

• The District provides service within its designated service area through the use of extensive water and sewer infrastructure including:

Water Treatment Plant

5 Water Pump Stations 2 Sewage Lift Stations

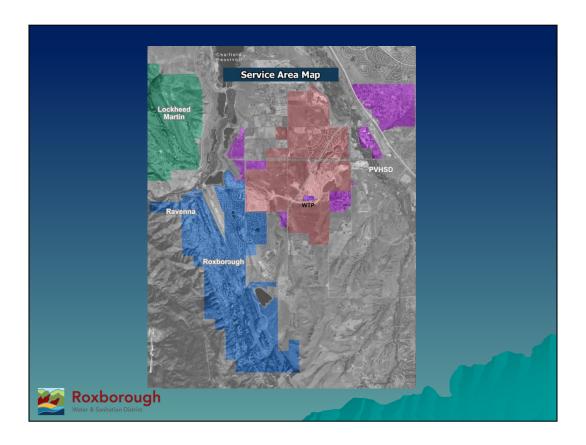
6 Water Storage Tanks 64 Miles of Sewer Pipes

86 miles of Water Pipes 1451 Manholes

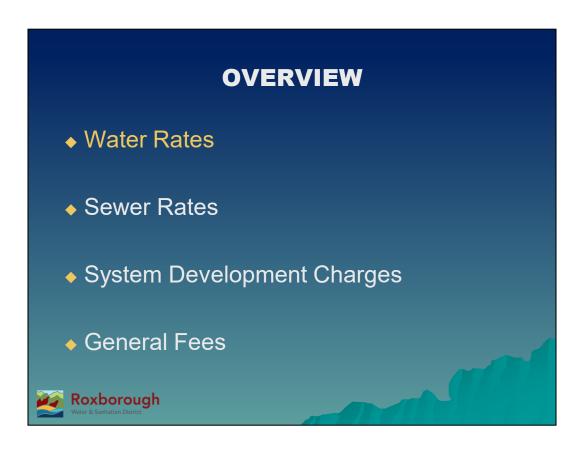
565 Fire Hydrants

2121 Water Valves

- Funding for operation, maintenance, repair and replacement of the District's system is primarily provided by rates, fees and charges. Property taxes provide a minor component of the District's revenues.
- The District reviews rates on an annual basis. Rates are established based on funding requirements for operation, maintenance and replacement of the system.



- RWSD provides different services in different areas
- Central Service Area (Roxborough Development)
 - RWSD provides both water and sewer service.
- East Service Area Water Service Only
 - Areas included in the Subdistrict are the Chatfield East, Chatfield Acres, Titan Road Industrial Park (TRIP), Plum Valley Heights developments and several smaller parcels.
 - Chatfield East, Chatfield Acres, and TRIP are served with water supplied by RWSD and treated by Centennial Water and Sanitation District.
 - Plum Valley Heights is served through the RWSD treatment and distribution system.
- West Service Area (Lockheed-Martin) Sewer Service Only
 - RWSD conveys LM sewer flows to Littleton for treatment service
- Sterling Ranch service provided by Dominion Water and Sanitation District
 - RWSD provides water treatment service only.
 - · DWSD provides the raw water.



- Each year, the District reviews background information regarding water treatment and use; revenues and expenses; and rate history; to establish an appropriate perspective for evaluation of rates.
- Rates are then calculated to support the current year budget and provide adequate reserves for operations, maintenance, and capital replacement.

	Total Treated Water (1Kgal)	Average No. EQRs	Average Water Use Per Unit (GPD/EQR)	Total Revenue From User Charges (\$)	Ave. Revenue/ EQR From User Charges (\$)	Total Revenue From User Charges & Surcharges (\$)	Ave. Revenue/ EQR From User Charges & Surcharges (\$)
2019	313,998	3791	227	\$3,386,585	\$893	\$4,606,232	\$1,215
2020	370,025	3844	264	\$3,873,409	\$1008	\$5,102,115	\$1,327
2021	342,715	3876	242	\$3,707,043	\$956	\$4,952,390	\$1,278
2022	361,487	3924	252	\$3,794,971	\$967	\$5,058,367	\$1,289
2023	315,528	3966	218	\$3,577,022	\$902	\$4,847,478	\$1,222

- Water production in 2023 decreased from production in 2022 primarily due to a 40% increase in precipitation in 2023.
- The average annual cost per customer(EQR) was \$902 without surcharges and \$1,222 with surcharges. Surcharges included \$25/mo./EQR for water supply and \$3/mo./EQR for system replacements.

^{*}EQR (Equivalent Residential Unit) – A customer using the same size tap as a normal residential unit. Customers using larger taps are counted as more EQRs in proportion to tap size.

AFFORDABILITY

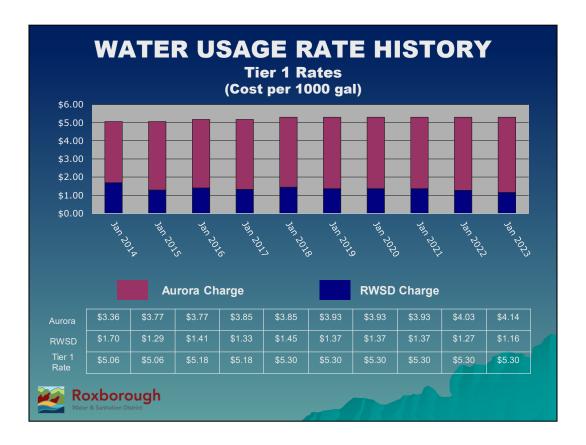
- ◆ EPA Criteria Less than 2.5% MHI
- ◆ CDPHE Criteria Less than 1.5% MHI
- Roxborough CDP 2018-2022 MHI -\$150,086
- Average Annual Cost/Cust. \$1,222
- Average Annual Cost/Cust 0.81%



- Affordability of water rates is evaluated by comparing Roxborough Water and Sanitation District rates to affordability guidelines used by EPA and CDPHE.
- EPA has not issued strict guidance regarding affordability but generally indicates that water rates exceeding 2.0% to 2.5% of the median household income may be a concern.
- CDPHE indicates that water rates exceeding 1.5% of median household income may be a concern.
- The actual affordability index for RWSD based on the 2018-2022 median household income for Roxborough CDP of \$150,086, and the average annual cost per RWSD customer of \$1,222 is 0.81% of MHI.

Rate (Per 1000 Gal)	Mar 2019- Mar 2020	Mar 2020- Mar 2021	Mar 2021- Mar 2022	Mar 2022- Mar 2023	Mar 2023- Present
0-5 gal	\$5.30	\$5.30	\$5.30	\$5.30	\$5.30
6-10 gal	\$5.30	\$5.30	\$5.30	\$5.75	\$6.25
11-20 gal	\$6.30	\$6.30	\$6.50	\$7.00	\$7.75
21-40 gal	\$7.50	\$7.50	\$7.75	\$8.50	\$10.00
41+ gal	\$12.50	\$12.50	\$12.75	\$13.75	\$17.00
Monthly Base Charge	\$35.14/ mo	\$36.20/ mo	\$36.50/ mo	\$37.00/ mo	\$39.00/ mo

- The Tier 1 rate per 1000 gallons of water has not increased since 2019, primarily due to the District's desire to keep essential indoor water at an affordable rate.
- The monthly flat fee has increased by less than 2% per year since 2019.

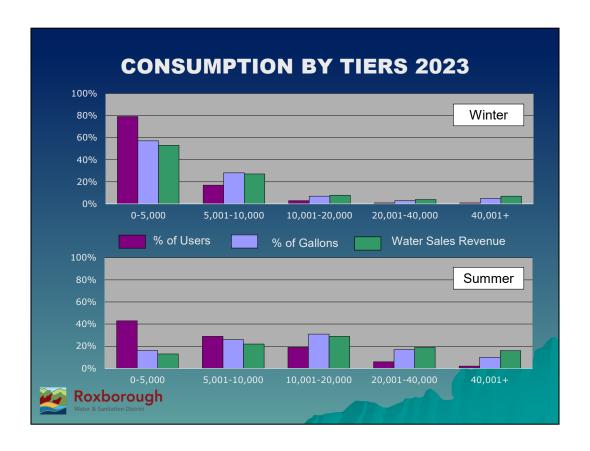


• Since 2014:

- the cost of raw water purchased from Aurora has increased from \$3.36/1000 gal to \$4.14/1000 gal, a 19% increase, or an average of 1.9% per year.
- The District's charge for treatment and distribution has decreased from \$1.70 to \$1.16, a 47% decrease.

VARIABLE COST OF WATER % 2022 2023 Difference -11.1% \$1,485,726 Water \$1,320,164 \$251,156 -6.3% \$268,131 **Utilities Operating Supplies** \$109,603 \$53,125 -51.5% -5.6% Operator O/T \$30,318 \$28,634 **CWSD Treatment &** \$21,941 \$17,021 -22.4% Distribution \$1,915,719 \$1,670,100 -12.8% Total 318,194 -13.6% Production (1000 gals) 368,444 0.95% Variable Cost (Per 1000 \$5.20 \$5.25 Roxborough

- The Cost of Water includes items that vary based on the quantity of water treated. Fixed costs such as operating staff, equipment, and insurance are not included in the Cost of Water.
- The total production cost increased \$0.05 per 1000 gallons from 2022 to 2023.



- In winter, the lowest tier represents 79% of the Users, 57% of the water and 53% of the water sales revenue.
- In summer, the first three tiers represent 91% of the Users, 73% of the water and 64% of the water sales revenue.
- In both winter and summer, users in the upper tiers use more water per user and pay higher rates for the water used.

WATER REVENUES VS. EXPENSES Total Operating Total Operating Balance* Revenues **Expenses** 2018 \$3,567,360 \$3,208,882 \$358,479 \$3,728,772 \$3,347,700 \$381,072 2019 2020 \$4,443,981 \$4,151,417 \$292,564 \$4,228,475 2021 \$3,711,266 \$517,209 2022 \$4,338,531 \$4,124,282 \$214,249 2023 \$3,930,841 \$3,699,321 \$231,520 2024 \$3,601,200 \$4,386,205 (\$785,005)(Budget) * Available for Capital Projects/Reserves Roxborough

- For 2018 -2023, the amounts shown reflect actual revenues and expenses.
- For 2024, revenues and expenses are based on the 2024 budget.
- The balance for each year is used to fund reserves, as established by the District's financial policies.
- The District's budgeting practice is based on conservative estimates of revenues and aggressive budgeting of expenses, which results in a projected deficit for the budget year. As shown by the results in previous years, a positive balance is normally achieved based on actual revenues and expenses.

RATES IN OTHER DISTRICTS

 RWSD rates compared to rates in 14 local districts

Arapahoe Water and Wastewater Authority (ACWWA)

Centennial (CEN)

Stonegate Village (SGV)

Cottonwood (CWD)

Castle Pines N. (CPN)

Perry Park (PP)

Genesee (GEN)

Sterling Ranch (SR)

Parker (PAR)

Castle Pines (CP)

Castle Rock (CR)

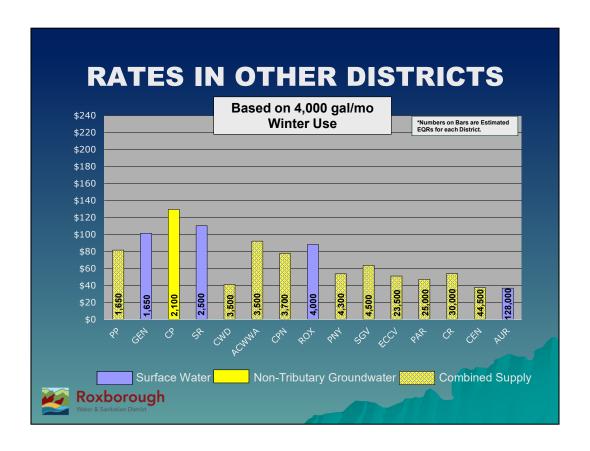
Pinery (PNY)

E. Cherry Crk. (ECCV)

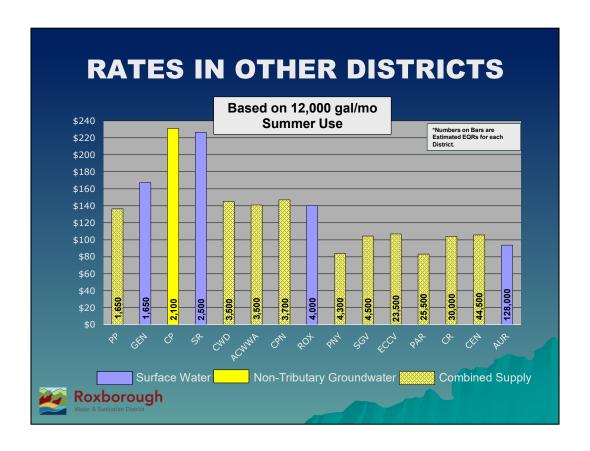
Aurora (AUR)



- For informational purposes, rates are normally compared to rates in nearby districts.
- A comparison of rates in these districts is provided on the following slide.



- Comparison of rates to other districts is presented for informational purposes only. Each entity must set its own rates based on its own unique financial requirements.
- Generally, smaller districts tend to have higher rates than larger districts. In addition, those districts that use surface water, or have a combined supply with a significant portion of surface water, have higher rates than districts that use primarily groundwater.
- Eventually, all districts will have to convert to surface water and will have correspondingly higher rates.



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- Eventually, all districts will have to convert to surface water and will have correspondingly higher rates.

REBATE PROGRAMS								
REBATES IN OTHER DISTRICTS	AURORA WATER	DENVER WATER	CASTLE ROCK	ROXBOROUGH				
High Efficiency Toilet (<1.1 gpf)	up to \$100	Up to \$100	Up to \$150 (0.8 gpf)	\$50				
High Efficiency Washer	-			Up to \$75				
Xeriscape (500 SF minimum) Res.	\$4000 Max over 2 years		\$2.50/sq ft Max 1,500 sq ft					
Rotary High Efficiency Sprinkler Heads	\$6 per head / limit 50 heads per residence	Up to \$3 per head / 1 rebate per 10-years	Up to \$5 per head / Max of \$2000					
Weather-based Controller with Rain Sensor	\$200	up to \$75						

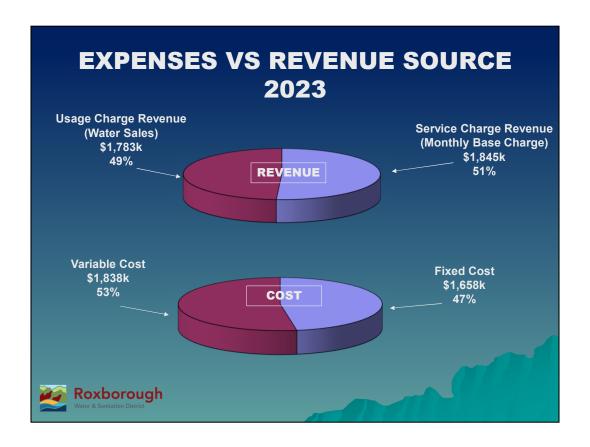
- The District provides rebates for certain high efficiency fixtures and appliances.
- In general, additional revenues received from upper tier customers are used to fund the rebate program.

REVIEW OF RATE PHILOSOPHY (IMPLEMENTED 2003) BASIC CONCEPT

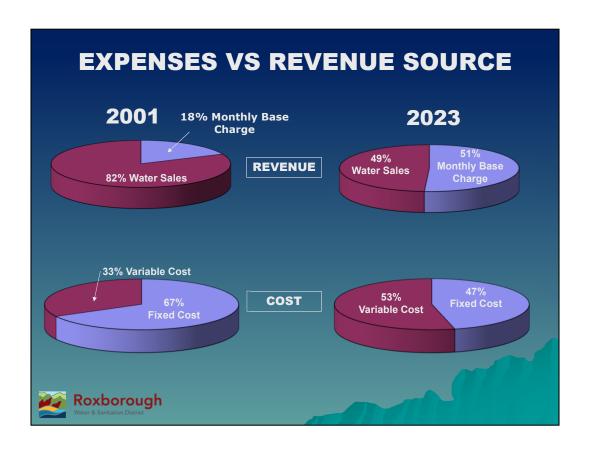
- Monthly Base Charge
 - Monthly Base Charges cover fixed costs
 - Spread income over year
 - Revenues not sensitive to water use
- Tiered Water Use Charges
 - Charges reflect actual water use
 - Adds fairness
 - Lowest tier covers in house use



- The District charges a monthly base charge to cover expenses related to fixed cost items such as personnel, insurance, administrative expenses, vehicles, etc.
- The District also charges for actual water use on a per 1000 gallon basis.



- To achieve financial stability, the District's rate structure is based on covering fixed costs with the monthly base charge revenue, and variable costs with water sales revenue. Under this system customers:
 - Share equally in costs related to keeping the system ready to serve (Monthly Base Charge).
 - Pay for water in proportion to use (\$ per 1000 gallons).
- Using this method, the District maintains adequate revenue independent of water sales.
- In 2023, fixed costs were 47% of total costs, while monthly base charge revenue represented 51% of total revenues. Results for variable costs and water sales revenue were similar.



• In 2001, prior to adoption of the current rate strategy, the majority of the District's revenues came from water sales, while the majority of the costs were fixed. This left the District vulnerable to revenue shortfalls in low water use years.

RECOMMENDED 2024 WATER RATE ACTION

- ◆ Increase Usage Charges
- ◆ Increase to Monthly Base Charge
- ◆ Aurora Water Drought Surcharges

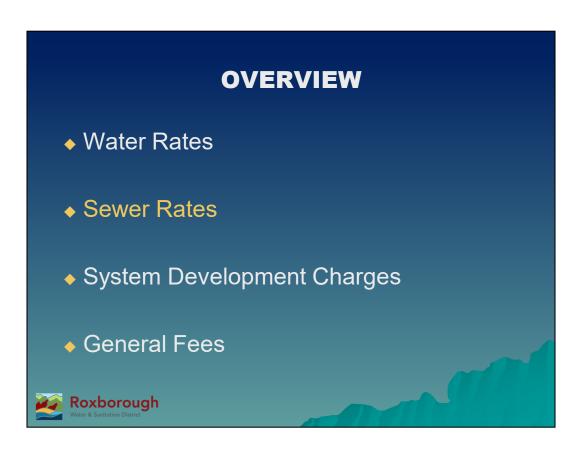


		Current	Recommended 2024 Rates
Water L	Ise		
Per 1000 Gal	0-5 gal	\$5.30	\$5.50
	5-10 gal	\$6.25	\$6.75
	10-20 gal	\$7.75	\$8.25
	20-40 gal	\$10.00	\$10.50
	40 + gal	\$17.00	\$18.00
Projected Reserves from Wa	ter Sales	\$804,931	\$969,293
Base Ch	arge		
Monthly Base Charge		\$39.00	\$41.50
Projected Reserves from Bas	se Charge	(\$84,223)	\$34,757
Surchar	ges		
Vater System Replacement	Fund	\$3.00	\$3.00
Projected Revenue from Wat Replacement Fund	er System	\$142,776	\$142,776
Vater Supply Fund		\$25.00	\$25.00
Projected Revenue from Wat Service	er Supply Fund for Debt	\$1,189,800	\$1,189,800

- Summary of the adequacy of existing rates:
 - The existing flat fee provides slightly less revenue than needed to cover fixed costs as projected in the 2023 budget.
 - The \$3/mo. surcharge for capital replacement reserves provides a modest contribution to reserves.
 - The \$25/mo. surcharge for water supply produces adequate revenue for debt service on the loan for the permanent water supply.
- Recommended Action:
 - Increase all Tier Rates.
 - Increase the Monthly Base Charge by \$2.50.
- The Board approved the recommended action at its March 20, 2024 meeting, with an effective date of March 25, 2024.

	<u>·</u>	uary 1, 202			
Allowed Water	Aurora Water Dr	Normal	Stage I	Stage II	Stage III
Surcharge per 1,000 ga winter quarter average	allons used up to 110% of	\$0.00	\$0.00	\$0.00	\$4.41
Surcharge per 1,000 ga winter quarter average	\$0.00	\$2.05	\$7.98	\$13.23	
Recomme	ended Aurora Water	Drought Su	ırcharge	for RWS	D
Allowed Water	Usage for Tiers	Normal	Stage I	Stage II	Stage III
Allowed Water		Normal \$0.00	Stage I \$0.00	_	III
	00		I	II	\$4.41
Tier 1 0-5,00	000	\$0.00	1	II \$0.00	\$4.41 \$13.2
Tier 1 0-5,00 Tier 2 5-10,0	000	\$0.00 \$0.00	\$0.00 \$2.05	\$0.00 \$7.98	\$4.41 \$4.41 \$13.2 \$13.2

- In the event of water shortages, the City of Aurora can impose surcharges on its own customers and on Roxborough.
- Implementation of the surcharges requires a vote of the Aurora City Council.



- Unlike water, sewer flows for each customer are not metered. As a result, sewer service is billed as a monthly base charge.
- The monthly base charge charged for sewer service provides revenues for operation as well as reserves for operations and system replacement.

SEWER ANNUAL COST per EQR

	Total Wastewater (1000's of Gal)	Average No. of Connected EQRs	Average Sewage Produced Per Unit (GPD/EQR)	Total Revenue From User Charges (\$) *	Ave. Revenue/ EQR From User Charges (\$) *	Total Revenue From User Charges & Surcharges (\$) *	Ave. Revenue/ EQR From User Charges & Surcharges (\$) *
2019	196,677	3606	149	\$1,648,695	\$457	\$1,777,107	\$493
2020	194,288	3618	147	\$1,703,263	\$471	\$1,832,504	\$506
2021	196,992	3658	148	\$1,766,411	\$483	\$1,897,131	\$519
2022	178,638	3711	132	\$1,875,252	\$505	\$2,007,885	\$541
2023	204,061	3733	150	\$1,968,378	\$527	\$2,101,749	\$563



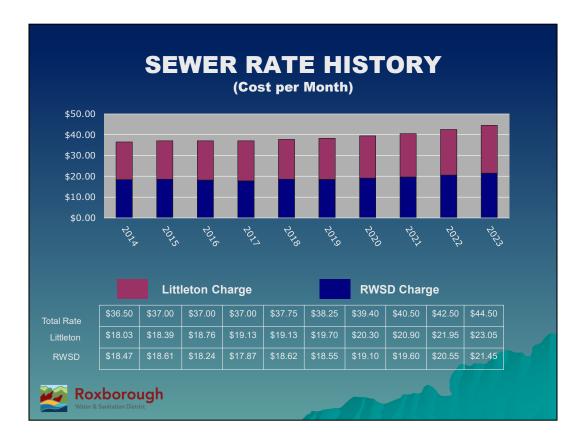
- * Lockheed Martin & Sterling Ranch not included
- The quantity of wastewater collected in the District during 2023 increased from the prior year.
 - Wastewater flows in 2023 were higher primarily due increased precipitation which increases Inflow and Infiltration related to high groundwater tables.
- The average annual cost per customer(EQR) was \$527 without surcharges and \$563 with surcharges. The only surcharge related to sewer service is \$3/mo./EQR for system replacement.

AFFORDABILITY

- ◆ EPA Criteria Less than 2.5% MHI
- ◆ CDPHE Criteria Less than 1.5% MHI
- Roxborough CDP 2018-2022 MHI -\$150,086
- Average Annual Cost/Cust. \$563
- ◆ Average Annual Cost/Cust 0.38%



- Affordability of sewer rates is evaluated by comparing Roxborough Water and Sanitation District rates to affordability guidelines used by EPA and CDPHE.
- EPA has not issued strict guidance regarding affordability but generally indicates that sewer rates exceeding 2.0% to 2.5% of the median household income may be a concern.
- CDPHE indicates that sewer rates exceeding 1.5% of median household income may be a concern.
- The actual affordability index for RWSD based on the 2018-2022 median household income for Roxborough CDP of \$150,086, and the average annual cost per RWSD customer of \$563, is 0.38% of MHI.



• Since 2014:

- Overall sewer rates have increased by an average of 1.8% per year.
- The treatment cost charged by Littleton has increased by 2.2% per year.
- The cost charged by the District for collection and transmission has increased by 1.4% per year.

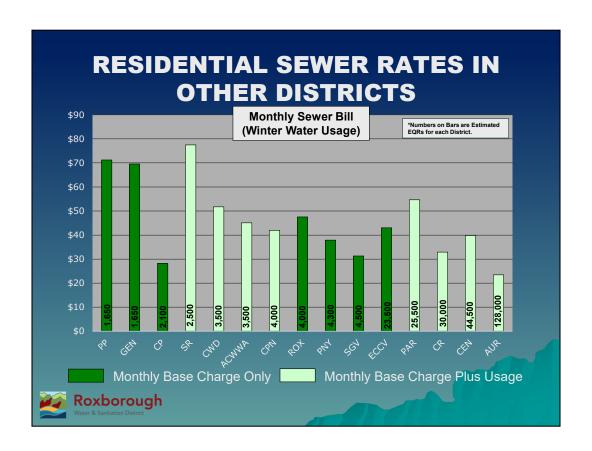
SEWER REVENUES VS. EXPENSES

	Total Operating Revenues	Total Operating Expenses	Balance*
2018	\$1,959,851	\$1,672,379	\$287,472
2019	\$1,940,768	\$1,866,796	\$73,972
2020	\$2,027,282	\$1,789,489	\$237,794
2021	\$2,141,242	\$1,981,928	\$159,314
2022	\$2,245,091	\$2,224,310	\$20,781
2023	\$2,372,455	\$2,272,865	\$99,589
2024 (Budget)	\$2,153,000	\$2,238,500	(\$85,500)



* Available for Capital Projects/Reserves

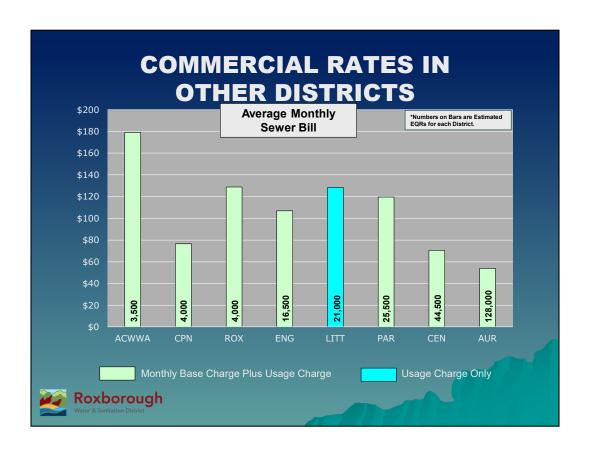
- For 2018 2023, amounts shown reflect actual revenues and expenses.
- For 2024, revenues and expenses are based on the 2024 budget.
- The balance for each year is used to fund reserves, as established by the District's financial policies.
- The District's budgeting practice is based on conservative estimates of revenues and aggressive budgeting of expenses, which results in a relatively low estimated balance. As shown by the results in previous years, a higher balance is normally achieved based on actual revenues and expenses.



 Comparison of rates to other districts is presented for informational purposes only. Each entity must set its own rates based on its own unique financial requirements.

Cost per Month Monthly Base Charge \$ 44.50 Non-Metered Wastewater Usage (Cost/1,000 gal clean water used) Metered Wastewater Flow (Cost/1,000 gal wastewater produced) Repair and Replacement Fee \$ 3.00

- Commercial customers pay the same base charge per EQR as residential customers.
- Commercial customers pay an additional fee to account for the types of discharge they produce. The fee varies depending on whether wastewater is metered or unmetered.
- Commercial customers pay the same Repair and Replacement fee per EQR as residential customers.



 Comparison of rates to other districts is presented for informational purposes only. Each entity must set its own rates based on its own unique financial requirements.

RECOMMENDED 2024 SEWER RATE ACTION

- ◆ Increase Monthly Base Charge
- ◆ Increase to Commercial Wastewater Charge (per 1,000 gals)

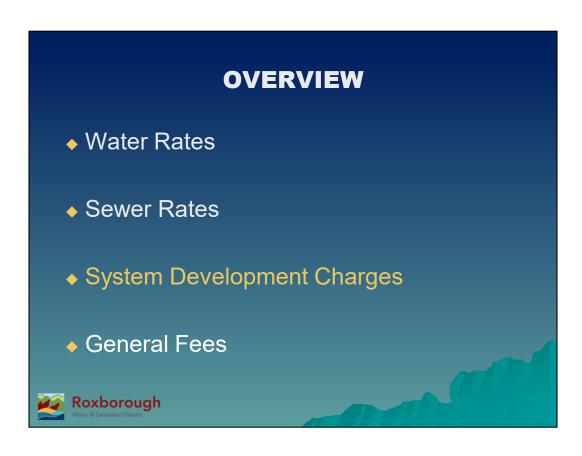


	Current	Recommende 2024 Rates
onthly Base harge	\$44.50	\$46.50
ewer System eplacement Fund	\$3.00	\$3.00
Projected Reserves om Monthly Base Charge	\$107,958	\$197,550
rojected Reserves om Surcharges	\$134,388	\$134,388

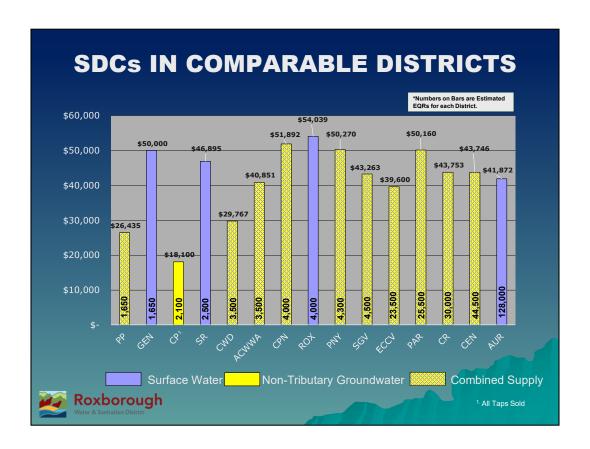
- Summary of the adequacy of existing rates:
 - The existing monthly base charge and surcharge provide adequate revenue to cover system operation expenses and make modest contributions to reserves.
- Recommended Action:
 - Increase sewer rates.
- The Board approved the recommended action at its March 20, 2024 meeting, with an effective date of March 25, 2024.

RECON	MENDA1 Current	Recommended 2024 Rates
		2024 Nates
Monthly Base Charge	\$44.50	\$46.50
Sewer System Replacement Fund	\$3.00	\$3.00
Non-Metered Wastewater Usage (Cost/1,000 gal clean water used)	\$2.26	\$2.36
Metered Wastewater Flow (Cost/1,000 gal wastewater produced)	\$4.16	\$4.36

- Summary of the adequacy of existing rates:
 - The existing monthly base charge and surcharge provide adequate revenue to cover system operation expenses and make modest contributions to reserves.
- Recommended Action:
 - Increase sewer rates.
 - Increase the commercial wastewater charge.
- The Board approved the recommended action at its March 20, 2024 meeting, with an effective date of March 25, 2024.



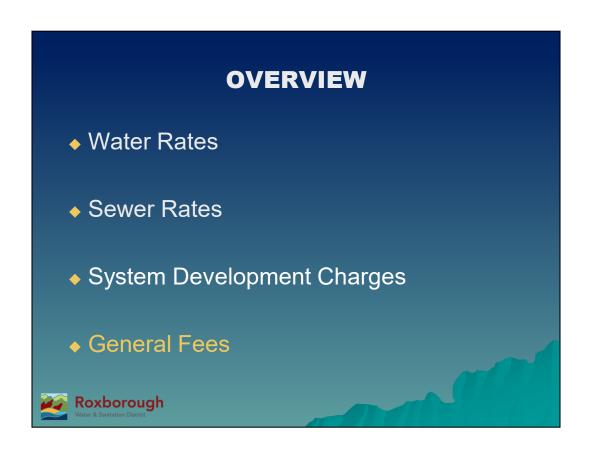
- System Development Charges (SDCs) are required for new homes connecting to the District's water and sewer systems.
- SDCs do not apply to existing customers connected to the District's water and sewer systems.



 Comparison of rates to other districts is presented for informational purposes only. Each entity must set its own rates based on its own unique financial requirements.

	SDC Summary								
		2023	2024						
Water									
	New Facilities	\$3,561	\$5,126						
	Existing Facilities Buy-In	\$27,701	\$27,670						
	Water Supply	\$5,847	\$6,147						
	Subtotal	\$37,109	\$38,943						
Sewer									
	New Facilities	\$423	\$1,372						
	Existing Facilities Buy-In	\$10,851	\$10,707						
	Outside Treatment Fees	\$5,656	\$5,656						
	Subtotal	\$16,930	\$17,735						
Total V	Water and Sewer SDC	\$54,039	\$56,678						
Roxb Water & Sanit	orough ation District	-and							

- System Development Charges are calculated to ensure that new homes pay their fair share of water and sewer infrastructure costs. The SDC is comprised of a number of components including:
 - New homes' share of the cost of new facilities required to serve District customers.
 - Buy-In to existing systems that have been or are being paid for by existing customers.
 - Water supply.
 - Connection fee paid to Littleton for wastewater treatment service.
- For 2024, the SDC for a new home connecting to the District's water and sewer systems is \$56,678, an increase of \$2,639 from 2023.
- Recommended Action:
 - Increase the SDC by \$2,639.
- The Board approved the recommended action at its March 20, 2024 meeting, with an effective date of March 25, 2024.



 General Fees includes any fees or surcharge charged by the District in addition to water, sewer or SDC. For a full list of charges please refer to the Schedule of Fees on the District's website.



- Recommended Action:
 - Institute a new refundable Inspection fee to be added to the Application for Water & Sewer Connection Permit.
 - This fee would be assessed at the time of the application and is eligible to be refunded once the District has approved the final landscaping is complete and in conformance of the District Rules and Regulations.

• The Board denied the recommended action at its March 20, 2024 meeting.