

To: Mayor Danforth and Board of Trustees

From: Leslie Klusmire, Interim Town Manager

Assistance with data from Town Treasurer Lisa Cyriacks, Public Works Superintendent Andrew Martinez, Public Works Assistant Gretchen Nelson

RE: Options and Recommendation for Water and Sewer Rates to Cover Operation and Maintenance Costs

Date: June 13, 2022

As I forewarned in the 2022 budget, the financial state of the Water and Wastewater Funds is concerning. The .5% sales tax instituted to subsidize those funds in 2020 provides nearly 50% of the fund revenue and is still insufficient to cover actual expenses. The Water Fund is running at a deficit. While the Water Fund currently covers operational costs, it cannot maintain prudent reserves or fund future capital improvement and replacement costs with its current low user fees. The Wastewater Fund covers its current operating expenses. Still, it will fall far behind when the amount of sales tax revenue not allowed by TABOR in enterprise funds is removed, and the expected significant increases in wastewater treatment charges are levied due to the Baca Water and Sanitation District Agreement's expiration in March of 2022.

The process of raising rates is never easy. There will be backlash from existing customers and newly assessed accounts. No one wants to pay more for essential services. I have put together a survey of other towns and what they were charging in 2021. Of note, I had to go to several websites in that search, and nearly everyone I visited is proposing a significant rate increase to their customers that is not reflected in the survey. The Town can't control its essential water and sewer costs. The CDPHE requirements continue to result in significant cost increases.

Reinstatement of both funds to enterprise status is necessary to allow the Town to take out loans to fund needed improvements. This means reducing the amount of taxes and state grants in those funds to no more than 10% of total revenue starting on January 1, 2023.

The Public Works staff is seeing increased water usage (verified through meter reads) this summer, probably due to gardening and an increase in the number of tourists. This points to the need for increased water storage so that we can maintain enough water to use for a fire. The only way the Town will be able to afford this project is through grants and loans. Loans require solvency to obtain and the extra expense of a loan payment. A CDPHE drinking water loan of \$400,000 over 30 years will result in a \$1,600 payment per month.

Crestone has endeavored to keep its water and sewer rates very low to allow low-income residents to afford to pay those rates. Some do not want to subject low-income residents to the application requirements of public assistance to cover water and sewer charges. Residents are

already taking advantage of those programs that don't have concerns about the application process.

The Town is the only municipal entity I know that does not require customers to tap into mains if they are available or pay an "availability fee." The reason why municipalities and water districts require mandatory taps (or an availability fee for those that don't tap) is that the Town is paying the costs of operating its treatment and distribution (water) and collection system (sewer). Those costs are significant and the same whether you have 40 or 80 customers. If you allow customers not to pay for the infrastructure you've developed to serve them, you have to charge the tapped-in customers more money and they shoulder a proportionately larger share of those costs.

In addition, the Trustees assumed that revenues were covering expenses because actual expenses were not properly calculated in previous budgets and financial reports. Most personnel and some other costs were being paid out of the General Fund. The auditor had been reallocating those funds properly each year, but the Trustees were not given the audits.

The audit is an audit of staff work, and audits are required so that the elected officials and the public can be assured their finances are being properly managed. The Trustees are ultimately responsible for the proper handling of Town funds. Unfortunately, since the Trustees did not ask to see the audits, significant deficiencies continued year after year. I don't know if audits were presented to the Board before the engagement of Wall, Smith, and Bateman. I asked our auditor, and she told me they've never been asked to present to the Board. In every other Town I know of, this is an annual summer event – a presentation of the previous year's audit to the municipal or county elected officials.

The Town needs to raise rates significantly to cover operational and maintenance costs. Without a rate increase, both funds will be bankrupt by the end of next year. There are options.

Future topics for the W&S funds:

Future capital costs for water improvements are usually covered through water fees paid for additional water use over base rates and tap fees. Tap fees usually cover future capital costs for wastewater fees. In Crestone's case, we typically collect zero to one tap fee per year. This is not enough to fund capital improvements. Voters recently approved a Capital Improvement Fund, which will hold the excess sales tax that can no longer go to subsidize water and sewer funds. In the year that the Town elects to use those for a large project, the fund they are used in will lose enterprise status for the entire calendar/fiscal year.

The Town's tap fees are 1/3 to 1/4 of the average tap fee for small towns in Colorado. I will bring a subsequent recommendation to increase them for new taps due to new development. I don't recommend increasing tap fees for existing structures for reasons that will be explained later in this memo.

Water

Currently, the base rate for water is \$34. Most customers pay the base rate. The Town does collect some additional use revenue as follows:

- Up to 4000 gallons: Base rate @ \$34
- From 4000 to 8000 gallons: \$6 per 1000 gallons used
- From 8000 to 12000 gallons: \$8 per 1000 gallons used
- Over 12000 gallons: \$10 per 1000 gallons used

If someone were to use 12,000 gallons in a month, at the current rate, their bill would be \$90 and would increase by \$10 for every additional 1000 gallons used.

The Town's current annual revenue from additional use is about \$9000.¹ The various calculations attached to this memo separate additional water use revenue from the base rate revenue and target it for capital improvement savings. I am not recommending increasing the rates for additional water use at this time. I am recommending the revenue from additional water use charges be saved toward water storage engineering studies.

Going into 2023, our Water Fund budget will operate at a deficit of \$69,482 with no rate increase. This is due to the loss of sales tax revenue and spending down the cash balance. The cash balance is reduced because all expenses are now shown in the Water Fund and paid out of Water Revenue instead of General Fund subsidies. The fund would have operated at a revenue deficit this year if it didn't have the excess cash balance to make it through the year. The General Fund revenue is primarily from sales and property tax, and subsidizing the Water fund with it exacerbates the Tabor limit problem. The cash balance was spent to make up for that deficit. In the future, the cash balance carried from year to year should equal the four-month reserve.

The staff completed research to determine how many taps we had and how many people could tap into an adjacent main. We don't have perfect records or good mapping, so this could be off by a tap or two.

- Number of taps: 61
- Number of customers being billed: app 47 in 2021
- Number of properties that would be tapped if the Town required mandatory taps: 62
- Total number of additional properties that would pay for water service costs if the Town billed all existing taps and required mandatory taps: 103
- Total number of additional properties that would pay for water service costs if the Town billed all existing UNITS (residential or business): 153

¹ using 2021 9 months actual revenue

The Town does require customers to pay the base rate if they are tapped regardless of if they choose to use a well instead. The staff surmises that some customers are not being billed because they elected to use their well. If this is what the Town wants to continue to do, we need to change the code, and the rates will need to be increased over the proposal contained in this memo. I have calculated the rate without a mandatory tap or availability fee using the number of taps – 61 – and not the number of accounts currently billed – 47.

The total base rate increase you must institute on January 1 under your current code for existing taps is \$130. This amount covers your water enterprise fund operations.

It would work as follows:

Up to 4000 gallons: Base rate @ \$130
From 4000 to 8000 gallons: \$6 per 1000 gallons used
From 8000 to 12000 gallons: \$8 per 1000 gallons used
Over 12000 gallons: \$10 per 1000 gallons used

If someone were to use 12,000 gallons in a month, their bill would be: \$186 and would increase by \$10 for every additional 1000 gallons used.

Yes, that is a lot, and the average rate for 10,000 gallons in the state was \$68 in 2021. However, usually, these entities require mandatory connections.

If the Town were to require mandatory connections (with an option that if someone doesn't want to connect, they are charged an availability fee equivalent to the base rate), the total base rate increase would be \$80. This amount covers your water enterprise fund operations. This base rate assumes 103 customers are billed at the base rate tapped or not.

It would work as follows:

Up to 4000 gallons: Base rate @ \$80
From 4000 to 8000 gallons: \$6 per 1000 gallons used
From 8000 to 12000 gallons: \$8 per 1000 gallons used
Over 12000 gallons: \$10 per 1000 gallons used

If someone were to use 12,000 gallons in a month, their bill would be \$136 and would increase by \$10 for every additional 1000 gallons used.

Most municipalities now require each unit to be metered and charged accordingly. The Town allows one meter for a multi-tenant building. You may want to consider requiring each dwelling unit to be metered because you lose revenue by allowing one meter.

If the Town were to require mandatory connections for all units (with an option that if someone

doesn't want to connect, they are charged an availability fee equivalent to the base rate), the total base rate increase would be \$54. This amount covers your water enterprise fund operations. This base rate assumes 153 customers are billed at the base rate tapped or not.

It would work as follows:

Up to 4000 gallons: Base rate @ \$54
From 4000 to 8000 gallons: \$6 per 1000 gallons used
From 8000 to 12000 gallons: \$8 per 1000 gallons used
Over 12000 gallons: \$10 per 1000 gallons used

If someone were to use 12,000 gallons in a month, their bill would be \$110 and would increase by \$10 for every additional 1000 gallons used.

At the end of this memo, I discuss strategies to fund taps for existing residents and businesses.

Wastewater

Currently, the base rate for one EQR is \$40 (\$38.50 plus a \$1.50 admin fee). Most customers pay the base rate. Eleven customers pay for a total of 43.5 additional EQRs charged at \$38.50 each.

Going into 2023, with no rate increase in our Wastewater Fund, the 2023 budget will show a deficit of \$65,812. This is due to the loss of sales tax revenue and spending down the cash balance. The cash balance is reduced because all expenses are now shown in the Wastewater Fund and paid out of wastewater revenue instead of General Fund subsidies. The General Fund revenue is primarily from sales and property tax, exacerbating the Tabor limit problem. In the future, the cash balance carried from year to year should equal the four-month reserve.

The staff completed research to determine how many taps the Town has and how many people could tap into an adjacent main. We don't have perfect records or good mapping, so this could be off by a tap or two.

- Number of taps: 83
- Number of customers being billed: app 77 in 2021
- Number of properties that would be tapped if the Town required mandatory taps: 10
- Number of properties that would be tapped if the Town required mandatory taps on the 2023 line extension: 15 to 20
- Total number of properties that would pay for water service costs if the Town billed all existing taps and required mandatory taps: 93 now, potentially 120ish

The town requires customers to pay the base EQR rate if they have a tap. I don't know why we are not charging the six customers with taps that don't have accounts. If this is what the Town

wants to continue to do, we need to change the code, and the rates will need to be increased over the proposal contained in this memo. I calculated the rate without a mandatory tap or availability fee using the number of taps – 83 – and not the number of accounts currently billed – 77.

The total base rate increase you must institute on January 1 for existing taps is \$86. This amount covers your water enterprise fund operations and maintenance and generates an additional \$10,000 to cover an additional water storage annual loan payment.

It would work as follows, figuring 126.5 EQRs billed per month:

For the 83 customers at the base rate for one EQR: \$86
The 11 customers would pay this rate per additional EQR

The total Base Rate for Customers with access to both water and sewer would be \$216 per month.

I am recommending doing away with the “administration and maintenance” fee. Operations and maintenance costs are much more than that, and the costs of operating the system should be reflected entirely in the actual rate.

Yes, that is a lot, and the wastewater flat fee average in the state was about \$38 for municipalities and \$47 for special districts in 2021. Usually, these entities require mandatory connections for public health reasons. In addition, the requirements for wastewater treatment are rapidly becoming most expensive. I suspect many small towns with low rates still depend on lagoons for treatment. CDPHE is expected to require towns to phase out lagoons within two years. A small wastewater plant will cost upwards of \$5 million. Center just completed one estimated at \$9 million that ended up costing \$12 million. Monte Vista will build a \$30 million plant and significantly increase rates to cover that cost.

If the Town were to require mandatory connections (with an option that if someone doesn't want to connect, they are charged an availability fee equivalent to the base rate), the EQR rate increase would be \$68. This amount covers your water enterprise fund operations and maintenance. This base rate assumes 103 customers are billed at the base rate.

Although we estimate about 27 additional customers based on ten customers that aren't connected now and an additional 17 added after the sewer line extension is installed. I am counting an additional 35 EQRs because the Mystic Rose building is not connected.

It would work as follows, figuring 161.5 EQRs billed per month:

- For the 83 customers at the base rate for one EQR: \$68
- The 11 customers would pay this rate per additional EQR

The total Base Rate for Customers with access to both water and sewer with mandatory connections would be \$148 per month.

Funding mandatory taps

I understand that some people can't afford to tap into the system. What I propose is that the Town offers taps at cost. Andrew Martinez is securing estimates for the average actual costs of taps.

DOLA is not aware of grants to pay for taps for people who cannot afford them due to low-income limitations. I have an email to CDPHE to see if they have any financing programs for taps. For people who don't want to take the hit of the total cost all at once, the Town can offer to spread the cost over a year. The Town will have to secure funding that could be paid back as the people make payments on their taps.

I understand that some residents don't want a tap at all, regardless of if there is assistance available. You can keep your rates lower for all residents by charging an "availability fee" at the base rate for those residents.

For residents that are not near a main and could not hook up without extending the main, no rates should be charged until main extensions reach their location.

WATER		# Taps	AVERAGE MONTHLY BILL PER 10,000 G	AVERAGE MONTHLY BILL	AVERAGE MONTHLY WATER CONSUMPTION	CUSTOMER ASSISTANCE PROGRAM	% Residential	Rate Structure
Aguilar town	456	442	\$50.50	\$33.00	5000	No	n/a	
Akron town	1757	839	\$35.50	\$32.58	8538	No	85%	FLAT
Alamosa city	9806							
Alma town	296	212	\$50.00	\$48.00	2000	No	85%	TIER
Antonito town	647	421	\$17.50	\$17.50	11000	No	80%	TIER
Baca Water and Sanitation District								
Bennett town	2862	1445	\$34.23	\$76.50	7000	No	95%	TIER
Beulah Water Works Distric		165	\$300.00	\$140.00	4200	Yes	96%	TIER
Buena Vista town	2855							
Calhan town	762	433	\$65.66	\$57.36	6740	No	89%	TIER
Center town (District)	1929							
Central City city	779	375	\$124.18	\$2,804.00	3000	Yes	91%	TIER
Cokedale town	127	87	\$94.00	\$27.00	2804	No	96%	TIER
Crawford town	403	300	\$25.90	\$28.75	10843	No	96%	TIER
Crested Butte town	1639	1200	\$31.00	\$71.50	na	No	na	TIER
Crestone town	141							TIER
Cripple Creek city	1155	807	\$57.71	\$19.77	3000	No	na	na
Del Norte town	1458							
Dillon town	1064	1831	\$90.19	\$66.42	4000	No	70%	TIER
East Alamosa Water and Sanitation District		404	\$79.25	\$68.00	5000	No	90%	TIER
Eckley town	232	140	\$32.00	\$38.00	15000	No	97%	TIER
Fraser town	1400	1700	\$66.00	\$55.50	3000	No	na	FLAT
Frisco town (District)	2913							
Georgetown town	1118	1140	\$104.84	\$75.32	7000	No	88%	TIER
Gunnison city	6560	2500	\$21.02	\$31.42	8000	No	99%	TIER
Hayden town	1941	1050	\$90.85	\$58.65	3248	No	73%	TIER
Hot Sulphur Springs town	687	333	\$55.00	\$65.00	4500	Yes	99%	TIER
Jamestown town	256	106	\$80.00	\$80.00	na	Yes	100%	FLAT
Julesburg town	1307	500	\$32.27	\$30.27	12000	Yes	80%	FLAT
Keenesburg town	1250	776	\$43.64	\$43.64	10000	No	90%	TIER
La Veta town (District)	862	625	\$45.00	\$45.00	5000	No	95%	FLAT
Morrison town	396	337	\$75.00	\$25.00	5000	Yes	4%	TIER
Mount Crested Butte town (District)	941	933	\$84.00	\$54.30	4000	Yes	75%	TIER
Nederland town	1471	717	\$108.56	\$43.80	3000	Yes	85%	TIER
Nunn town	504	245	\$75.00	\$62.00	7000	Yes	95%	TIER
Oak Creek town	889	486	\$119.45	\$122.22	12895	Yes	93%	FLAT
Ophir town	197	75	\$42.50	\$42.50	10506	No	100%	FLAT
Palisade town	2565	1375	\$30.60	\$50.40	4010	No	85%	TIER

WATER		# Taps	AVERAGE MONTHLY BILL PER 10,000 G	AVERAGE MONTHLY BILL	AVERAGE MONTHLY WATER CONSUMPTION	CUSTOMER ASSISTANCE PROGRAM	% Residential	Rate Structure
Paonia town	1447	1110	\$74.33	\$45.00	na	na	na	na
Parachute town	1390	419	\$80.45	\$44.68	179	Yes	80%	TIER
Pinon Water and Sanitation District (Las Animas)		26	\$40.00	\$58.00	10000	No	95%	TIER
Pritchett town	112	125	\$36.40	\$30.00	5000	No	99%	TIER
Rangely town	2299	1200	\$56.50	\$46.63	7500	Yes	80%	TIER
Rockvale town	511	271	\$82.00	\$61.00	3000	No	99%	TIER
Rocky Ford city	3876	1800	\$25.00	\$35.00	30000	No	80%	TIER
Rye town	206	121	\$60.00	\$48.00	5000	No	95%	TIER
Saguache town	539	385	\$36.00	\$36.00	15000	No	94%	FLAT
San Luis town (District)	598	336	\$42.00	\$42.00	8000	No	100%	TIER
Simla town	601	324	\$47.00	\$37.23	6000	No	90%	TIER
Starkville town	62	75	\$45.00	\$45.00	3400	No	80%	FLAT
Swink town	604	285	\$77.94	\$24.71	2000	No	87%	FLAT
Vona town	95	64	\$52.00	\$50.00	7000	No	75%	TIER
Walden town	606	506	\$45.50	\$46.49	10990	No	75%	TIER
Wiggins town	1401	641	\$101.50	\$110.61	12847	No	91%	FLAT
Williamsburg town	731	299	\$82.87	\$91.15	8500	Yes	100%	FLAT

Comparable Towns						
Wastewater	Population	# Taps/EQRs	AVERAGE MONTHLY BILL	CUSTOMER ASSISTANCE PROGRAM	% Residential Customers	Rate Structure
Aguilar town	456	354	\$24.00	No	na	FLAT
Akron town	1757	770	\$29.00	No	87%	FLAT
Alamosa city	9806					
Alma town	296	212	\$46.00	No	85%	FLAT
Antonito town	647	372	\$22.50	No	80%	FLAT
Baca Water and Sanitation District						
Bennett town	2862	1306	\$72.96	Yes	93%	TIER
Beulah Water Works Distric						
Buena Vista town	2855					
Calhan town	762	418	\$36.07	No	89%	TIER
Center town (District)	1929	1000	\$24.75	No	75%	na
Central City city	779					
Cokedale town	127	87	\$75.00			
Crawford town	403	270	\$29.10	No	99%	FLAT
Crested Butte town	1639	1200	\$41.50	No	na	FLAT
Crestone town	141					
Cripple Creek city	1155	700	\$13.20	No	na	TIER
Del Norte town	1458					
East Alamosa Water and Sanitation District	1500	488	\$33.00	No	90%	TIER
Eckley town	232	140	\$35.28	No	97%	FLAT
Florissant	200	88	\$60.00	No	90%	TIER
Fraser town	1400	1750	\$45.83	No	na	na
Frisco town (District)	2913	4970	\$35.00	No	72%	na
Georgetown town	1118	1347	\$56.66	No	88%	FLAT
Gunnison city	6560	2500	\$44.14	No	74%	FLAT
Hayden town	1941	996	\$32.95	No	73%	TIER
Hot Sulphur Springs town	687	333	\$55.00	Yes	99%	TIER
Jamestown town	256					
Julesburg town	1307	500	\$35.00	Yes	80%	FLAT
Keenesburg town	1250	750	\$41.00	No	90%	TIER
Kremmling town (District)	1509	868	\$45.00	No	90%	FLAT
La Jara town	730					
La Veta town (District)	862	625	\$35.00	No	95%	FLAT
Lake City town	432					
Las Animas	2139	991	\$29.13	Yes	90%	TIER
Leadville city (District)	2633					
Mead town	4781	1000	\$45.00	No	95%	TIER
Meeker town (District)	2374	1076	\$40.00	No	88%	TIER
Minturn town	1033					
Moffat town	108					
Monte Vista city	4247					

		Budget	Budget O&M only/enterprise rules	Number of taps	Number of taps billed	Number of customers near a main but not tapped	Number of customers occupying business/residential units in excess of the metered location	w/initial rate increase to \$65 for 61 tapped customers	w/full rate increase of \$130 for 61 tapped customers	w/full rate increase to \$80 with mandatory tapping or availability fee at base rate 103 customers	w/full rate increase to \$54 with mandatory tapping or availability fee at base rate 153 customers in ALL UNITS
38	WATER PROFESSIONAL SERVICES										
39	Town Administrator, Treasurer, Auditor, Janitorial Expense - 7.5% to Water, 7.5% to Wastewater	\$8,599	\$8,599					\$8,599	\$8,599	\$8,599	\$8,599
40	Attorney 2.5% to Water, 2.5% to Wastewater	\$1,130	\$1,130					\$1,130	\$1,130	\$1,130	\$1,130
41	Town Engineer Contract 10% to Water, 40% to Wastewater	\$2,000	\$2,000					\$2,000	\$2,000	\$2,000	\$2,000
42	Bookkeeper 30% to Water, 30% to Sewer	\$3,300	\$3,300					\$3,300	\$3,300	\$3,300	\$3,300
43	Legal	\$5,000	\$5,000					\$5,000	\$5,000	\$5,000	\$5,000
44	Engineering	\$5,000	\$5,000					\$5,000	\$5,000	\$5,000	\$5,000
45	ORC Water System (Contract)	\$6,000	\$6,000					\$6,000	\$6,000	\$6,000	\$6,000
46	PROFESSIONAL SERVICES TOTAL	\$10,000	\$10,000					\$10,000	\$10,000	\$10,000	\$10,000
47											
48	OPERATIONS										
49	Town Hall Operations Expense Reimbursement	\$12,669	\$12,669					\$12,669	\$12,669	\$12,669	\$12,669
50	Taps and Installation	\$5,000	\$2,000					\$2,000	\$2,000	\$2,000	\$2,000
51	Extention parts and Installation	\$1,000	\$1,000					\$1,000	\$1,000	\$1,000	\$1,000
52	Repairs and Maintenance	\$2,000	\$2,000					\$2,000	\$2,000	\$2,000	\$2,000
53	Equipment, Tools	\$42,000	\$42,000					\$42,000	\$42,000	\$42,000	\$42,000
54	Fire Hydrant	\$11,000	\$11,000					\$11,000	\$11,000	\$11,000	\$11,000
55	Supplies	\$350	\$350					\$350	\$350	\$350	\$350
56	Testing	\$750	\$750					\$750	\$750	\$750	\$750
57	Electricity	\$5,000	\$5,000					\$5,000	\$5,000	\$5,000	\$5,000

		Budget	Budget O&M only/enterprise rules	Number of taps	Number of taps billed	Number of customers near a main but not tapped	Number of customers occupying business/residential units in excess of the metered location	w/initial rate increase to \$65 for 61 tapped customers	w/full rate increase of \$130 for 61 tapped customers	w/full rate increase to \$80 with mandatory tapping or availability fee at base rate 103 customers	w/full rate increase to \$54 with mandatory tapping or availability fee at base rate 153 customers in ALL UNITS
58	Utility Locates	\$25	\$25					\$25	\$25	\$25	\$25
59	Cell Phone stipend	\$240	\$240					\$240	\$240	\$240	\$240
60	Travel	\$1,000	\$1,000					\$1,000	\$1,000	\$1,000	\$1,000
61	Training	\$1,000	\$1,000					\$1,000	\$1,000	\$1,000	\$1,000
62	Dues	\$175	\$175					\$175	\$175	\$175	\$175
63	PW Vehicles Expense Reimburse to GF	\$3,113	\$3,113					\$3,113	\$3,113	\$3,113	\$3,113
64	Misc	\$0	\$0					\$0	\$0	\$0	\$0
65	TOTAL OPERATIONS	\$85,321	\$82,322					\$82,322	\$82,322	\$82,322	\$82,322
66											
67	CAPITAL PROJECTS	\$0	\$0					\$0	\$0	\$0	\$0
68	SUBTOTAL EXPENSES	\$115,263	\$137,264					\$137,264	\$137,264	\$137,264	\$137,264
69	TOTAL AVAILABLE RESOURCES	\$149,686	\$45,143					\$85,057	\$135,757	\$136,357	\$136,621
70	TOTAL REMAINING RESOURCES	\$34,422	-\$92,121					-\$52,207	-\$1,507	-\$907	-\$643

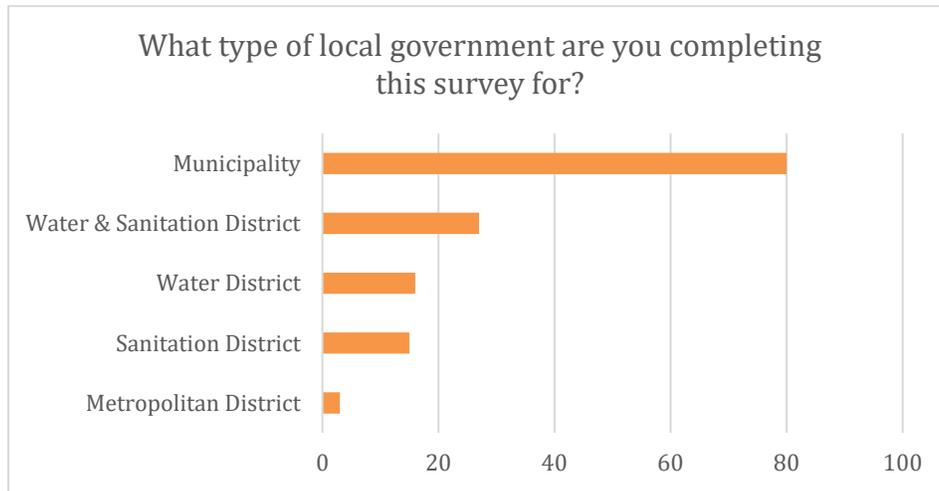
		\$2,022	Budget w/o non-O&M/enterprise rules	Number of taps	Number of taps billed	Number of customers near a main but not tapped	w/initial rate increase to \$70 for 83 tapped customers	w/full rate increase of \$86 for 83 (126.5 EQRs) tapped customers	w/full rate increase to \$68 with mandatory tapping or availability fee
23	BOT, PW staff expense - 7.5% to Water, 7.5% to Wastewater	\$10,594	\$10,594				\$10,594	\$10,594	\$10,594
24	Admin (Clerks) payroll expense - 5% to Water, 5% to Wastewater	\$3,739	\$3,739				\$3,739	\$3,739	\$3,739
25	Subtotal WATER ENTERPRISE PERSONNEL	\$14,333	\$14,333				\$14,333	\$14,333	\$14,333
26									
27	PROFESSIONAL SERVICES								
28	Town Administrator, Treasurer, Auditor, Janitorial Expense - 7.5% to Water, 7.5% to Wastewater	\$7,988	\$7,988				\$7,988	\$7,988	\$7,988
29	Attorney 2.5% to Water, 2.5% to Wastewater	\$1,050	\$1,050				\$1,050	\$1,050	\$1,050
30	Town Engineer Contract 10% to Water, 40% to Wastewater	\$8,000	\$8,000				\$8,000	\$8,000	\$8,000
31	Bookkeeper 30% to Water, 30% to Sewer	\$3,300	\$3,300				\$3,300	\$3,300	\$3,300
32	Legal	\$0	\$0				\$0	\$0	\$0
33	Engineering	\$0	\$0				\$0	\$0	\$0
34	ORC Wastewater System (Contract)	\$3,300	\$3,300				\$3,300	\$3,300	\$3,300
35	TOTAL PROFESSIONAL SERVICES	\$23,638	\$23,638				\$23,638	\$23,638	\$23,638
36									
37	OPERATIONS								
38	Town Hall Operations % for WW to GF	\$6,334	\$6,334				\$6,334	\$6,334	\$6,334
39	Baca W&S District Treatment Expense	\$54,000	\$54,000				\$65,000	\$65,000	\$65,000
40	Tap Installation Expense	\$5,000	\$5,000				\$5,000	\$5,000	\$5,000
41	Extension Expense	\$0	\$0				\$0	\$0	\$0
42	Repairs	\$2,000	\$2,000				\$2,000	\$2,000	\$2,000
43	Equipment, tools	\$100	\$100				\$100	\$100	\$100
44	Water and Sewer Master Plan	\$10,000	\$10,000				\$10,000	\$10,000	\$10,000
45	PW Vehicle Expense for WW To GF	\$3,113	\$3,113				\$3,113	\$3,113	\$3,113

		\$2,022	Budget w/o non-O&M/enterprise rules	Number of taps	Number of taps billed	Number of customers near a main but not tapped	w/initial rate increase to \$70 for 83 tapped customers	w/full rate increase of \$86 for 83 (126.5 EQRs) tapped customers	w/full rate increase to \$68 with mandatory tapping or availability fee
46	TOTAL OPERATIONS	\$80,547	\$80,547				\$91,547	\$91,547	\$91,547
47									
48	CAPITAL PROJECTS	\$600,000	\$0				\$0	\$0	\$0
49									
50	CAPITAL EQUIPMENT	\$0	\$0				\$0	\$0	\$0
51	TOTAL EXPENSES	\$718,517	\$118,518				\$129,518	\$129,518	\$129,518
52	TOTAL AVAILABLE RESOURCES	\$799,997	\$52,706				\$69,859	\$130,687	\$131,923
53	REMAINING RESOURCES	\$81,479	-\$65,812				-\$59,659	\$1,169	\$2,405
#REF!									
#REF!	PROJECTED GRANT REVENUE	\$625,000							
#REF!	TOTAL GRANT FUNDED PROJECTS	\$625,000							
#REF!	NON-GRANT EXPENSES	\$93,517							

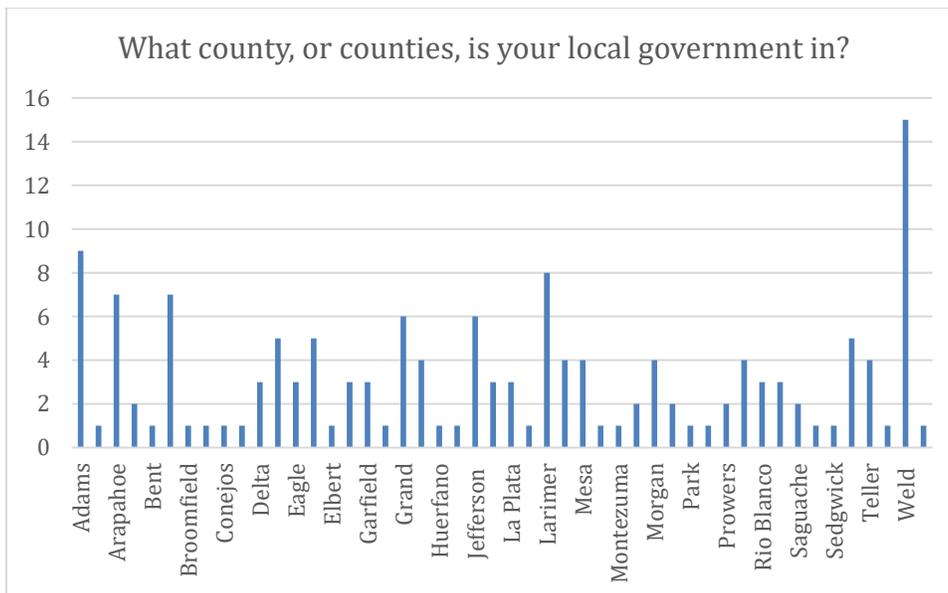


Overview

The Division of Local Government (DLG) conducted a survey of local utility practices. The survey was open for responses for three weeks in September and early October 2021. Responses were received from 141 local utilities included 80 municipalities, 16 water districts, 15 sanitation districts, 27 water and sanitation districts, and 3 metropolitan districts.



Responses came from communities around the state. Forty-eight of Colorado’s 64 counties are represented in survey responses.



Attachment A at the back of this report contains a list of respondents and the responses themselves. DLG wants to thank the survey respondents for their contributions to this year’s effort.





Methodology

DLG's annual water and wastewater survey gathers information about water and wastewater rates that is not available through other sources. Survey data are compared with an annual report on counties and municipalities produced by DLG. The "Local Government Financial Statistics Report" estimates municipal median water and wastewater bills based on revenue reported in audited financial statements and audit exemptions.

The survey also includes questions about an additional topic of interest to water and wastewater providers. Past topics have included water conservation measures, tap fees, and the COVID-19 pandemic. This year's survey included questions about utility rate structures and the availability of customer assistance programs.

The online survey was emailed to 513 municipalities and special districts including sanitation districts, water districts, water and sanitation districts, and metropolitan districts. The list included all water, sanitation, and water and sanitation districts, municipalities with water and/or wastewater enterprises, and metropolitan districts known to have a water and/or wastewater enterprise.

The invitation to complete the survey was sent on September 15, 2021 and reminders were sent on September 22 and September 29. The due date to complete the survey was October 1 and the survey was left open for additional responses for about a week after the due date. At the conclusion of this survey, 141 unique responses were received, for a response rate of 27%. This count excludes duplicate responses, which were removed, and DLG reached out to respondents for clarification on unclear or atypical answers. Corrections and clarifications were provided by several respondents and are included in the following analysis.

Attachments will include both unmodified data and the updates and changes DOLA made during the review process.

Key Findings

Compared with the 2020 survey, median drinking water rates for 10,000 gallons of use showed a 5.4% decrease for municipalities and a 24% increase for special districts between the 2020 and 2021 surveys. DLG's Local Government Financial Statistics report shows a 2.3% increase in median municipal rates. The median drinking water rate based on typical consumption is \$52.68. This is about 7.1% higher than the median rate based on typical consumption from the prior year survey. The rate changes reflected by the survey are more likely related to the different sample of local governments that responded to the survey this year rather than actual rate increases and decreases.

The reported median wastewater rate is \$35.56. Median wastewater rates showed a 4.8% median decrease for municipalities and no change for special districts. As discussed in regards to drinking water rates, the decrease in reported rates is more likely to be related to the sample of special



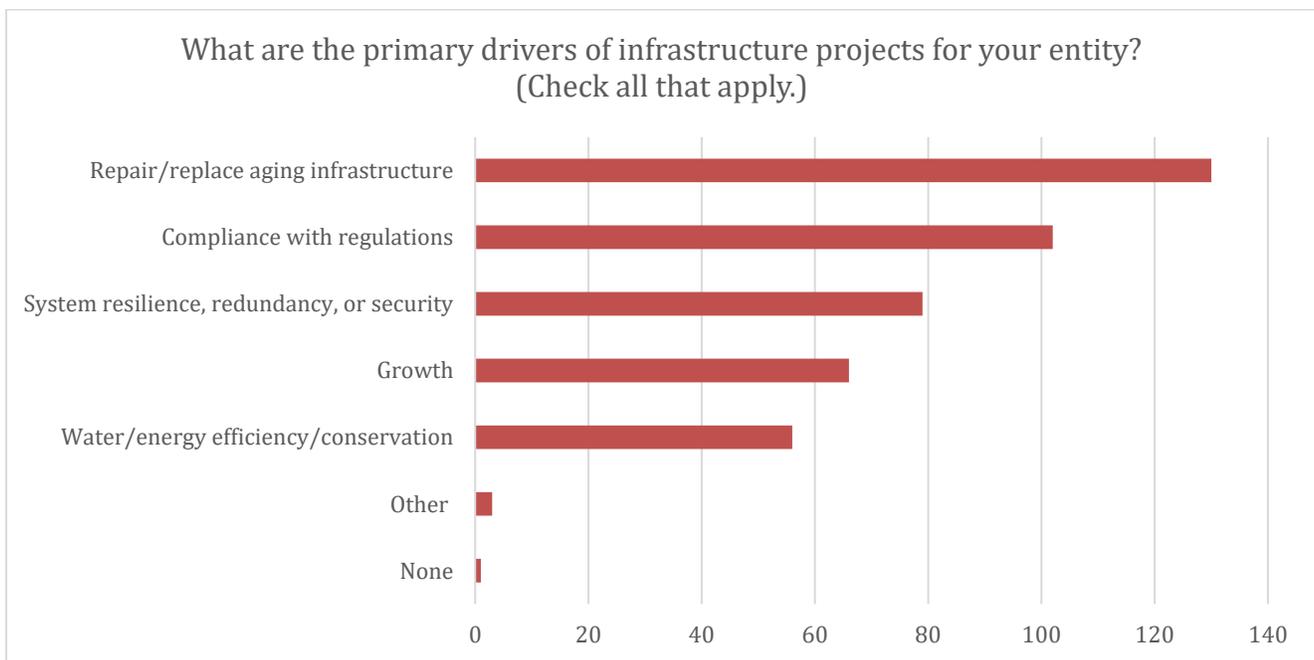


districts that responded to the survey instead of utilities actually decreasing rates. For comparison, the Local Government Financial Statistic Report indicated a 2.6% increase in median municipal rates.

Respondents were also asked to provide information about their rate structures and priorities when setting rates, which is summarized below in this report. Overall, the most commonly reported drinking water rate structure is a tiered rate structure with increasing block rates and the most commonly reported wastewater rate structure is a flat rate. Most water and wastewater providers prioritize the objective of full cost recovery and revenue stability when setting rates.

Upcoming Projects and Funding Sources

A series of general questions asked water and wastewater providers to assess their upcoming capital needs and infrastructure projects. Most (77%) respondents reported having a drinking water or wastewater project in the next 18-24 months. Repair or replacement of aging infrastructure appears to be the primary driver of these infrastructure projects, with projects to obtain/maintain compliance with regulations following closely behind.



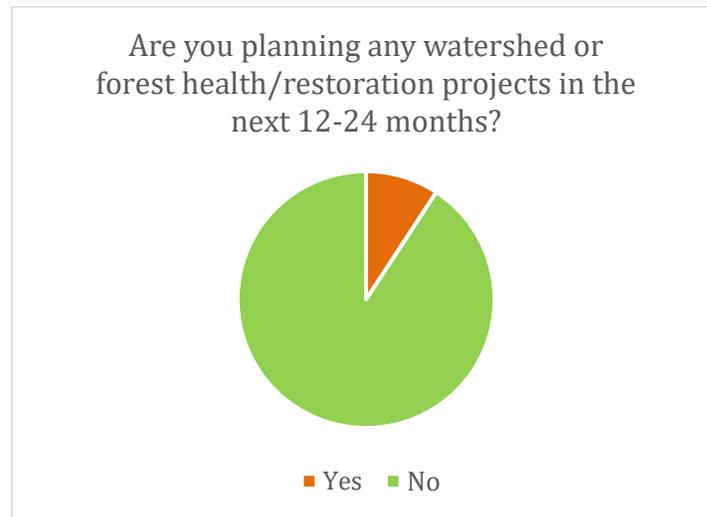
The projects listed as “Other” in the chart above include renewable water and regional water/wastewater system connection, addressing distribution capacity issues, and supplementing water resources.





Entities with impending projects were asked to indicate the funding source for the project, if known. Most intend to use reserves, seek grants, or pursue State Revolving Fund loans. Other funding sources included issuing bonds, utilizing American Rescue Plan Act funds, or accessing other funding programs including Colorado Water Conservation Board funding, FEMA grants, and other federal funding.

The State Revolving Funds are now able to finance forest health projects and program staff are trying to gauge the need for funding for these types of projects. Of those surveyed, only 13 entities anticipate having such a project in the next 12-24 months.



Typical Water Bills

One hundred and eighteen (84%) out of the total 141 respondents reported their utility provides drinking water service. The size of these systems varied greatly with number of taps ranging from 26 to 88,669, and populations ranging from 75 to 386,502. The median number of taps among





respondents was 679. The average composition of residential customers compared to total customers was 88%.

The survey asked respondents to calculate the monthly bill for residential users at 10,000 gallons of consumption. While 10,000 gallons per month may not represent typical use in many areas, (respondents to this year’s survey reported the average per tap residential water consumption was 7,750 gallons per month), it serves as a useful tool for comparing rates amongst water providers and illustrating trends.

In order to better compare the survey data to the Local Government Financial Statistics Report and gather data that represent typical bills, the survey also asked for the average monthly bill based on average residential consumption.

Overall, the median water rate at 10,000 gallons was \$61.05. The median rate based on typical water use was \$52.68. The median rate based on typical use is similar to the 2021 Local Government Financial Statistics Report produced by DLG, which estimated the 2020 median water rate at \$50.86.

2021 DOLA Rate Survey (Colorado Water)							
Water Bills	Responses	Based on 10,000 gallons of use			Based on typical use		
		Average	Median	Range	Average	Median	Range
Average monthly residential water bill for municipal customers	74	\$61.33	\$59.61	\$17.50-\$125	\$51.70	\$47.32	\$17.50-\$125
Average monthly residential water bill for special districts	44	\$103.33	\$78.60	\$26.82-\$559.40	\$77.23	\$62.25	\$26.82-\$200

2020 DOLA Rate Survey (Colorado Water)							
Water Bills	Responses	Based on 10,000 gallons of use			Based on typical use		
		Average	Median	Range	Average	Median	Range
Average monthly residential water bill for municipal customers	55	\$67.93	\$63.00	\$23.20-\$240	\$51.53	\$41.61	\$18.87-\$115
Average monthly residential water bill for special districts	41	\$75.08	\$59.53	\$25.00-\$240	\$61.78	\$48.99	\$20.00-\$150

Based on the rates for 10,000 gallons of use, it appears that municipal water rates decreased from 2020 to 2021. However, it is unusual for utilities to decrease rates, so the more likely explanation is the increased number of responses and a different sample of responses affected the average and median rate calculations. The rates based on typical use show a slight increase in average and median residential water bills between 2020 and 2021. For special districts, responses showed an increase in average and median rates between 2020 and 2021 for both rates based on 10,000 gallons of use and typical use.





Typical Wastewater Bills

One hundred and five (74%) out of the total 141 respondents reported their utility provides wastewater service. The size of these systems varied greatly with number of taps ranging from 28 to 85,933, and populations ranging from 80 to 449,752. The median number of taps among respondents was 1,000. The average composition of residential customers compared to total customers was 87%.

Overall, the median reported wastewater rate was \$35.56. The median rate is similar to the 2021 Local Government Financial Statistics Report produced by DLG, which estimated the 2020 median wastewater rate at \$36.06.

Reported municipal average and median rates showed a slight decrease from the 2020 survey. The greater number of responses and a different sample of responses likely accounts for the decrease in reported wastewater rates, since it is uncommon for utilities to decrease rates. Special districts showed a slightly higher 2021 average rate and a nearly equivalent median rate when compared to 2020.

2021 DOLA Rate Survey (Colorado Wastewater)				
Wastewater Bills	Responses	Average	Median	Range
Average monthly residential wastewater bill for municipal customers	62	\$37.43	\$35.33	\$11-\$83.52
Average monthly residential wastewater bill for special districts	43	\$46.31	\$36.00	\$18.46-\$200

2020 DOLA Rate Survey (Colorado Wastewater)				
Wastewater Bills	Responses	Average	Median	Range
Average monthly residential wastewater bill for municipal customers	46	\$38.04	\$37.10	\$11.50-\$79.90
Average monthly residential wastewater bill for special districts	40	\$41.46	\$36.07	\$22.50-\$111.55

Rate Structure

There is a variety of rate structures that drinking water and wastewater providers utilize to generate the revenue needed to cover operating expenses, plan for future infrastructure projects, and repay existing debt. Some rate structures may also encourage water conservation or give water customers a break in heavily agricultural areas. The survey asked respondents to report on their rate structures and their priorities in setting rates.

In an attempt to standardize responses for better analysis, the following rate structures and definitions were offered as survey choices. The definitions of the following rate structures come





from an EPA article “Understanding Your Water Bill”¹. While the audience for these explanations are water customers, not utilities, using these definitions offered a straightforward way to standardize the vast array of possible rate structures an entity may use.

Flat rate “is a rate structure where all customers are charged the same fee, regardless of the amount of water used.”

Tiered, uniform rate “is a structure that has a constant per unit price for all metered units of water consumed on a year-round basis.” For example, a utility may charge \$1 per 1,000 gallons for usage of any amount, with or without a base rate.

Tiered, increasing block rate “is a rate structure in which the unit price of each succeeding block of usage is charged at a higher unit rate than the previous block(s).”

Tiered, decreasing block rate is “the opposite of increasing block rates where the unit price of each succeeding block of usage is charged at a lower unit rate than the previous block(s).”

Seasonal Rates “are rates that cover a specific time period. They are established to encourage conservation during peak use periods.”

Drought Rates is a structure in which rate adjust “based on the local area's drought level. Higher levels of drought result in higher prices for water in order to encourage conservation.”

Water Budget Based Rates “is a rate structure where households are given a “water budget” based on the anticipated needs of that household either by the number of people living in the house and/or property size. Users are charged a certain rate for use within their budget and a higher rate for use that exceeds their budget.”

The same terminology was used to gather rate structure detail from both drinking water and wastewater providers, and respondents were allowed to select more than one in order to fully describe their utility’s rate structure.

In a separate question, the survey asked if the utility charges a base rate. It became clear during the analysis of survey responses that some respondents indicated using a “flat fee” rate structure, when they meant to describe charging a base rate. Some of these responses were corrected when identified, but there may still be some misinterpretation in other responses that could skew the data.

In order to capture additional nuances of rate structures, the survey asked if different rate structures were used for any of the following situations:

- Customer class (for example, residential versus commercial customers)
- Tap size
- In-boundary versus out-of-boundary users

¹ “Understanding Your Water Bill”. United States Environmental Protection Agency. <https://www.epa.gov/watersense/understanding-your-water-bill>





- Different defined service areas

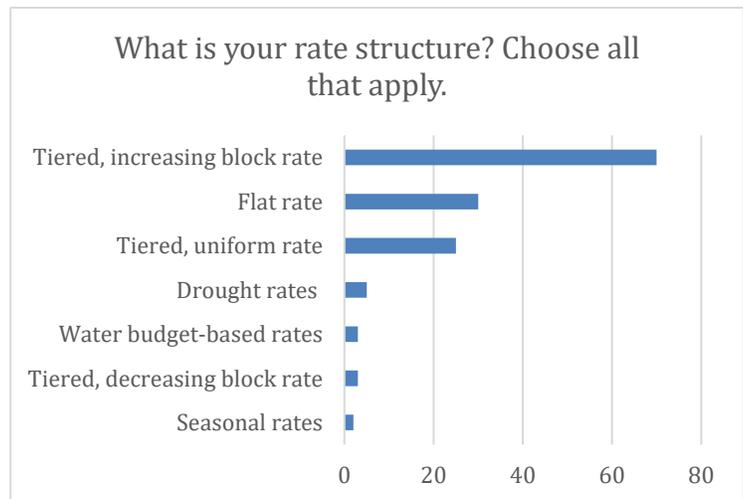
Finally, the survey asked respondents to rank their priorities when setting rates and rate structures from most important to least important. An Environmental Finance Center webinar² excellently distills this complex process into four basic rate-setting objectives: full cost recovery/revenue stability, encouraging conservation, fostering business-friendly practices, and maintaining affordability. The image below is from the webinar.



While all of these objectives are important, rate structures will usually prioritize one or two objectives over the others. Full cost recovery and maintaining affordability can be considered competing objectives, as can encouraging conservation and fostering business-friendly practices. On the other hand, full cost recovery and encouraging conservation can be considered synergistic objectives that can be met with the same types of rate structures. Fostering business-friendly practices and maintaining affordability are also considered synergistic objectives.

Water Rate Structures

Of the 114 responses, the most common water rate structure reported is “Tiered, increasing block rate”, followed by “Flat rate” and “Tiered, uniform rate”.

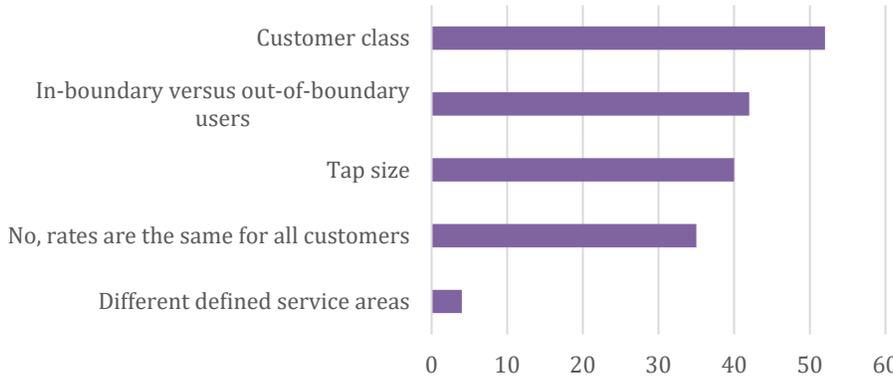


² Kirk, Evan. (2020, October 14). “Setting the Right Rates for Your System [Webinar]. Environmental Finance Center at University of North Carolina”. <https://efcnetwork.org/events/vermont-online-training-setting-the-right-rates-for-your-system/>





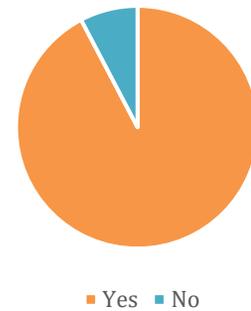
Does your system have different rate structures for any of the following situations? Choose all that apply.



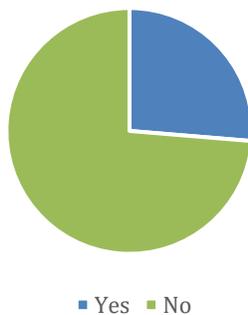
The 110 responses show that most utilities (68%) charge differently for customer class, tap size, and out-of-boundary customers. Nearly 32% of responding utilities, report using the same rate structure for all customers.

Most water providers reported charging a base rate with 108, (92%), reporting yes, and 9, (8%), reporting no base rate.

Do you charge a base rate?



Do you currently offer a customer assistance program for users that have difficulty affording their monthly bills?

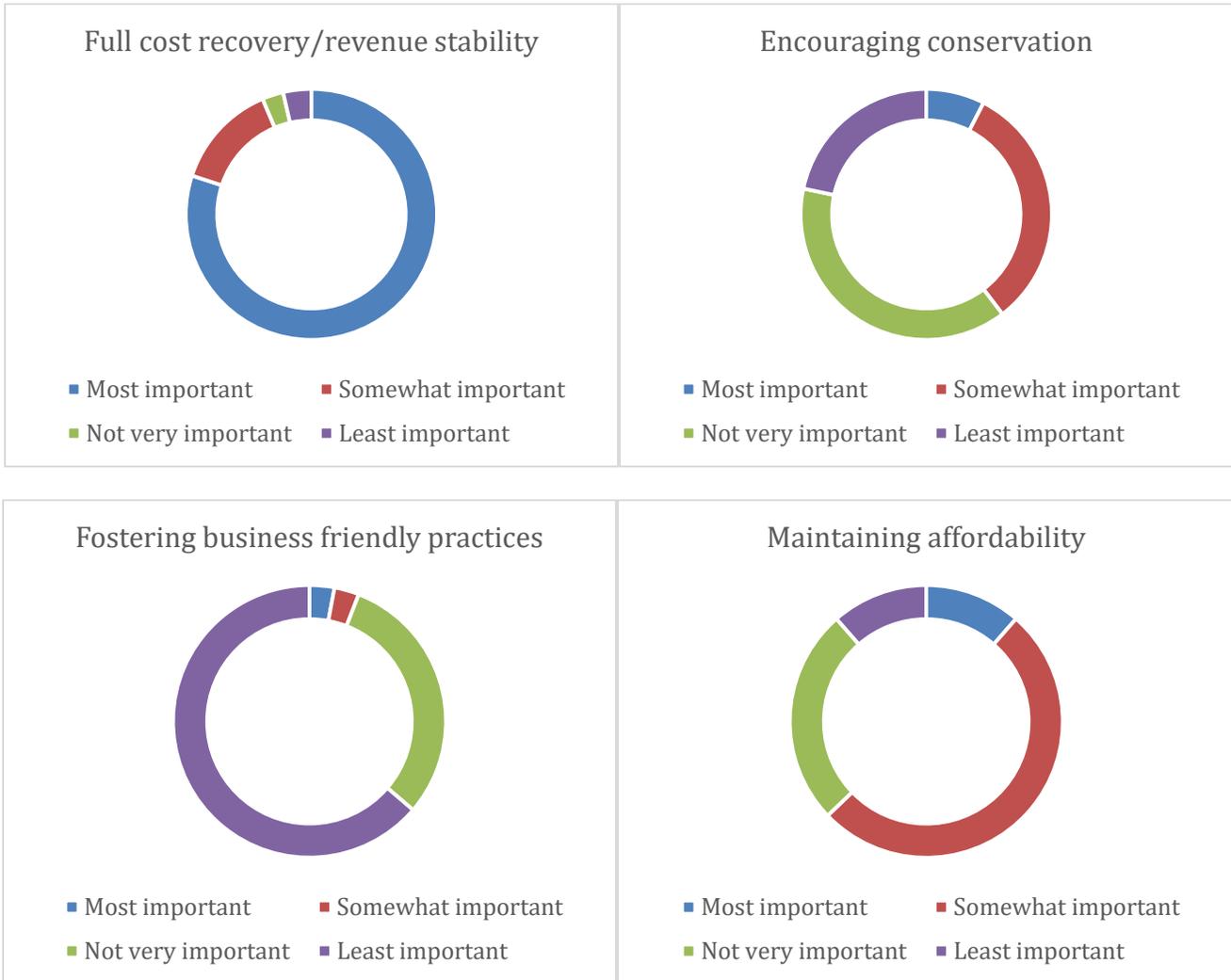


Most water providers reported that they do not offer a customer assistance program. Only 30 of 114, (26%), offer a customer assistance program.



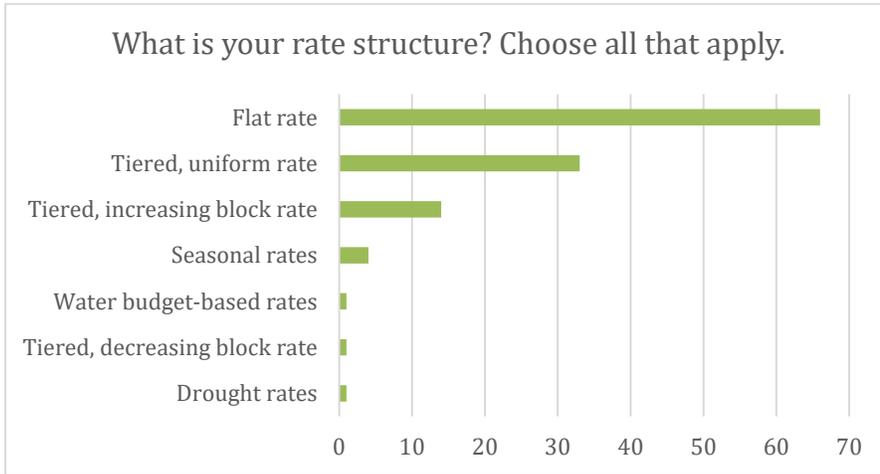


Respondents ranked their priorities for setting rates from highest priority to lowest as follows: full cost recovery/revenue stability, maintaining affordability, encouraging conservation, fostering business friendly practices. It is interesting to see how respondents ranked each objective in the below graphs, which gives some insight into how water providers are thinking about rates.



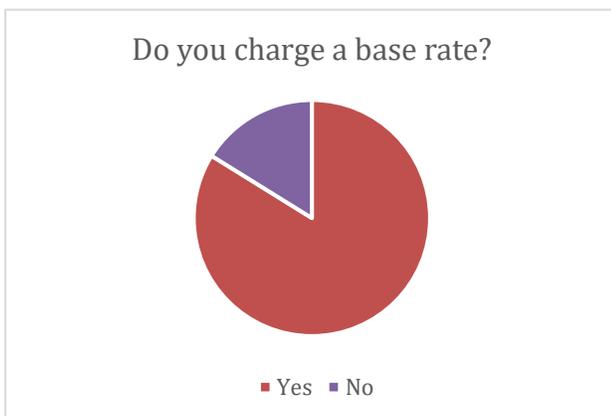
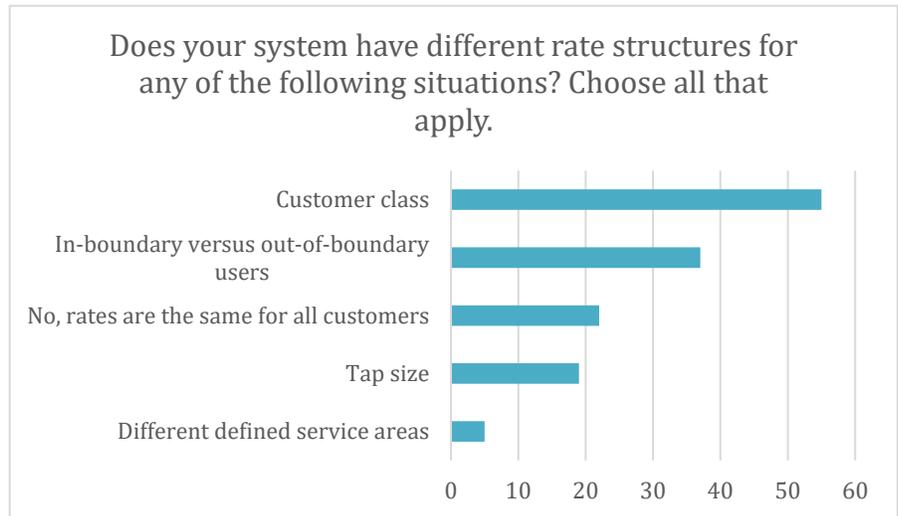


Wastewater Rate Structures



Of the 10 responses, the most common wastewater rate structure reported is “Flat rate”, followed by “Tiered, uniform rate”.

The 99 responses show that most utilities, (78%), charge differently for customer class, tap size, and out-of-boundary customers. Nearly 22% of responding utilities, report using the same rate structure for all customers.



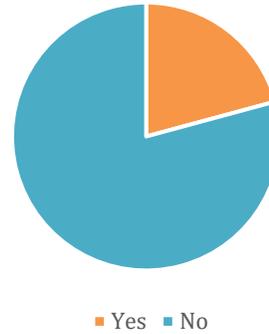
Most wastewater providers reported charging a base rate with 83, (84%), reporting yes, and 16, (16%), reporting no base rate.





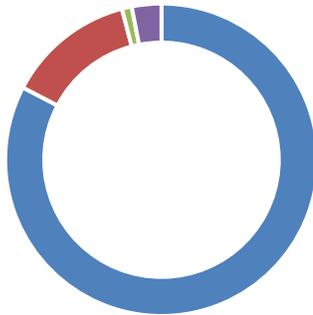
Most wastewater providers reported that they do not offer a customer assistance program. Only 21 of 101, (21%), offer a customer assistance program.

Do you currently offer a customer assistance program for users that have difficulty affording their monthly bills?



Respondents ranked their priorities for setting rates from highest priority to lowest as follows: full cost recovery/revenue stability, maintaining affordability, fostering business friendly practices, encouraging conservation. As with rate priorities for water providers, it is interesting to see how respondents ranked each objective in the below graphs, which gives some insight into how wastewater providers are thinking about rates.

Full cost recovery/revenue stability



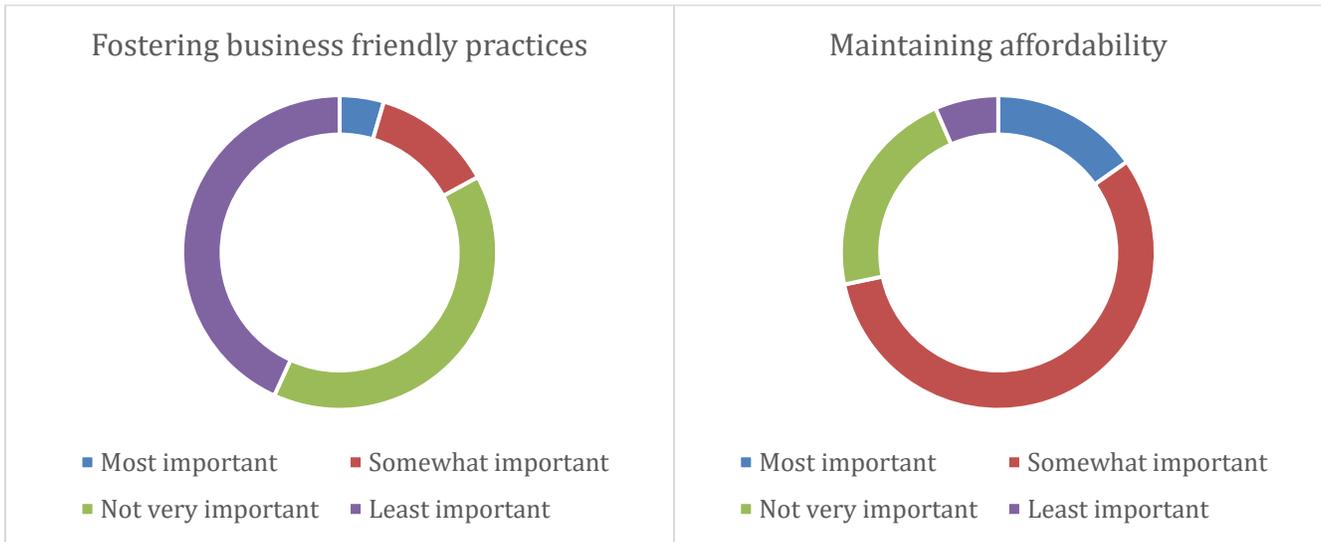
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■ Not very important ■ Least important

Encouraging conservation



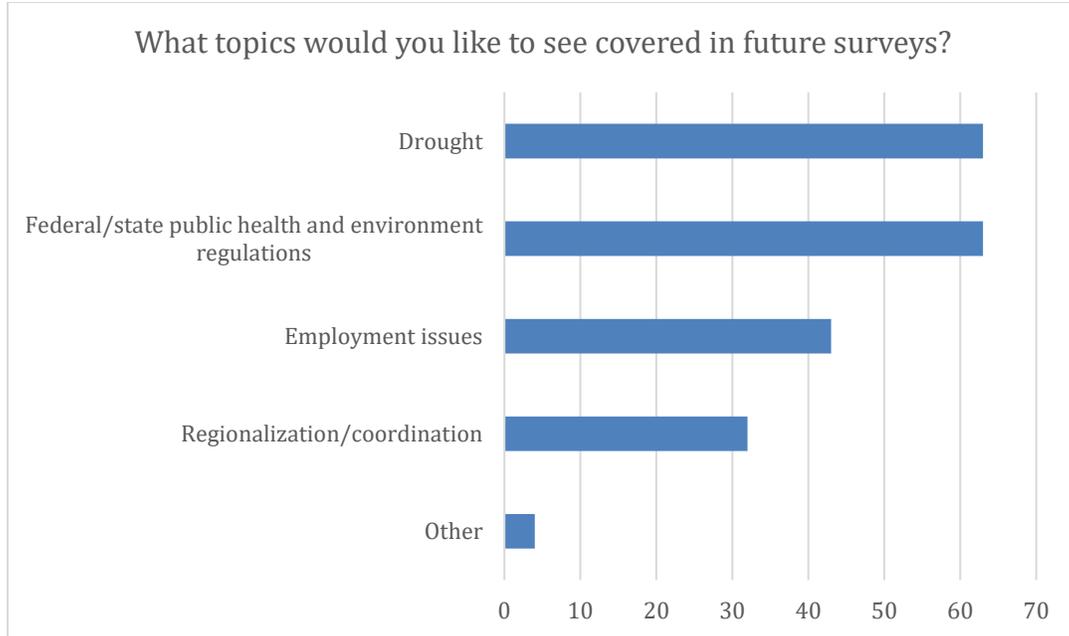
■ Most important ■ Somewhat important
■ Not very important ■ Least important





Future Surveys

Respondents were asked to vote on survey topics for next year’s survey. The list was compiled based on suggestions from prior year surveys.



To make suggestions for topics for future surveys, please email desiree.santerre@state.co.us for consideration and potential inclusion in future surveys.

