

Water Services

Brief History and Looking Forward

OVERVIEW

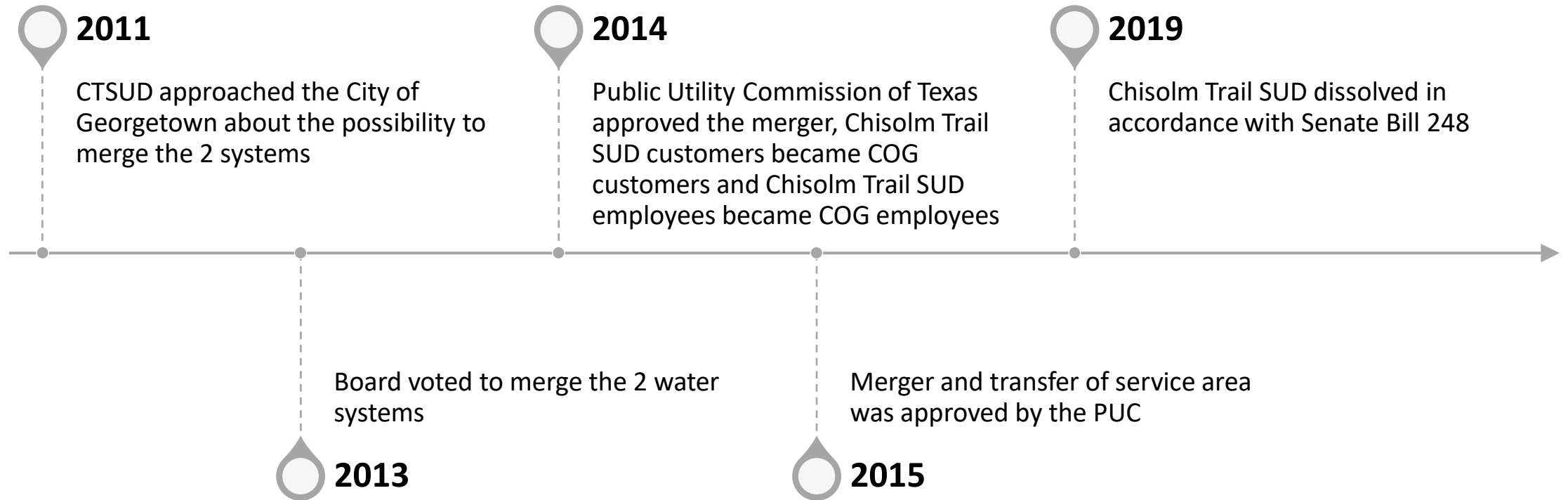
- Policy
- Background
- 2018 Rate Study
- Water Planning
- Capital Improvement Projects

FISCAL AND BUDGETARY POLICY

- A rate study will be conducted every 3 years to review rate methodology and ensure revenues will meet future needs. All enterprise rates will be based on standardized cost of service methodologies and conservation goals.
- Working capital reserves should be 25% or ninety (90) days of operating expenses, net debt service and long-term water contract costs.
- Also we are required by policy to have 90 days contingency for operating costs
- Bond Coverage Ratio – 1.5x coverage of self-supported debt
- Last rate study was in 2018

BACKGROUND-

Chisolm Trail Special Utility District



CUSTOMERS

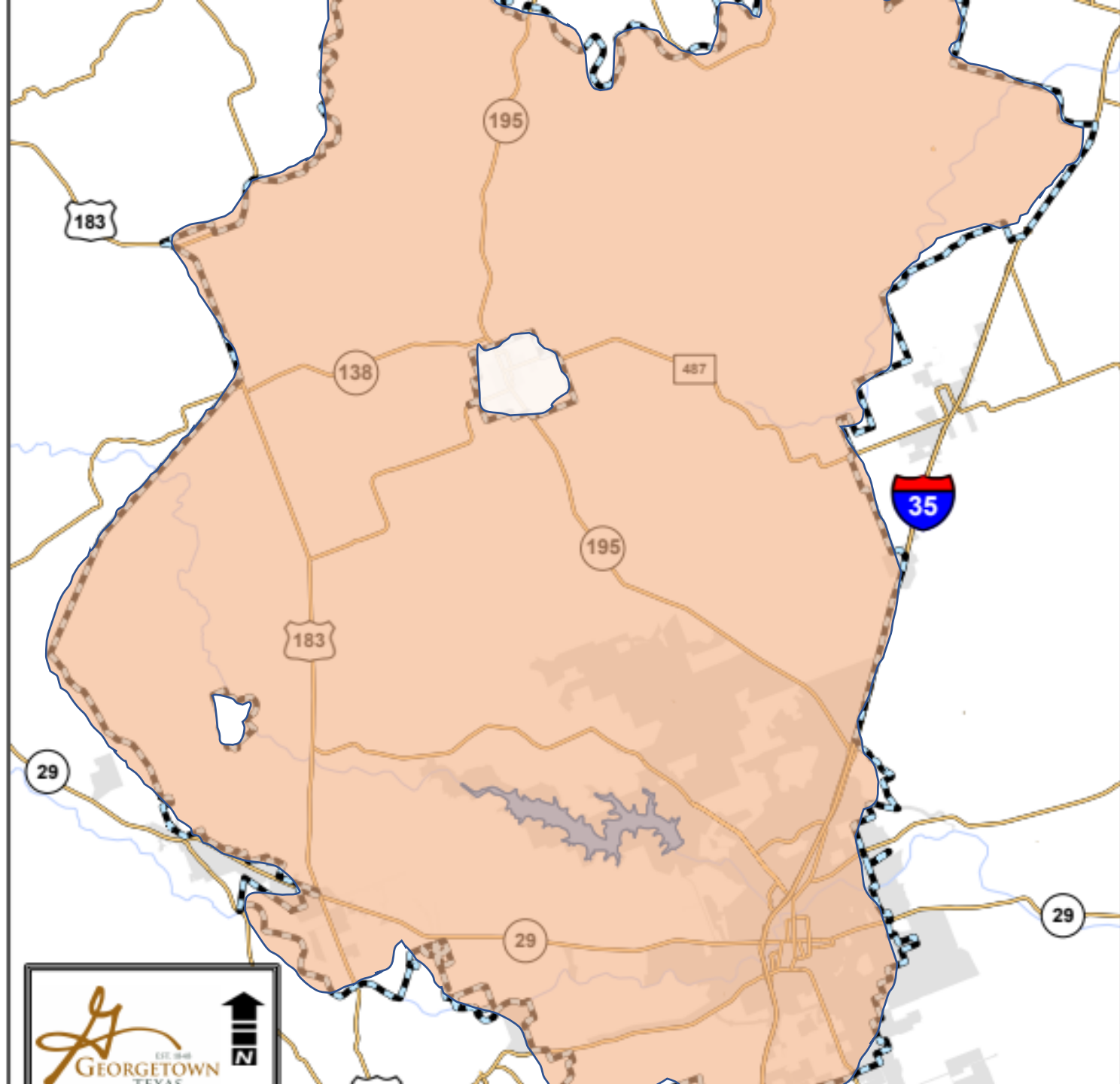
Prior to CTSUD

- 23,500 customers
- ~75 square miles of utility coverage

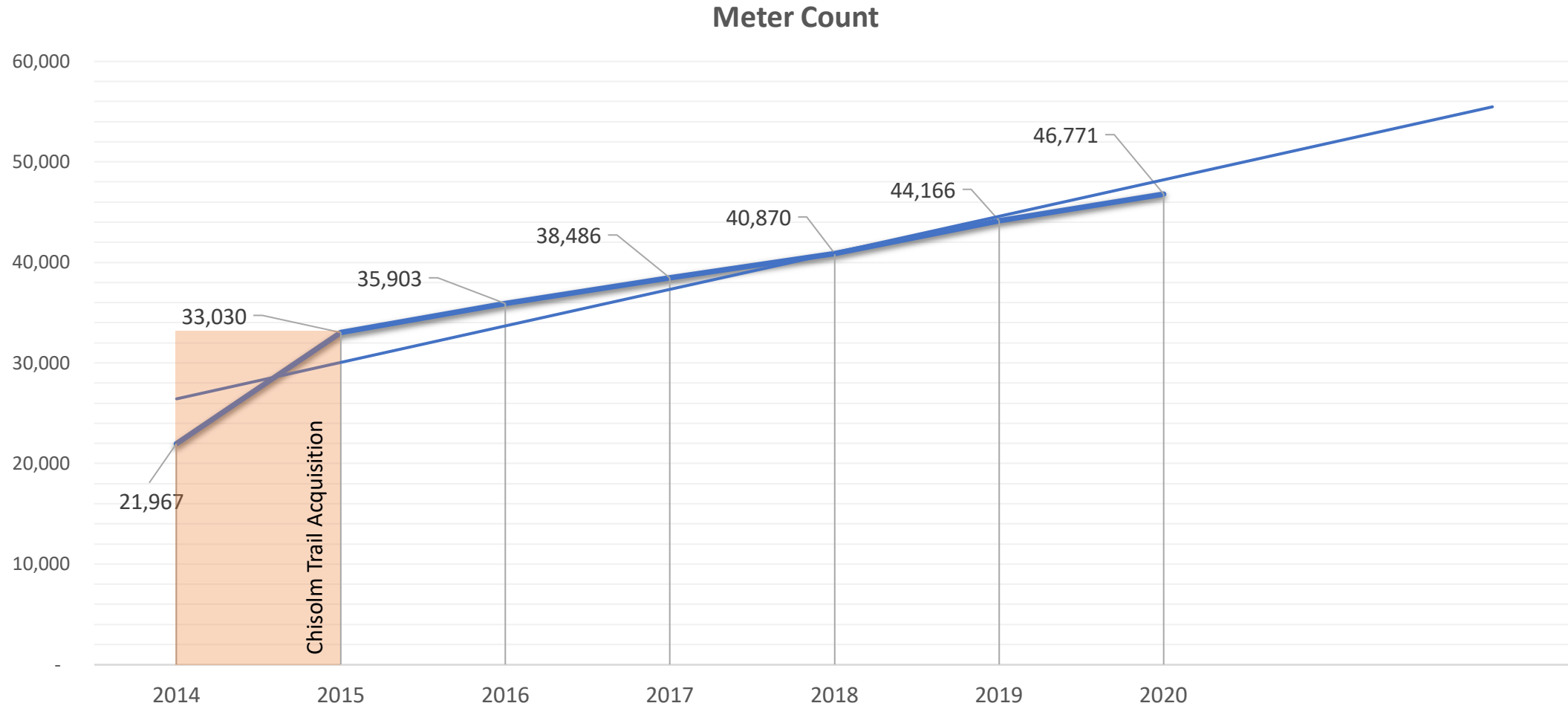
CTSUD Acquired

- Gained 7,633 customers
- Gained 375 square miles of utility coverage

WATER UTILITY COVERAGE



TRENDS



- On average ~3,000 number of new connects per year

CONSERVATION AND WATER PLANNING

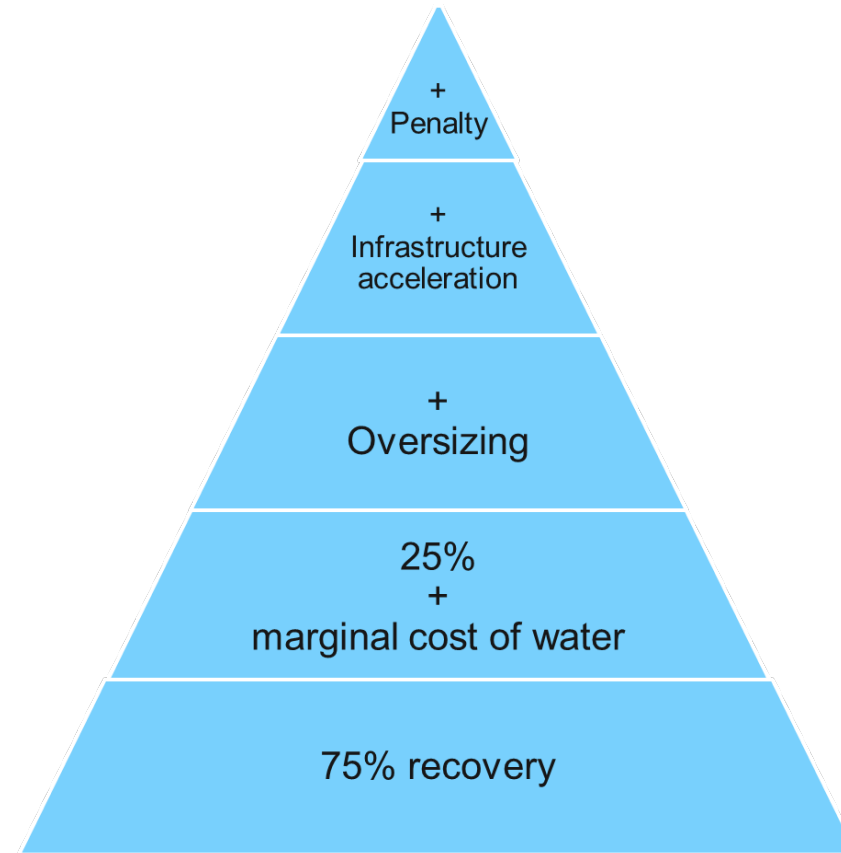
WATER RATE OVERVIEW

- **Considerations and Inputs**

- Advancement of CIP Plan
- Promote efficient water use via tiers

- **Water Rate Breakdown**

- Base Charges
 - 75% of fixed costs recovered in base rate
- Volumetric Charges
 - 25% of fixed costs recovered in first tier
 - Second through fourth tiers covers
 - Oversizing and acceleration
 - Conservation initiatives
 - Fifth tier for excessive use



CURRENT RATES – WATER RESIDENTIAL

- **Base Rates** (effective 01/01/2014)

- ¾ inch meter
 - \$23.00 inside city
 - \$27.50 outside city

- **Volumetric Rates** (effective 01/01/19)*Cost is per 1,000 gallons

(1,000 gallons)	Volumetric Rate
0-10	\$1.75
11-20	\$2.40
21-40	\$4.00
41-60	\$6.50
61 and above	\$8.50

CURRENT RATES – WATER NON-RESIDENTIAL

Non-Residential Volumetric Water Rates (effective 01/01/19)*Cost is per 1,000 gallons				
	Meter Size	Tier 1 Rate	Tier 2 Rate	Tier 2 Threshold
Small Commercial	<2"	\$2.40	\$6.50	300,001 gallons
Large Commercial	2"	\$2.40	\$6.50	600,001 gallons
Large Commercial	3"	\$2.40	\$6.50	900,001 gallons
Large Commercial	4"	\$2.40	\$6.50	4,000,001 gallons
Large Commercial	6"	\$2.40	\$6.50	6,000,001 gallons
Large Commercial	8"	\$2.40	\$6.50	8,000,001 gallons
Manufacturing	<8"	\$2.40		
Municipal Interruptible		\$2.40		
Restaurant		\$2.40		
Evaporative Cooling		\$2.40		
Fire Flow		\$2.40		
Irrigation Only		\$4.00	\$8.50	500,001 gallons

CURRENT RATES – WASTEWATER

Wastewater Rate Schedule (effective October 1st, 2019)

	Customer Charge Inside (per month)	Volumetric Chg (per 1000 gals)	Customer Charge Out (per month)	Volumetric Chg (per 1000 gals)
Residential Service Single family / Domestic use only	\$32.00*	N/A	\$36.75*	N/A
Small Commercial Service 4" sewer line / 3/4" wtr mtr / 10 fixtures or less / must be requested in writing	\$32.00	N/A	\$36.75	N/A
Commercial Service 6" or smaller sewer line	\$48.40	\$2.75	\$55.65	\$3.15
Large Commercial Service 8" or larger sewer line	\$85.95	\$2.75	\$98.85	\$3.15
High Strength Commercial BOD over 250 / food processing or high level of oil or chemicals in the discharge	\$48.40	\$4.50	\$55.65	\$5.20
Multi-Family Service Residential housing with three or more individual dwelling units per water meter	\$114.95	\$2.75	\$132.20	\$3.15

*Residential low-income discount of 20% is available to customers who can provide us with verifiable proof of participation in the Medicaid Program by a permanent resident in the household.

WATER PLANNING

- **Water Resources Planning**

- Supply
 - Surface Water
 - Ground Water
 - Conservation
- Infrastructure
 - Lake Georgetown
 - BRA Pipeline
 - Wells
- State Water Plan
 - Updated every 5 years
 - 50-year planning horizon

- **System Capacity Planning**

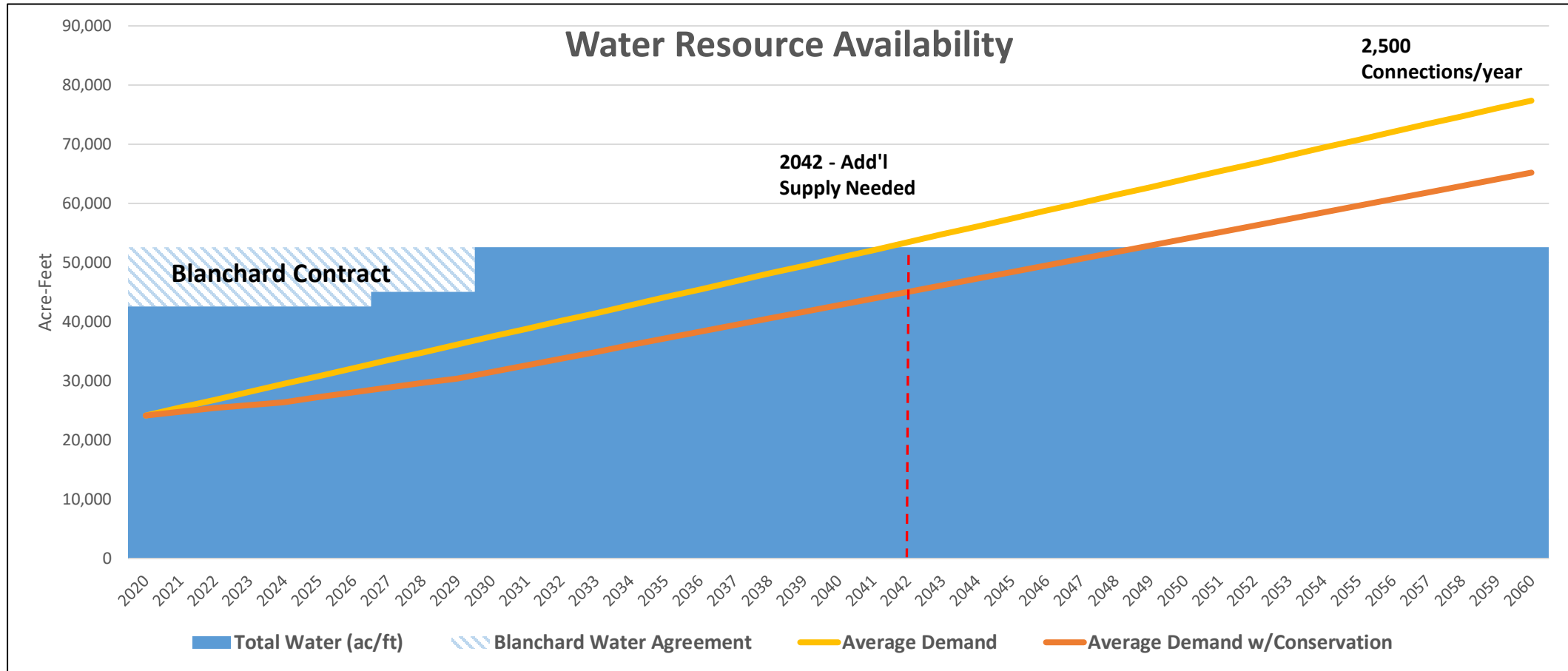
- Priorities
 - Domestic use
 - Fire flow
 - Outdoor use
- Infrastructure
 - Treatment Plants
 - Pumps
 - Water Lines
 - Storage Tanks
- Water Master Plan
 - Updated every 5 years
 - 20-year planning horizon
 - Outlines CIP needs

WATER PLANNING

- **Current Resources and Capacity**

- Water Supply – 53,795 ac/ft of raw water
 - Surface Supply - 45,707 ac/ft
 - Lake Georgetown – 6,720 ac/ft
 - Lake Stillhouse Hollow – 38,987 ac/ft
 - Groundwater Supply – 6,888 ac/ft (Edwards Aquifer)
- Water Treatment Capacity – 47mgd
 - Lake WTP – 28.6mgd
 - Park WTP – 6.2mgd
 - Southside WTP – 3.2mgd
 - Domel WTP – 3.0mgd
 - Round Rock Interconnection – 3.0mgd
 - (Additional 3mgd available w/ infrastructure improvements)

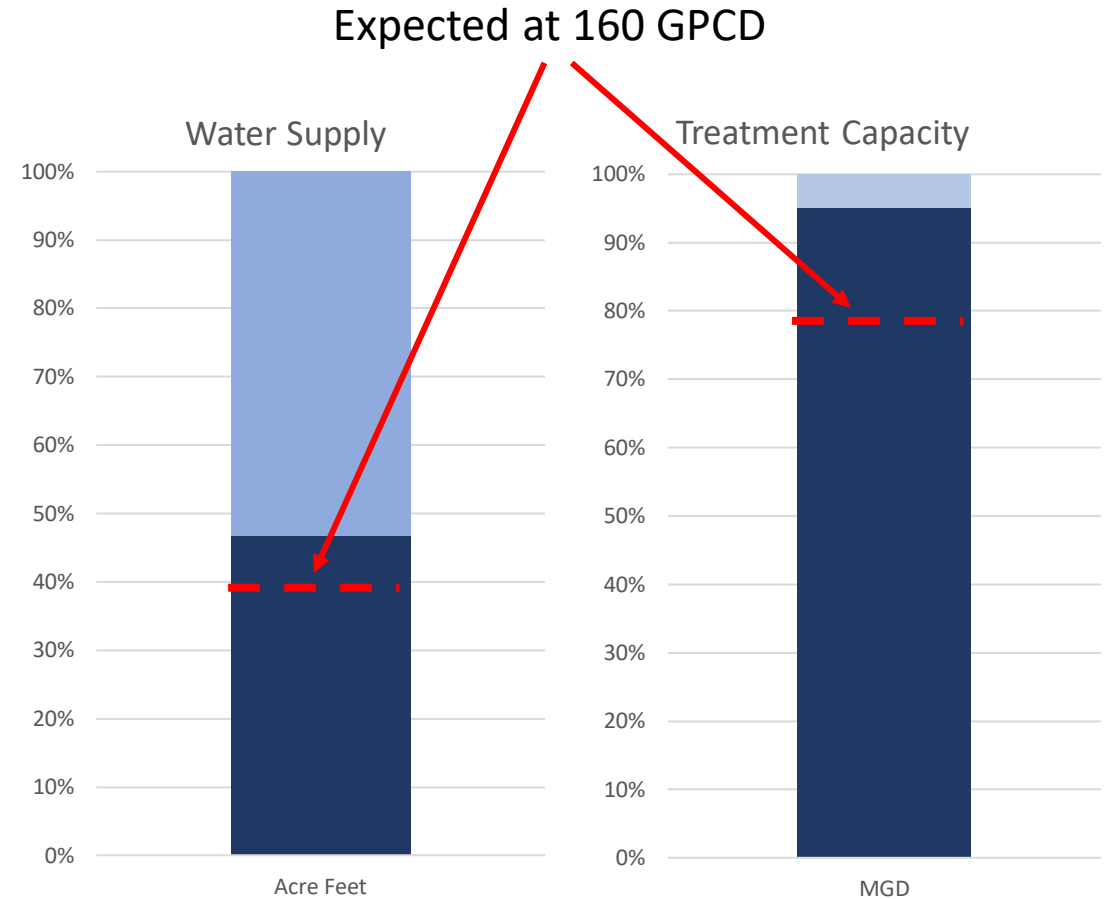
WATER PLANNING



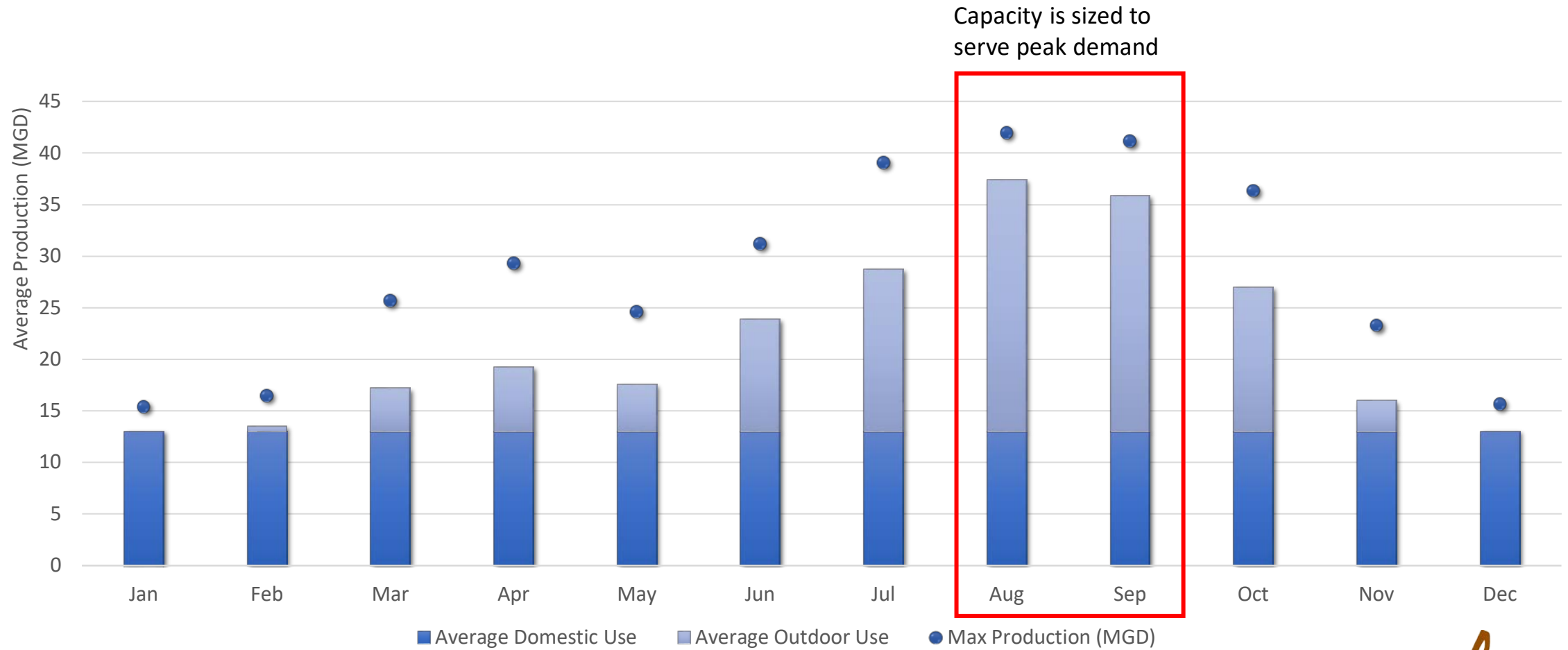
WATER USE TRENDS

- **Summer Impacts**

- Continued to see high growth
 - Nearly 3,300 new metered water connections / 7.95% growth
- High temperatures through September prolonged high use
- Entered into Drought Contingency Plan
 - Treatment capacity threshold met

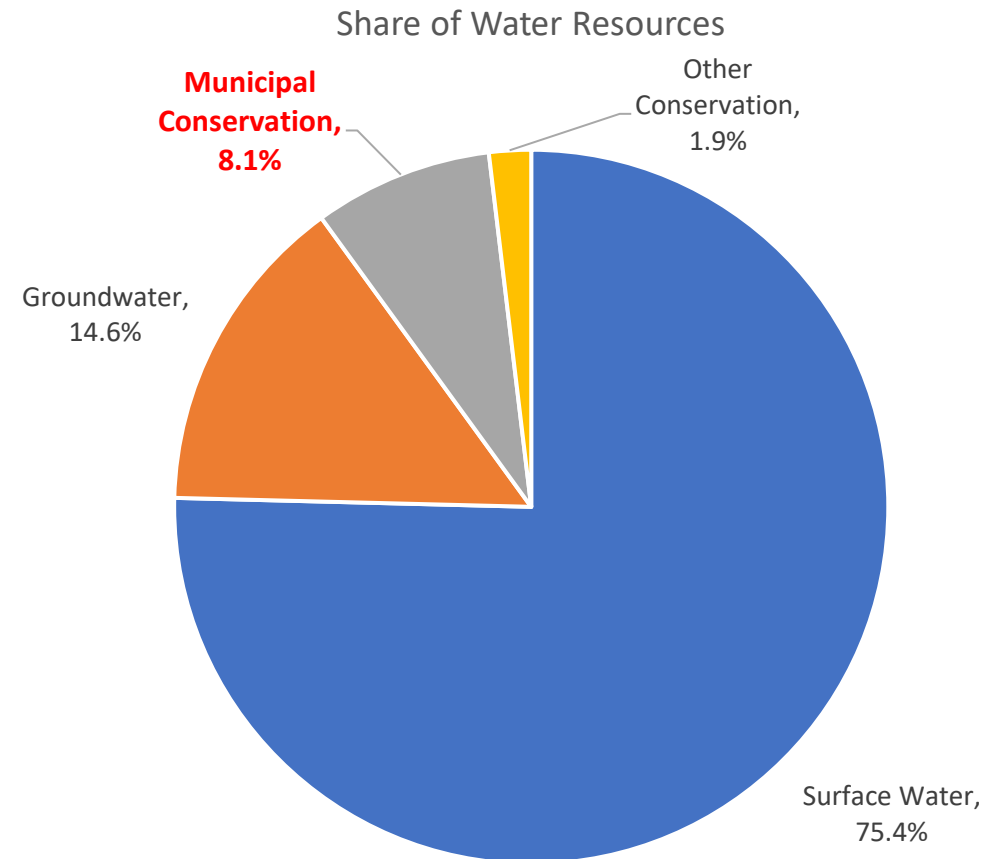


WATER USE TRENDS



Water Conservation in Georgetown

- **Conservation is a source of future water supply.**
 - More cost-effective than developing new surface or groundwater resources.
 - TWDB projects by 2030, 8.1% of new water resources in Williamson County will come from conservation efforts.
 - Long term we need to use less water per person than we do today.



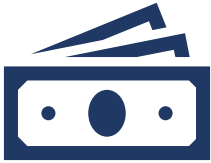
2018 WATER RATE STUDY

2018 RATE STUDY

- **Key Issues Identified**

- Descending Financial Performance
 - Rates will not keep up with costs without adjustments
- Wholesale Supplier Cost Increases
- Rapid Growth, Capital Projects and New Debt Service
 - \$195M in Capital Project needs between FY 2019 and FY 2023

2018 RECOMMENDATIONS



REVENUE SUFFICIENCY

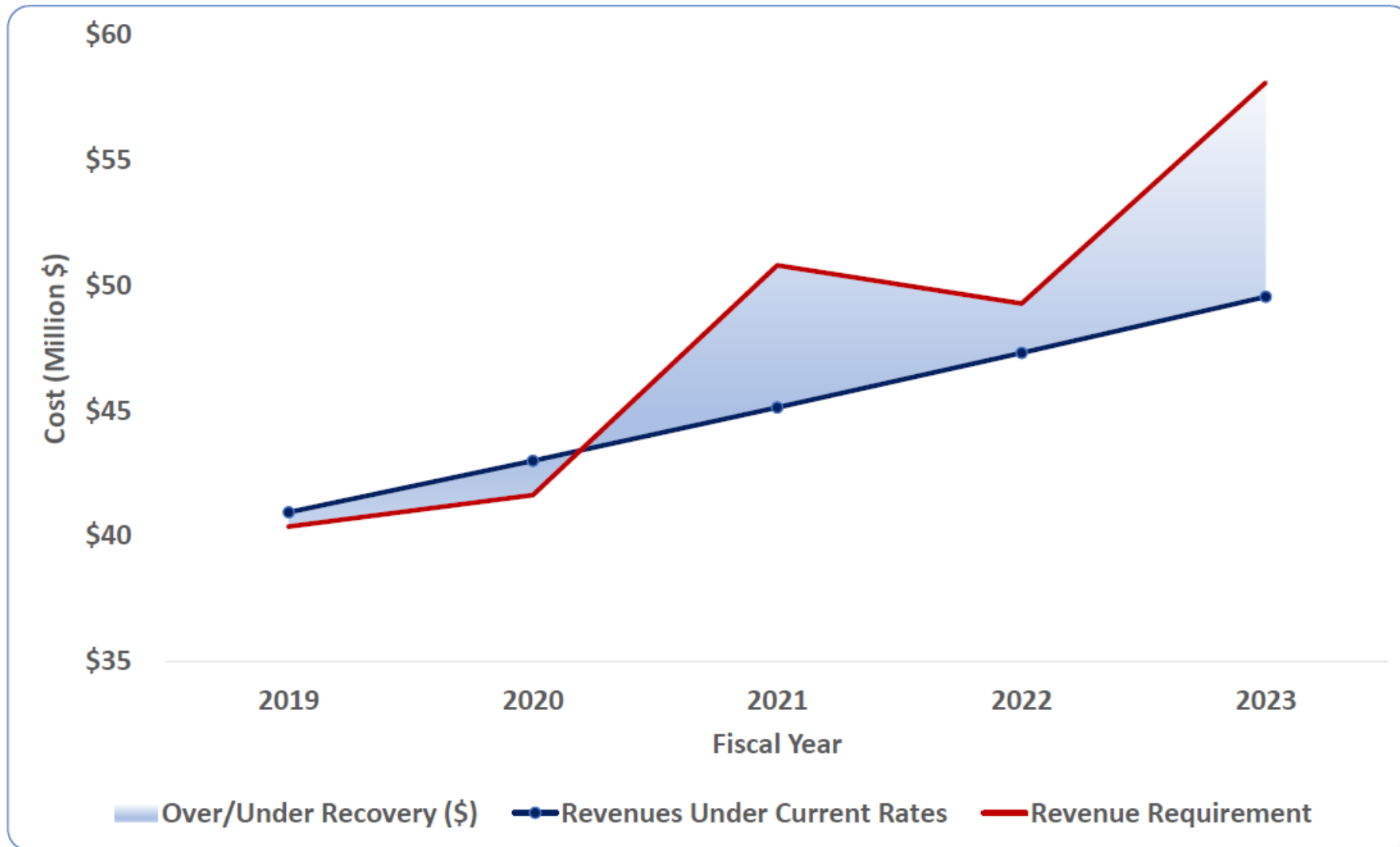


MINIMIZE RATE SHOCK TO
CUSTOMERS BY PHASING IN RATES



POTENTIAL RATE DESIGN
ALTERNATIVES

2018 COMBINED REVENUE PERFORMANCE – CURRENT RATES



2018 PROPOSED RATE INCREASES

	2019	2020	2021	2022	2023
Water	-	-	13.00%	-	15.38%
Wastewater	4.40%	-	12.50%	-	16.67%

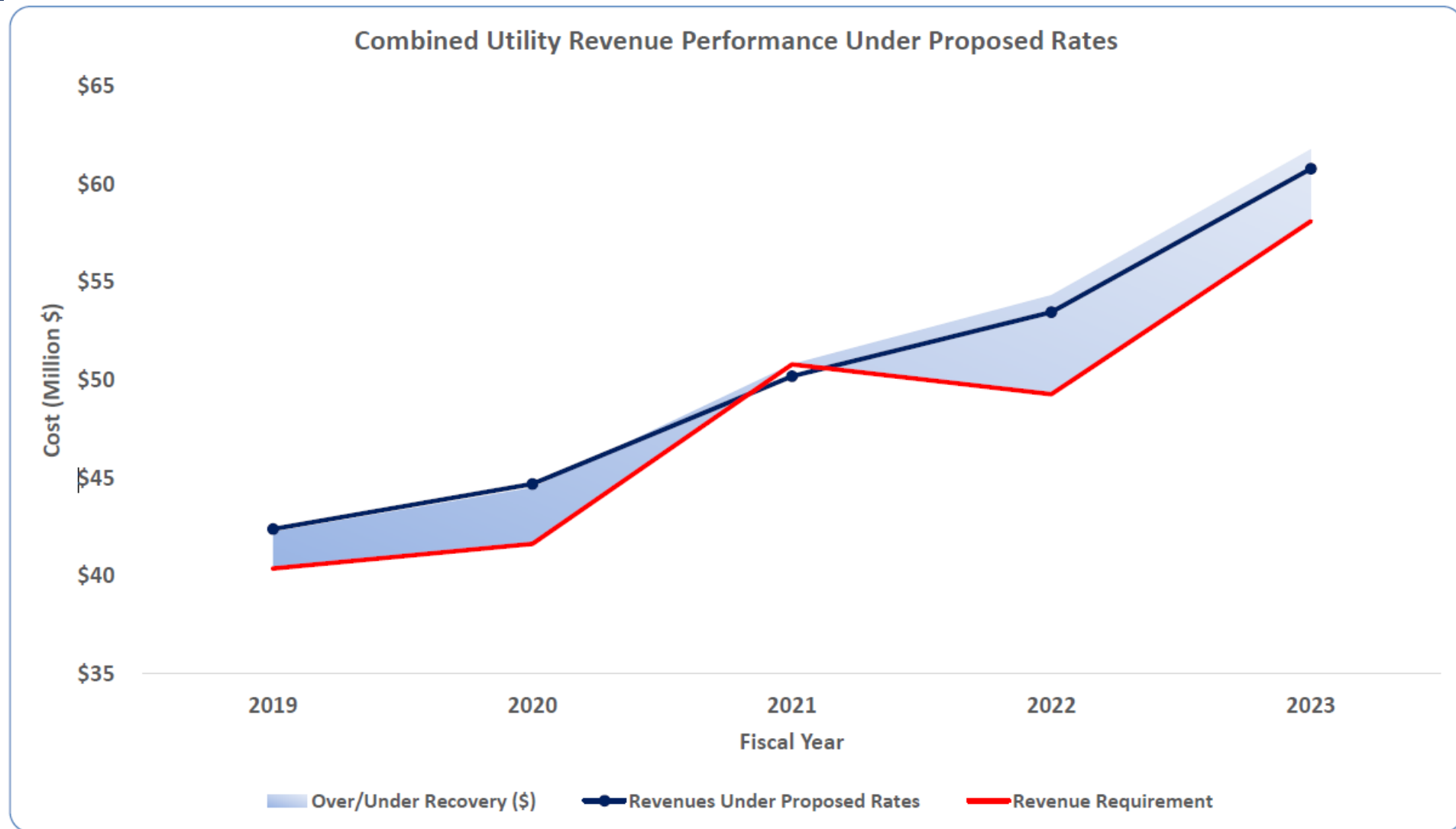
- **Water**

- Rate increases adjust both minimum and volumetric rates across all customer classes by the % above
- Proposed Rate Design changes effective FY 2019 yields an estimated 17% increase in rate revenues
 - Irrigation Block
 - Base Rate multipliers
 - Possibly offset with behavior changes

- **Wastewater**

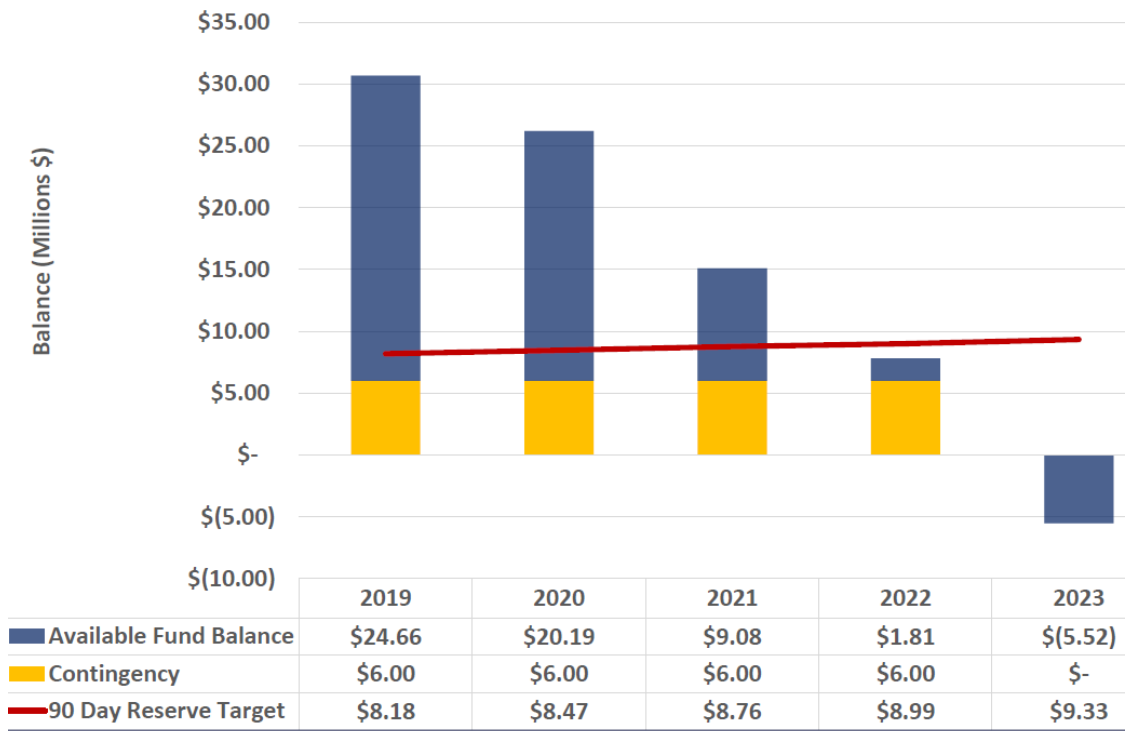
- Rate increases adjust both minimum and volumetric rates across all customer classes by the % above

2018 COMBINED REVENUE PERFORMANCE – PROPOSED RATES



2018 COMBINEED FUND PERFORMANCE- CURRENT RATES VS. PROPOSED RATES

2018 Current Rates



2018 Proposed Rates



WATER PROPOSED FIXED RATE DESIGN METER EQUIVALENCIES

Meter Size	Current	Proposed Charge	Turbine Factors
5/8"	\$15.50	\$15.50	0.674
3/4"	\$23.00	\$23.00	1.000
1"	\$38.50	\$38.50	1.674
1 ½"	\$76.50	\$76.50	3.326
2"	\$122.50	\$153.34	6.667
3"	\$245.50	\$368.00	16.000
4"	\$383.50	\$644.00	28.000
6"	\$766.50	\$1,410.00	61.304
8"	\$1226.50	\$2,450.00	106.522

Residential Volumetric Rates remain unchanged

WATER PROPOSED VOLUMETRIC RATE DESIGN COMMERCIAL (LESS THAN 3")

Small Commercial (<2" Meter)	Current	Proposed (FY 2019)
0 – 300,000 gallons	\$2.40	\$2.40
300,001 + gallons	\$2.40	\$6.50
Large Commercial (2" Meter)	Current	Proposed (FY 2019)
0 – 600,000 gallons	\$2.40	\$2.40
600,001 + gallons	\$2.40	\$6.50
Large Commercial (3" Meter)	Current	Proposed (FY 2019)
0 – 900,000 gallons	\$2.40	\$2.40
900,001 + gallons	\$2.40	\$6.50

WATER PROPOSED VOLUMETRIC RATE DESIGN

COMMERCIAL (4", 6", 8")

Commercial (4" Meter)	Current	Proposed (FY 2019)
0 – 4,000,000 gallons	\$2.40	\$2.40
4,000,001 + gallons	\$2.40	\$6.50
Commercial (6" Meter)	Current	Proposed (FY 2019)
0 – 6,000,000 gallons	\$2.40	\$2.40
6,000,001 + gallons	\$2.40	\$6.50
Commercial (8" Meter)	Current	Proposed (FY 2019)
0 – 8,000,000 gallons	\$2.40	\$2.40
8,000,001 + gallons	\$2.40	\$6.50
Industrial**	Current	Proposed (FY 2019)
0+ gallons	\$2.40	\$2.40

***Potential Industrial class for one customer*

2018 WASTEWATER PROPOSED FIXED RATES

	Current	2019	2020	2021	2022	2023
Residential	\$30.65	\$32.00	\$32.00	\$36.00	\$36.00	\$42.00
Small Commercial	\$30.65	\$32.00	\$32.00	\$36.00	\$36.00	\$42.00

*No Volumetric rates on these customers

2018 WASTEWATER PROPOSED FIXED AND VOLUMETRIC RATES

		Current	2019	2020	2021	2022	2023
Commercial	Fixed	\$46.35	\$48.39	\$48.39	\$54.44	\$54.44	\$63.51
	Volumetric	\$2.35	\$2.75	\$2.75	\$3.10	\$3.10	\$3.61
Large Commercial	Fixed	\$82.30	\$85.92	\$85.92	\$96.67	\$96.67	\$112.78
	Volumetric	\$2.35	\$2.75	\$2.75	\$3.10	\$3.10	\$3.61
High Strength Commercial	Fixed	\$46.35	\$48.39	\$48.39	\$54.44	\$54.44	\$63.51
	Volumetric	\$3.70	\$4.46	\$4.46	\$5.02	\$5.02	\$5.86
Multi-Family	Fixed	\$110.10	\$114.95	\$114.95	\$129.32	\$129.32	\$150.87
	Volumetric	\$2.35	\$2.75	\$2.75	\$3.10	\$3.10	\$3.61
Evaporation Cooler	Fixed	\$46.35	\$48.39	\$48.39	\$54.44	\$54.44	\$63.51
	Volumetric	\$2.35	\$2.75	\$2.75	\$3.10	\$3.10	\$3.61

2018 Implementations

- The residential rate structure was not affected and did not change.
- The monthly charges for the commercial rate structures increased for meters greater than 1.5 inches.
- Irrigation rate tiers (blocks) were added to commercial customers to recover peak increases related to commercial irrigation usage.
- The non-potable rate increased to \$1.25 per 1,000 gallons and the rate for meters on fire hydrant connections for non-irrigation water use increased to \$8.50 per 1,000 gallons.
- These rates became effective in January 2019.
- Previous adjustments were in 2014.

LOOKING FORWARD

- **Water Conservation**
- **Water Treatment Capacity**
- **Maintaining the Utility**
 - Infrastructure and increased operating costs
- **Increase in cost of water contracts**
 - Every 3 years or so new rates are implemented

PREPARING FOR 2020 AND BEYOND

- **Current Projects**

- Sun City 2 MG Water EST - Complete
- Braun 3.5 MG Water EST - Complete
- Ronald Reagan 30" Water Line - Complete
- Cedar Breaks to Pastor Dedicated 24" Water Line – Substantially Complete
- Lake WTP Raw Water Intake & Pump Station Improvements – Complete
- Pastor Pump Station – Substantially Complete
- West loop 24" Waterline Improvements – Substantially Complete
- Round Rock Interconnect – 1 MGD – Complete
- Leander Customer Transfer 1200 customers +/- 1.5 MGD

- **Future Projects**

- 2020
 - Lake 980 High Service Pump Station
- 2021
 - CR 255 Water Line
 - Leander Interconnect 3 MGD
 - Shell Road Water line
 - South West Bypass Water Line Improvements
- 2022
 - Round Rock Interconnect – 3 MGD
 - North Lake Water Treatment Plant Exp – 8.8 MGD
- 2025
 - South Lake Water Treatment Plant – 22 MGD

BRA INITIATIVES

Aquifer Storage and Recovery Study

- Ph 1-Assessment
 - Seasonal Utilization
 - Long term water Supply
 - Available reservoir
 - Recharge Availability
 - Hydrogeologic review
 - Water quality Compatibility
- Ph 2 – Conceptual Scenarios
 - Planning level costs and ranking vs traditional water supply
- *Ph 3 – Pilot Testing*
- *Ph 4 – Exploratory Well drilling*
- *Ph 5 – Design and Permitting*
- *Ph 6 - Implementation*

Groundwater Resource Study

- Opportunities previously marketed by various groups
- BRA Collaboration between BRA, Georgetown, Round Rock
- Development of additional water resource regional and long-term solutions
- Williamson county 2070, <162,000 acft/yr>
 - Georgetown (65,467) acreft/yr
 - Round Rock (16,566) acreft/yr
- Future Phases implementation of long-term water supply solutions

CIP COSTS-WATER

Water	FY2021	FY2022	FY2023	FY2024	FY2025	Beyond 5 Years	Total
Tank Rehabilitation	750,000						750,000
Hoover Pump Station	2,750,000	0	0	0	0	0	2,750,000
Hoover Pump Station	1,150,000	0	0	0	0	0	1,150,000
Hoover Pump Station	2,200,000	0	0	0	0	0	2,200,000
Miscellaneous Line Upgrades	250,000	250,000	250,000	250,000	0	250,000	1,250,000
Tank Maintenance	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
South Lake Plant Transmission West (W23-01)	1,250,000	0	0	12,000,000	0	0	13,250,000
Water Oak 24" Waterline	3,500,000	0	0	0	0	0	3,500,000
Southwest Bypass Water Line	1,500,000						1,500,000
Southwest Bypass Water Line	300,000						300,000
Southside Water Treatment Plant Rehabilitation	1,750,000						1,750,000
Southside Water Treatment Plant Rehabilitation	500,000						500,000
Hoover Pump Station	750,000						750,000
Carriage Oaks Transmission	0	0	0	0	0	2,000,000	2,000,000
CR 200 Line Impr (CO-1)	0	0	0	0	0	500,000	500,000
CR 200 Line Impr (CO-1)	0	0	0	0	0	3,000,000	3,000,000
CR262 Waterline	0	0	0	0	0	3,000,000	3,000,000
Aviation Drive	2,300,000						2,300,000
Round Rock Supply Line	3,200,000	0	0	0	0	0	3,200,000
Round Rock Elevated Storage Tank	3,500,000	0	0	0	0	0	3,500,000
Round Rock Supply Pump Station	2,500,000	0	0	0	0	0	2,500,000
S. Lake WTP (2018)	0	8,000,000	62,000,000	0	0	0	70,000,000
South Lake Plant Transmission East (W23-02)	0	0	600,000	4,000,000	0	0	4,600,000
Total	28,650,000	8,750,000	63,350,000	16,750,000	500,000	9,250,000	127,250,000

CIP COSTS-WASTEWATER

Waste Water	FY2021	FY2022	FY2023	FY2024	FY2025	Beyond 5 Years	Total
EARZ	1,500,000	1,500,000	1,500,000	1,500,000		1,500,000	7,500,000
Lift Station Upgrades	550,000	550,000	550,000	550,000	550,000	550,000	3,300,000
Cimarron Hills Wastewater Treatment Plant Expansion	600,000	0	0	0	0	0	600,000
Interceptor Lift Station Removal & Gravity Main	0	1,500,000	0	0	0	0	1,500,000
Interceptor Lift Station Removal & Gravity Main	0	1,000,000	0	0	0	0	1,000,000
Interceptor Lift Station Removal & Gravity Main	0	0	6,000,000	0	0	0	6,000,000
Cimarron Hills Wastewater Treatment Plant Expansion	0	4,000,000	0	0	0	0	4,000,000
Northlands Wastewater Treatment Plant	0	0	0	0	0	14,000,000	14,000,000
Northlands Wastewater Treatment Plant	0	0	0	0	250,000	0	250,000
San Gabriel Int. (SGI-2)	0	32,500,000	0	0	0	0	32,500,000
Waste Water Treatment Plant Expansion (Pecan/Mankins)	0	0	0	0	0	4,000,000	4,000,000
Waste Water Treatment Plant Expansion (Pecan/Mankins)	0	0	0	0	0	37,500,000	37,500,000
Wolf Ranch Expansion and Force Main	0	1,700,000	0	0	0	0	1,700,000
Wolf Ranch Expansion and Force Main	0	0	4,200,000	0		0	4,200,000
Total	2,650,000	42,750,000	12,250,000	2,050,000	800,000	57,550,000	118,050,000

CHANGES

- Transfer of customers to Leander ~ 1,200 accounts
- FY22 - Liberty Hill Customer Transfer ~ up to 3,500 accounts

QUESTIONS?