



Work-session #3: Sustainable Utilities

FY 2014-15 Operating and Capital Budget Development

UNION COUNTY

NORTH CAROLINA

Goals for Today

- Goals for Rate Making
- Current Projections
 - Previous Projections
- Cost Drivers
 - Operating
 - Capital
 - Debt
- Reserves
 - Current Ratings and Possible Impacts
- Miscellaneous Fee Update and Calculation Clarification
- Recommended 3-Year Rate Plan



Goals for Rate Making

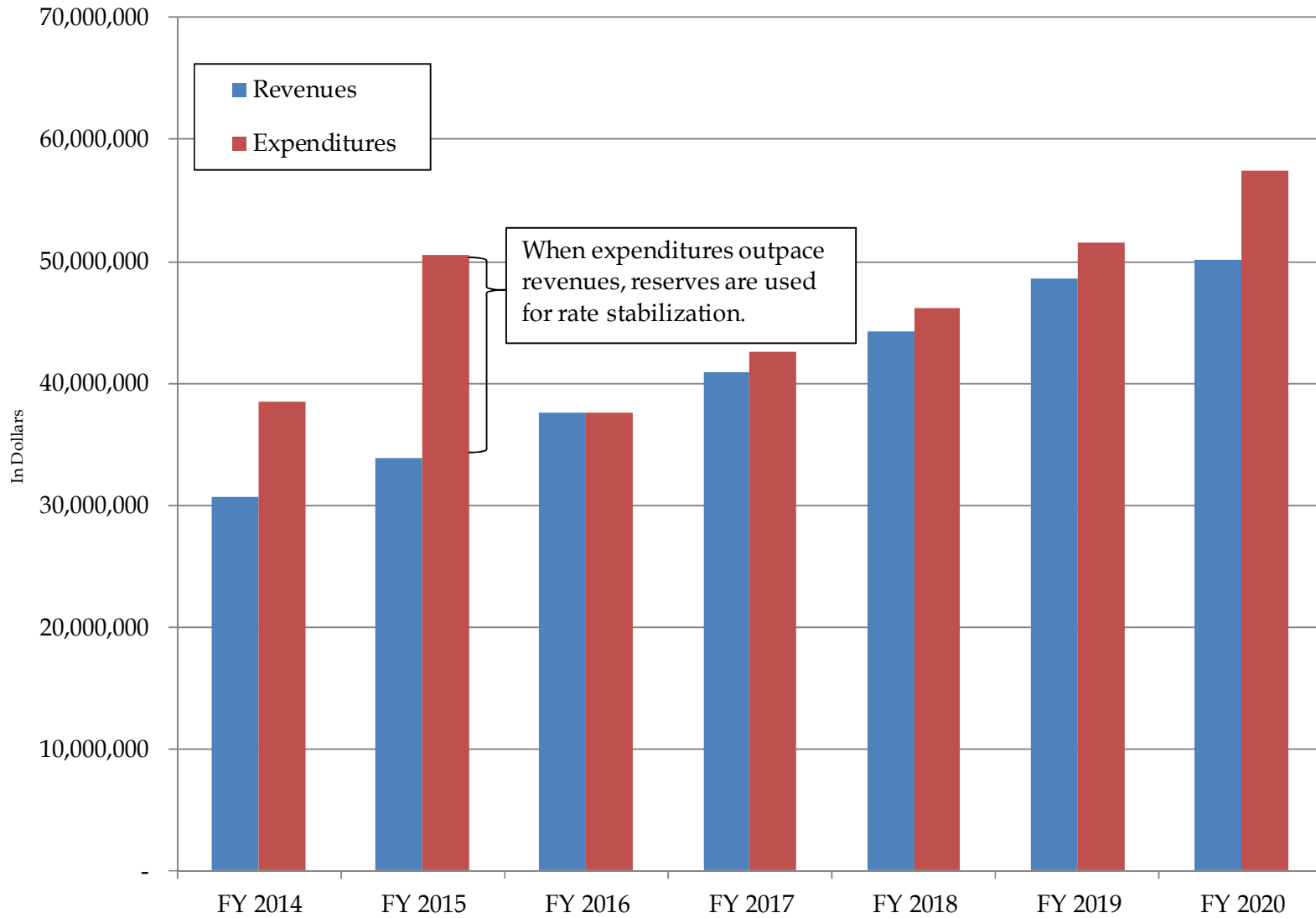
- Ensuring Fiscal Sustainability
 - Sustainable Operations
 - Sustainable System
 - Sustainable Debt Service
- Ensuring Rate Fairness
 - Base Rates v. Volumetric Rates
 - Rate Stabilization
 - Intergenerational Equity
- Encouraging Conservation



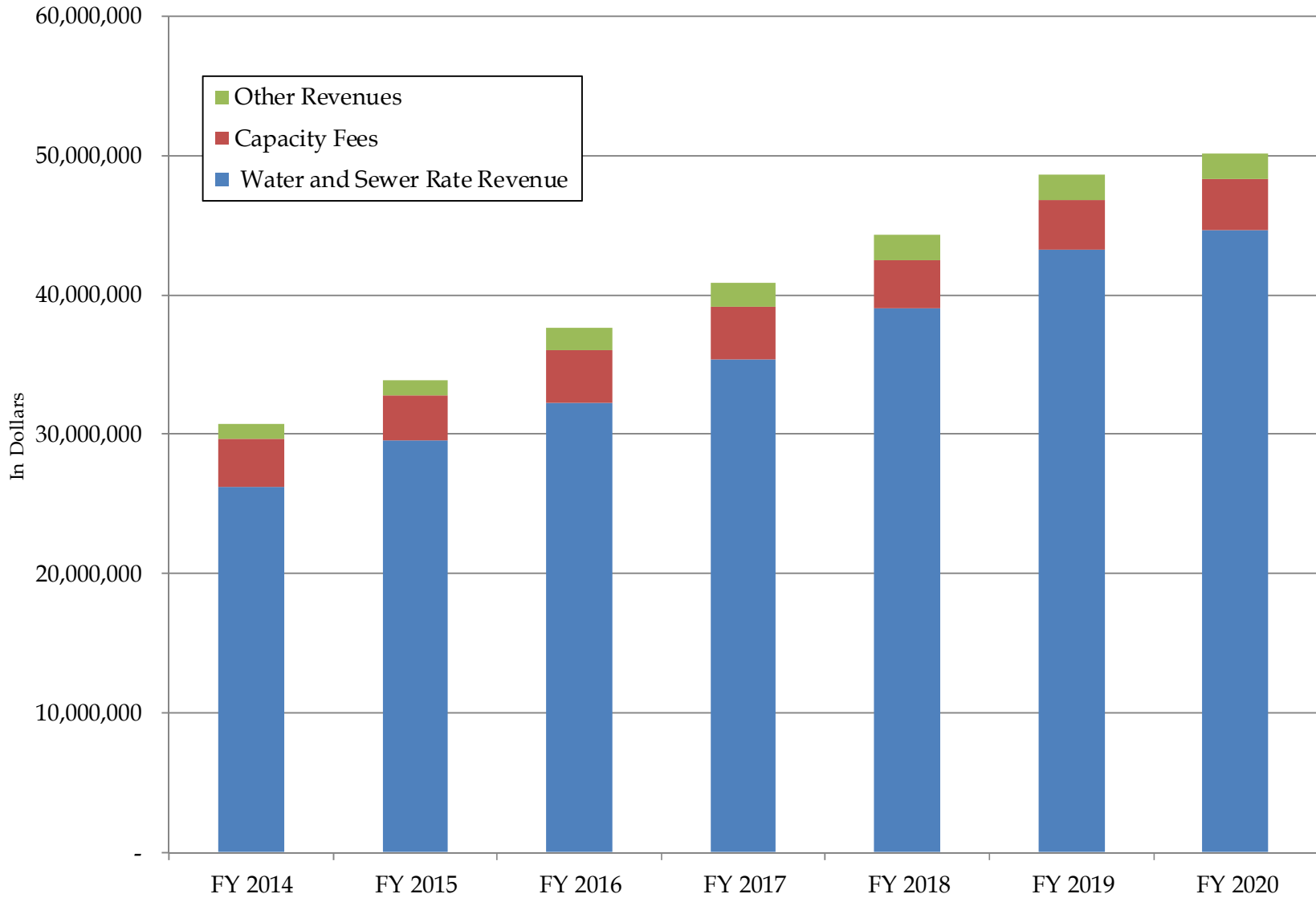
Water and Sewer Utility Fund Projections							
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Revenues							
Water and Sewer Rate Revenue	\$ (26,174,584)	(29,497,367)	(32,279,419)	(35,326,497)	(38,992,013)	(43,246,512)	(44,626,587)
Water Tap Fees	(1,486,230)	(1,230,000)	(1,419,357)	(1,459,474)	(1,340,911)	(1,374,774)	(1,409,493)
Sewer Tap Fees	(1,940,741)	(2,016,225)	(2,262,576)	(2,326,526)	(2,137,525)	(2,191,507)	(2,246,852)
Water Miscellaneous Revenues	(12,157)	(10,200)	(10,506)	(10,821)	(11,146)	(11,480)	(11,825)
General Miscellaneous Revenues	(1,098,450)	(1,113,740)	(1,147,152)	(1,181,567)	(1,217,014)	(1,253,524)	(1,291,130)
Interest Income	-	-	(483,638)	(596,506)	(579,190)	(555,585)	(504,115)
Total Revenue	\$ (30,712,162)	(33,867,532)	(37,602,648)	(40,901,391)	(44,277,799)	(48,633,382)	(50,090,002)
Expenditures							
Operating Expenses							
Personnel	\$ 7,030,684	8,159,524	8,752,900	9,377,799	10,035,742	10,728,319	11,248,527
Utilities	1,403,088	1,421,120	1,534,351	1,656,604	1,783,363	1,919,820	2,066,719
Water Purchased for Resale	3,374,232	3,427,800	3,556,998	3,713,040	3,849,247	3,990,961	4,138,424
Other Operating	8,046,774	8,380,942	8,632,370	8,891,341	9,158,082	9,432,824	9,715,809
Payments to Anson County	295,092	387,000	295,092	295,092	295,092	295,092	295,092
Capital Outlay	824,000	290,000	298,700	307,661	316,891	326,398	336,189
Transfer to Stormwater Fund	319,893	390,757	402,480	414,554	426,991	439,800	452,994
Existing Debt Service	6,627,374	6,408,223	6,294,377	6,220,760	5,953,573	5,934,172	5,917,812
New Debt Service	-	-	3,060,824	5,065,358	9,390,968	12,223,811	19,170,413
PayGo Capital Program	10,589,089	21,696,400	4,740,340	6,601,840	4,888,360	6,242,700	4,141,406
Total Expenditures	\$ 38,510,226	50,561,766	37,568,432	42,544,049	46,098,309	51,533,897	57,483,385
Revenue (Over)/Under Expenditures	\$ 7,798,064	16,694,234	(34,216)	1,642,658	1,820,510	2,900,515	7,393,383
Projected June 30, 20XX Fund Balance	\$ 77,131,936	60,437,702	60,471,918	58,829,260	57,008,750	54,108,235	46,714,852
Projected Reserve Target	\$ 32,586,867	34,945,080	36,786,590	38,717,901	41,267,422	45,362,711	46,714,854
Projected Rate Increases	3.50%	6.50%	6.50%	6.50%	7.00%	7.50%	0.00%
December 2011 Projections	3.50%	3.80%	3.80%	3.80%	3.80%	6.00%	8.00%



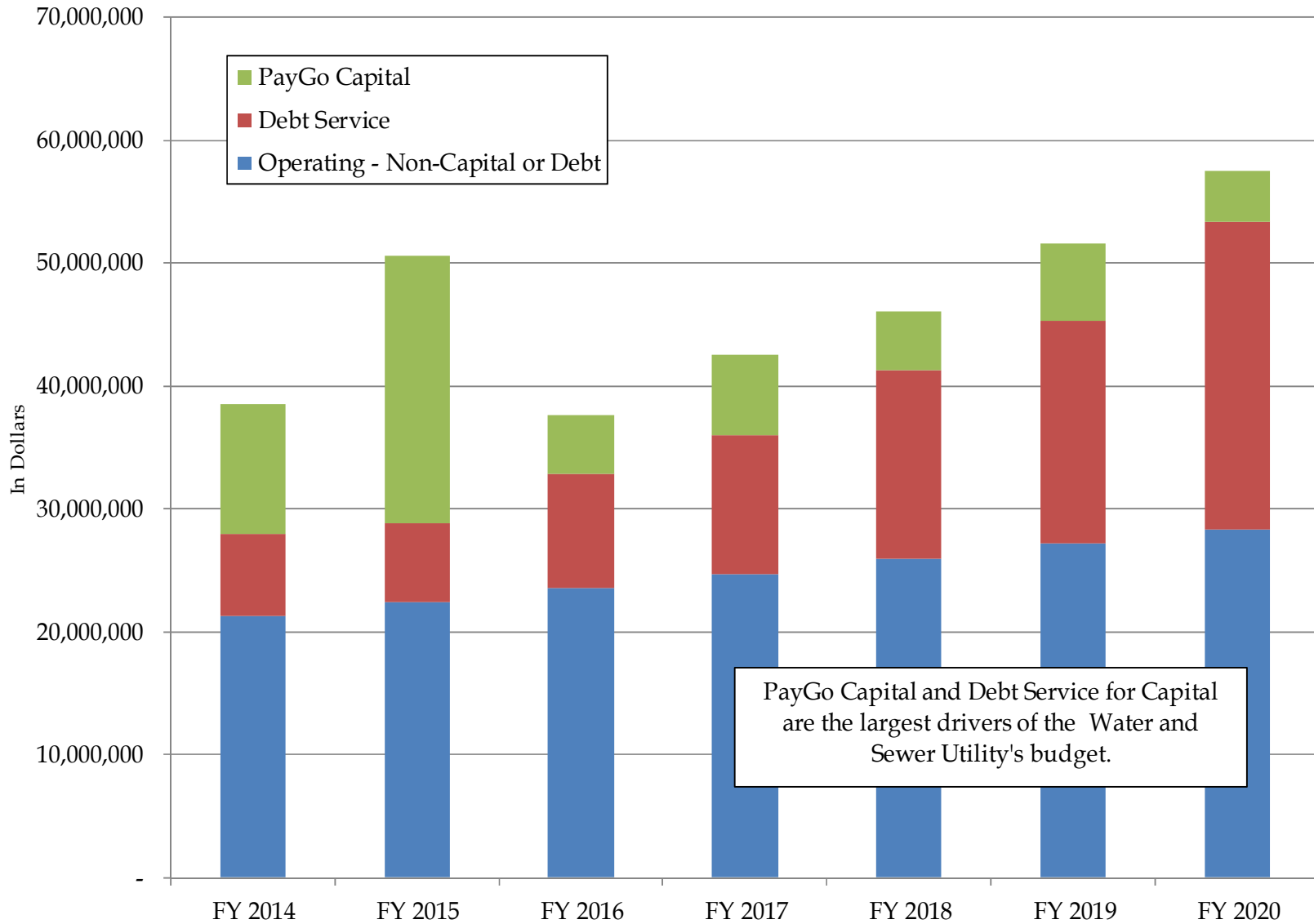
Water and Sewer Fund Revenue and Expenditures Projection



Water and Sewer System Revenue Mix



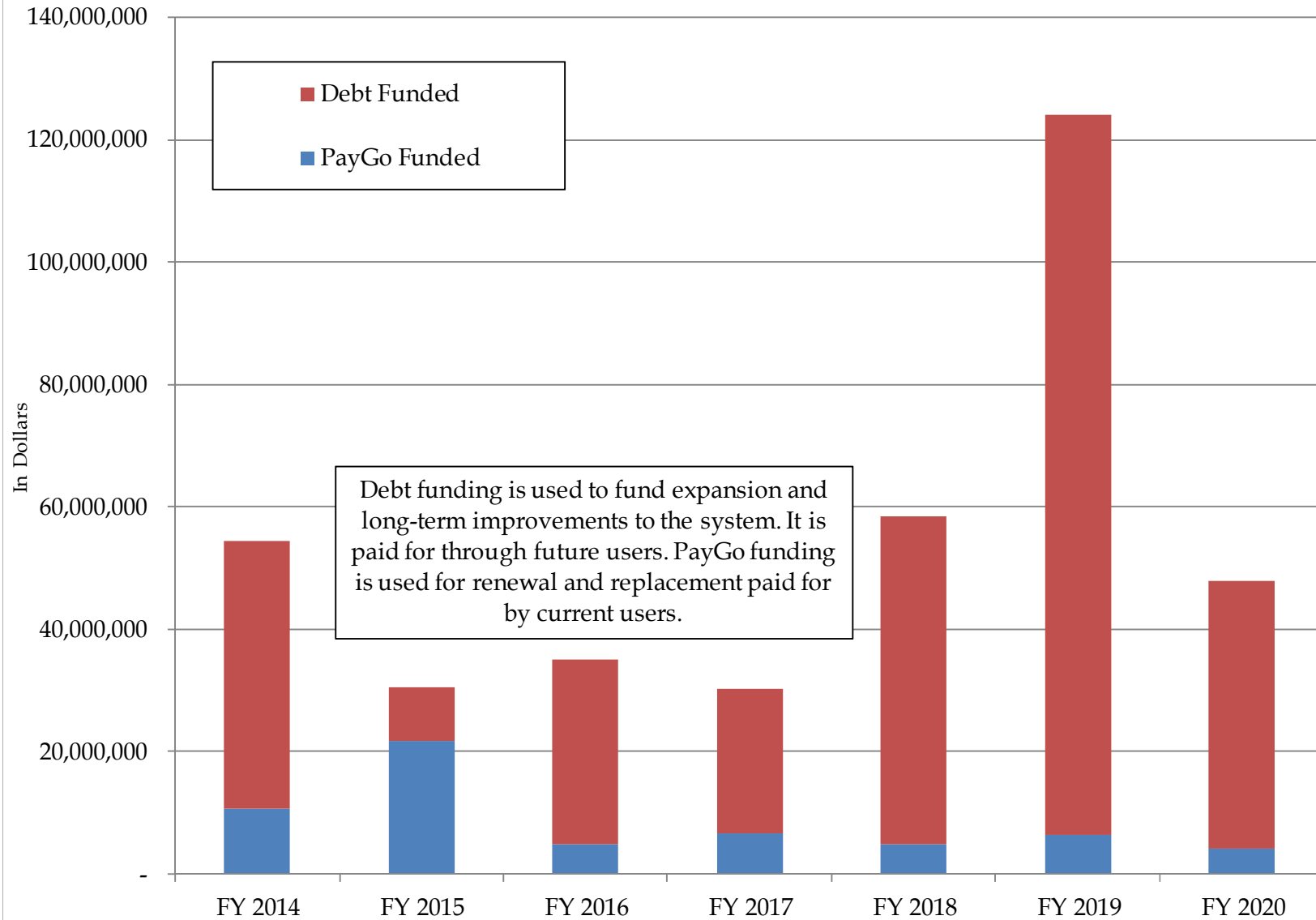
Water and Sewer System Expenditure Mix



PayGo Capital and Debt Service for Capital are the largest drivers of the Water and Sewer Utility's budget.



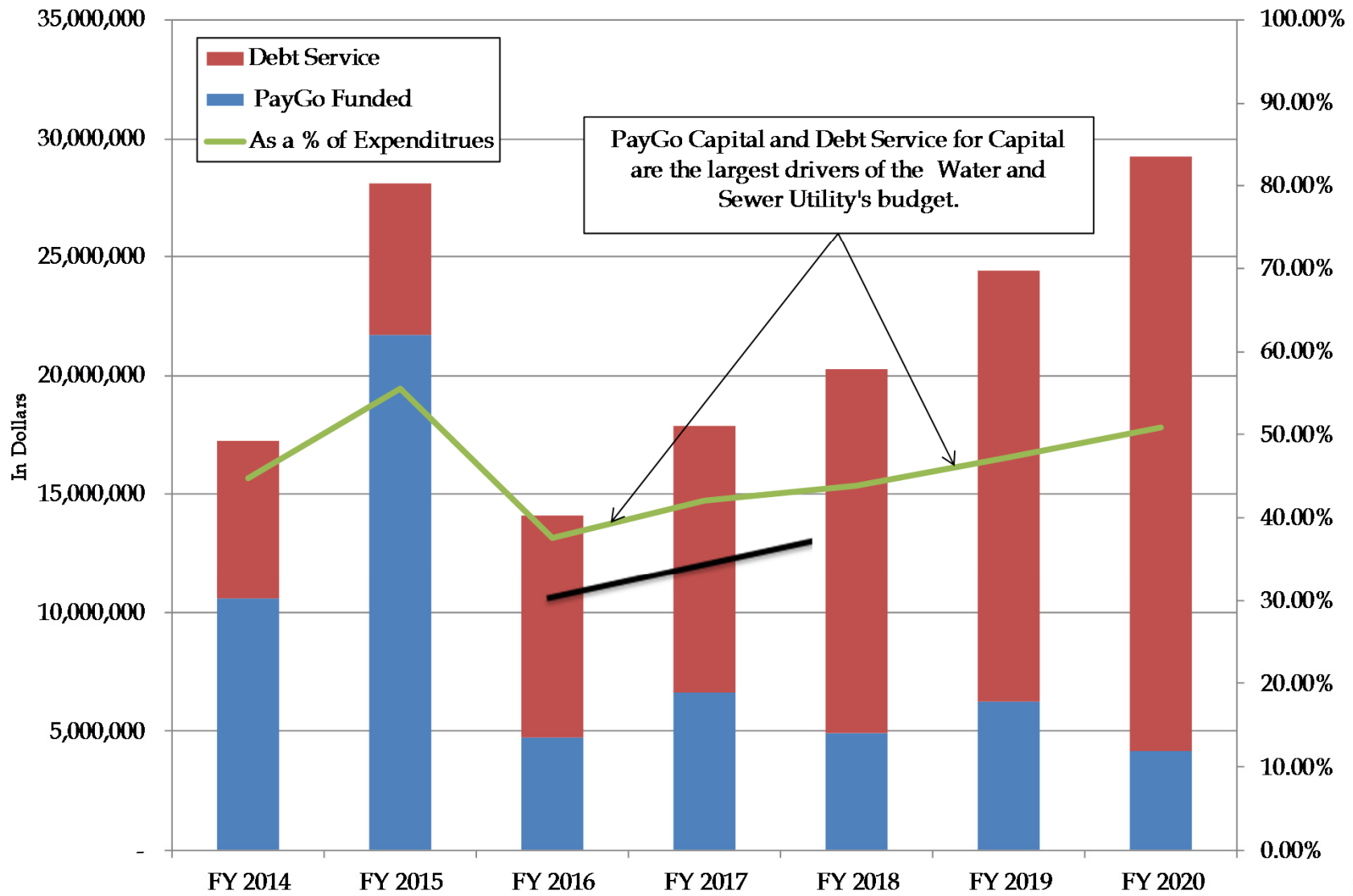
Water and Sewer System Capital Funding Mix

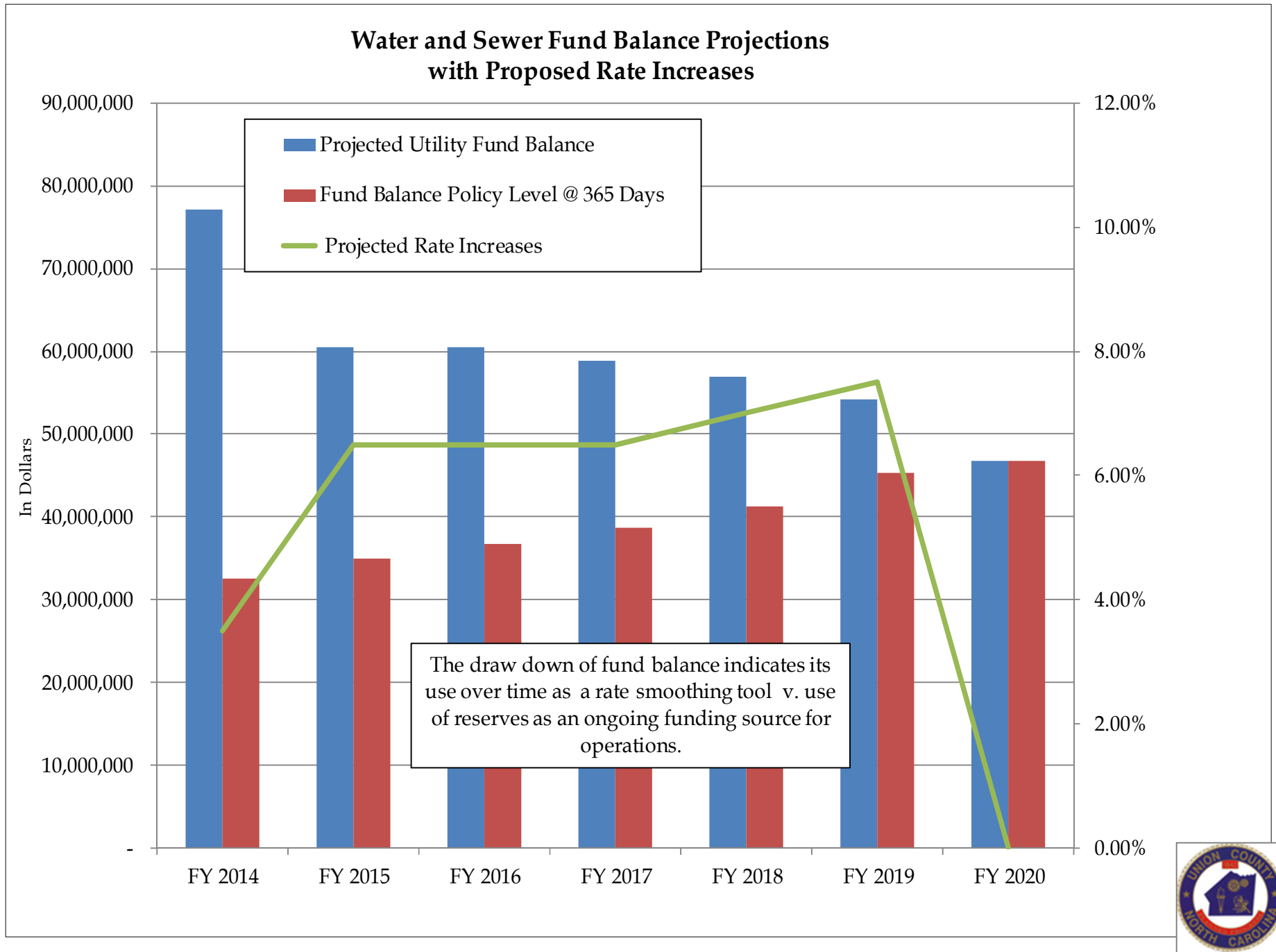


Debt funding is used to fund expansion and long-term improvements to the system. It is paid for through future users. PayGo funding is used for renewal and replacement paid for by current users.



Water and Sewer System Capital Effort





Water Base Facility Charge				
Meter Size	FY 2014	FY 2015	FY 2016	FY 2017
	Current	Proposed	Proposed	Proposed
Base Charge 3/4"	\$ 6.10	7.40	8.20	9.05
1"	15.35	18.60	20.55	22.70
1-1/2"	30.50	36.90	40.85	45.05
2"	48.75	59.00	65.35	72.05
3"	137.15	166.10	183.85	202.75
4"	304.75	369.10	408.65	450.65
6"	426.65	516.70	572.00	630.85
Hydrant	6.10	7.40	8.20	9.05

Water Volumetric Rates				
Class/Tier	FY 2014	FY 2015	FY 2016	FY 2017
	Current	Proposed	Proposed	Proposed
<i>Residential</i>				
Tier 1	\$ 1.95	1.95	2.10	2.20
Tier 2	2.65	2.65	2.80	3.00
Tier 3	3.75	3.75	4.00	4.25
Tier 4	5.85	5.85	6.05	6.20
Tier 5	10.10	10.10	10.10	10.10
<i>Irrigation</i>				
Tier 1	3.75	3.75	4.00	4.25
Tier 2	3.75	3.75	4.00	4.25
Tier 3	3.75	3.75	4.00	4.25
Tier 4	5.85	5.85	6.05	6.20
Tier 5	10.10	10.10	10.10	10.10
Non-Residential Flat	2.70	2.70	2.90	3.05

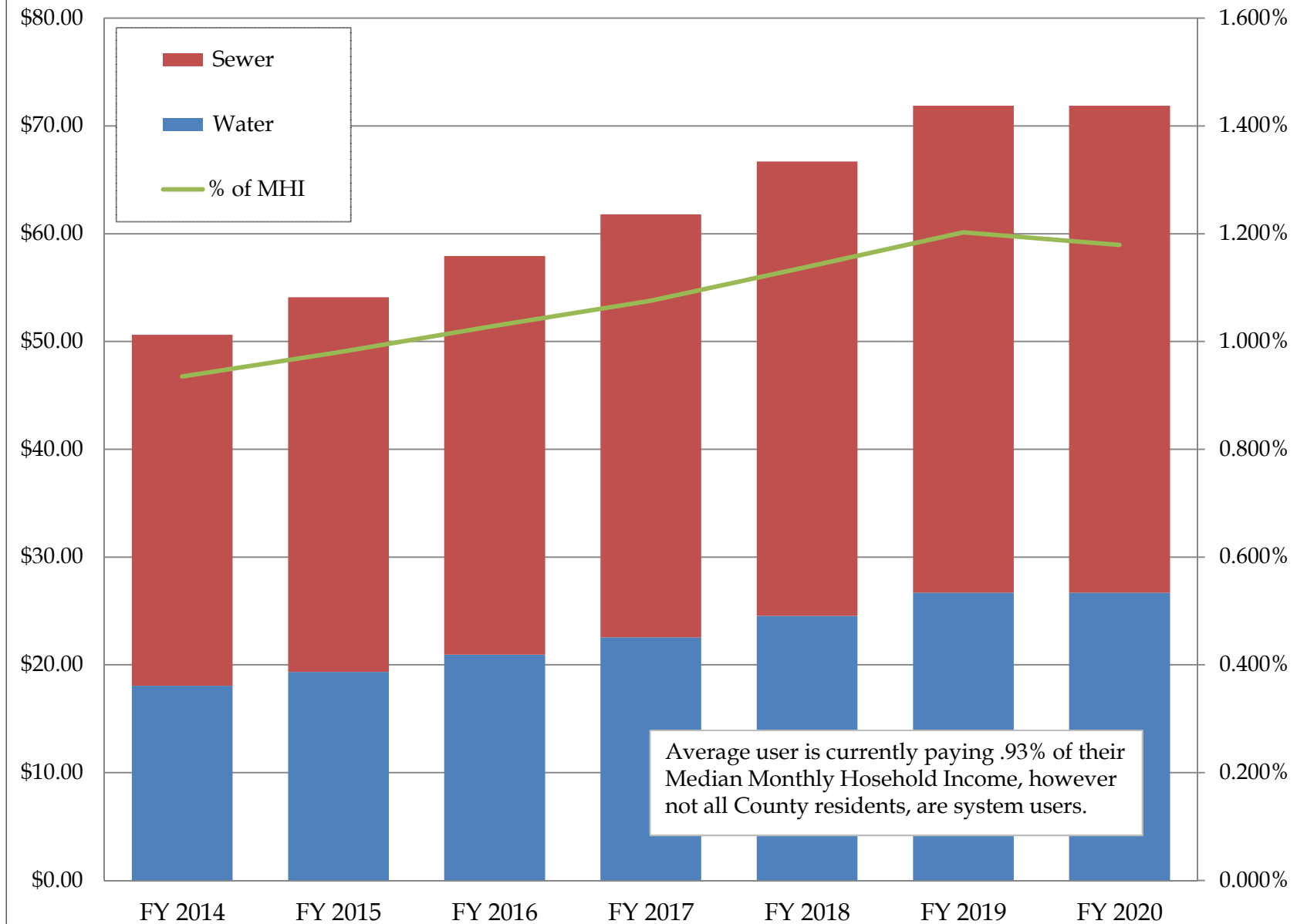


Sewer Base Facility Charge				
Meter Size	FY 2014	FY 2015	FY 2016	FY 2017
	Current	Proposed	Proposed	Proposed
Base Charge 3/4"	\$ 9.25	9.85	10.50	11.15
1"	23.31	24.85	26.45	28.15
1-1/2"	46.34	49.35	52.55	56.00
2"	74.09	78.90	84.05	89.50
3"	208.50	222.05	236.50	251.85
4"	463.33	493.45	525.50	559.70
6"	648.61	690.75	735.65	783.50
Flat	31.75	33.80	36.00	38.35
Other Metered	9.25	9.85	10.50	11.15

Sewer Volumetric Rates				
Class/Tier	FY 2014	FY 2015	FY 2016	FY 2017
	Current	Proposed	Proposed	Proposed
<i>Residential</i>				
0 - 12K Gallons	\$ 4.40	4.70	5.00	5.30
<i>Non-Residential</i>				
All Usage	4.40	4.70	5.00	5.30



Residential Water and Sewer Utility Affordability



Average user is currently paying .93% of their Median Monthly Household Income, however not all County residents, are system users.



Capacity Fees for Large Meters

- **Current Policy for Meters Larger than 2"**
 - Fees for meter sizes greater than 2" is determined based on anticipated usage with each new service
- **Proposed changes**
 - To provide better definition of the methodology for determining capacity fees
 - To extend this methodology to also include 2" meters



Capacity Fees for Large Meters

- **Equivalent Residential Unit (ERU) Method**

- Capacity fees are a multiple of the estimated water demand as compared to the water demand of a single family residential unit (1 ERU)
- 1 ERU = 703 gpd (*max day water demand*)

- **Water capacity fees due**

= Estimated Water Demand (gpd) / 703 gpd/ERU × Capacity Fee (\$)/ERU

- Applies to new or expanded water/sewer service
- Sewer capacity fees will be determined in the same manner



Capacity Fees for Large Meters

Equivalent Residential Unit (ERU) Method

Example:

A commercial development has an estimated water demand of 65,000 gpd for its max day usage.

$$65,000 \text{ gpd} / 703 \text{ gpd/ERU} = 92.5 \text{ ERUs}$$

$$\text{Water capacity fees due} = 92.5 \text{ ERUs} \times \$1,200/\text{ERU} = \$111,000$$

$$\text{Sewer capacity fees due} = 92.5 \text{ ERUs} \times \$3,090/\text{ERU} = \$285,825$$



Meter Tampering Fee

- **Current Fee - \$50 per occurrence**
- **Misdemeanor - NC State law**
- **Proposed Tampering fee**
 - **Tiered Structure**

Meter Tampering Fees	
1 st Offense	\$100
2 nd Offense	\$250
3 rd Offense	\$500



Meter Installation Fee

- **Fee not defined in current Rate Ordinance**
- **Meter Installation Fee:** Actual cost of meter assembly plus labor costs to install
 - Example: ¾" meter = \$160 (meter and ERT) + \$25 (labor) = \$185
 - Fee is based upon meter size

Meter Size	Meter Installation Fee
¾"	\$185
1"	\$275
1 ½"	\$1,400
2" & larger	Actual Cost



Temporary Construction Meters - Deposit

- **Create a new definition for “Temporary Construction Meter”**
 - Defined as a meter set at the beginning of or during the construction phase of any new development (commercial or residential), prior to the issuance of a Certificate of Occupancy
- **Purpose**
 - To collect sufficient funds to cover cost of damage to meters during construction
 - Grading, landscaping, paving, installation of other utilities, etc.
- **Amount of deposit will vary based on meter size**
 - Equal to Meter Installation Fee



Late Fees

- **Current Fee: \$5.00 or 5%, whichever is greater**
 - FY2010 - 17.2% of bills not paid on time
 - FY2014 - 18.4% of bills not paid on time
- **Other NC Water/Sewer Utilities**
 - 63% of utilities charging a flat fee charge \$10 or more
 - 72% of utilities charging a percentage charge 5% or more
- **Proposed Fee: \$10.00 or 5%, whichever is greater**



Recommendation

- Adopt the Three-Year Rate Structure to be Implemented July 1st
- Implement Procedural Changes
- Work toward Efficient Project Implementation
- Manage Timing and Efficiency of Debt
- Evaluate Rate Plan as Part of FY 2018 Budget Preparation

