

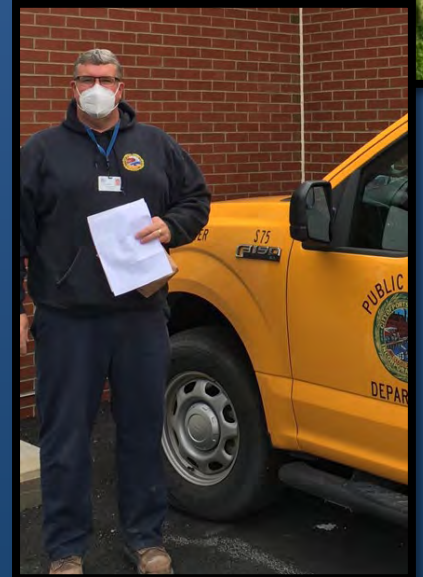
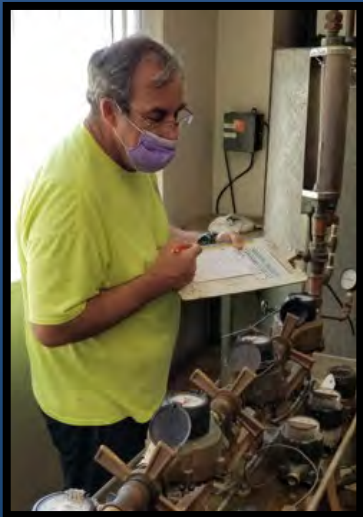
Water, Sewer, & Stormwater
FY21 Budget Listening Session
City Council Presentation
May 19, 2020



Overview of Tonight's Meeting

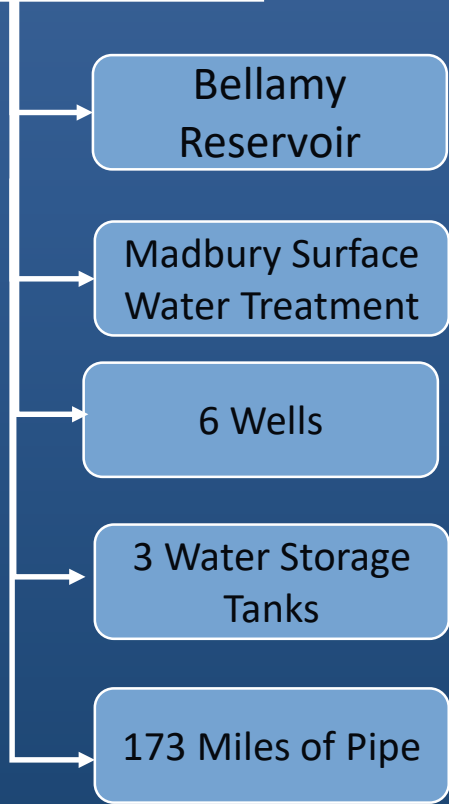
- Introductions
 - Peter Rice – Public Works Director
 - Brian Goetz – Deputy Public Works Director
 - Terry Desmarais – City Engineer
 - David Hyder – STANTEC
- System Overviews and Highlights
- Budget Approach and Response to Effects of Covid-19
- Rate Increase Adjustments
- Proposed FY21 Budgets
- Discussion

Continuing to Provide Essential Services Water – Sewer - Stormwater

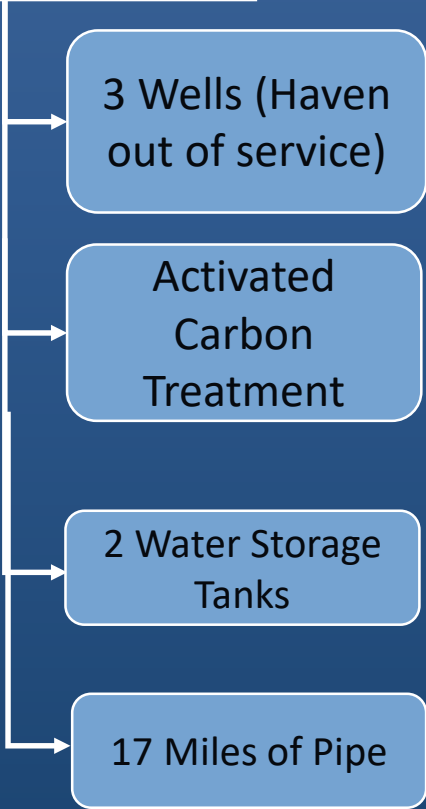


Water Division

Portsmouth Regional Water System



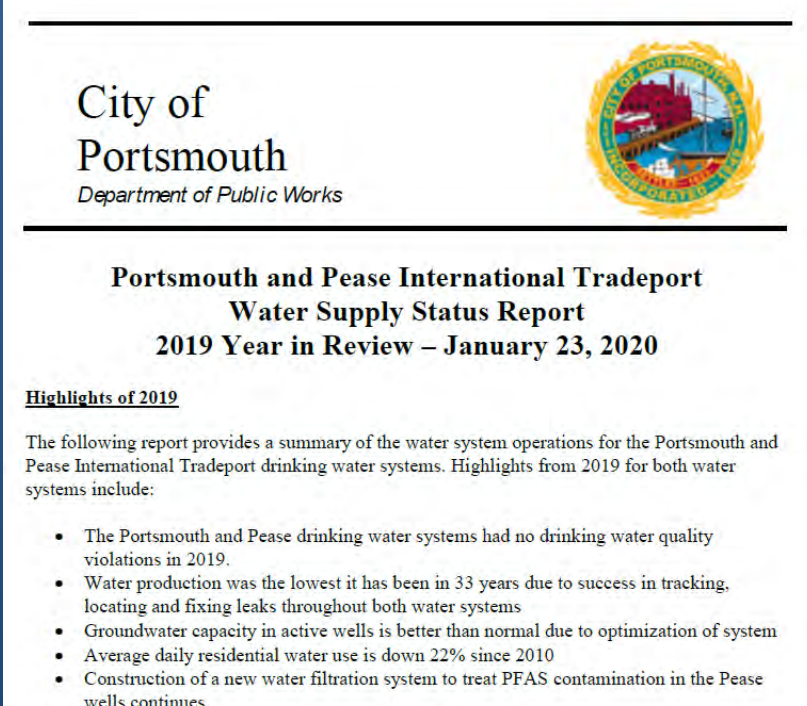
Pease Tradeport Water System



Water System Highlights

Year in Review Posted on City Website:
cityofportsmouth.com/publicworks/water/supply-status

- The Portsmouth and Pease drinking water systems are in compliance with all drinking water regulatory requirements
- Continue to respond and treat Pease Tradeport PFAS contamination



The screenshot shows the title page of a report. At the top left, it says 'City of Portsmouth Department of Public Works'. To the right is the official seal of the City of Portsmouth. The main title is 'Portsmouth and Pease International Tradeport Water Supply Status Report 2019 Year in Review – January 23, 2020'. Below the title is a section for 'Highlights of 2019' which includes a paragraph of introductory text and a bulleted list of five key points.

City of
Portsmouth
Department of Public Works

**Portsmouth and Pease International Tradeport
Water Supply Status Report
2019 Year in Review – January 23, 2020**

Highlights of 2019

The following report provides a summary of the water system operations for the Portsmouth and Pease International Tradeport drinking water systems. Highlights from 2019 for both water systems include:

- The Portsmouth and Pease drinking water systems had no drinking water quality violations in 2019.
- Water production was the lowest it has been in 33 years due to success in tracking, locating and fixing leaks throughout both water systems
- Groundwater capacity in active wells is better than normal due to optimization of system
- Average daily residential water use is down 22% since 2010
- Construction of a new water filtration system to treat PFAS contamination in the Pease wells continues

Newington Booster Station Upgrade Completed



- Aeration system for Total Trihalomethane (TTHM) Treatment



- Building Upgrades
- New Booster Pumps and Motor Controls

Pease Water Treatment Facility - Construction In Progress:



Recent Water Pipe Projects

- Islington Street south of Bartlett
- Maplewood Avenue Corridor
- Pleasant Street Area
- Little Harbor School Road waterline
- Coleman Drive, Newington
 - Installed by City Crew



New Billing System

- Completed transition to new billing system
- Will eventually enable more data to customers through online customer portals



Sewer Division

Sewer Collections and Pumping Stations

~115 Miles
Sewer Main

20 Wastewater
Pumping Stations

Meter/Backflow

Dig Safe

Wastewater Treatment

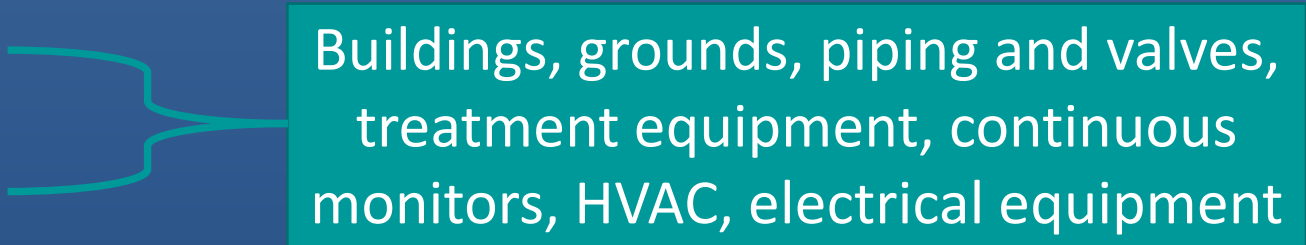
Peirce Island
WWTF
(6.13 MGD)

Pease WWTF
(1.2 MGD)



Core Functions and Services

- Wastewater Treatment
 - EPA Permit Compliance
 - Preventative Maintenance
 - Corrective Maintenance
 - Facility Improvements
 - Industrial User Program
 - 24 Hour Operation and Oversight



Buildings, grounds, piping and valves, treatment equipment, continuous monitors, HVAC, electrical equipment

Core Function and Services

■ Collection System

- Maintenance
- Minor Construction
- New Installations and Inspections
- Pipe Inspection and Cleaning
- Fats, Oil and Grease
- 24 Hour Operation and Oversight

■ Pumping Stations

- Preventative Maintenance
 - Including Force Mains
- Corrective Maintenance
- Facilities Improvements
- 24 Hour Operation and Oversight

Wastewater Treatment Facility NPDES Permits

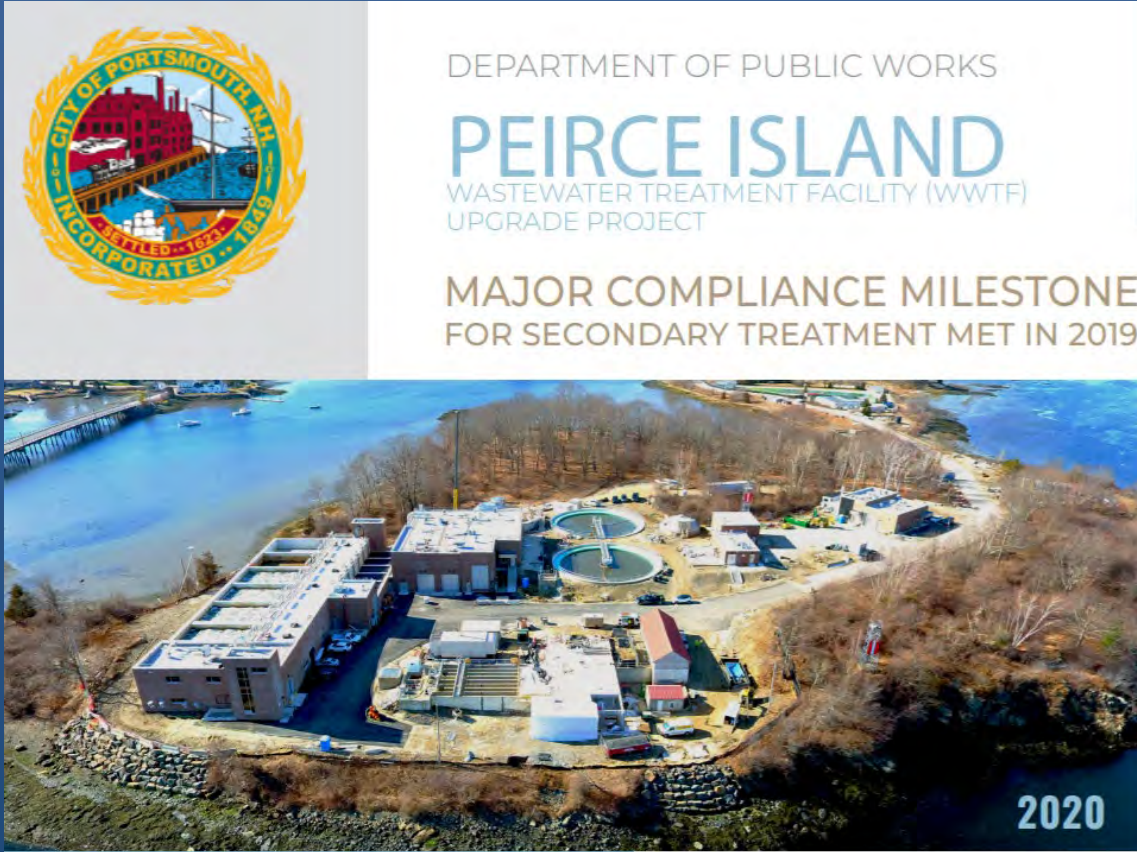
- Peirce Island WWTF
 - 2007 NPDES Final Permit
 - Began Compliance April 1, 2020
- Pease WWTF
 - 2000 NPDES Final Permit
 - NPDES Permit Application June 2019 – Flow Increase Request
- Draft Great Bay Total Nitrogen General Permit
 - Draft Permit Issued January 7, 2020
 - Comments Submitted to EPA May 8, 2020

Regulatory Impacts on Budget

- NPDES Permits
 - Lower limits require upgrades
 - Capital and operational expenditures
- Long Term Control Plan (LTCP) To Minimize Combined Sewer Overflow
 - Sewer separation
 - Infiltration and inflow reduction
 - Capital expenditures

Major Projects – Wastewater Treatment Upgrades

■ Peirce Island Treatment



■ Pease Tradeport Headworks



FY21 Budgeting Process Prior to Covid-19

- Worked with staff to itemize needs for all line items based on realistic projections
- Projected budget increases based on new systems in service for FY21:
 - Sewer – Pease Headworks System
 - Sewer – Peirce Island Wastewater Treatment Facility Commissioning
- Recommended Rate Model Increase as Noted in FY20 Budget:
 - Water: 2%
 - Sewer: 4%
- Water rates would be much higher if not for Air Force agreements to fund Pease Tradeport PFAS Treatment System

Pease Tradeport Water Treatment Air Force Agreements

- Reimbursements totaling over \$17 million
- Would have required approx. 15% increase in water rates



Rendering of Pease Grafton Road Water Treatment Building

FY21 Budget Response to Covid-19

- Recommended Rate Increases Reduced
 - Water: 0%
 - Sewer: 0%
- Hold off hiring the following open positions
 - Water - Equipment Operator
 - Sewer - Treatment Operator
 - Stormwater – Laborer
- Delay or Eliminate Future Year Capital Projects

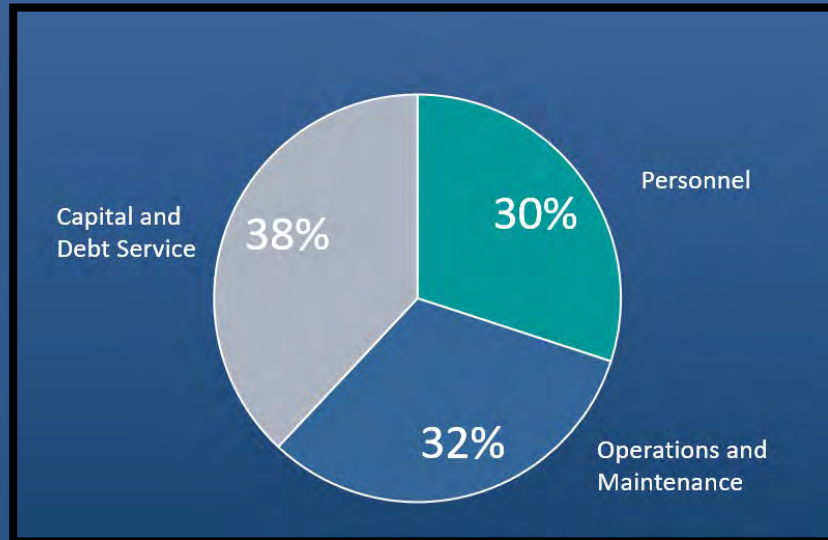
Water and Sewer
Rate Model Approach and
FY21 Adjustments
David Hyder, Stantec

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

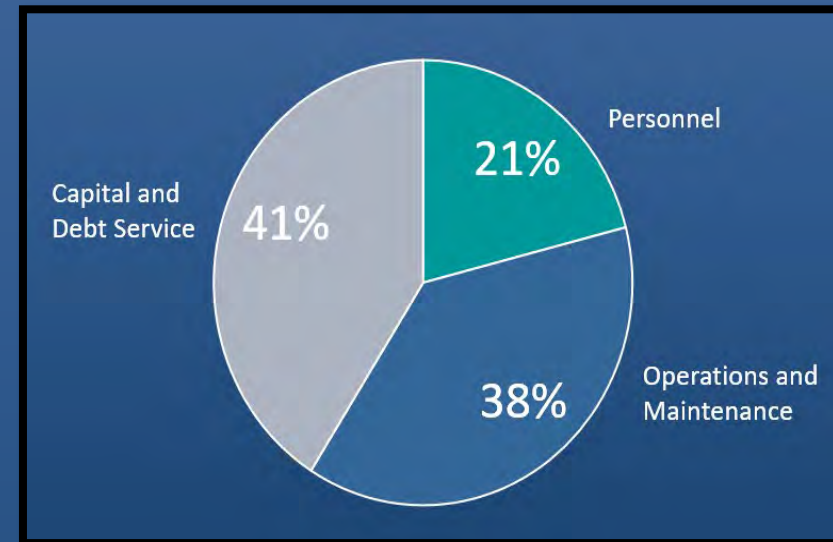
Water and Sewer Cash Funding Components

Water



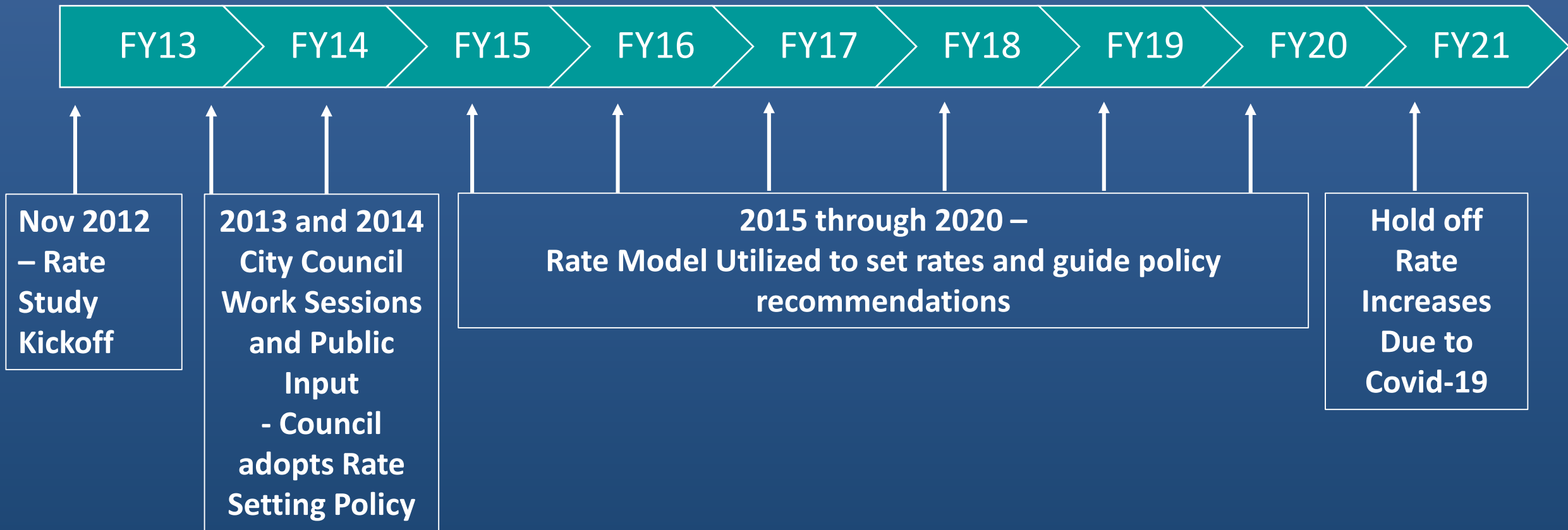
- 30% - Personnel salaries and benefits
- 32% - Operations and maintenance
- 38% - Capital funding and debt service

Sewer

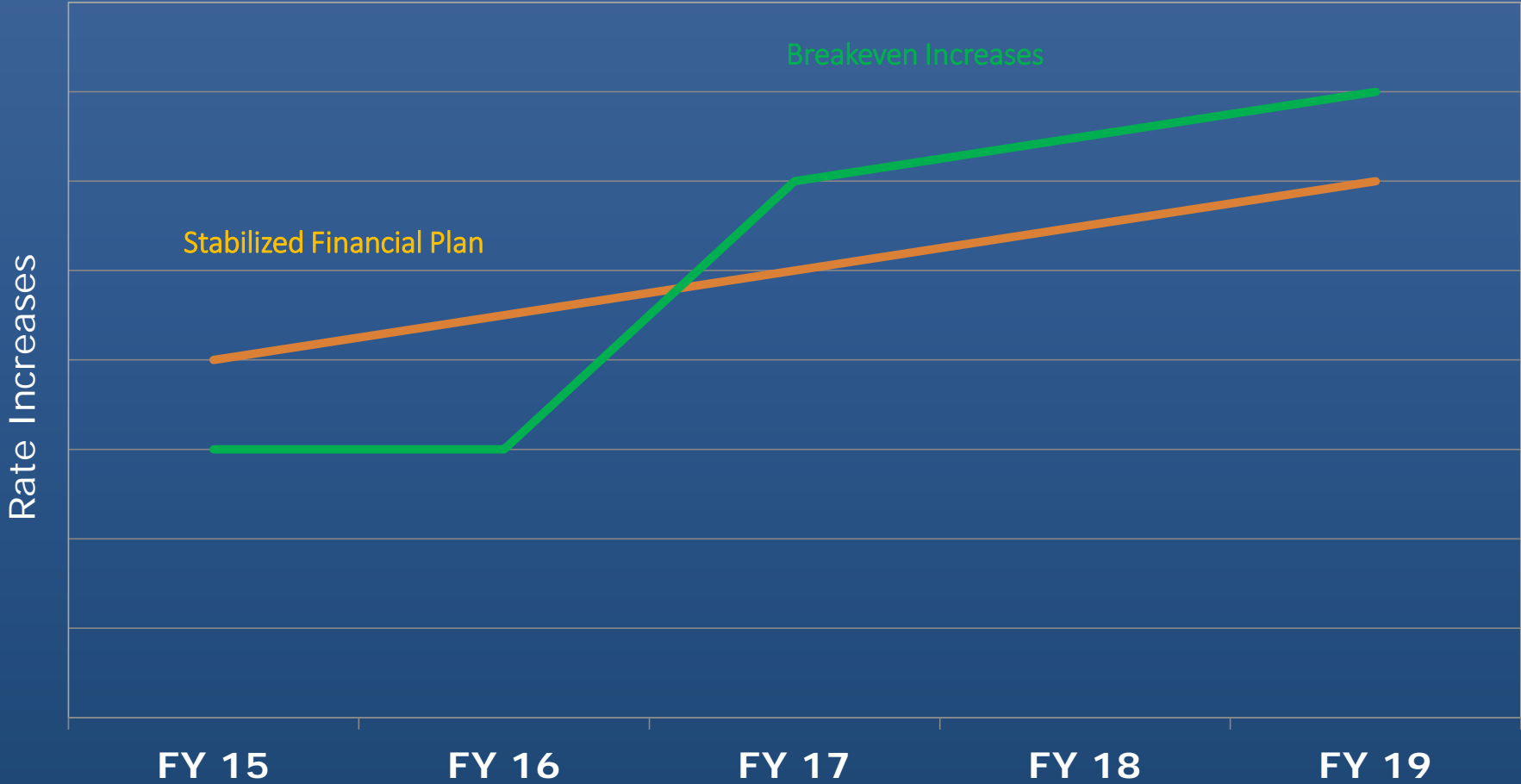


- 21% - Personnel salaries and benefits
- 38% - Operations and maintenance
- 41% - Capital funding and debt service

Rate Setting Policy FY13 to FY20

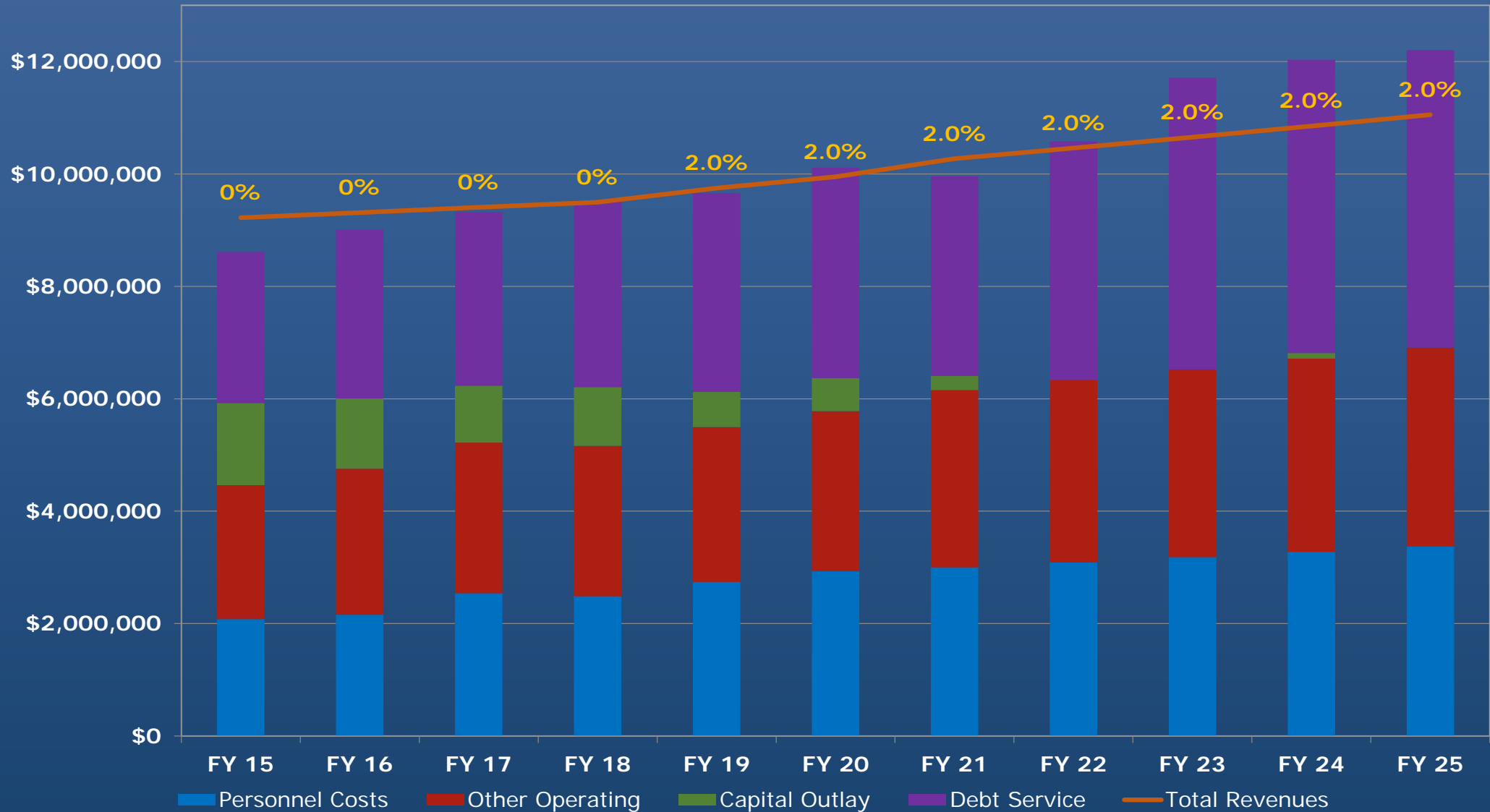


FY13 to FY20: Use of “Glidepath” Approach to Raising Rates in Anticipation of Major Capital Projects



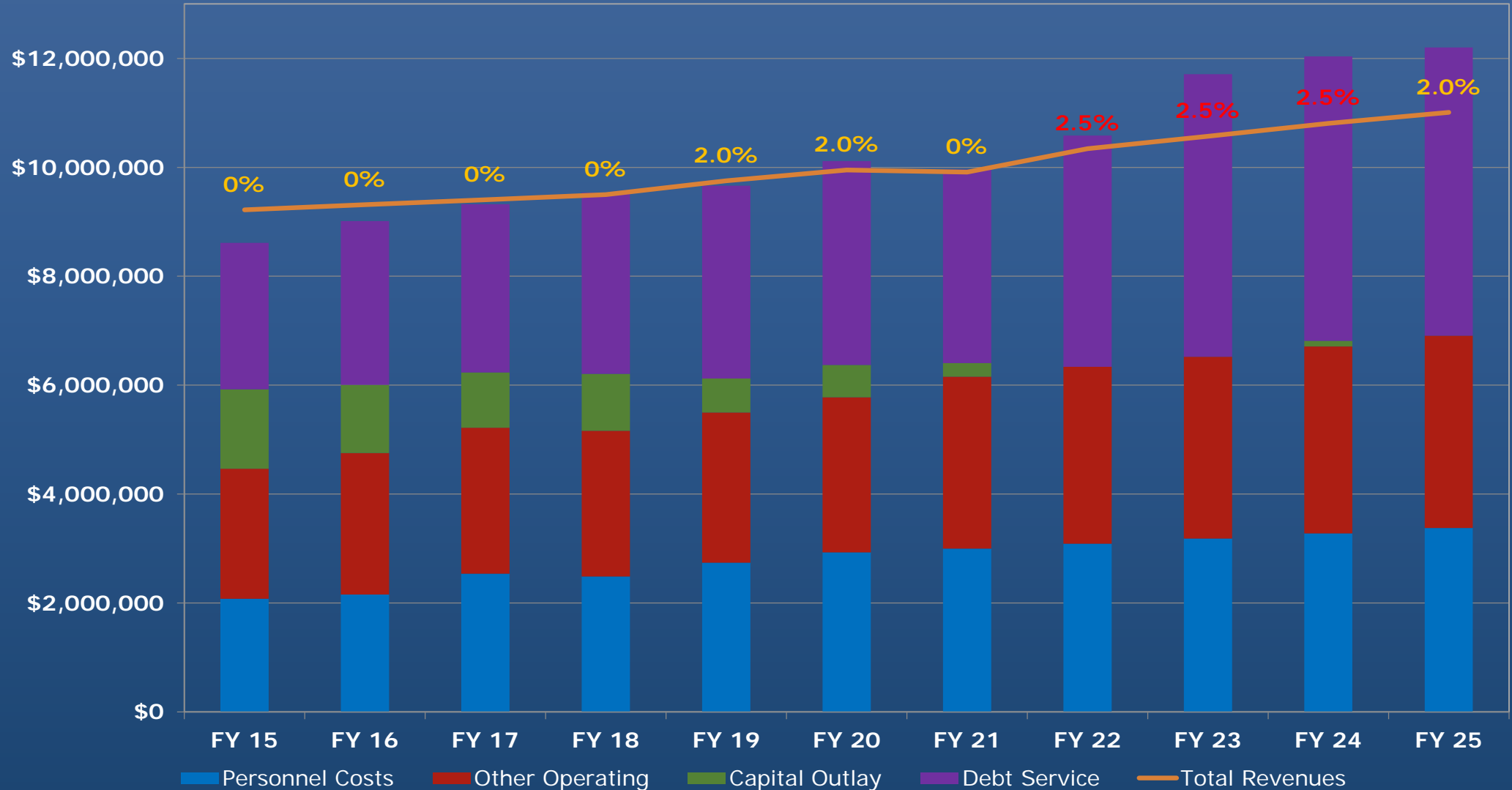
Water Rate History and Projections

Steady State Plan Annual 2% Increases



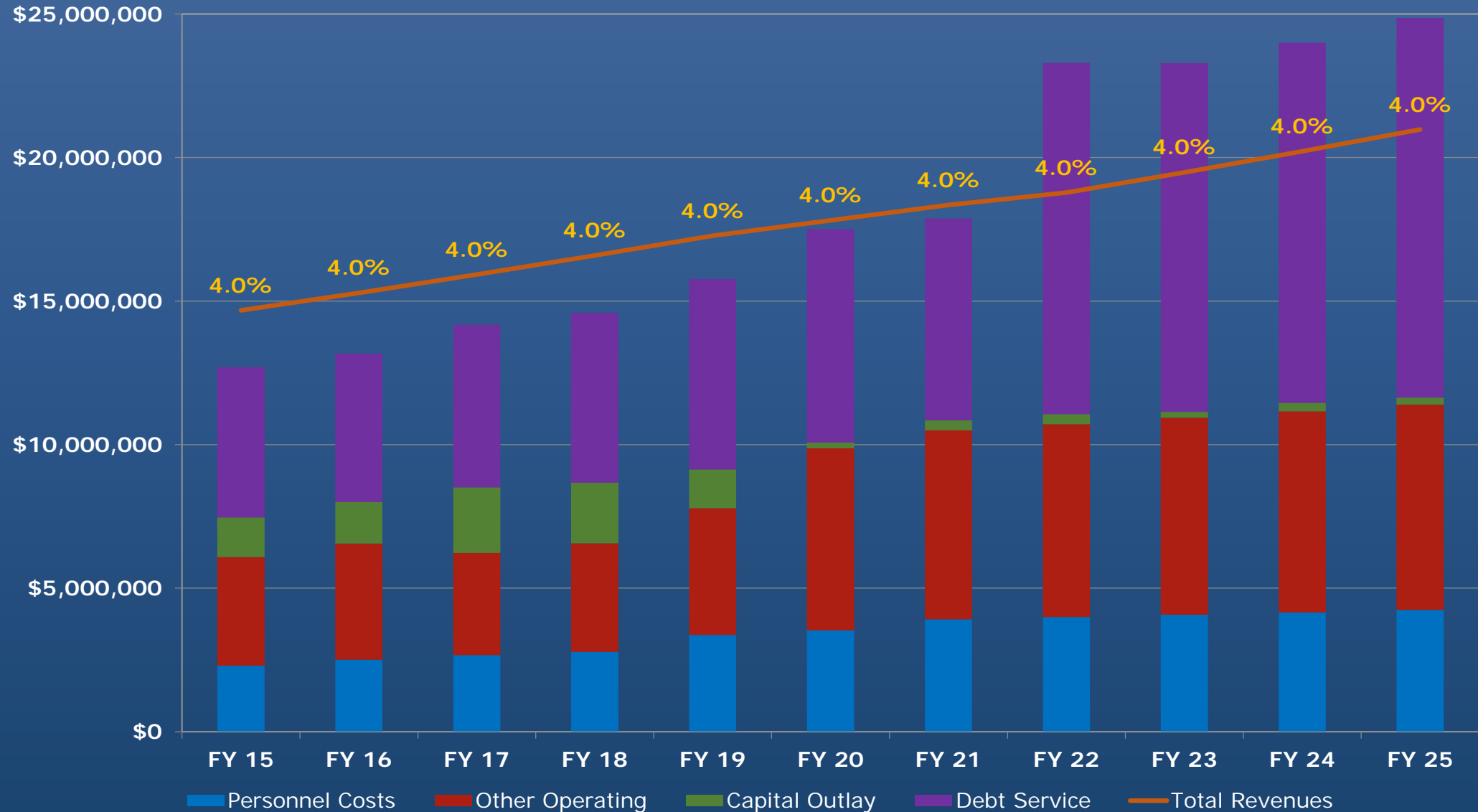
Water Rate Projections

Revised Plan - 0% Increase FY21



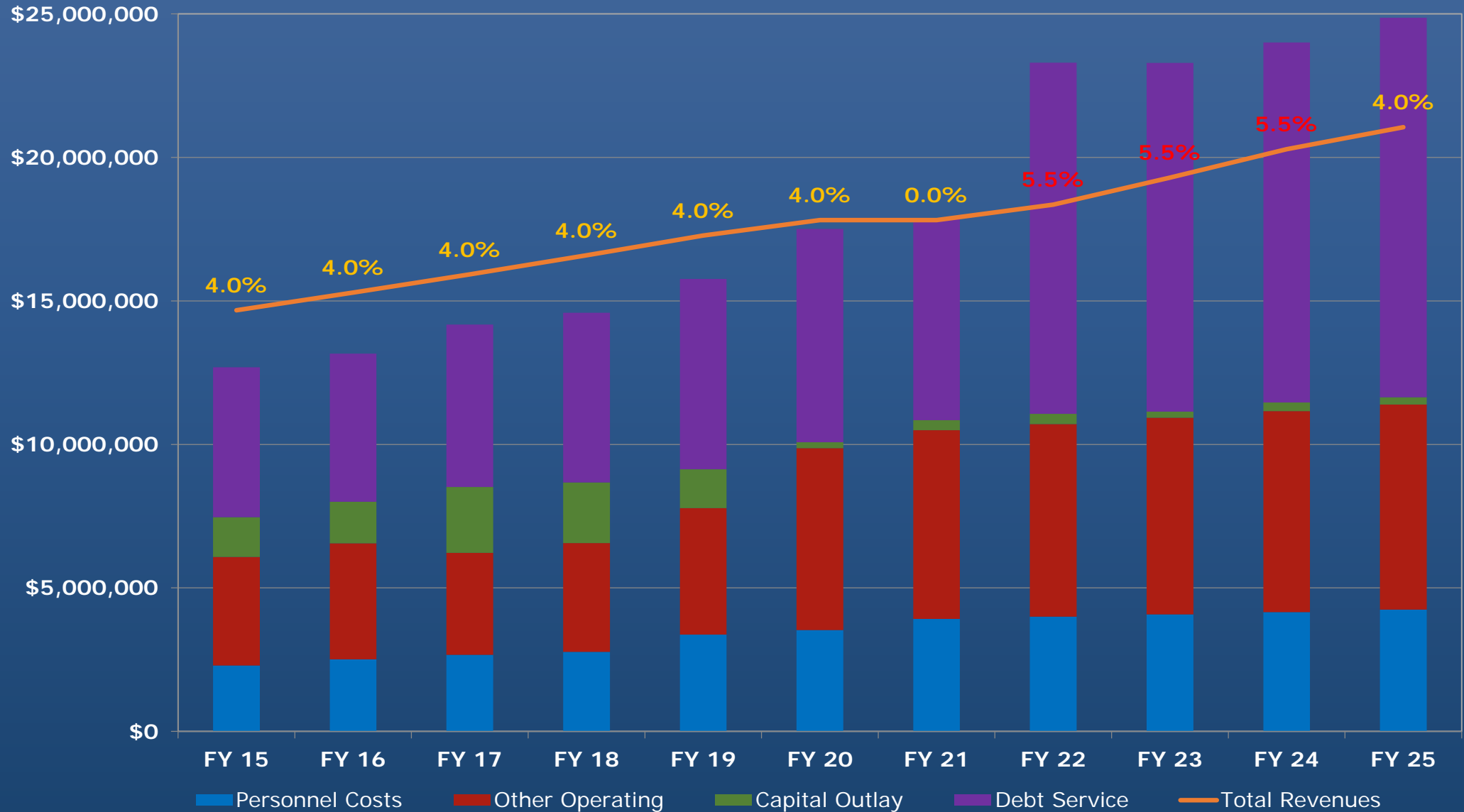
Sewer Rate History and Projections

Steady State Plan Annual 4% Increases



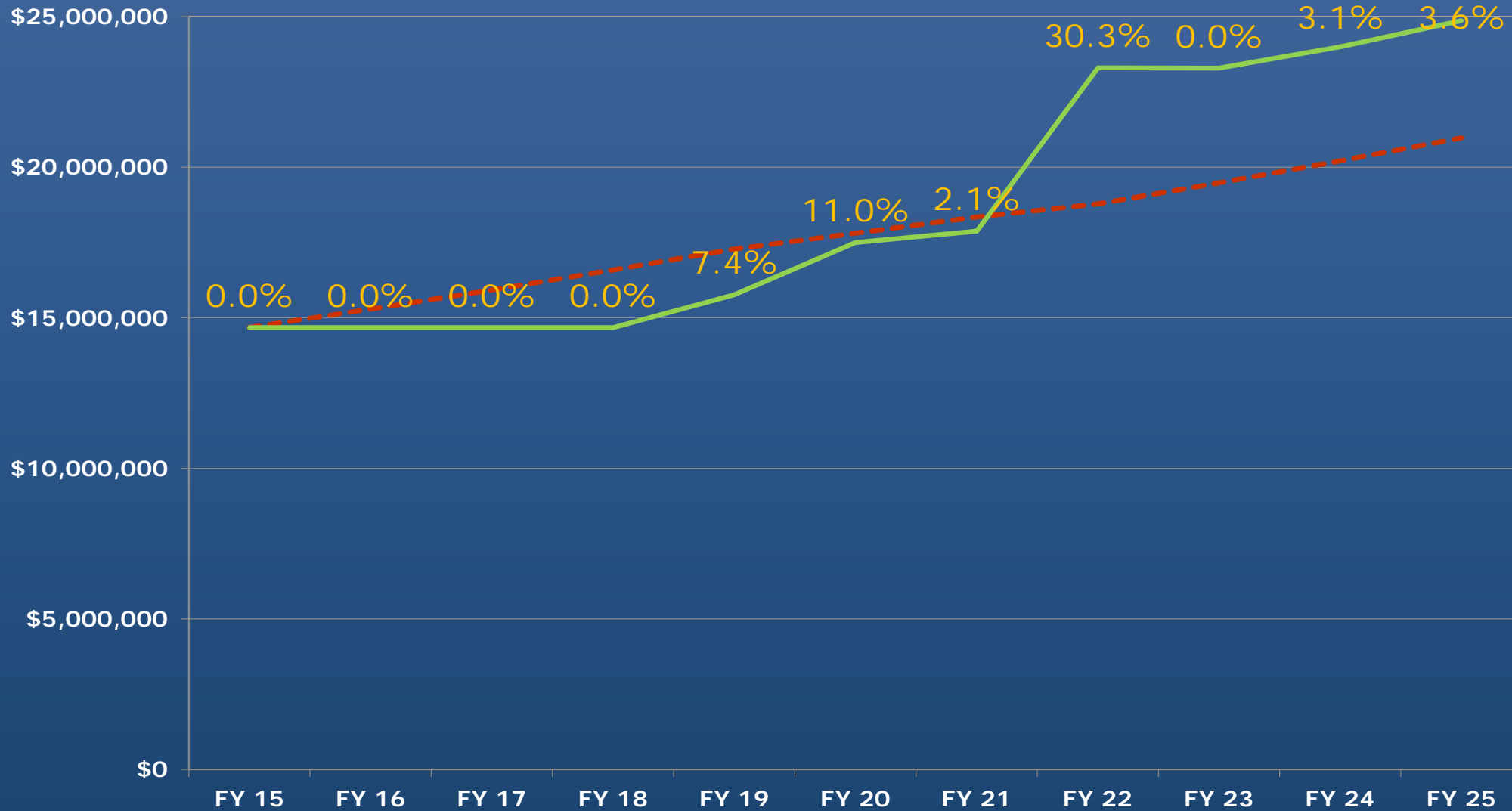
Sewer Rate Projections

Revised Plan - 0% Increase FY21



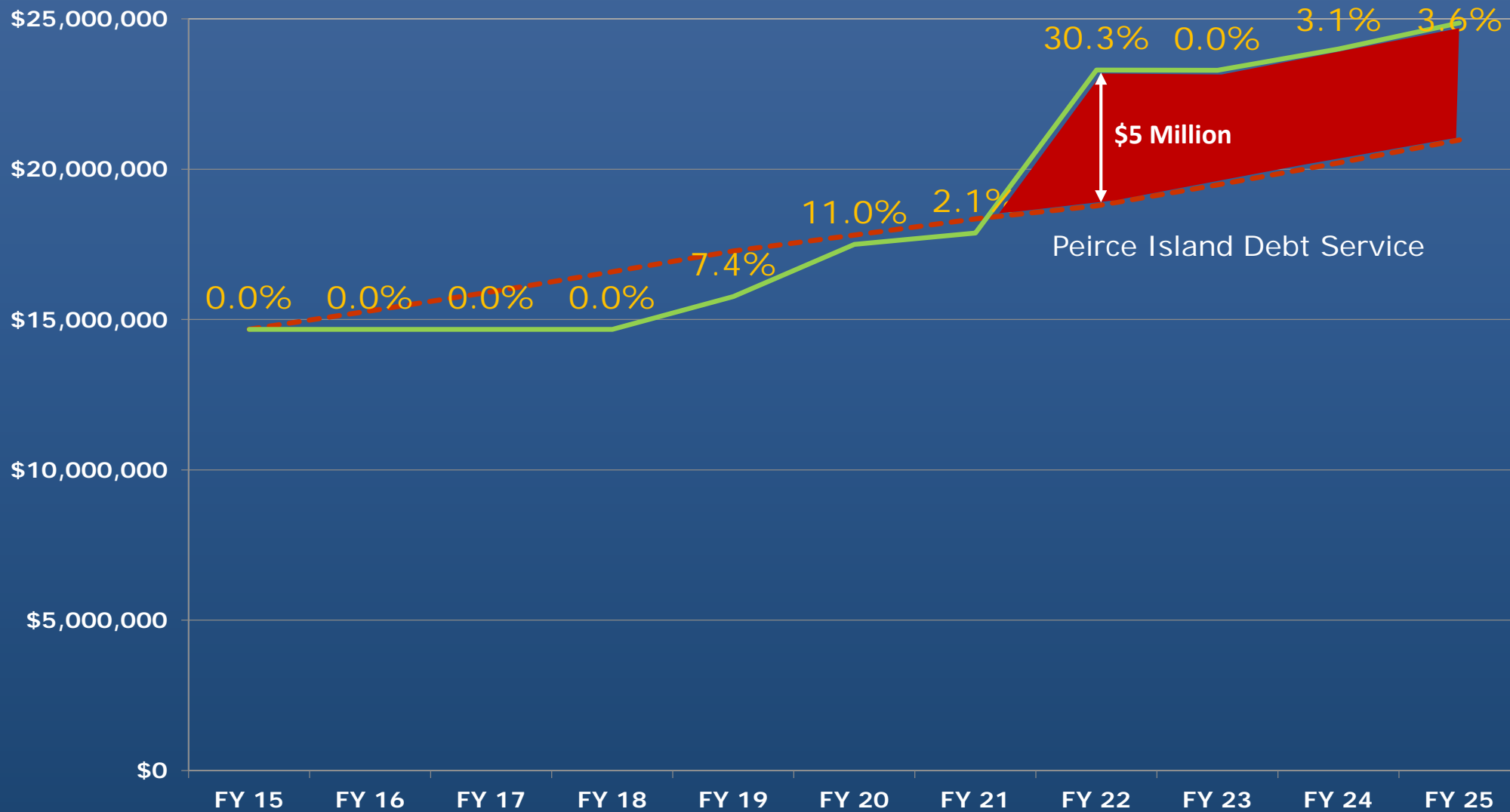
Sewer Rate Comparison

Breakeven Used Every Year



Sewer Rate Comparison

Breakeven Used Every Year



Summary Rate Projections

- Prior year rate adjustments have prepared the utilities to manage current events
- Water and Sewer Utility Fund is in a financial position to maintain current water and sewer rates for FY21
- To address deviation from rate plan future actions will be required:
 - Future rate adjustments will need to be above historical projections
 - Delay or elimination of planned capital improvement projects
 - Potential for future federal infrastructure stimulus to offset project costs

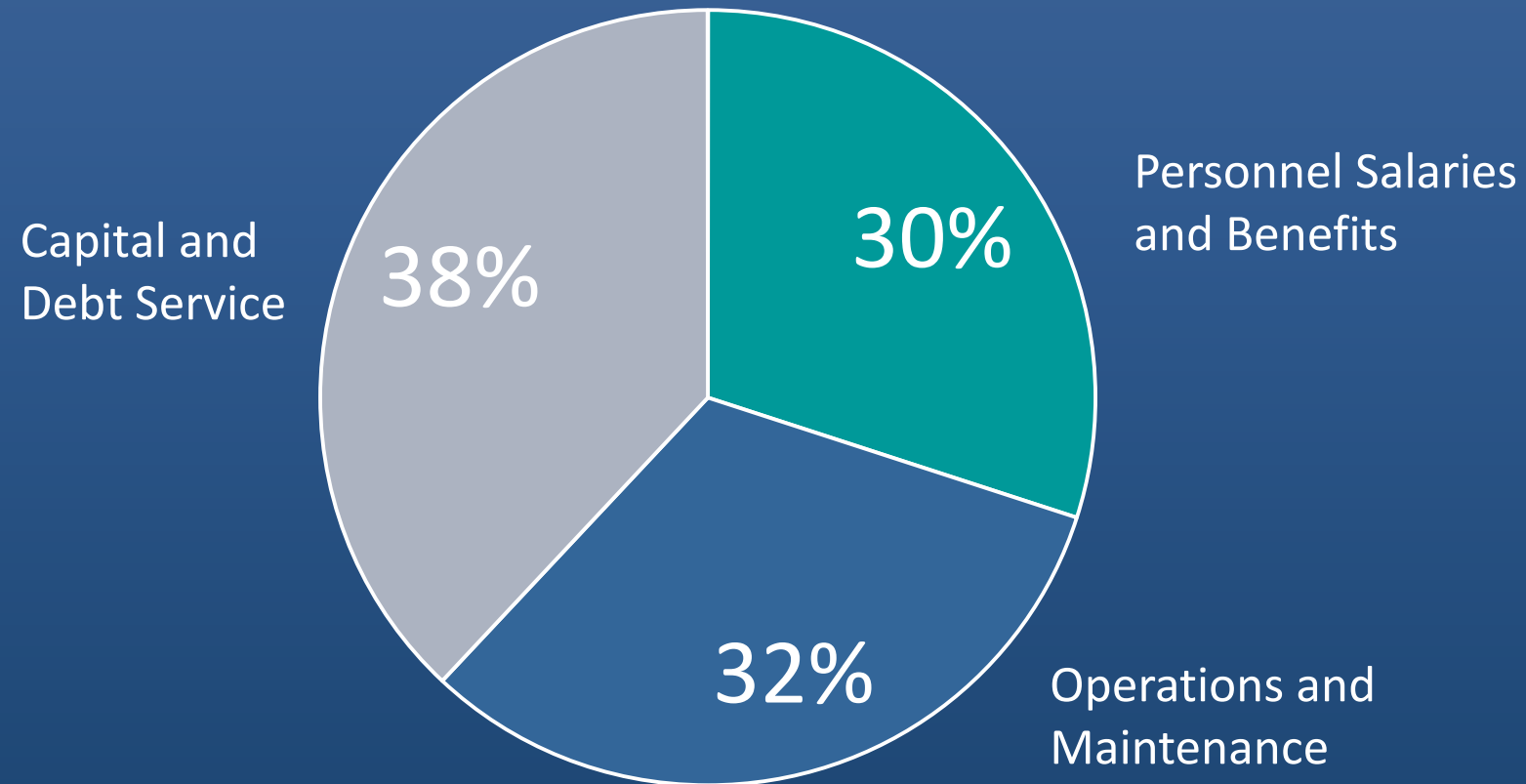
Proposed Budgets

Water - Proposed FY21 Cash Needs

	FY20 Budget	FY21 Budget	FY21 vs FY20
Salaries and Benefits	3,009,344	2,950,899	(58,445)
Operations and Maintenance	2,530,127	2,543,480	13,353
Property Taxes	125,500	135,000	9,500
Equipment & Minor Capital	114,750	92,000	(22,750)
Rolling Stock	470,000	360,000	(110,000)
Interest on Debt	1,119,680	1,026,717	(92,963)
Accrued Interest	(11,335)	(10,969)	366
Principal on Debt	2,392,528	2,537,528	145,000
Projected Principal Debt	160,000	0	(160,000)
Capital Projects	200,000	250,000	50,000
TOTAL CASH REQUIREMENT	10,110,594	9,884,655	(225,939)

Reference: page 361 of FY20 and page 363 of FY21 Budget

FY21 Water Cash Funding Breakdown

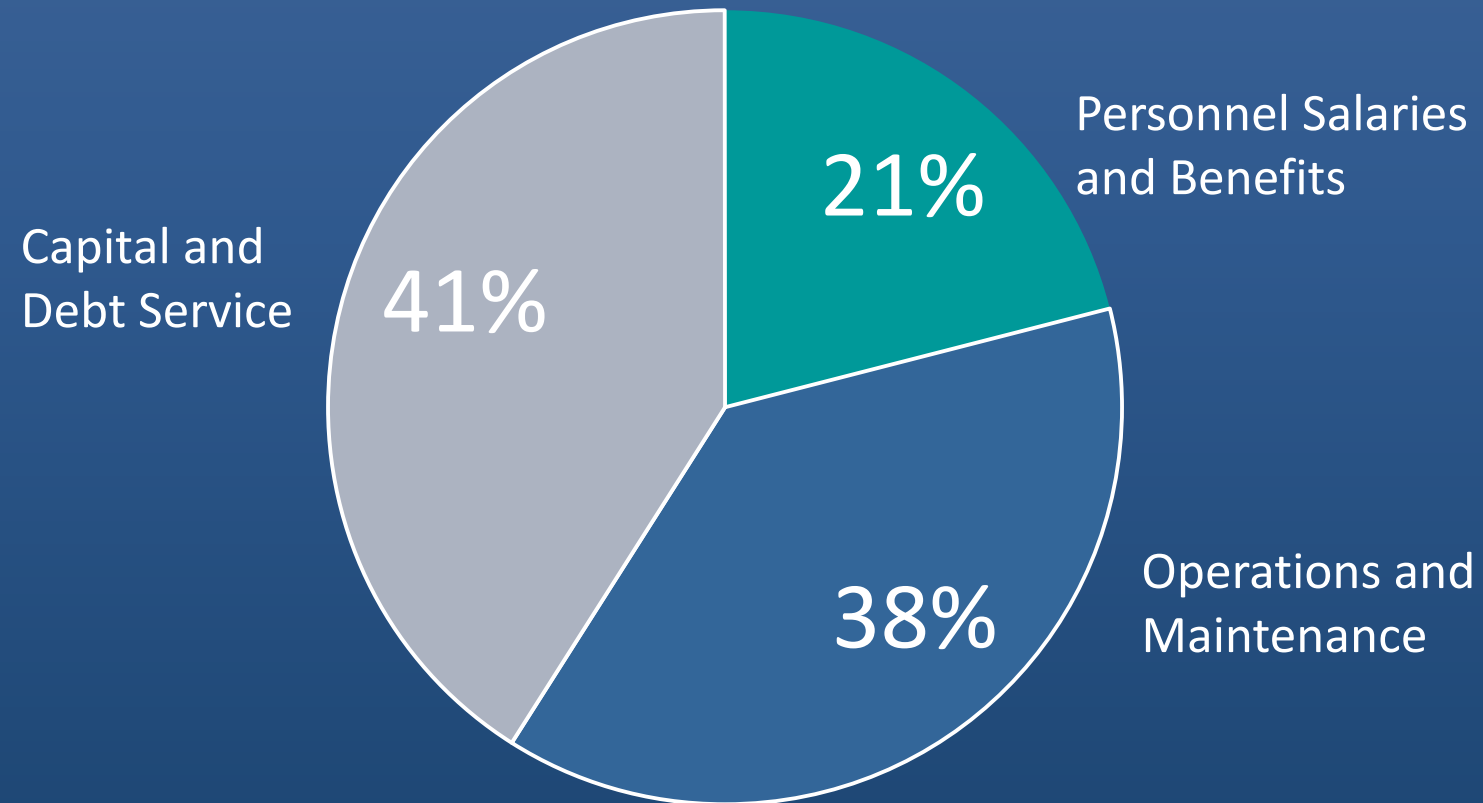


Sewer Proposed FY21 Cash Needs

Reference: p. 379 of FY20
& p. 381 of FY21 Budget

	FY20 Budget	FY21 Budget	FY21 vs FY20
Salaries and Benefits	3,634,620	3,724,093	89,485
Operations and Maintenance	4,691,012	5,405,363	714,351
Permits/Legal Fees	275,000	425,000	150,000
Transfer to Stormwater	397,806	277,707	(120,099)
Equipment & Minor Capital	147,500	175,250	27,750
Rolling Stock	652,000	423,000	(229,000)
Interest on Debt	2,579,897	4,100,031	1,520,134
Accrued Interest	(5,668)	(1,596,461)	(1,590,793)
Principal on Debt	4,385,593	4,529,142	143,549
Projected Principal Debt	520,000	0	(520,000)
Capital Projects	200,000	350,000	150,000
Total Cash Requirement	17,477,748	17,813,125	335,377

FY21 Sewer Cash Funding Breakdown



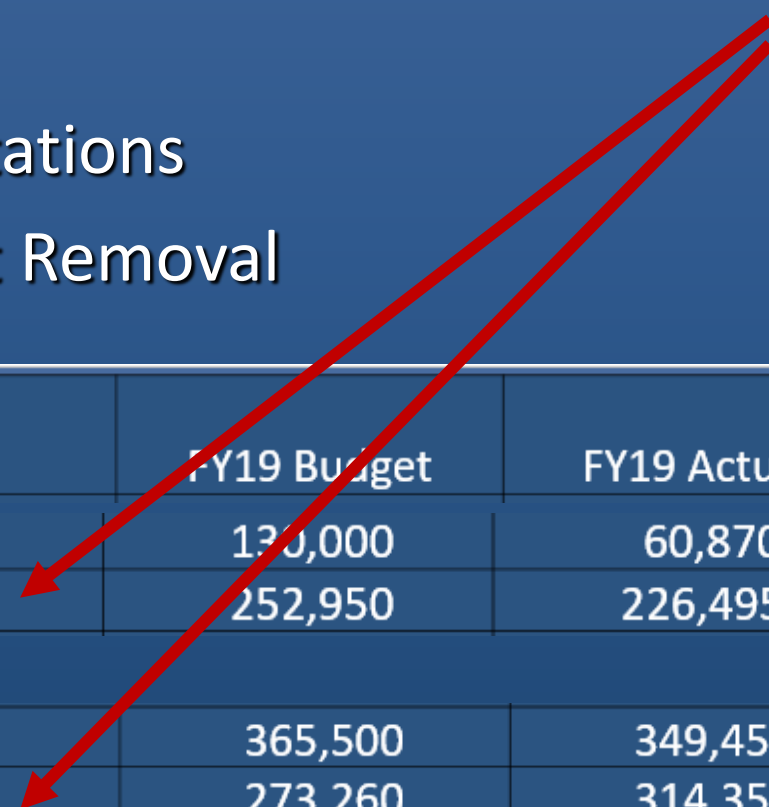
FY20 vs FY21 Differences

- Other O&M: \$714,351
 - Peirce Island WWTF: Electricity, Sludge Disposal, Chemicals
 - Pease WWTF: Electricity, Facilities Improvements
- Permit Related: \$150,000
 - Great Bay Total Nitrogen General Permit Water Quality Monitoring

Contracted Services

- Engineering Administration
- Distribution and Collections
- Treatment
- Pumping Stations
- Sludge/Grit Removal

We need detailed list of what these cost went to and projections for FY21:



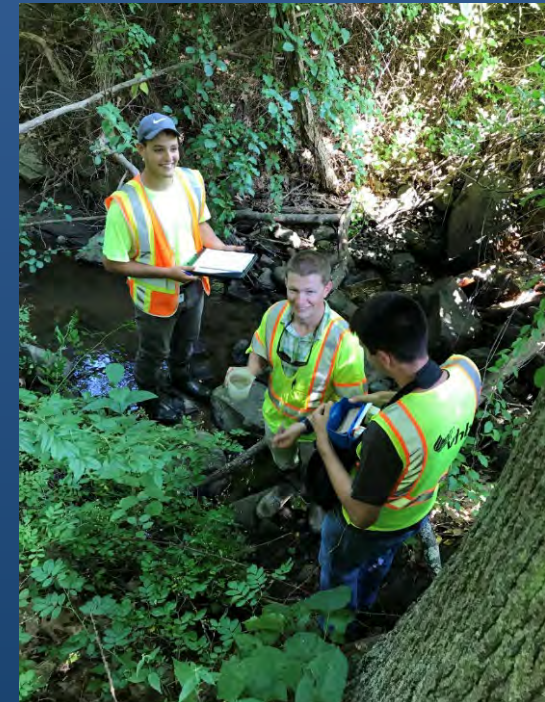
	FY19 Budget	FY19 Actual	FY20 Budget	FY21 City Manager Rec.	Vs FY20 Budget
Sludge/Grit Removal	130,000	60,870	145,000	150,000	5,000
Prof Contracted Services	252,950	226,495	246,080	197,580	(48,500)
Sludge/Grit Removal	365,500	349,457	672,000	960,500	288,500
Prof Contracted Services	273,260	314,359	313,560	312,250	(1,310)

Proposed FY21 Stormwater Budget



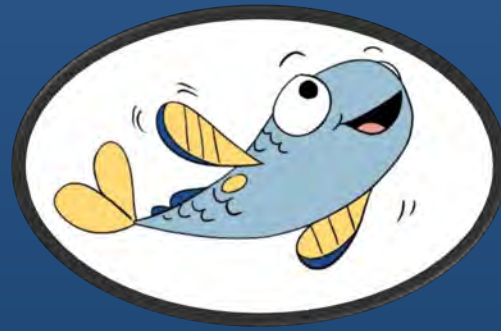
Stormwater Program – FY20 Focus

- Continued work and planning to meet new EPA MS4 Stormwater Permit
- Updated outfall inventory and initial ranking
- Stormwater system GIS map updates
- Dry weather outfall screening and sampling
 - Identified and inspected 202 sites
 - Identified 23 sites for dry weather sampling
- Public Outreach



Public Outreach

- Water/Sewer Billing Insert
 - Stormwater Overview
- Storm Drain Markers
- Dog License Flyer
 - “Scoop the Poop”
- Mailer to Residents
 - Handling Leaves and Yard Waste
 - Lawn Care Efficiency
- Public Meeting
 - November 16, 2019
- Website Update
 - “Think Blue”



Think Blue



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 (ex: rivers, lakes and oceans), which may create water quality impacts and siltation that could potentially damage aquatic habitats.

Why should we care? As a result of stormwater and the increase in volume of surface waters, flooding can also occur. With flooding comes property and infrastructure damages. 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.



How can you help?

What can you do as a resident or landowner in Portsmouth and surrounding areas?

- 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 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

For additional information, please scan the QR code or visit the City's website.
Portsmouth Public Works - 680 Peverly Hill Road - Portsmouth, NH - (603) 427-1530



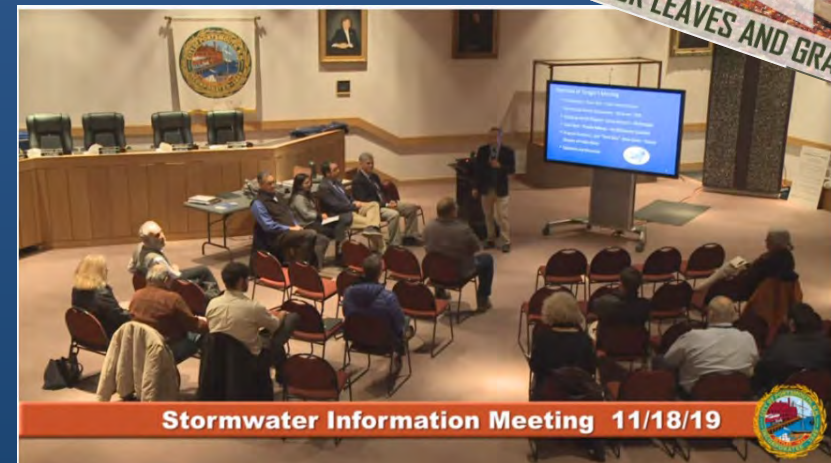
EVERY DROP

Small Changes. Big Difference.

We love our dogs! But dog waste carries harmful bacteria that can make our waters unsafe for drinking or swimming. So always pick it up and throw it in the trash!

RAKE IT OR LEAVE IT

WHAT TO DO WITH YOUR LEAVES AND GRASS CLIPPINGS



Stormwater Maintenance in 2019

Catch basins cleaned and inspected 1,224

Amount of materials removed from catch basins 257 tons

Drain lines cleaned and inspected 9,190 feet

Street Sweeping 790 miles
260 tons of material



FY21 Stormwater Budget

EXPENSES	FY20	FY21	FY21 vs FY20
Personnel Costs	415,613	419,415	3,802
Professional Contracted Services	75,000	78,000	3,000
Other Operating	5,000	58,000	53,000
<i>Total</i>	495,613	555,415	59,802

Discussion