

The 33rd Annual Virginia Water and Wastewater Rate Report 2021

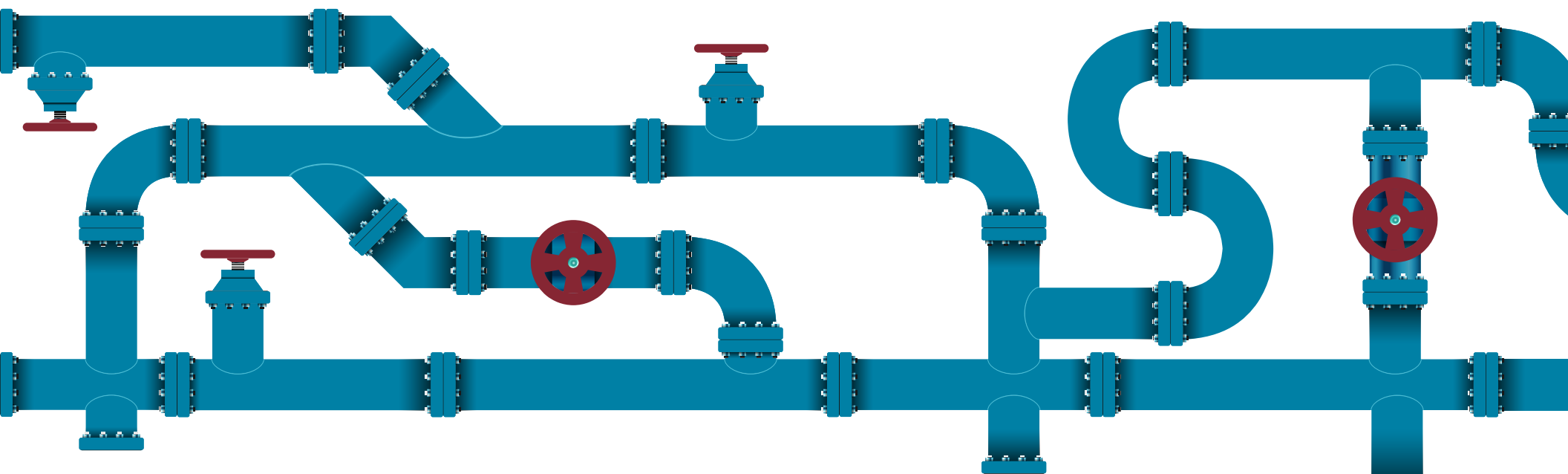


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Draper Aden Associates has provided water and wastewater rate analysis to local government clients across Virginia for several decades. For questions about this report or rate consultation services, please contact Becca Naurath at 540.557.1311 or rnaurath@daa.com.

About Our Survey

For 33 years, Draper Aden Associates has provided the Annual Virginia Water and Wastewater Rate Report as a service to our clients and to water and sewer providers across the Commonwealth. Earlier this year, Draper Aden Associates conducted a survey to request water and wastewater rate information from 259 water and sewer providers; data from fifty-one percent (51%), or 132 utilities is included in this report. The information summarized herein includes:

- approximate number of residential and non-residential connections
- billing frequency (monthly, bi-monthly, or quarterly)
- the charge for residential customers using 3,000, 4,000, and 5,000 gallons of water per month
- the charge for non-residential customers using 1,000,000 gallons per month
- the current residential connection fee and capital recovery charge
- the year that rates and fees were last changed.

We are pleased to share these results and express our gratitude to all who participated in this effort.

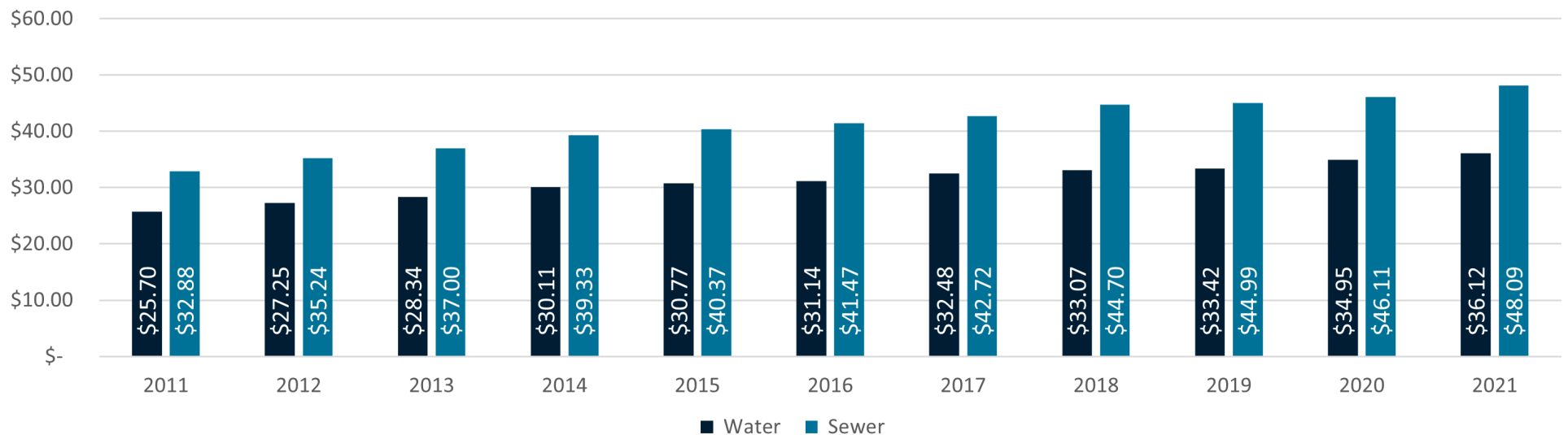
51%
Response Rate

Control Group Data

For over 20 years, Draper Aden's survey has tracked a select group comprised of 20 water and wastewater providers who represent a cross section of utilities across the Commonwealth. We have consistently tracked the monthly residential charges of these 20 utilities to provide an indication of trends in water and wastewater rates in Virginia – and to provide an indication of average increases over time.

The average water rate increased by 3.3% in 2021 and the average sewer rate increased by 4.3%. Since 2011, water rates have increased by approximately 3.5% per year and wastewater rates have increased by approximately 3.9% per year.

AVERAGE WATER AND SEWER BILLS (BASED ON 5,000 GALLONS OF USAGE)



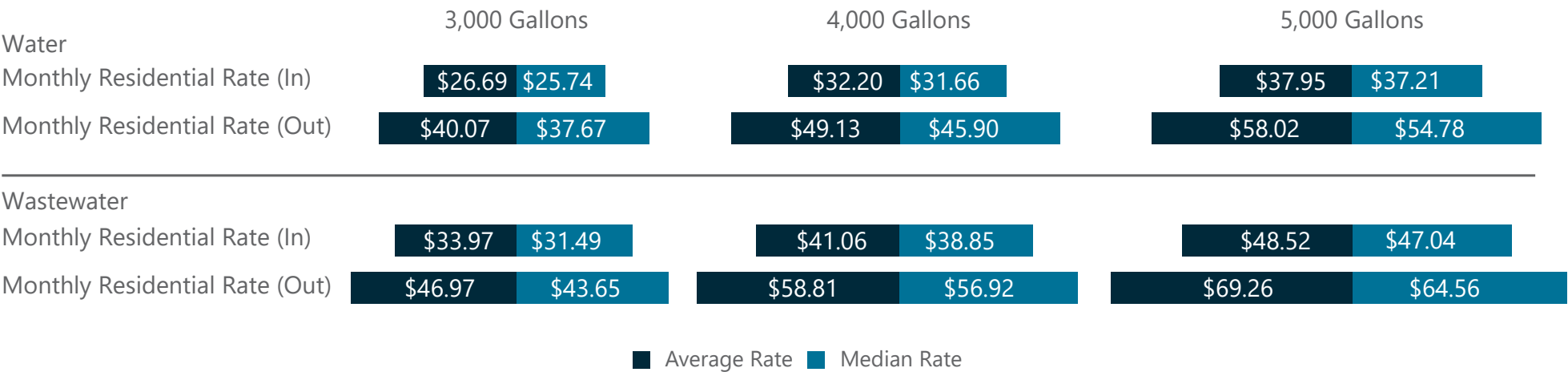
Water and Wastewater Rates

Utilities were asked to calculate the charges for residential customers using 3,000, 4,000 and 5,000 gallons of water per month. Utilities that bill on a bi-monthly or quarterly basis provided rates based on equivalent usage and the rates were normalized to monthly rates. Respondents were asked to use the rates in effect on July 1, 2021.



Residential Connections	# of Replies	Smallest System # of Connections	Largest System # of Connections	Average # of Connections	Median # of Connections
Water	126	7	363,809	11,190	2,199
Wastewater	122	38	119,240	8,020	1,765

Monthly Residential Rates

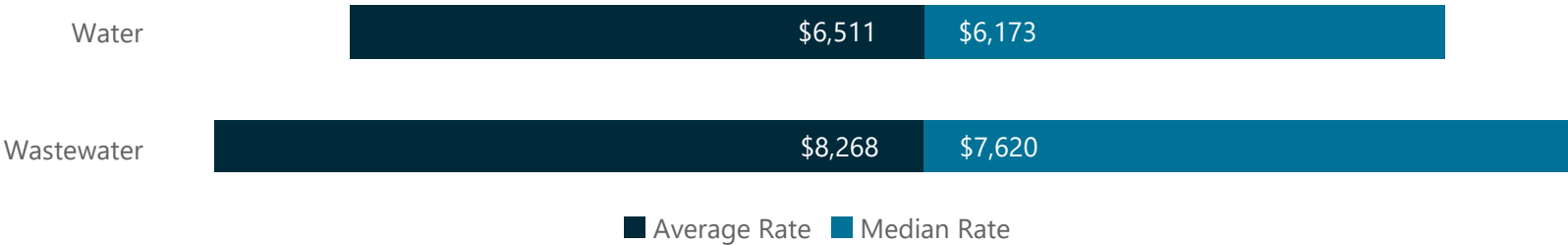


Utilities were also asked to provide the rate for a non-residential customer that uses 1,000,000 gallons per month. If the size of the meter influences the charges, the utility was to assume a 4-inch meter.



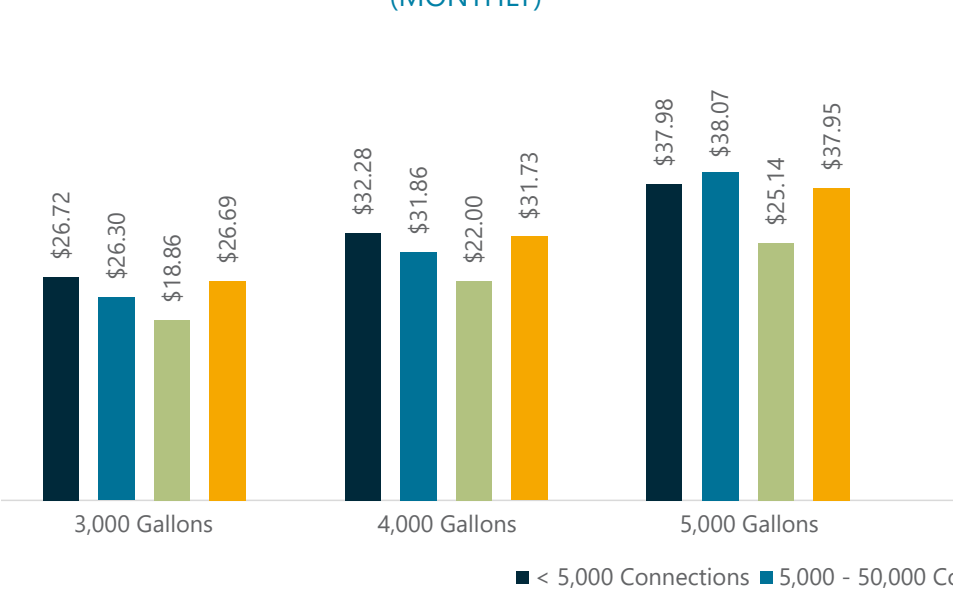
Non-residential Connections	# of Replies	Smallest System # of Connections	Largest System # of Connections	Average # of Connections	Median # of Connections
Water	126	3	12,737	713	187
Wastewater	122	4	7,139	609	175

Monthly Non-residential Rates (per 1 million gallons)



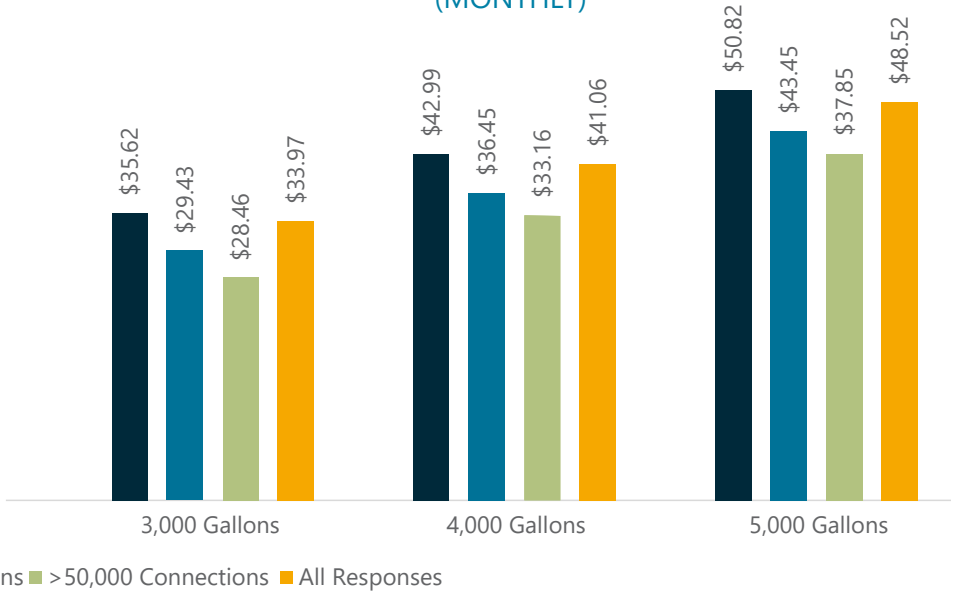
Water Rate Summary by System Size

AVERAGE RESIDENTIAL WATER RATES BY SYSTEM SIZE (MONTHLY)



Wastewater Rate Summary by System Size

AVERAGE RESIDENTIAL WASTEWATER RATES BY SYSTEM SIZE (MONTHLY)



Connection Fees and Capital Recovery Charges

Residential connection fees and capital recovery charges are shown below. Connection fees are charges for tapping into the water main and running a line to the water meter or for tapping into the sewer line and running a lateral to the property line. Capital recovery charges are capital charges for buying into the existing system or charges that recognize the Cost of adding capacity to the system. Providers were asked to furnish the charges for a residential connection using a 5/8- or 3/4-inch meter.

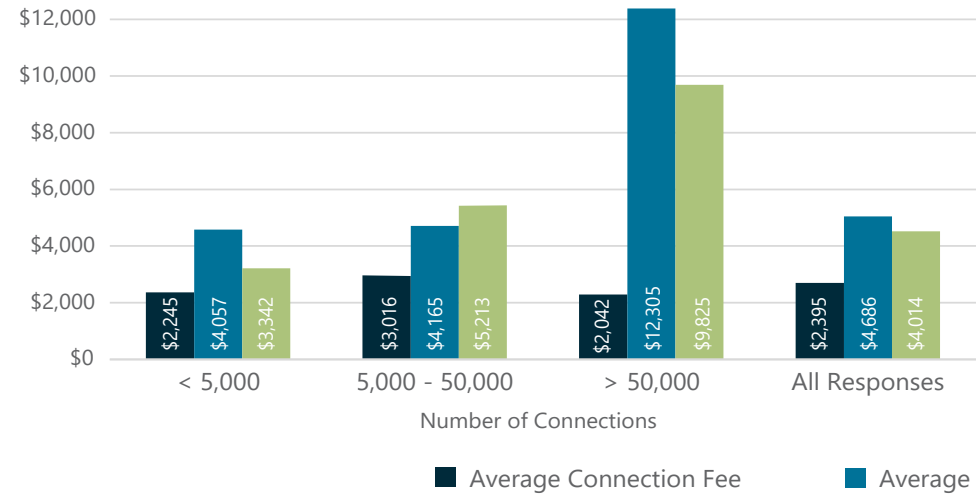
	Connection Fees		Capital Recovery Charges		Combined Charges	
	Water	Wastewater	Water	Wastewater	Water	Wastewater
Average	\$2,395	\$3,367	\$4,686	\$4,978	\$4,014	\$4,886
Median	\$1,500	\$2,000	\$3,854	\$4,500	\$3,000	\$4,000
High	\$18,100	\$14,863	\$24,010	\$16,200	\$27,990	\$16,200
Low	\$80	\$25	\$500	\$450	\$240	\$25

**Fees and charges in this table are for residential connections using a 5/8- or 3/4-inch meter*



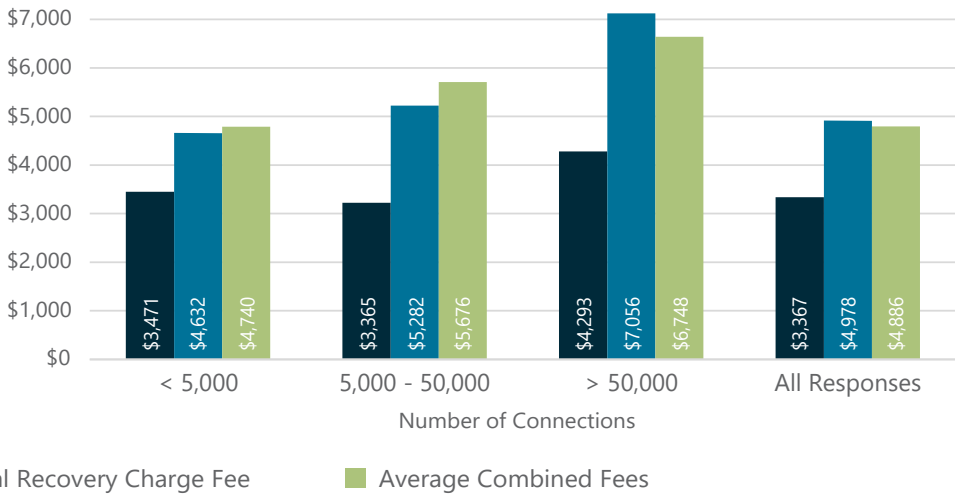
Water Connection and Capital Recovery Charges by System Size

CONNECTION FEES AND CAPITAL RECOVERY CHARGES
WATER SYSTEMS



Wastewater Connection and Capital Recovery Charges by System Size

CONNECTION FEES AND CAPITAL RECOVERY CHARGES
WASTEWATER SYSTEMS





Water Data

	# Residential Water Units	# Non-Residential Water Units	Residential Water Rate Inside (3,000 gal./mo.) ¹	Residential Water Rate Outside (3,000 gal./mo.) ¹	Residential Water Rate Inside (4,000 gal./mo.)	Residential Water Rate Outside (4,000 gal./mo.)	Residential Water Rate Inside (5,000 gal./mo.)	Residential Water Rate Outside (5,000 gal./mo.)	Billing Frequency	Water Rate - Business Inside (1 million gal./mo.)	Last Water Rate Change	Water Source ²	Residential Connection Fee ³	Last Water Connection Fee Change	Residential Capital Recovery Charge ³	Last Water CRC Rate Change
Albemarle County Service Authority	32,702	1,512	\$23.10		\$32.53		\$41.96		M	\$9,232	2021	S	\$1,026	2013	\$6,656	2017
Alleghany County	2,588	187	\$47.00		\$47.00		\$47.00		M	\$9,797	2021	S	\$1,000	2000		
Altavista, Town of	1,744	69	\$15.56	\$24.62	\$18.58	\$30.66	\$21.60	\$36.70	Q	\$3,123	2021	C	\$1,500	2018		
Amelia County	294	147	\$22.50		\$27.00		\$31.50		M	\$4,725	2015	G	COST+100%	2007	\$3,000	2013
Amherst County Service Authority	5,972	422	\$34.66		\$42.23		\$49.86		B	\$7,583	2021	S	\$1,500	2021	\$3,000	2021
Amherst, Town of	1,131	164	\$38.85	\$77.70	\$46.60	\$93.20	\$54.35	\$108.70	M	\$12,250	2019	S			\$1,700	
Appomattox, Town of	944	231	\$17.50		\$23.70		\$29.90		M	\$6,199	2020	S	\$1,500		\$2,500	
Arlington County	35,663	1,946	\$14.73		\$19.64		\$24.55		Q	\$4,910	2021	S	\$4,350	2021	95/dfu	2021
Augusta County Service Authority	13,852	1,051	\$25.77		\$31.82		\$37.87		B	\$6,279	2021	C	\$1,350	2019	\$2,645	
Bedford Regional Water Authority	13,457	1,052	\$38.40	\$39.40	\$43.20	\$44.20	\$48.00	\$49.00	M	\$5,300	2021	C	\$1,500	2021	\$5,000	2021
Berryville, Town of	1,751	27	\$31.58	\$37.67	\$39.73	\$47.85	\$47.88	\$58.03	M		2020	S	\$13,838	2020		
Blacksburg, Town of	10,022	319	\$25.47	\$44.59	\$32.93	\$57.65	\$40.39	\$70.71	M	\$7,463	2021	S	\$675	2021	\$1,725	2021
Blackstone, Town of			\$25.40	\$38.10	\$33.87	\$50.81	\$42.34	\$63.51	M	\$8,212	2021	S				
Bland County Service Authority	550	55	\$32.50		\$39.75		\$47.00		M	\$8,267	2014	G	\$1,300	2018		
Bluefield, Town of	2,300	100	\$34.58	\$51.87	\$42.96	\$64.44	\$51.34	\$77.01	M	\$10,669	2021	S	\$450	2017		
Boones Mill, Town of			\$58.00	\$78.00	\$64.00	\$84.00	\$70.00	\$90.00	M	\$6,020	2018	G	\$3,000			
Boydton, Town of			\$21.90	\$31.90	\$26.90	\$41.90	\$31.90	\$51.90	M			S				
Bridgewater, Town of	2,199	124	\$17.16	\$29.98	\$21.17	\$33.99	\$25.18	\$38.00	M	\$4,785	2021	C	\$2,988	2021		
Bristol Virginia Utilities Authority	6,931	955	\$25.21	\$37.79	\$28.91	\$43.33	\$32.61	\$48.87	M	\$3,321	2021	S	\$990	2019		
Broadway, Town of	1,546	155	\$18.31		\$23.40		\$28.49		B		2018	S	\$2,500	2018		
Brookneal, Town of			\$29.30		\$36.10		\$42.90		M			S				
Buckingham County	321	95	\$26.12		\$26.12		\$39.72		M	\$13,572	2020	S	\$2,000	1994		
Buena Vista, City of	2,620	199	\$25.74		\$34.32		\$42.90		M	\$8,580	2020	G	\$2,500	2019		
Campbell County Utility & Service Auth.	10,702	565	\$26.81		\$33.07		\$39.34		B	\$6,344	2012	C	\$1,500	2010	\$1,900	2010
Cape Charles, Town of	1,160	110	\$36.09		\$38.72		\$41.35		M		2021	G	\$875	2021	\$4,000	2012
Caroline County	1,652	138	\$25.73		\$27.33		\$29.25		M	\$2,179	2021	G	\$1,500	2021	\$5,000	2018
Carroll County PSA	3,689	165	\$41.59		\$51.99		\$62.39		M	\$5,254	2021	C	\$1,250	2019		
Charlotte Court House, Town of	200	61	\$37.00		\$41.00		\$45.00		M		2015	S	\$1,450			
Chatham, Town of	717	216	\$15.42	\$25.65	\$20.56	\$34.20	\$25.70	\$42.75	Q	\$5,140	2018	S	\$1,000	2018		
Chase City, Town of	1,076	101	\$26.10	\$33.41	\$32.00	\$40.96	\$37.90	\$48.51	M		2020	S	\$800	2014		

¹**"Inside"** refers to inside of municipal boundary. **"Outside"** rates are listed where the utility has implemented higher rates to users outside of the municipal boundary.

²**Water Source:** **S** = surface water, **G** = groundwater, and **C** = combination.

³**Connection and Capital Recovery Charge (CRC) Fees:** **"Cost"** = customer pays the Cost of making the connection; **"Cost + "** = the customer pays the Cost to make the connection, plus additional charges, **"Fixture"** or **DFU** means the customer is charged that fee per the number of drainage fixture units in the structure. **Min** = Minimum charge is dollar amount cited.



Water Data

	# Residential Water Units	# Non-Residential Water Units	Residential Water Rate Inside (3,000 gal./mo.) ¹	Residential Water Rate Outside (3,000 gal./mo.) ¹	Residential Water Rate Inside (4,000 gal./mo.)	Residential Water Rate Outside (4,000 gal./mo.)	Residential Water Rate Inside (5,000 gal./mo.)	Residential Water Rate Outside (5,000 gal./mo.)	Billing Frequency	Water Rate - Business Inside (1 million gal./mo.)	Last Water Rate Change	Water Source ²	Residential Connection Fee ³	Last Water Connection Fee Change	Residential Capital Recovery Charge ³	Last Water CRC Rate Change
Chesterfield County	134,935	5,688	\$19.51		\$22.52		\$25.53		B	\$3,209	2021	S	\$2,100	2021	\$5,725	2018
Chilhowie, Town of	2,100	144	\$26.59	\$50.18	\$31.90	\$60.24	\$37.21	\$70.30	M	\$5,591	2021	G	\$900	2016		
Chincoteague, Town of	2,500	1,095	\$14.03		\$18.39		\$22.75		Q	\$5,521	2012	G	\$670	2012	\$3,708	2012
Christiansburg, Town of	11,197	1,116	\$31.00	\$46.50	\$42.00	\$63.00	\$53.00	\$79.50	M	\$8,386	2021	S	\$3,000	2015		
Clarke County Sanitary Authority	445	34	\$38.70		\$51.60		\$64.50		B	\$12,900	2019	G			\$13,800	2006
Clarksville, Town of			\$30.90	\$61.55	\$38.11	\$75.92	\$45.32	\$90.29	B	\$7,219	2021	S				
Coeburn, Town of	1,550	165	\$25.74	\$37.02	\$31.68	\$45.90	\$37.62	\$54.78	M		2015	S	COST+\$50			
Courtland, Town of	668	48	\$11.00	\$13.00	\$11.00	\$13.00	\$11.00	\$13.00	M		1994	G	\$1,200			
Craigsville, Town of			\$37.00		\$37.00		\$37.00		M	\$9,490		G	\$2,000			
Culpeper, Town of	6,841	747	\$19.17		\$25.56		\$31.95		M	\$3,973	2019	G	COST	2019	\$6,500	2006
Danville, City of	17,500	2,500	\$19.50		\$22.75		\$26.25		M	\$2,486	2016	S	\$1,500	2021	\$0	
Dinwiddie County Water Authority	3,545	185	\$15.70		\$20.01		\$24.32		M	\$3,902	2017	C	\$1,618	2015		2015
Dublin, Town of	2,441	206	\$33.95	\$49.44	\$40.96	\$58.19	\$47.97	\$66.94	M	\$8,466	2021	S	\$1,500		\$0	
Dungannon, Town of	256	4	\$27.00	\$31.00	\$44.00	\$52.00	\$49.00	\$57.00	M		2021	G	\$88	2021		
Edinburg, Town of	630	51	\$29.55	\$44.33	\$36.55	\$54.83	\$36.55	\$54.83	M	\$732	2021	G	\$5,000	2009		
Fairfax Water	363,809	12,737	\$14.94		\$18.27		\$21.60		Q	\$3,379	2021	S	\$1,430	2021	\$24,010	2021
Farmville, Town of	3,086	597	\$16.81	\$25.22	\$20.49	\$30.74	\$24.17	\$36.26	M	\$5,240	2018	S	\$1,000	2020		
Fauquier County Water and Sanitation Authority	6,618	217	\$46.07		\$52.72		\$59.37		M	\$11,230	2021	G				
Ferrum Water & Sewer Authority	195	30	\$24.00		\$29.50		\$35.00		M	\$5,570	2017	G	COST+\$500	2017	\$1,500	2017
Fincastle, Town of	200	50	\$28.18		\$32.28		\$36.38		M	\$5,256	2021	G	\$2,500	2021	\$3,500	2021
Franklin, City of	3,270	252	\$23.82	\$29.86	\$27.02	\$33.82	\$30.22	\$37.78	M	\$3,214	2016	G	\$3,500			
Galax, City of	3,200	500	\$16.00	\$32.00	\$20.50	\$41.00	\$25.00	\$50.00	B	\$4,503	2020	S	\$1,000	2010		
Gate City, Town of	1,087	140	\$36.05	\$44.96	\$43.95	\$52.05	\$51.85	\$59.95	M	\$7,912	2014	S	\$650	2014		
Gloucester, County of	5,906	934	\$30.18		\$40.18		\$50.18		M	\$10,397	2013	C	\$3,500	2008	\$500	2008
Goochland, County of	1,750	287	\$26.30		\$33.03		\$39.76		B	\$9,665	2021	S	\$4,600	2021		
Gordonsville, Town of	915	10	\$47.31	\$73.15	\$55.11	\$84.85	\$62.91	\$96.55	M	\$7,541	2020		\$1,000		\$5,000	
Greensville County WSA			\$19.99		\$26.65		\$33.31		M	\$6,980	2021	C	\$960			
Gretna, Town of	585	105	\$28.21	\$56.42	\$37.61	\$75.22	\$47.01	\$94.03	B	\$5,547	2021	G	\$300			
Halifax County Service Authority	4,500	445	\$25.00		\$30.00		\$35.00		B	\$4,158	2021	S			\$1,250	2015
Hamilton, Town of	701	29	\$17.13	\$23.13	\$22.84	\$30.84	\$35.59	\$48.05	B		2019	G	\$18,100	2010		
Hanover County	20,642	1,828	\$14.24		\$19.53		\$24.82		B	\$4,252	2021	C			\$6,595	2021
Harrisonburg, City of	18,923	5,479	\$12.77	\$18.98	\$14.36	\$24.64	\$19.95	\$30.30	M	\$3,385	2019	S	\$2,500	2010		
Henry Co. Public Service Authority	12,414	938	\$30.00		\$30.00		\$34.70		M	\$7,017	2013	C	\$1,750	2013		
Highland County - McDowell Water System	56	21	\$35.00		\$35.00		\$42.50		B	\$7,470	2006	G	\$200			



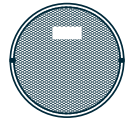
Water Data

	# Residential Water Units	# Non-Residential Water Units	Residential Water Rate Inside (3,000 gal./mo.) ¹	Residential Water Rate Outside (3,000 gal./mo.) ¹	Residential Water Rate Inside (4,000 gal./mo.)	Residential Water Rate Outside (4,000 gal./mo.)	Residential Water Rate Inside (5,000 gal./mo.)	Residential Water Rate Outside (5,000 gal./mo.)	Billing Frequency	Water Rate - Business Inside (1 million gal./mo.)	Last Water Rate Change	Water Source ²	Residential Connection Fee ³	Last Water Connection Fee Change	Residential Capital Recovery Charge ³	Last Water CRC Rate Change
Honaker, Town of	649	70	\$28.44	\$36.86	\$33.94	\$42.26	\$39.44	\$47.86	M	\$5,527	2018		\$1,200	2018		
Isle of Wight County	4,106	156	\$50.17		\$61.37		\$72.57		B	\$1,108	2020	C	\$4,000			
James City Service Authority	22,395	1,031	\$16.66		\$20.41		\$27.22		M	\$6,083	2021	G	\$3,219	2020	\$1,436	2020
Kenbridge, Town of	473	97	\$15.15	\$28.11	\$20.15	\$36.15	\$26.15	\$44.19	M		2012	G				
Kilmarnock, Town of	788	256	\$14.50	\$21.75	\$18.96	\$28.43	\$21.93	\$32.88	B	\$5,963	2021	G	\$2,055	2006		
King George County Service Authority	4,118	2,406	\$36.79		\$42.18		\$47.57		B	\$5,877	2021	G	\$8,662	2013		
La Crosse, Town of	378	42	\$27.52	\$49.50	\$31.62	\$53.60	\$35.72	\$57.70	M	\$4,116	2017		\$1,000	2017		
Lawrenceville, Town of	979	151	\$12.42	\$21.66	\$16.56	\$28.88	\$20.70	\$36.10	M		2010	S	\$400	2010		
Lexington, City of	2,500	600	\$23.74	\$32.04	\$31.66	\$42.72	\$39.57	\$53.41	M	\$16,837	2021	S	MIN \$1965	2021	\$729	2021
Loudoun Water	78,773	4,850	\$20.32		\$23.01		\$25.70		Q	\$3,782	2021	C	\$80		\$7,180	2021
Louisa Co. Water Authority Northeast Creek	97	72	\$20.13		\$26.84		\$33.55		M	\$6,710	2021	C	\$3,750	2004	\$5,250	2021
Louisa Co. Water Authority Zion Crossroads	732	71	\$20.13		\$26.84		\$33.55		M	\$6,710	2021	G	\$3,750	2004	\$5,250	2021
Luray, Town of	2,193	126	\$39.71	\$59.57	\$45.50	\$68.25	\$51.29	\$76.94	M	\$6,268	2021	G	\$3,320	2010	\$1,200	2010
Lynchburg, City of	23,000	2,000	\$13.92		\$17.50		\$21.09		M	\$3,633	2017	S	\$1,150	2017	\$1,220	2000
Manassas, City of	10,142	1,395	\$19.63		\$22.84		\$26.05		M	\$3,712	2021	S	\$957	2012	\$4,887	2015
Marion, Town of	3,505	455	\$23.85	\$47.62	\$32.84	\$65.54	\$41.82	\$83.46	M	\$8,983		S	\$900	2016		
Martinsville, City of	7,000	500	\$25.31	\$31.50	\$25.31	\$31.50	\$28.50	\$35.68	M	\$2,675	2016	S	\$900	2014		
Mineral, Town of	263	51	\$26.50	\$30.00	\$34.50	\$39.00	\$42.50	\$48.00	M	\$8,003	2013	C	\$4,000	2007		
Montross, Town of	235	86	\$25.00	\$36.50	\$25.00	\$36.50	\$25.00	\$36.50	M		2021	G	\$500			
Mount Jackson, Town of	742	101	\$22.47	\$33.66	\$29.96	\$44.88	\$37.45	\$56.10	M	\$7,490	2021	G	\$5,000	2019		
Nelson County	103	14	\$29.90		\$29.90		\$36.00		M		2013	S	\$2,000	2013		
Nelson County Service Authority	2,875	60	\$46.00		\$46.00		\$58.00		M	\$11,952	2019	C	\$4,000			
New Kent County	3,239	215	\$23.81		\$30.96		\$38.11		B	\$8,535	2021	G	\$4,650	2017	\$2,500	2017
Norton, City of	1,864	340	\$29.25	\$44.45	\$35.40	\$56.75	\$44.05	\$71.55	M	\$6,168	2019	S	\$240			
Onancock, Town of	618	60	\$29.21		\$38.80		\$48.39		B		2020	G	\$1,500			
Orange, Town of	1,805	336	\$19.20	\$52.30	\$23.40	\$59.10	\$27.60	\$65.90	M	\$4,213	2020	S	\$3,000	2014		
Powhatan County	7	114	\$32.03		\$39.10		\$41.67		B	\$7,340	2021	C	\$4,100			
Prince William County Service Authority	120,725	3,747	\$17.20		\$20.65		\$24.10		M	\$3,972	2020	S	\$4,600	2012		
Radford, City of	5,200	461	\$16.32		\$16.32		\$20.40		M	\$3,760	2014	S	\$1,500	2014		
Rapidan Service Authority	7,957	502	\$21.51		\$27.68		\$33.85		M	\$6,173	2021	S	\$10,000			
Rockbridge County PSA (Rivermont and Riveria))			\$37.52		\$46.17		\$54.82		B	\$8,790	2021	G	\$1,025	2007	\$4,000	2007
Rockingham County	4,064	322	\$15.50		\$15.50		\$19.50		M	\$4,000	2021	G	\$625	2009	\$2,650	2009
Rocky Mount, Town of	2,446	542	\$17.85	\$35.70	\$21.37	\$42.74	\$24.89	\$49.78	M	\$3,381	2019	S	\$1,000	2016		
Round Hill, Town of	1,700	30	\$21.51	\$32.26	\$28.68	\$43.02	\$35.85	\$53.76	B		2020		\$500	2015	\$11,500	2021



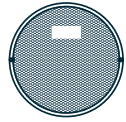
Water Data

	# Residential Water Units	# Non-Residential Water Units	Residential Water Rate Inside (3,000 gal./mo.) ¹	Residential Water Rate Outside (3,000 gal./mo.) ¹	Residential Water Rate Inside (4,000 gal./mo.)	Residential Water Rate Outside (4,000 gal./mo.)	Residential Water Rate Inside (5,000 gal./mo.)	Residential Water Rate Outside (5,000 gal./mo.)	Billing Frequency	Water Rate - Business Inside (1 million gal./mo.)	Last Water Rate Change	Water Source ²	Residential Connection Fee ³	Last Water Connection Fee Change	Residential Capital Recovery Charge ³	Last Water CRC Rate Change
Rural Retreat, Town of			\$28.70	\$49.96	\$35.15	\$61.03	\$41.60	\$72.10	M	\$8,564	2021	G	\$1,000	2017		
Saint Paul, Town of	563	87	\$25.22	\$42.42	\$32.37	\$53.62	\$39.52	\$64.57	M	\$7,166	2021	S	\$750			
Salem, City of	8,275	1,515	\$30.91		\$36.71		\$42.51		M	\$6,836	2021	S	\$1,500	2016	\$2,000	2016
Scott County Public Service Authority	5,214	109	\$40.87		\$51.39		\$61.91		M	\$10,575	2021	C	\$1,500	2015		
Shenandoah, Town of	1,045	60	\$26.65	\$39.50	\$31.15	\$47.00	\$35.65	\$54.50	M	\$4,316	2021	G	\$6,000	2020		
Smithfield, Town of	3,263	487	\$25.39	\$30.31	\$31.94	\$38.50	\$38.49	\$46.69	B	\$6,556	2021	G	\$660	1999	\$2,720	2007
South Hill, Town of	2,241	484	\$21.49	\$42.98	\$28.32	\$56.64	\$34.65	\$69.30	M	\$4,975	2021	S	\$1,000	1991		
Southampton County	814	26	\$29.00		\$29.00		\$36.00		M	\$7,001	2021	G	\$1,000	2009	\$4,000	2009
Spotsylvania County	30,990	2,050	\$19.03		\$25.74		\$32.45		M	\$10,868	2019	S	\$1,290	2008	\$4,920	2008
Stafford County	37,536	1,863	\$22.69		\$26.54		\$31.82		M	\$5,286	2021	S	\$1,450	2005	\$6,900	2010
Stanley, Town of	1,545	91	\$22.00	\$29.00	\$35.50	\$32.50	\$25.00	\$36.00	M		2017	G	\$3,825	2018		2018
Stoney Creek Sanitary District	1,400	45	\$39.00		\$44.00		\$49.00		B	\$6,540	2013	G	\$4,000	2010		
Stuart, Town of	627	150	\$25.33	\$35.98	\$29.55	\$41.83	\$33.77	\$47.68	M		2020	S	\$600			
Tazewell, Town of	1,766	258	\$40.00	\$59.75	\$50.75	\$76.35	\$61.50	\$92.95	M	\$10,758	2021	S	\$540	2011		
Timberville, Town of	1,406	49	\$15.13	\$22.46	\$18.52	\$26.57	\$21.91	\$30.68	B	\$4,645	2021		\$4,500	2014		
Troutdale, Town of	80	3	\$26.50		\$35.00		\$43.75		M		2021		\$1,000	2020		
Victoria, Town of	850	25	\$30.50		\$35.67		\$40.84		M	\$6,080	2020	S	\$275	2019		
Vienna, Town of	9,462	495	\$27.53		\$35.23		\$41.43		Q	\$11,347	2021	S	\$17,230	2021	\$10,760	2021
Washington County Service Authority	20,052	1,836	\$43.16	\$50.48	\$51.73	\$58.79	\$60.30	\$67.10	M	\$7,067	2021		\$1,628			
West Point, Town of	1,153	192	\$22.45		\$22.45		\$22.45		B	\$5,694	2018	G	\$500	2007	\$3,500	2007
Western Virginia Water Authority (Botetourt Co.)	1,701	118	\$26.50		\$31.25		\$36.00		M	\$6,905	2021	G	\$2,000	2020		
Western Virginia Water Authority (Franklin Co.)	3,066	79	\$30.00		\$30.00		\$30.00		M	\$5,400	2009	C	\$2,000	2020		
Western Virginia Water Authority (Roanoke City/County)	55,199	2,615	\$22.35		\$25.55		\$28.75		M	\$4,758	2021	C	\$2,000	2020		
Westmoreland County	56	9	\$22.50		\$22.50		\$22.50		B		2018	G				
Winchester, City of	9,448	1,765	\$37.44	\$56.15	\$44.82	\$67.22	\$52.20	\$78.29	B	\$8,273	2021	S	\$5,300	2018		
Windsor, Town of	1,032	55	\$27.13	\$28.63	\$31.00	\$33.00	\$38.75	\$41.25	B	\$7,750	2021	G	\$1,000	2008	\$5,000	2008
Wise, Town of	2,395	258	\$29.33	\$42.65	\$35.85	\$52.13	\$42.37	\$61.10	M	\$6,530	2019	S	\$500	2000		
Wytheville, Town of	4,098	688	\$26.47	\$52.94	\$35.24	\$70.48	\$44.01	\$88.02	M	\$4,202	2021	S	\$1,500+METER	2005		



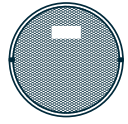
Wastewater Data⁴

	# Residential Wastewater Units	# Non-Residential Wastewater Units	Residential WW Rate Inside (3,000 gal./mo.)	Residential WW Rate Outside (3,000 gal./mo.)	Residential WW Rate Inside (4,000 gal./mo.)	Residential WW Rate Outside (4,000 gal./mo.)	Residential WW Rate Inside (5,000 gal./mo.)	Residential WW Rate Outside (5,000 gal./mo.)	Billing Frequency	WW Rate Business Inside (1 million gal./mo.)	Last WW Rate Change	Residential Connection Fee Wastewater	Last WW Connection Fee Change	Residential Capital Recovery Charge	Last WW CRC Rate Change
Abingdon, Town of	4,202	708	\$29.62	\$53.38	\$34.05	\$60.84	\$38.48	\$68.30	M	\$5,932	2021	\$1,500		\$2,200	2018
Albemarle County Service Authority	29,595	1,188	\$29.82		\$39.76		\$49.70		M	\$9,940	2021		2013	\$6,820	2017
Alexandria Renew / City of Alexandria	23,099	3,490	\$45.25		\$56.22		\$67.19		M	\$11,896	2021	\$9,446	2021		
Alleghany County	1,929	134	\$47.00		\$47.00		\$47.00		M	\$11,297	2021	\$1,000	2000		
Altavista, Town of	1,113	40	\$9.26	\$18.49	\$12.34	\$24.65	\$15.43	\$30.81	Q	\$3,162	2021	\$2,000	2018		
Amelia County	239	119	\$30.00		\$36.00		\$42.00		M	\$6,300	2021	COST+100%	2007	\$4,000	2013
Amherst County Service Authority	897	202	\$36.93		\$48.26		\$59.68		B	\$11,339	2021	\$1,500	2021	\$4,500	2021
Amherst, Town of	680	142	\$47.90	\$95.80	\$54.75	\$109.50	\$61.60	\$123.20	M	\$15,265	2019	\$2,200			
Appomattox, Town of	754	188	\$47.27		\$67.04		\$84.81		M	\$17,766	2020	\$2,200	2013	\$3,000	2019
Arlington County	35,307	1,642	\$28.32		\$37.76		\$47.20		Q	\$9,440	2021	\$0	2021		2021
Augusta County Service Authority	8,332	720	\$42.33		\$52.55		\$62.77		B	\$10,514	2021	\$1,250		\$4,900	
Bedford Regional Water Authority	4,869	697	\$45.70	\$47.30	\$52.90	\$55.20	\$60.10	\$63.10	M	\$7,092	2021	\$1,500	2021	\$5,900	2021
Berryville, Town of	1,725	11	\$56.63	\$69.56	\$73.90	\$91.14	\$91.17	\$112.72	M		2020	\$14,863	2020		
Blacksburg, Town of	9,404	299	\$21.56	\$37.73	\$27.71	\$48.49	\$33.86	\$59.25	M	\$6,153	2021	\$1,115	2021	\$2,500	2021
Blackstone, Town of			\$25.47	\$38.21	\$33.95	\$50.93	\$42.43	\$63.65	M	\$8,480	2021				
Bland County Service Authority	330	35	\$26.50		\$31.00		\$37.50		M	\$11,953	2014	\$400	2018		
Boones Mill, Town of			\$58.00	\$78.00	\$64.00	\$84.00	\$70.00	\$90.00	M	\$6,020	2018	\$4,000			
Boydton, Town of			\$26.90	\$36.90	\$31.90	\$46.90	\$36.90	\$56.90	M						
Bridgewater, Town of	2,142	119	\$31.47		\$39.29		\$47.11		M	\$9,187	2021	\$7,772	2021		
Bristol Virginia Utilities Authority	6,703	966	\$26.48	\$34.05	\$30.26	\$39.72	\$34.04	\$45.39	M	\$3,587	2021	\$2,250			
Broadway, Town of	1,488	95	\$13.82		\$17.64		\$21.46		B		2018	\$4,600	2018		
Brookneal, Town of			\$17.16		\$19.82		\$22.48		M						
Buckingham County	178	42	\$42.08		\$42.08		\$56.09		M	\$13,996	2020	\$2,500	1994		
Buena Vista, City of	2,535	167	\$25.62		\$34.16		\$42.70		M	\$8,540	2020	\$2,000	2019		
Campbell County Utility & Service Auth.	3,435	306	\$25.82		\$32.41		\$39.03		B	\$6,610	2012	\$1,900	2010	\$2,200	2010
Cape Charles, Town of	1,160	110	\$67.23		\$71.34		\$75.45		M		2021	\$875	2012	\$6,600	2012
Caroline County	993	114	\$57.03		\$67.06		\$77.40		M	\$11,172	2021	\$2,000	2021	\$6,000	2018
Carroll County PSA	891	210	\$46.20		\$57.20		\$68.20		M	\$8,301	2021	\$1,250	2019		
Chatham, Town of	428	123	\$19.17	\$35.70	\$25.56	\$47.60	\$31.95	\$59.50	Q	\$6,390	2018	\$1,000	2018		
Chase City, Town of	1,076	69	\$19.90	\$25.47	\$22.49	\$28.79	\$25.08	\$32.10	M			\$600	2014		
Chesterfield County	117,934	3,848	\$25.99		\$29.10		\$32.20		B	\$3,458	2021	\$0	2021	\$5,400	2018
Chilhowie, Town of	1,040	121	\$26.85	\$56.83	\$32.22	\$67.68	\$37.59	\$78.98	M	\$6,983	2021	\$900	2016		
Christiansburg, Town of	10,658	563	\$30.50	\$45.47	\$40.75	\$61.13	\$51.00	\$76.50	M	\$10,250	2018	\$3,000	2015		
Clarke County Sanitary Authority	338	30	\$58.50		\$58.50		\$65.96		B	\$14,924	2019			\$16,200	2006
Clarksville, Town of			\$47.38	\$107.12	\$61.57	\$128.87	\$75.76	\$150.62	B	\$14,195	2021				



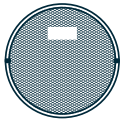
Wastewater Data⁴

	# Residential Wastewater Units	# Non-Residential Wastewater Units	Residential WW Rate Inside (3,000 gal./mo.)	Residential WW Rate Outside (3,000 gal./mo.)	Residential WW Rate Inside (4,000 gal./mo.)	Residential WW Rate Outside (4,000 gal./mo.)	Residential WW Rate Inside (5,000 gal./mo.)	Residential WW Rate Outside (5,000 gal./mo.)	Billing Frequency	WW Rate Business Inside (1 million gal./mo.)	Last WW Rate Change	Residential Connection Fee Wastewater	Last WW Connection Fee Change	Residential Capital Recovery Charge	Last WW CRC Rate Change
Coeburn, Town of	995	130	\$33.46	\$55.53	\$41.18	\$68.85	\$48.91	\$82.17	M		2015	COST+\$50			
Craigsville, Town of			\$34.00		\$34.00		\$34.00		M	\$6,999		\$3,000			
Culpeper, Town of	6,602	653	\$24.15		\$32.20		\$40.25		M	\$7,273	2019	COST	2019	\$10,000	2006
Danville, City of	16,250	2,300	\$23.52		\$26.61		\$29.95		Monthly	\$2,862	2016	\$1,234	2021	\$0	
Dinwiddie County Water Authority	3,450	140	\$20.82		\$26.82		\$32.82		M	\$5,805	2017	\$3,910	2015		2015
Dublin, Town of	1,091	150	\$23.65	\$30.70	\$30.81	\$39.90	\$37.97	\$49.10	M	\$7,827	2021	\$1,500		\$0	
Dungannon, Town of	211	4	\$27.00	\$31.00	\$44.00	\$52.00	\$49.00	\$57.00	M		2021	\$88	2012		
Edinburg, Town of	586	41	\$36.40	\$54.60	\$47.40	\$71.10	\$47.40	\$71.10	M	\$1,070	2021	\$10,000	2009		
Farmville, Town of	2,062	592	\$20.17	\$30.26	\$24.58	\$36.88	\$29.00	\$43.51	M	\$6,288	2018	\$1,000	2020		
Fauquier County Water and Sanitation Authority	4,466	294	\$59.96		\$69.87		\$79.78		M	\$10,817	2021				
Ferrum Water & Sewer Authority	148	30	\$31.50		\$39.00		\$46.50		M	\$7,620	2017	COST+500	2017	\$2,500	2017
Fincastle, Town of	200	50	\$39.19		\$45.88		\$52.57		M	\$7,264	2021	\$2,500	2021	\$3,500	2021
Franklin, City of	4,270	252	\$32.30	\$36.95	\$36.73	\$45.62	\$41.16	\$51.29	M	\$4,449	2016	\$4,500			
Galax, City of	3,200	500	\$16.00	\$32.00	\$20.50	\$41.00	\$25.00	\$50.00	B	\$4,503	2020				
Gate City, Town of	803	131	\$38.25		\$47.65		\$57.05		M	\$10,958	2018	\$900	2014		
Gloucester, County of	1,780	694	\$41.72		\$55.27		\$68.40		M	\$12,156	2013	\$5,335	2008	\$1,200	2008
Goochland, County of	1,467	195	\$41.58		\$49.15		\$56.72		B	\$14,777	2021	\$6,600	2021		
Gordonsville, Town of	756	4	\$45.61	\$48.38	\$54.15	\$56.92	\$62.92	\$65.46	M	\$8,551	2017				
Greensville County WSA			\$37.30		\$37.30		\$44.77		M	\$8,699	2021	\$1,320			
Gretna, Town of			\$17.90	\$35.79	\$23.86	\$47.72	\$29.83	\$59.65	B	\$3,807	2021	\$400			
Halifax County Service Authority	4,395	445	\$37.10		\$42.80		\$48.50		B	\$5,385	2021			\$1,500	2015
Hamilton, Town of	608	29	\$32.64	\$44.04	\$43.52	\$58.72	\$69.77	\$94.16	B		2019	\$5,000	2010		
Hampton, City of	43,324	90	\$20.60		\$20.57		\$20.55		M						
Hanover County	20,208	1,710	\$32.26		\$40.17		\$48.10		B	\$5,975	2021			\$6,778	2021
Harrisonburg, City of	17,591	4,861	\$17.31	\$25.74	\$23.08	\$34.32	\$28.85	\$42.90	M	\$5,620	2019	\$4,500	2010		
Henry Co. Public Service Authority	6,912	7,139	\$30.00		\$30.00		\$34.70		M	\$7,017	2013	\$1,750	2013		
Honaker, Town of	655	70	\$31.01	\$41.64	\$36.51	\$47.14	\$42.01	\$52.64	M	\$5,530	2018	\$500	2018		
Hopewell Regional Wastewater Treatment Facility	8,877	569	\$16.18		\$19.98		\$23.78		M	\$3,166	2017	\$2,026	2018		
Isle of Wight County	3,357	86	\$21.00		\$28.00		\$35.00		B	\$700	2020	\$3,700			
James City Service Authority	24,018	1,158	\$36.96		\$51.72		\$60.26		M	\$11,702	2019	\$3,583	2020	\$1,818	2020
Kenbridge, Town of	417	144	\$54.19		\$65.19		\$77.19		M		2021				
Kilmarnock, Town of	780	252	\$30.50	\$43.25	\$40.45	\$58.16	\$47.08	\$68.10	B	\$13,295	2021	\$8,040	2006		
King George County Service Authority	242	183	\$70.65		\$83.23		\$95.81		B	\$13,374	2021	\$11,183	2013		
La Crosse, Town of	269	35	\$23.48	\$31.50	\$28.88	\$36.90	\$34.28	\$42.30	M	\$5,413	2017	\$1,000	2017		



Wastewater Data⁴

	# Residential Wastewater Units	# Non-Residential Wastewater Units	Residential WW Rate Inside (3,000 gal./mo.)	Residential WW Rate Outside (3,000 gal./mo.)	Residential WW Rate Inside (4,000 gal./mo.)	Residential WW Rate Outside (4,000 gal./mo.)	Residential WW Rate Inside (5,000 gal./mo.)	Residential WW Rate Outside (5,000 gal./mo.)	Billing Frequency	WW Rate Business Inside (1 million gal./mo.)	Last WW Rate Change	Residential Connection Fee Wastewater	Last WW Connection Fee Change	Residential Capital Recovery Charge	Last WW CRC Rate Change
Lawrenceville, Town of	809	131	\$33.00	\$57.75	\$44.00	\$77.00	\$55.00	\$96.25	M		2010	\$400	2010		
Lexington, City of	2,500	550	\$47.20	\$63.76	\$62.94	\$85.02	\$78.67	\$106.28	M	\$33,520	2021	\$1,908	2021	\$450	2021
Loudoun Water	78,773	4,850	\$28.05		\$33.32		\$38.59		Q	\$5,535	2021	\$80		\$8,711	2021
Louisa Co. Water Authority Northeast Creek	38	48	\$29.79		\$39.72		\$49.65		M	\$9,930	2021	\$5,250	2004	\$6,750	2021
Louisa Co. Water Authority Zion Crossroads	732	56	\$29.79		\$39.72		\$49.65		M	\$9,930	2021	\$5,250	2004	\$6,750	2021
Luray, Town of	2,131	73	\$48.81	\$73.22	\$56.13	\$84.20	\$63.45	\$95.18	M	\$7,918	2021	\$5,940	2010	\$1,200	2010
Lynchburg, City of	19,000	2,000	\$29.14		\$37.35		\$45.56		M	\$8,290	2020	\$1,330	2017	\$1,950	2000
Manassas, City of	10,097	1,302	\$19.63	\$19.63	\$22.84	\$22.84	\$26.05	\$26.05	M	\$10,904	2021			\$10,952	2015
Marion, Town of	2,705	345	\$23.85	\$47.62	\$32.84	\$64.54	\$41.82	\$83.46	M	\$9,422	2016	\$900	2016		
Martinsville, City of	7,000	500	\$23.64		\$23.64		\$26.37		M	\$2,743	2016	\$850	2014		
Mineral, Town of	115	34	\$35.40		\$44.25		\$53.10		M	\$8,859	2013	\$8,000	2007		
Mount Jackson, Town of	733	95	\$39.48	\$59.28	\$52.64	\$79.04	\$65.80	\$98.80	M	\$13,160	2021	\$10,000	2019		
Nelson County	183	18	\$38.60		\$38.60		\$45.45		M		2013	\$2,000	2013		
Nelson County Service Authority	2,493	54	\$60.60		\$60.60		\$71.90		M	\$11,255	2021	\$4,000			
New Kent County	2,526	150	\$33.08		\$42.99		\$52.90		B	\$12,136	2021	\$9,250	2017	\$2,500	2017
Norton, City of	1,579	320	\$42.44	\$78.90	\$53.20	\$103.50	\$63.96	\$128.10	M	\$10,773	2019	\$175			
Onancock, Town of	618	61	\$67.59		\$90.41		\$112.90		B		2020	\$1,200			
Orange, Town of	1,455	301	\$41.88	\$83.52	\$47.38	\$91.62	\$52.88	\$99.72	M	\$5,564	2014	\$12,330	2014		
Powhatan County	126	110	\$34.63		\$41.63		\$48.63		B	\$7,341	2021	\$8,100			
Prince William County Service Authority	119,240	3,387	\$32.05		\$38.70		\$45.35		M	\$7,553	2020	\$10,800	2012		
Fairlawn Sewer Authority (Previously PCSA)	845	107	\$26.50		\$27.75		\$29.00		M	\$4,425	2019	\$500	2010		
Radford, City of	5,200	461	\$18.36		\$24.48		\$30.60		M	\$6,120	2014	\$1,500	2014		
Rapidan Service Authority	6,582	355	\$38.30		\$48.38		\$58.46		M	\$10,088	2021	\$10,000			
Rappahannock County Water & Sewer Authority	159	53	\$50.00		\$50.00		\$50.00		Q	\$50	2018	\$7,500	2009		
Rockbridge County PSA (Rivermont and Riveria))			\$50.03		\$60.78		\$71.53		B	\$10,945	2021	\$825	2021	\$4,500	2007
Rockingham County	3,664	225	\$17.80		\$23.20		\$28.60		M	\$5,402	2021	\$625	2009	\$5,300	2009
Rocky Mount, Town of	1,749	384	\$17.85	\$35.70	\$21.32	\$42.64	\$24.79	\$49.58	M	\$3,328	2019	\$1,000	2016		
Round Hill, Town of	1,700	30	\$32.26	\$48.42	\$43.01	\$64.56	\$53.76	\$80.70	B		2020	\$850	2015	\$13,897	2021
Rural Retreat, Town of			\$30.48		\$36.54		\$42.79		M	\$8,203	2021	\$400			
Saint Paul, Town of	408	73	\$27.74	\$46.66	\$35.60	\$58.98	\$43.47	\$71.02	M	\$7,882	2021	\$350			
Salem, City of	7,977	1,293	\$38.87		\$44.26		\$49.65		M	\$5,435	2016	\$2,100	2016	\$1,000	2016
Scott County Public Service Authority	1,201	70	\$45.76		\$59.62		\$73.48								
Shenandoah, Town of	870	60	\$26.65	\$39.50	\$31.15	\$47.00	\$35.65	\$54.50	M	\$4,316	2021	\$7,000	2020		
Smithfield, Town of	3,172	469	\$44.04	\$46.83	\$55.61	\$59.33	\$67.18	\$71.83	B	\$11,583	2021	\$1,580	1999	\$4,120	2007

 Wastewater Data⁴	# Residential Wastewater Units	# Non-Residential Wastewater Units	Residential WW Rate Inside (3,000 gal./mo.)	Residential WW Rate Outside (3,000 gal./mo.)	Residential WW Rate Inside (4,000 gal./mo.)	Residential WW Rate Outside (4,000 gal./mo.)	Residential WW Rate Inside (5,000 gal./mo.)	Residential WW Rate Outside (5,000 gal./mo.)	Billing Frequency	WW Rate Business Inside (1 million gal./mo.)	Last WW Rate Change	Residential Connection Fee Wastewater	Last WW Connection Fee Change	Residential Capital Recovery Charge	Last WW CRC Rate Change
South Hill, Town of	1,960	436	\$23.64	\$47.28	\$31.15	\$62.30	\$38.12	\$76.24	M	\$5,473	2021	\$1,500	1991		
Southampton County	1,387	80	\$37.00		\$37.00		\$46.00		M	\$9,001	2021	\$1,800	2009	\$6,000	2009
Spotsylvania County	30,068	1,781	\$20.28		\$26.00		\$31.72		M	\$6,287	2019	\$2,220	2008	\$4,920	2008
Stafford County	34,422	1,486	\$36.30		\$42.86		\$49.42		M	\$6,907	2021	\$2,100	2005	\$3,500	2010
Stanley, Town of	1,420	70	\$29.40	\$31.00	\$30.70	33.5	\$32.50	\$36.00	M		2017	\$4,025	2017		2018
Stoney Creek Sanitary District	1,385	45	\$51.00		\$56.00		\$61.00		B	\$6,527	2013	\$6,000	2010		
Stuart, Town of	364	100	\$24.16	\$27.69	\$29.74	\$33.99	\$35.32	\$40.29	M		2020	\$600			
Tazewell, Town of	1,678	234	\$41.35	\$60.75	\$52.20	\$76.00	\$63.05	\$91.25	M	\$10,858	2021	\$540			
Timberville, Town of	1,257	61	\$20.53	\$29.64	\$24.41	\$34.36	\$28.29	\$39.08	B	\$5,187	2021	\$4,500	2014		
Victoria, Town of	850	25	\$20.50		\$27.04		\$33.58		M	\$6,505	2021	\$25	2019		
Vienna, Town of	9,533	571	\$26.25		\$37.80		\$47.25		Q	\$10,950	2021	\$8,340	2021	\$7,625	2021
Washington County Service Authority	2,209	255	\$58.08		\$67.07		\$76.06		M	\$10,571	2021	\$3,225			
Western Virginia Water Authority (Botetourt Co.)	2,997	167	\$27.75		\$31.50		\$35.25		M	\$4,195	2021	\$2,000	2020		
Western Virginia Water Authority (Franklin Co.)	88	19	\$27.75		\$31.50		\$35.25		M	\$4,195	2021	\$2,000	2020		
Western Virginia Water Authority (Roanoke City/County)	51,199	2,619	\$27.75		\$31.50		\$35.25		M	\$4,195	2021	\$2,000	2020		
Westmoreland County	2,910	298	\$37.00	\$40.00	\$37.00	\$40.00	\$37.00	\$40.00	M		2018	\$10,022	2018	\$1,539	2018
Winchester, City of	8,830	1,654	\$43.44		\$57.92		\$72.40		B	\$14,480	2021	\$7,200	2018		
Wise, Town of	1,984	194	\$36.66	\$53.31	\$44.81	\$65.16	\$52.96	\$77.01	M	\$8,162	2019	\$500	2000		
Wytheville, Town of	3,888	688	\$18.43	\$36.86	\$24.56	\$49.12	\$30.69	\$61.38	M	\$6,452	2019	\$1,500	2005		

⁴Participants provided wastewater treatment services by the Hampton Roads Sanitation District (HRSD): Gloucester County, Isle of Wight County, James City Service Authority, Town of Smithfield, and the City of Virginia Beach included the HRSD wastewater charges in their responses. As a result, the data listed in the wastewater section of this report includes the HRSD wastewater treatment charges as follows: 3,000 gallons per month (or 401 cubic feet) - \$23.50; 4,000 gallons per month (or 535 cubic feet) - \$31.33; 5,000 gallons per month (or 668 cubic feet) - \$39.17 and 1,000,000 gallons per month (or 133,681 cubic feet) - \$7,833.68.



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