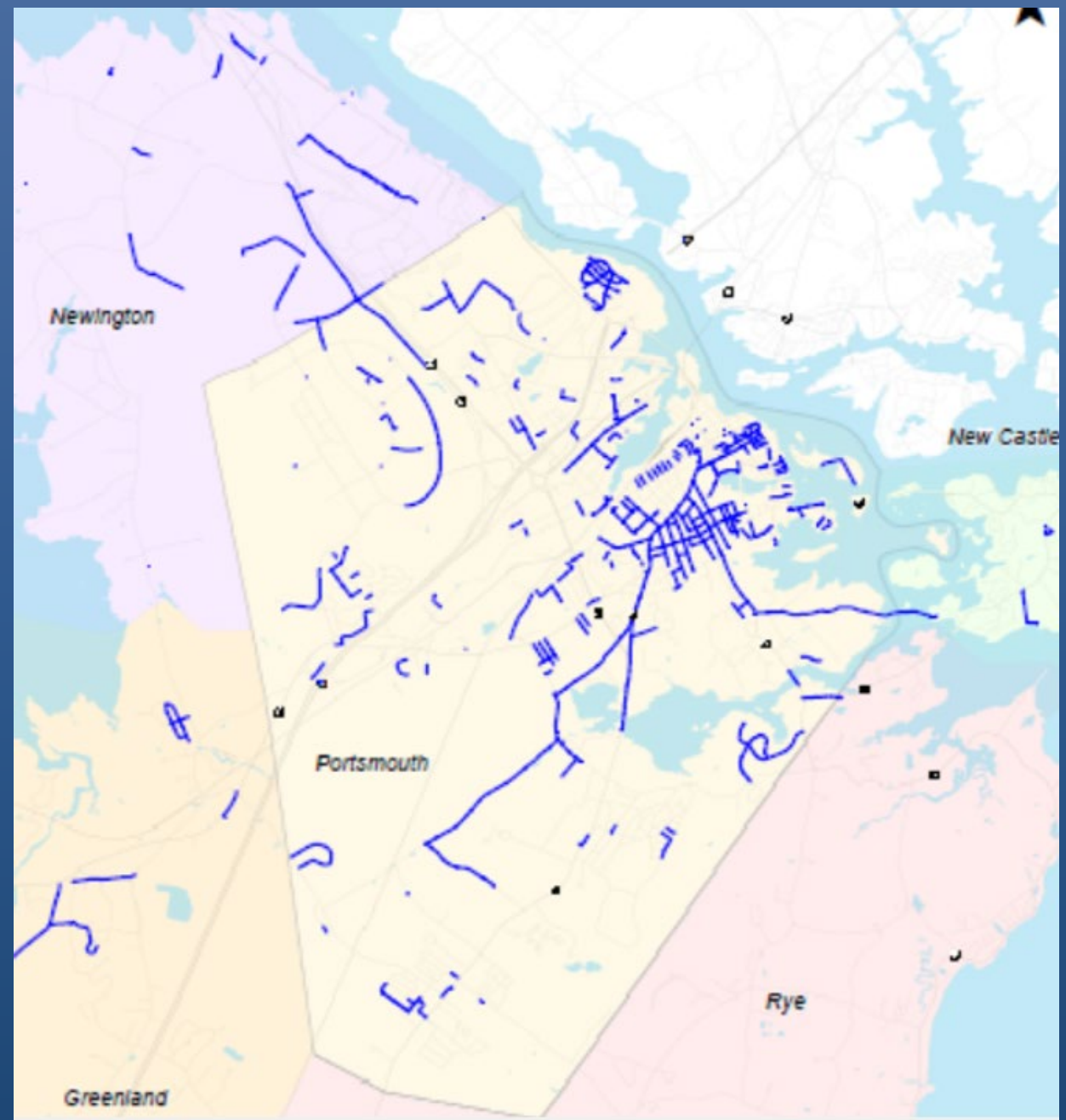
Water Main Replacements



Ongoing work throughout water system

Water Pipe Improvements – Since 1990

- 41 Miles of Pipe
- 22% of system
- About 1%/year



February 24, 2018 – Fire in Greenland

Fire destroys Greenland auto body shop



Multiple fire departments responded to a fire at Carter's European Auto Repair at 437 Portsmouth Ave. in Greenland on Saturday morning. (PHOTOS BY BUZZ DIETTERLE/SEACOASTONLINE)

No injuries reported and several dogs rescued

Staff reports
news@seacoastonline.com

GREENLAND — A multiple-alarm fire broke out at Carter's European Auto Repair at 437 Portsmouth Ave. Saturday morning.

Fire Chief Ralph Cresta said the fire call came in at 10:02 a.m. He said the building is a total loss but that there were no injuries.

"It was fully involved when I arrived," Deputy Chief Ted Hartmann said. "We did manage to remove several dogs that were in the office. One occupant of the building was evaluated and later one firefighter. Neither one had to be transported."

Multiple fire departments responded to the blaze that reportedly started in a garage bay and destroyed cars inside and outside the structure. Loud popping noises that sounded like fireworks exploding could be heard before the fire was contained around 11 a.m. The thick smoke forced emergency personnel to close down Portsmouth Avenue in the vicinity of Dunkin Donuts until the blaze was under control.

ONLINE ONLY

To watch a video of firefighters' efforts to battle the blaze see this story at Seacoastonline.com.

Heavy smoke was still showing at 11 a.m. and the roof had collapsed. Carter's was open for business at the time of the fire and had employees on site.

Linda Chetson's son Chuck Williams owns the business in front, Rainscapes Lawn Sprinklers, which was being renovated. Chetson said they suffered water damage but should be OK otherwise.

The cause of the fire remained under investigation as of late Saturday afternoon. The owner was out of the country on vacation, Cresta said.

"It appears to have started at the rear of the building," he said. "There were hazards, fuel in the cars stored inside and other chemicals used by the business. We will probably leave a crew here overnight in case there are hot spots."

Multiple fire departments responded to the blaze, including Greenland, Portsmouth, Stratham, Rye, North Hampton and Newmarket.

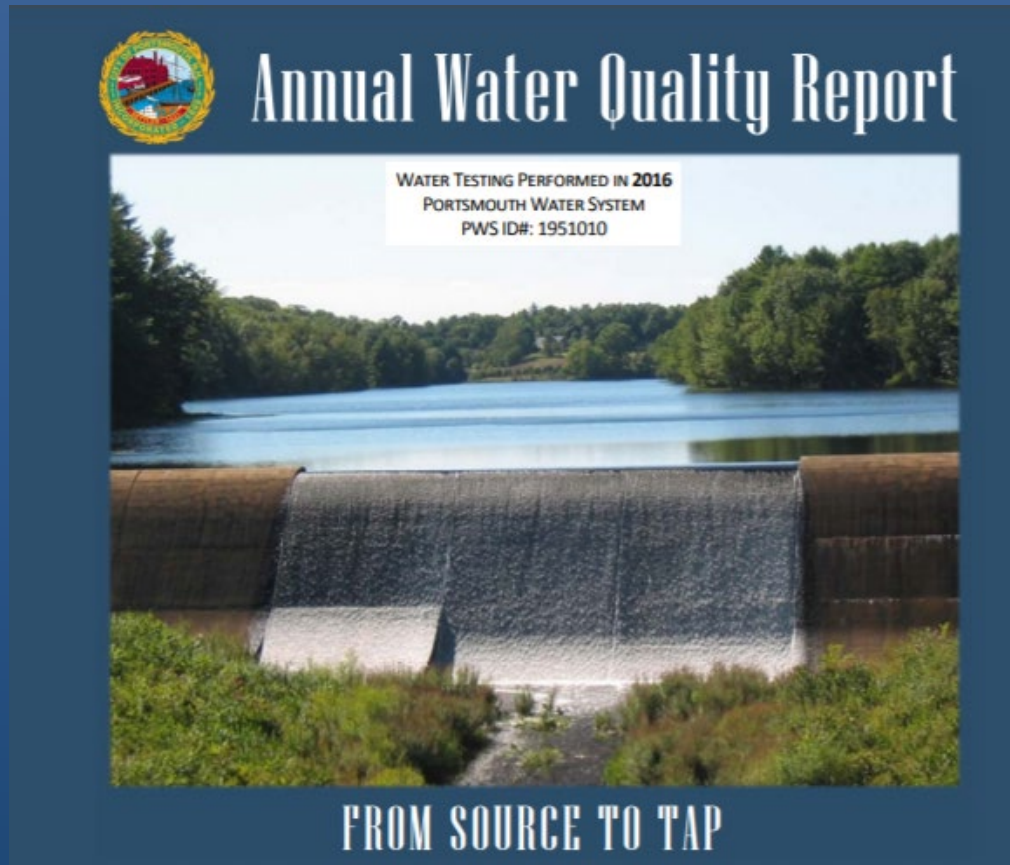


A multiple-alarm fire destroyed Carter's European Auto Repair at 437 Portsmouth Ave. in Greenland on Saturday morning. The fire destroyed cars inside and outside the structure.



- “We would like to extend our sincere thanks to the ... crews from Portsmouth DPW for their exceptional service assisting us with the fire at 437 Portsmouth Avenue earlier today.”
- Greenland Fire Department Facebook Post on 2/24/2018

Drinking Water Quality



- Lead and Copper Sampling for Greenland Well Replacement
 - 60 required samples
 - Currently at 43 sampled
- PFAS Sampling
 - Monthly for Pease Sources
 - Every Six months for Portsmouth Sources
 - April 2018 sampling: non-detections of PFOS and PFOA at all sources
 - Results posted on City website

Pease Well PFAS Response – Demonstration Filters in Service Since September 2016



Pease Tradeport Water Treatment Air Force Agreements and Reimbursement

- Replacement Well Study - \$179,000
- Preliminary Design Study for Treatment System - \$60,000
- Pilot Testing and Carbon Filter Demonstration Project - \$947,700
- Treatment Facility Comparative Analysis - \$46,623
- Final Treatment Facility Design - \$1,329,080
- Construction in FY19
- Long-Term Operations and Maintenance Agreement

Madbury Solar Panel Installation

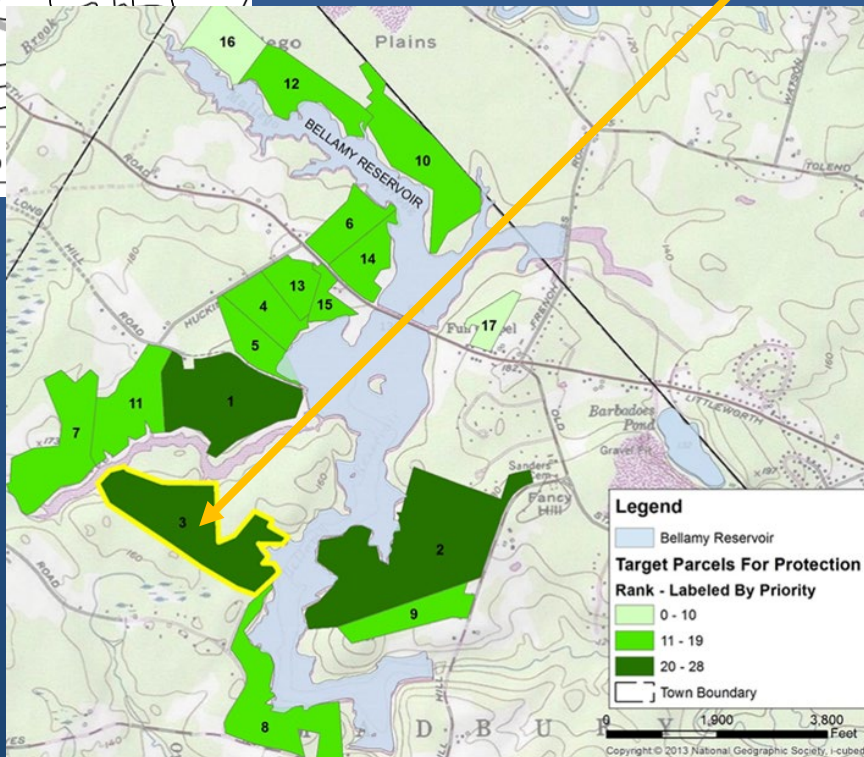
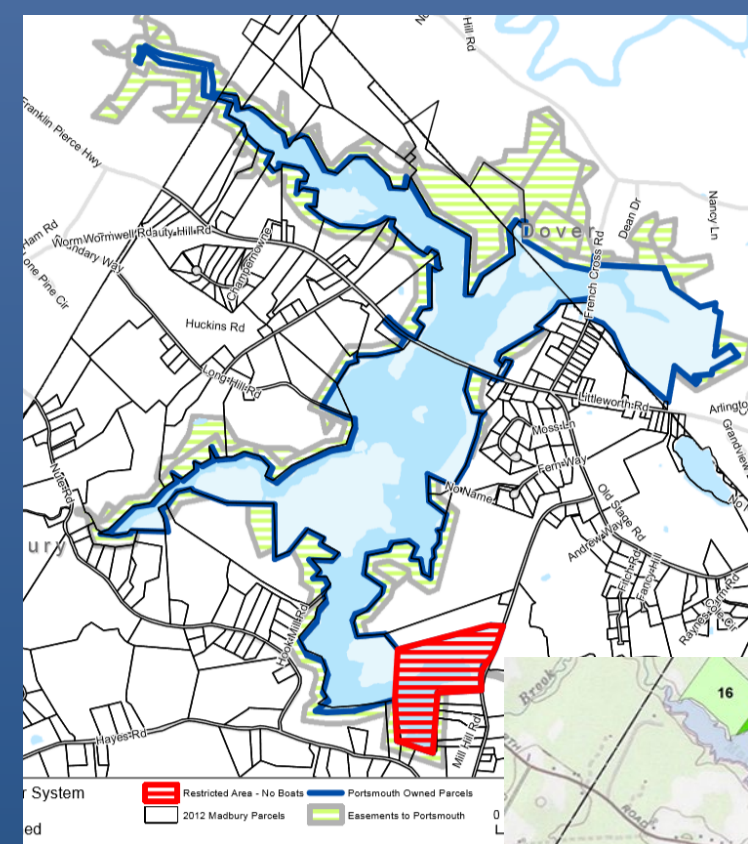


382,801 kWh Generated
22% of Madbury's Power needs
314 Tons of CO2 Emissions

Year	Month	kWh Generated
2017	January	7,162
2017	February	9,985
2017	March	25,119
2017	April	29,694
2017	May	30,534
2017	June	36,681
2017	July	38,960
2017	August	38,614
2017	September	30,534
2017	October	25,413
2017	November	16,500
2017	December	6,997
2018	January	10,800
2018	February	16,913
2018	March	27,797
2018	April	31,098

Bellamy Reservoir Water Protection and Conservation Easement

- 72 Acre Olson Property
- Worked with Town of Madbury and Southeast Land Trust
- Acquired \$200,000 Drinking Water and Groundwater Trust Funding
- \$223,130 Balance of Funding from Water Enterprise Fund
- Currently working on other potential acquisitions around the reservoir





IN THIS ISSUE

- 1 For the Love of Water
- 2 Preparing the Stonehouse Forest for the Public
- 3 Diamonds
- 3 New Fund to Enhance Public Water Supplies
- 4 With Deep Roots, Comes a Deep Commitment
- 5 Keeping the Promise of Stewardship
- 6 Upcoming Events
- 8 Join us for the Wild & Scenic Film Festival
- 8 New Faces at SELT

For the Love of Water

Dave Olson is a firm believer that decisions based on love always work out. His love for his land and the creatures who dwell there are at the core of his decision to conserve his 72-acre property – the Bellamy Farm – for ongoing public benefit.

As a former professor at the University of New Hampshire, Dave taught wildlife biology, fire ecology, and forest management. He's always known the value of his land. Tucked away in a quiet corner of Madbury, it is nestled along the banks of the Bellamy River and Reservoir and is home to abundant wildlife, a blueberry plantation, a small 12-acre cut-your-own Christmas tree farm, and forests with nearly 35 species of native trees.

Dave's desire to conserve his land was driven by his educational and academic background, as well as the "Yankee tradition of keeping land open."

The first thing he did when he got the land in 1974 was to take down the gates and open access to the Bellamy Reservoir. He tries to speak with everyone who accesses the reservoir from this point. No easy task considering that, by his count calculating each visit and person, the property was accessed 8,000 times last year for kayaking, fishing, hiking, and other low-impact uses. It's his goal to continue to allow low-impact uses.

Dave thinks that the property's appeal is in large part because, "The reservoir isn't a shoreline dotted with houses and docks. It's wild. People get a chance to see beautiful wild landscapes, to catch fish, to hunt, to see a lot of different wildlife."

And, wildlife is abundant here. Ever the scientist, Dave tracks the biodiversity of his land. His detailed notes include whether creatures are nesting on the land or just passing through. It lists 108 species of birds, 22 large and small mammals, and 17 different amphibians and reptiles.

Beyond these values, the protection of the Bellamy Reservoir is a high priority for the City of Portsmouth, as the Bellamy is its primary water supply. With problems at Pease and increasing

continued on page 3

Above: Early February morning light on the frozen Bellamy Reservoir in Madbury. PHOTO BY JERRY MONKMAN

Water Efficiency Rebate Program

Water and Sewer Enterprise Fund



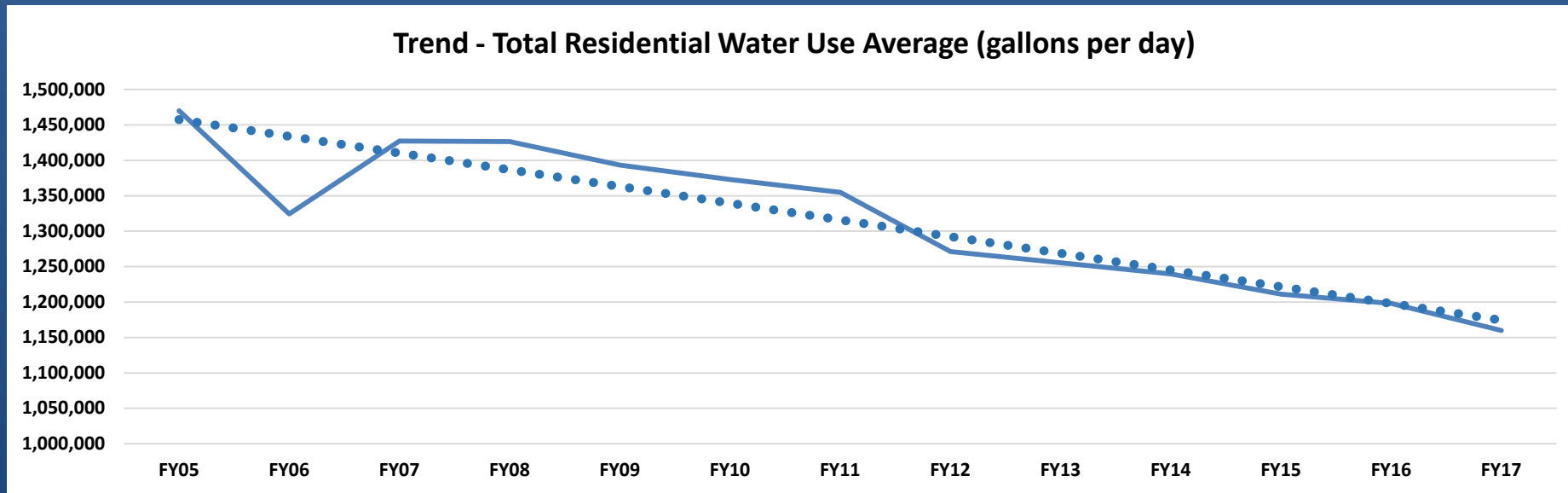
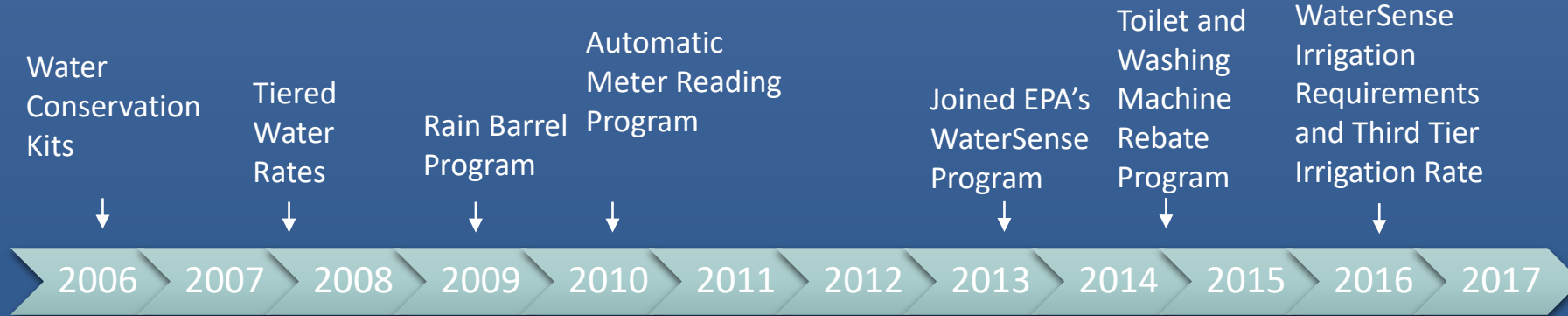
Low-Flow Toilets (821 total):

- 200 rebates issued in 2015
- 253 rebates issued in 2016
- 368 rebates issued in 2017

High Efficiency Washing Machines (129 total):

- 71 rebates issued in 2015
- 34 rebates issued in 2016
- 24 rebates issued in 2017


Water Efficiency Timeline



Assistance Program

- Assistance Program FY18
 - Ongoing Assistance - 25% Discount on Water/Sewer
 - 26 customers currently assisted
 - \$3,783.24
 - Temporary Assistance - \$300 one-time credit
 - 10 customers assisted
 - \$2,041.53

City of Portsmouth NH
Water and Sewer Assistance Programs



Program Effective Date: 01/01/15

If you are a current customer of the City of Portsmouth's Water and Sewer Division you may be eligible for one of the following assistance programs:

(1) Receive On-going Assistance of 25% off your water and sewer bills with the Water & Sewer Annual Assistance Program.



Water & Sewer Annual Assistance Program
25% discount on water and sewer for income-eligible homeowners or tenants serviced by the City of Portsmouth's Division of Water and Sewer.

- (1) Applicant must reside at the property and have a current water and sewer account at the address on the application.
- (2) See Application Section A for income restrictions.
- (3) Program discount is valid from date of acceptance forward. It is not applicable to any past due balances on the customer's account.
- (4) Applicant must provide the required documents as described on the application and schedule an appointment with the Billing Office.

(2) Receive Temporary Assistance of up to a \$300 credit toward your water and sewer bill once per year.

Water & Sewer Temporary Assistance
The City of Portsmouth Water and Sewer customers may receive up to a \$300 water and sewer credit if you have a verifiable financial hardship that occurred within the past six (6) months (e.g. major medical expenses, job loss, or a change in marital status).

- (1) Applicant must reside at the property and have a current water and sewer account at the address on the application.
- (2) Must be a verifiable financial hardship (see application form for more details).
- (3) Applicant must provide the required documents as described on the application and schedule an appointment with the Billing Office.



Water and Sewer Billing Office - City Hall
1 Junkins Ave
Portsmouth, NH 03801
603-610-7248 / www.cityofportsmouth.com

Program Effective Date: 01/01/15

To access these services:

- 1. Verify your eligibility.**
Check your eligibility for the programs for which you are applying (see programs listed to left).
- 2. Complete the appropriate application.**
Be sure to include all requested documents as listed in the applications. Applications are available at City of Portsmouth Water & Sewer Billing Office.
- 3. Water & Sewer Assistance applicants must set up their appointment through the Billing Office.**

Please contact the Water & Sewer Billing Office located at Portsmouth City Hall to set up your appointment.
Phone # (603) 610-7248

Process Time for Applications:
Within three (3) weeks of your appointment you will receive a notification of approval, pending, or denial. Discounts through the Annual Assistance Program are good for one (1) year.
You need to apply each successive year thereafter.

Ongoing Capital Projects

Addressing Long-Term Supply Needs

- Newington Booster Station Upgrade –
 - Commencing Soon – one year of construction
- Finalize Madbury Well Upgrades and Permitting
- Groundwater Study for Additional Wells – Pending
- Continued Water main replacements
- Continued Water Efficiency Efforts
- Town of New Castle Water System Improvements
 - May 8, 2018 – Town voted Yes to spend \$5.5 million to upgrade their pipes

Proposed FY19

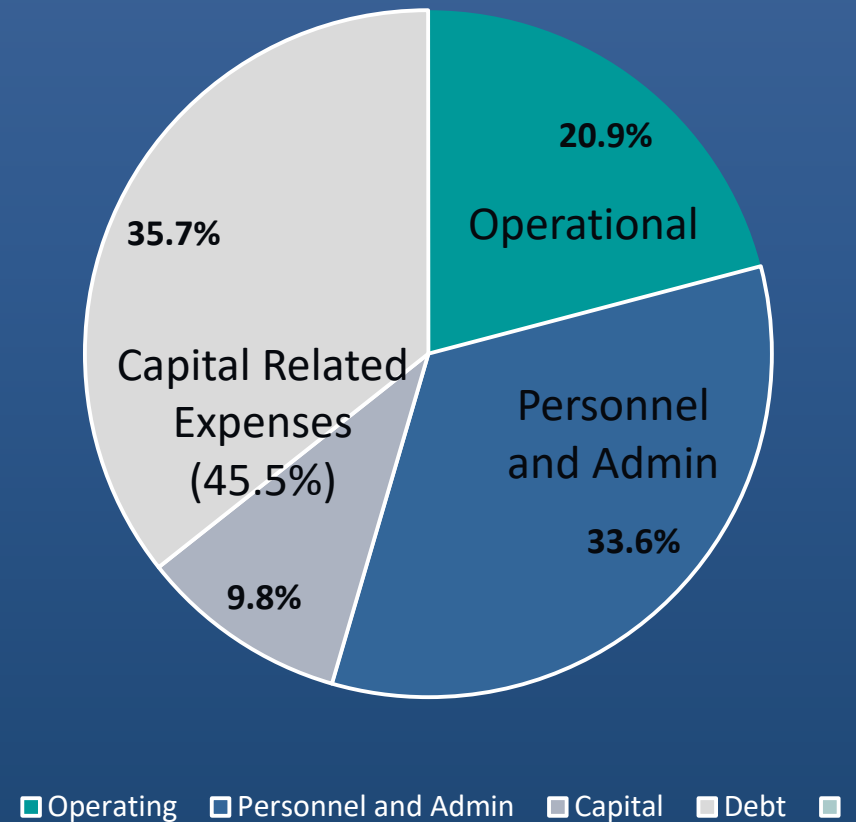
Water

Budget

FY 19 Water Fund Budget

	Proposed Budget	% of Total Budget
Personnel Costs	\$ 2,740,611	28%
Chemicals	\$ 325,000	3%
Repairs	\$ 230,250	2%
Utilities	\$ 373,812	4%
Administrative Overhead	\$ 593,156	6%
Sludge/Grit Removal	\$ 130,000	1%
Prof Contracted Services	\$ 252,950	3%
Property Taxes	\$ 125,500	1%
Equipment	\$ 99,750	1%
Stock Materials	\$ 263,700	3%
Assistance Program	\$ 5,000	0%
Other Operating	\$ 266,565	3%
Interest on Debt	\$ 1,098,387	11%
Principal on Debt	\$ 2,437,528	25%
Capital Projects	\$ 500,000	5%
Rolling Stock	\$ 472,000	5%
Total Budget	\$ 9,914,209	100%

FY19 Proposed Water Fund Budget





Sewer Division

Accomplishments and Priorities



Peirce Island Wastewater Treatment Facility Upgrade



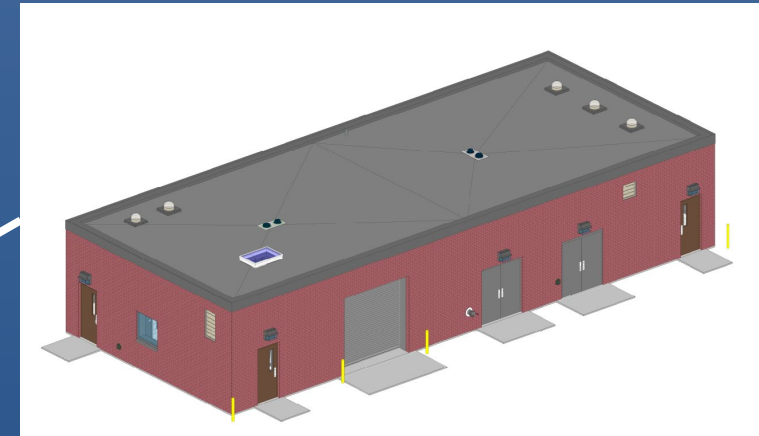
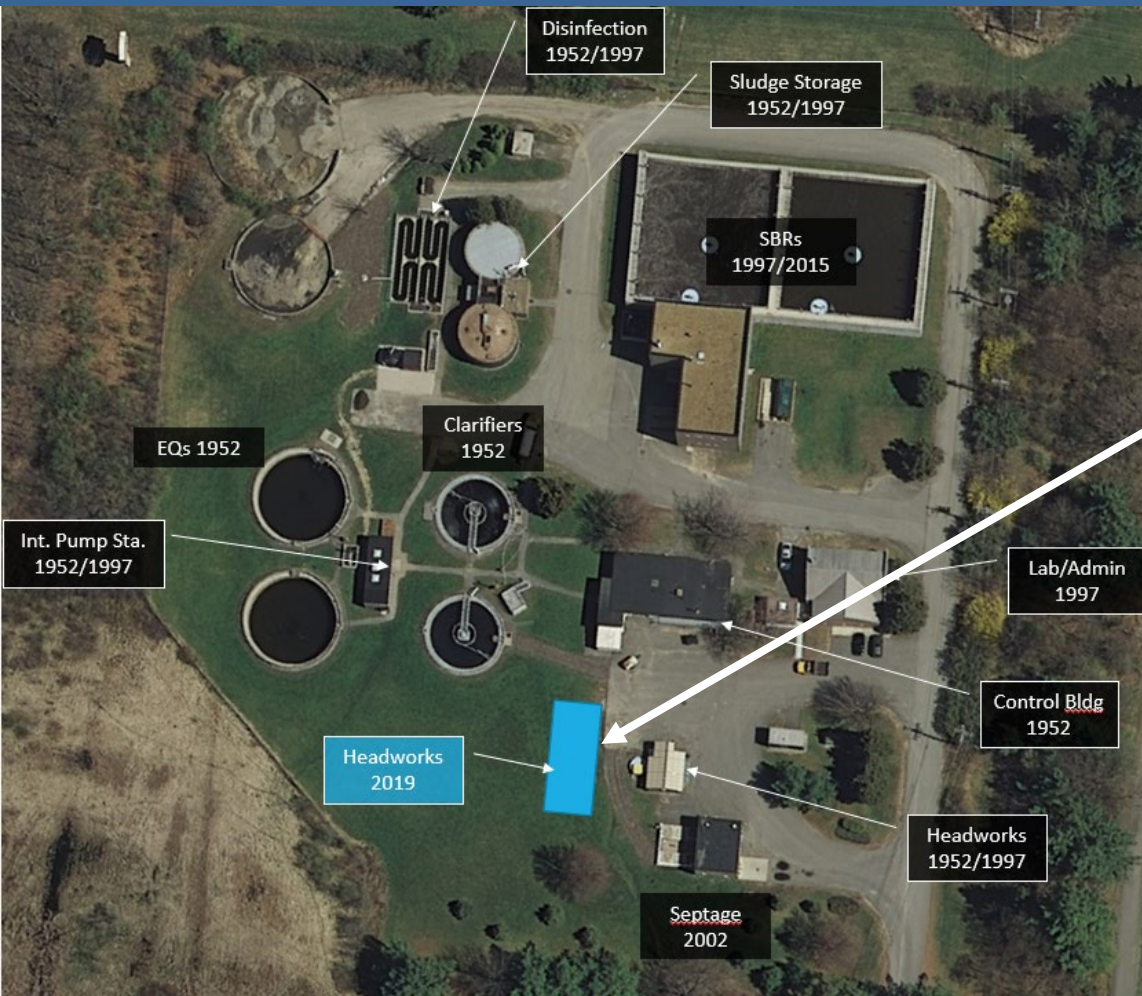
- August 2016 – Awarded to Methuen Construction, of Salem, NH
- September 2016 - Construction Began
- December 2019 -Secondary Treatment Completion
- August 2019 - Project Completion

Wastewater Public Outreach

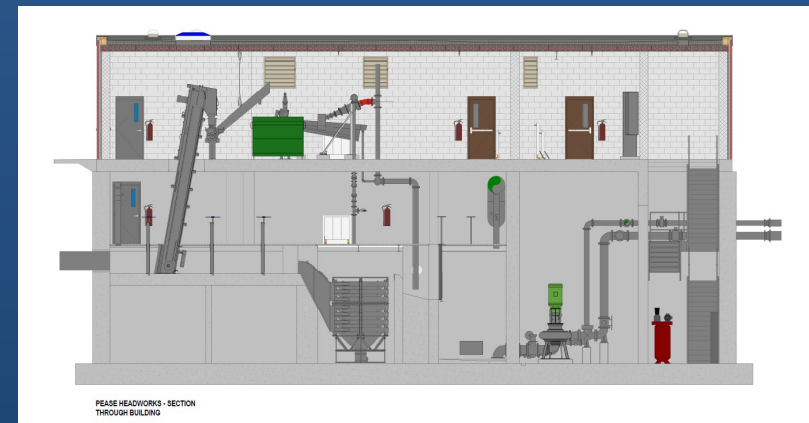
- Website updates
- Press Releases
- Monthly public meetings at City Hall
- Coordination with Recreation Department
- Construction Updates
- Construction Site Tours

The screenshot shows the website for the City of Portsmouth, Department of Public Works, specifically the 'WASTEWATER & SEWER' section. The page title is 'PEIRCE ISLAND WASTEWATER FACILITY UPGRADE PROJECT'. A navigation menu includes 'Projects', 'Collections', 'Treatment', 'Resources', 'Public Meetings', and 'Contact'. A breadcrumb trail reads: 'City of Portsmouth > Public Works Home > Wastewater & Sewer > Peirce Island Wastewater Facility > Peirce Island Wastewater Facility Upgrade Project'. The main content area features a 'GO TO...' sidebar with links for 'News and Updates', 'Recreational Info', 'Project Area', 'Construction Route', 'Recorded Meetings', and 'Report Form'. Below this is a 'PROJECT CONTACT' section with a photo of Terry Desmarais, PE, City Engineer, and his contact information: (603) 766-1421. The 'PUBLIC MEETINGS' section states that monthly public meetings are held every third Wednesday at 11 a.m. in City Hall's Conference Room A. At the bottom, an 'UPCOMING MEETINGS' section lists three dates: WED MAY 16, WED JUN 20, and WED JUL 18, all at 11:00 AM in Conference Room A, City Hall.

Pease Wastewater Treatment Facility Upgrades



New Headworks Building



Lafayette Road Pumping Station Upgrade



Original Station

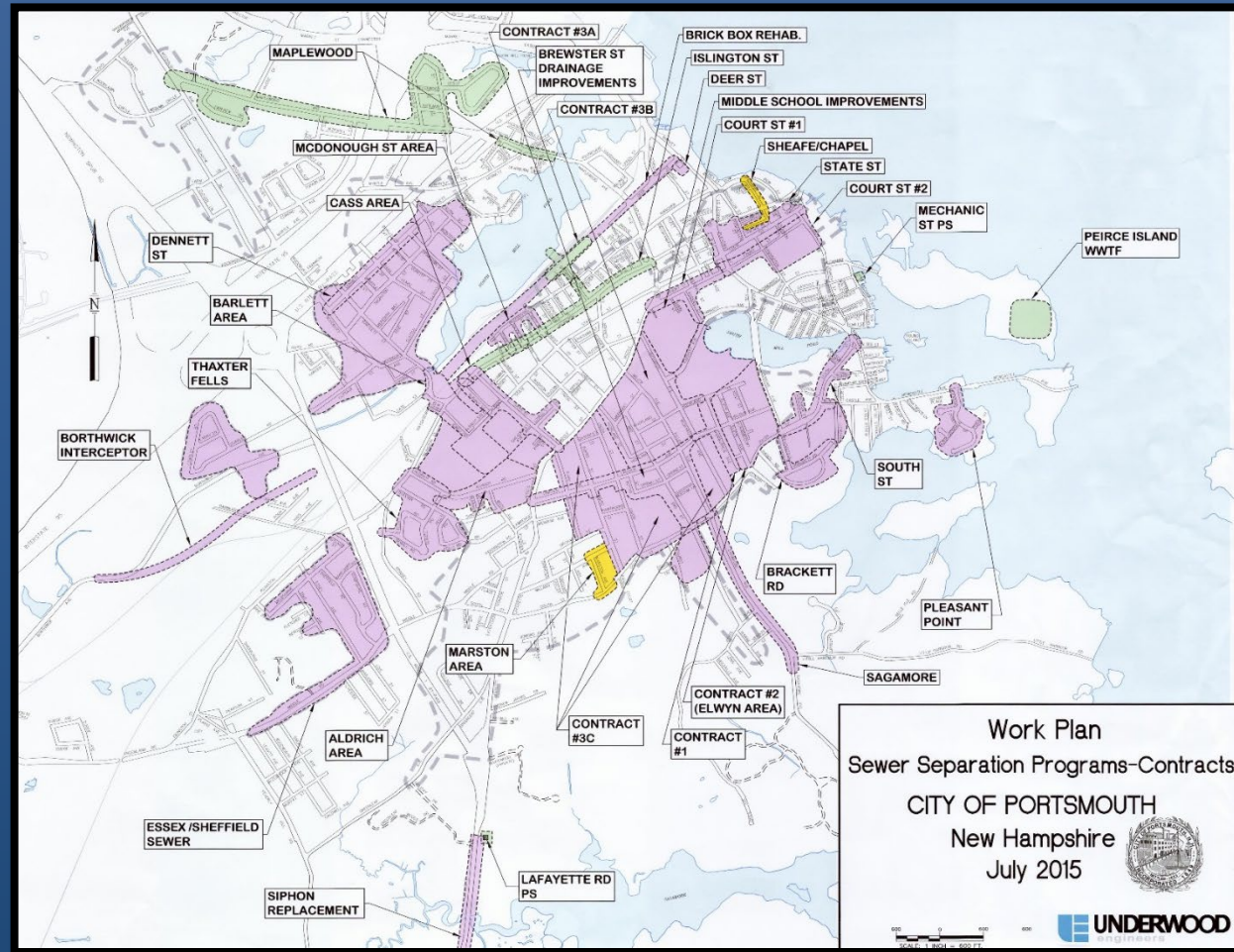


Currently under
Construction

Long-Term Combined Sewer Overflow Control Plan

Supplemental Compliance Plan Projects (by Oct 2023)

1. Maplewood at Fairview Dr
2. Pleasant at Court St
3. Islington St (Bypass to Dover St)
4. McDonough St 3B (Complete)
5. Union (State to Middle)
6. Fleet St
7. Contract 1 – Sewer Rehabilitation

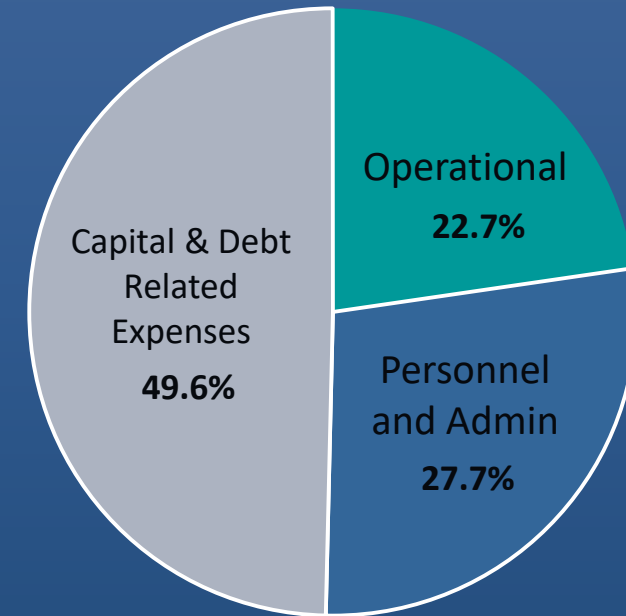


Proposed FY19 Sewer Budget

FY 19 Sewer Fund Budget

	Proposed Budget	% of Total Budget
Personnel Costs	\$ 3,370,768	22%
Chemicals	\$ 676,000	4%
Repairs & Maintenance	\$ 411,275	3%
Utilities	\$ 553,350	4%
Administrative Overhead	\$ 593,156	4%
Sludge/Grit Removal	\$ 365,500	2%
Prof Contracted Services	\$ 273,260	2%
Permits Expenses/Legal Fees	\$ 425,000	3%
Equipment	\$ 144,500	1%
Stock Material	\$ 137,500	1%
Assistance Program	\$ 20,000	0%
Other Operating	\$ 455,679	3%
Transfer to Stormwater	\$ 260,067	2%
Interest on Debt	\$ 2,223,688	15%
Principal on Debt	\$ 4,385,593	29%
Capital Projects	\$ 450,000	3%
Rolling Stock	\$ 512,500	3%
Total Budget	\$ 15,257,836	100%

FY19 Proposed Sewer Fund Budget

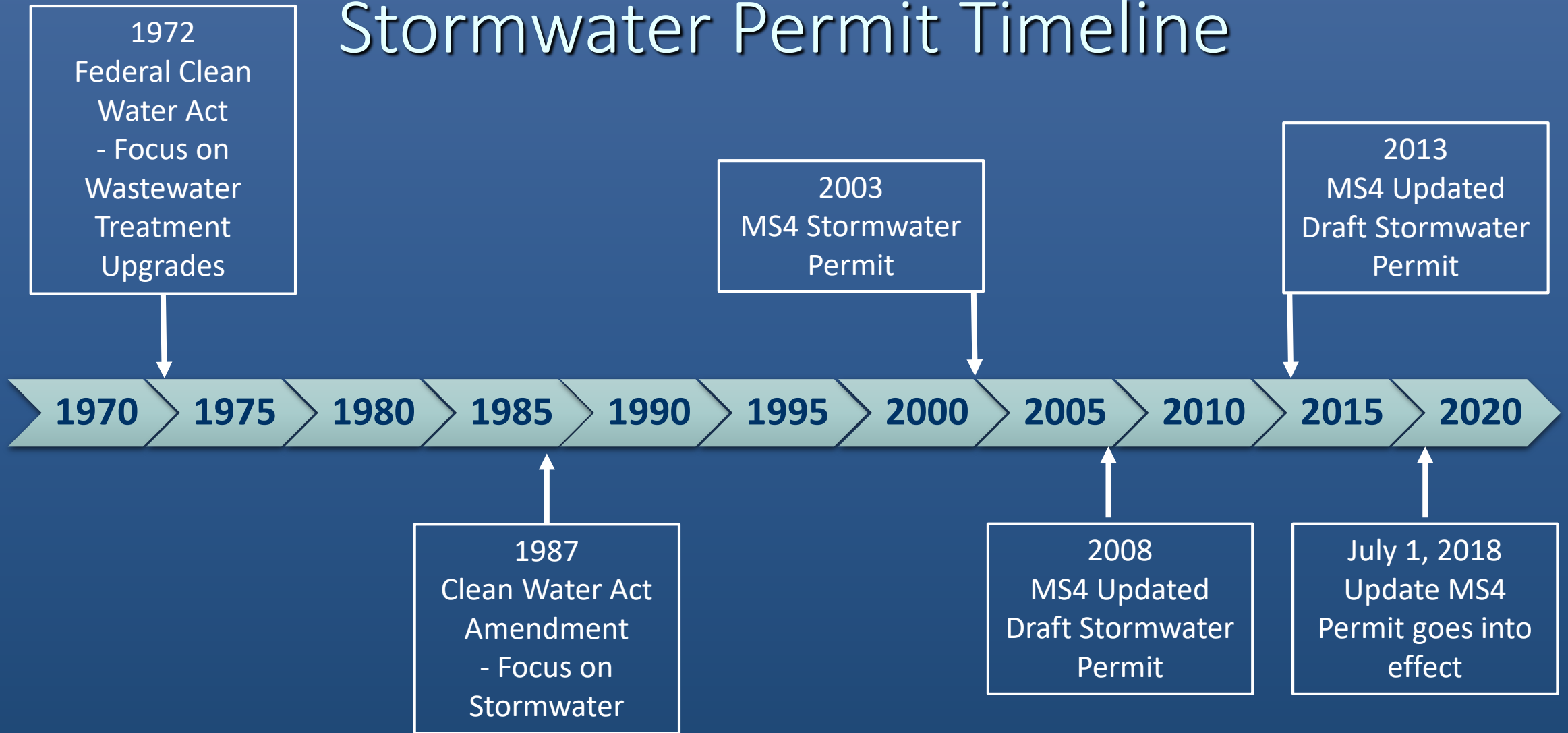


■ Operating
 ■ Personnel and Admin
 ■ Capital & Debt

Proposed FY19 Stormwater Budget



Stormwater Permit Timeline



Final 2017 NH Small MS4 General Permit



Suzanne Warner
EPA Region 1
Boston, MA

NH MS4 Stormwater Permit -- Guidance for NHDES related provisions



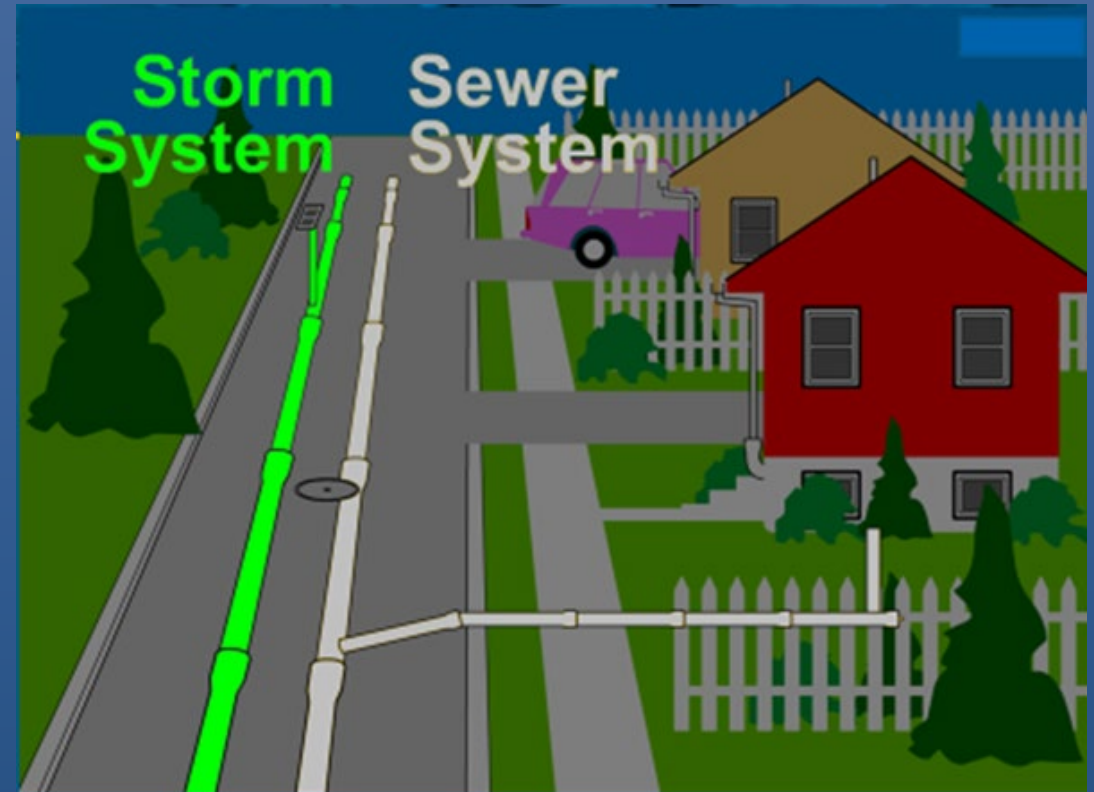
Ted Diers
NH Department of Environmental Services



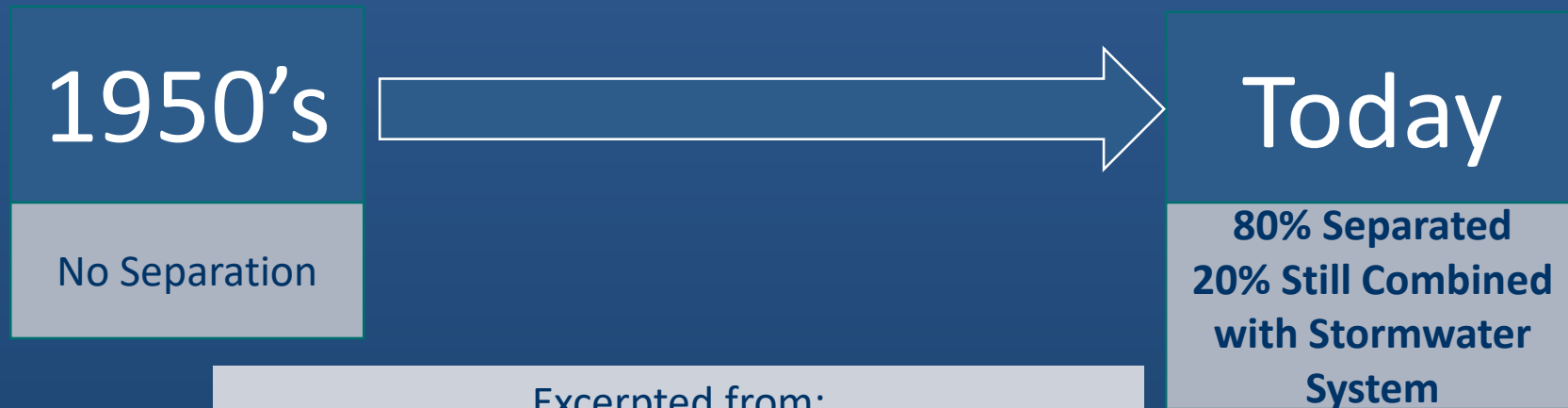
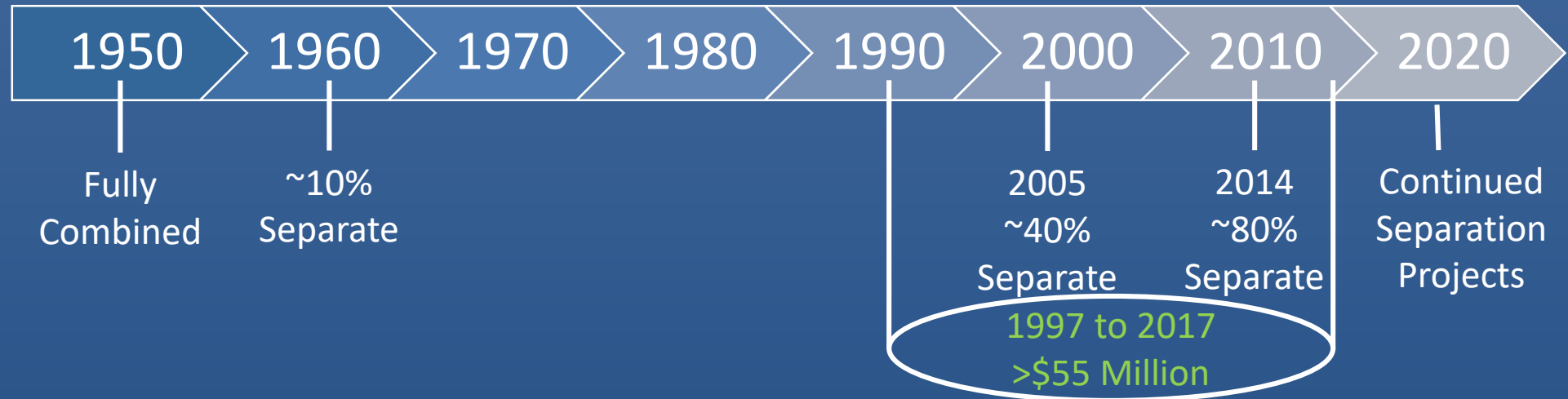
- From EPA's News Release:
- Working closely with New Hampshire Department of Environmental Services (NHDES), and with extensive community input, EPA developed permit requirements that will:
 - Find and eliminate illegal sewage discharges from stormwater systems;
 - Implement common-sense practices to keep pollution out of stormwater—for example, better street sweeping and cleaning of stormwater catch basins; and
 - Make sure that new development incorporates modern stormwater management, to avoid adding to the problem.

Stormwater System

- 70 Miles of piping
- 2965 Catch Basins
- 763 Manholes
- 67 Stormwater Treatment Units
- 430 Outfalls



Some Combined Stormwater/Sewer Remains - Sewer Separation Progress

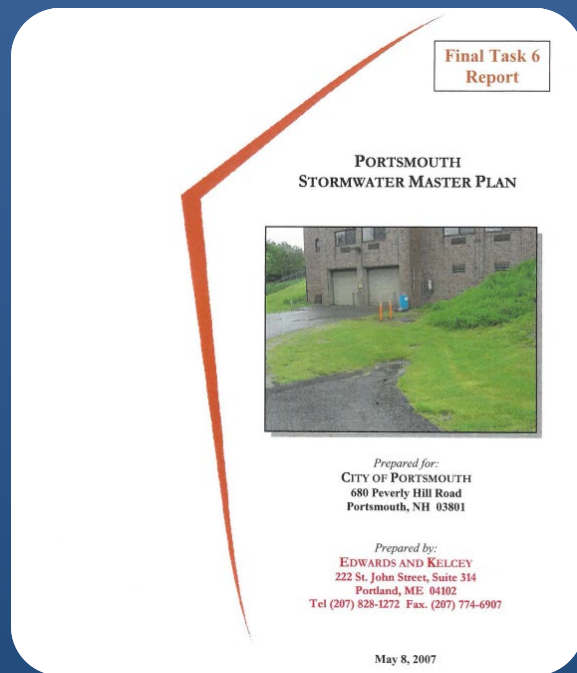


Excerpted from:
Combined Sewer Overflows presentation
City Council Meeting August 7, 2017

Stormwater Program – 2003 to 2017

- Managed by Public Works
- City has been addressing stormwater needs incrementally
- Costs split between Highway and Sewer Divisions
- Worked with EPA, DES, and other Communities

Stormwater Master Plan - 2007



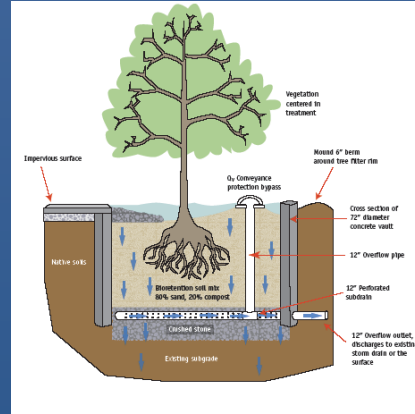
- Addressed maintenance needs related to future permitting requirements
- Recommended additional funds for operating budget and management staff
- Projected needs based on anticipated future stormwater permit requirements

Green Infrastructure

Rain Gardens



Tree Box Filters



Rain Barrels



South Mill Pond Vortex Unit



State Street Stormwater Interceptor



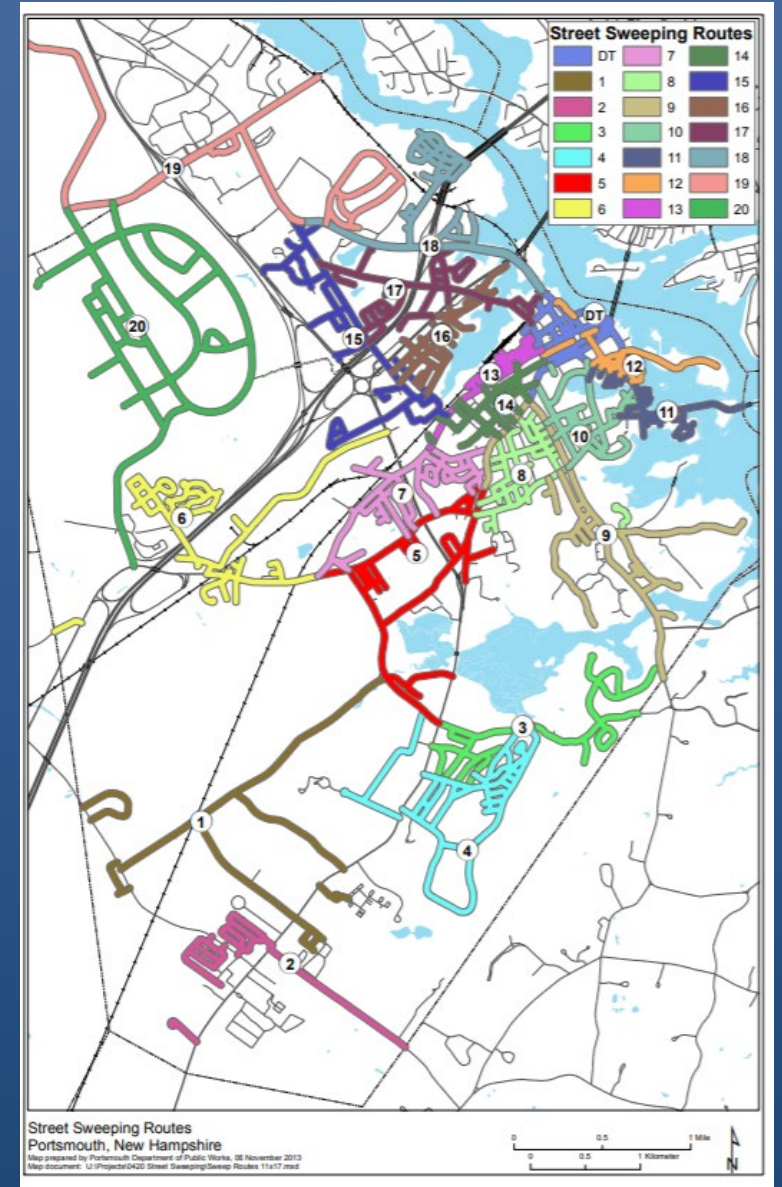
Sagamore Avenue Porous Pavement



Green Infrastructure Maintenance



Street Sweeping



Catch Basin Cleaning



Camera Truck – Pipe Inspections and Cleaning



Summer Interns

Stormwater Infrastructure Inspections



2014



2015



2016



2017

Public Outreach

Stormwater Management



This flyer has been developed to provide the Portsmouth Water Division's customers with information about how stormwater is managed and suggested steps that individuals can take to protect and improve water quality.

What is stormwater?

Stormwater is precipitation that runs over the land surface (runoff) and does not infiltrate the ground. In the process it may pick up pollutants and deposit them into surface waters (rivers, lakes and oceans), which may create water quality impacts and siltation that could potentially damage aquatic habitats.



Why should we care?

Stormwater pollution creates water quality impacts to swimming, boating and aquatic habitats that can be mitigated or prevented with awareness and new approaches to stormwater management. These pollutants tend to come from eroding soils, fertilizers and lawn chemicals, pet waste, and trash and debris. As a result of stormwater and the increase in volume of surface waters, flooding can also occur. With flooding comes property and infrastructure damages.

In the past, stormwater has been managed with the goals of controlling erosion and flooding, but the conventional approach has not been successful in either protecting water quality or accommodating flood waters. Recent changes in state and federal programs – and to some extent in local programs – recognize the shortcomings of the conventional approach and lay a course for a more up-to-date approach that can preserve both water quality and pre-development hydrologic conditions. The new approach employs tools such as low impact development techniques and stormwater utilities. Using these tools, it is possible to maintain water quality, ecosystem health and groundwater resources.
– New Hampshire Water Resources Primer (2008)

How can you help?

- Never pour hazardous materials into a storm drain
- Dispose of used motor oil, gasoline, antifreeze, cleaning agents, pesticides or fertilizers, paint and other hazardous agents in an appropriate manner - such as taking them to Household Hazardous Waste Days (held twice a year at Portsmouth's Department of Public Works)
- Do not sweep litter, sand, leaves or other materials into storm drains. Dispose of them in the trash or compost the material
- Never hose down a spill into a storm drain. Use absorbent towels or cat litter to clean up the spill and dispose of the material in the trash if it is not hazardous
- Detergents and chemical cleaners should not be used to wash sidewalks or driveways
- If you see a storm drain that is clogged please contact your respective Public Works Department and dispose of the material in the trash if it is not hazardous

Stormwater Management



What is the City doing?

The City's Stormwater Management Program includes the following to better service Portsmouth water customers and protect our environment:

- A completed a **Stormwater Master Plan**.
- A standalone **stormwater ordinance** to protect our waterways
- Site review and **zoning ordinance revisions** including low-impact development requirements.
- A **partnership with Soak Up the Rain New Hampshire (SOAK)**, a program managed by the NHDES with the goal of protecting and restoring clean water.
- Installation of **rain gardens** throughout the area, in which water filters through plants and soil layers before entering the groundwater system.
- **Tree box filter installations**, mini water quality filters installed beneath trees to control runoff while helping irrigate trees.
- **Increased green infrastructure improvements to City projects** with commitments to stormwater enhancements, aesthetics and regulations of the Clean Water Act.



Tree box filter



Rain garden, Portsmouth High School



Sagamore Ave. Reconstruction with Porous Pavement



Resources:

- www.cityofportsmouth.com
- www.soaknh.org
- Portsmouth Department of Public Works: (603) - 427 - 1530

Work with UNH Stormwater Center



May 7, 2018 NEWEA
Green Infrastructure
Tour with UNH
Stormwater Center



Seacoast Stormwater Coalition

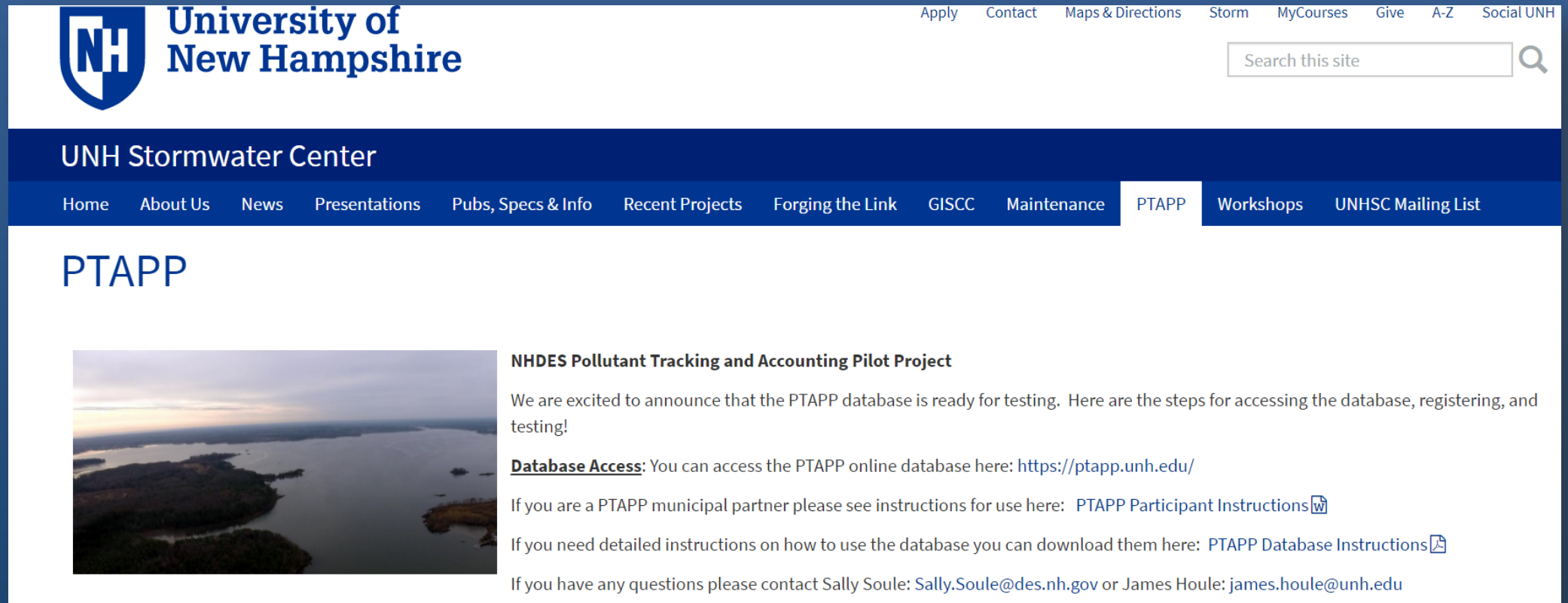
- Addressing New Permit Requirements

- Dover
- Durham
- Exeter
- Hampton
- North Hampton
- Portsmouth
- Rochester
- Rollinsford
- Rye
- Seabrook
- Somersworth
- UNH
- DES
- Southeast Watershed Alliance



April 18, 2018 Meeting in Dover

Pollution Tracking and Accounting Pilot Project - Future Compliance Tracking Mapping and GIS Database Updates



The screenshot shows the University of New Hampshire website. At the top left is the UNH logo and the text "University of New Hampshire". To the right are navigation links: "Apply", "Contact", "Maps & Directions", "Storm", "MyCourses", "Give", "A-Z", and "Social UNH". Below this is a search bar with the text "Search this site" and a magnifying glass icon. A dark blue navigation bar contains the text "UNH Stormwater Center" and a menu of links: "Home", "About Us", "News", "Presentations", "Pubs, Specs & Info", "Recent Projects", "Forging the Link", "GISCC", "Maintenance", "PTAPP" (highlighted), "Workshops", and "UNHSC Mailing List". The main content area has the heading "PTAPP" and a large image of a lake at sunset. To the right of the image is the text: "NHDES Pollutant Tracking and Accounting Pilot Project", "We are excited to announce that the PTAPP database is ready for testing. Here are the steps for accessing the database, registering, and testing!", "**Database Access:** You can access the PTAPP online database here: <https://ptapp.unh.edu/>", "If you are a PTAPP municipal partner please see instructions for use here: [PTAPP Participant Instructions](#)", "If you need detailed instructions on how to use the database you can download them here: [PTAPP Database Instructions](#)", and "If you have any questions please contact Sally Soule: Sally.Soule@des.nh.gov or James Houle: james.houle@unh.edu".

Proposed FY19 Stormwater Funding

- Set up Special Revenue Fund in FY19
 - Proposed FY19 Budget \$520,133
 - 50% funding from General Fund, 50% from Sewer Fund
 - Improved Tracking of Work Effort for Regulatory Reporting
- Explore setting up Stormwater Enterprise Fund
- Bring recommendations to City Council prior to FY20 Budget

FY19 Stormwater Budget

EXPENSES	Proposed Budget	% of Total Budget
Personnel Costs	\$ 440,133	85%
Professional Contracted Services	\$ 75,000	14%
Other Operating	\$ 5,000	1%
<i>Total Budget</i>	\$ 520,133	100%
FUNDING		
<i>Sewer Fund Transfer</i>	\$ 260,067	50%
<i>General Fund Transfer *</i>	\$ 260,066	50%

* FY18 General Fund Stormwater Budget (page 251)

- \$259,057

Water and Sewer
Rate Recommendations,
Stormwater Funding Proposal
David Hyder –
Stantec Consulting

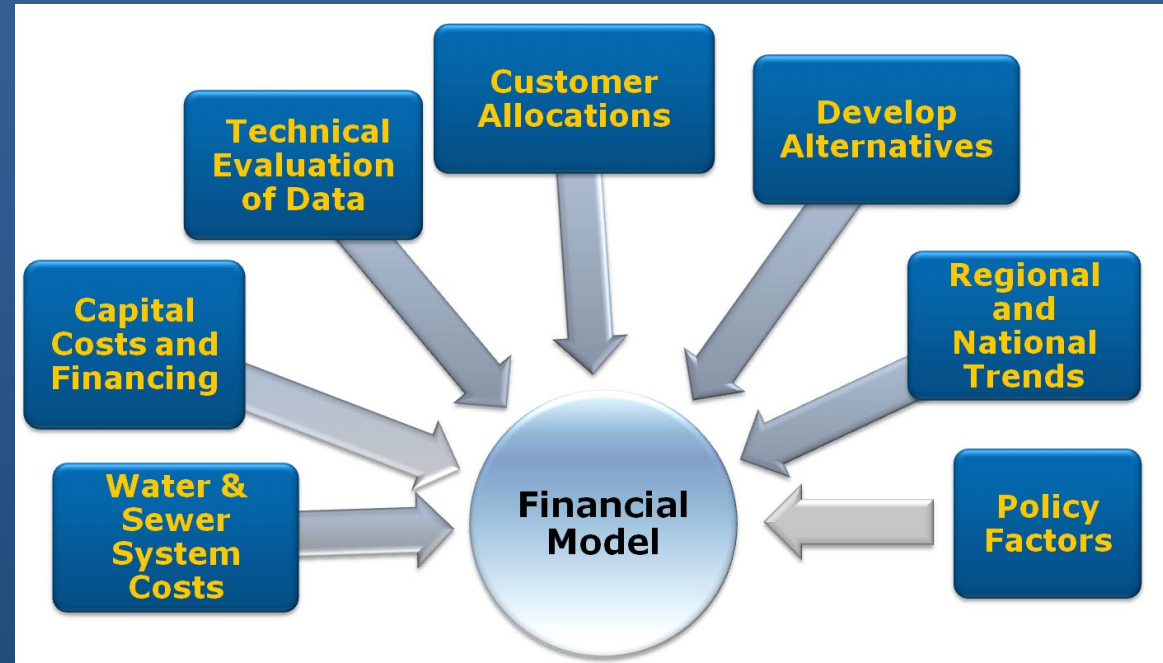
Water and Sewer System Funding: Enterprise Funds

- Enterprise Funds Account for Operations That are Financed and Operated in a Manner Similar to Private Business
- Must have Fees and or Charges Sufficient Enough to Cover the Cost of Providing Goods and Services, Including Capital costs (i.e. System Reinvestment and Debt Service)
- Note: Property Taxes do not Subsidize the Water and Sewer Funds

Rate Model Components

The rate model serves as the key tool to assist in long-term planning, allowing:

- Prudent financial planning which results in predictable rate increases
- Funding of significant capital projects
- Proactive management of the systems which results in lowest rates over time



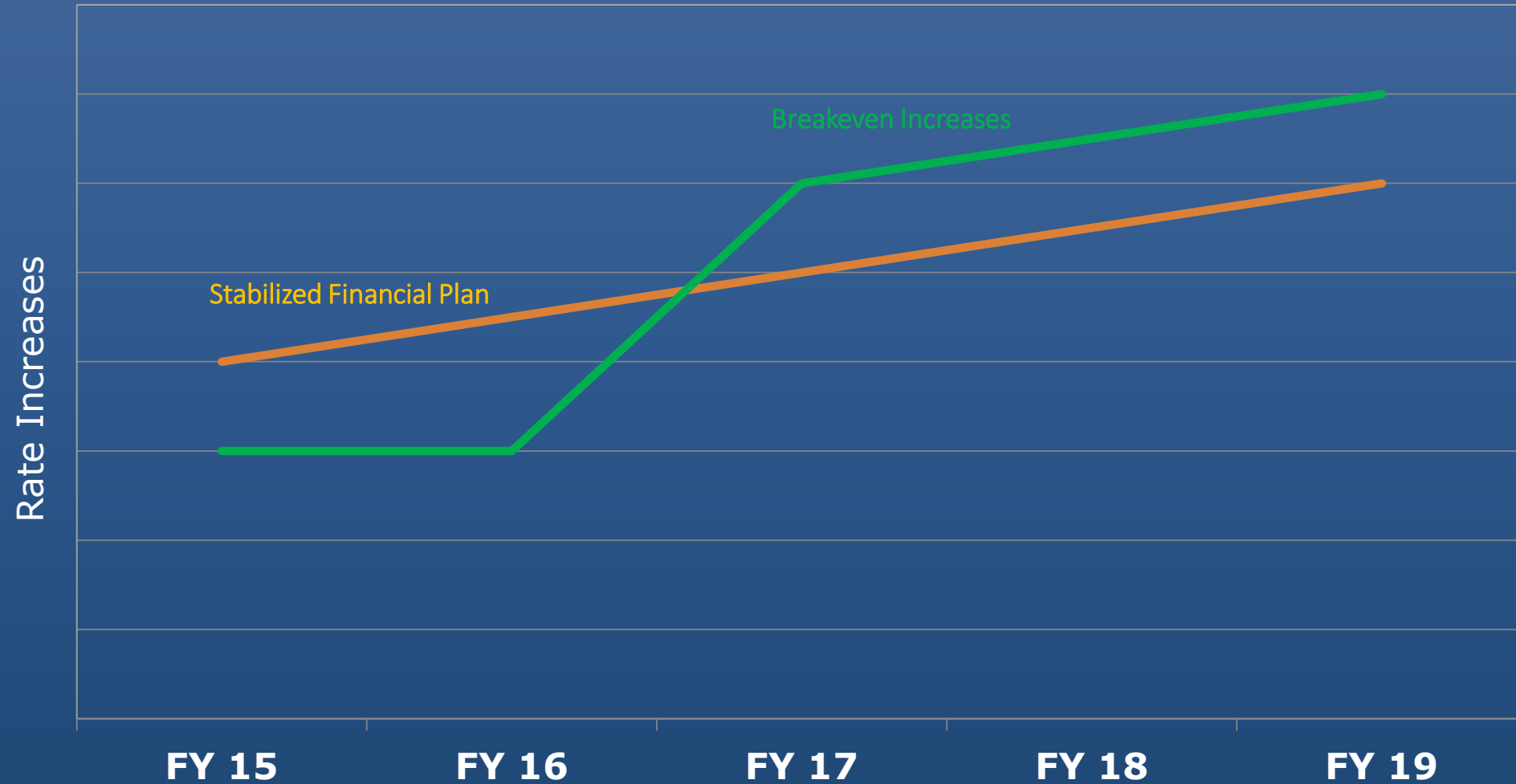
Water/Sewer Fund Challenges

- Aging Infrastructure
- Regulatory Compliance
- Evolving technologies and level of system complexities, especially with treatment facilities - both water and sewer
- Major Capital Projects
- Declining Demands / High Fixed Cost Service

Rate Study Highlights

- November 2012 - Rate Study Kickoff
- February 2013 - City Council Work Session
- March 2013 - Public Input Session Rate Study
- April 2013 - City Council Work Session Water & Sewer Budget
- March 2014 - Public Input Session Rate Study
- May 2014 - City Council Work Session Water and Sewer Budget
- FY15 and FY16 Budget Incorporated Rate Recommendations
- FY 17 Budget Incorporated Rate Recommendation Including:
 - Update of wholesale water rates, Implementation of irrigation rates
- FY 18 Budget Incorporated Rate Recommendations

Continued Use of “Glidepath” Approach to Raising Rates in Anticipation of Major Capital Projects



FY19 Water Revenue Budget

The FY19 Water Division appropriations would be funded from the following sources to meet cash requirements:

- \$8,069,988 - Water Consumption (79%)
- \$2,061,036 - Other Fees (20%)
- \$ 44,208 - State Revenues/Special Agreements (<1%)

FY19 Proposed Water Rate

2% Rate Change from FY 18 (First increase since FY11)

	FY 19 Proposed (per unit)
First Tier Rate (10 units or less per month)	
Capital Related rate, per unit billed	\$2.88
First 10 units billed per month	\$1.35
Total First Tier Rate	\$4.23
Second Tier Rate (over 10 units per month)	
Capital Related rate, per unit billed	\$2.88
Over 10 units billed per month	\$2.22
Total Second Tier Rate	\$5.10

1 unit = 748 gallons of water

FY19 Proposed Irrigation Rates

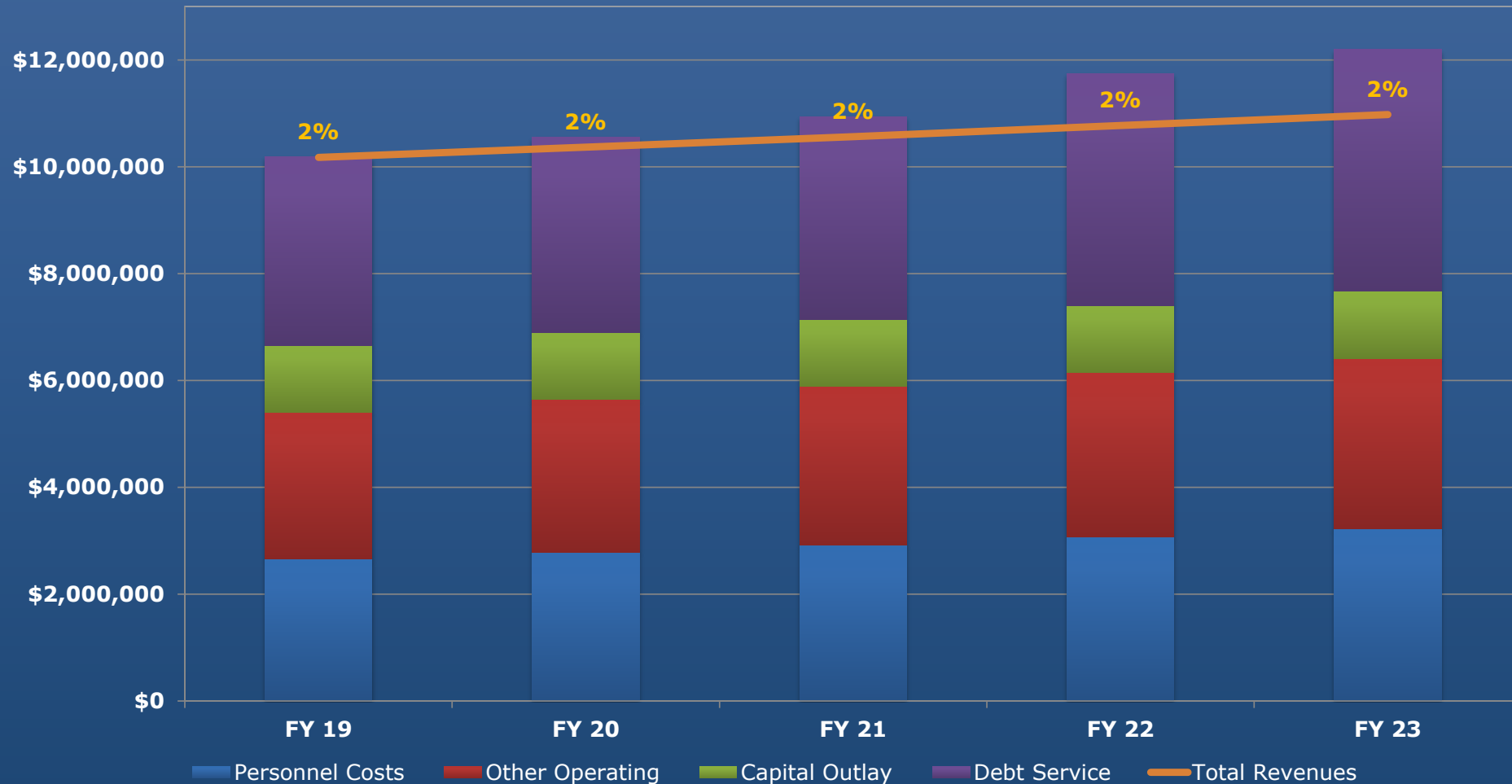
2% Rate Change from FY 18

	FY 19 Proposed (per unit)
First Tier Rate (0 to 10 units per month)	
Capital Related rate, per unit billed	\$2.88
First 10 units billed per month	\$2.22
Total First Tier Rate	\$5.10
Second Tier Rate (11 to 20 units per month)	
Capital Related rate, per unit billed	\$2.88
11 to 20 units billed per month	\$6.73
Total Second Tier Rate	\$9.61
Third Tier Rate (all units over 20 per month)	
Capital Related rate, per unit billed	\$2.88
All units billed per month	\$8.98
Total Third Tier Rate	\$11.86

1 unit = 748 gallons of water

Water Rate Projections

Model for Rate Stabilization Approach



FY19 Proposed Water Rate

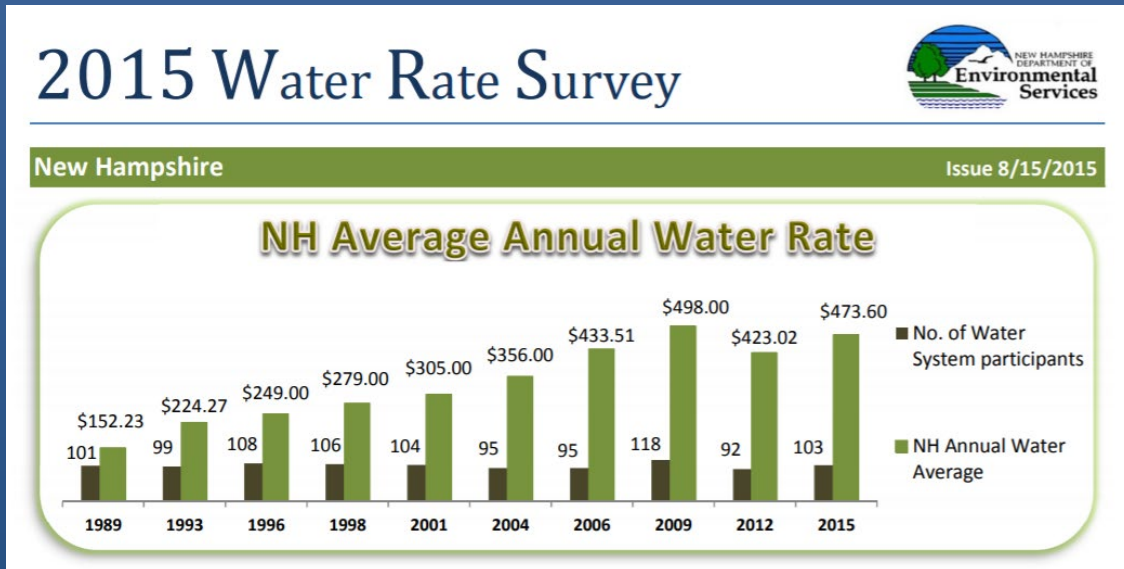
Average Residential Customer Bill

FY 19 Water Rate
 Average Residential Customer Bill
 Monthly Consumption in units
 (1 unit = 100 cf = 748 gallons)

	Rate	Billed Units	Monthly Charge
Capital Related Rate, per unit	\$2.88	5	\$14.40
1 st Tier water service rates	\$1.35	5	\$6.75
Minimum Charge (5/8" meter)	\$4.95	n/a	\$4.95
Total Monthly Charge			\$26.10
Total Annual Charge			\$313.20

This increase results in a monthly increase of \$0.40 per month or \$4.80 per year for the average residential customer.

2015 – Average New Hampshire Annual Water Cost



- Average - New Hampshire
 - \$473.60
- Portsmouth Average
 - \$308.40

FY19 Sewer Revenue Budget

The FY19 Sewer Division appropriations would be funded from the following sources to meet cash requirements:

- \$16,633,110 - Sewer Consumption (91%)
- \$ 752,905 - State Aid Grant (4%)
- \$ 332,500 - Miscellaneous Fees (<2%)
- \$ 321,969 - Special Agreements (<2%)
- \$ 300,000 - Interest on Investment (<2%)

FY19 Proposed Sewer Rate

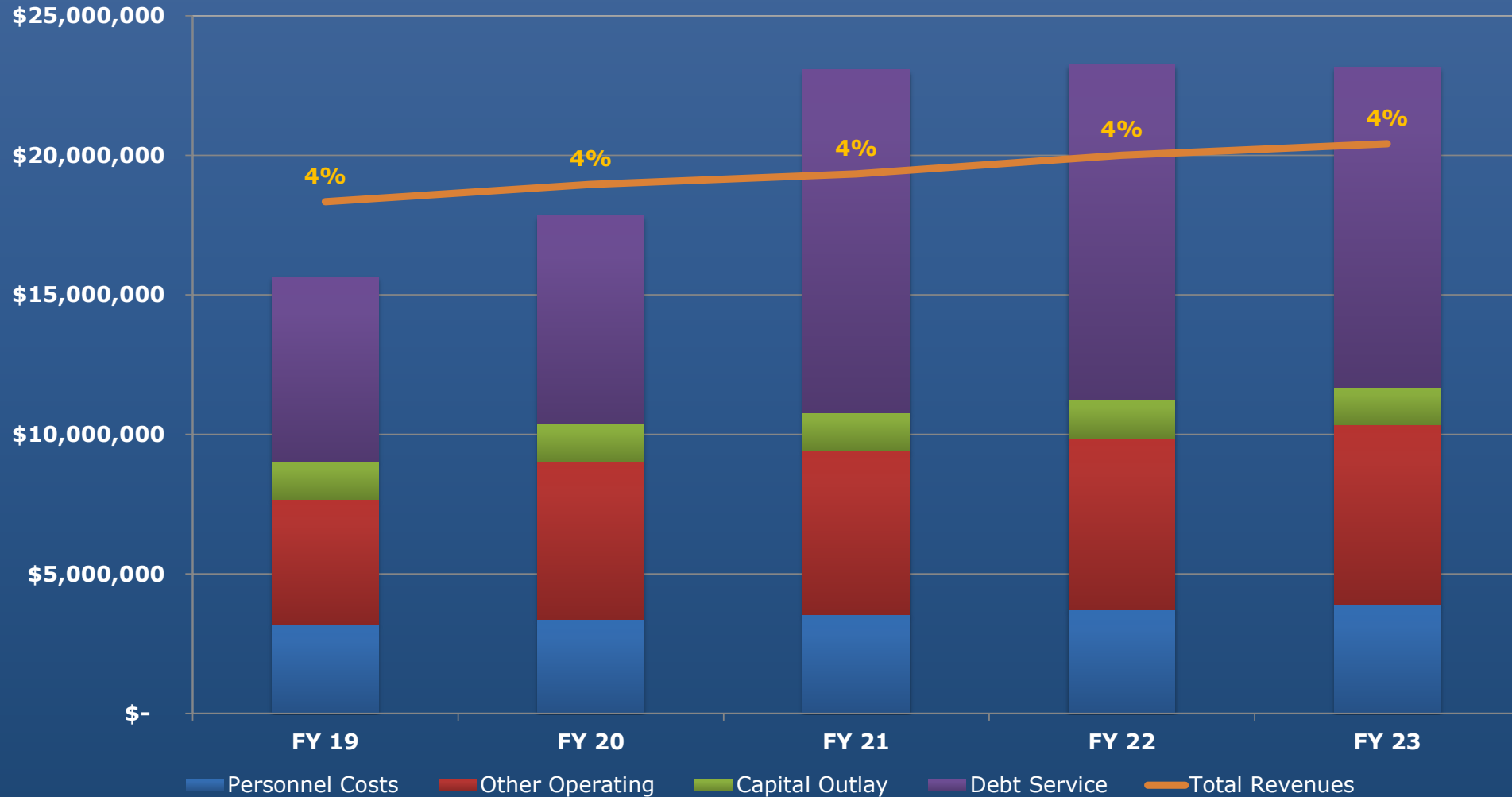
4% Rate Change from FY 18

	FY 19 Proposed (per unit)
First Tier Rate (10 units or less per month)	
Capital Related rate, per unit billed	\$7.02
First 10 units billed per month	\$6.22
Total First Tier Rate	\$13.24
Second Tier Rate (over 10 units per month)	
Capital Related rate, per unit billed	\$7.02
Over 10 units billed per month	\$7.54
Total Second Tier Rate	\$14.56

1 unit = 748 gallons of water

Sewer Rate Projections

Model for Rate Stabilization Approach



FY19 Proposed Sewer Rate Average Residential Customer Bill

FY 19 Sewer Rate
Average Residential Customer Bill
Monthly Consumption in units
(1 unit = 100 cf = 748 gallons)

	Rate	Billed Units	Monthly Charge
Capital Related Rate, per unit	\$7.02	5	\$35.10
1 st Tier water service rates	\$6.22	5	\$31.10
Minimum Charge (5/8" meter)	\$0.00	n/a	\$0.00
Total Monthly Charge			\$66.20
Total Annual Charge			\$794.40

This increase results in a monthly increase of \$2.55 per month or \$30.60 per year for the average residential customer.

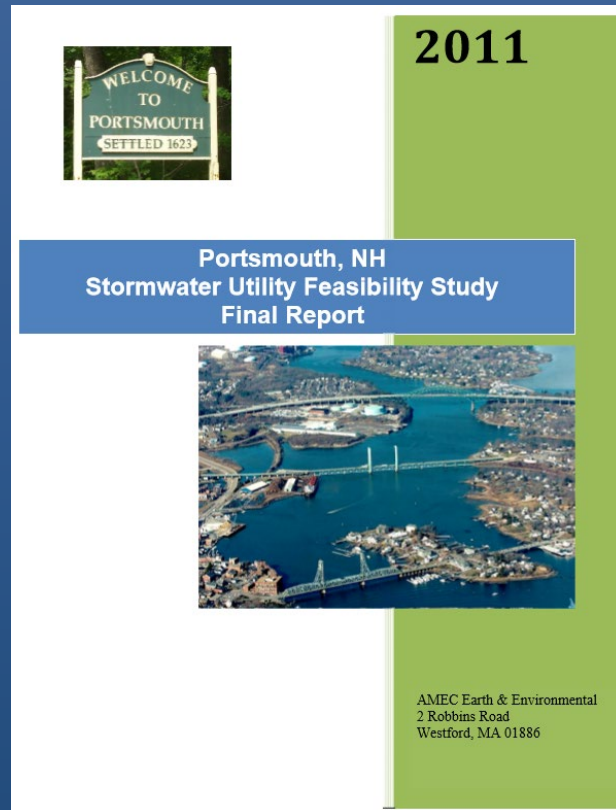
Other Seacoast Community Sewer Rates

- Somersworth – 33% projected increase in rates by 2020
- Dover – 57% increase (2011 to 2018)
- Durham – 56% increase (2013 to 2018)
- Newmarket – 7%/year increase for the next four years
- Exeter – 25%/year increase for the next four years

FY 19 Stormwater System Funding Approach

Establish Stormwater Division	Combined Nature of System	Proposed Funding Approach	Evaluate Funding Approach Over Time
Enables tracking of costs for future assessment of funding needs	Recognize combined nature of system and fact that some stormwater functions provided by Sewer Division	✓ 50% General Fund ✓ 50% Sewer Fund Common approach for combined systems	Continue to evaluate funding approach as costs are tracked and systems are further separated

Stormwater Utility Feasibility Study



- Looked at funding pending regulatory compliance requirement needs
- Assess based on Equivalent Residential Unit (ERU) property
- During this next year we will be examining future funding options

2008 New Hampshire Legislation

**TITLE X
PUBLIC HEALTH
CHAPTER 149-I
SEWERS**

Assessment for Sewers

Section 149-I:10-a

149-I:10-a Stormwater Utility Fund. –

I. The funds received from stormwater utility fees shall be kept as a separate and distinct fund to be known as the stormwater utility fund. Such fund shall be allowed to accumulate from year to year, shall not be commingled with town or city tax revenues, and shall not be deemed part of the municipality's general fund accumulated surplus. Such fund may be expended only for stormwater treatment, conveyance, and discharge systems.

II. Except when a capital reserve fund is established pursuant to paragraph III, all stormwater utility funds shall be held in the custody of the municipal treasurer. Estimates of anticipated revenues and anticipated expenditures from the stormwater utility fund shall be submitted to the governing body as set forth in RSA 32:6 if applicable, and shall be included as part of the municipal budget submitted to the local legislative body for approval. If the municipality has a properly established stormwater utility commission, then notwithstanding RSA 41:29 or RSA 48:16, the treasurer shall pay out amounts from the stormwater utility fund only upon order of the stormwater utility commission. Expenditures shall be within amounts appropriated by the local legislative body.

III. At the option of the local governing body, or of the stormwater utility commission if any, all or part of any surplus in the stormwater utility fund may be placed in one or more capital reserve funds and placed in the custody of the trustees of trust funds pursuant to RSA 35:7. If such a reserve fund is created, then the governing body, or stormwater utility commission if any, may expend such funds pursuant to RSA 35:15 without prior approval or appropriation by the local legislative body, but all such expenditures shall be reported to the municipality pursuant to RSA 149-I:25. This section shall not be construed to prohibit the establishment of other capital reserve funds for any lawful purpose relating to municipal water systems.

Source. 2008, 295:8, eff. Aug. 26, 2008.

- The funds received from stormwater utility fees shall be kept as a separate and distinct fund to be known as the stormwater utility fund. Such fund shall be allowed to accumulate from year to year, shall not be commingled with town or city tax revenues, and shall not be deemed part of the municipality's general fund accumulated surplus. Such fund may be expended only for stormwater treatment, conveyance, and discharge systems.

Discussion