



Special City Council Meeting

New Braunfels Utilities Fiscal Years 2024 and 2025 Proposed Rate Plan
April 3, 2023

Overview

- State of NBU
- Strategic Plan
- Growth, Assumptions, Risks, and Key Outcomes
- Capital Plan
- Water Supply
- Operating Expenses
- Funding Sources
- Cost of Service & Rate Design



STATE OF NBU

Looking Back

As the 2nd fastest growing city, resource scarcity limited our focus to basic needs: regulatory compliance, systems capacity, procurement, etc.

Although we grew the workforce by 40%, we are still understaffed by 1/3. Yet, we made significant and historic accomplishments:

- Master planned every critical function
- Implemented a capital plan that grew by 300%
- Increased our water supply portfolio by 60% while more than doubling the number of sources
- Maintained electric reliability that outperforms every sector of the industry



Looking Back



Select Recognitions

- American Public Power Association (APPA) Certificate of Excellence in Electric Reliability
- APPA Reliable Public Power Provider (RP3) Diamond Level (highest) – for dedication to reliability, safety, workforce development and system improvement. NBU has held the highest level of designation (Diamond) since 2020
- APPA Excellence in Public Power Communication in print, digital, web, and social
- American Water Works Association (AWWA) Opflow Journal profiled NBU's Satellite Leak Detection Program
- Texas Commission on Environmental Quality (TCEQ) Texas Environmental Excellence Award for NBU Customer Leak Detection Program
- Award of Achievement for Excellence in Financial Reporting for 32 consecutive years

Looking Forward

We're not growing the organization, we are having to scale

- Business planning and resource allocation are shifting focus from meeting basic needs to meeting Service Level Expectations
- Historic changes in the Electric Reliability Council of Texas (ERCOT) market and the electric industry (electric transportation, solar, battery storage, etc.) are driving innovation and will lead to new customer solutions
- Increases in severity, duration and frequency of drought and other significant weather events are opportunities to mature our emergency management and conservation efforts



Looking Forward

- Modern customer payment portal with mobile app – Fall 2023
- Capital plans will add capacity for compliance and resiliency, but also put pressure on rates:
 - 27% increase in electric substation capacity
 - 20% increase in wastewater treatment capacity
 - 58% increase in water production capacity
- Proposed two-year rate plan to meet needs



STRATEGIC PLAN

MISSION

Strengthening our community by providing resilient essential services



CORE VALUES

Safety, Team,
Integrity,
Culture,
and Stewardship



VISION

Be a trusted community partner dedicated to excellence in service



STRATEGIC GOALS

Customers and Community

People and Culture

Infrastructure and Technology

Financial Excellence

Safety and Security

Stewardship



FY 2024 ANNUAL PRIORITIES

Mission-Critical Priorities Designed to Achieve Our Strategic Goals

Distributed Energy Resources (DER) Program Creation

One Water

Emergency Management

Power Supply Roadmap

Enterprise Asset Management

Integrated Resource Plan

Enterprise Project Management

SAS Budget Model

Electric Transportation (ET) Program Creation

Back Up Operations Center

Physical Security Master Plan

NBU HQ

Fiber Network

Water and Wastewater SCADA (Supervisory Control and Data Acquisition) Solutions

Levels of Service (LOS) & Key Performance Indicators (KPI)

- Scarcity and growth have focused resources on meeting basic needs – i.e. regulatory compliance, systems capacity, procurement
- In the next 5 years, focus turns to meeting service expectations
- Current and expected LOS, along with KPI assigned to every functional area of NBU
- KPIs will inform how and where to find efficiencies and add/deploy resources

Current Service Level Deficiencies

Examples Include:

- Electric Vehicles/Electric Transportation – No program exists for system readiness, customer solutions, power supply/rate integration
- Distributed Energy Resources – Current program is frustrating for installers and customers (lead times unacceptable)
 - Evaluation needed to ensure rebates incentivizing solar
 - No power supply/rate integration
- Underground W/WW Utility Locates – Only staffed to complete 50% of requests
- Water Operations Backlog (repair of water leaks/sewer issues) – 2 years as of March 2023

Current Service Level Deficiencies

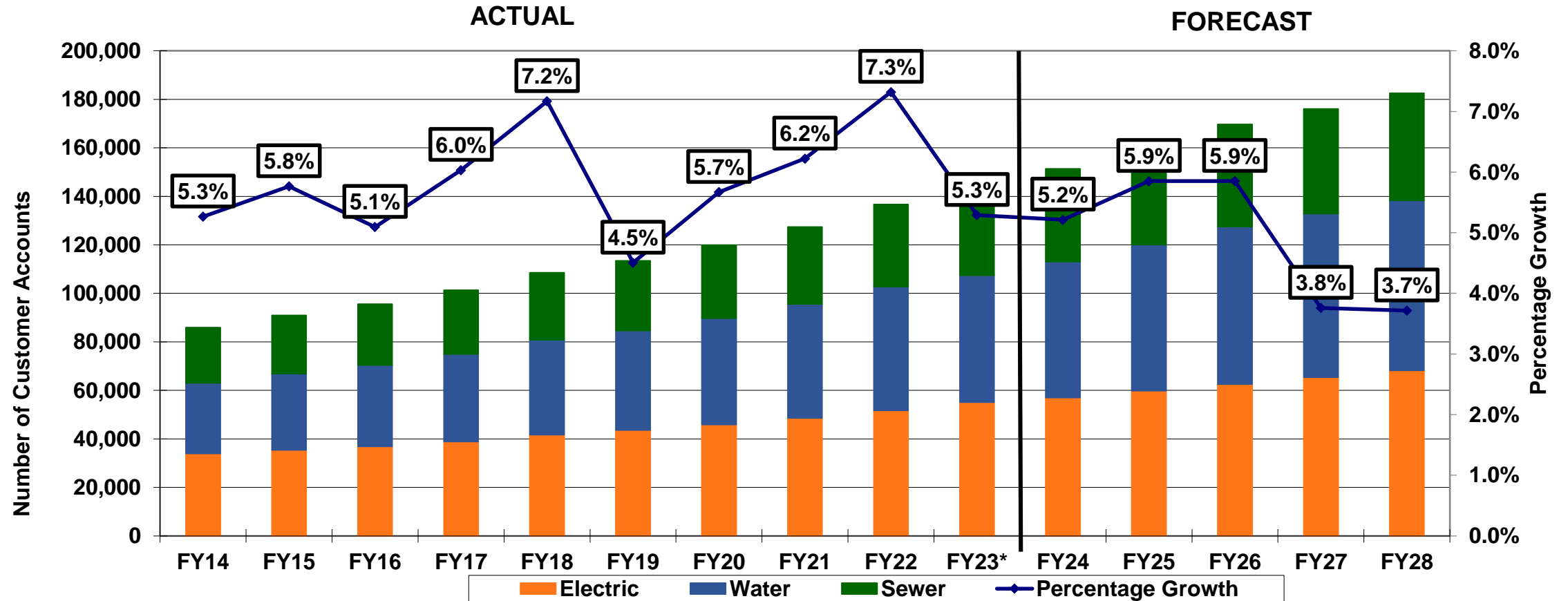
- GIS Backlog – Current backlog is more than 4 weeks, or 50% of total unresolved monthly tickets
- Predictive Maintenance Backlog – Basic maintenance activities to prevent asset failure have been suspended due to lack of resources
- Asset Management – No program exists to optimize Operations & Maintenance (O&M) and capital investments over asset life to meet reliability expectations
- Developer Submittal Review – Plan review meeting 15 day goal 90% of the time, but no goal exists for Letter of Certification (LOC) or plat review
 - Need seamless integration with City of NB processes (FY23 first year with dedicated Real Estate/Right of Way (ROW) Manager)

**GROWTH, ASSUMPTIONS,
RISKS & KEY OUTCOMES**

Growth, Interest Rates & The Economy

- Interest rate increases have significantly slowed growth
- NBU consulted with multiple outside resources including a real estate investment firm, financing firm, engineering firms, developers and builders for insight on forecasting growth
- Consensus was on a near term slowdown (~1 year), with high growth returning
- NBU growth rates are forecasted by customer class and by line of business (water, sewer and electric territories are not identical)
- Growth Assumptions included in NBU 5-Year Plan
 - Combined customer growth for FY24 = 5.2%
 - Combined average customer growth over the 5-Year Plan = 4.9%

Combined Customer Growth



*Forecast (actuals through November)

Assumptions

- Includes \$169M in Impact Fees over 5-Year Plan; reduced Impact Fees by 25% in FY24 due to transformer shortage/impact to growth
- O&M Non-Personnel includes 2% inflation in FY24, 8% in FY25 and 6% thereafter
- Power Stabilization Fund at \$95M by FY28
 - No change to Power Stabilization Fund collection within 5-Year Plan
 - Target balance decreased from \$142M to \$95M based on statistical analysis conducted by The Energy Authority

Assumptions

- Capital contributions of \$102M over 5-Year Plan with \$66.5M coming from one developer
- Increase Electric revenues to achieve 50% cash funded for capital by FY27
- Increased Water revenues for a positive net available for Capital funding
- Community Assistance Program increases each year per Rate Advisory Committee recommendation

Key Risks

Revenue

- Developer Capital Contributions and Development Fee
- Supply Chain / Transformer Shortage
- Impact Fee Funding and Assumptions

Reserves

- Power Stabilization Fund

Mitigating Risk with Reserves

Strategy: Increase Days Cash on Hand (DCoH)

- Power Stabilization Fund target balance based on statistical analysis of risk. Equivalent to 69% of annual power supply budget (FY24)
- Contingency Fund target balance is 120 days operating expenses (industry best practice)

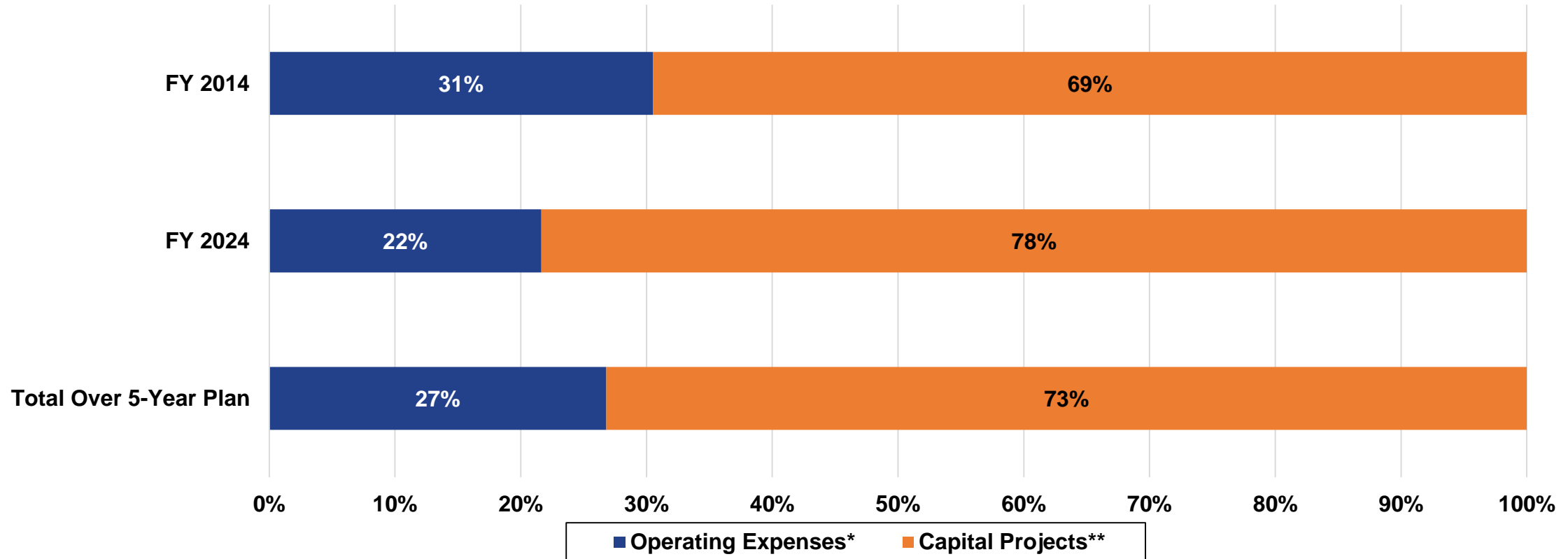
	Beginning Balance	FY24	FY25	FY26	FY27	FY28	Ending Balance
Power Stabilization Fund*	\$20,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$95,000**
Contingency Fund*	\$23,834	\$3,528	\$3,411	\$3,484	\$3,555	\$3,549	\$41,361
DCoH		228	261	287	305	322	

*Dollar amounts in thousands

**Power Stabilization Fund adds 163 days to Days Cash on Hand (DCoH) when filled

CAPITAL PLAN

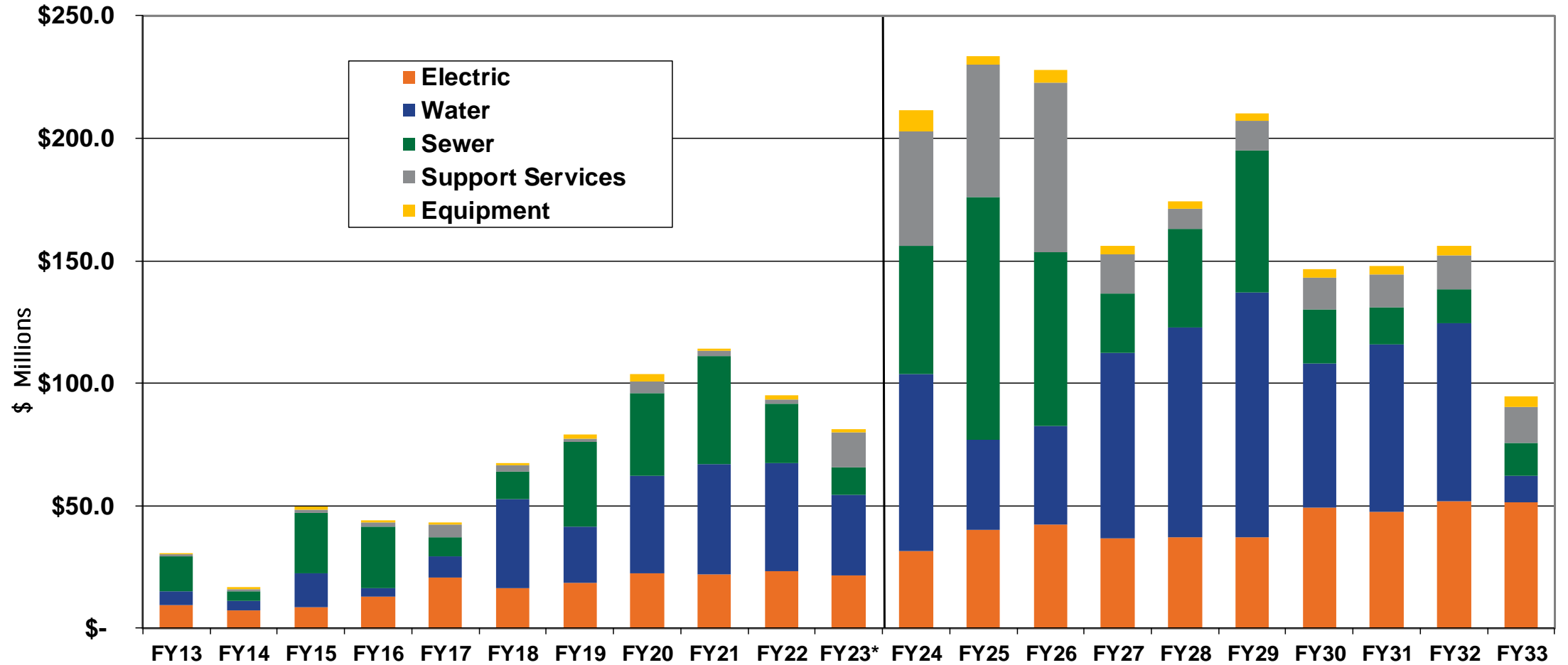
Budgeted Sources of Expenditures



*Does not include purchased power, purchased water, and depreciation

**Capital includes equipment and capital projects

Capital Expenditures – Historical & Projected



CAPITAL PLAN

ELECTRIC INFRASTRUCTURE

Drivers for Electric System Improvements

Regulatory Compliance

- Design electric infrastructure to meet or exceed National Electrical Safety Code (NESC) and National Electrical Code (NEC) requirements
- Achieve all NERC (North American Electric Reliability Corporation) & ERCOT (Electric Reliability Council of Texas) requirements with NBU's transmission system.

Proactive Operations

- Maintain a 3 year rolling average SAIDI (System Average Interruption Index) in top quartile for Texas utilities or 3 year rolling average SAIDI < 52.56 minutes (99.99% reliability)
- SAIFI < 1.0 Interruptions (System Average Interruption Frequency Index)
- Customer Count per Feeder < 1,050 Customers
- Nominal Capacity > System Demand
- Rehab/Replace aging infrastructure prior to failure

DISTRIBUTION



TRANSMISSION



SUBSTATION



River Road
Substation



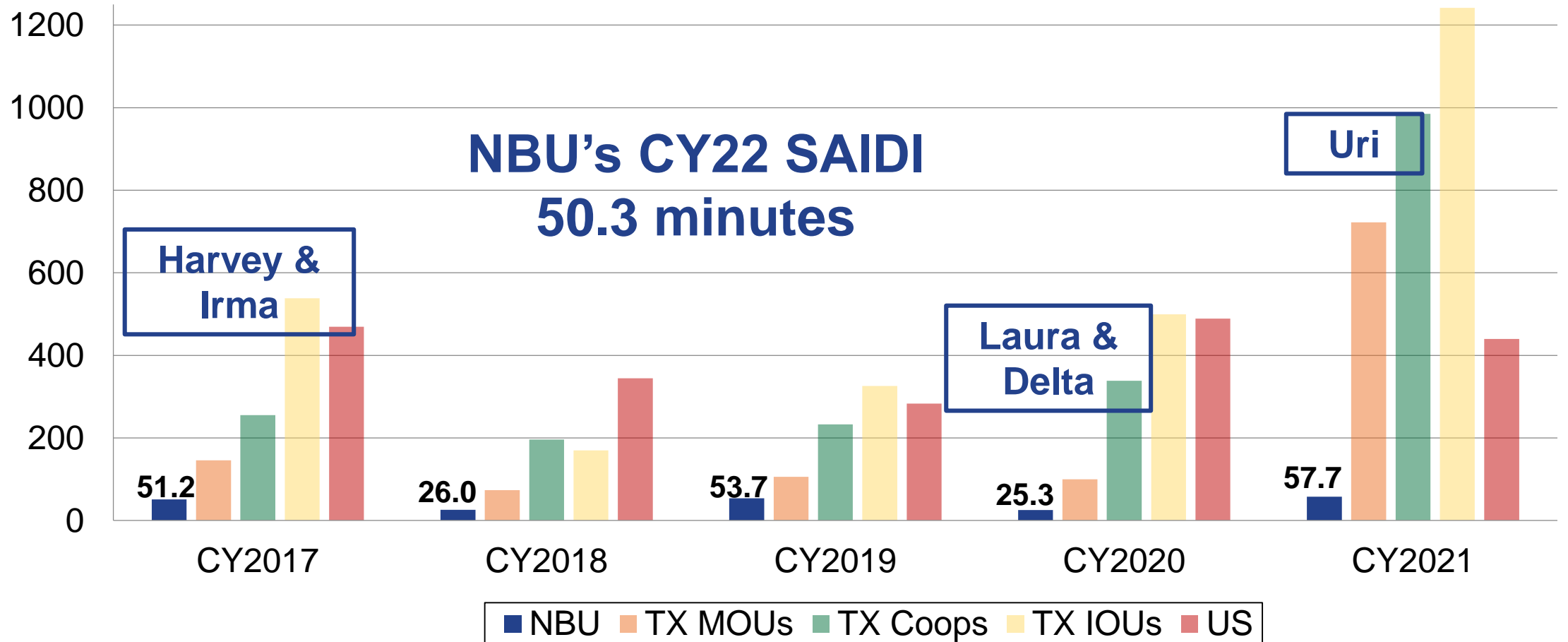
Mayfair Bulk Grade
Underground
Distribution



T-340 Transmission
Line Upgrade



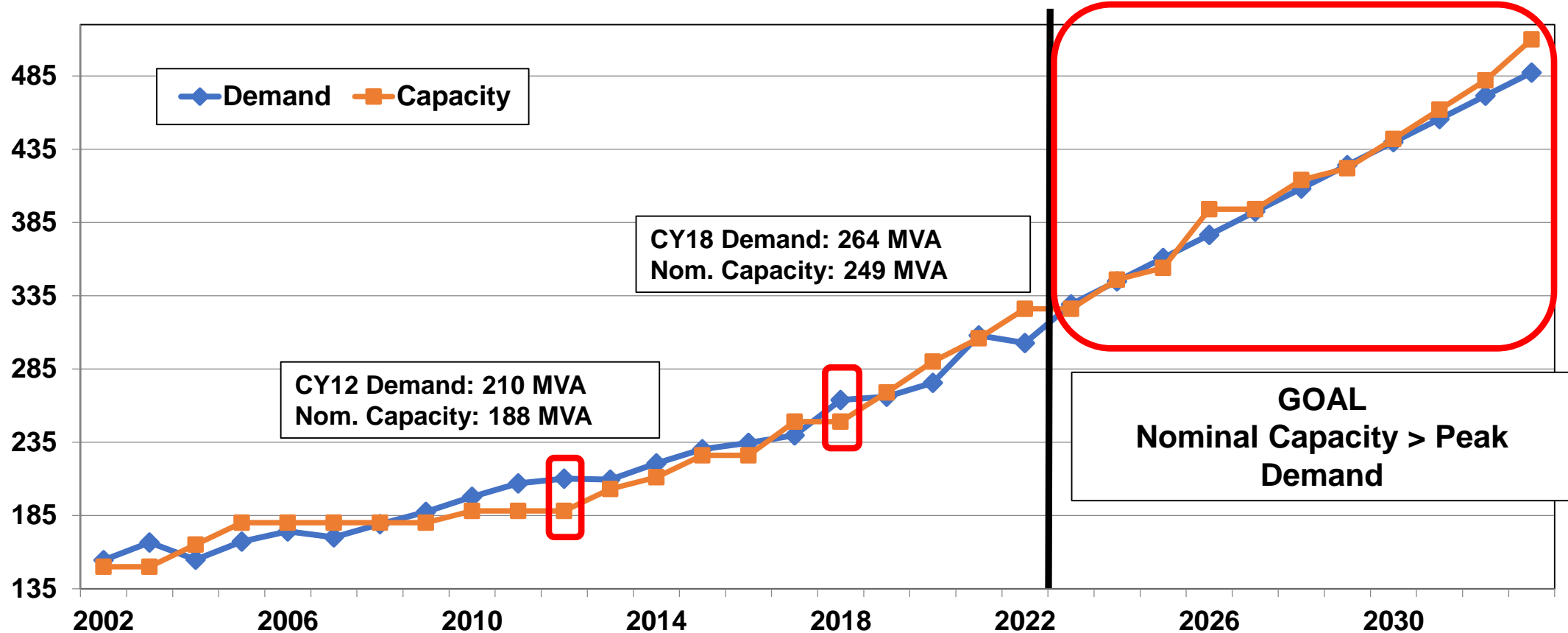
Reliability Bar Graph, SAIDI (Lower is better!)



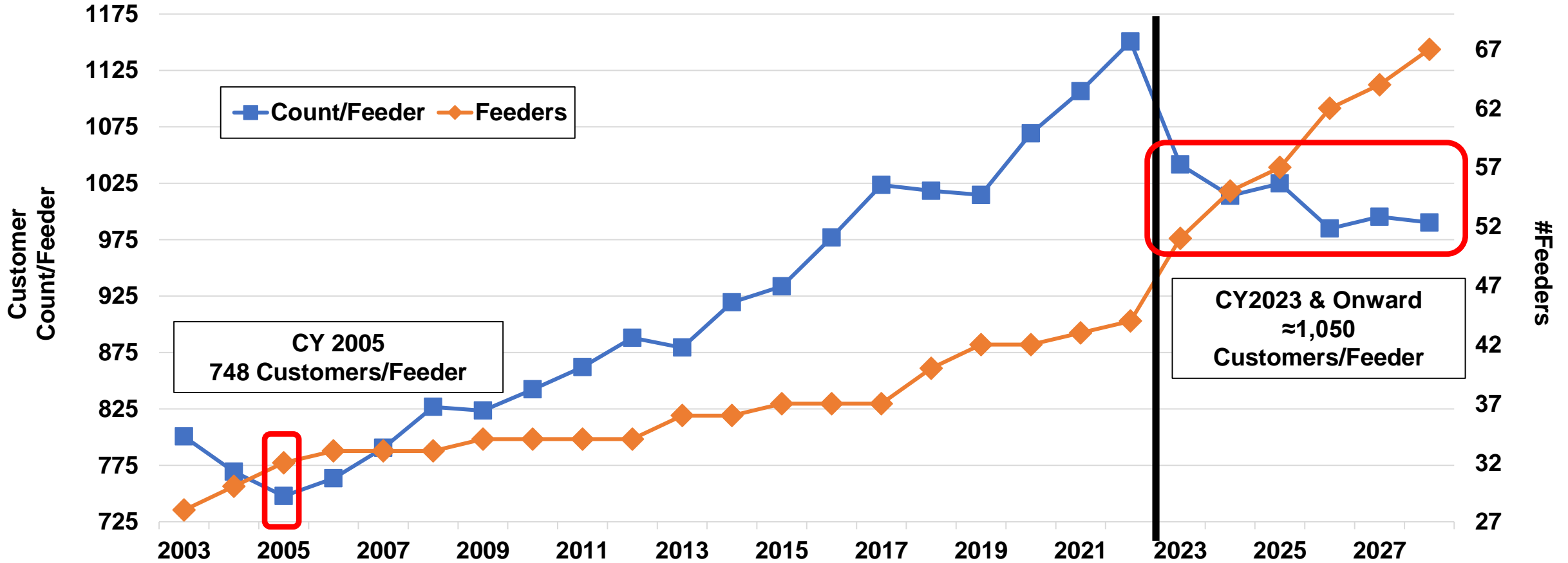
Source: U.S. Energy Information Administration <https://www.eia.gov/electricity/data/eia861/>

System Demand vs. Nominal Capacity

Demand in Megavolt–Amperes (MVA)



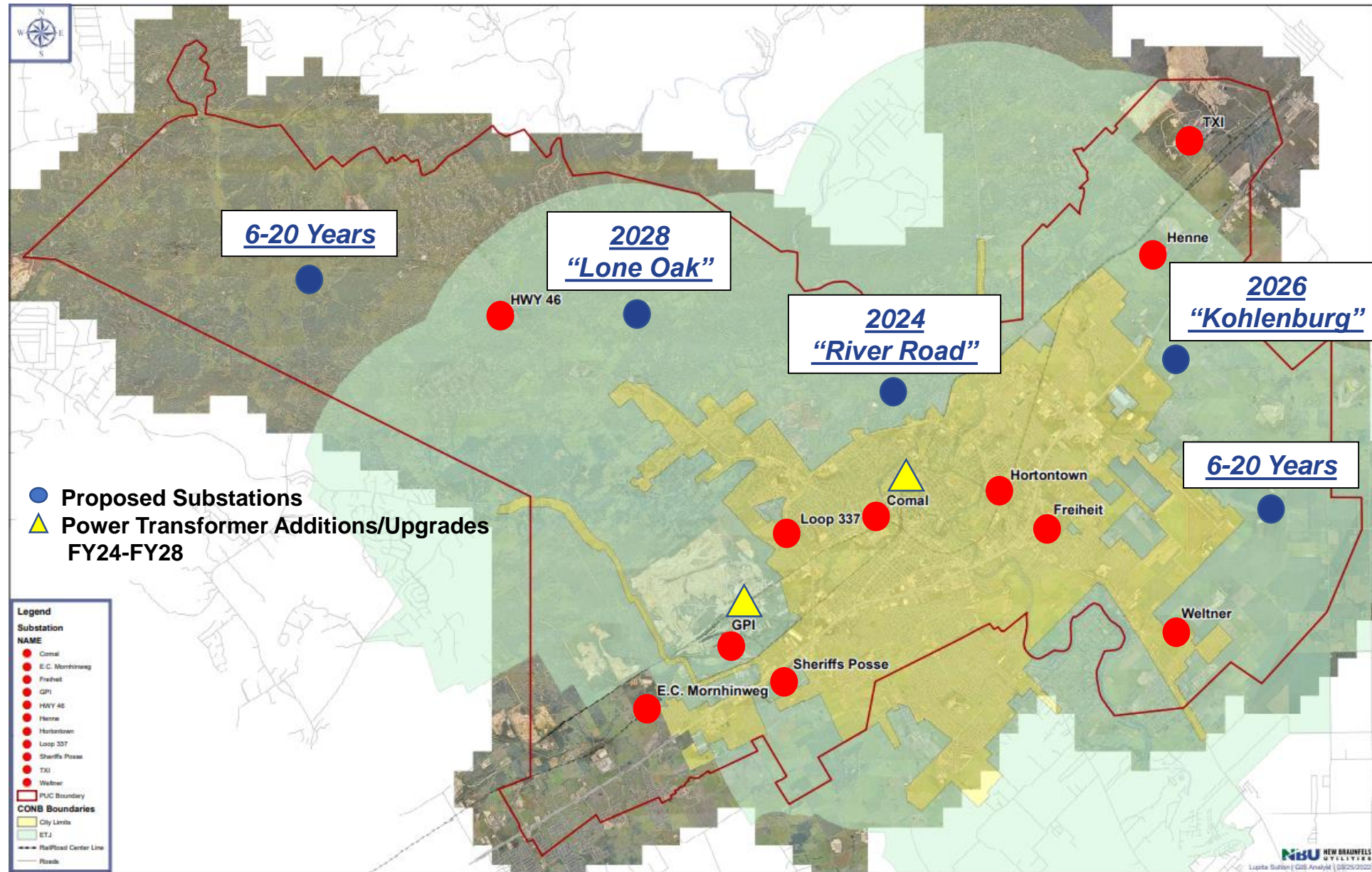
Customer Count per Feeder



NBU Electric Substations

Over the past **25 years**, NBU has added **5 substations**.

The proposed budget calls for the addition of **3 substations** in the next **5 years**.

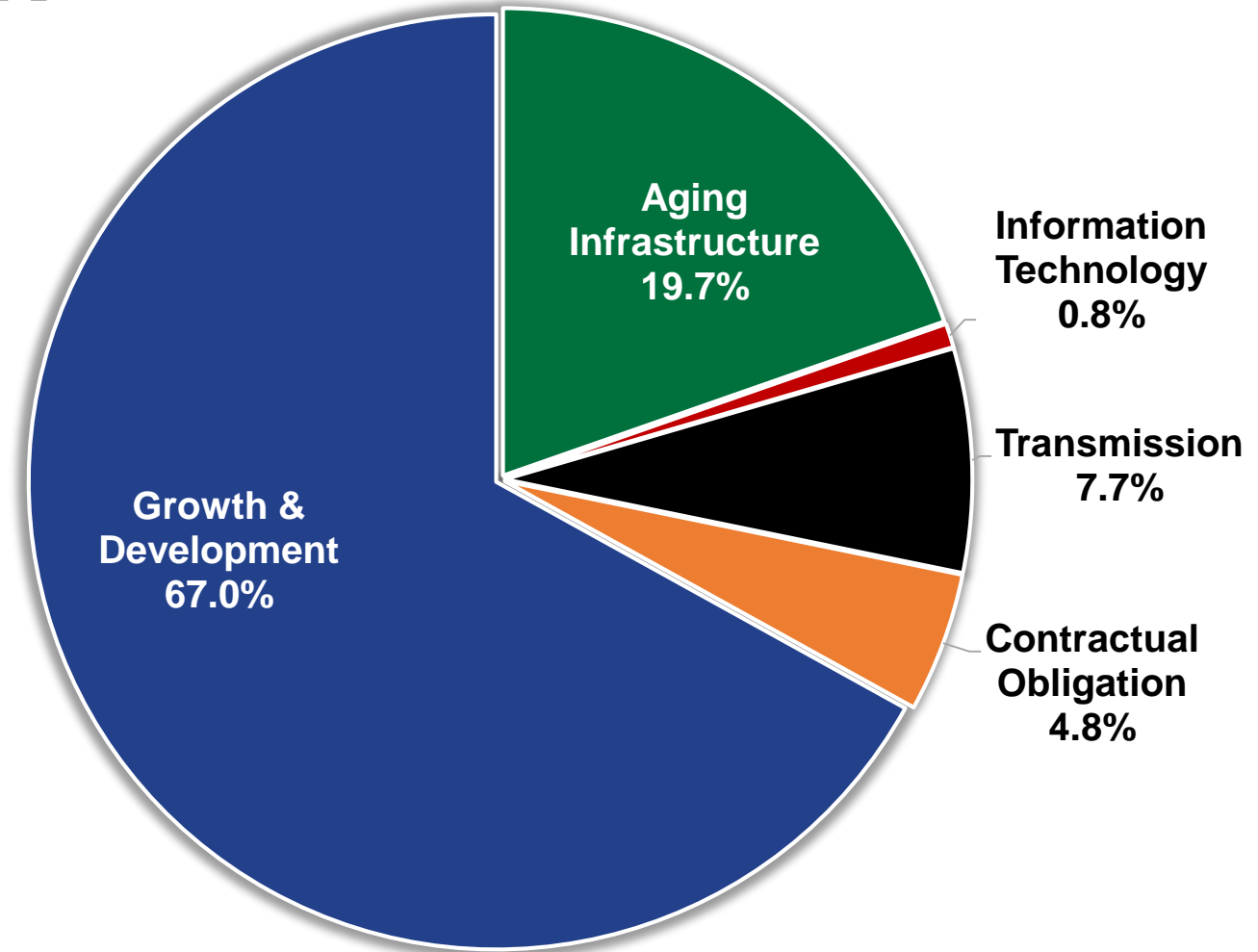


Significant 5 Year CIP Projects

Year	Project	Budget	Substation	Transmission	Distribution
2024	River Road Substation & Feeders	\$9,136,827	X		X
	Freiheit Breaker Additions & Control House	\$2,371,748	X		
	Three-Phase Extensions (FM 2722)	\$1,806,177			X
2025	Comal Substation T3 & Feeder CO33	\$3,644,220	X		X
	HE11 Conrads Rd. Feeder	\$1,864,032			X
	Henne Substation Breaker & Half	\$2,419,085	X	X	
2026	Kohlenberg Rd. Substation	\$11,414,536	X		X
	T-340 Transmission Line Upgrade	\$5,552,686		X	
	HW14 to FM 3009 Extension Phase 2	\$3,589,375			X
	HW23 Fallen Oak Feeder	\$2,449,407			X
	Industrial Substation PWT Replacement	\$2,069,535	X		
2027	TxDOT Road Widening	\$6,799,829			X
	Residential OH to UD Conversion	\$3,203,846			X
	GPI Substation Improvements	\$2,147,200	X		
2028	Lone Oak Substation	\$8,191,806	X		
	Comal Substation Breaker & Half	\$3,451,483	X	X	

Electric Capital Plan

ELECTRIC CIP BY CATEGORY	
Growth & Development	\$125,623,418
Aging Infrastructure	\$36,870,010
Transmission	\$14,515,916
Contractual Obligation	\$9,056,823
Information Technology	\$1,552,841
Total 5-Year Plan	\$187,619,009



CAPITAL PLAN

WATER INFRASTRUCTURE

Drivers for Water System Improvements

Regulatory Compliance

- TCEQ (Texas Commission on Environmental Quality) minimum water system requirements
- Supply, pumping, storage
- Protect public health

Proactive Operations

- Rehab/replace aging infrastructure
- Reduce risk of high consequence failures

Water System Deficiencies

Regulatory Compliance

- None!
- As of December 2021, the NBU water system is TCEQ compliant

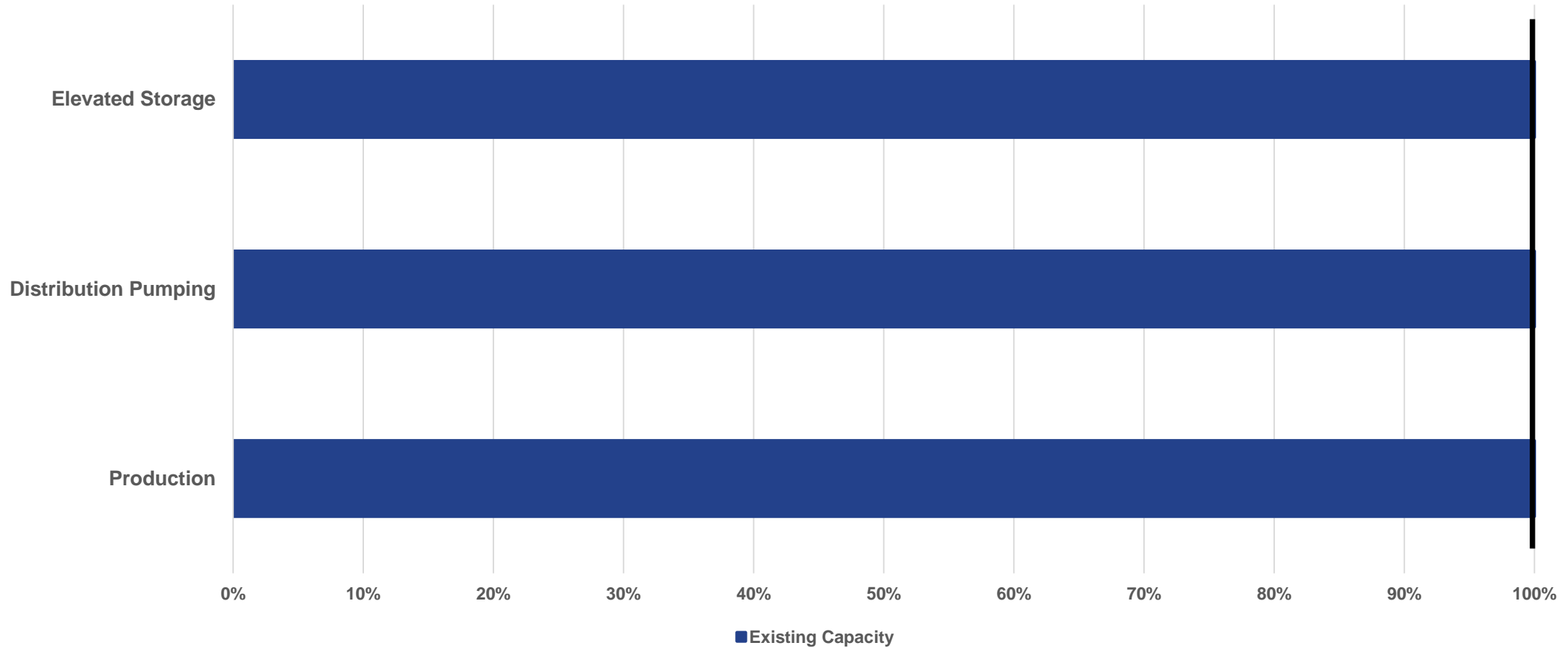
Operational

- Enterprise strategic asset management planning
- Water system capacity

Capacity vs. Compliance

Existing Capacity

TCEQ COMPLIANCE





WATER

SUPPLY



TREATMENT



DISTRIBUTION
PUMPING



TRANSMISSION



ELEVATED
STORAGE



Grandview Discharge Line



Trinity WTP Exp

















Landa Pump Station Expansion



SWTP Discharge Line



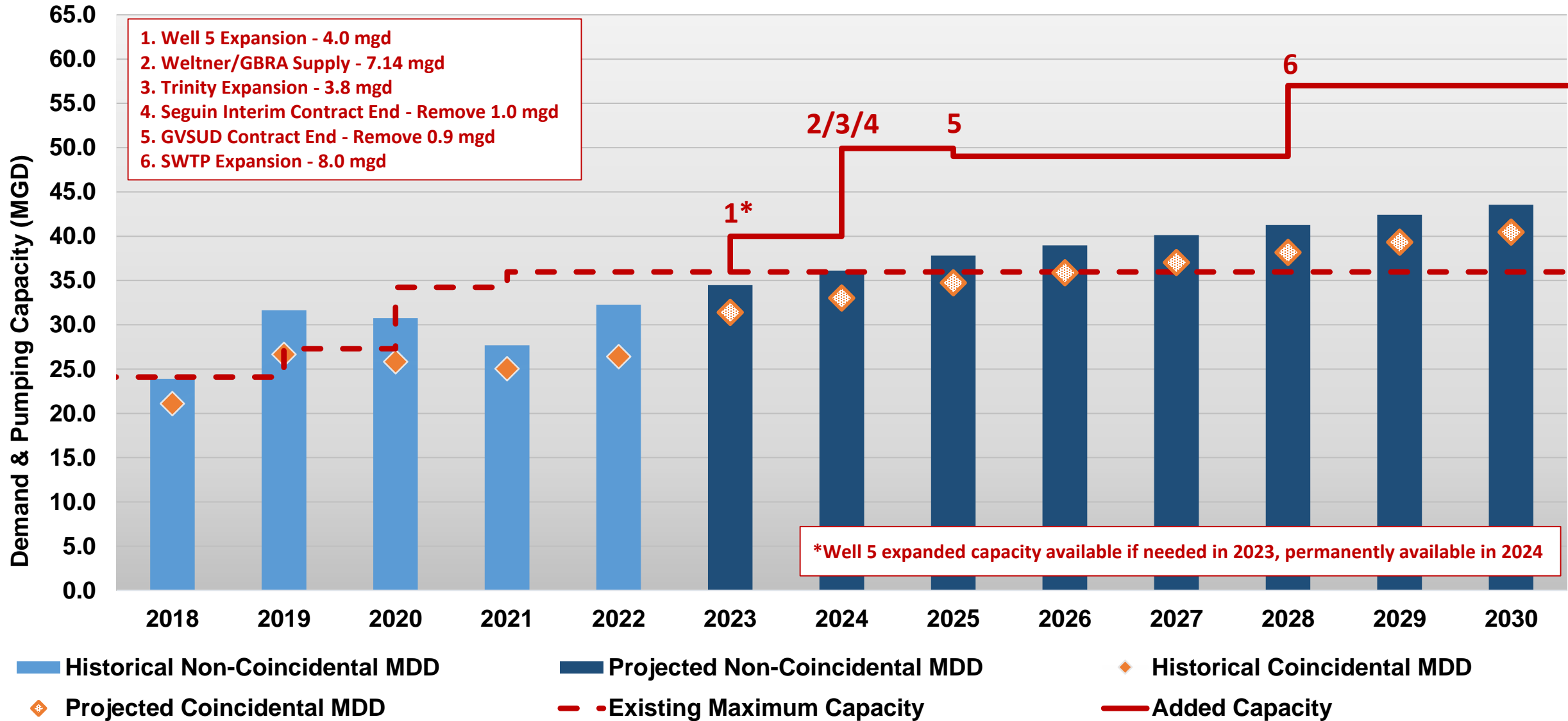
Water Elevated Storage Evaluation

Pressure Zone	Effective Elevated Storage Capacity (MG)	2023 Recommended Elevated Storage (MG)	2030 Recommended Elevated Storage (MG)	Additional Volume by 2030 (MG)	Planned Projects
River Chase	0.14	0.23 	0.24 	0.09	New River Chase EST – FY 2030
Hoffmann	0.24	0.09 	0.09 	0.00	-
Kohlenberg	0.72	1.18 	2.04 	1.32	Conrads EST – FY 2025
Downtown	2.88	4.74 	5.31 	2.43	PZ Conversions – FY 2028
Morningside	1.00	1.88 	2.22 	1.22	FM 1044 EST – FY 2026
Texas/Loop	0.99	0.30 	0.93 	0.00	-
Kerlick	1.36	0.82 	1.07 	0.00	-
Westpointe/Mission	1.22	0.31 	0.38 	0.00	-
Copper Ridge	0.40	0.11 	0.18 	0.00	-

Water Distribution Pumping Evaluation

Pressure Zone	Firm Distribution Pumping Capacity (MGD)	2023 Recommended Firm Capacity (MGD)	2030 Recommended Firm Capacity (MGD)	Additional Capacity by 2030 (MG)	Planned Projects
River Chase	1.50	1.24	1.31	0.00	-
Hoffmann	1.60	1.71	1.78	0.18	Bretzke HM PS – FY2029
Kohlenberg	4.50	6.42	9.94	5.44	FM 306 PS Exp – FY2024 FM 1101 PS – FY2028
Bretzke	1.40	0.43	0.43	0.00	-
Downtown	24.40	31.29	38.53	14.13	SWTP Exp – FY2029 Weltner Rd PS – FY2023 Landa Park PS Exp – FY2024
Morningside	8.40	7.18	8.56	0.16	County Line PS Exp – FY2029
Texas/Loop	2.48	2.23	4.77	2.29	Decommission Texas PS – FY2024 Veramendi FCV from Kerlick PZ - TBD
Kerlick/Westpointe/Mission	6.59	9.61	11.16	4.57	Grandview PS Exp – FY2023 Well 4 Exp – FY2023 Trinity Exp – FY2024 Mission/Westpointe PZ Connection – FY2024
Copper Ridge	2.22	1.15	1.44	0.00	Hwy 46 Phase 2 Expansion – FY2027

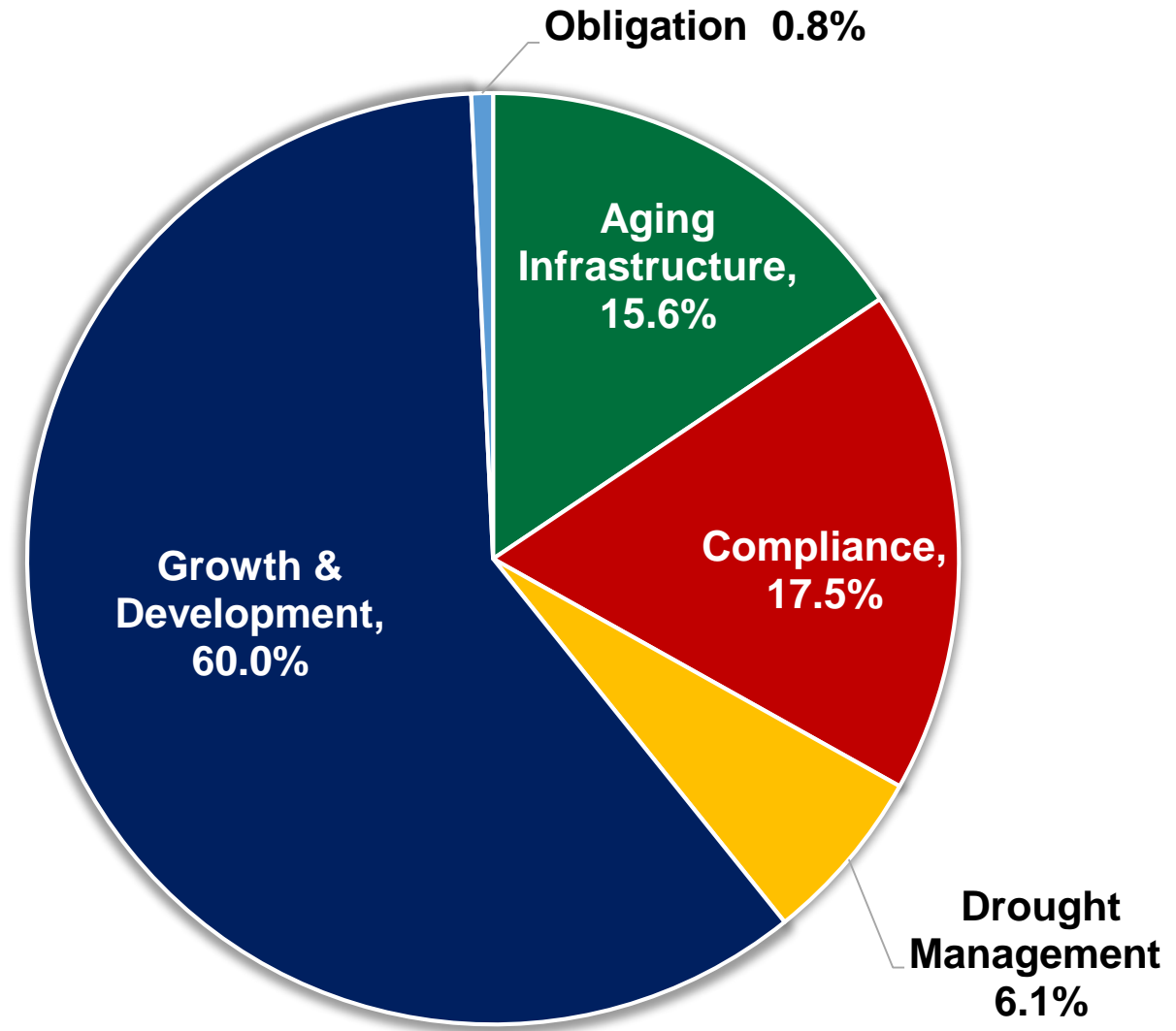
Water Production Evaluation



Water Capital Plan

WATER CIP BY CATEGORY

Growth & Development*	\$186,258,129
Compliance	\$54,423,607
Aging Infrastructure	\$48,404,317
Drought Management	\$19,014,279
Obligation	\$2,342,965
Total 5-Year Plan	\$310,443,296



CAPITAL PLAN

WASTEWATER INFRASTRUCTURE

Drivers for Wastewater System Improvements

Regulatory Compliance

- TCEQ requirements
- Sanitary sewer overflows
- Wastewater treatment plant discharge permit
- Protect public health

Proactive Operations

- Rehab/replace aging infrastructure
- Reduce risk of high consequence failures

Wastewater System Deficiencies

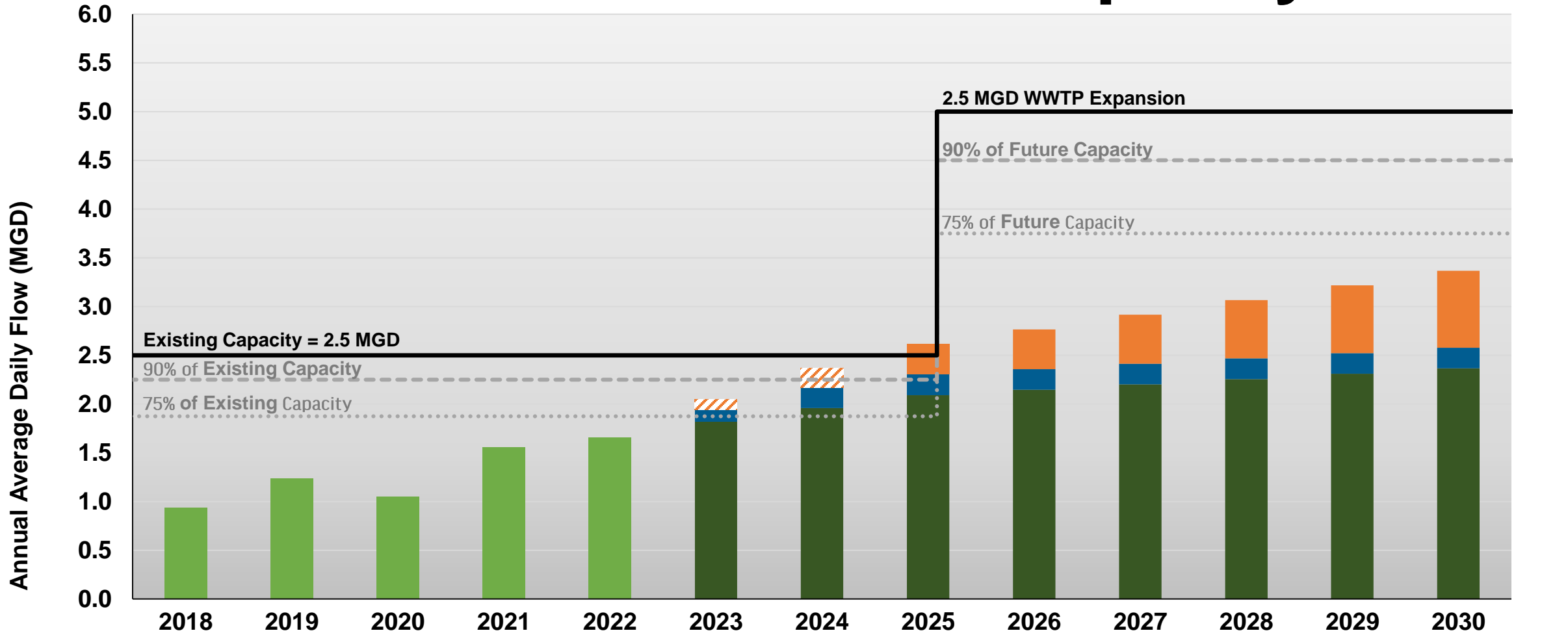
Regulatory Compliance

- Pipeline capacity that leads to sanitary sewer overflows

Operational

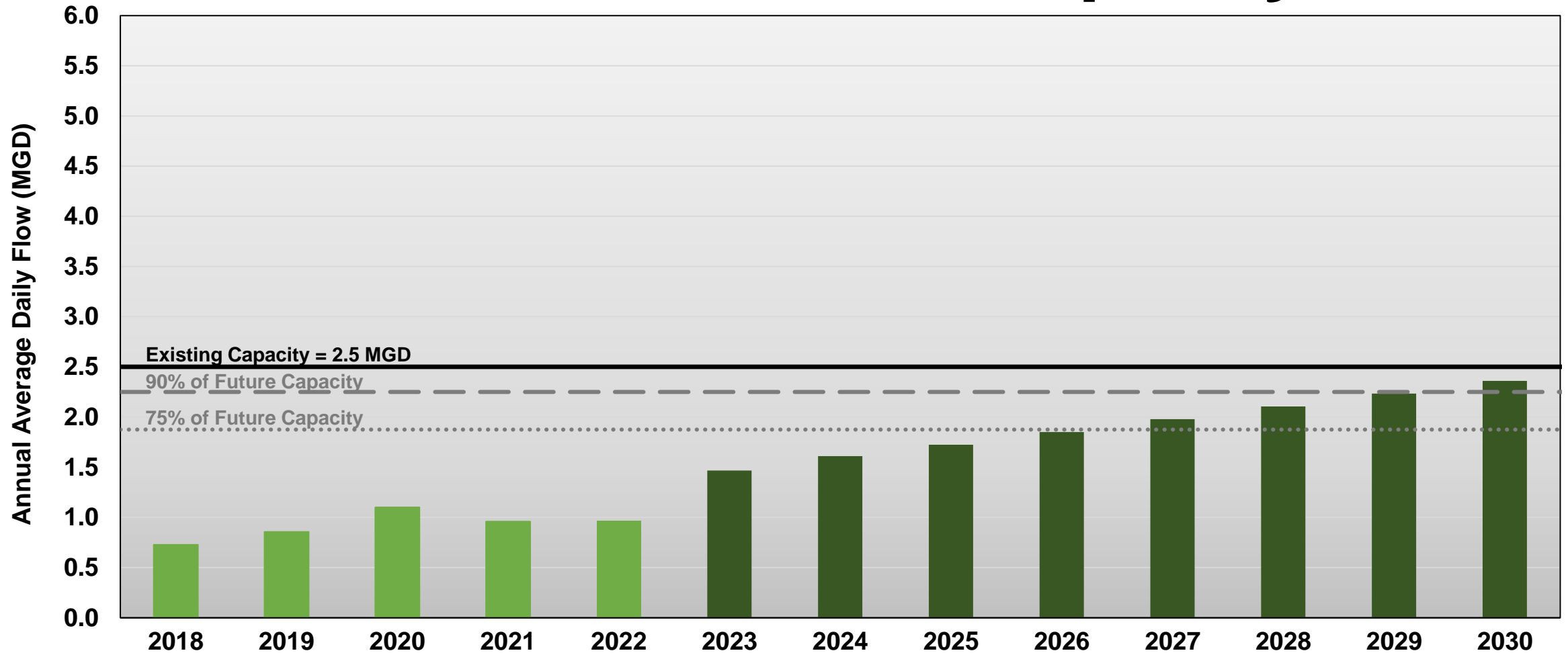
- Enterprise strategic asset management planning

McKenzie Treatment Capacity

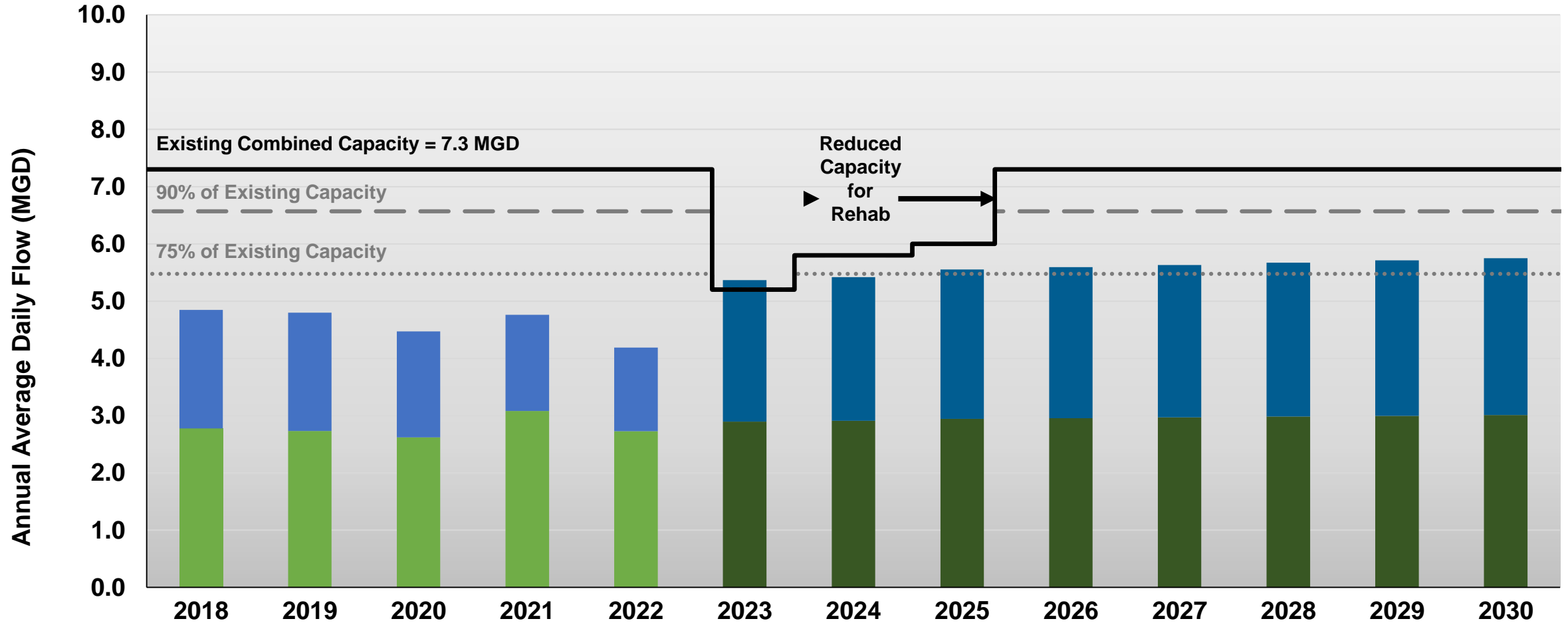


- Historical McKenzie WRF Flow
- Projected McKenzie WRF Flow
- Projected GBRA Flows
- Projected Mayfair Flows to McKenzie WRF
- ▨ Projected Mayfair IWWTF Flows

Gruene Treatment Capacity



Kuehler Treatment Capacity





WASTEWATER

COLLECTION



TRANSMISSION



TREATMENT



Saengerhalle Lift Station Expansion



McKenzie WRF Expansion



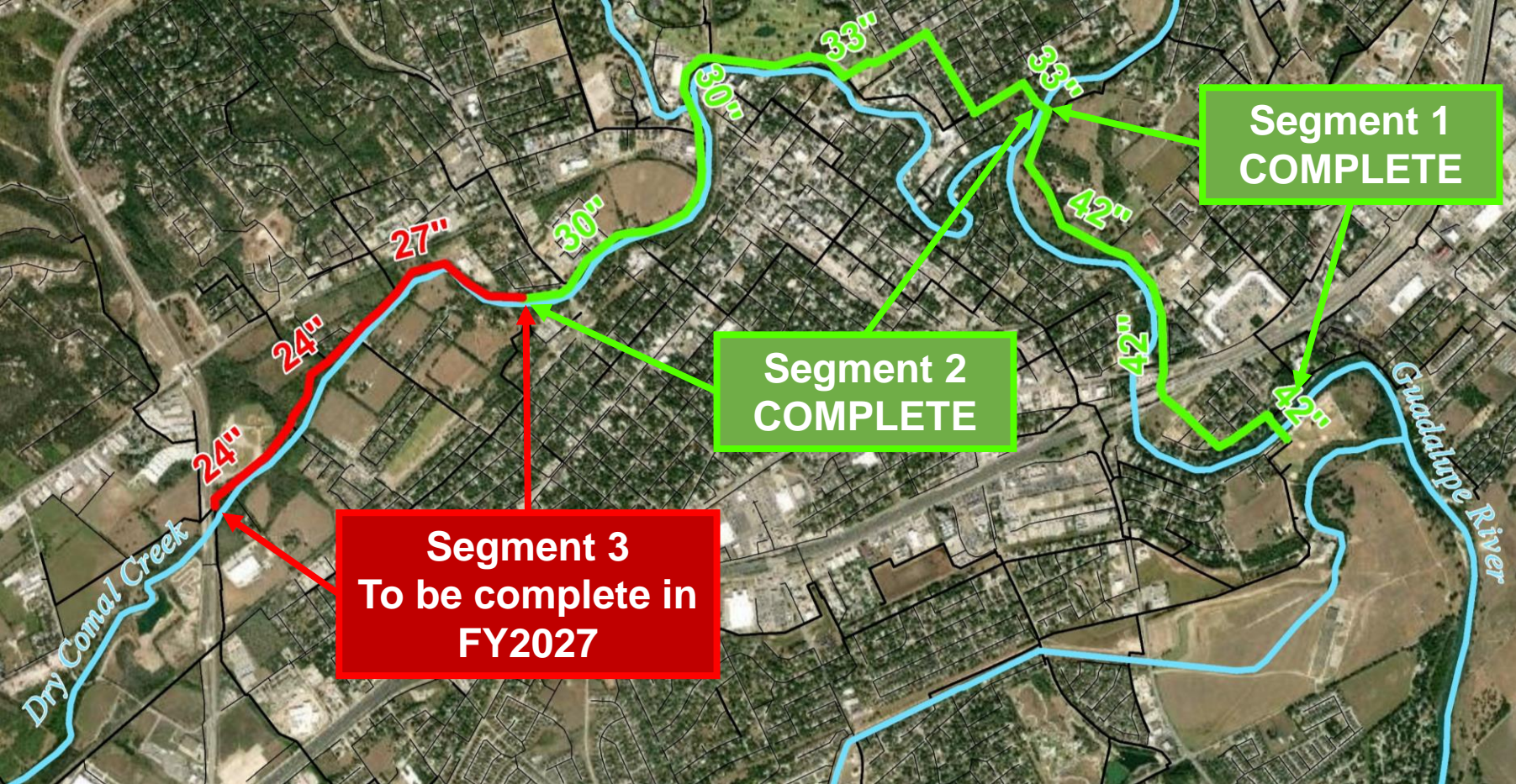
Rio Lift Station Expansion



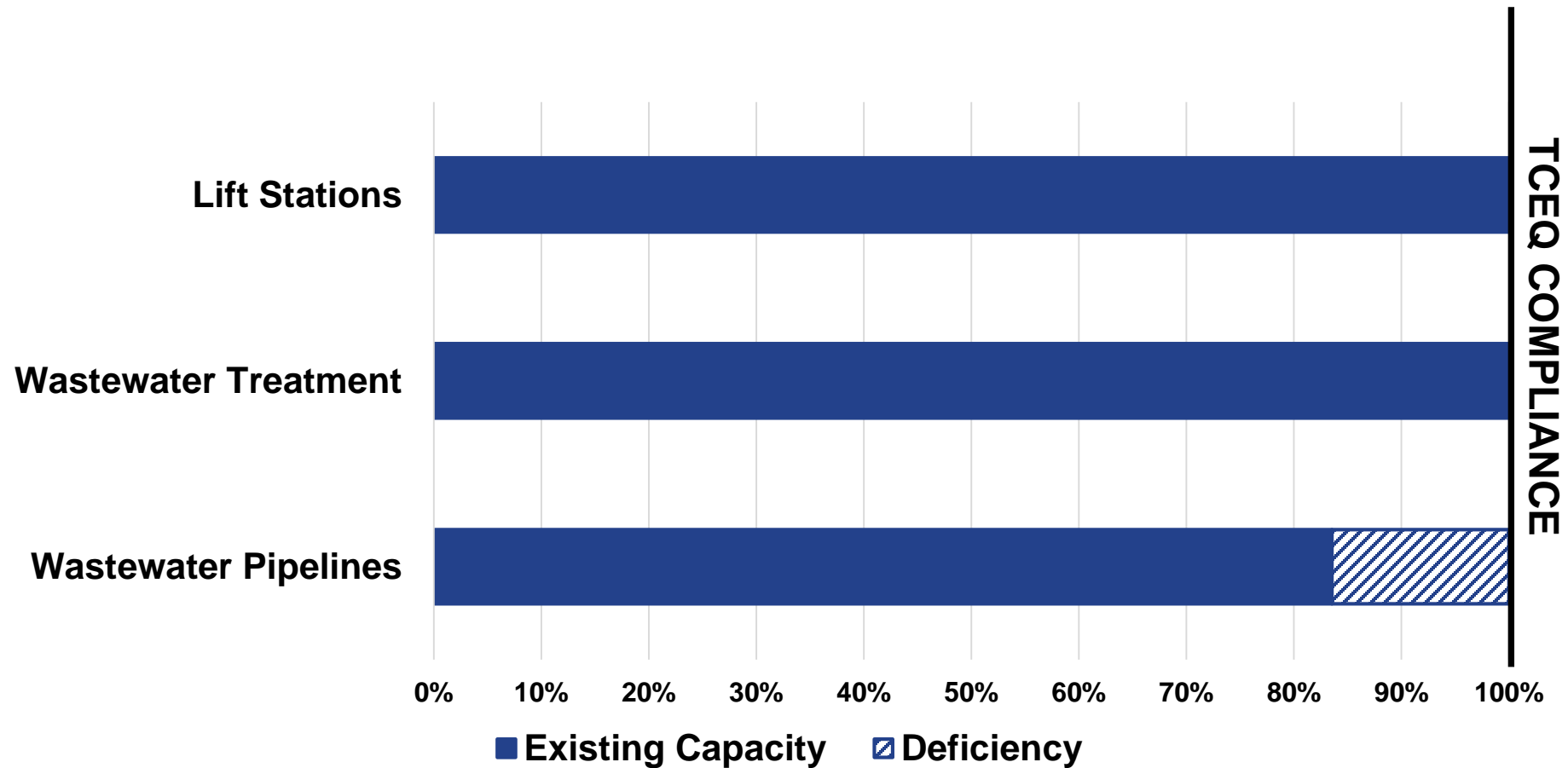
North Kuehler Interceptors



North Kuehler Interceptor Alignment

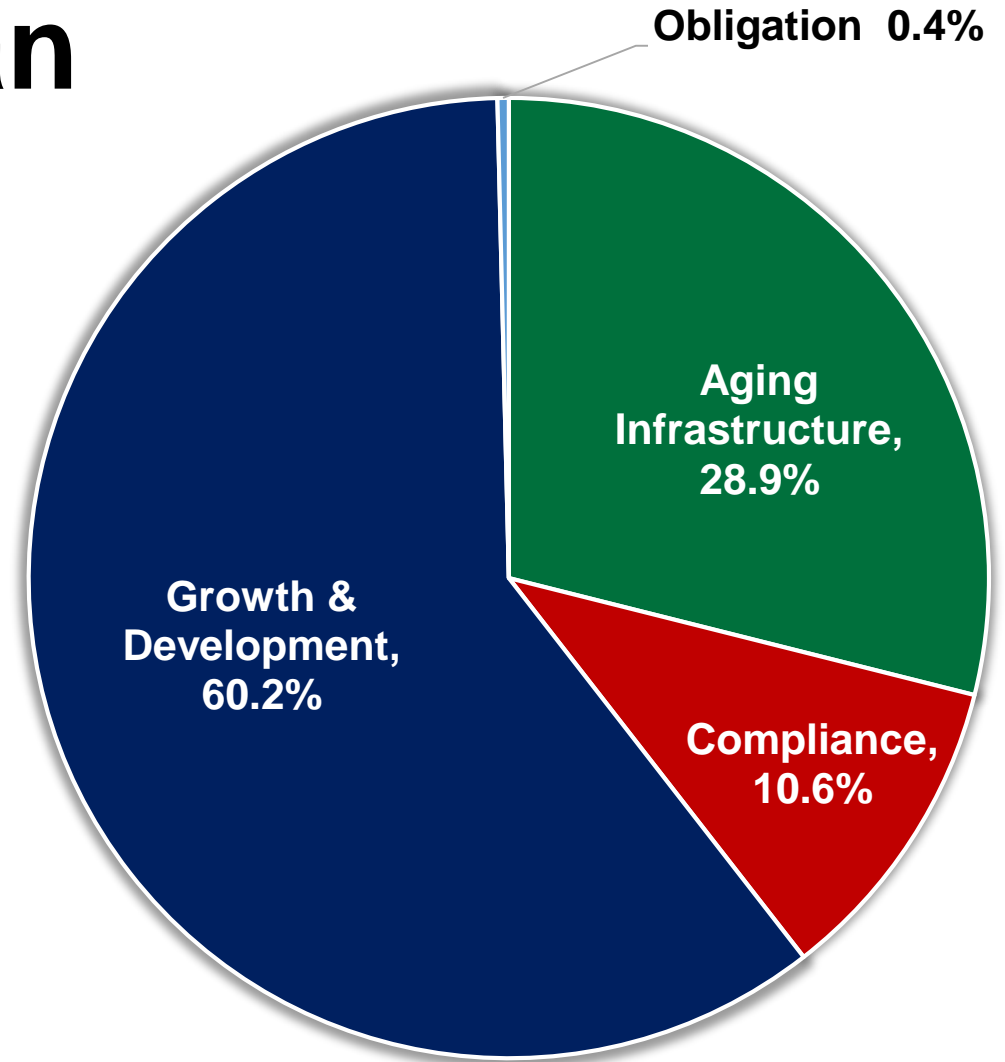


Capacity vs. Compliance – Sewer



Wastewater Capital Plan

WASTEWATER CIP BY CATEGORY	
Growth & Development*	\$172,367,765
Aging Infrastructure	\$82,876,898
Compliance	\$30,251,550
Obligation	\$1,085,269
Total 5-Year Plan	\$286,581,482



WATER SUPPLY

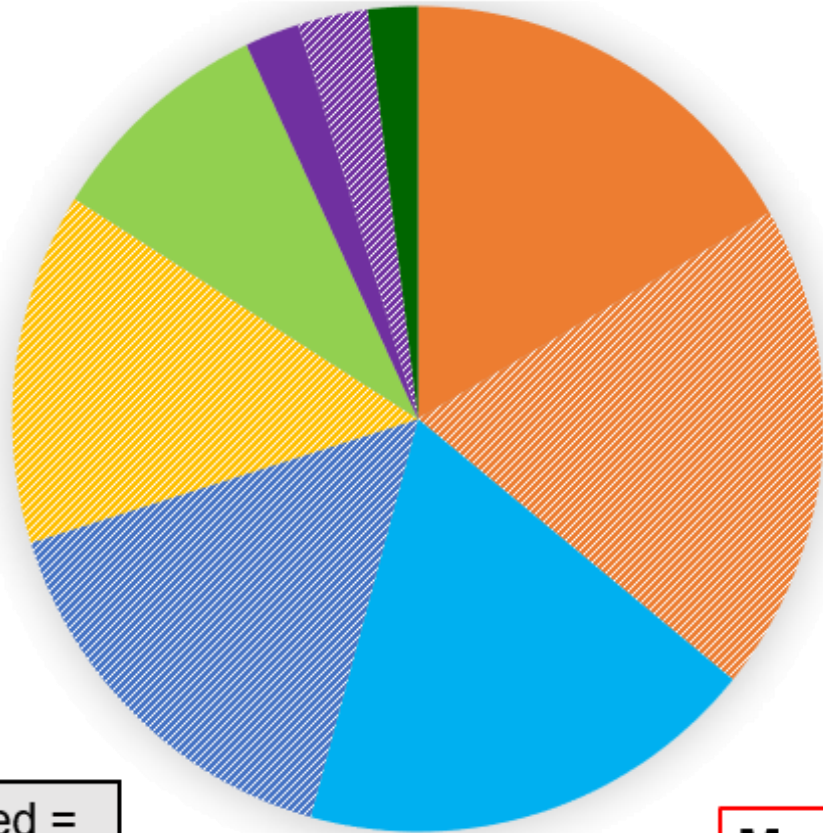
Water Supply



Water Infrastructure



Water Supply Portfolio

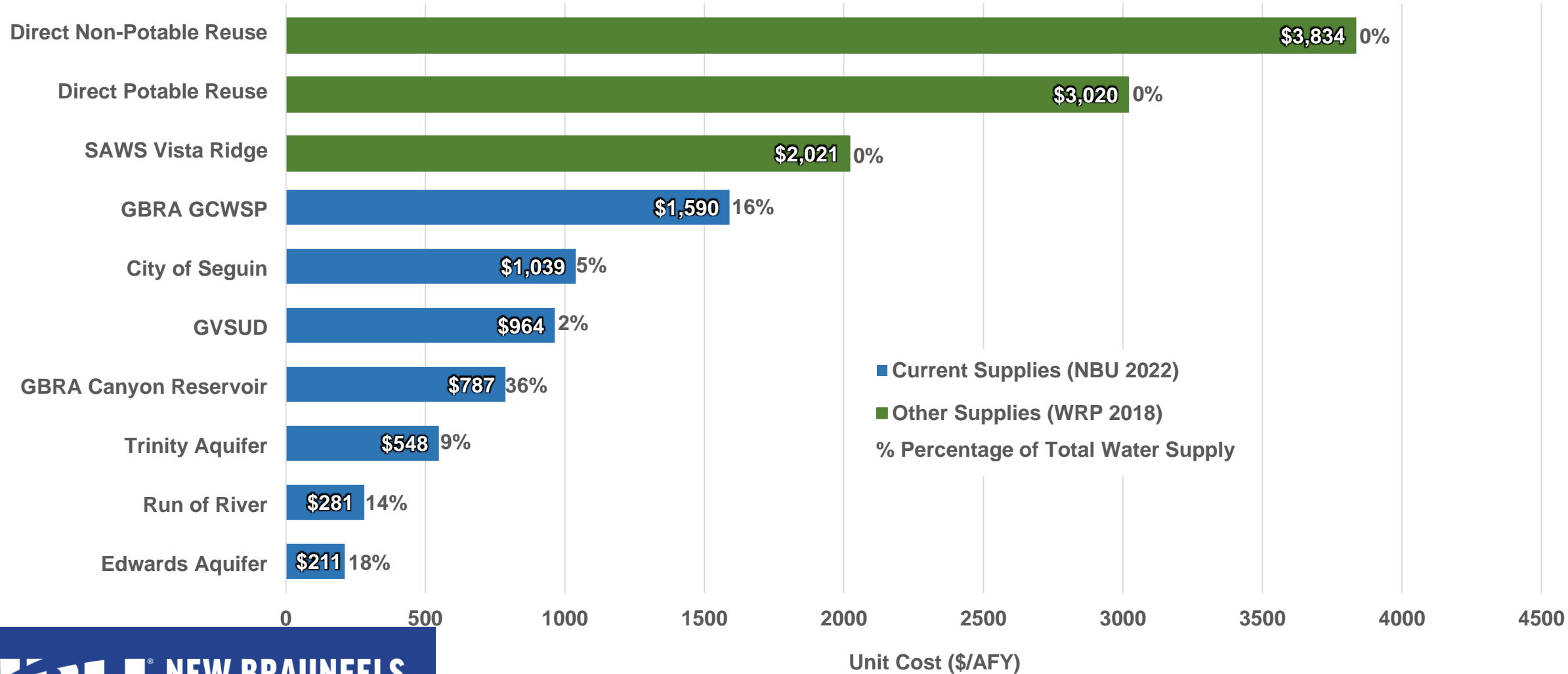


- Canyon Reservoir (\$787 per ac-ft) = 36%
- Edwards Aquifer (\$211 per ac-ft) = 18%
- GBRA GCWSP (\$1590 per ac-ft) = 16%
- Run of River (\$281 per ac-ft) = 14%
- Trinity Aquifer (\$548 per ac-ft) = 9%
- City of Seguin (\$1039 per ac-ft) = 5%
- GVSUD (\$964 per ac-ft) = 2%

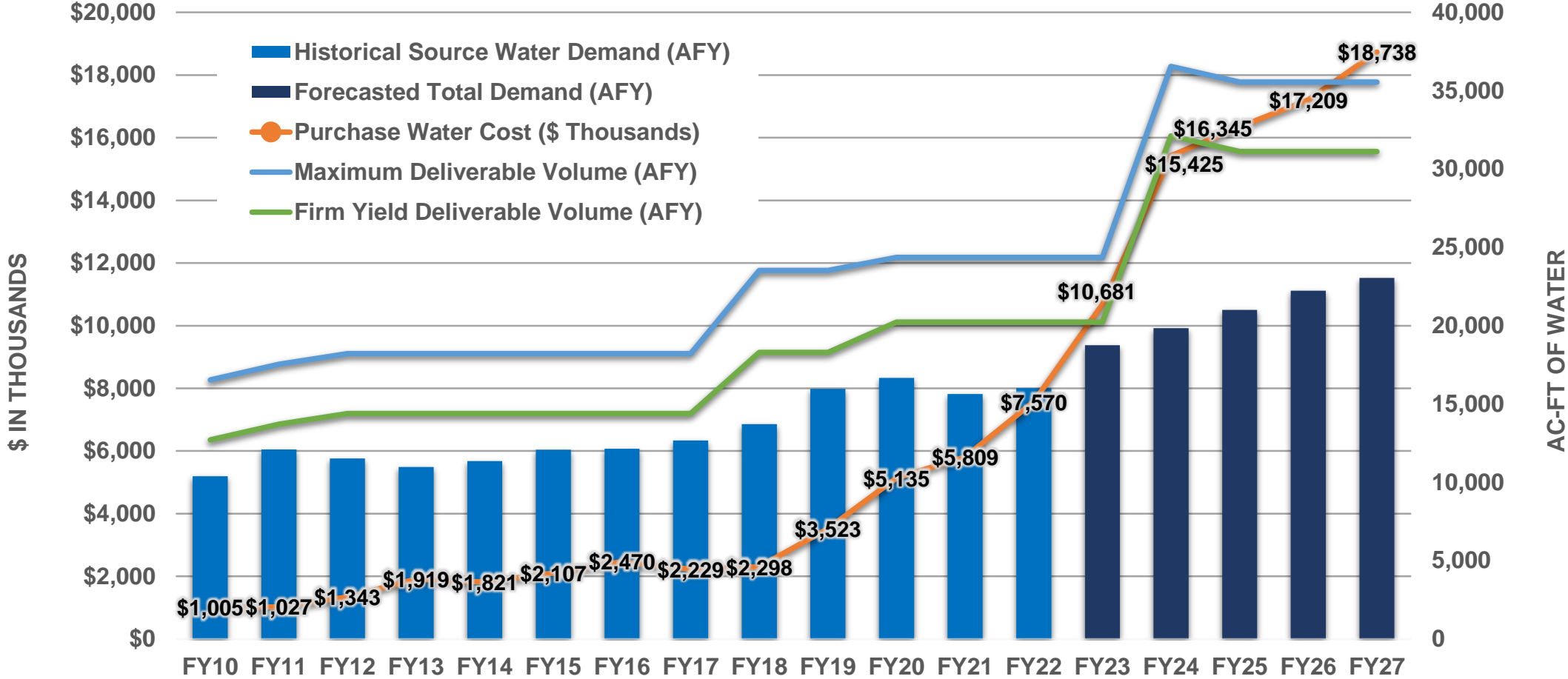
Hatched =
Undeliverable

Max Volume Contracted, as of 2022 – 50,375 AFY
Max Volume Deliverable, as of 2022 – 24,353 AFY

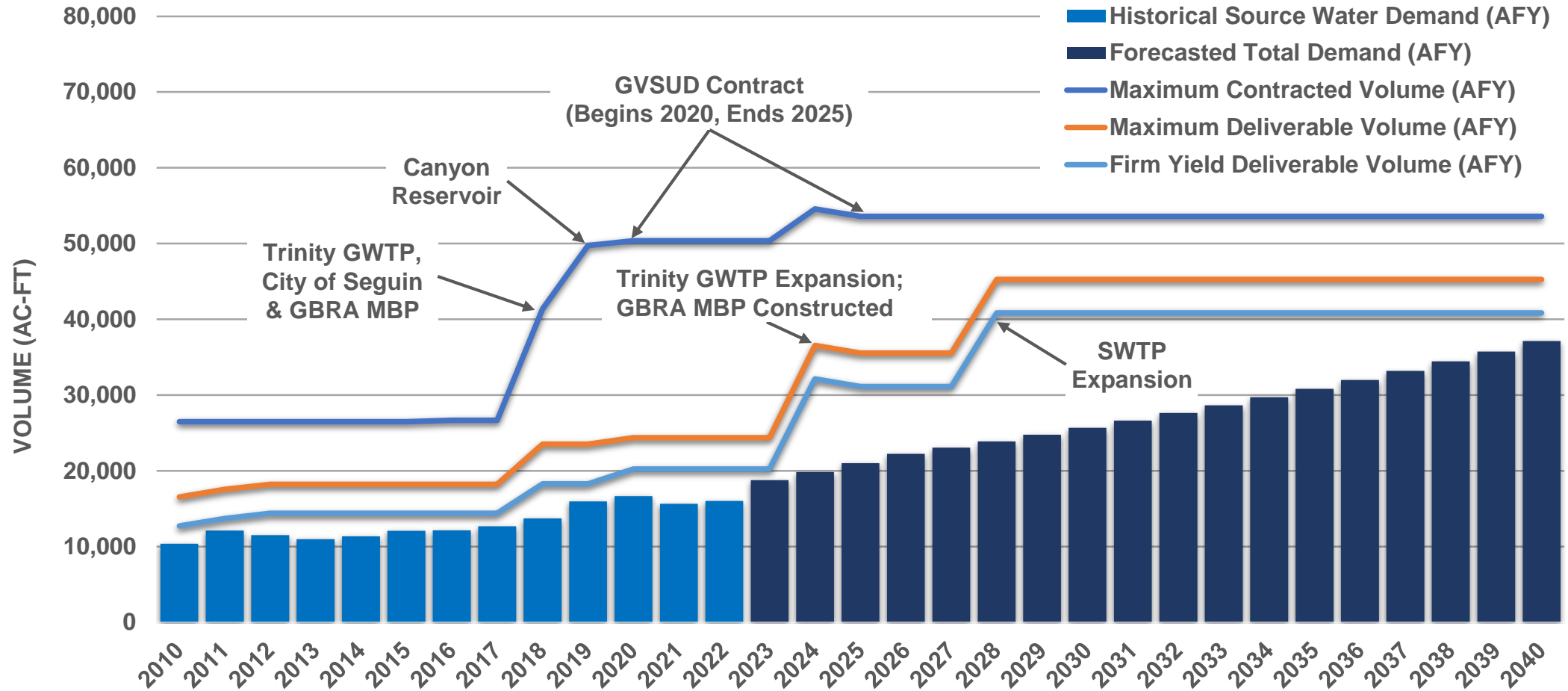
Water Supply Cost Comparison



Water Supply Costs



Water Supply – 2010 through 2040



CAPITAL PLAN

FACILITIES

Project Schedule

Task Name	Start	Finish	2023				2024				2025				2026				2027				2028			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
- NBU HQ	09/01/23	12/01/27																								
Design	09/01/23	08/30/24																								
Construction	08/01/24	04/07/27																								
Move In	04/07/27	12/01/27																								
- BOC	05/01/23	04/16/25																								
Design	05/01/23	07/21/23																								
Construction	07/21/23	12/12/24																								
Operational	12/12/24	04/16/25																								
- New Office Space	03/23/23	04/30/24																								
Design	04/01/23	09/29/23																								
Construction	03/23/23	03/29/24																								
Move In	03/29/24	04/30/24																								
- Service Center	04/27/23	12/01/27																								
Transfer Agreement	04/27/23	04/27/23																								
Move Out	04/28/23	12/01/27																								
- Main Office																										
TBD																										

NBU HQ Cost Breakdown

	<u>Life of Project</u>	<u>5-Year Plan</u>
NBU Headquarters	\$133.6M	\$127.6M
Back-up Operations Center	\$ 8.3M	\$ 7.9M
New Office Space	\$ 3.6M	\$ 3.6M
Proceeds from Service Center	\$ (10.2M)	\$ (0.5M)
Proceeds from Main Office	\$ (5.0M)	\$ (5.0M)
<hr/>		
Total Minus Proceeds	\$130.3M	\$133.6M

CAPITAL PLAN

SUPPORT

Support Capital 5-Year Plan

Facilities

- Office Space
 - NBU HQ – \$122.1M
(Net of Proceeds totaling \$5.5M)
 - Other Office Space – \$3.6M
- Backup Operations Center – \$7.9M
- Other Facilities Projects – \$9.8M

Headwaters

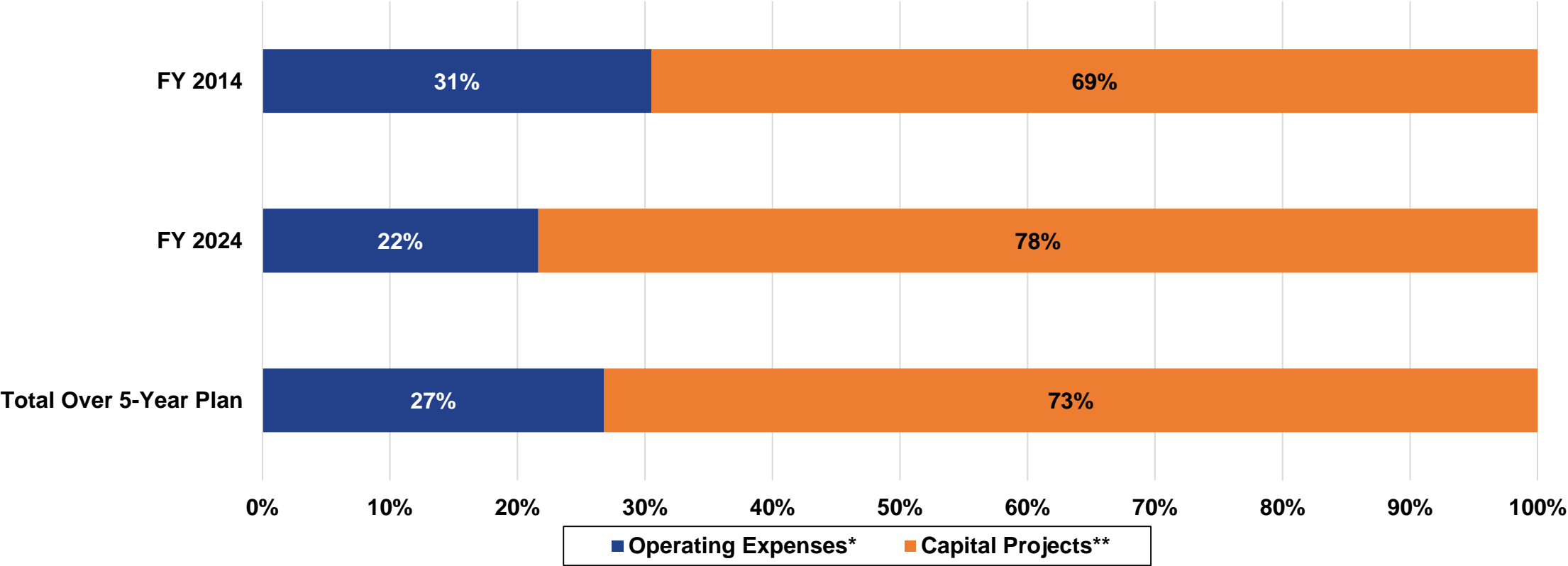
- Headwaters – \$2.4M
 - Net of donations and grants totaling \$13.9M

Technology

- System Technology Upgrades – \$1.8M
- Digital Radio System & Kerlick Tower removal – \$650K
- Cyber Security System – \$1.4M
- Fiber Resiliency – \$1.3M
- Infrastructure Equipment – \$9.7M
- Data Strategy Projects – \$4.4M
- CIS Functionality Upgrade – \$1.5M
- Other Upgrades & Enhancements – \$465K
- CityWorks Mobile Projects – \$125K
- Mass Meter Change Out – \$8M

OPERATING EXPENSES

Budgeted Sources of Expenditures



*Does not include purchased power, purchased water, and depreciation

**Capital includes equipment and capital projects

Operating Expenses

FY24 Budget - NBU Operating Expenses	Expense	Percentage
Purchased Power Costs	\$ 137,408,020	55%
Depreciation Expense	\$ 42,641,749	17%
Personnel	\$ 36,792,401	15%
Operating Expenses (Non-personnel)	\$ 21,608,236	8%
Purchased Water Costs	\$ 12,385,036	5%
Total Operating Expenses	\$ 250,835,442	100%

OPERATING EXPENSES

POWER SUPPLY

Third Party Power Supply Review

- “Our assessment is that NBU’s approach & methods in the business areas we reviewed (which included Front, Middle, and Back Office) represent a sound approach to Risk Management and are generally consistent with common utility practice.”
- “NBU is punching above its weight.”
- Currently implementing TEA recommendations for continued improvement and sophistication



OPERATING EXPENSES

PERSONNEL

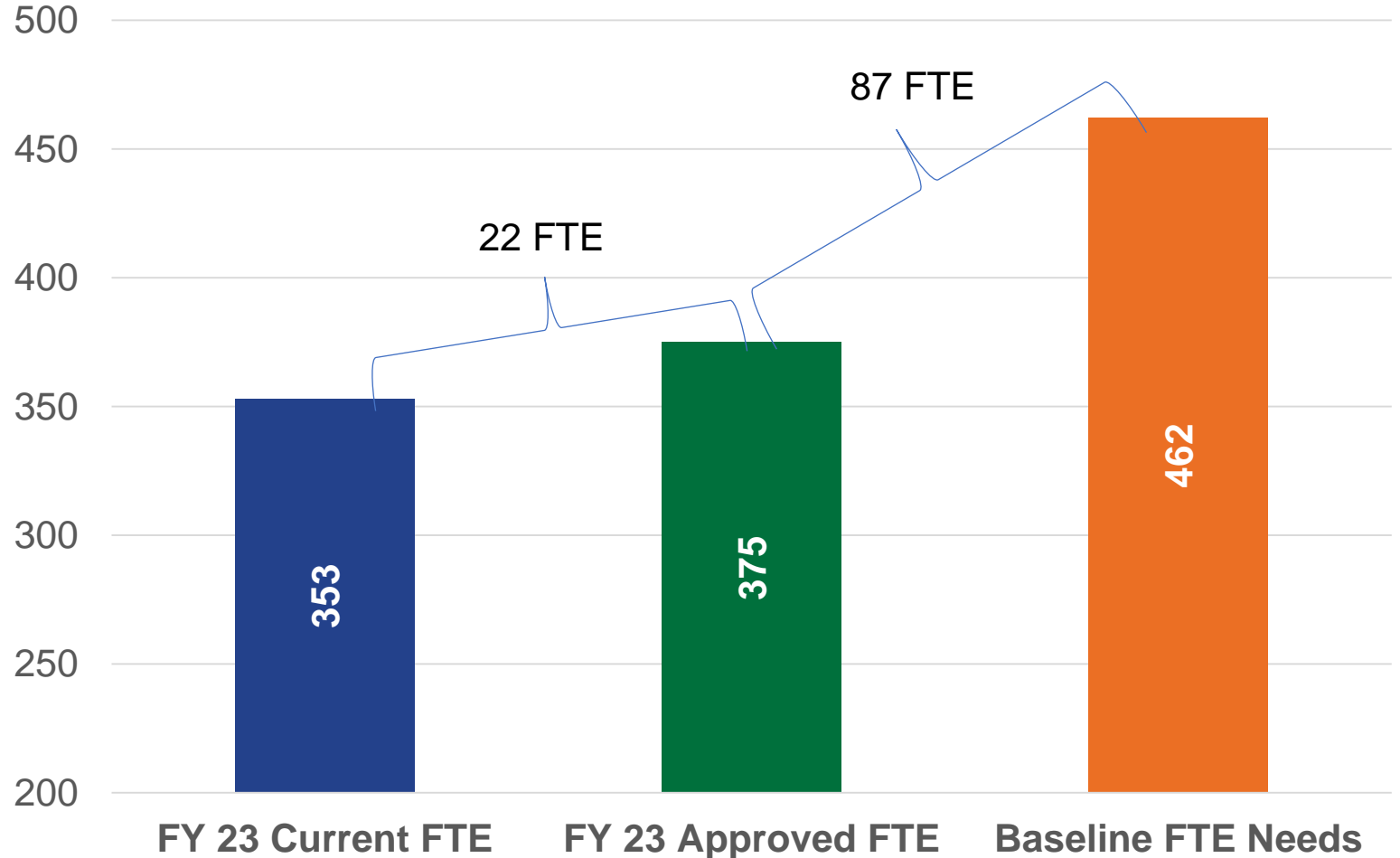
Workforce Planning Study

Study Purpose

Determine number of employees needed to meet current level of service expectations and forecast future needs

Findings

NBU has a ~30% deficit in Full Time Employees (FTE)



Personnel Budget

FY 2023 Needs	462
Current FTEs	375
FY 2024	34
FY 2025	34
FY 2026	21
FY 2027	21
FY 2028	21
TOTAL	506

FY 2024 Full-Time Employee (FTE) Additions by Department:

- Water Operations – 9
- Electric Operations – 3
- Business Planning – 3
- Resource Planning – 2
- Water Treatment & Compliance – 2
- Data Strategy – 2
- Real Estate – 2
- Accounting – 1
- Conservation and Customer Solutions – 1
- Electric Substation – 1
- Executive Services – 1
- Finance – 1
- Information Technology – 1
- Legal – 1
- Public Affairs – 1
- Purchasing – 1
- Safety – 1
- Systems Control – 1

OPERATING EXPENSES

**EXCLUDING PERSONNEL &
POWER SUPPLY**

Operating Expenses

Amounts in Thousands

	FY 2023 Budget	FY 2024 Budget	Variance	Percent Change
Personnel				
Salaries	\$ 32,166	\$ 37,707	\$ 5,541	17.2%
Less: Power Supply Reclassed to Purchase				
Power	(813)	(870)	(57)	7.1%
Net Salaries	\$ 31,353	\$ 36,837	\$ 5,484	17.5%
Benefits	\$ 12,061	\$ 12,591	\$ 530	4.4%
Less: Power Supply Reclassed to Purchase				
Power	(297)	(289)	9	-3.0%
Net Benefits	\$ 11,764	\$ 12,302	\$ 539	4.6%
TOTAL PERSONNEL COSTS	\$ 43,117	\$ 49,139	\$ 6,022	14.0%
Non-Personnel				
Non-Personnel Costs	\$ 25,425	\$ 29,938	\$ 4,512	17.7%
Less: Power Supply Reclassed to Purchase				
Power	(1,992)	(1,607)	385	-19.3%
TOTAL NON-PERSONNEL COSTS	\$ 23,433	\$ 28,331	\$ 4,897	20.9%
Total O&M	\$ 66,550	\$ 77,470	\$ 10,920	15.2%
Less: Contra to Capital	(17,068)	(19,069)	(2,001)	11.5%
Net O&M	\$ 49,482	\$ 58,401	\$ 8,918	16.4%

Operating Expenses – Key Initiatives

Annual Priorities	FY 2024 Budget
Enterprise Asset Management	\$450,000
Enterprise Project Management	\$250,000
Distributed Energy Resources (DER)	\$204,992
SAS Budget Model	\$154,472
Electric Vehicle Research	\$50,000

Compliance Initiatives	FY 2024 Budget
Water Resource Plan Update	\$1,013,138
Tree Trimming For Electric Overhead Lines	\$770,028
Fire Hydrant Maintenance	\$312,000
Power Supply Resource Planning	\$300,000
Power Portfolio Management	\$300,000
Hedge Strategy Review Implementation & Consulting	\$134,800
PUC (Public Utility Commission) Rate Case (Transmission Cost of Service)	\$120,000
Utilis Satellite Leak Detection	\$100,000
Construction Specification Book	\$100,000

FUNDING SOURCES

New Revenue – Not from Rates

In FY2024:

- Comprehensive fee review planned with annual review going forward
- Impact Fee Program E - increase over Program D = approximately **\$2.69M**
- Update to Electric Connection Policy – **\$1M** per year
- GBRA Wholesale Wastewater – Capital Participation Fee – **\$796K**
- Update to Water Fees – **\$500K**
- Antenna Lease – **\$213K**

Total Non-Core Revenue Sources and Cost Recovery for Fees – \$5.2M

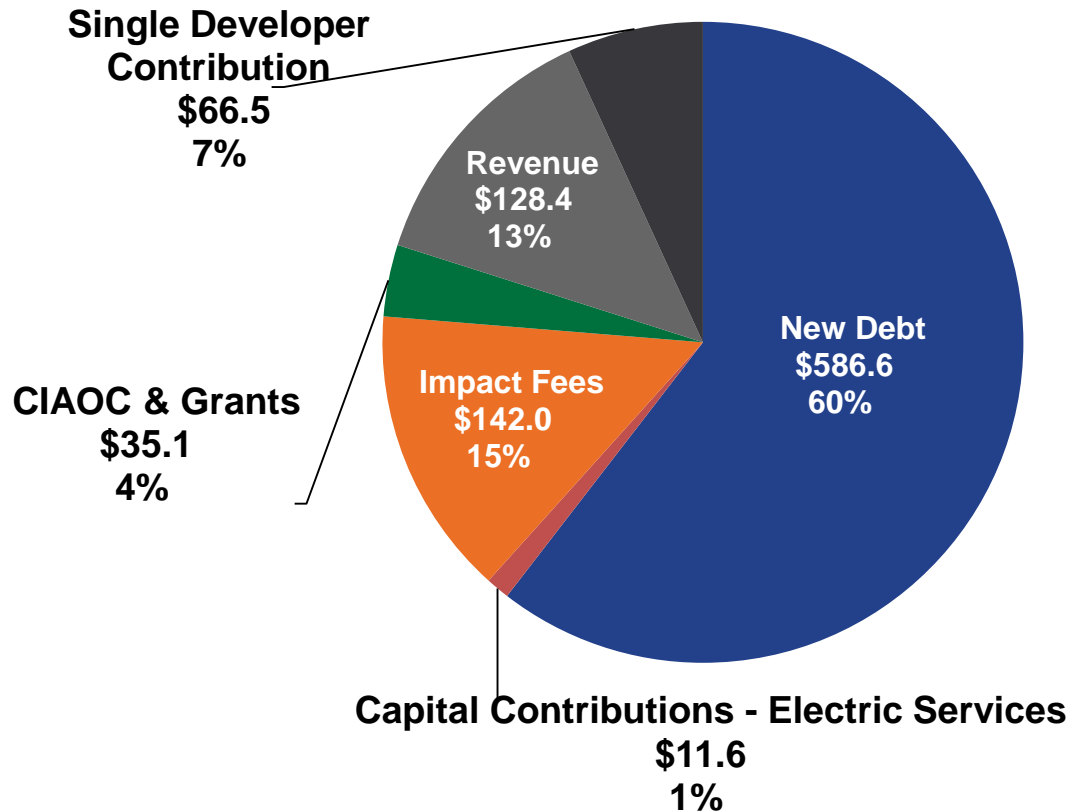
Cost Cutting

- Commercial Paper Program – **\$500K** in savings
- Line Sensors – **\$300K in Value of Lost Load (VoLL)**
- Satellite Leak Detection – **140.9 million gallons** saved totaling **\$29K**
- Customer Side Leak Detection – **Over 300 million gallons** saved resulting in **\$269K** customer savings (Lowest tier rates decreased Off-Peak not including Water Supply Fee)
- AMI – **\$742K** saved and **156,000** truck rolls avoided since 9/1/2016
- TWDB Funding – **\$484K** interest savings-FY24 (**\$9.4M** over life of the project (30 years))
- No health care premium increases for **10th straight year** due to education and employee wellness programs

FY 2024 Total Savings – \$2.3M

Capital Funding by Source

Amounts in Millions



60% of capital requirements will be met with existing or new borrowings

Impact Fees are estimated to provide about \$142M in funds or 15% of capital requirements

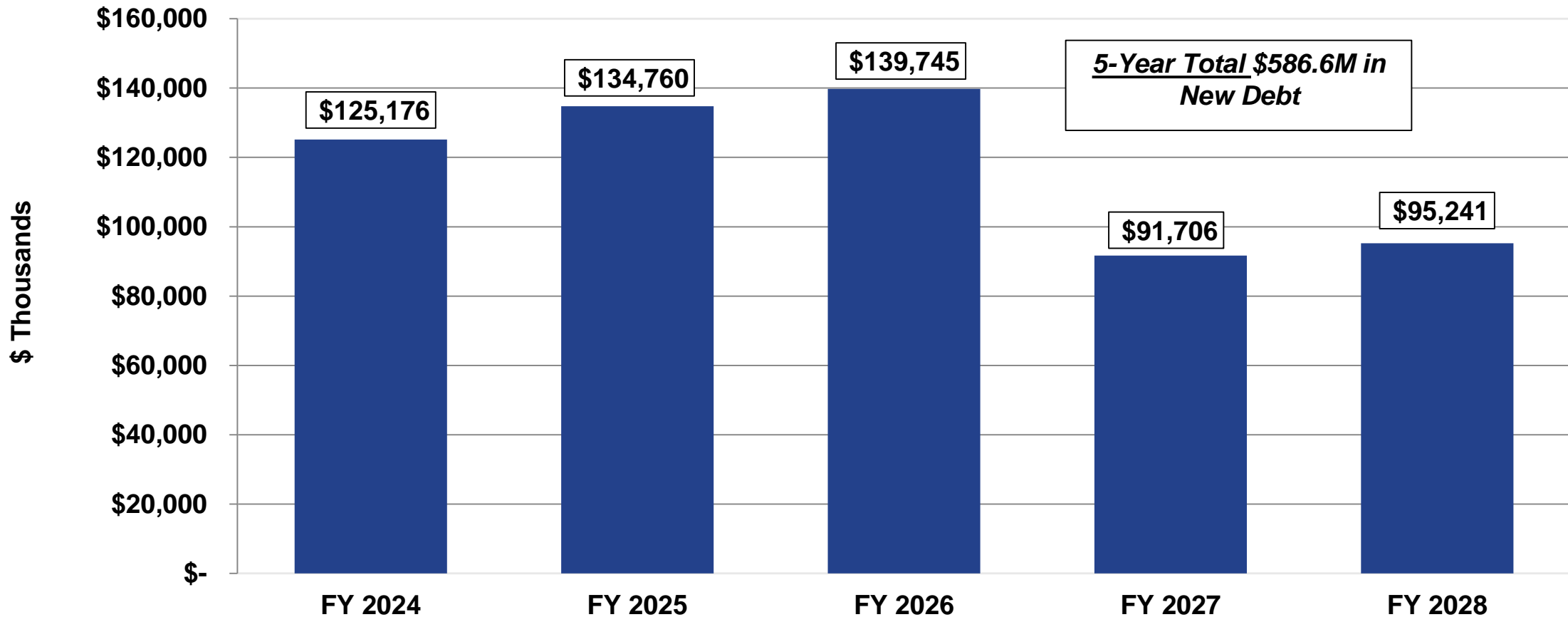
Internally-generated funds will provide about 13% of capital requirements

Other contributions and Grants will provide about 4% of capital requirements

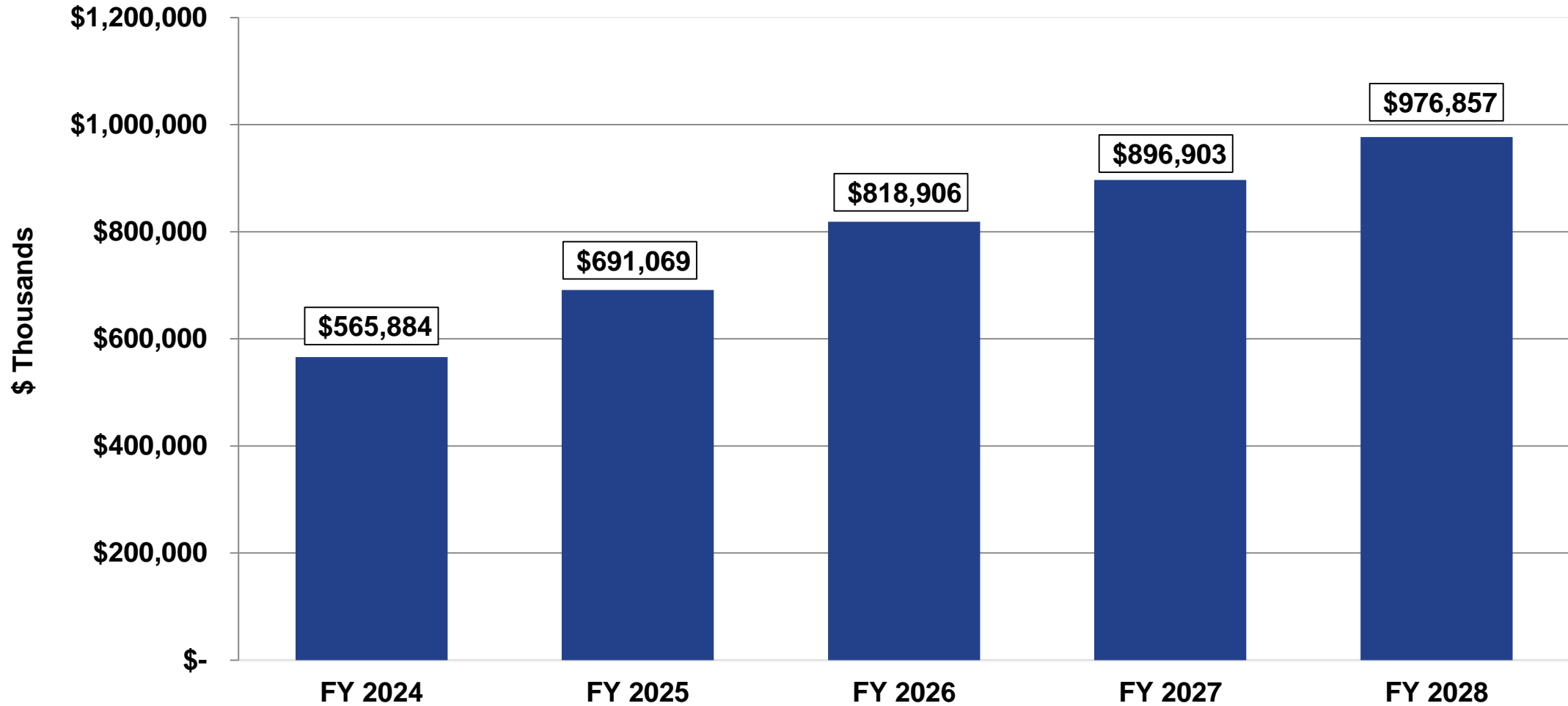
Single Developer Contribution will provide about 7% of capital requirements

Electric Services Capital Contributions will provide about 1% of capital requirements

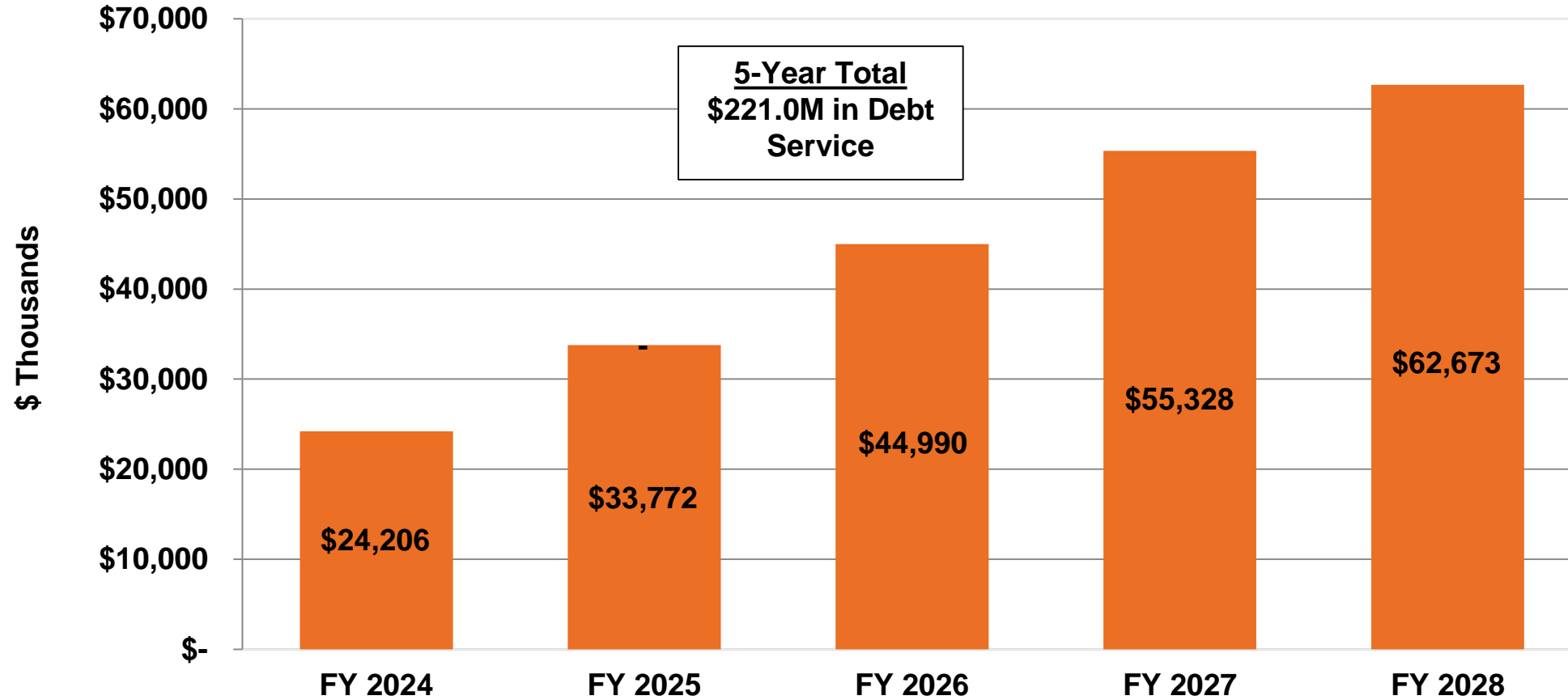
Debt Funding Requirement Long-Term Financing



Total Debt



Debt Service



COST OF SERVICE AND RATE DESIGN

Cost of Service & Rate Design Steps

1. Rate Advisory Committee
2. Determination of the Revenue Requirement
3. Determine Cost of Service
4. Design Rates

1. Rate Advisory Committee

- Establish Rate Advisory Committee to devote time and energy necessary to
 - Learn about the utility business
 - Understand and provide insights, perspectives and feedback to NBU management and the Board of Trustees on Cost of Service and Rate Design
 - Each step of the process was presented to the RAC as deliverables were completed
 - RAC went above and beyond by identifying Key Policy Areas, establishing subcommittees for each, facilitating feedback from customer groups and making recommendations to incorporate in rate design

2. Determine the Revenue Requirement

- After identifying all possible non-rate revenue, cutting costs and adding efficiencies, **how much revenue does each utility need to meet forecasted costs?**

3. Determine “Cost of Service”

What is each customer class’s equitable share of the utility revenue?

1. Functionalize Costs
2. Classification of Costs
 - Fixed – cost is same regardless of volume
 - Variable – cost fluctuates based on customer demand
3. Allocate Costs to Customer Classes

4. Rate Design

- How should rates be adjusted to reflect Cost of Service while incorporating community values?
 - Rate Advisory Committee – Honor Key Policy Areas

Rate Advisory Committee

RAC Public Outreach

Date	Meeting	Topic
June 1, 2022	RAC Public Meeting	Initial Meeting for Establishment of RAC
August 10, 2022	RAC Public Meeting	Rates/Cost of Service 101
August 16, 2022	RAC Site Tour	NBU Facilities
September 14, 2022	RAC Public Meeting	Background and Intro to Revenue/Revenue Requirements
October 19, 2022	RAC Public Meeting	Revenue/Revenue Requirements
November 16, 2022	RAC Public Meeting	Water/Wastewater COS
December 7, 2022	RAC Public Meeting	Electric COS
December 14, 2022	RAC Public Forum	Public Forum
January 11, 2023	RAC Public Meeting	Electric Rates and Rate Design
January 18, 2023	RAC Public Meeting	Water/Wastewater Rates and Rate Design
February 1, 2023	RAC Public Meeting	Final Review and Wrap-Up

RAC Public Outreach, Cont.

Date	Committee/Organization	Location	Attendees
November 11, 2022	New Comers Club	McKenna Events Center	50
January 25, 2023	Community Impact and New Braunfels Herald Zeitung	Videoconference	2
February 7, 2023	New Braunfels Downtown Association	McKenna Events Center	50
February 15, 2023	Retirees Are Progressive	Headwaters at the Comal	30
February 21, 2023	Greater New Braunfels Chamber Board	Honors Hall	20
March 8, 2023	Rotary Club of New Braunfels	Columbus Hall	80
March 21, 2023	Area Realtor/Lender Associates	Headwaters at the Comal	20

**** Over 250 customers reached through civic organization presentations**

**** Over 100 customers reached through Key Policy Area subcommittee contact**

Rate Advisory Committee (RAC)

Key Policy Areas

The RAC identified seven key policy areas to shape rate design:

- Low/Fixed Income Customers
- Equity and Fairness in Rate Making
- Conservation and Renewables
- Revenue Sufficiency
- Accommodating Growth
- Utility Stability and Financial Strength
- Simple to Understand and Easy to Implement

Low/Fixed Income Customers Recommendations

Low/Fixed Income Customers

- The cost of NBU services should be equitably assessed across customer classes.
- Deposits, fees and penalties should be reflective of the true cost of the activity or service. However, NBU should consider the financial strain on low/fixed income customers which are disproportionately impacted by deposits/fees/penalties and benchmark to other community-owned utilities.
- NBU internal programs and external support of nonprofits should model the value of helping neighbors.
- Levels of NBU financial support of low- and fixed-income customers should increase proportionately as rates increase.

Low/Fixed Income Customers Implementation

INCORPORATED IN PROPOSED RATE DESIGN

- Costs were assessed by customer class, and any revenue requirements needed were allocated appropriately
- Created new low water tier to help customers control costs
- NBU has increased the amount that it is contributing to the Utility Bill Assistance Program for its upcoming five-year operating plan (FY24-FY28) by ~5.3% each year, compared to projected bill increases of ~6.7% on average (with all three services for low use water)

Community Assistance/Low Income Discount Program Budgeted \$'s	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
FY2023 – Approved	\$416,000	\$416,000	\$416,000	\$416,000	N/A
FY2024 – Proposed	\$441,000	\$466,000	\$489,000	\$514,000	\$543,000
Proposed – % Increase YoY	N/A	5.7%	4.9%	5.1%	5.6%

FUTURE CONSIDERATION

- Review of fees as it relates to scaling based on income level
- Additional support of non-profits



Equity & Fairness in Rate Making Recommendations

Equity & Fairness in Rate Making

- Rates may not always align with cost-of-service results.
- Consider sub-classes to recognize unique challenges.
- Cross-subsidization between classes should prioritize and encourage sustainable practices and conservation.
- Gradualism should be implemented through a transparent process that includes community perspective.
- Consider forming a Community Advisory Board (CAB) to enrich community input and vet issues.

Equity & Fairness in Rate Making Implementation

INCORPORATED IN PROPOSED RATE DESIGN

- NBU did not fully align with the COS results, especially if it put an undue burden on a particular customer class, but did trend in the right direction utilizing gradualism. The process was discussed and made transparent through the public RAC meetings
- NBU created a customer class for Large Commercial water customers. This allowed customers that utilized water in the course of business to not be penalized as discretionary use, i.e. hospitals
- NBU followed the RAC recommendation and encouraged sustainable practices by sending conservation pricing signals in water rates and adjusting the tier structure

FUTURE CONSIDERATION

- NBU's Board will continue to consider forming community advisory boards to vet important issues

Conservation & Renewables Recommendations

Conservation & Renewables

- Promote the adoption of Distributed Energy Resources by removing barriers to entry and improving communication and customer experience.
- Target 50% renewable energy.
- Monitor electric vehicle adoption and plan for future rate options.
- Consider variable, tiered and/or time-based rates.
- Revise essential use volume and strengthen water conservation pricing signals by increasing irrigation rates and fines
- It is important for NBU to have a clear position on these issues that aligns with their customers and to educate the public.

Conservation & Renewables Implementation

INCORPORATED IN PROPOSED RATE DESIGN

- NBU has revised the essential use water tier and revised all other tiers for both water and irrigation use to strengthen conservation pricing signals as part of this cost of service study
- NBU is working with solar installers and incorporating best practices to improve the customer experience for rooftop solar and other DER installations
- This year, NBU will conduct a study of potential impacts under a variety of electric vehicle adoption scenarios

FUTURE CONSIDERATION

- In FY 2024, NBU will update its power supply Integrated Resource Plan which will utilize community input to evaluate affordability, volatility mitigation, share of renewables, time of use rates as a resource, strategies for distributed energy resources (solar, battery storage, microgrids, electric vehicles, etc.) and related topics and strategies
- IN FY 2024, NBU will develop a Distributed Energy Roadmap, which will provide comprehensive program designs that will help NBU achieve the targets and provide best practice programs, pricing signals, incentives, educational materials, and resources to customers
- NBU will be reviewing and providing recommended adjustments to the City of New Braunfels Drought Ordinance to include fines or surcharges for violations to watering restriction rules

Revenue Sufficiency Recommendations

Revenue Sufficiency

- Consider internal and external economic headwinds and how an increase in rates will impact the community at large.
- Pursue operational efficiencies and evaluate proper level of reserves
- Consider all expenses/fees related to development

Revenue Sufficiency Implementation

INCORPORATED IN PROPOSED RATE DESIGN

- The new rate design is within the “mid-range” category of the Fitch affordability benchmark and in the “strongest” category for fixed based charge recovery
- Regarding efficiencies, NBU’s recent nationwide workforce study showed that NBU is currently operating very lean with a 31% shortfall in full time employees
- NBU is in the process of evaluating all fees across the company to ensure they are covering costs. Water and Wastewater fee review is complete. Over the next 12 months, the remainder of the fees will be evaluated and placed on a review schedule to be approved by the Board of Trustees annually with the budget
- Prior to this rate design, electric capital would have been funded 100% with debt. The proposed design incorporates a portion to be funded by cash, which will be in alignment with NBU Board of Trustees policy and rating agency expectations

Accommodating Growth Recommendations

Accommodating Growth

- NBU needs to be a partner with the development community.
- NBU needs to maintain staffing levels sufficient to keep pace with growth and consistently meet published review timelines, utility availability requests and other items required for developers to complete projects.
- Growth costs should be shared between growth customers and existing customers.
- Do not subsidize utility rates for economic development

Accommodating Growth Implementation

INCORPORATED IN PROPOSED RATE DESIGN

- NBU's Board of Trustees and City Council have voted to assess the maximum allowable water and wastewater impact fee allowed by state statute. Even with this decision, the statute does not allow impact fees to cover the full costs of growth related projects
- NBU does not have an economic development rate subsidization, but relies on City Council through the New Braunfels Economic Development Corporation (EDC) to provide incentives
- NBU is an active participant in the Chamber of Commerce, the New Braunfels Economic Development Foundation (EDF), the Economic Advisory Committee and helped create the community's current Economic Development Strategic Plan

FUTURE CONSIDERATION

- Over the next two months, NBU staff will be working with the Board of Trustees to establish Key Performance Indicators (KPI) and corresponding Levels of Service across the organization to include development related processes (review time, etc.) and provide proper resources to meet those KPIs through the budget which will be incorporated in the final rate design

Utility Stability & Financial Strength Recommendations

Utility Stability & Financial Strength

- A significant reserve is necessary and beneficial to the community and should be well-defined in policy
- Reserve amount needs to consider the balance of the community needs and NBU's financial stability and should have a well-defined policy surrounding it
- Consider collecting reserve amounts in non-peak energy season

Utility Stability & Financial Strength Implementation

INCORPORATED IN PROPOSED RATE DESIGN

- NBU has reserves in place that are established, used and refilled in accordance with credit rating criteria, NBU Board of Trustees policies and NBU's Enterprise Risk Management requirements
- One of those reserves, NBU's Power Stabilization Fund, is being evaluated using a risk-based analysis by a third party to inform the proper target fund balance. The analysis will consider the past performance of the ERCOT market and will also contemplate changes currently being made by the Public Utility Commission of Texas and the Texas Legislature. This work will be complete in time for the final rate design in March 2023

FUTURE CONSIDERATION

- NBU is evaluating only collecting reserves in non-peak energy seasons

Simple to Understand & Easy to Implement Recommendations

Simple to Understand & Easy to Implement

- Detailed & easy to understand, graphically pleasing, concise and comprehensive.
- Transparent (definition of rates and terms).
- Searchable – by customer, if interested.
- Multi-platform (dimensionality).
- Proactive (crisis communications).

Simple to Understand & Easy to Implement Implementation

INCORPORATED IN PROPOSED RATE DESIGN

- NBU revised its bill design in November 2022 to eliminate confusion that incorporated many of these recommendations
- NBU eliminated the On-Peak/Off-Peak water rate differential with this rate design proposal. The analysis showed that peak rates were not having an impact on water conservation, but were creating complexity
- NBU now has a Rate Breakdown page on its website and is forecasting and communicating electric rates on a quarterly basis across multiple media platforms
- NBU is in the process of upgrading its customer interface in FY24, which will improve its functionality to include searchability and multi-platform including a mobile app

FUTURE CONSIDERATION

- There are a number of other bill design recommendations that NBU will work to incorporate
- NBU will continue to evaluate communication effectiveness

Revenue Requirements

Revenue Requirements

- After identifying all possible non-rate revenue, cutting costs and adding efficiencies, how much revenue does each utility need to meet forecasted costs?
- Each utility (water, wastewater, electric) self-sustaining – No inter-utility subsidies
- Maintain appropriate reserve funds
- Sufficient revenue for NBU to make discretionary transfer of funds to the City of New Braunfels
- Bond Rating
 - Debt Service Coverage
 - Days Cash on Hand
 - Debt to Capitalization

Fitch Bond Rating Comparisons

Austin Energy	AA
New Braunfels Utilities	AA
Bryan Utilities City Electric System	AA-
CPS Energy	AA-
Garland Power & Light	AA-
Lower Colorado River Authority	AA-
Pedernales Electric Cooperative	AA-
Brownsville Public Utilities Board	A+
Guadalupe Valley Electric Cooperative	A+
City of Denton	A
Seguin Utility Fund	A-

NBU's Credit Ratings

Agency	Pre-Summer Rating	Pre-Summer Outlook	Current Rating	Current Outlook
S&P	A+	Negative	A+	Negative
Fitch	AA	Negative	AA-	Stable
Moody's	Aa1	Negative	Aa1	Negative

S&P: "We believe that ERCOT's demand and price volatility, and NBU's growth pressures necessitate extraordinary levels of liquidity, and so we view the prospective improvement in liquidity as necessary to maintain the current rating."

Moody's: "A return to stability is dependent on the utility's ability to return to pre-storm liquidity and debt service coverage levels."

Revenue Requirements & Results

Requirements Presented to the Rate Advisory Committee based on FY23 FOP					
FY24 Budget	FY24	FY25	FY26	FY27	FY28**
Electric*	4.0%	3.9%	3.9%	3.8%	N/A
Water	9.5%	9.5%	9.5%	7.8%	N/A
Wastewater	7.3%	7.3%	6.8%	5.8%	N/A

FY2028 Results		Policy
DSC	2.6	≥2.4X
Total New Debt	\$615.3M	
Debt to Cap.	54.9%	<55%
Total Debt	\$1,003.7M	

Requirements Needed to Achieve Goals based on FY24 FOP					
FY24 Budget	FY24	FY25	FY26	FY27	FY28
Electric*	4.8%	5.9%	4.6%	3.8%	1.2%
Water	9.1%	13.4%	13.6%	11.8%	11.8%
Wastewater	7.3%	7.3%	7.7%	7.7%	7.7%

FY2028 Results		Policy
DSC	2.9	≥2.4X
Total New Debt	\$586.6M	
Debt to Cap.	52.9%	<55%
Total Debt	\$976.9M	

Variance					
FY24 Budget	FY24	FY25	FY26	FY27	FY28
Electric*	0.8%	2.0%	0.7%	0.0%	N/A
Water	-0.4%	3.9%	4.1%	4.1%	N/A
Wastewater	0.0%	0.0%	0.9%	1.9%	N/A

*Electric rate increases are only applied to the Delivery Charge and Electric Service Availability Charge, which results in the corresponding percentage increases

**FY28 rates not yet available at the time of presentation to the RAC

Financial Results

Amounts in Thousands

	Forecast FY 2023	Budget FY 2024	Forecast FY 2025	Forecast FY 2026	Forecast FY 2027	Forecast FY 2028	Policy Requirement
Total Debt	\$ 412,529	\$ 565,884	\$ 691,069	\$ 818,906	\$ 896,903	\$ 976,857	
Equity	589,598	627,860	708,901	777,856	827,483	870,545	
Capitalization	\$ 1,002,127	\$ 1,193,744	\$ 1,399,970	\$ 1,596,762	\$ 1,724,386	\$ 1,847,402	
Total Debt / Capitalization Ratio¹	41%	47.40%	49.36%	51.29%	52.01%	52.88%	55%
Days Cash on Hand	186	228	261	287	305	322	140
Debt Service Coverage²	4.75	4.28	3.84	3.29	2.96	2.86	2.40
Debt Service Including Extraordinary³ Event	1.60	4.28	3.84	3.29	2.96	2.86	1.40
Adjusted DSC Including Extraordinary³ Event⁴	1.40	3.74	3.46	2.99	2.70	2.60	

¹Total Debt / (Current Debt + Long-Term Debt + Equity)

²Net Available for Debt Service / Debt Service

³(Net Available for Debt Service - Intergovernmental Expense) / Debt Service

⁴Debt Service Coverage for an extraordinary event (unusual & infrequent) for the fiscal year the impact of the event occurs, must at least meet the minimum requirements for the additional bonds test

Cost of Service and Rate Design

Revenue Requirement – 1st Step in the COS Process Based on Financial Forecast

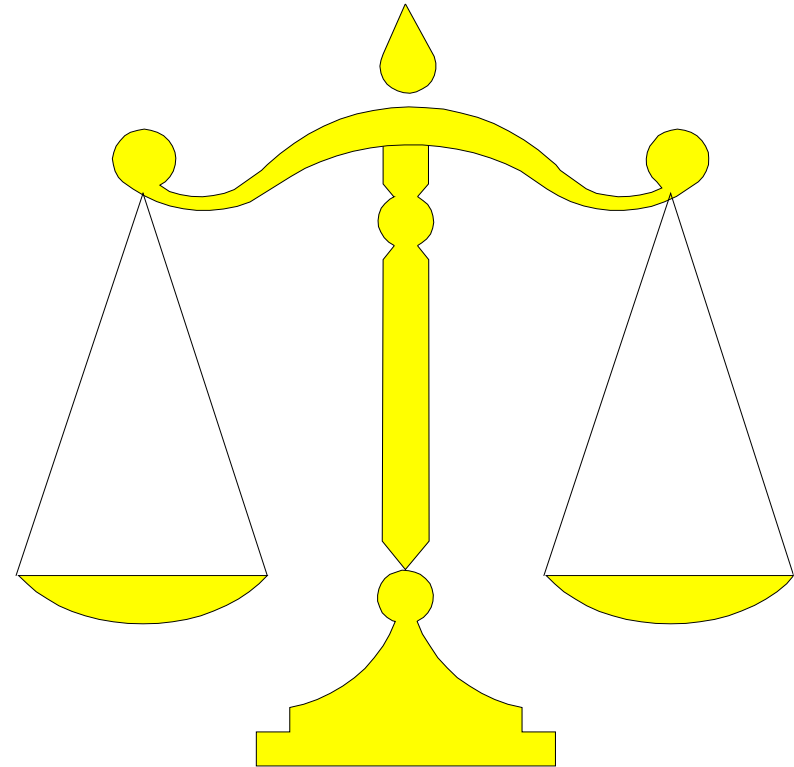
Revenue Requirement

- The total costs to operate and deliver a utility service to customers that must be recovered in retail rates.
- These total costs to be recovered in rates are compared to revenues under current retail rates to determine revenue sufficiency (e.g., if current rates cover the total costs to deliver service).
- Cash based Revenue Requirement summary will look slightly different than financial operating results shown previously.

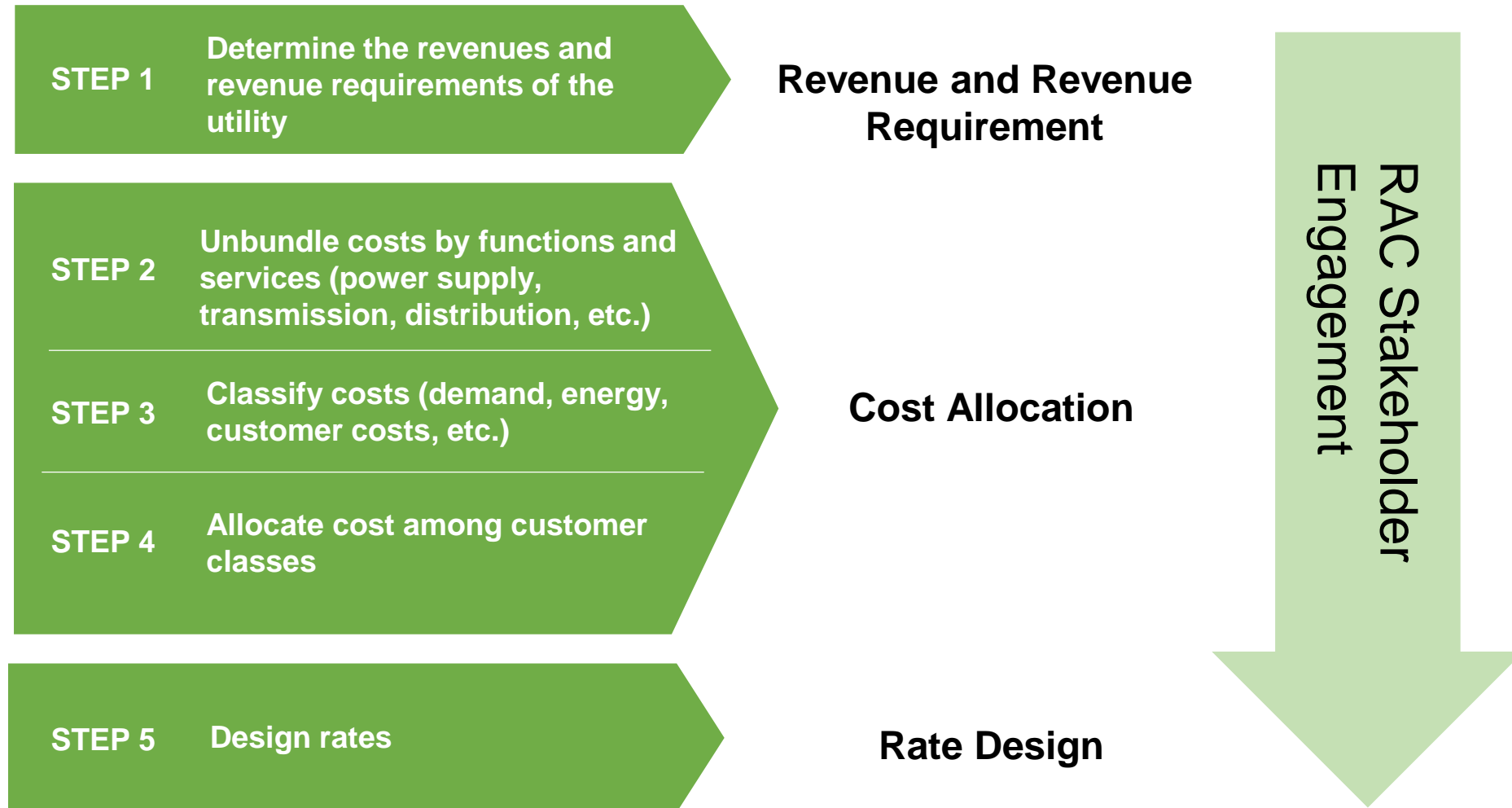
Item	Description
Operating & Maintenance (O&M) Expenses	Labor costs, materials, supplies, typical utility operations, etc.
Other Expenses / Revenues	Misc. Expenses, non-rate revenues/late fees, interest on cash reserves
Debt Service	Principal and interest on debt issuances for capital projects
Capital Improvements	Cash funded capital projects
PILOT, Franchise Fees, Transfers	City Transfers, payment in lieu of tax, use of right of way (what an IOU would have paid)
Contribution to Reserves	Increase cash reserve levels to meet utility targets/needs for ratings agencies

Utility Rate Setting Goals and Process

- Calculate the total costs to provide utility service, and equitably recover those costs from customers in rates
- Develop a rate strategy that aligns with NBU's long-term goals and strategy while maintaining financial stability
- Perform a cost-of-service analysis to determine if cost allocations are fair and equitable among the customer classes



Cost of Service and Rate Making Process



Rate Design Recommendations

NBU is pursuing a two-year rate plan for the years FY 2024 and FY 2025 (8/1/2023 – 7/31/2025)

- Rate recommendations provide sufficient revenues to
 - Meet cost of service requirements
 - Align with NBU's financial policies
 - Follow utility industry best practice
 - Support maintaining credit rating (thereby reducing cost of debt)
- Revenue changes can be attributed to both organic customer growth and rate design changes

Electric

~67% of rate increases due to capital needs; ~<1% due to personnel; ~32% due to other O&M expenses

Water

~84% of rate increases due to capital needs; ~7% due to personnel; ~9% due to other O&M expenses

Wastewater

~87% of rate increases due to capital needs; ~4% due to personnel; ~9% due to other O&M expenses

Electric Cost of Service and Rate Design

Electric Rate Recommendations

Revenue Sufficiency

Overall rates set to recover the total Cost of Service (COS) and Revenue Requirement

Equity and Fairness in Rate Making

Gradualism (phase-in of increases)

Similar rate increases for most classes. Existing rates align with COS results.

Utility Financial Stability and Strength

Moves to balanced 50/50 debt and rate funded capital

Reduced cost of debt; ensures financial strength, flexibility for NBU

Electric Rate Recommendations – Key Outcomes

- Two-year rate plan:
 - 2024: 4.8% | 2025 5.9% Average System Rate/Revenue Increase
 - Rate increases primarily driven by system capital and infrastructure needs
 - Rate increases are not driven by ERCOT market prices, power supply and transmission costs are a pass through
 - Rate increases consistent across Classes (e.g., no Customer Classes are getting significantly larger rate increases than others)
 - Drivers: ~67% capital; ~1% personnel; ~32% other O&M
- Outcomes:
 - Over 2-yr rate plan
 - Rate increases meet NBU's cash needs
 - Over 5-yr rate plan:
 - Positions NBU to cash fund capital improvements (rather than 80%+ debt)
 - No longer heavily reliant on debt for capital, provides flexibility
 - Align with NBU Financial Policies
 - Follows utility industry practice
 - Supports improved credit rating (reduce costs of debt)
 - Bridges to ERCOT market redesign

Potential Impacts of ERCOT Market Redesign

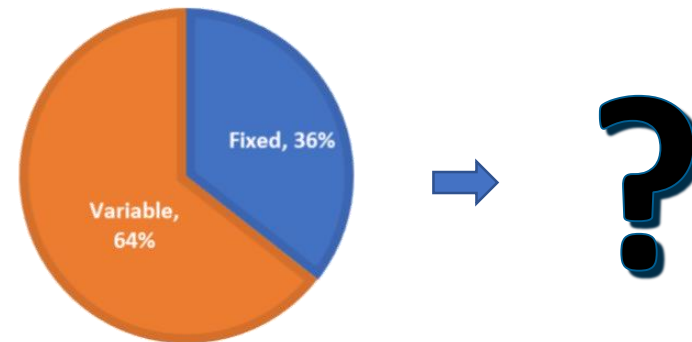
Expected impacts (please note this is overly simplified):

- Load serving entities (like NBU) will be required to show they have the capacity to meet peak demand needs
- LSEs will purchase capacity or performance credits from generators or generation companies to meet its designated or calculated peak demands
- This is a new cost to LSEs which would be passed on to rate payers
- Once decided, it will take 1-2 years to implement

What does this mean to NBU?

Once a plan is adopted and implemented, NBU's costs will likely increase, and those costs will be fixed or capacity related not variable or energy. This may affect the cost structure of NBU (and all other utilities) in delivering service to customers.

FIXED AND VARIABLE COSTS FOR NBU



Electric Cost of Service Results

Line	Description	Allocated 2023-2027 Cost of Service	2023-2027 Rate Revenues	Revenue Over/(Under) Recovery		Percent Increase for Full Cost Recovery
				Amount	Percent	
		(\$)	(\$)	(\$)	(%)	(%)
1	Residential Service (RE)	\$ 91,775,510	\$ 78,309,104	\$ (13,466,406)	85%	17%
2	Small General Service (SGS)	\$ 9,739,917	\$ 8,471,099	\$ (1,268,818)	87%	15%
3	Large General Service (LGS)	\$ 51,125,637	\$ 43,521,515	\$ (7,604,122)	85%	17%
4	Very Large Power (VLP)	\$ 14,336,047	\$ 12,587,396	\$ (1,748,651)	88%	14%
5	Transmission Service (TSR)	\$ 37,747,765	\$ 39,199,588	\$ 1,451,824	104%	-4%
6	Lighting Classes	\$ 364,728	\$ 375,137	\$ 10,408	103%	-3%
7	Total	\$ 205,089,604	\$ 182,463,840	\$ (22,625,764)	89%	12%

Electric Rate Recommendations by Class

Total Revenue Change Needed Per Class by Year

Class	FY 2024	FY 2025
Residential	6.3%	6.5%
Small Commercial	6.7%	6.7%
Large Commercial	7.3%	8.6%
Very Large Power	5.7%	7.3%
Transmission Service	0.0%	0.0%
Lighting	1.6%	1.6%
System Average	4.8%	5.9%

Electric Rate Recommendations

Residential Average Bill Impact

Charge	FY 2023	Bill ¹	FY 2024	Bill ¹	FY 2025	Bill ¹
NBU Delivery						
Elec. Availability (\$/Mo.)	\$17.06	\$17.06	\$20.00	\$20.00	\$20.00	\$20.00
Delivery (\$/kWh)	\$0.0149	\$17.88	\$0.01954	\$23.45	\$0.02646	\$31.75
Pass Through						
Generation ² (\$/kWh)	\$0.0730	\$87.60	\$0.0730	\$87.60	\$0.0730	\$87.60
Transmission ² (\$/kWh)	\$0.0172	\$20.64	\$0.0172	\$20.64	\$0.0172	\$20.64
Replenish Reserves ³ (\$/kWh)	\$0.0130	\$15.60	\$0.0075	\$9.00	\$0.0075	\$9.00
Bill Total		\$158.78		\$160.69		\$168.99
Difference				\$1.91 (1.2%)		\$8.30 (5.2%)

Notes:

1. Assumes 1,200 kWh per month average consumption
2. Assumes April 2023 GCRF/TCRF
3. Assumes planned decrease in Replenish Reserves rate beginning in FY24

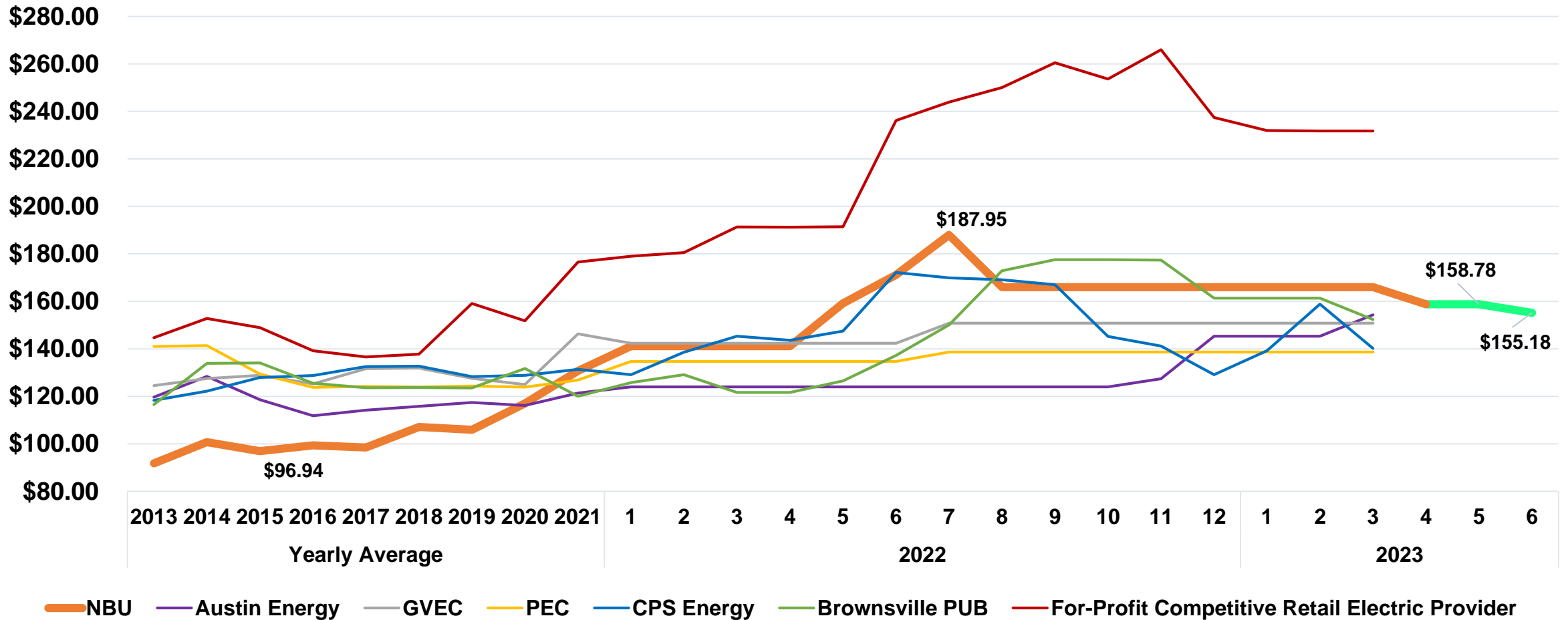
Residential Electric Bill Comparison

Average Use – 1,200 kWh



*Assumes planned decrease in reserve replenishment; March current monthly rates for all entities except NBU, which is at April rates

Monthly Electric Bills – 1,200 kWh



Electric Rate Recommendations

Small Commercial Average Bill Impact

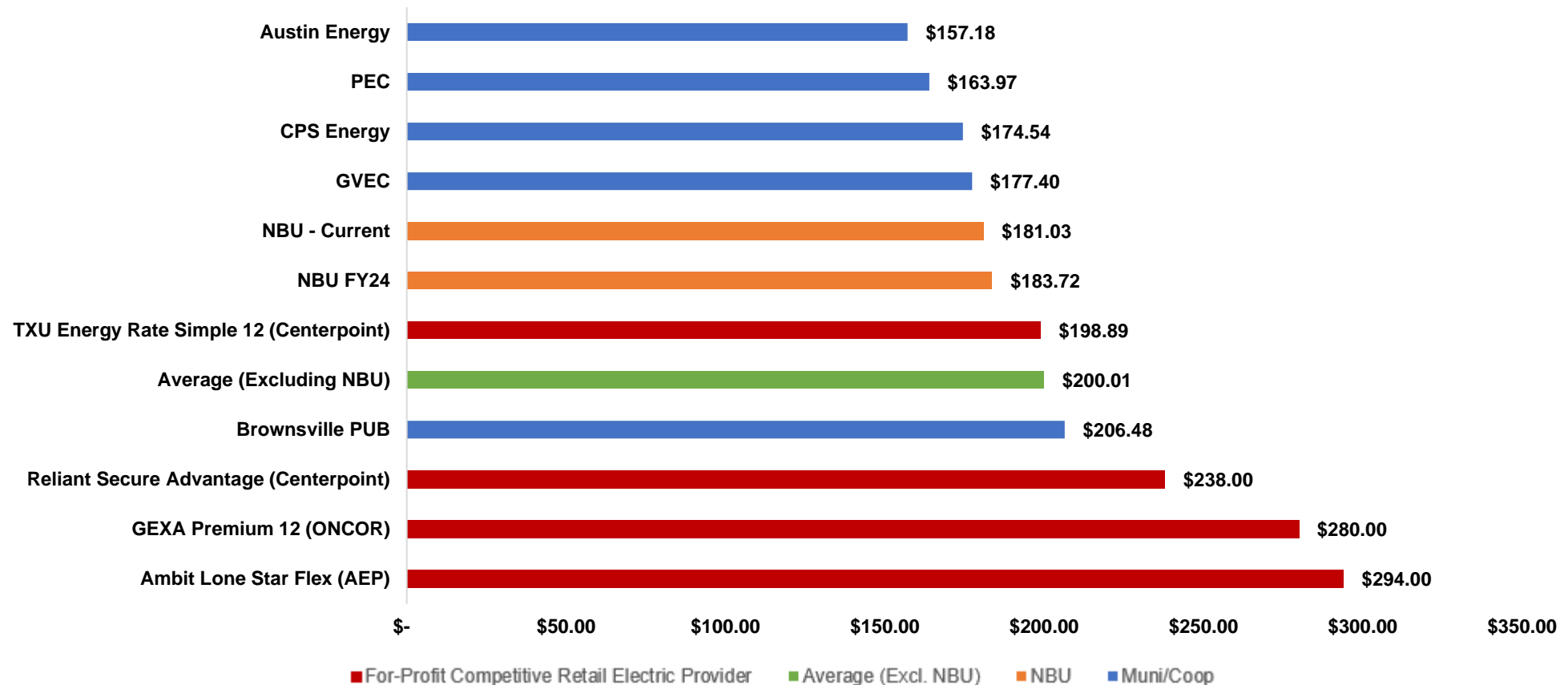
Charge	FY 2023	Bill ¹	FY 2024	Bill ¹	FY 2025	Bill ¹
NBU Delivery						
Elec. Availability (\$/Mo.)	\$23.10	\$23.10	\$29.05	\$29.05	\$35.46	\$35.46
Delivery (\$/kWh)	\$0.0961	\$13.45	\$0.01278	\$17.89	\$0.0156	\$21.84
Pass Through						
Generation ² (\$/kWh)	\$0.0730	\$102.20	\$0.0730	\$102.20	\$0.0730	\$102.20
Transmission ² (\$/kWh)	\$0.0172	\$24.08	\$0.0172	\$24.08	\$0.0172	\$24.08
Replenish Reserves ³ (\$/kWh)	\$0.0130	\$18.20	\$0.0075	\$10.50	\$0.0075	\$10.50
Bill Total		\$181.03		\$183.72		\$194.08
Difference				\$2.69 (1.5%)		\$10.36 (5.6%)

Notes:

1. Assumes 1,400 kWh per month average consumption
2. Assumes April 2023 GCRF/TCRF
3. Assumes planned decrease in Replenish Reserves rate beginning in FY24

Small Commercial Electric Bill Comparison

Average Use – 1,400 kWh



Electric Rate Recommendations

Large Commercial Average Bill Impact

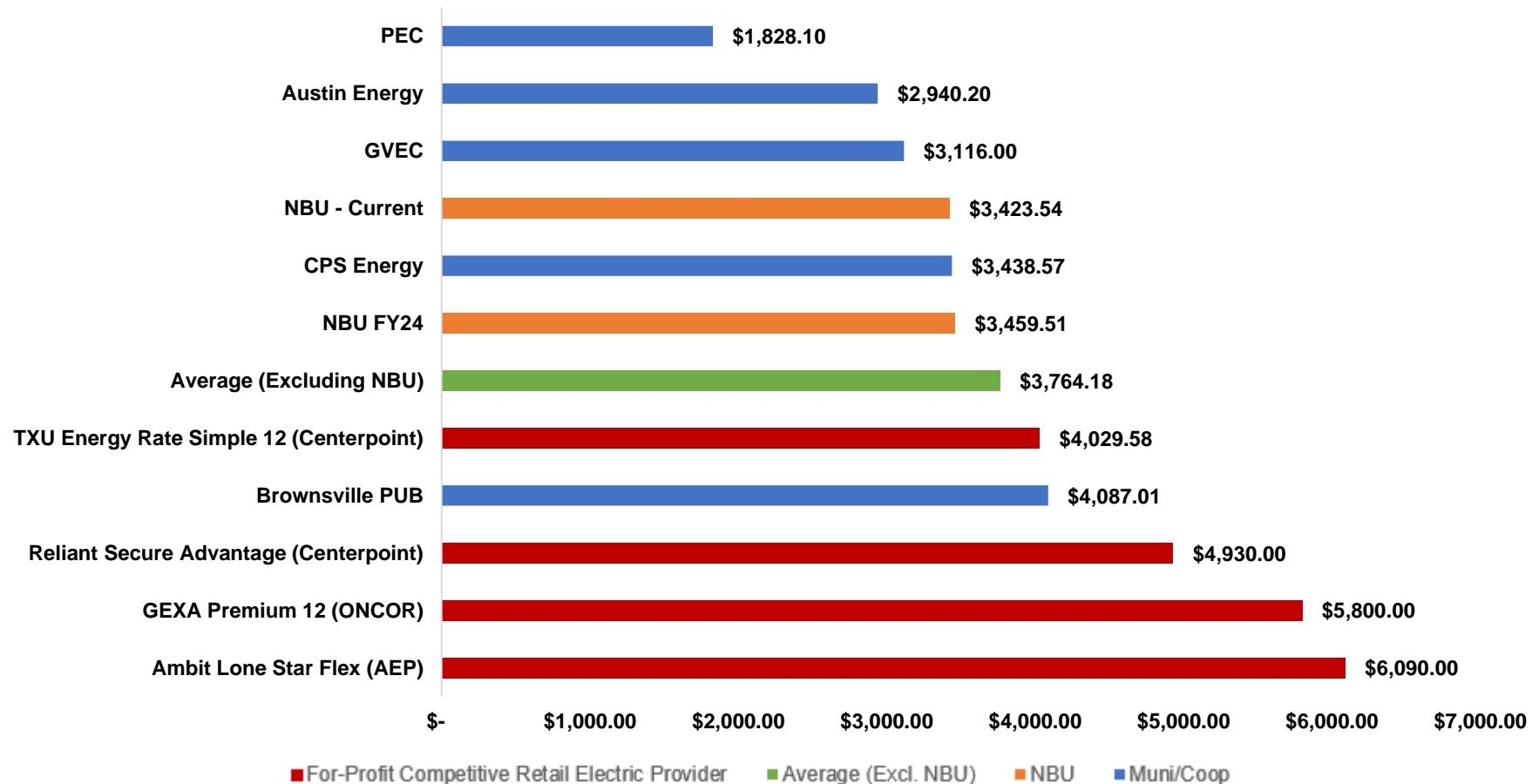
Charge	FY 2023	Bill ¹	FY 2024	Bill ¹	FY 2025	Bill ¹
NBU Delivery						
Elec. Availability (\$/Mo.)	\$36.38	\$36.38	\$50.41	\$50.41	\$67.07	\$67.07
Delivery Demand (\$/kW)	\$5.34	\$448.56	\$7.50	\$630.00	\$9.98	\$838.32
Transmission Demand (\$/kW)	\$1.15	\$96.60	\$1.15	\$96.60	\$1.15	\$96.60
Pass Through						
Generation ² (\$/kWh)	\$0.0730	\$2,117.00	\$0.0730	\$2,117.00	\$0.0730	\$2,117.00
Transmission ² (\$/kW)	\$0.012	\$348.00	\$0.012	\$348.00	\$0.012	\$348.00
Replenish Reserves ³ (\$/kWh)	\$0.013	\$377.00	\$0.0075	\$217.50	\$0.0075	\$217.50
Bill Total		\$3,423.54		\$3,459.51		\$3,684.49
Difference				\$35.97 (1.1%)		\$224.98 (6.5%)

Notes:

1. Assumes 29,000 kWh per month average consumption, 84 kW demand per month, and less than 151 installed kVA per month
2. Assumes April 2023 GCRF/TCRF
3. Assumes planned decrease in Replenish Reserves rate beginning in FY24

Large Commercial Electric Bill Comparison

Average Use – 29,000 kWh, 84 kW & <151 kVA



*Assumes planned decrease in reserve replenishment; March current monthly rates for all entities except NBU, which is at April rates

Electric Rate Recommendations

Very Large Power Average Bill Impact

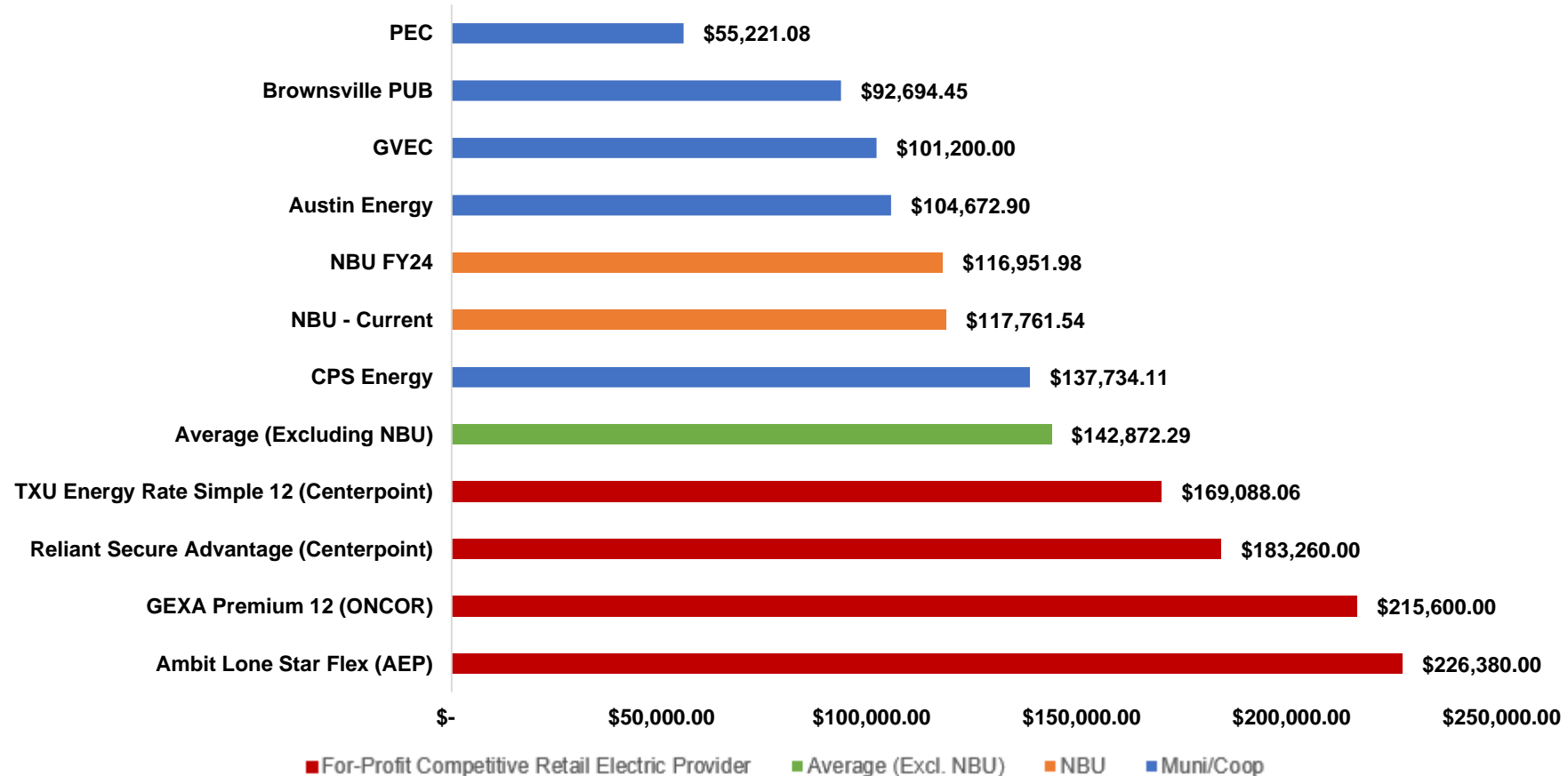
Charge	FY 2023	Bill ¹	FY 2024	Bill ¹	FY 2025	Bill ¹
NBU Delivery						
Elec. Availability (\$/Mo.)	\$1,192.54	\$1,192.54	\$1,836.98	\$1,836.98	\$2,687.87	\$2,687.87
Delivery Demand (\$/kW)	\$3.22	\$8,050.00	\$5.01	\$12,525.00	\$7.33	\$18,325.00
Transmission Demand (\$/kW)	\$1.15	\$2,875.00	\$1.15	\$2,875.00	\$1.15	\$2,875.00
Pass Through						
Generation ² (\$/kWh)	\$0.0730	\$78,694.00	\$0.0730	\$78,694.00	\$0.0730	\$78,694.00
Transmission ² (\$/kW)	\$0.012	\$12,936.00	\$0.012	\$12,936.00	\$0.012	\$12,936.00
Replenish Reserves ³ (\$/kWh)	\$0.0130	\$14,014.00	\$0.0075	\$8,085.00	\$0.0075	\$8,085.00
Bill Total		\$117,761.54		\$116,951.98		\$123,602.87
Difference				(\$809.56) (-0.7%)		\$6,650.89 (5.7%)

Notes:

1. Assumes 1,078 MWh per month average consumption, 2.5 MW demand per month, and less than 3,000 and greater than 1,999 installed kVA per month
2. Assumes April 2023 GCRF/TCRF
3. Assumes planned decrease in Replenish Reserves rate beginning in FY24

Very Large Commercial Electric Bill Comparison

Average Use – 1,078 MWh, 2.5 MW, <3,000 & >1,999 kVA



Water Cost of Service and Rate Design

Water Rate Recommendations

On Peak/Off Peak

Remove On-Peak/Off-Peak Differential

Make FY2022 Revenue Neutral

General Service (GS) Class

Split Commercial Class into Large GS and Small GS

Move High Use Customers to Large General Service Class

Usage Tiers

Establish Tiers to Reflect Usage Levels

Create Tier to Allow for Low Usage Savings

FY 2024/2025 Water Rate Design

- Remove On-Peak/Off-Peak Differential
- Split Commercial Class into Small General Service and Large General Service (LGS) to match customer usage patterns
 - Move Larger Usage Customers into Large Commercial Class
- Modified tiers in Residential, Small Commercial and Irrigation Classes to match customer usage patterns
- Average System Revenue Increase
 - 2024: 9.07% | 2025: 13.43%
- Drivers: ~84% capital; ~7% personnel; ~9% other O&M

Water Cost of Service Results

Line	Customer Class	Allocated FY 2024 Cost of Service	2024 Existing Rate Revenues	Revenue Over/(Under) Recovery		Percent Increase for Full Cost Recovery
				Amount	Percent	
		(\$)	(\$)	(\$)	(%)	(%)
1	Residential	\$ 24,770,834	\$ 17,149,911	\$ (7,620,923)	69%	44%
2	Residential Irrigation	\$ 7,867,368	\$ 8,948,426	\$ 1,081,058	114%	-12%
3	Commercial	\$ 7,434,488	\$ 8,172,446	\$ 737,958	110%	-9%
4	Commercial Irrigation	\$ 2,483,532	\$ 3,514,251	\$ 1,030,719	142%	-29%
5	Multi-Unit Res 2-4	\$ 224,839	\$ 259,774	\$ 34,935	116%	-13%
6	Multi-Unit Res 5+	\$ 1,639,794	\$ 2,736,389	\$ 1,096,595	167%	-40%
7	Commercial – Re-Use Water	\$ 133,962	\$ 75,284	\$ (58,678)	56%	78%
8	Total	\$ 44,554,817	\$ 40,856,481	\$ (3,698,336)	91.7%	9.1%

Water Rate Recommendations by Class

Total Revenue Change Needed Per Class by Year

Class	FY 2024*	FY 2025
Residential**	35.1%	11.2%
Residential Irrigation	1.2%	16.7%
Small Commercial	-12.8%	12.3%
Small Commercial Irrigation	-6.1%	23.1%
Large Commercial	0.0%	11.3%
Multi-Unit 2-4	-2.9%	18.9%
Multi-Unit 5+	-3.9%	11.8%
Commercial Re-Use Water	0.0%	0.0%
Other Sales	9.0%	17.1%
System Average	9.1%	13.4%

*Higher increases in FY2024 are mainly due to adjustments in rate structure and not to increases in rates

**Includes non-metered residential irrigation

Water Rate Recommendations

Residential Bill Impact – Essential Use

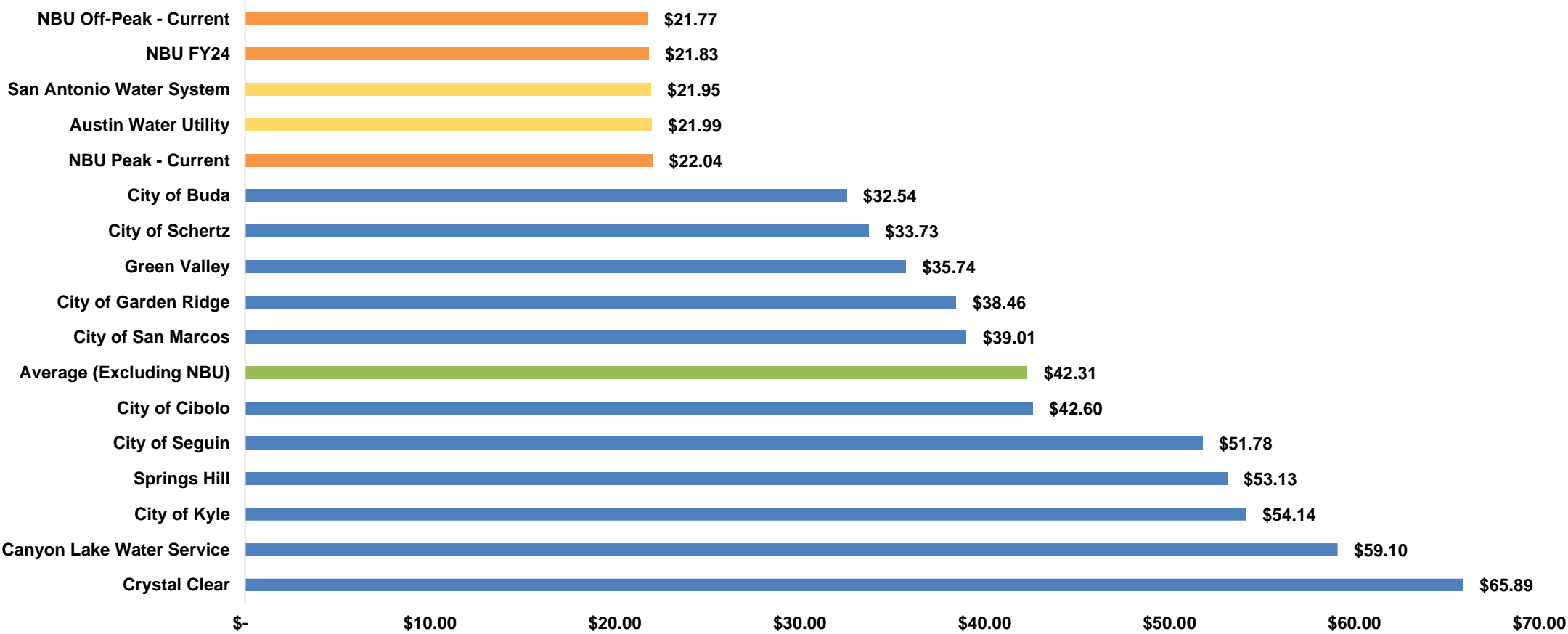
Charge	FY 2023	Bill ^{1,3}	FY 2024	Bill ^{1,3}	FY 2025	Bill ^{1,3}
NBU Delivery						
Water Usage (\$/Thousand Gallons)	\$1.93	\$5.79	\$1.95	\$5.85	\$2.15	\$6.45
Water Service Availability Charge	\$15.98	\$15.98	\$15.98	\$15.98	\$16.05	\$16.05
Pass Through						
Water Supply Fee ¹ (\$/Thousand Gallons)	\$2.79	\$0.00	\$1.84	\$0.00	\$1.84	\$0.00
Bill Total		\$21.77		\$21.83		\$22.50
Difference				\$0.06 (0.3%)		\$0.67 (3.1%)

Notes:

1. Assumes 3,000 gallons per month average consumption on 5/8" meter
2. Assumes planned decrease in Water Supply Fee (WSF) rate beginning in FY24, and assumes it will stay constant for FY25; note that the WSF does not apply to usage between 0 – 6,000 gallons for residential customers
3. 37.4% of NBU water customers use between 0 – 3,000 gallons on average per month

Residential Water Bill Comparison

Essential Use – 3,000 Gallons



*Assumes March current monthly rates for all entities except NBU, which is at April rates and 5/8" meter size

Water Rate Recommendations

Residential Bill Impact – Average Use

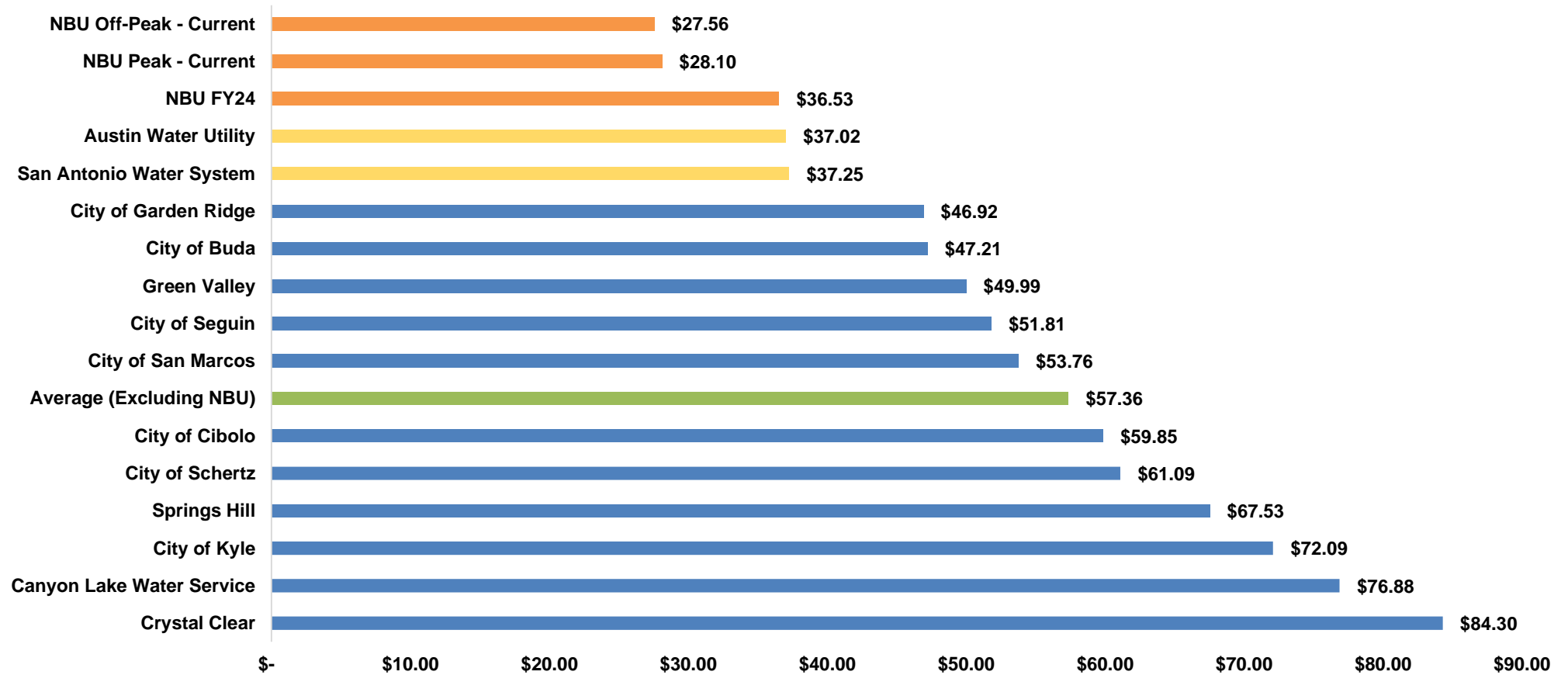
Charge	FY 2023	Bill ^{1,3}	FY 2024	Bill ^{1,3}	FY 2025	Bill ^{1,3}
NBU Delivery						
Water Usage (\$/Thousand Gallons)	\$1.93	\$11.58	\$1.95	\$20.55	\$2.15	\$22.05
Water Service Availability Charge	\$15.98	\$15.98	\$15.98	\$15.98	\$16.05	\$16.05
Pass Through						
Water Supply Fee ¹ (\$/Thousand Gallons)	\$2.79	\$0.00	\$1.84	\$0.00	\$1.84	\$0.00
Bill Total		\$27.56		\$36.53		\$38.10
Difference				\$8.97 (32.5%)		\$1.57 (4.3%)

Notes:

1. Assumes 6,000 gallons per month average consumption on 5/8" meter
2. Assumes planned decrease in Water Supply Fee (WSF) rate beginning in FY24, and assumes it will stay constant for FY25; note that the WSF does not apply to usage between 0 – 6,000 gallons for residential customers only
3. 33.5% of NBU water customers use between 3,001 – 6,000 gallons on average per month

Residential Water Bill Comparison

Average Use – 6,000 Gallons



Water Rate Recommendations

Residential Bill Impact – Moderate Use

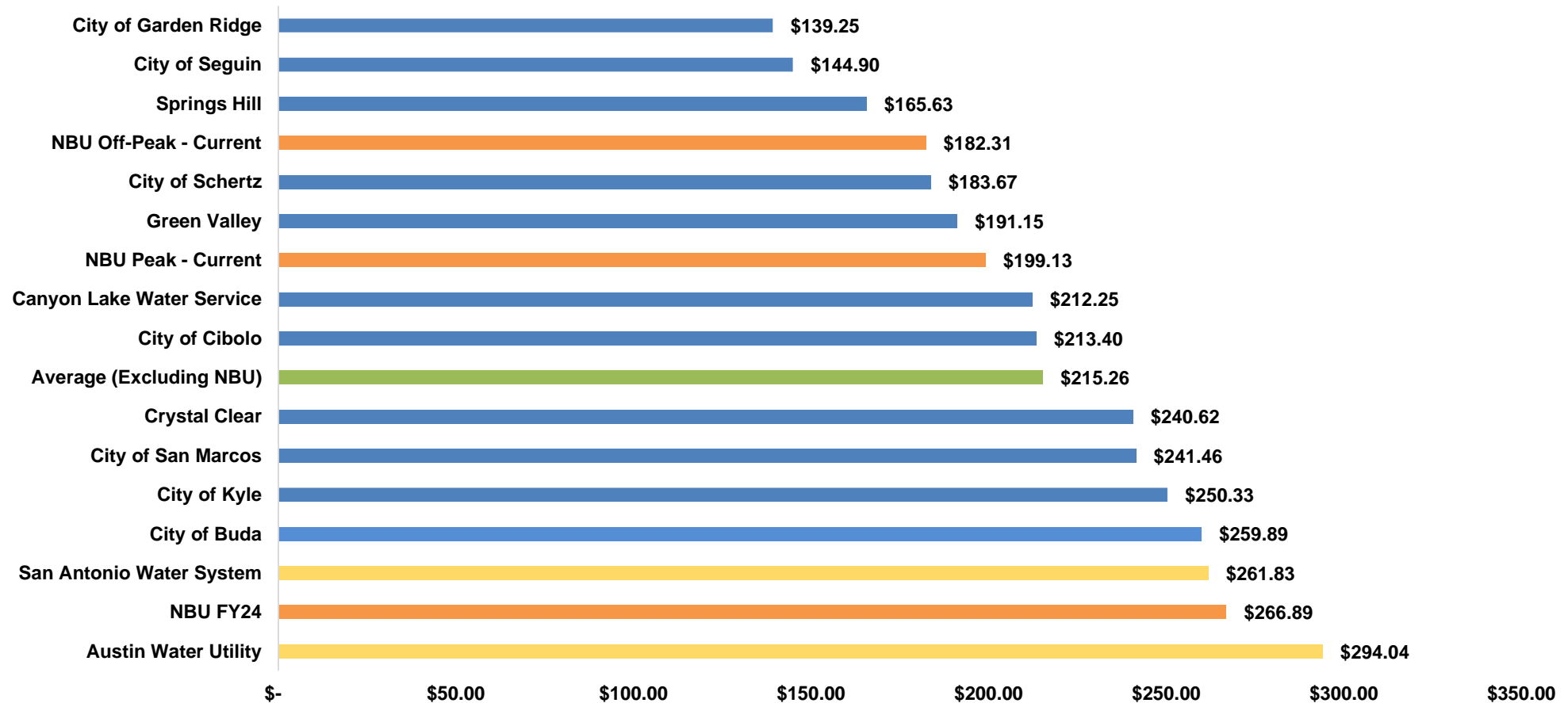
Charge	FY 2023	Bill ^{1,3}	FY 2024	Bill ^{1,3}	FY 2025	Bill ^{1,3}
NBU Delivery						
Water Usage (\$/Thousand Gallons)	Varies	\$117.50	Varies	\$215.95	Varies	\$229.30
Water Service Availability Charge	\$15.98	\$15.98	\$15.98	\$15.98	\$16.05	\$16.05
Pass Through						
Water Supply Fee ¹ (\$/Thousand Gallons)	\$2.79	\$48.83	\$1.84	\$34.96	\$1.84	\$34.96
Bill Total		\$182.31		\$266.89		\$280.31
Difference				\$84.59 (46.4%)		\$13.42 (5.0%)

Notes:

1. Assumes 25,000 gallons per month average consumption on 5/8" meter
2. Assumes planned decrease in Water Supply Fee (WSF) rate beginning in FY24, and assumes it will stay constant for FY25; note that the WSF does not apply to usage between 0 – 6,000 gallons for residential customers only
3. 26.6% of NBU water customers use between 6,001 – 25,000 gallons on average per month

Residential Water Bill Comparison

Moderate Use – 25,000 Gallons



Water Rate Recommendations

Irrigation Bill Impact – Moderate Use

Charge	FY 2023	Bill ¹	FY 2024	Bill ¹	FY 2025	Bill ¹
NBU Delivery						
Water Usage (\$/Thousand Gallons)	Varies	\$151.05	Varies	\$199.25	Varies	\$239.00
Water Service Availability Charge	\$15.98	\$15.98	\$15.98	\$15.98	\$16.05	\$16.05
Pass Through						
Water Supply Fee ¹ (\$/Thousand Gallons)	\$2.79	\$69.75	\$1.84	\$46.00	\$1.84	\$46.00
Bill Total		\$236.78		\$261.23		\$301.05
Difference				\$24.45 (10.3%)		\$39.82 (15.2%)

Notes:

1. Assumes 25,000 gallons per month average consumption on 5/8" meter
2. Assumes planned decrease in Water Supply Fee (WSF) rate beginning in FY24, and assumes it will stay constant for FY25; note that the WSF does not apply to usage between 0 – 6,000 gallons for residential customers only

Irrigation Bill Comparison

Moderate Use – 25,000 Gallons



Water Rate Recommendations

Multi-Unit Bill Impact – Average Use

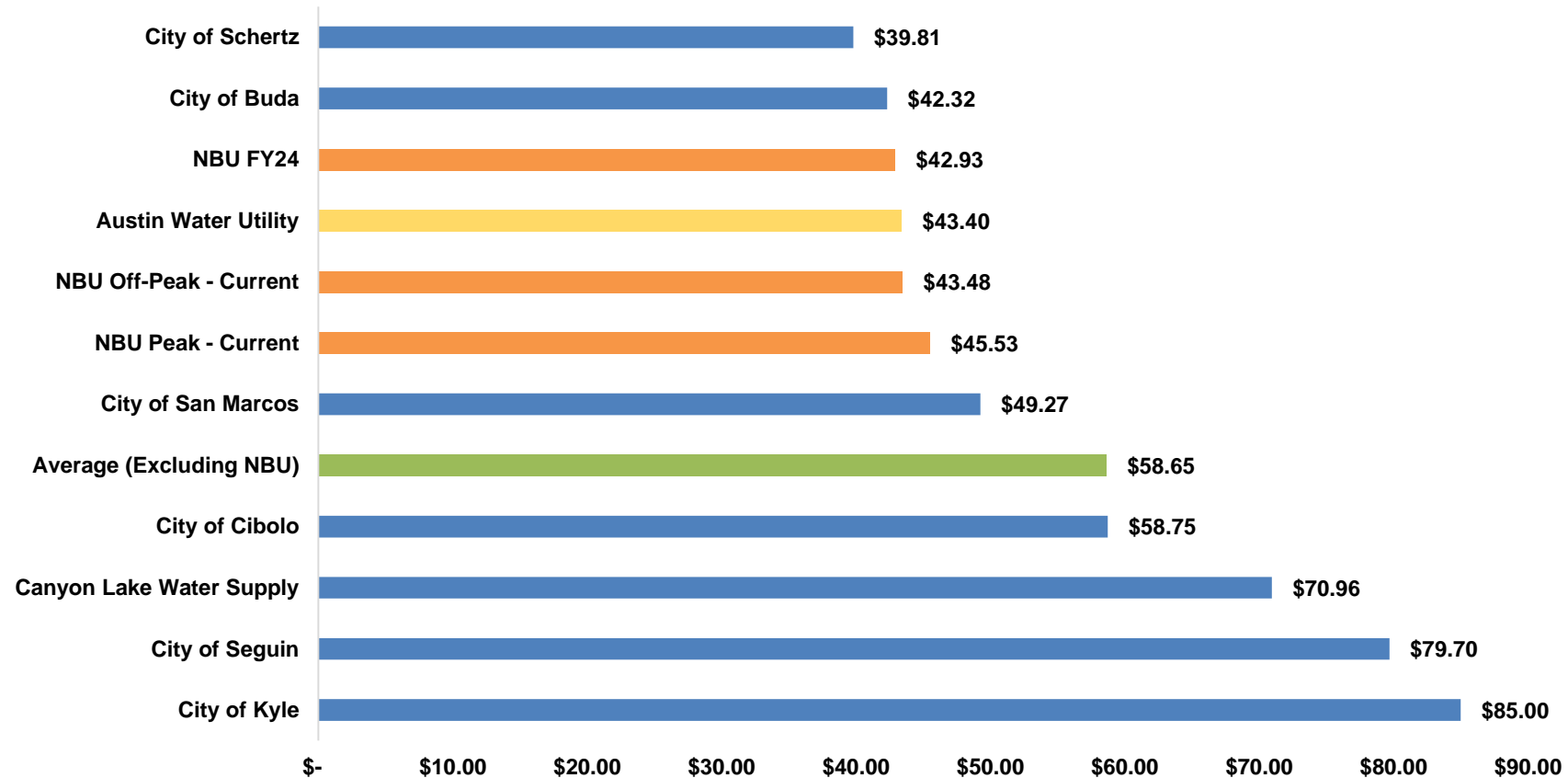
Charge	FY 2023	Bill ¹	FY 2024	Bill ¹	FY 2025	Bill ¹
NBU Delivery						
Water Usage (\$/Thousand Gallons)	\$2.71	\$13.55	Varies	\$42.93	Varies	\$47.75
Water Service Availability Charge	\$15.98	\$15.98	\$15.98	\$15.98	\$16.05	\$16.05
Pass Through						
Water Supply Fee ¹ (\$/Thousand Gallons)	\$2.79	\$13.95	\$1.84	\$9.20	\$1.84	\$9.20
Bill Total		\$43.48		\$42.93		\$47.75
Difference				(\$0.55) (-1.3%)		\$4.82 (11.2%)

Notes:

1. Assumes 5,000 gallons per month average consumption on 5/8" meter
2. Assumes planned decrease in Water Supply Fee (WSF) rate beginning in FY24, and assumes it will stay constant for FY25; note that the WSF does not apply to usage between 0 – 6,000 gallons for residential customers only

Multi-Unit Water Bill Comparison

Average Use – 5,000 Gallons



Water Rate Recommendations

Small General Service Bill Impact – Average Use

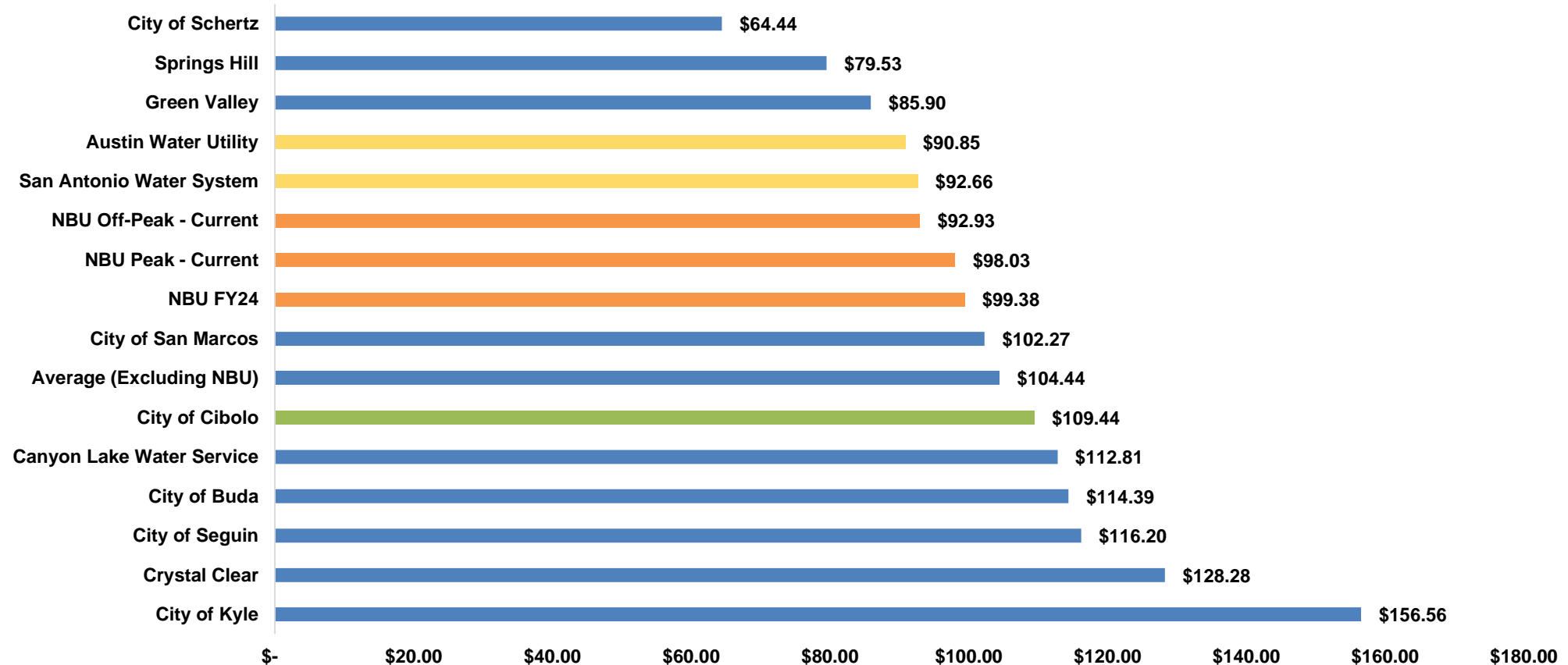
Charge	FY 2023	Bill ¹	FY 2024	Bill ¹	FY 2025	Bill ¹
NBU Delivery						
Water Usage (\$/Thousand Gallons)	Varies	\$38.55	Varies	\$55.25	Varies	\$60.73
Water Service Availability Charge	\$20.06	\$20.06	\$21.50	\$21.50	\$22.00	\$22.00
Pass Through						
Water Supply Fee ¹ (\$/Thousand Gallons)	\$2.79	\$34.32	\$1.84	\$22.63	\$1.84	\$22.63
Bill Total		92.93		\$99.38		\$105.36
Difference				\$6.45 (6.9%)		\$5.97 (6.0%)

Notes:

1. Assumes 12,300 gallons per month average consumption on 5/8" meter
2. Assumes planned decrease in Water Supply Fee (WSF) rate beginning in FY24, and assumes it will stay constant for FY25; note that the WSF does not apply to usage between 0 – 6,000 gallons for residential customers only

Small General Service Water Bill Comparison

Average Use – 12,300 Gallons



Water Rate Recommendations

Large General Service Bill Impact – Average Use

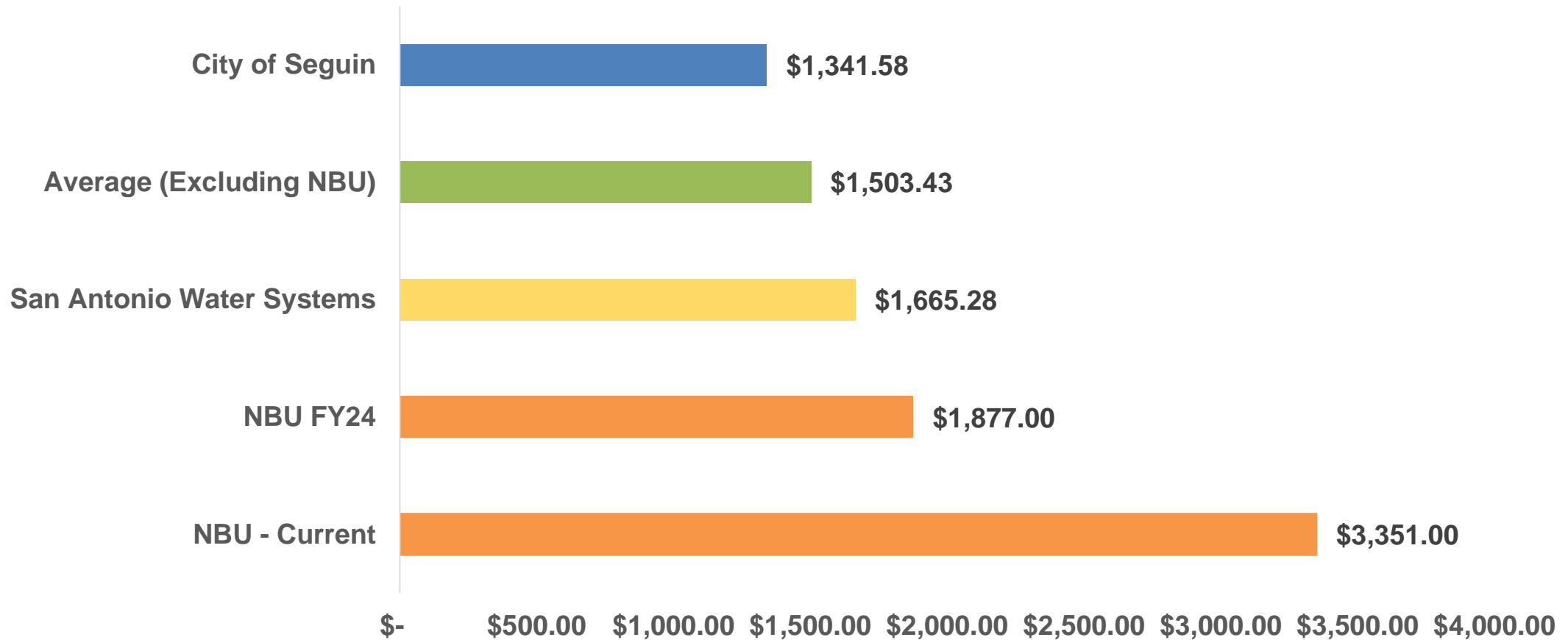
Charge	FY 2023	Bill ¹	FY 2024	Bill ¹	FY 2025	Bill ¹
NBU Delivery						
Water Usage (\$/Thousand Gallons)	\$2.40	\$720.00	\$3.25	\$975.00	\$3.75	\$1,125.00
Water Service Availability Charge	\$1,794.11	\$1,794.11	\$350.00	\$350.00	\$400.00	\$400.00
Pass Through						
Water Supply Fee ¹ (\$/Thousand Gallons)	\$2.79	\$837.00	\$1.84	\$552.00	\$1.84	\$552.00
Bill Total		\$3,351.11		\$1,877.00		\$2,077.00
Difference				(\$1,474.11) (-44.0%)		\$200.00 (10.7%)

Notes:

1. Assumes 300,000 gallons per month average consumption on 5/8" meter
2. Assumes planned decrease in Water Supply Fee (WSF) rate beginning in FY24, and assumes it will stay constant for FY25; note that the WSF does not apply to usage between 0 – 6,000 gallons for residential customers only

Large General Service Bill Comparison

Average Use – 300,000 Gallons



Wastewater Cost of Service and Rate Design

FY 2024/2025 Sewer Rate Design

- No changes to customer classifications
- Average System Revenue Increase
 - 2024: 7.3% | 2025: 7.3%
- Drivers: ~87% capital; ~4% personnel; ~9% other O&M
- Sewer comprised of three classes: Residential, Multi-Family, Commercial, no change to any class but residential and Multi-Family 2-4

Wastewater Cost of Service Results

Line	Customer Class	Allocated FY 2024 Cost of Service	2024 Existing Rate Revenues	Revenue Over/(Under) Recovery		Percent Increase for Full Cost Recovery
				Amount	Percent	
		(\$)	(\$)	(\$)	(%)	(%)
1	Residential	\$ 23,518,324	\$ 20,784,532	\$ (2,733,791)	88%	13.15%
2	Commercial	\$ 12,162,439	\$ 12,324,783	\$ 162,344	101%	-1.32%
3	Multi-Unit 2-4	\$ 197,359	\$ 193,514	\$ (3,845)	98%	1.99%
4	Multi-Unit 5+	\$ 4,217,293	\$ 4,064,752	\$ (152,541)	96%	3.75%
5	Total	\$ 40,095,415	\$ 37,367,581	\$ (2,727,833)	93%	7.3%

Wastewater Rate Recommendations by Class

Total Revenue Change Needed Per Class by Year

Class	FY 2024	FY 2025
Residential	10.5%	10.5%
Multi-Unit Res 2-4	10.5%	10.5%
Multi-Unit Res 5+	0.0%	0.0%
Multi-Unit Res 5+ COD	0.0%	0.0%
Multi-Unit Res 5+ TSS	0.0%	0.0%
Commercial	0.0%	0.0%
Commercial COD	0.0%	0.0%
Commercial TSS	0.0%	0.0%
System Average	7.3%	7.3%

Wastewater Rate Recommendations

Residential/Multi-Unit 2-4 Bill Impact – Average Use³

Charge	FY 2023	Bill ¹	FY 2024	Bill ¹	FY 2025	Bill ¹
NBU Delivery						
Wastewater Usage (\$/Thousand Gallons)	\$6.47	\$29.76	\$7.15	\$32.89	\$7.90	\$36.34
Wastewater Service Availability Charge	\$27.52	\$27.52	\$30.41	\$30.41	\$33.60	\$33.60
Bill Total		\$57.28		\$63.30		\$69.94
Difference				\$6.02 (10.5%)		\$6.64 (10.5%)

Notes:

1. Assumes 300,000 gallons per month average consumption on 5/8" meter
2. Assumes planned decrease in Water Supply Fee (WSF) rate beginning in FY24, and assumes it will stay constant for FY25; note that the WSF does not apply to usage between 0 – 6,000 gallons for residential customers only
3. Note: Residential and Multi-Unit 2-4 are the only rate classes with a wastewater rate adjustment. Multi-Unit 2-4 is included in the Residential rate class

Residential/Multi-Unit 2-4 Wastewater Bill Comparison

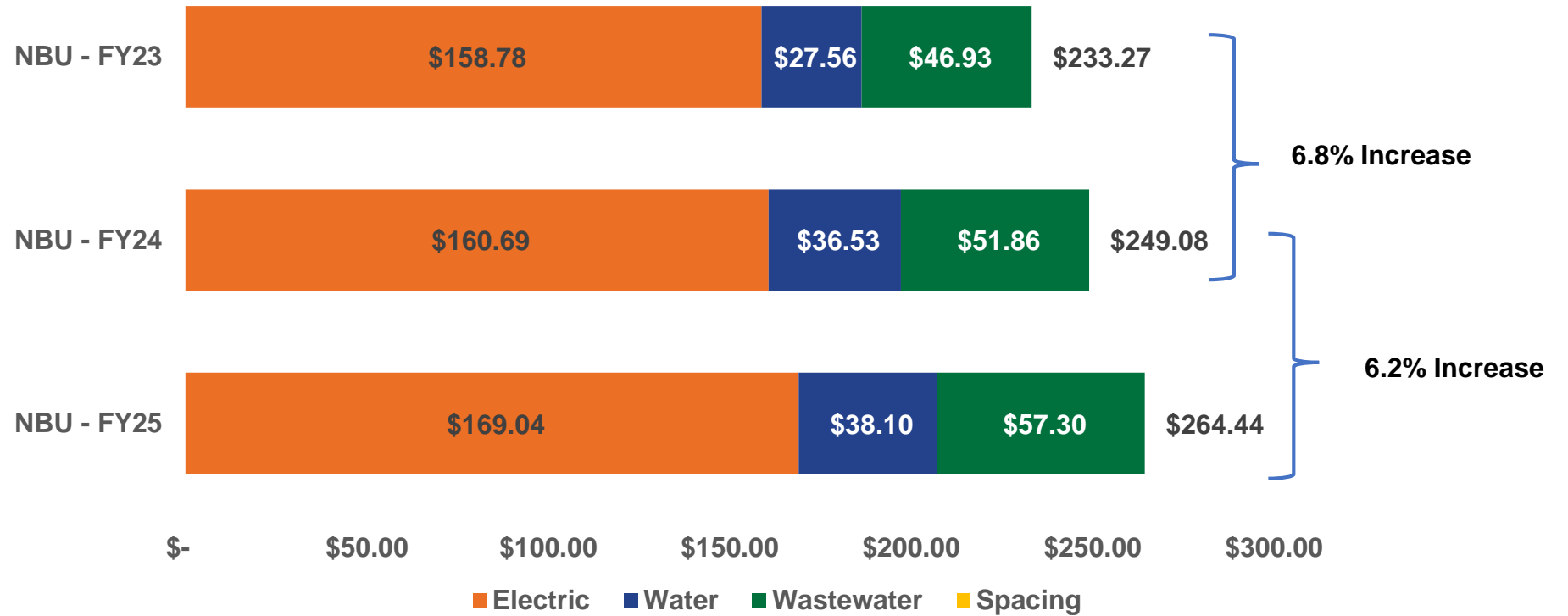
Average Use – 4,600 Gallons



Note: Residential and Multi-Unit 2-4 are the only rate classes with a wastewater rate adjustment. Multi-Unit 2-4 is included in the Residential rate class.



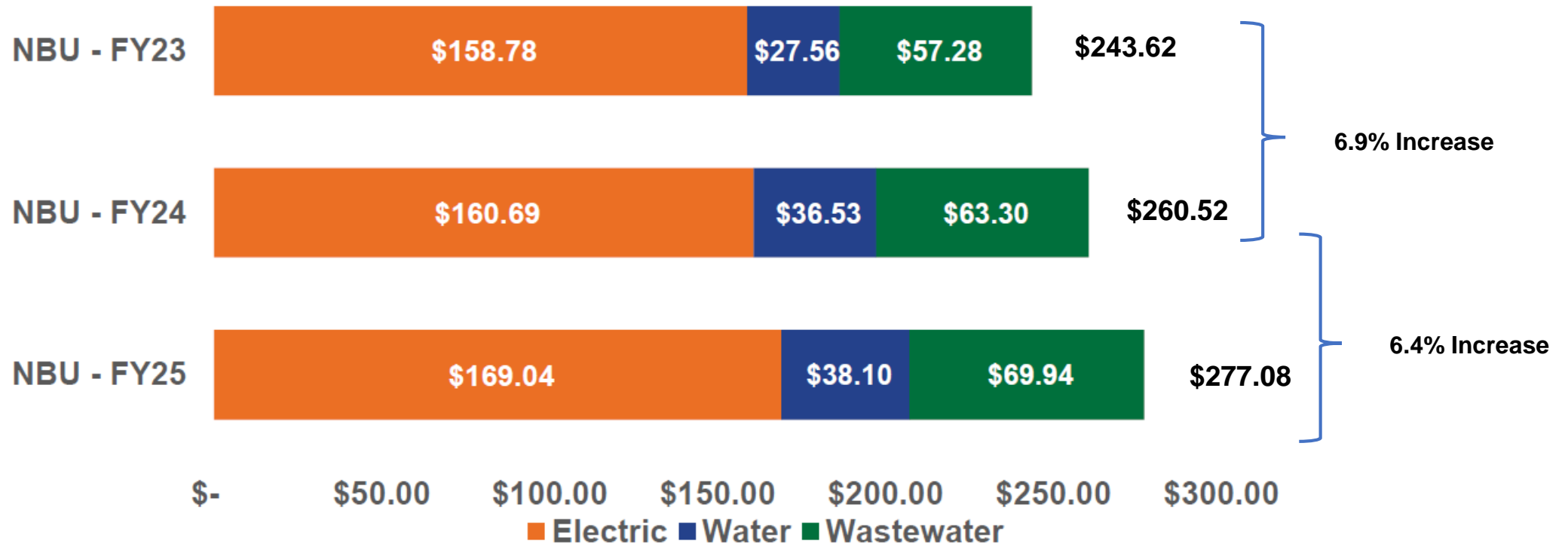
Residential Bill Yearly Increase Low Water Use



Note: Based on 1,200 kWh for electric, 3,000 gallons for water, and 3,000 gallons for wastewater

Residential Bill Yearly Increase

Average Water Use



Note: Based on 1,200 kWh for electric, 6,000 gallons for water, and 4,600 gallons for wastewater

Fitch Ratings Comparisons

Fitch Affordability Benchmarks

Stronger

Residential charges for combined water/sewer utilities less than or equal to 1.2% of median household income (MHI)

Approximately 30% or more of revenues recovered from fixed base charges

Mid-range

Residential charges for combined water/sewer utilities less than or equal to 1.5% of MHI

Approximately 15% or more of revenues recovered from fixed base charges

Residential charges based upon 6,000 gallons for Water and 4,600 gallons for Wastewater.

	% of MHI	% from Fixed Charge
NBU	1.47%	35%
Stronger	$\leq 1.2\%$	$\geq 30\%$
Mid-Range	$\leq 1.5\%$	$\geq 15\%$

Customer Bill Assistance

NBU funds an assistance and discount program for its customers

- Based on feedback from the RAC, NBU has increased its contribution to those funds for the 5-Year Plan by approximately 5.3% per year to closely align with the projected average bill increases of ~6.7% on average (with all three services for low use water)

Community Assistance/Low Income Discount Program Budgeted \$'s	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
FY2023 – Approved	\$416,000	\$416,000	\$416,000	\$416,000	N/A
FY2024 – Proposed	\$441,000	\$466,000	\$489,000	\$514,000	\$543,000
Proposed – % Increase YoY	N/A	5.7%	4.9%	5.1%	5.6%

- NBU is in the process of realigning the two programs to better serve customers and will bring expanded recommendations to the Board in FY24

Public Involvement Process

Public Involvement Process

Date	Meeting	Topic
June 1, 2022	RAC Public Meeting	Initial Meeting for Establishment of RAC
August 10, 2022	RAC Public Meeting	Rates/Cost of Service 101
August 16, 2022	RAC Site Tour	NBU Facilities
September 14, 2022	RAC Public Meeting	Background and Intro to Revenue/Revenue Requirements
October 19, 2022	RAC Public Meeting	Revenue/Revenue Requirements
November 1, 2022	New Comers Club	RAC Community Presentation
November 16, 2022	RAC Public Meeting	Water/Wastewater COS
December 7, 2022	RAC Public Meeting	Electric COS
December 14, 2022	RAC Public Forum	Public Forum
January 11, 2023	RAC Public Meeting	Electric Rates and Rate Design
January 18, 2023	RAC Public Meeting	Water/Wastewater Rates and Rate Design
February 1, 2023	RAC Public Meeting	Final Review and Wrap-Up
February 2, 2023	NBU Board Strategic Retreat	RAC Preliminary Rates
February 7, 2023	NB Downtown Association	RAC Community Presentation
February 15, 2023	Retirees Are Progressive	RAC Community Presentation
February 21, 2023	Chamber Board Meeting	RAC Community Presentation
February 23, 2023	NBU Board Meeting	Preliminary Rates
March 8, 2023	Rotary Club	RAC Community Presentation
March 20, 2023	Realtor/Lender Associates	RAC Community Presentation
March 27, 2023	NBU Budget Workshop	RAC Policy Areas and Feedback
March 30, 2023	NBU Board Meeting	Rate Approval

Upcoming Dates

Date	Action
April 3, 2023	Public Hearing and First Reading of Ordinance Revision
April 10, 2023	Second Reading of Ordinance Revision
August 1, 2023	Effective Date of FY 2024 Rates
August 1, 2024	Effective Date of FY 2025 Rates

QUESTIONS?
