Agenda



Public Involvement Committee

February 26, 2024, | 3:00 – 5:00

| Question and Answer Update – Joseph Gonzales, AW Assistant Director, Financial Services |
|--|
| Wastewater Allocations – Eric Callocchia, Partner, NewGen Strategies and Solutions |
| Water Forward Reuse Strategies – Joseph Gonzales, AW Assistant Director, Financial Services |
| Next Meeting - Joseph Gonzales, AW Assistant Director, Financial Services |
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Austin Water

2024 Public Involvement Committee

Meeting 3: Wastewater

Cost Allocations

Joseph Gonzales
Asst. Director, Financial Services
Austin Water

February 26, 2024

Agenda

- Question and Answer Update
- NewGen Wastewater Cost Allocations
- Water Forward Reuse Strategies



Question and Answer Update

Questions and responses posted on SpeakUp Austin



NewGen





February 26, 2024

AUSTIN WATER PIC MEETING #3 - WASTEWATER ALLOCATIONS



DISCUSSION TOPICS

- Revenue Requirement Recap
- Wastewater Cost of Service (COS) Process
- Revenue Requirement Functionalization
 - Functions to Cost Pools
- Allocation to Cost Causative Components
- Distribution to Customer Classes
 - Direct Contribution vs. I/I
- Draft Wastewater COS Results

Note: All figures are subject to change. The material contained herein is for information and discussion only and does not reflect the final results of the study.



KEY TAKEAWAYS

- The study Test Year is still a work in progress.
 - Future known and measurable adjustments will be made
- Certain system and customer information is still under review and will be updated.



WASTEWATER REVENUE REQUIREMENTS UNDER CURRENT POLICY

| | FY 2023 | | | FY 2024 | | Preliminary |
|---|---------|-------------|----|-------------|----|-------------|
| Wastewater Revenue Requirements | | Actuals | | Budget | | Test Year |
| O&M Expense | | | | | | |
| Operations | \$ | 82,202,415 | \$ | 87,936,768 | \$ | 87,936,768 |
| Support Services | | 20,250,634 | | 22,120,498 | | 22,120,498 |
| Environmental, Planning, and Development Services | | 10,399,112 | | 6,613,272 | | 6,613,272 |
| Customer Experience | | 6,237,836 | | 4,994,105 | | 4,994,105 |
| Engineering Services | | 2,685,722 | | 14,036,904 | | 14,036,904 |
| Other Utility Program Req | | 4,334,154 | | 5,291,461 | | 5,291,461 |
| Other Requirements | | 8,198,576 | | 13,741,399 | | 13,741,399 |
| Total O&M Expense | \$ | 134,308,449 | \$ | 154,734,407 | \$ | 154,734,407 |
| Debt Service | | | | | | |
| All Principal & Interest | \$ | 77,161,029 | \$ | 84,674,838 | \$ | 72,668,701 |
| Total Debt Service | \$ | 77,161,029 | \$ | 84,674,838 | \$ | 72,668,701 |
| Transfers | | | | | | |
| Trf to Wastewater CIP Fund | \$ | 43,778,001 | \$ | 49,000,000 | \$ | 90,685,665 |
| TRF CRF to Debt Defeasance | | 10,930,634 | | 11,000,000 | | - |
| Trf to General Fund | | 22,128,734 | | 23,044,775 | | 23,044,775 |
| Administrative Support | | 7,744,620 | | 7,684,889 | | 7,684,889 |
| Other Transfers | | 7,194,196 | | 10,482,817 | | 10,482,817 |
| Total Transfers | \$ | 91,776,185 | \$ | 101,212,481 | \$ | 131,898,146 |
| Total Revenue Requirements | \$ | 303,245,663 | \$ | 340,621,726 | \$ | 359,301,254 |

WASTEWATER
NET REVENUE
REQUIREMENTS
UNDER
CURRENT
POLICY

| Wastewater Net Revenue Requirements | Preliminary Test Year | | | | |
|--|--------------------------|-------------|--|--|--|
| O&M Expenses | \$ | 154,734,407 | | | |
| Debt Service | | 72,668,701 | | | |
| Transfers | | 131,898,146 | | | |
| Total Revenue Requirements | | 359,301,254 | | | |
| Less: Non-Rate Revenue | | 15,792,141 | | | |
| Net Revenue Requirement | | 343,509,113 | | | |

WASTEWATER REVENUE REQUIREMENTS UNDER CONTEMPLATED CHANGE TO FINANCIAL POLICY

| | FY 2023 | | | FY 2024 | | Preliminary |
|---|---------|-------------|--------|-------------|----|-------------|
| Wastewater Revenue Requirements | | Actuals | Budget | | | Test Year |
| O&M Expense | | | | | | |
| Operations | \$ | 82,202,415 | \$ | 87,936,768 | \$ | 87,936,768 |
| Support Services | | 20,250,634 | | 22,120,498 | | 22,120,498 |
| Environmental, Planning, and Development Services | | 10,399,112 | | 6,613,272 | | 6,613,272 |
| Customer Experience | | 6,237,836 | | 4,994,105 | | 4,994,105 |
| Engineering Services | | 2,685,722 | | 14,036,904 | | 14,036,904 |
| Other Utility Program Req | | 4,334,154 | | 5,291,461 | | 5,291,461 |
| Other Requirements | | 8,198,576 | | 13,741,399 | | 13,741,399 |
| Total O&M Expense | \$ | 134,308,449 | \$ | 154,734,407 | \$ | 154,734,407 |
| Debt Service | | | | | | |
| All Principal & Interest | \$ | 77,161,029 | \$ | 84,674,838 | \$ | 72,668,701 |
| Total Debt Service | \$ | 77,161,029 | \$ | 84,674,838 | \$ | 72,668,701 |
| Transfers | | | | | | |
| Trf to Wastewater CIP Fund | \$ | 43,778,001 | \$ | 49,000,000 | \$ | 70,214,550 |
| TRF CRF to Debt Defeasance | | 10,930,634 | | 11,000,000 | | - |
| Trf to General Fund | | 22,128,734 | | 23,044,775 | | 23,044,775 |
| Administrative Support | | 7,744,620 | | 7,684,889 | | 7,684,889 |
| Other Transfers | | 7,194,196 | | 10,482,817 | | 10,482,817 |
| Total Transfers | \$ | 91,776,185 | \$ | 101,212,481 | \$ | 111,427,031 |
| Total Revenue Requirements | \$ | 303,245,663 | \$ | 340,621,726 | \$ | 338,830,139 |

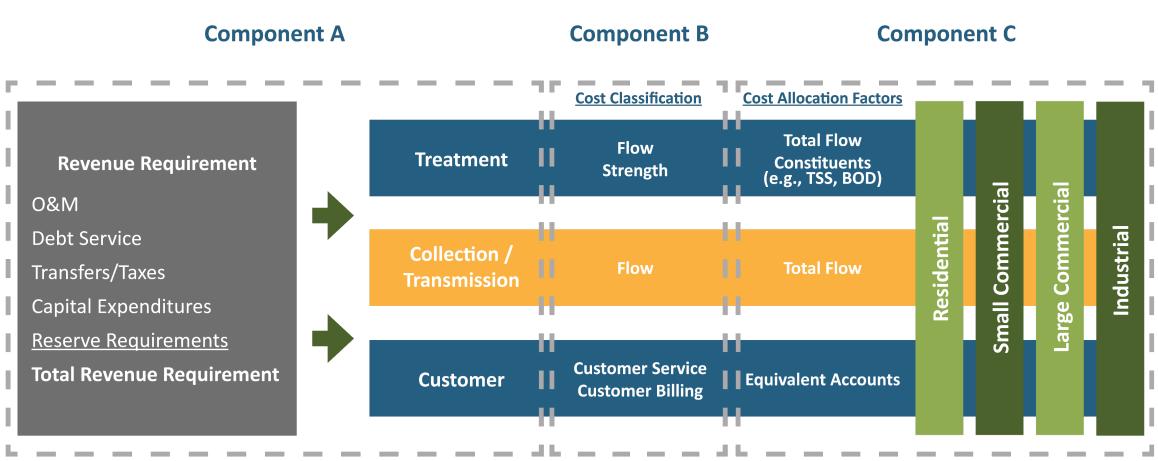
WASTEWATER
NET REVENUE
REQUIREMENTS
UNDER
CONTEMPLATED
CHANGE TO
FINANCIAL
POLICY

| Wastewater Net Revenue Requirements | Preliminary Test Year | | | | |
|--|--------------------------|--|--|--|--|
| O&M Expenses | \$ 154,734,407 | | | | |
| Debt Service | 72,668,701 | | | | |
| Transfers | 111,427,031 | | | | |
| Total Revenue Requirements | 338,830,139 | | | | |
| Less: Non-Rate Revenue | 15,792,141 | | | | |
| Net Revenue Requirement | 323,037,998 | | | | |

WASTEWATER COST OF SERVICE PROCESS

- Functionalization answers how much money is spent running the system and what the money is spent on.
 - Example: It costs \$6.3 million per year to run the system's aeration basins.
- Allocation answers why the money is being spent, that is, what are the "cost causative components" that drive the need to spend money.
 - Example: The aeration basins treat Biochemical Oxygen Demand (BOD).
- **Distribution** answers **who** is causing the costs to be incurred, that is, who is contributing (and in what amount) to the total "cost causative components" of the system.
 - Example: Residential customers contribute 45 million pounds (28%) of BOD to the system each year.

SAMPLE WASTEWATER COST OF SERVICE PROCESS



Note: For illustrative purposes only. Functions and allocators may change to align with utility operations/services.

COST FUNCTIONALIZATION

| Wastewater Service Functions | |
|---------------------------------|--------------------------|
| Collection | Flow Equalization Basins |
| Interceptors | Aeration Basins |
| Lift Stations | Secondary Clarifiers |
| Plant Raw WW Pumping | Return Sludge Pumping |
| Preliminary Treatment | Waste Sludge Pumping |
| Industrial | Filters |
| Industrial Waste Control | Disinfection and Outfall |
| Bar Screens | Sludge Thickening |
| Grit Removal | Sludge Pumping |
| Primary Clarifiers | Biosolids Management |
| Wholesale & Industrial Services | Customer Service |

STEP 1A: FUNCTIONALIZATION (IN MILLIONS)

| | | | | | | | Preliminary Net Revenue |
|---------------------------------|--------------|-------------|---------------|------------|---------------|-----------|-------------------------|
| Function | O&M Expenses | Other Costs | Capital Costs | NNR - O&M | NNR - Capital | Transfers | Requirement |
| Collection | 45.64 | 1.63 | 27.20 | (6.26) | (2.69) | 49.11 | 114.63 |
| Interceptors | 23.91 | 0.93 | 15.59 | (1.03) | (1.51) | 27.61 | 65.49 |
| Lift Stations (Conveyance) | 10.56 | 0.17 | 2.92 | (0.46) | - | 5.14 | 18.34 |
| Plant Raw WW Pumping | 1.82 | 0.15 | 2.53 | (80.0) | - | 0.76 | 5.19 |
| Preliminary Treatment | 1.17 | - | - | (0.05) | - | - | 1.12 |
| Industrial Waste Control | 2.88 | - | - | (0.12) | - | - | 2.75 |
| Bar Screens | - | 0.02 | 0.37 | - | - | 0.22 | 0.62 |
| Grit Removal | - | 0.01 | 0.09 | (0.00) | - | 0.07 | 0.16 |
| Primary Clarifiers | 2.05 | 0.03 | 0.48 | (0.09) | - | 0.33 | 2.80 |
| Flow Equalization Basins | 2.14 | 0.04 | 0.63 | (0.09) | - | 0.41 | 3.13 |
| Aeration Basins | 6.37 | 0.28 | 4.66 | (0.28) | - | 2.78 | 13.82 |
| Secondary Clarifiers | 3.49 | 0.06 | 0.94 | (0.15) | - | 0.63 | 4.97 |
| Return Sludge Pumping | 0.23 | 0.03 | 0.42 | (0.01) | - | 0.30 | 0.96 |
| Waste Sludge Pumping | 0.17 | - | - | (0.01) | - | - | 0.16 |
| Filters | 4.62 | - | - | (0.20) | - | - | 4.42 |
| Disinfection and Outfall | 21.45 | 0.16 | 2.59 | (0.93) | - | 1.68 | 24.94 |
| Revenue Allocated Costs | - | - | - | - | - | 23.04 | 23.04 |
| Sludge Thickening | 0.96 | 0.21 | 3.52 | (0.04) | - | 1.83 | 6.47 |
| Sludge Pumping | - | - | - | - | - | - | - |
| Biosolids Management | 16.00 | 0.40 | 6.62 | (0.69) | - | 4.53 | 26.86 |
| Wholesale & Industrial Services | 0.11 | - | - | (0.03) | - | - | 0.08 |
| Customer Service | 16.66 | - | - | (0.72) | - | - | 15.93 |
| Indirect Treatment | 0.54 | - | - | (0.02) | - | - | 0.52 |
| Indirect | 7.40 | - | - | (0.32) | - | - | 7.08 |
| Total | \$ 168.18 | \$ 4.11 | \$ 68.56 | \$ (11.59) | \$ (4.20) | \$ 118.45 | \$ 343.51 |

FUNCTIONS TO COST POOLS

| Function | Joint | Retail Only | Wholesale Only | Commercial & Industrial | Surcharge Customers |
|---------------------------------|-------|----------------|-------------------|----------------------------|------------------------|
| Collection | | X | | | |
| Interceptors | X | | | | |
| Lift Stations | X | | | | |
| Plant Raw WW Pumping | X | | | | |
| Preliminary Treatment | X | | | | |
| Industrial | X | | | | |
| Industrial Waste Control | | | | 50% | 50% |
| Bar Screens | X | | | | |
| Grit Removal | X | | | | |
| Primary Clarifiers | X | | | | |
| Wholesale & Industrial Services | X | | | | |

FUNCTIONS TO COST POOLS

| Function | Joint | Retail Only Costs | Wholesale Only Costs | Commercial & Industrial Monitoring | Surcharge Customers |
|--------------------------|-------|-------------------|----------------------|------------------------------------|---------------------|
| Flow Equalization Basins | X | | | | |
| Aeration Basins | X | | | | |
| Secondary Clarifiers | X | | | | |
| Return Sludge Pumping | X | | | | |
| Waste Sludge Pumping | X | | | | |
| Filters | X | | | | |
| Disinfection and Outfall | X | | | | |
| Sludge Thickening | X | | | | |
| Sludge Pumping | X | | | | |
| Biosolids Management | X | | | | |
| Customer Service | X | | | | |

STEP 1B: FUNCTIONS TO COST POOLS

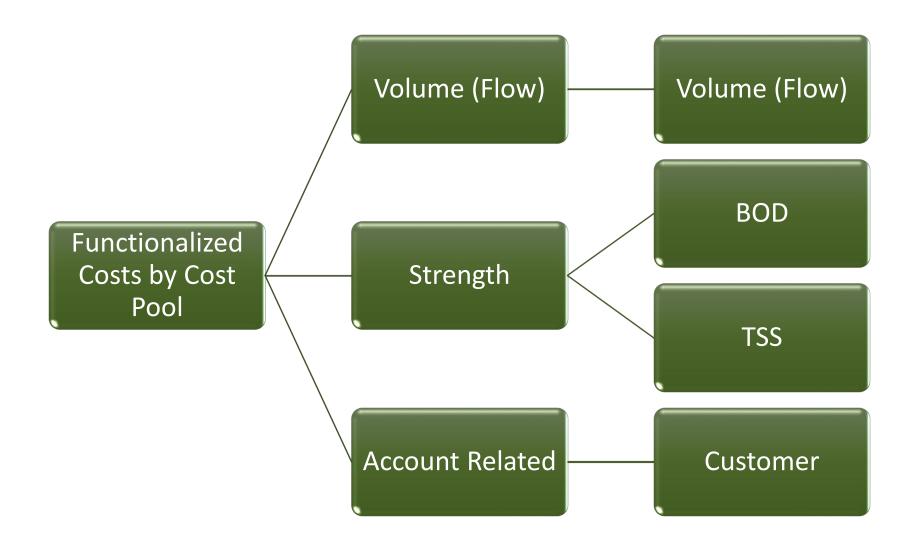
| Functional Category | Jo | int | Retail Only | Wholesale | Commercial & Industrial Monitoring | Extra Strength Surcharge Customer | Preliminary Net Revenue Requirement |
|---------------------------|----|--------|--------------|-----------|---------------------------------------|--------------------------------------|--|
| Collection | | - | 114.63 | - | - | - | 114.63 |
| Interceptors | | 65.49 | - | - | - | - | 65.49 |
| Lift Stations (Conveyance | e) | 18.34 | - | - | - | - | 18.34 |
| Plant Raw WW Pumping | | 5.19 | - | - | - | - | 5.19 |
| Preliminary Treatment | | 1.12 | - | - | - | - | 1.12 |
| Industrial Waste Control | | - | - | - | 1.38 | 1.38 | 2.75 |
| Bar Screens | | 0.62 | - | - | - | - | 0.62 |
| Grit Removal | | 0.16 | - | - | - | - | 0.16 |
| Primary Clarifiers | | 2.80 | - | - | - | - | 2.80 |
| Flow Equalization Basins | | 3.13 | - | - | - | - | 3.13 |
| Aeration Basins | | 13.82 | - | - | - | - | 13.82 |
| Secondary Clarifiers | | 4.97 | - | - | - | - | 4.97 |
| Return Sludge Pumping | | 0.96 | - | - | - | - | 0.96 |
| Waste Sludge Pumping | | 0.16 | - | - | - | - | 0.16 |
| Filters | | 4.42 | - | - | - | - | 4.42 |
| Disinfection and Outfall | | 24.94 | - | - | - | - | 24.94 |
| Revenue Allocated Costs | | 23.04 | - | - | - | - | 23.04 |
| Sludge Thickening | | 6.47 | - | - | - | - | 6.47 |
| Sludge Pumping | | - | - | - | - | - | - |
| Biosolids Management | | 26.86 | - | - | - | - | 26.86 |
| Wholesale & Industrial So | er | - | - | 0.07 | 0.02 | - | 0.08 |
| Customer Service | | 15.93 | - | - | - | - | 15.93 |
| Indirect Treatment | | 0.52 | - | - | - | - | 0.52 |
| Indirect | | 4.94 | 2.01 | 0.00 | 0.06 | 0.06 | 7.08 |
| Total | \$ | 223.90 | \$ 116.64 \$ | 0.07 | \$ 1.46 | \$ 1.44 | \$ 343.51 |

STEP 1C: COST POOL FUNCTIONALIZATION

| Functional Category | Mains | Lift Stations | Preliminary Treatment | Primary Treatment | Aeration | Secondary Treatment | Sludge Pumping | Other Sludge- Related |
|------------------------------------|-----------|---------------|--------------------------|----------------------|----------|------------------------|-------------------|--------------------------|
| Joint | 66.55 | 18.81 | 10.49 | 2.91 | 14.16 | 6.13 | 0.17 | 6.52 |
| Retail Only | 116.64 | - | - | - | - | - | - | - |
| Wholesale | - | - | - | - | - | - | - | - |
| Commercial & Industrial Monitoring | - | - | - | - | - | - | - | - |
| Extra Strength Surcharge Customer | - | - | - | - | - | - | - | _ |
| Total | \$ 183.19 | \$ 18.81 | \$ 10.49 | \$ 2.91 | \$ 14.16 | \$ 6.13 | \$ 0.17 | \$ 6.52 |

| Functional Category | Effluent Disposal | Biosolids Management | Services | Industrial Waste Control | Customer Services | Revenue Allocated Costs | Preliminary Net Revenue Requirement |
|------------------------------------|----------------------|-------------------------|----------|-----------------------------|----------------------|-------------------------------|---|
| Joint | 30.74 | 27.71 | - | - | 16.67 | 23.04 | 223.90 |
| Retail Only | - | - | - | - | - | - | 116.64 |
| Wholesale | - | - | 0.07 | - | - | - | 0.07 |
| Commercial & Industrial Monitoring | - | - | 0.02 | 1.44 | - | - | 1.46 |
| Extra Strength Surcharge Customer | - | - | - | 1.44 | - | - | 1.44 |
| Total | \$ 30.74 | \$ 27.71 | \$ 0.09 | \$ 2.88 | \$ 16.67 | \$ 23.04 | \$ 343.51 |

ALLOCATION TO COST CAUSATIVE COMPONENTS



COST CAUSATIVE COMPONENTS

- 1
- Volume Costs associated with conveying wastewater flow through the system, including collection and treatment assets

- 2
- BOD Costs associated with treating biochemical oxygen demand (BOD)

- 3
- TSS Costs associated with treating total suspended solids (TSS)

- 4
- Customer Costs associated with serving customers

STEP 2: ALLOCATION TO COST CAUSATIVE COMPONENTS

| | | | | | Preliminary | |
|-----------------------------|-----------|----------|----------|----------|-------------|--|
| Causative Components | Flow | BOD | TSS | Customer | Net Revenue | |
| | | | | | Requirement | |
| Mains | 183.19 | - | - | - | 183.19 | |
| Lift Stations | 18.81 | - | - | - | 18.81 | |
| Preliminary Treatment | 10.49 | - | - | - | 10.49 | |
| Primary Treatment | - | 1.02 | 1.89 | - | 2.91 | |
| Aeration | - | 14.16 | - | - | 14.16 | |
| Secondary Treatment | - | 6.13 | - | - | 6.13 | |
| Sludge Pumping | - | 0.09 | 0.09 | - | 0.17 | |
| Other Sludge-Related | - | 3.26 | 3.26 | - | 6.52 | |
| Effluent Disposal | 30.74 | - | - | - | 30.74 | |
| Biosolids Management | - | 13.85 | 13.85 | - | 27.71 | |
| Services | 0.09 | - | - | - | 0.09 | |
| Industrial Waste Control | 1.44 | 1.18 | 0.26 | - | 2.88 | |
| Customer Services | - | - | - | 16.67 | 16.67 | |
| Revenue Allocated Costs | 13.55 | 4.02 | 2.05 | 3.42 | 23.04 | |
| Total | \$ 258.30 | \$ 43.71 | \$ 21.41 | \$ 20.09 | \$ 343.51 | |

DEVELOPMENT OF BOD/TSS: INFLOW AND INFILTRATION (I/I)

- Contribution of BOD and TSS determination:
 - Direct flow for most retail customers (i.e., non-sampled) is 200 mg/L
 - Sampled industrial customers based on actual strength
- I/I for all customer classes:
 - 40 mg/L for BOD
 - 95 mg/L for TSS
- System I/I percentage is 10.5%
- I/I distributed to customer classes based on billed flow

UNITS OF SERVICE -FLOW

| Wastewater Flows by Customer Class | Annual Billed Flow (kGal) | Flow Allocated (kGal) | Total Contributed Flow (kGal) | % of Total Flow |
|------------------------------------|------------------------------|-----------------------------|-------------------------------------|-----------------|
| <u>Retail</u> | | | | |
| Residential | 11,534,239 | 1,211,095 | 12,745,334 | 32.90% |
| Multi-Family | 11,912,306 | 1,250,792 | 13,163,098 | 33.98% |
| Commercial | 8,135,034 | 854,179 | 8,989,212 | 23.21% |
| Cypress | 187,499 | 19,687 | 207,186 | 0.53% |
| NXP - Ed Bluestein Blvd | 233,901 | 24,560 | 258,461 | 0.67% |
| NXP - W William Cannon | 222,783 | 23,392 | 246,175 | 0.64% |
| Samsung | 1,425,595 | 149,687 | 1,575,283 | 4.07% |
| University of Texas | 244,798 | 25,704 | 270,502 | 0.70% |
| Wholesale | | | | |
| Mid Tex Utilities (Avana Sub) | 65,311 | 6,858 | 72,169 | 0.19% |
| Comanche Canyon (WCID17) | 7,030 | 738 | 7,768 | 0.02% |
| North Austin MUD | 187,964 | 19,736 | 207,701 | 0.54% |
| Northtown MUD | 186,028 | 19,533 | 205,561 | 0.53% |
| Rollingwood | 56,126 | 5,893 | 62,019 | 0.16% |
| Shady Hollow MUD | 132,345 | 13,896 | 146,241 | 0.38% |
| Sunset Valley MUD | 78,927 | 8,287 | 87,214 | 0.23% |
| Steiner Ranch (WCID17) | 146,626 | 15,396 | 162,022 | 0.42% |
| Wells Branch MUD | 246,679 | 25,901 | 272,580 | 0.70% |
| Westlake Hills | 53,189 | 5,585 | 58,774 | 0.15% |
| Total System | 35,056,378 | 3,680,920 | 38,737,298 | 100.00% |

UNITS OF SERVICE -BOD

| | Billed Flow | | _ | % of |
|----------------------------------|-------------|-------------|------------|------------------|
| Wastewater BOD by Customer Class | lbs/day | I&I lbs/day | Total | Total lbs/day |
| Retail | | | | |
| Residential | 44,143.86 | 927.02 | 45,070.88 | 29.47% |
| Multi-Family | 45,590.80 | 957.41 | 46,548.21 | 30.43% |
| Commercial | 31,134.42 | 653.82 | 31,788.24 | 20.78% |
| Cypress | 158.77 | 15.07 | 173.84 | 0.11% |
| NXP - Ed Bluestein Blvd | 505.78 | 18.80 | 524.58 | 0.34% |
| NXP - W William Cannon | 729.00 | 17.91 | 746.91 | 0.49% |
| Samsung | 1,391.29 | 114.58 | 1,505.87 | 0.98% |
| University of Texas | 824.47 | 19.67 | 844.14 | 0.55% |
| Extra Strength Surcharge | 21,795.44 | - | 21,795.44 | 14.25% |
| Wholesale | | | | |
| Mid Tex Utilities (Avana Sub) | 249.96 | 5.25 | 255.21 | 0.17% |
| Comanche Canyon (WCID17) | 0.74 | 0.57 | 1.31 | 0.00% |
| North Austin MUD | 719.38 | 15.11 | 734.48 | 0.48% |
| Northtown MUD | 711.97 | 14.95 | 726.92 | 0.48% |
| Rollingwood | 214.80 | 4.51 | 219.32 | 0.14% |
| Shady Hollow MUD | 506.51 | 10.64 | 517.15 | 0.34% |
| Sunset Valley MUD | 302.07 | 6.34 | 308.41 | 0.20% |
| Steiner Ranch (WCID17) | 15.46 | 11.78 | 27.24 | 0.02% |
| Wells Branch MUD | 944.09 | 19.83 | 963.92 | 0.63% |
| Westlake Hills | 203.57 | 4.27 | 207.84 | 0.14% |
| Total System | 150,142.37 | 2,817.52 | 152,959.89 | 100.00% |

UNITS OF SERVICE -TSS

| Wastewater TSS by Customer Class | Billed Flow lbs/day | I&I lbs/day | Total | % of Total lbs/day |
|----------------------------------|------------------------|----------------|------------|--------------------------|
| Retail | | | | |
| Residential | 44,143.86 | 2,201.68 | 46,345.54 | 33.56% |
| Multi-Family | 45,590.80 | 2,273.84 | 47,864.64 | 34.66% |
| Commercial | 31,134.42 | 1,552.83 | 32,687.25 | 23.67% |
| Cypress | 78.94 | 35.79 | 114.73 | 0.08% |
| NXP - Ed Bluestein Blvd | 189.11 | 44.65 | 233.76 | 0.17% |
| NXP - W William Cannon | 251.53 | 42.53 | 294.05 | 0.21% |
| Samsung | 422.84 | 272.12 | 694.96 | 0.50% |
| University of Texas | 950.95 | 46.73 | 997.67 | 0.72% |
| Extra Strength Surcharge | 4,779.20 | - | 4,779.20 | 3.46% |
| <u>Wholesale</u> | | | | |
| Mid Tex Utilities (Avana Sub) | 249.96 | 12.47 | 262.43 | 0.19% |
| Comanche Canyon (WCID17) | 0.45 | 1.34 | 1.80 | 0.00% |
| North Austin MUD | 719.38 | 35.88 | 755.26 | 0.55% |
| Northtown MUD | 711.97 | 35.51 | 747.48 | 0.54% |
| Rollingwood | 214.80 | 10.71 | 225.52 | 0.16% |
| Shady Hollow MUD | 506.51 | 25.26 | 531.77 | 0.39% |
| Sunset Valley MUD | 302.07 | 15.07 | 317.13 | 0.23% |
| Steiner Ranch (WCID17) | 9.46 | 27.99 | 37.44 | 0.03% |
| Wells Branch MUD | 944.09 | 47.09 | 991.18 | 0.72% |
| Westlake Hills | 203.57 | 10.15 | 213.72 | 0.15% |
| Total System | 131,403.89 | 6,691.62 | 138,095.51 | 100.00% |

UNITS OF SERVICE -CUSTOMER

Based on equivalent meters

| | Equivalent | % of Total | |
|---------------------------------------|------------|---------------|--|
| Wastewater Accounts by Customer Class | Accounts | Accounts | |
| Retail | | | |
| Residential | 222,239 | 93.19% | |
| Multi-Family | 4,873 | 2.04% | |
| Commercial | 11,343 | 4.76% | |
| Cypress | 1 | 0.00% | |
| NXP - Ed Bluestein Blvd | 1 | 0.00% | |
| NXP - W William Cannon | 1 | 0.00% | |
| Samsung | 1 | 0.00% | |
| University of Texas | 14 | 0.01% | |
| Wholesale | | | |
| Mid Tex Utilities (Avana Sub) | 1 | 0.00% | |
| Comanche Canyon (WCID17) | 1 | 0.00% | |
| North Austin MUD | 1 | 0.00% | |
| Northtown MUD | 1 | 0.00% | |
| Rollingwood | 1 | 0.00% | |
| Shady Hollow MUD | 1 | 0.00% | |
| Sunset Valley MUD | 1 | 0.00% | |
| Steiner Ranch (WCID17) | 1 | 0.00% | |
| Wells Branch MUD | 1 | 0.00% | |
| Westlake Hills | 1 | 0.00% | |
| Total System | 238,483.00 | 100.00% | |

STEP 3: DISTRIBUTION TO CUSTOMER CLASSES

| | Flow | BOD | | TSS | Customer | Preli | minary Net Revenue Requirement |
|-------------------------------|--------------|-----|-------|----------|----------|-------|-----------------------------------|
| Retail | | | | | | | |
| Residential | 85.80 | 1 | 12.53 | 7.10 | 18.7 | 2 | 124.15 |
| Multi-Family | 88.61 | 1 | 12.94 | 7.33 | 0.43 | L | 109.29 |
| Commercial | 61.77 | | 8.84 | 5.01 | 0.9 | õ | 76.57 |
| Cypress | 1.41 | | 0.05 | 0.02 | 0.00 |) | 1.48 |
| NXP - Ed Bluestein Blvd | 1.76 | | 0.15 | 0.04 | 0.00 |) | 1.94 |
| NXP - W William Cannon | 1.68 | | 0.21 | 0.05 | 0.00 |) | 1.93 |
| Samsung | 10.73 | | 0.42 | 0.11 | 0.00 |) | 11.25 |
| University of Texas | 1.84 | | 0.23 | 0.15 | 0.00 |) | 2.23 |
| Extra Strength Surcharge | - | | 7.24 | 0.99 | - | | 8.23 |
| Total Retail | \$ 253.60 | \$ | 42.61 | \$ 20.78 | \$ 20.09 | \$ | 337.07 |
| Wholesale | | | | | | | |
| Mid Tex Utilities (Avana Sub) | 0.27 | | 0.07 | 0.04 | 0.00 |) | 0.38 |
| Comanche Canyon (WCID17) | 0.03 | | 0.00 | 0.00 | 0.00 |) | 0.03 |
| North Austin MUD | 0.76 | | 0.20 | 0.12 | 0.00 |) | 1.08 |
| Northtown MUD | 0.75 | | 0.20 | 0.11 | 0.00 |) | 1.07 |
| Rollingwood | 0.23 | | 0.06 | 0.03 | 0.00 |) | 0.32 |
| Shady Hollow MUD | 0.54 | | 0.14 | 0.08 | | | 0.76 |
| Sunset Valley MUD | 0.32 | | 0.09 | 0.05 | 0.00 |) | 0.45 |
| Steiner Ranch (WCID17) | 0.60 | | 0.01 | 0.01 | 0.00 |) | 0.61 |
| Wells Branch MUD | 1.00 | | 0.27 | 0.15 | 0.00 |) | 1.42 |
| Westlake Hills | 0.22 | | 0.06 | 0.03 | 0.00 |) | 0.31 |
| Total Wholesale | \$ 4.71 | \$ | 1.10 | \$ 0.63 | \$ 0.00 | \$ | 6.44 |
| Total System | \$ 258.30 | \$ | 43.71 | \$ 21.41 | \$ 20.09 | 9 \$ | 343.51 |

SUMMARY OF UNITS OF SERVICE

| | Pre | | | |
|---------------------------------|-----|------------|------------|--|
| Cost Causative Component | | Revenue | % of Total | |
| | Re | equirement | | |
| | | | | |
| Flow | \$ | 258.30 | 75.20% | |
| BOD | \$ | 43.71 | 12.72% | |
| TSS | \$ | 21.41 | 6.23% | |
| Customer | \$ | 20.09 | 5.85% | |
| Total | \$ | 343.51 | 100.00% | |

DRAFT WASTEWATER COST OF SERVICE RESULT

| | Preliminary Net | |
|-------------------------------|-----------------|------------|
| | Revenue | % of whole |
| | Requirement | |
| <u>Retail</u> | | |
| Residential | 124.15 | 36.14% |
| Multi-Family | 109.29 | 31.82% |
| Commercial | 76.57 | 22.29% |
| Cypress | 1.48 | 0.43% |
| NXP - Ed Bluestein Blvd | 1.94 | 0.57% |
| NXP - W William Cannon | 1.93 | 0.56% |
| Samsung | 11.25 | 3.28% |
| University of Texas | 2.23 | 0.65% |
| Extra Strength Surcharge | 8.23 | 2.40% |
| Total Inside City Retail | 337.07 | |
| | | |
| Wholesale | | |
| Mid Tex Utilities (Avana Sub) | 0.38 | 0.11% |
| Comanche Canyon (WCID17) | 0.03 | 0.01% |
| North Austin MUD | 1.08 | 0.32% |
| Northtown MUD | 1.07 | 0.31% |
| Rollingwood | 0.32 | 0.09% |
| Shady Hollow MUD | 0.76 | 0.22% |
| Sunset Valley MUD | 0.45 | 0.13% |
| Steiner Ranch (WCID17) | 0.61 | 0.18% |
| Wells Branch MUD | 1.42 | 0.41% |
| Westlake Hills | 0.31 | 0.09% |
| Total Wholesale | 6.44 | |
| | | |
| Total System | \$ 343.51 | 100.00% |

Note: All results are subject to change. The material contained herein is for information and discussion only and does not reflect the final results of the study.



QUESTIONS?

NEWGEN STRATEGIES AND SOLUTIONS 8140 NORTH MOPAC EXPY, SUITE 1-240 AUSTIN, TX 78759 ANDY MCCARTNEY
ERIC CALLOCCHIA
GRANT RABON

WATER FORWARD

REUSE STRATEGIES



Water Forward

Water Forward is Austin's 100-year integrated water resource plan, unanimously adopted by Council in November 2018. Water Forward identifies diverse and environmentally conscious water management strategies to adapt to growth, drought, and climate change and ensure a sustainable, resilient, equitable, and affordable water future for our community.



Water Forward Guiding Principles

Water Forward is updated on a 5-year cycle. The updated plan will be submitted for Council Approval in November 2024.

Resiliency

Inclusive approach + Community values

Diverse strategies

Equity + Affordability

Protect the Colorado River

Reduce operational risks

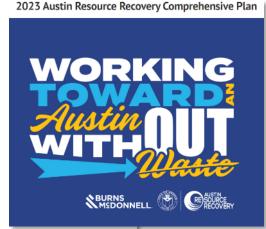
Focus on local supplies

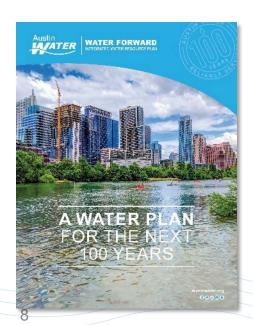


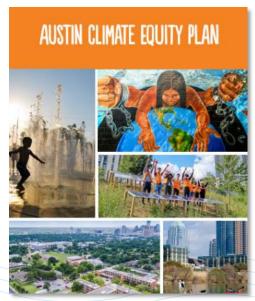
WATER FORWARD One City One Water One Approach

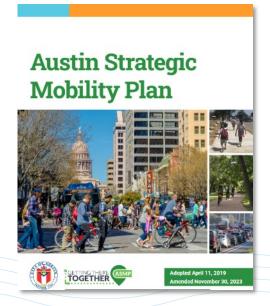
- Environmental Sustainability & Climate Equity
- Affordability
- Reliability & Resiliency

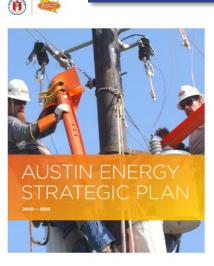






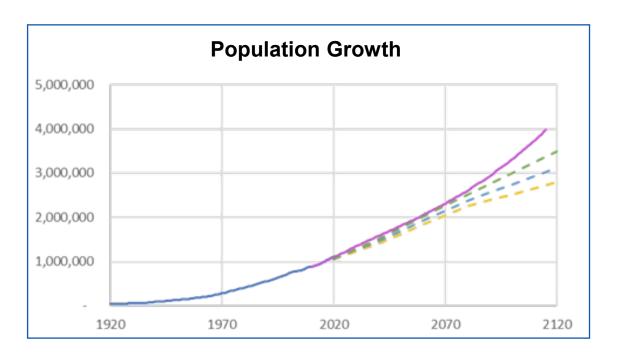


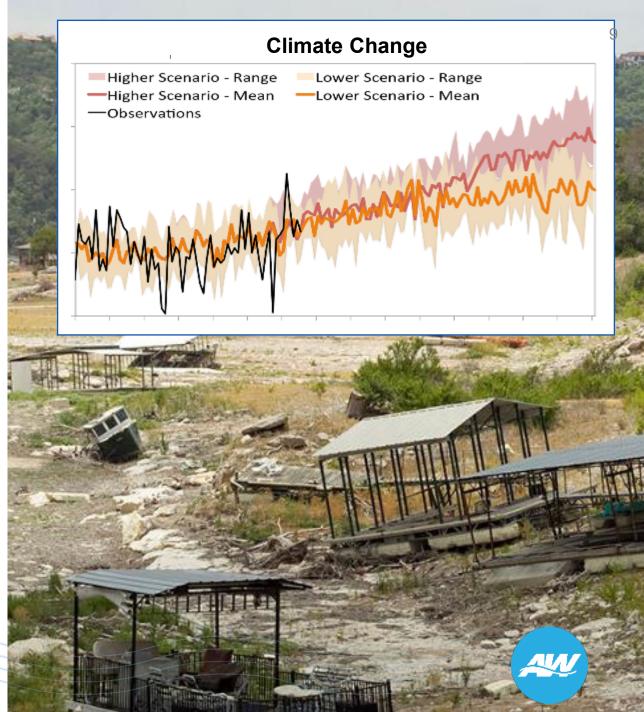




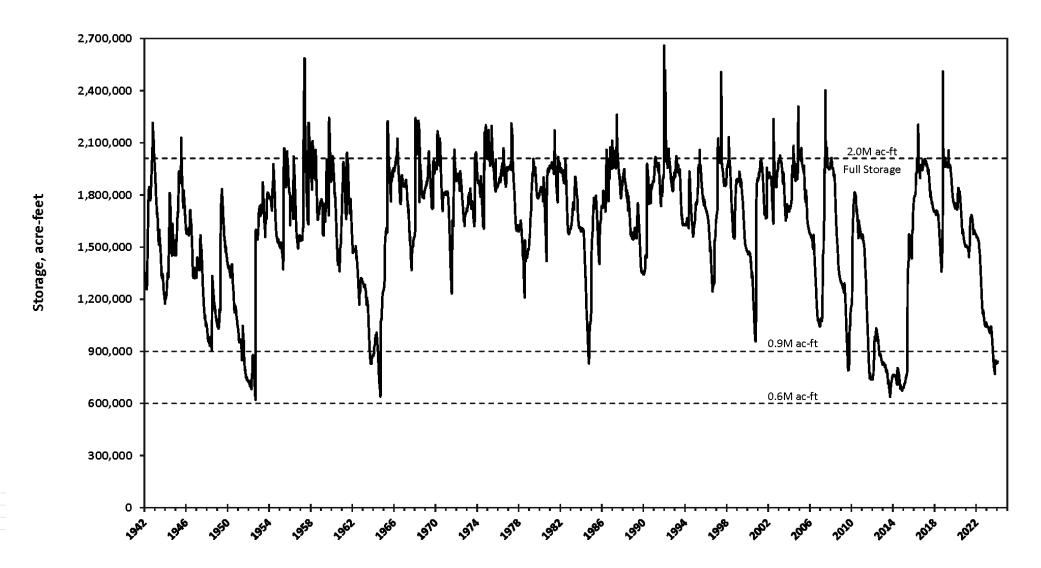


Planning for Uncertainty





Combined StorageLakes Buchanan and Travis





Water Forward Strategies









Supply



Partnerships



Why Now? Why Reuse?

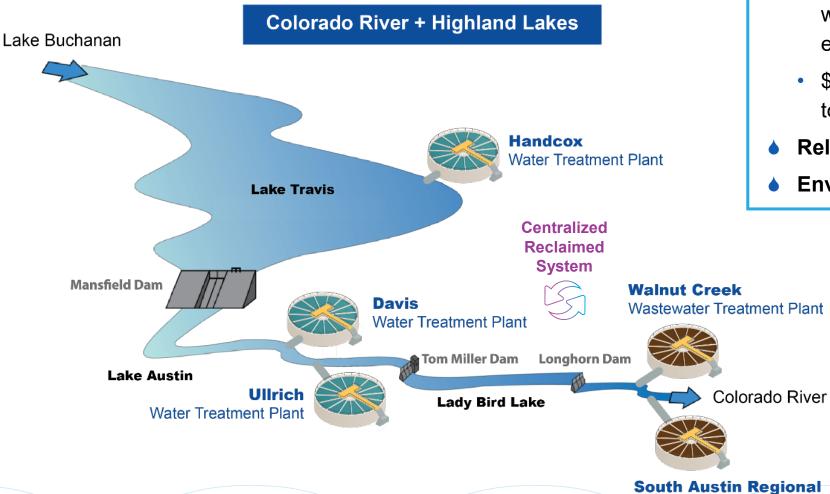








Value of Reuse



Affordability

Wastewater Treatment Plant

- LCRA dditional use payments trigger when average for 2 consecutive years exceeds 201,000 afy
- \$10M+ Annual Cost Savings to Customers
- Reliability & Resiliency
- Environmental Sustainability



AW & COA Leading the Way



Advancing Reuse

- Central Library
- Permitting & Development Center
- Austin Energy Headquarters
- Other Developments
 - Austin Peace Academy
 - Waterloo Park Restrooms
 - Mueller Visitor Center
 - Travis County Community Center







Water Forward Reuse & Conservation Implementation Highlights



- Onsite Water Reuse System (OWRS) regulatory framework and incentive approved by Council
- ✓ New Voluntary Reclaimed Water Connection incentive developed



Water benchmarking, onsite water reuse, and extension of reclaimed water connection requirements approved by Council



Investments to Advance Reuse



Walnut Creek WWTP Reclaimed Water Initiative Phase 1A&B Central Zone Projects

51st Street Tank

Bulk Fill Stations

Montopolis Tank & Pump Station

Planning and Development Center On-Site Reclamation Facility South Austin Regional WWTP Pump Station

Walnut Creek WWTP
Metering

Surge Analysis

Indirect Potable Reuse Planning

Decentralized WWTPs
Design Criteria

Montopolis Elevated Storage Tank

1995

2005

2015

2025

2035

\$100 million

\$94 million

\$203 million

Reclaimed Water Mains

Montopolis
Downtown
Capital Complex
Red River
University of Texas
Austin-Bergstrom Airport

Reclaimed Water Mains

Decker Lane
Onion Creek District Park
Krieg Fields
Seaholm Street

Reclaimed Water Mains

Onion Creek
Oltorf Street
South 1st Street
West Riverside
ABIA North Loop
3rd St: Guadalupe to Nueces

Reclaimed Water Mains

Travis County Courthouse SAR WWTP to SH71 8th St: Congress to West

Lake and Rattan Area Planning

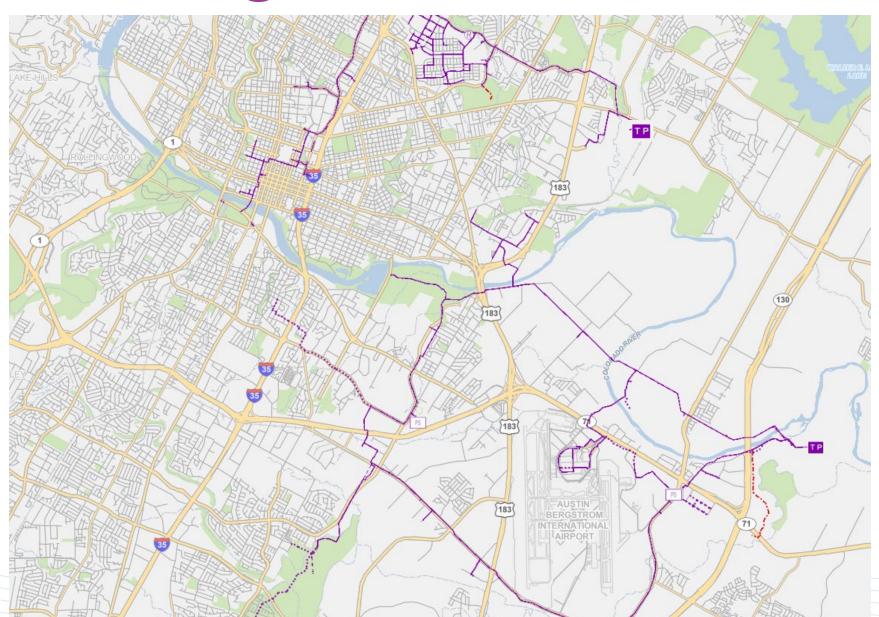
Reclaimed Water Mains

SH71 to US183 SH71 to Lady Bird Lake Downtown Toomey Road



Advancing Reuse across Austin



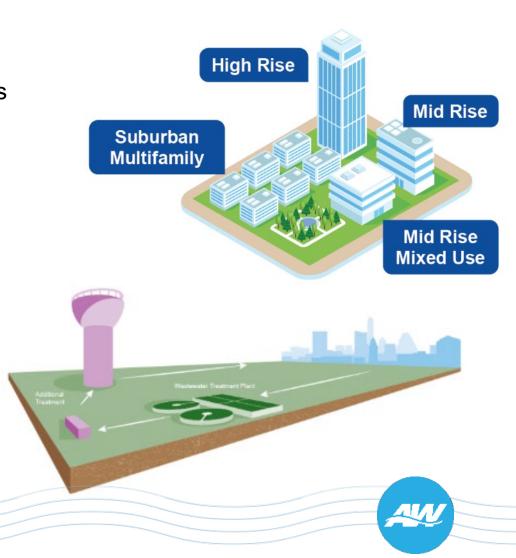




Reuse Strategies



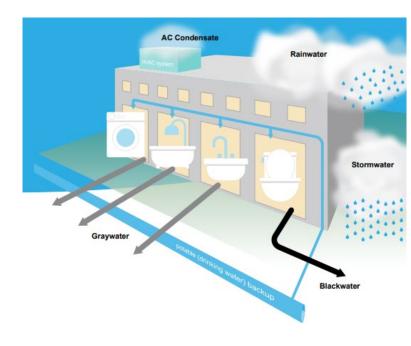
- ♦ New Affordability Incentives
 Incentives to support expansion and adoption of reuse strategies
- ▶ Reclaimed Water System
 Expanding AW's centralized reclaimed water system
- ◆ Onsite Water Capture and Reuse Commercial and multifamily rainwater, stormwater, graywater, and air conditioning condensate



Addressing Affordability Advancing Reuse



- Incentives and grants for reuse and conservation
- Reduced monthly fixed charges
- Expedited building permit review process
- Low interest loan program
- Cost sharing
- ◆ Travis County PACE Loan Program





Funding Strategies Advancing Reuse



Community Benefit Charge (CBC)

 Add an extra \$0.15 per thousand gallons to AW's CBC to fund reclaimed water system expansion and onsite reuse programs

OWRS Alternative Fee

Large developments greater than 500 feet from centralized reclaimed will install dual plumbing and pay
a fee to support reclaimed system expansion in place of implementing OWRS

Purple Choice and Purple Choice Plus

 Voluntary rate program for AW residential and commercial customers to fund reclaimed system expansion and programs

Excess Usage Fees

Fees applied when potable water allotments from Water Benchmarking are exceeded



| Development Size | Current Requirements Effective 12/1/2021 | Proposed Updates to Requirements Effective 4/1/2024 |
|---|--|---|
| Small <250,000 square feet | Water Benchmarking Connect to centralized reclaimed water within 250 feet | No Change |
| Large ≥250,000 square feet without multifamily | Water Benchmarking Connect to centralized reclaimed water within 500 feet | Water Benchmarking Connect to centralized reclaimed water within 500 feet; or Install an onsite water reuse system; or Install dual plumbing, make ready to connect to centralized reclaimed water, and pay a fee to support reclaimed system expansion, for developments greater than 500 feet from centralized reclaimed water |
| Large ≥250,000 square feet with multifamily (Exclude projects accredited for Affordability Unlocked or State Low Income Housing Tax Credit) | Water Benchmarking Connect to centralized reclaimed water within 250 feet | Water Benchmarking Connect to centralized reclaimed water within 500 feet; or Install an onsite water reuse system; or Install dual plumbing, make ready to connect to centralized reclaimed water, and pay a fee to support reclaimed system expansion, for developments greater than 500 feet from centralized reclaimed water |

Key 2024 Activities Advancing Reuse



March 7: PURPLE PIPE DAY!

- Council considers Code changes for Onsite Water Reuse Systems and Reclaimed Water System Connections
- Council considers reauthorizing existing incentive program
- Council considers Community Benefit Charge increase (\$0.15 per thousand gallons)
 to fund Reclaimed Water System expansion and Onsite Reuse programs
- Council considers reclaimed water Interlocal Agreement with Travis County.

August

Budget adoption, including new rates and incentives for reclaimed water system expansion



