2021 Cost of Service Rate Study

2021 Rate Setting Effort – Assumptions

- ***Cost Escalation***
  - General inflation – **3%**
- ***Financial Targets***
  - Operating Reserve Target– **180 days of O&M expenses**
  - Debt Service Coverage Ratio Target – **1.15x**
- ***Future Bond Assumptions***
  - Payment Term – **30 years**
  - FY 2021/22 Interest Rate – **4%**
  - Beyond FY 2021/22 Interest Rate – **5%**
  - Estimated principal and interest payments for future debt provided by NHA (Agency's municipal advisor)

Carollo evaluated three financial performance tests

Cash Flow Test

Do revenues exceed O&M and rate-funded capital needs?

Debt Coverage Test

Do revenues exceed debt service coverage thresholds?

Reserve Fund Test

Are all end-of-year reserve fund targets met?

Total Capital Funding Needs

Capital Project	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	TOTAL
Harkins Slough Recharge Facilities Upgrades	$0	$1,530,000	$1,850,000	$1,930,000	$4,100,000	$0	**$9,410,000**
Struve Slough with Recharge Basins	220,000	1,080,000	-	11,800,000	-	-	**$13,100,000**
College Lake	3,673,000	13,133,075	33,564,300	13,985,125	-	-	**$64,355,500**
Basin Monitoring Improvements	-	-	1,500,000	-	-	-	**$1,500,000**
RW Facility Disk Filter Upgrade - Phase II	100,000	-	-	-	-	-	**$100,000**
0.5MG Storage Tank/UV Expansion - Phase III	250,000	2,000,000	-	-	-	-	**$2,250,000**
CDS F-Line Expansion	1,500,000	-	-	-	-	-	**$1,500,000**
BMP Update	250,000	150,000	-	-	-	-	**$400,000**
Conservation	400,000	400,000	400,000	400,000	400,000	400,000	**$2,400,000**
Adaptive Management Plan (AMP)	100,000	100,000	100,000	100,000	100,000	100,000	**$600,000**
Total Capital Funding Need	**$6,493,000**	**$18,393,075**	**$37,414,300**	**$28,215,125**	**$4,600,000**	**$500,000**	**$95,615,500**

Capital Funding Source	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	TOTAL
CDS F-Line Grant (Prop 84)	$2,084,642	$906,840	$0	$0	$0	$0	$2,991,482
RWF Disk Filter (Phase II) - Grant (Prop 1)	1,433,836	205,156	-	-	-	-	$1,638,992
RWF Disk Filter (Phase II) - SRF Loan	1,496,930	191,494	-	-	-	-	$1,688,424
Groundwater Sustainability Grant (Prop 68)	177,688	322,311	-	-	-	-	$499,999
RWF UV Expansion (Phase III) - Grant	-	87,500	700,000	-	-	-	$787,500
RWF UV Expansion (Phase III) - SRF Loan	-	-	1,462,500	-	-	-	$1,462,500
College Lake – Potential Grant	-	6,000,000	4,000,000	-	-	-	$10,000,000
Cash on Hand	9,343,055	-	-	-	-	-	$9,343,055
Total Capital Funding Sources	**$14,536,151**	**$7,713,301**	**$6,162,500**	**$0**	**$0**	**$0**	**$28,411,952**
Total Remaining Capital Funding Need	**~ $67.2 million**						

**Excludes restricted reserves. Cash on hand can be used in any fiscal year, as needed.*

Financial Outlook *without* Revenue Increases, Additional Bonds, or College Lake Grant

	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Revenue Increase	-	-	-	-	-	-
Bond Issuance	-	-	-	-	-	-
Cash Flow Surplus/(Deficit)	$3.20 million	-$0.94	-$34.07	-$60.96	-$64.06	$0.91
Debt Service Coverage Ratio	1.96 x	1.81 x	1.65 x	1.62 x	1.76 x	1.62 x
Total Cash on Hand & Reserves Ending Balance	$8.73 million	$2.90	-$30.11	-$56.83	-$59.97	-$59.36
Operating Reserve, days of O&M	180 days	49 days	-1,358 days	-2,155 days	-2,199 days	-2,109 days

Scenario 1: Financial Outlook *without* $10M College Lake Grant

	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Revenue Increase	**-**	**5.2%**	**6.8%**	**6.8%**	**6.8%**	**6.8%**
Bond Issuance	**-**	**$46.5 million**	**-**	**$25.5 million**	**-**	**-**
Cash Flow Surplus/(Deficit)	$3.20 million	$2.67	$2.29	$2.27	$2.97	$3.83
Debt Service Coverage Ratio	1.96 x	1.64 x	1.46 x	1.48 x	1.61 x	1.79 x
Total Cash on Hand & Reserves Ending Balance	$8.73 million	$40.33	$7.57	$8.40	$9.80	$13.18
Operating Reserve, days of O&M	180 days	180 days	180 days	180 days	180 days	180 days

Scenario 2: Financial Outlook *with* $10M College Lake Grant

	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Revenue Increase	**-**	**4.7%**	**6.1%**	**6.1%**	**6.1%**	**6.1%**
Bond Issuance	-	**$35.5 million**	-	**$25.5 million**	-	-
Cash Flow Surplus/(Deficit)	$3.20 million	$2.79	$2.50	$2.36	$2.93	$3.64
Debt Service Coverage Ratio	1.96 x	1.70 x	1.54 x	1.54 x	1.66 x	1.81 x
Total Cash on Hand & Reserves Ending Balance	$8.73 million	$35.67	$7.10	$8.49	$9.76	$12.95
Operating Reserve, days of O&M	180 days	180 days	180 days	180 days	180 days	180 days

Cost of Service bridges the gap between revenue increases and rates

STEP 1

Policy Review

- Reserve Policies
- Debt Funding

Revenue Requirements

- Operations and Maintenance
- Capital

STEP 2

Cost of Service Analysis

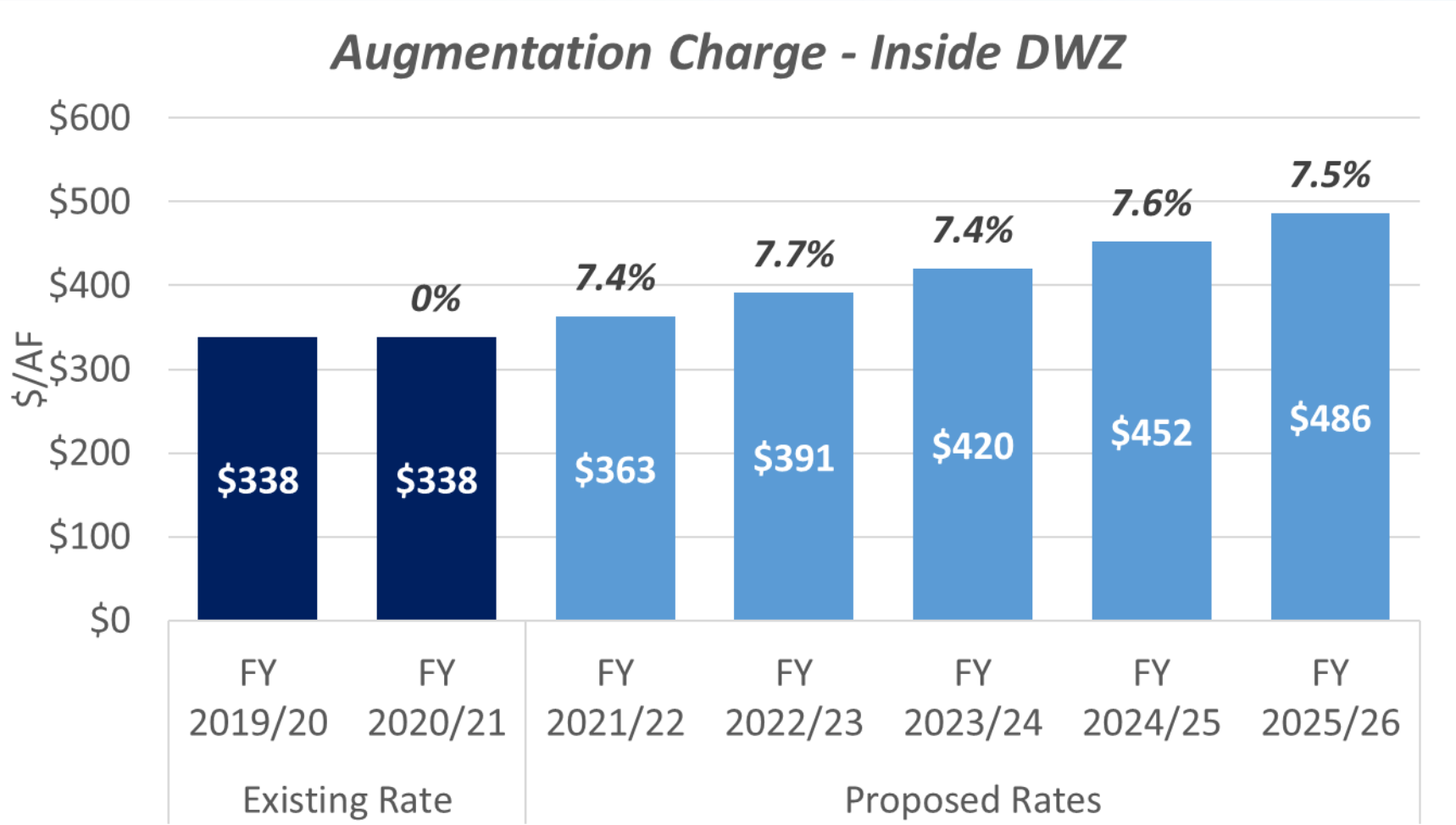
Budget Categories	Functional Categories
•Administration	• Augmentation Charge
• Operations	• Inside DWZ
• Harkins Slough	• Delivered Water (DWS)
• CDS	• Rural
• Suppl. Wells	
• Recycled Water	
• Metering	
• Basin Mgmt. Plan	
• Capital	
• Debt Service	
• R&R Reserves	

STEP 3

Rate Structure Design

- Outside DWZ
  - Metered
  - Unmetered
- Inside DWZ
  - Met.+ Zone Fee
  - Delivered Water
- Rural Residential

Scenario 1: Rates *without* $10M College Lake Grant Augmentation Charge – Inside DWZ

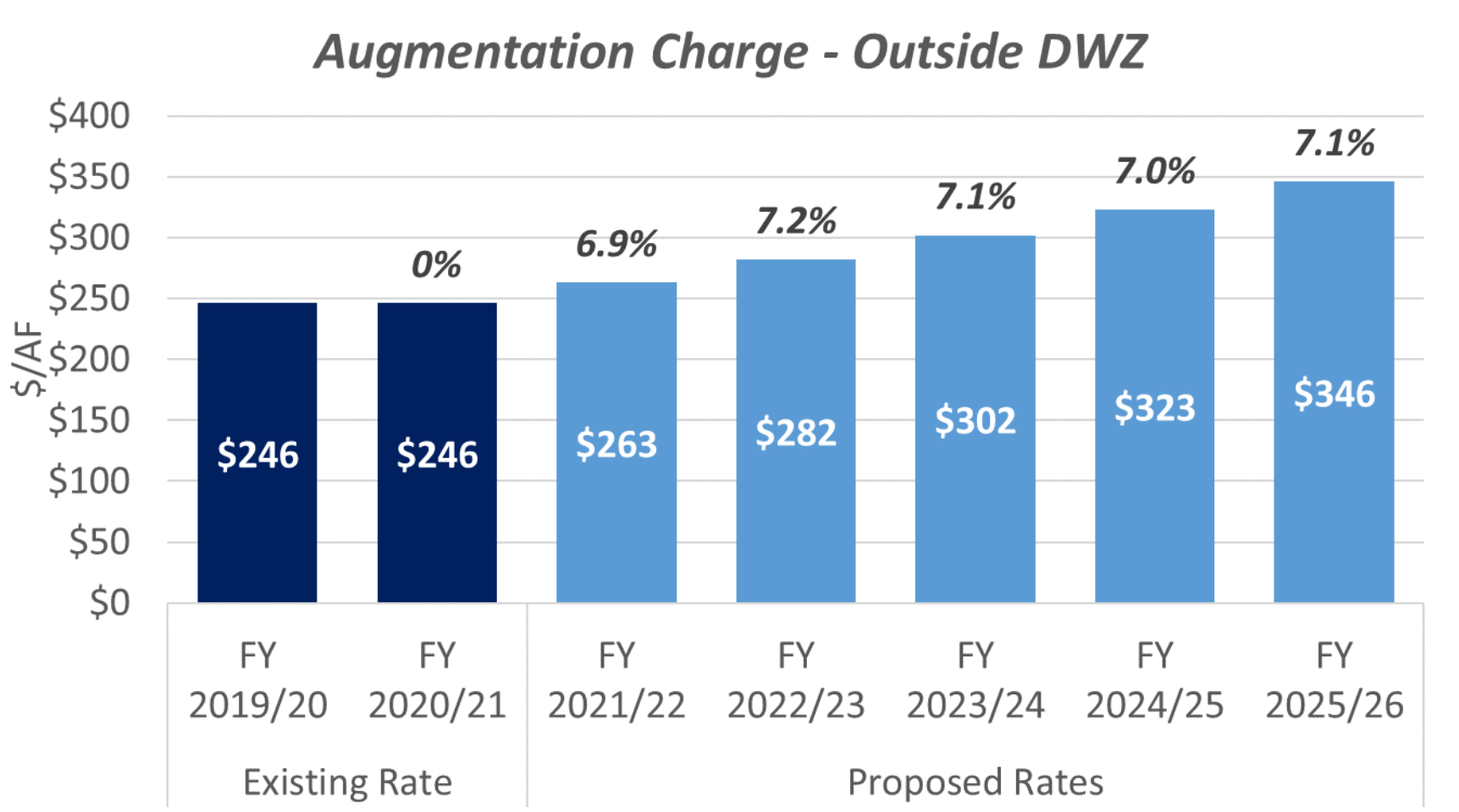


6-year Total Rate Increase*: **37.7%**

6-year Annual Average Rate Increase*: **6.3%**

*Under Scenario 2 (with $10M grant), total rate increase = **34.1%**, and annual avg. rate increase = **5.7%**

Scenario 1: Rates *without* $10M College Lake Grant Augmentation Charge – Outside DWZ



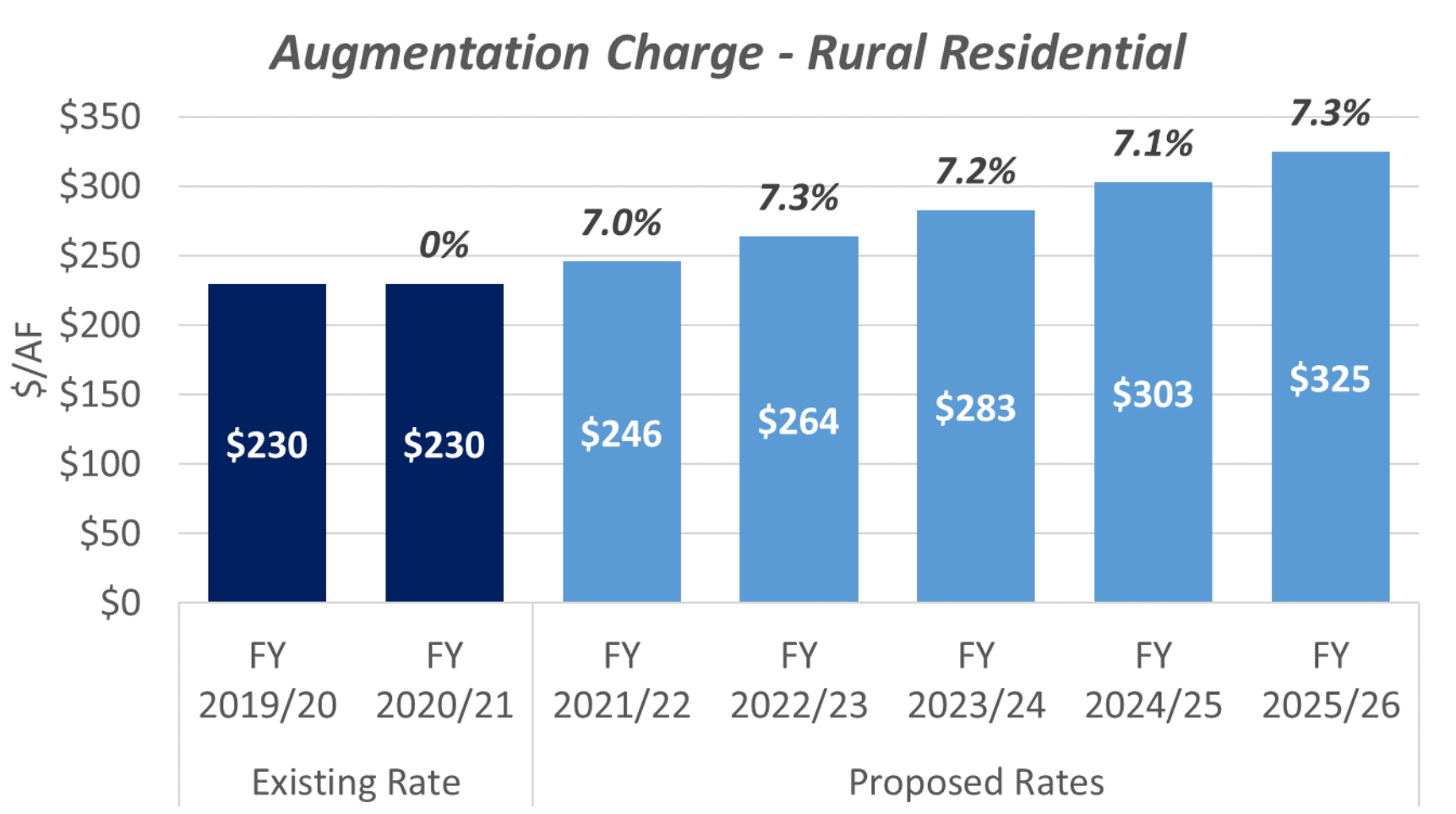
6-year Total Rate Increase*: **35.3%**

6-year Annual Average Rate Increase*: **5.9%**

*Under Scenario 2 (with $10M grant), total rate increase = **31.9%**, and annual avg. rate increase = **5.3%**

Scenario 1: Rates *without* $10M College Lake Grant Augmentation Charge – Rural Residential

**(billed for 0.5 AF/year)*

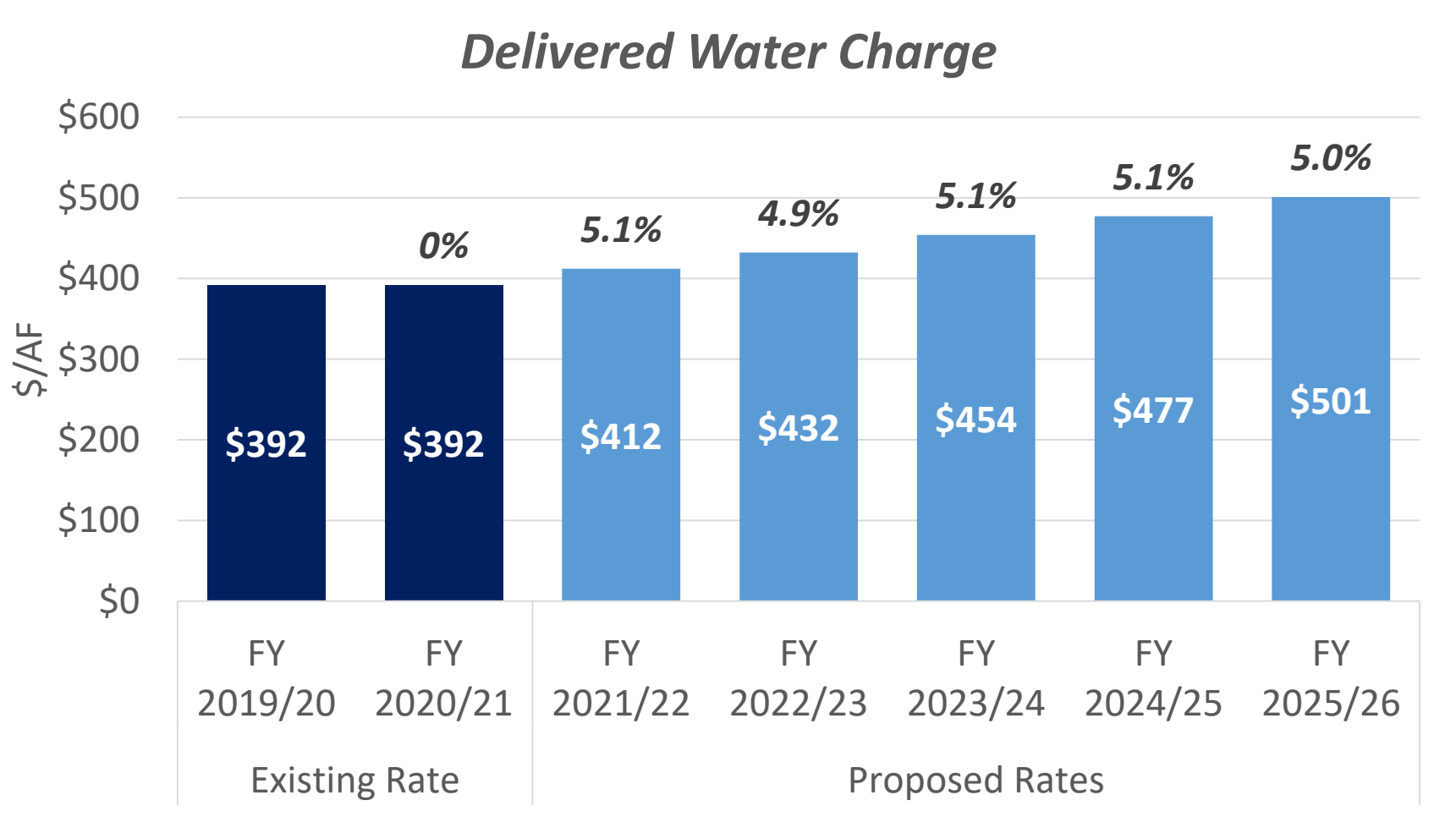


6-year Total Rate Increase*: **35.8%**

6-year Annual Average Rate Increase*: **6.0%**

*Under Scenario 2 (with $10M grant), total rate increase = **32.5%**, and annual avg. rate increase = **5.4%**

Scenario 1: Rates *without* $10M College Lake Grant Delivered Water Charge



6-year Total Rate Increase*: **25.1%**

6-year Annual Average Rate Increase*: **4.2%**

*Under Scenario 2 (with $10M grant), total rate increase = **22.2%**, and annual avg. rate increase = **3.7%**

Scenario 1: Rates *without* $10M College Lake Grant
Summary of Proposed Rates

Rate Class	FY 2019/20 Existing Rate	FY 2020/21 Existing Rate	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26
Augmentation Charge – Inside DWZ	$338/AF	$338/AF	$363/AF	$391/AF	$420/AF	$452/AF	$486/AF
Augmentation Charge – Outside DWZ	$246/AF	$246/AF	$263/AF	$282/AF	$302/AF	$323/AF	$346/AF
Augmentation Charge – Rural Residential*	$115/ Residence	$115/ Residence	$123/ Residence	$132/ Residence	$142/ Residence	$152/ Residence	$163/ Residence
Delivered Water Charge	$392/AF	$392/AF	$412/AF	$432/AF	$454/AF	$477/AF	$501/AF

**Rural Residential users are billed for 0.5 AF/year*