

COMMISSION FINANCE COMMITTEE  
MEETING MINUTES  
April 12, 2019

PRESENT: Commissioners Elofson, Lakdawala, Lynch, Rodriguez and Templeman

No.    Topic

1.    **PROPOSED FISCAL YEAR 2020 ANNUAL BUDGET REVIEW**

Commissioners Elofson, Lakdawala, Lynch, Rodriguez, and Templeman, along with staff, reviewed the proposed Fiscal Year 2020 annual budget. The Finance Committee will present its report to the full Commission at the April 23, 2019 meeting. The entire budget package will be presented to the Commission at the May Commission meeting.

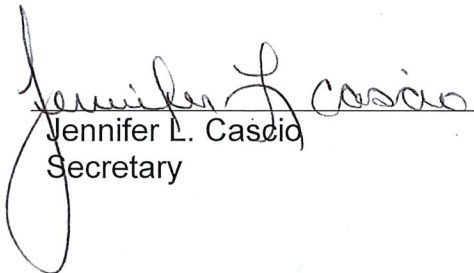
**Attachment:** [Presentation](#)

**Public Comment:** None

**Next Committee Meeting Date:** TBD

**Meeting Adjourned:** 10:50 am

SUBMITTED:

  
Jennifer L. Cascio  
Secretary

APPROVED:

  
Stephen Rodriguez  
Committee Chair



FY2020 Finance Committee  
April 12, 2019

- Review Financial Forecast
- Rates
  - Wastewater
  - Small Communities
  - Surcharge
  - Hauled Waste
  - Facility Charges
- Cash Spend Down Plan
- WIFIA

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# Financial Forecast

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### REVENUES

- Projected rate increases unchanged

### EXPENSES

- Budget process guided by forecast
  - Keep spending within targets

$$\text{Debt Service Coverage Ratio} = \frac{\text{REVENUES} - \text{EXPENSES}}{\text{Principal} + \text{Interest}}$$

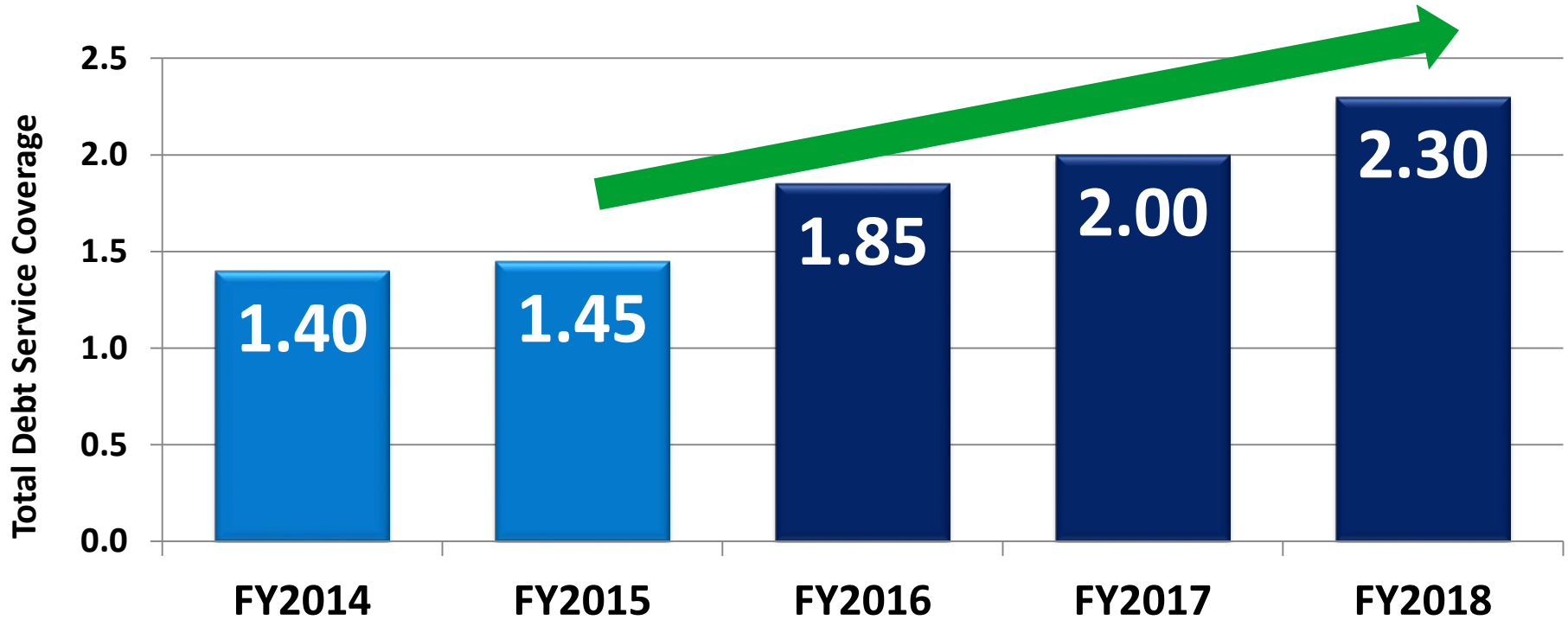
- *How much income will you generate to pay Debt Service (principal + interest)?*
- *Will bond investors get paid back?*
- *Higher is better*

**Target = 2.0x**  
**Policy = 1.4x**

2.0 means that you have **two times more money available** to pay for your loan payment

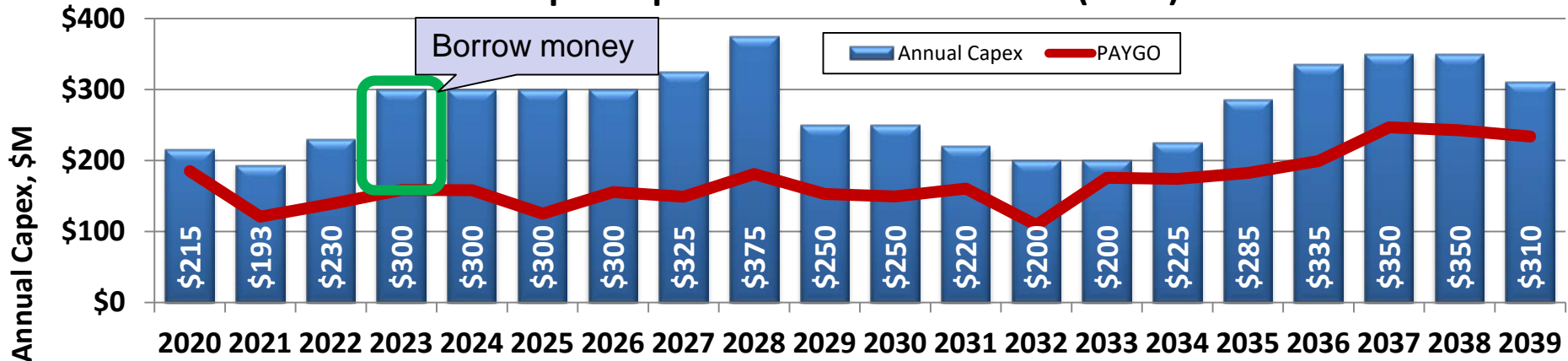
# Strategy Execution

Historical Total Debt Service Coverage Ratio (DSCR)



# How the model works

## Annual Capital Spend vs Available PAYGO (Cash)



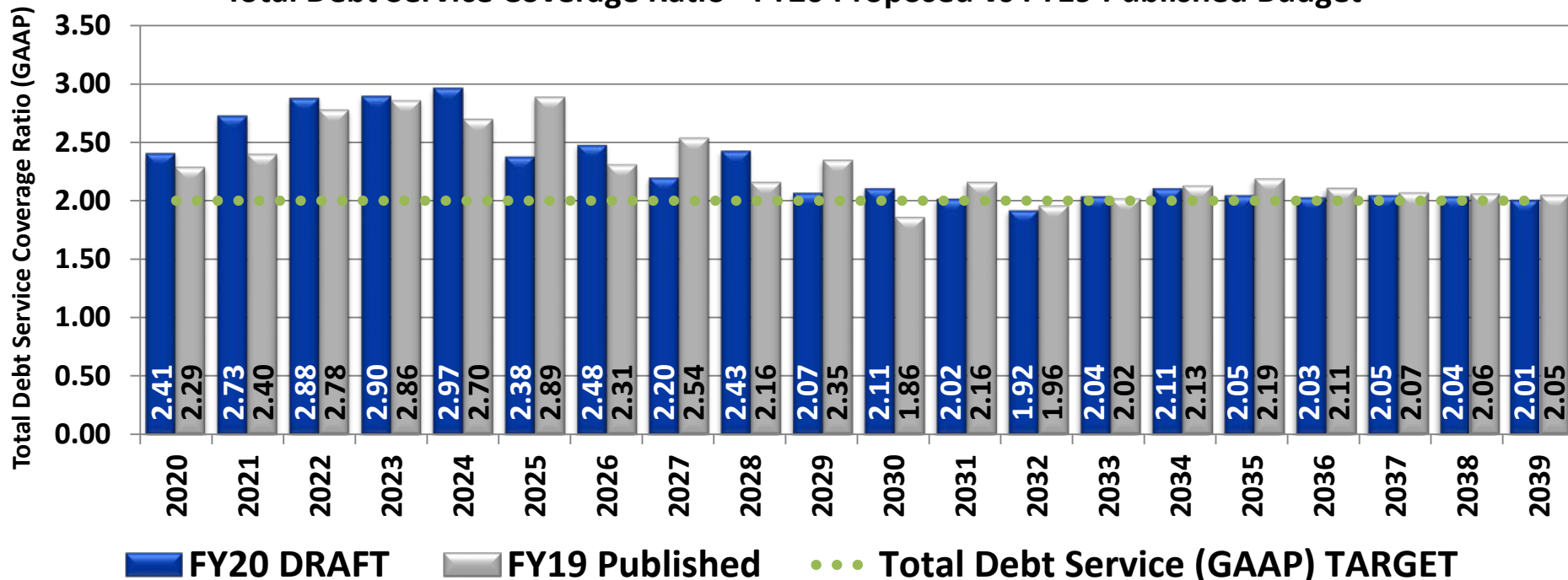
## Projected Debt Issuance



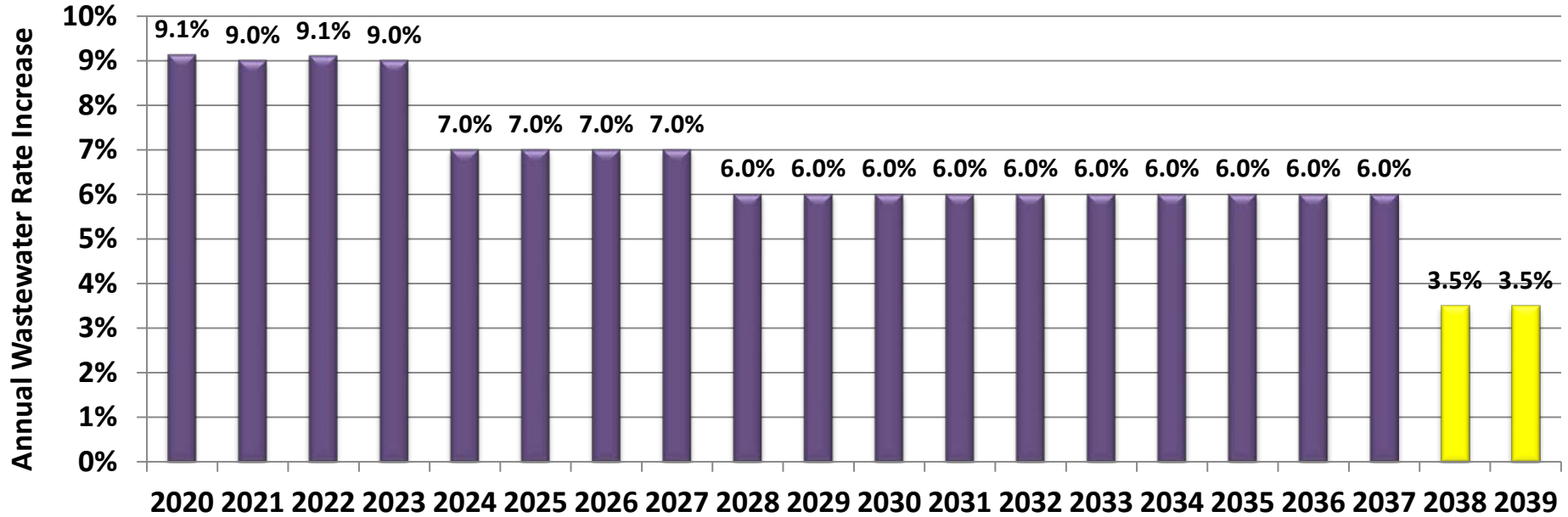


## 20-Year Financial Forecast – Target 2.0x

Total Debt Service Coverage Ratio - FY20 Proposed vs FY19 Published Budget

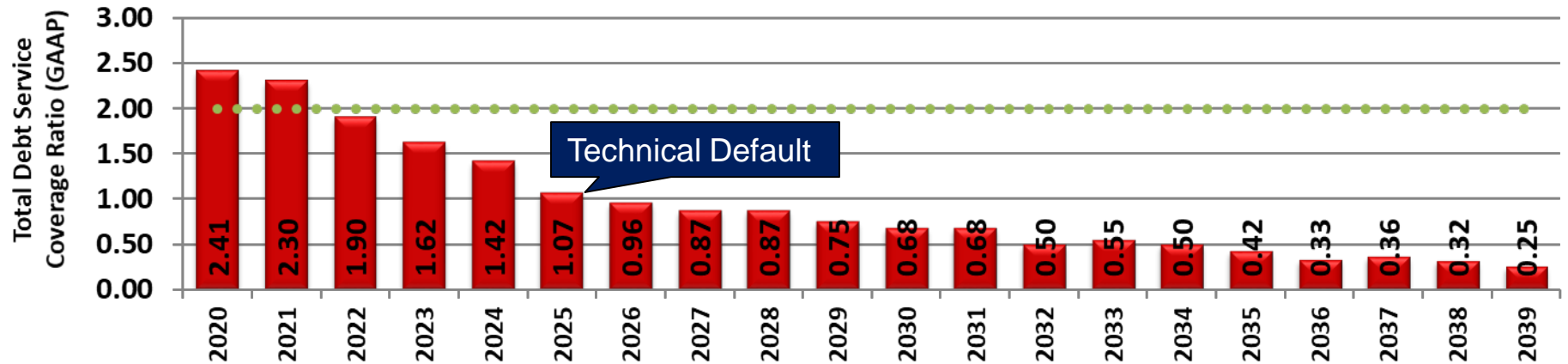


# Projected Wastewater Rate Increases

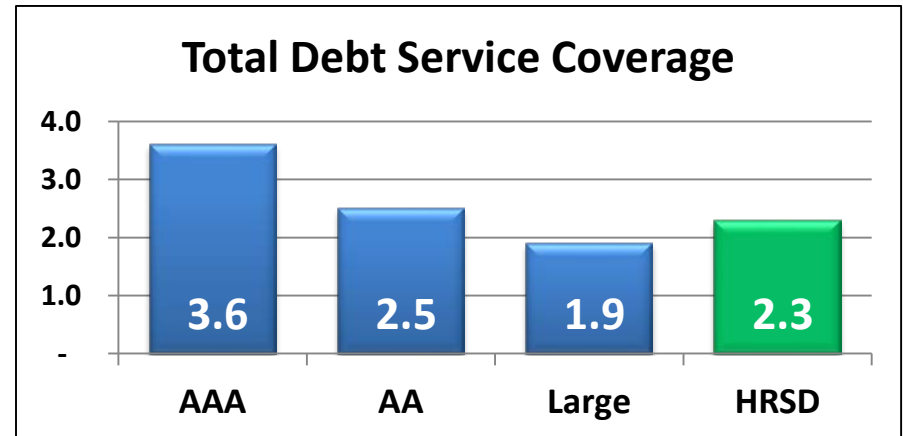
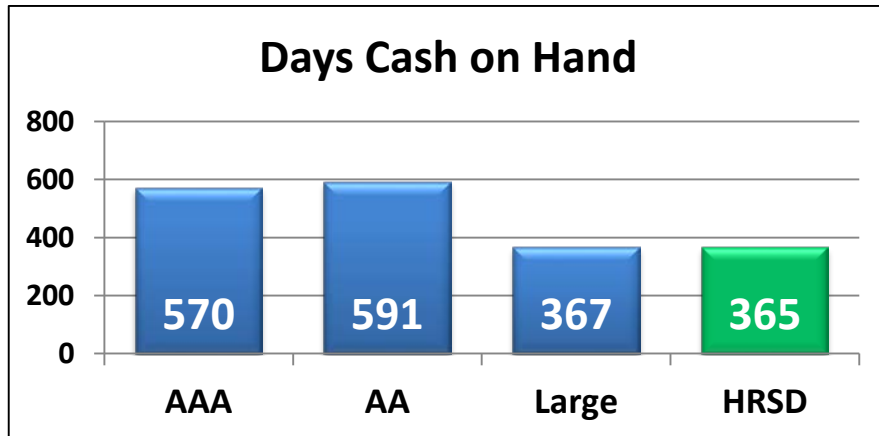
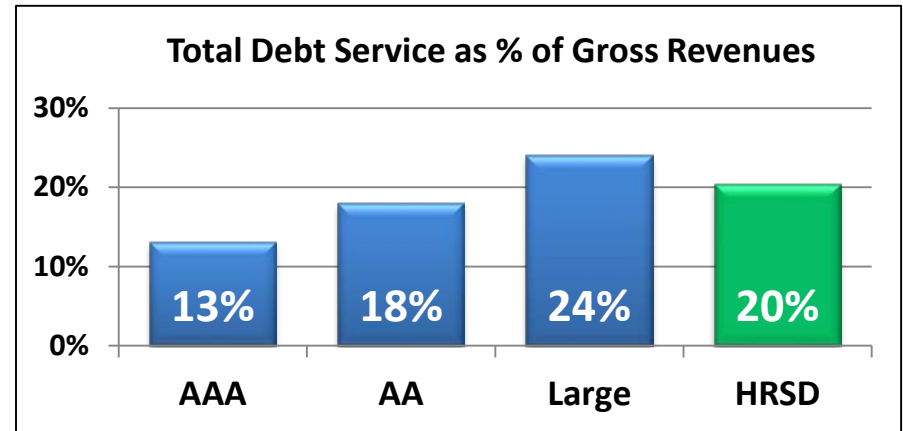
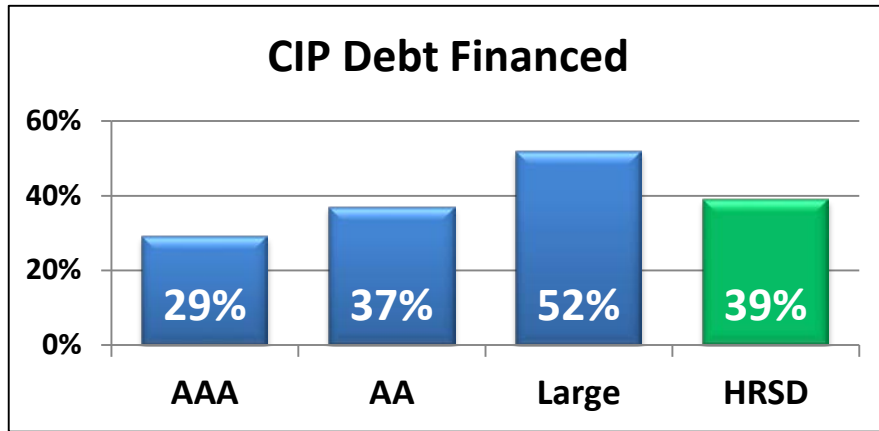


## No Rate Increase Scenario – 49% increase needed in FY2024

- Assume no rate increases for years 2020-2023
- 49% rate increase needed in FY2024 to avoid Bond Covenant violation
- Highlights importance of a long-term forecast



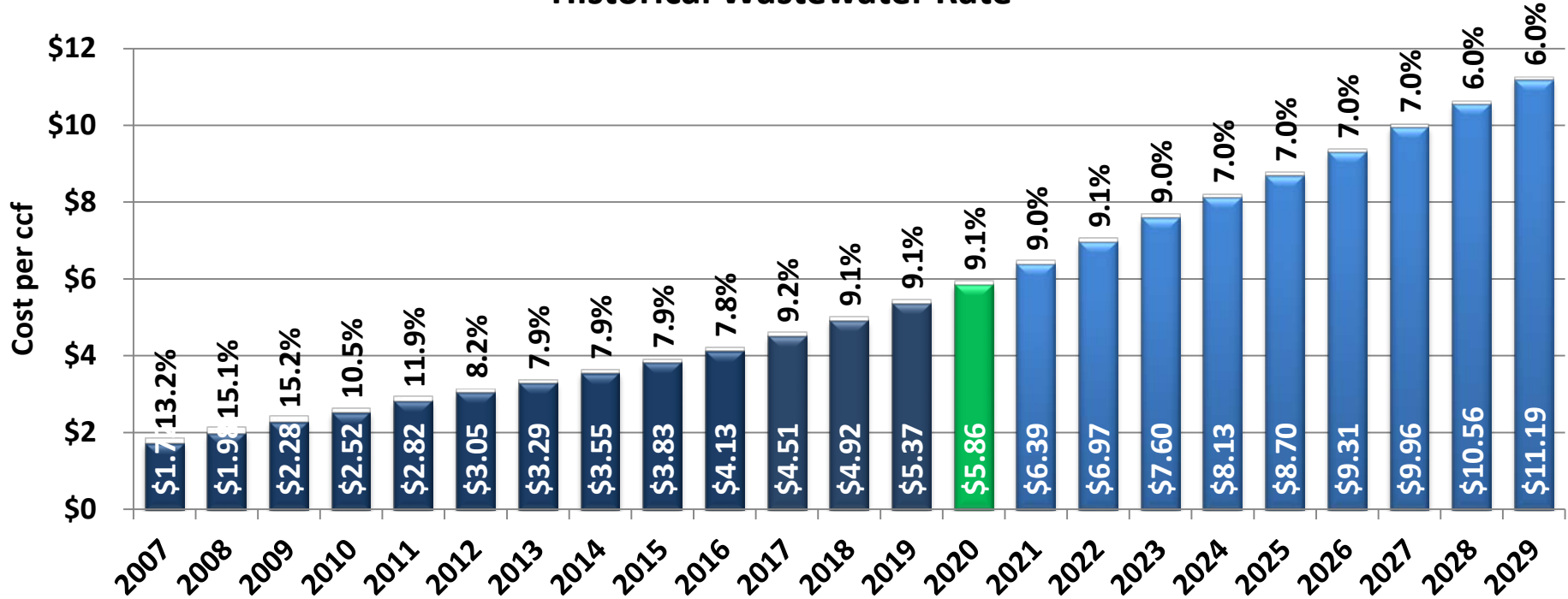
# Financial Forecast Metrics compared to 2019 Fitch Medians



- FY20 – 9.1% rate increase
  - \$5.86 per ccf (up from \$5.37 per ccf)
  - Avg monthly bill = \$32.82 @ 5.6 ccf
    - Up @\$2.75 from last year
    - About \$0.09 per day

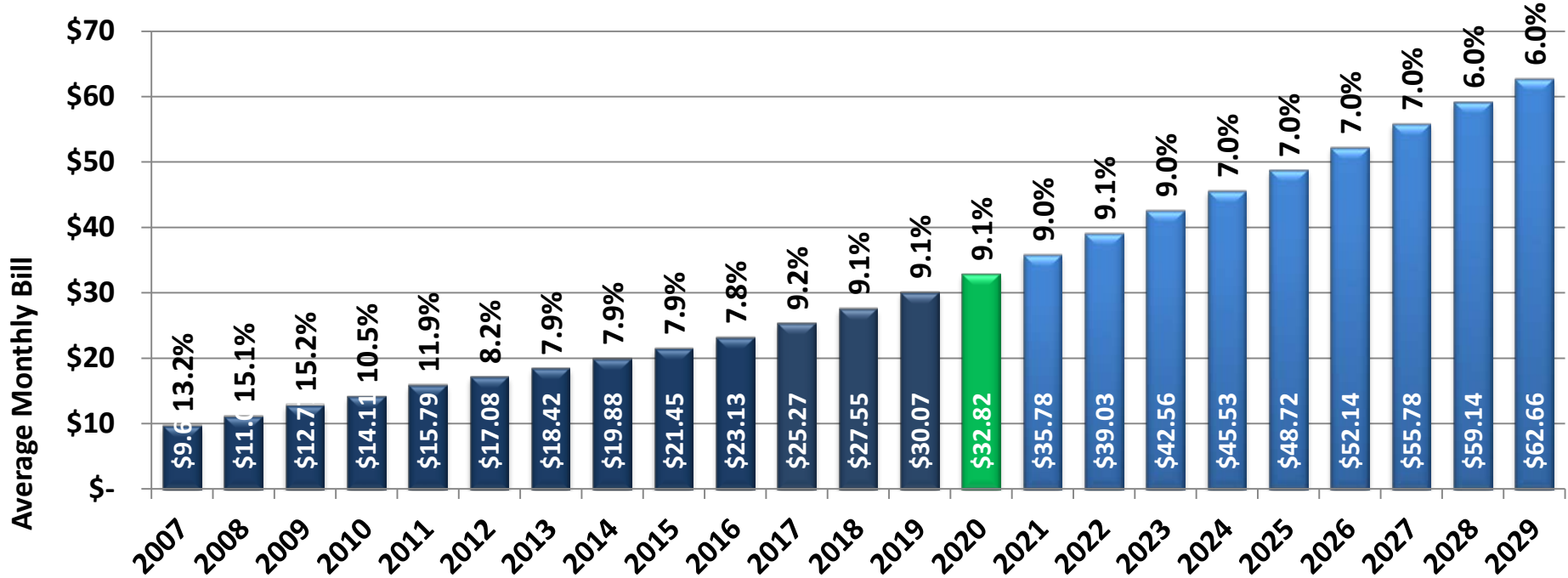
# Historical and Projected Rate Increases

## Historical Wastewater Rate



# Average Monthly Bill @ 5.6 ccf

## Historical Wastewater Rate



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# FY20 Budget

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## FY20 Budget At-A-Glance

- Revenue = \$338M
  - Operating - \$165M
  - Debt Service - \$64M

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  - PAYGO (Cash for CIP) = \$109M
- 
- 10 year CIP = \$2.8B
  - 20 year CIP = \$5.5B
  - Debt Outstanding = \$891M

# Revenues

	FY-2020	Adopted FY-2019	Increase/ (Decrease)	Percent Change	
<b>Operating Revenues</b>					
Wastewater Treatment Charges	\$ 323,395,000	\$ 297,062,000	\$ 26,333,000	9%	Municipal Assistance
Miscellaneous	1,255,000	1,405,000	(150,000)	(11%)	
<b>Total Operating Revenue</b>	<b>324,650,000</b>	<b>298,467,000</b>	<b>26,183,000</b>	<b>9%</b>	
<b>Non-Operating Revenues</b>					
Wastewater Facility Charges	6,160,000	6,075,000	85,000	1%	IPA Agreement Revenue
Investment Earnings	4,000,000	2,500,000	1,500,000	60%	
Build America Bond Subsidy	2,400,000	2,400,000	-	0%	
Other	595,000	820,000	(225,000)	(27%)	
<b>Total Non-Operating Revenues</b>	<b>13,155,000</b>	<b>11,795,000</b>	<b>1,360,000</b>	<b>12%</b>	
<b>Total Revenues</b>	<b>\$ 337,805,000</b>	<b>\$ 310,262,000</b>	<b>\$ 27,543,000</b>	<b>9%</b>	

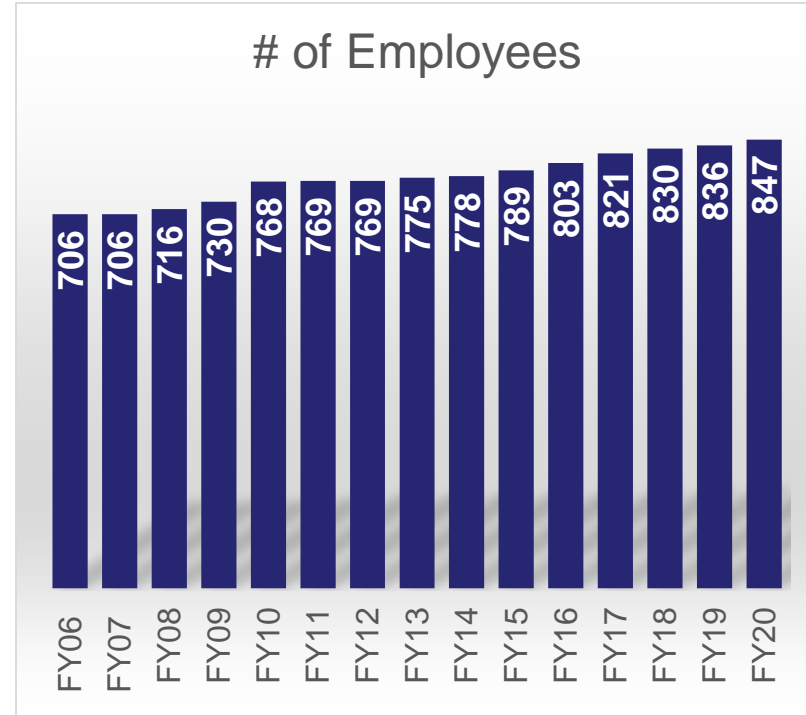
# Expenses

	FY-2020	Adopted FY-2019	Increase/ (Decrease)	Percent Change
<b>Operating Appropriations</b>				
General Management	\$ 460,252	\$ 624,583	\$ (164,331)	(26%)
Communications	444,116	423,764	20,352	5%
Finance	14,566,681	13,884,533	682,148	5%
Information Technology	15,854,415	15,089,692	764,723	5%
Talent Management	2,515,281	2,293,202	222,079	10%
Operations	103,821,084	98,842,274	4,978,810	5%
Engineering	7,689,863	7,903,702	(213,839)	(3%)
Water Quality	14,778,035	14,913,423	(135,388)	(1%)
General Expenses	5,529,093	5,761,766	(232,673)	(4%)
<b>Total Operating Appropriations</b>	<b>165,658,820</b>	<b>159,736,939</b>	<b>5,921,881</b>	<b>4%</b>
<b>Appropriations for Debt Service and Transfers</b>				
Debt Service	63,544,840	62,811,000	733,840	1%
Transfer to Capital Improvement Program (CIP)	108,341,340	87,475,061	20,866,279	24%
Transfer to General Reserve	-	-	-	0%
Transfer to Risk Management Reserve	260,000	239,000	21,000	9%
<b>Total Appropriations for Debt Service and Transfers</b>	<b>172,146,180</b>	<b>150,525,061</b>	<b>21,621,119</b>	<b>14%</b>
<b>Total Appropriations</b>	<b>\$ 337,805,000</b>	<b>\$ 310,262,000</b>	<b>\$ 27,543,000</b>	<b>9%</b>

Forecast @ \$165.8M

## Proposed New Positions, Total FTEs = 836 + 11 = 847 (+1.3%)

- **Information Technology = 5**
  - Chief Information Security Officer
  - IT Systems Security Manager
  - Senior Systems Engineer
  - Senior Programmer Analyst (2)
- **Operations = 1**
  - Electrical & Instrumentation Specialist
- **Engineering = 1**
  - Data Analyst
- **Water Quality = 4**
  - Tech Services Division Investigator
  - Tech Services Division Specialist (2)
  - WQ/Ops Quality Assurance Manager



- Many polymers and chemicals increased up to 26%
  - Ferric Sulfate = +35%
  - Polydyne = +26%
  - Praestol = +11%
- Practically **no** increase in Ops chemical budget (+0.1%)
  - Process improvements
  - More experience running new processes

## What's the value of Research and Development?

- 10 Year Annualized Rate of Increase
  - Utilities = 0.31%
  - Chemicals = 0.86%
- Estimated Cumulative Savings = **\$39.2M** since 2009
  - Relative to Bureau of Labor Statistics (BLS) inflation data

- Major Repairs and Replacements
  - Digester cleaning
  - VIP biosolids improvements (centrifuge, afterburner, incinerator repairs)
  - Pump and Drive replacements
  - Mixers
- Computer and Software upgrades

- New cost center – previously budgeted under General Expenses
  - Monitoring Lab = \$1M
  - Va Dept of Health Water Resources Engineer Grant = \$140k
  - USGS Monitoring and Research = \$102k



- Williamsburg Distributive Control System (DCS) Upgrade
- Outsourcing condition assessment and gravity system inspection
- Ebill/Epap Fees – Newport News and Va Beach switch to monthly billing
- Software maintenance

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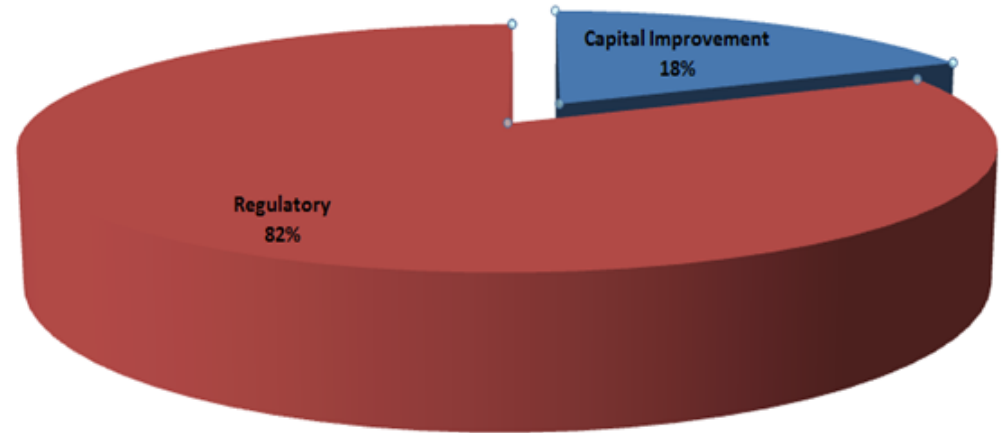
# Capital Improvement Program

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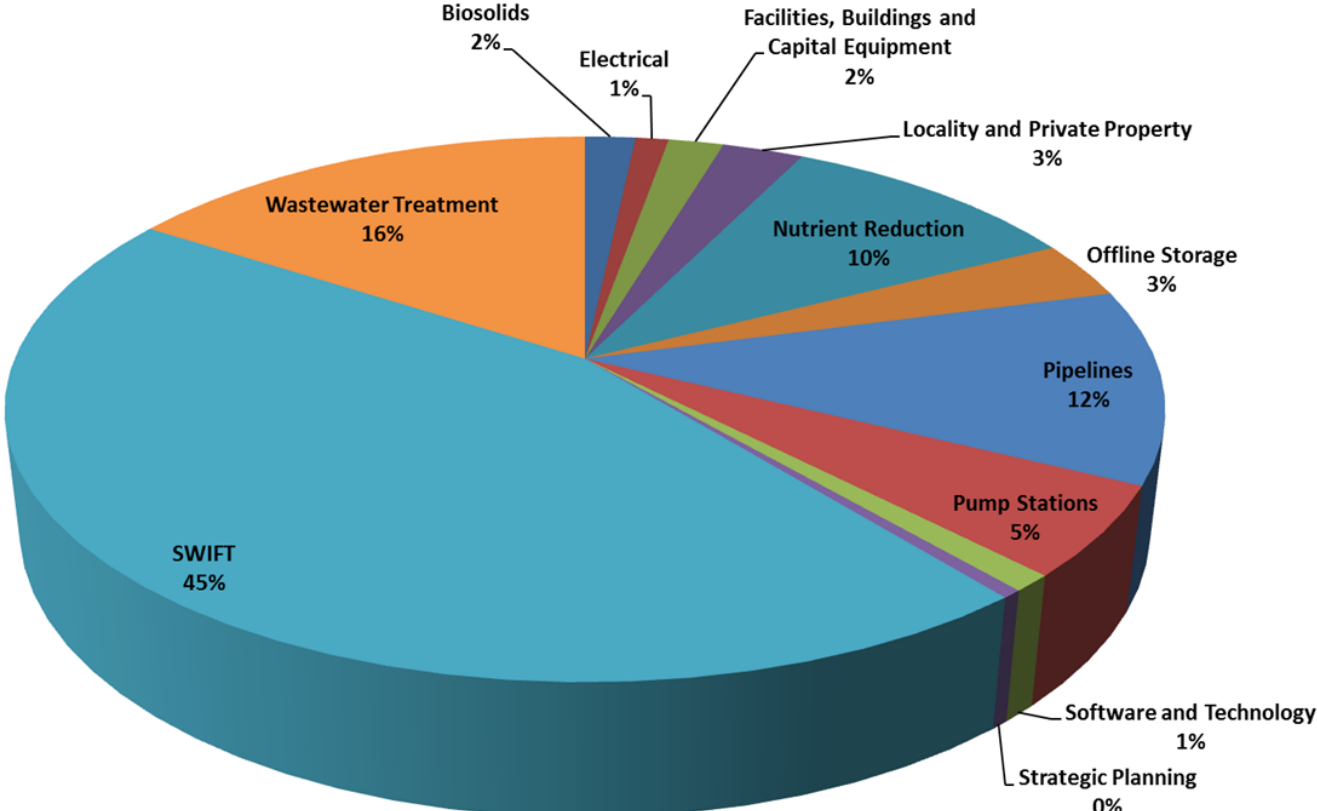
## FY2020-2029 CIP Stats

- FY20-29 = \$2.8B
- 181 Projects
- Includes Integrated Plan
  - SWIFT projects through FY32
  - \$200M high priority wet weather improvements in FY20-31
  - Remaining wet weather projects FY31-53

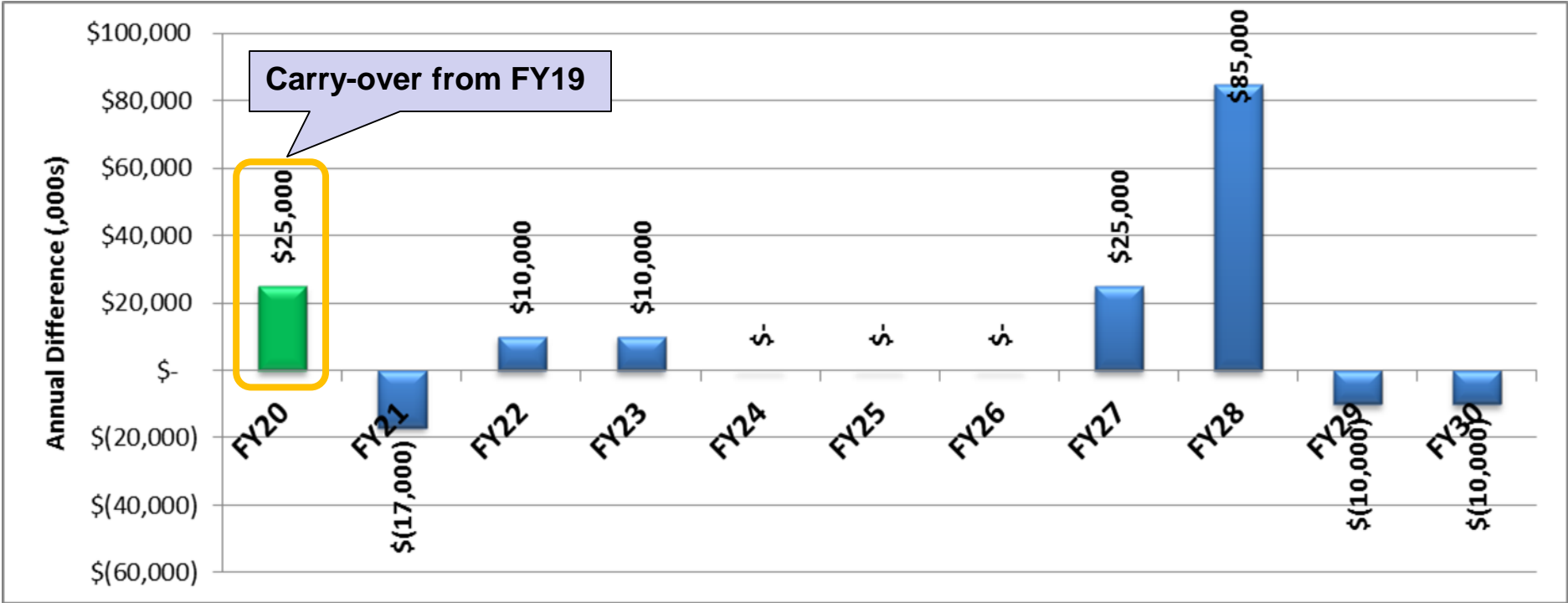
FY20 to FY29 Proposed Spending - Grouped by Regulatory Driver



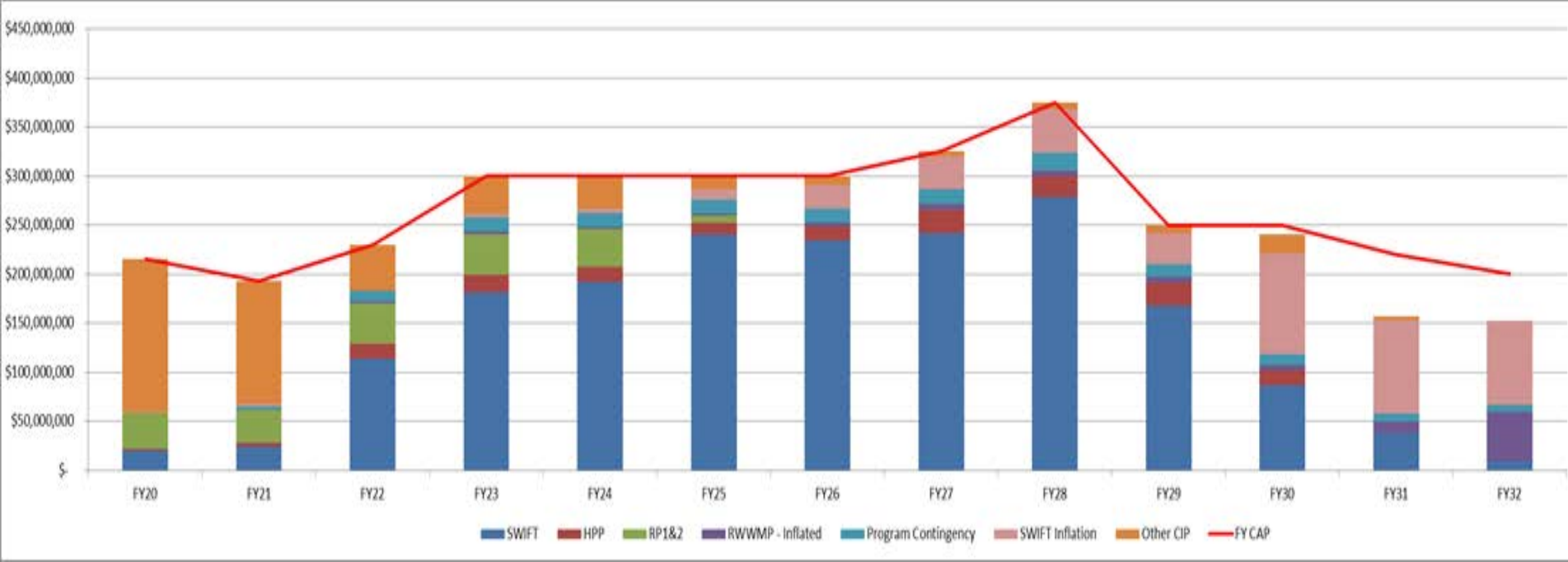
## FY20 to FY29 Proposed Spending - Grouped by Project Type



# FY2020-2030 Adjustments to Annual CIP Spending Targets – Net +\$93M



# Annual CIP Spend by Program



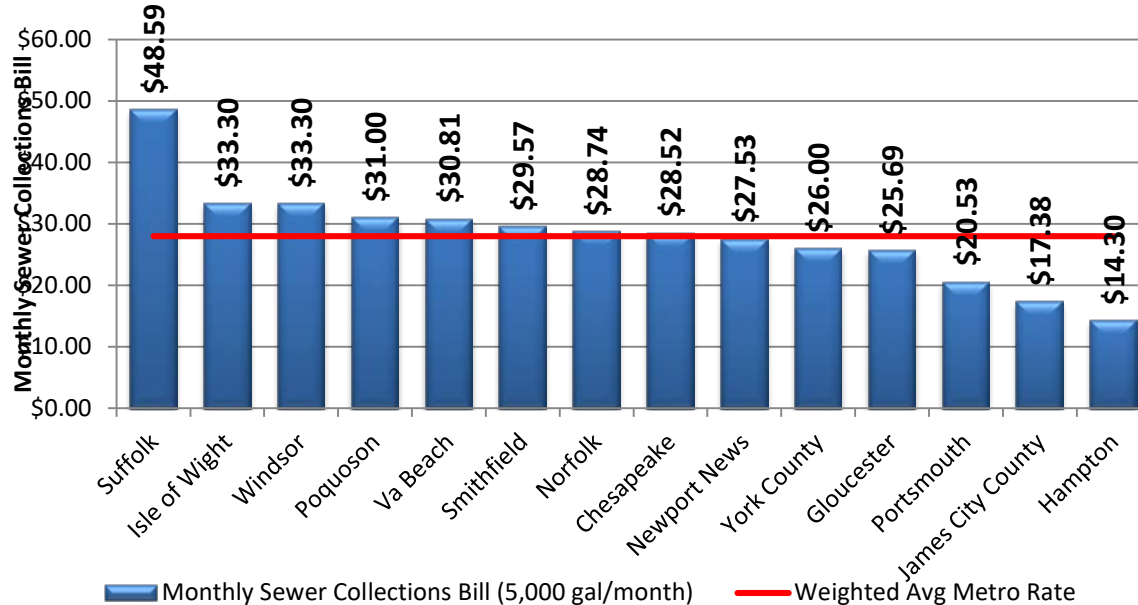
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## Small Communities Rates

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# Small Communities Rate Based on Weighted Avg Metro Rate = \$5.60/k-gals

FY2019 Monthly Collection Charges by Locality (HRPDC)



Locality	FY18	FY19	Rate Increase
Isle of Wight	\$ 31.70	\$ 33.30	5.05%
Windsor	\$ 31.70	\$ 33.30	5.05%
Portsmouth	\$ 19.55	\$ 20.53	5.03%
Norfolk	\$ 27.61	\$ 28.74	4.12%
Newport News	\$ 27.03	\$ 27.53	1.85%
James City County	\$ 17.21	\$ 17.38	0.99%
Suffolk	\$ 48.19	\$ 48.59	0.83%
Chesapeake	\$ 28.52	\$ 28.52	0.00%
Va Beach	\$ 30.81	\$ 30.81	0.00%
Gloucester	\$ 25.69	\$ 25.69	0.00%
Hampton	\$ 14.30	\$ 14.30	0.00%
Poquoson	\$ 31.00	\$ 31.00	0.00%
York County	\$ 26.00	\$ 26.00	0.00%
Smithfield	\$ 29.57	\$ 29.57	0.00%

<b>Weighted Avg Metro Monthly Bill - 5,000 gal/month</b>	<b>\$28.00</b>	<b>YOY % Increase</b>
<b>Weighted Avg Metro Rate - Per 1,000 gallons</b>	<b>\$5.60</b>	<b>1.3%</b>
<sup>1</sup> Monthly Wastewater Collection obtained from HRPDC FY19 data call, excludes Williamsburg <sup>2</sup> Population for Isle of Wight County and Towns is divided equally		



# Proposed Small Communities Rate (per k-gals)

**\$5.86/ccf = \$7.83/k-gals)**

## FY20 Small Communities Treatment and Collections Residential Bill

	HRSD Rate (\$/k-gals)	Collections (\$/k-gals)	Capital Recovery (\$/k-gals)	FY20 Rate	Minimum Monthly Bill - 3,000 gals	Minimum Bimonthly Bill - 6,000 gals	Flat Monthly Bill <sup>1</sup>	YOY Increase
King William	\$7.83	\$5.60	\$0.39	\$13.82	\$41.46	\$82.92	<b>\$55.28</b>	4.3%
Surry	\$7.83	\$5.60	N/A	\$13.43	\$40.29	\$80.58	<b>\$53.72</b>	5.7%
Urbanna	\$7.83	\$5.60	\$2.05	\$15.48	\$46.44	\$92.88	<b>\$61.92</b>	4.3%
West Point	\$7.83	\$5.60	\$2.28	\$15.71	\$47.13	\$94.26	<b>\$62.84</b>	5.1%

<sup>1</sup> Assumes 4,000 gals per month

	HRSD Rate (\$/k-gals)	Collections (\$/k-gals)	Capital Recovery (\$/k-gals)	FY20 Rate	Flat Monthly Bill based on ERU Usage Rate - 4,000 gals per month	YOY Increase
Mathews	\$7.83	\$5.60	N/A	<b>\$13.43</b>	\$53.72	5.7%

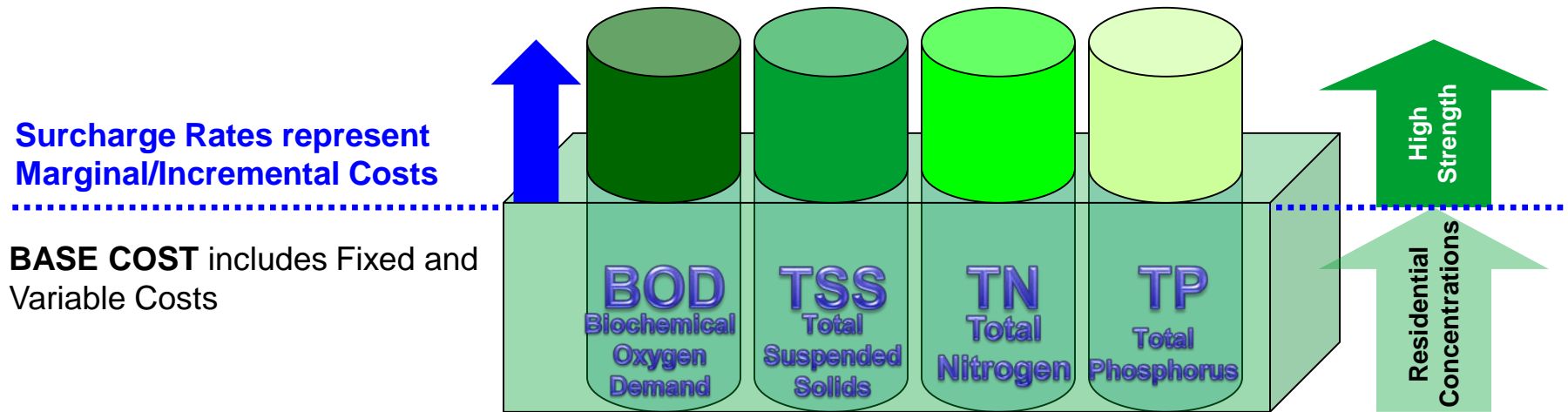
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## Surcharge Rates

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## Surcharges for High Strength or Unusual Wastes

- Domestic Quality Wastewater
- High Strength or Unusual Wastes



## FY20 Surcharge Rates

Surcharge Rate per 100 lbs Pollutant	FY19 Calculated	FY20 Calculated	FY19 vs FY20	
			\$ Differential	% Difference
Biochemical Oxygen Demand ( <b>BOD</b> )	\$ 1.67	<b>\$ 2.07</b>	\$ 0.40	24.0%
Total Suspended Solids ( <b>TSS</b> )	\$ 9.49	<b>\$ 10.08</b>	\$ 0.59	6.2%
Total Phosphorus ( <b>TP</b> )	\$ 152.74	<b>\$ 158.12</b>	\$ 5.38	3.5%
Total Kjeldahl Nitrogen ( <b>TKN</b> )	\$ 57.59	<b>\$ 54.11</b>	\$ (3.48)	-6.0%

FY20 CALCULATED					
PROJECTED TOTAL BILL (VOL, BOD, TSS, TN, TP)					
Top Ten Largest Surcharge Customers	FY19 Projected	FY20 Proposed	\$ Increase	% Increase	
SMITHFIELD FOODS INC	\$ 5,203,336	\$ 5,670,752	\$ 467,416	9.0%	
ANHEUSER BUSCH INC	\$ 3,098,256	\$ 3,385,328	\$ 287,072	9.3%	
PEPSI COLA COMPANY	\$ 327,074	\$ 358,406	\$ 31,332	9.6%	
MD VA MILK PRODUCERS ASSOC	\$ 295,384	\$ 321,452	\$ 26,068	8.8%	
37TH ST WATER TREATMENT PLANT	\$ 257,833	\$ 275,894	\$ 18,061	7.0%	
SENTARA HAMPTON GENERAL HOSP	\$ 248,703	\$ 270,496	\$ 21,793	8.8%	
BAE SYSTEMS-GUARD SHACK	\$ 224,266	\$ 242,960	\$ 18,694	8.3%	
BETHEL LANDFILL	\$ 143,203	\$ 153,234	\$ 10,031	7.0%	
SOUTHEASTERN PUBLIC SERVICE AUTHORITY	\$ 137,121	\$ 144,487	\$ 7,366	5.4%	
C & M INDUSTRIES INC	\$ 104,535	\$ 113,555	\$ 9,020	8.6%	

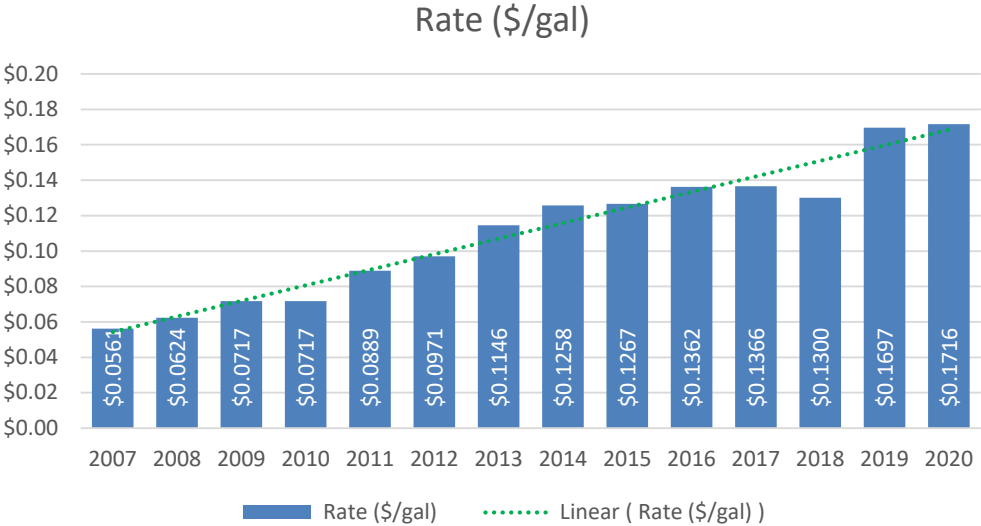
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# Hauled Waste Rate

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# FY20 Hauled Waste (Septage) Rate

- Cost to treat excluding conveyance
  - Volume
  - BOD
  - TSS
  - TN
  - TP
- FY19 = \$0.1697/gal
- FY20 = \$0.1717/gal (+1.1%)



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# Facility Charge Rates

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- Covers the cost of the new development's share of the wastewater system's capacity
- Based on average water meter size
  - Average flow assigned to each meter

$$\frac{\text{Net Replacement Value}}{\text{HRSD's Plant Capacity}} \times \frac{\text{Meter Size}}{\text{Average Flow}}$$



## Proposed FY20 Facility Charges – 3-Year Phase In

- Last updated in FY2017
- Chesapeake-Elizabeth will reduce both Net Replacement Value and HRSD’s Plant Capacity by 24 MGD
- Propose a 3-year phase in
- Utilize a 10-year rolling average for average meter flow

Meter Size	FY 19	3-Year Phase In		% Change
	Published	CE Closure	Change	
5/8	\$1,895	\$1,905	\$10	0.5%
3/4	\$4,830	\$4,210	-\$620	-12.8%
1	\$8,170	\$7,410	-\$760	-9.3%
1½	\$17,260	\$16,645	-\$615	-3.6%
2	\$30,510	\$30,505	-\$5	0.0%
3	\$70,800	\$73,810	\$3,010	4.3%
4	\$128,660	\$138,445	\$9,785	7.6%
6	\$298,610	\$336,960	\$38,350	12.8%
8	\$542,680	\$634,710	\$92,030	17.0%
10	\$862,550	\$1,038,525	\$175,975	20.4%
12	\$1,259,520	\$1,554,120	\$294,600	23.4%
14	\$1,734,700	\$2,186,505	\$451,805	26.0%
16	\$2,289,010	\$2,940,135	\$651,125	28.4%

$$\frac{\text{Net Replacement Value}}{\text{HRSD's Plant Capacity}} \times \frac{\text{Meter Size}}{\text{Average Flow}}$$



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## PAYGO (Cash) Spend Down – Meeting Liquidity Policy

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# March Monthly Report – Liquidity = 557 Days Cash

## HRSD - UNRESTRICTED CASH

*Can be used for any purpose since it is not earmarked for a specific use and is extremely liquid*

		Days Cash on Hand	Days Cash on Hand
<b>Total Unrestricted Cash</b>	<b>\$ 257,148,583</b>		<b>557</b>
Risk Management Reserve	\$ (3,439,784)	(7)	550
Reserve	\$ (15,266,324)	(33)	517
Capital (PAYGO only)	\$ (67,867,537)	(148)	369
<b>Net Unassigned Cash</b>	<b>\$ 170,574,938</b>		<b>369</b>

*Target = 365*  
*Policy = 270-365*

## Fund Entire FY20 CIP with Cash – Issue debt in FY2021

### **SOURCES = \$215M**

- Projected July 1, 2019 Capital Reserve Balance = \$77M
- Clean Water Loan Reimbursements = \$30M
- FY20 PAYGO (Cash for CIP) = \$108M

### **USES = \$215**

- FY20 CIP = \$215M

*Spend bond proceeds first to meet IRS arbitrage rebate guideline (18 month “spending exception”) – Most recent bond sale Jan 2018*

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# Water Infrastructure Finance and Innovation Act (WIFIA)

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# Best Case Scenario – WIFIA + Clean Water Loans save 25%

## WIFIA Cost Savings

Compared to issuing a \$100 million municipal bond...

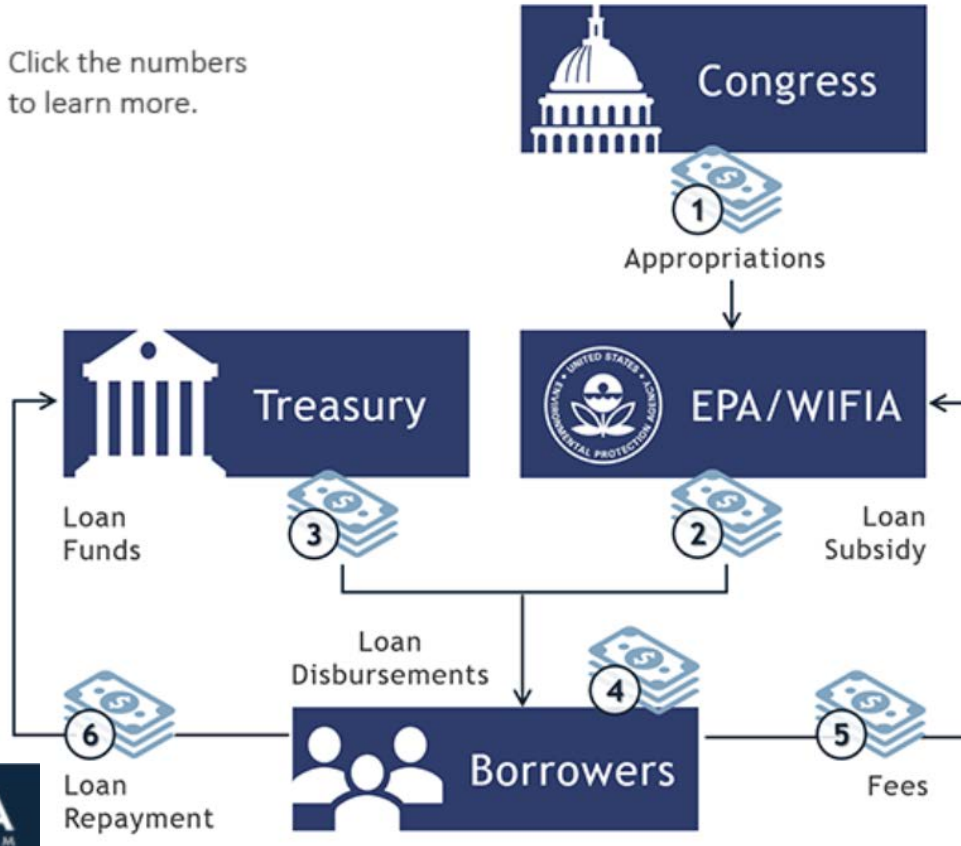


WIFIA costs are low because...

- Low, fixed interest rate equal to the U.S. Treasury rate of similar maturity.
- Low fees that compare favorably to capital market fees.
  - Application fees are eligible for financing as part of the WIFIA loan.
  - For the 2017 cohort of projects, WIFIA fees are significantly lower than estimated capital market fees.

# How WIFIA Works

Click the numbers to learn more.



## Should we pursue WIFIA funds?

- Pros

- Low rate – fixed at closing
- Flexible repayment
- Allowed at the subordinate lien position

- Cons

- Long approval timeline
- Davis/Bacon
- American Iron and Steel
- Environmental Permitting
- Historic Preservation Act



- Commission action in May 2019
- Apply for projects that make sense using criteria
  - Financing will not drive schedule
- Use an optimization model for financing structure
- Go/No Go if we are invited to apply (\$100k application fee)

- *March 26 – Budget Work Session*
- ~~*April 1 – Final CIP Meeting*~~
- April 12 – Finance Committee meeting (Atlantic Plant)
- April 23 – Draft Budget and Revenue Policy Submittal
- May 28 – Formal Budget Adoption
- Newspaper advertisement - 4 consecutive weeks
- July 1 – Budget Effective

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Questions?

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