



Draper Aden Associates

Engineering • Surveying • Environmental Services

The 27th Annual Virginia Water and Wastewater Rate Report 2015



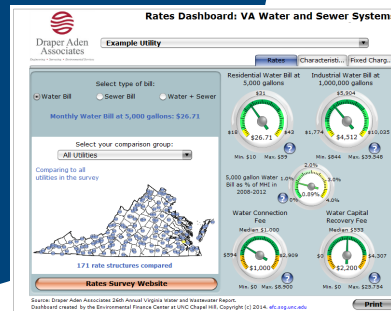
2015

Virginia water and wastewater providers were asked to provide information concerning the monthly residential water and wastewater bill based on consumption of 5,000 gallons of water (or 670 cubic feet) per month and to include all water and wastewater-related charges listed on the customer's bill. The survey provides residential rates both inside and outside of municipal boundaries where applicable. It also asked questions concerning rates for non-residential customers using one million gallons per month. Data for connection fees and capital recovery charges were also gathered. Our special topic this year included questions relative to wastewater facilities and septage charges.

For questions about water and wastewater rates or calculations included in this report please contact Sheryl Stephens at sstephens@daa.com.

Results are also available in an interactive Rate Dashboard, created in partnership with the EPA's Environmental Finance Center at UNC-Chapel Hill.

www.daa.com/vawwwrates



For the past 20 years the survey has featured a control group comprised of 20 water and wastewater providers who represent a cross section of utilities across the Commonwealth. The information in the table below is reflective of the data collected from this group. The rates shown indicate residential charges based on consumption of 5,000 gallons per month.

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Average Water Rate	\$19.52	\$19.94	\$21.59	\$22.50	\$23.58	\$25.00	\$25.70	\$27.25	\$28.34	\$30.11	\$30.77
Average Wastewater Rate	\$22.01	\$22.83	\$25.32	\$27.74	\$29.56	\$31.03	\$32.88	\$35.24	\$37.00	\$39.33	\$40.37
Average Combined Rate	\$41.53	\$42.77	\$46.91	\$50.24	\$53.14	\$56.03	\$58.58	\$62.59	\$65.34	\$69.44	\$71.14

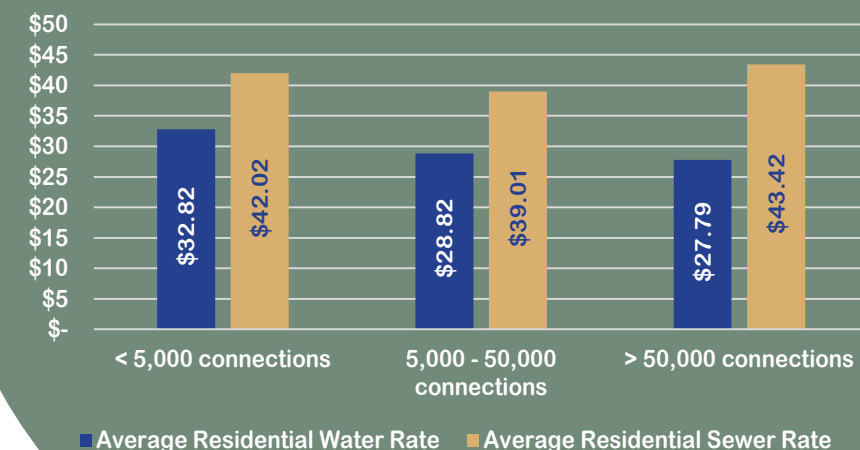
2.2% increase

2.6% increase

2.4% increase

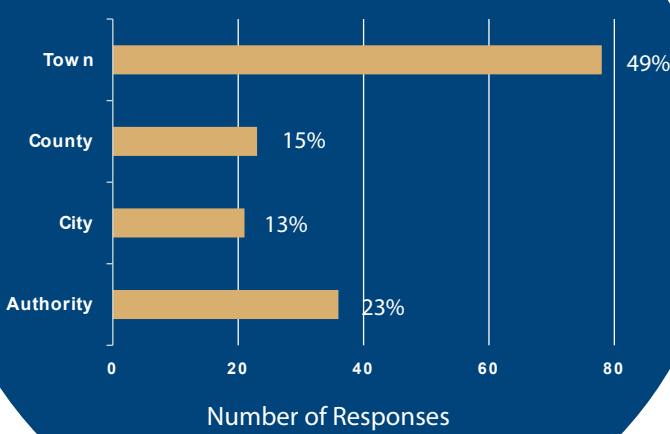
According to the results of this year's data, the combined average residential water and average residential wastewater rate increased 2.4% from 2014. Over the past ten years the combined average water rate and wastewater rate increased by 71.3%.

Average Residential Rates by System Size (5,000 gallons per Month)



59% return rate from 266 surveyed

Response Breakdown



What Keeps You Up At Night?

This year's survey offered an opportunity for participants to identify their top concerns about their services and/or facilities. The responses fell into seven (7) categories:

- Infrastructure Concerns,
- Operating and Maintenance Costs and Rates,
- Wastewater Treatment,
- Regulations and Regulatory Compliance,
- Workforce Concerns,
- Water Quality/Quantity, and
- Customer Service.

Almost 60% of the respondents cited infrastructure concerns or the rising operation and maintenance costs and the impact on user charges and fees. Approximately 25% of the responses indicated concerns about maintaining regulatory compliance or concerns with wastewater treatment.

To read the full summary of the specific concerns as stated by this year's survey response, go to www.daa.com/vawwwrates.

Capital recovery charges are capital charges for buying into the existing system or charges that will recognize the cost of adding capacity to the systems.

	Capital Recovery Charges	
	Water	Wastewater
Average	\$3,349	\$4,529
High	\$13,700	\$14,000
Low	\$400	\$500
Median	\$2,758	\$3,600

	Connection Fees	
	Water	Wastewater
Average	\$2,084	\$2,765
High	\$25,754	\$21,600
Low	\$100	\$100
Median	\$1,075	\$1,555

Connection fees are charges for tapping into the water main or into the sewer line and running a service line to the property.

	Combined Connection & Capital Recovery Charges	
	Water	Wastewater
Average	\$3,234	\$4,350
High	\$25,754	\$23,000
Low	\$100	\$175
Median	\$2,500	\$3,820

The data presented herein was provided by respondents and is assumed to be correct. In some cases, the respondent was contacted to verify or clarify responses. However, Draper Aden Associates, the Virginia Association of Counties, the Virginia Municipal League, the Virginia Section of AWWA, and the Virginia Water Environment Association cannot warrant the accuracy of the information presented in this report.

Septage and High-Strength Waste

Septage or Truck-Hauled Waste

This year our special topic focused on items concerning wastewater treatment. We asked several questions about facilities that accept truck-hauled waste. Of the 115 respondents that answered this section of the survey, 49 or (43%) indicated that truck-hauled waste was accepted at their facility.

Types of waste accepted:

Type of Waste	# of Utilities	% of Respondents	Charge (\$ per 1K gallons)	Average Charge (\$ per 1K gallons)
Septic Tank	45	92%	\$11 - \$160	\$67
Grease Trap	10	20%	\$30 - \$100	\$64
Portable Toilets	32	65%	\$18 - \$150	\$66
Septic Tank Waste from other Localities	22	45%	\$30 - \$160	\$71
Other (including leachate, process water, industrial discharge)	6	12%	\$50 - \$120	\$85

The following problems were associated with accepting the waste:

Problem	Times Cited
High BOD, pH, Nitrogen, Ammonia	7
Solids, Bar Screen Problems, Trash, Rags, Flushable Wipes	6
Grit	4
Grease	3
Type of Waste is Unknown	2
Odor	1
Volume of Septage	1

High-Strength Waste and Surcharges

One hundred and nine (109) respondents answered question about imposing surcharges for high-strength waste delivered to the wastewater treatment plant(s) and 76% of those responding indicated that additional charges were levied for high-strength waste.

Price per Pound	Biochemical Oxygen Demand	Total Suspended Solids	Total Nitrogen	Total Phosphorus	Chemical Oxygen Demand
High	\$0.73	\$0.89	\$1.64	\$5.50	\$1.64
Low	\$0.18	\$0.06	\$0.97	\$1.24	\$0.20
Median	\$0.28	\$0.27	\$1.30	\$5.07	\$0.92
Average	\$0.29	\$0.29	\$1.30	\$3.94	\$0.92

Rate Data

The tables below were compiled from all responses and are not limited to the control group.

Water	Replies	Avg.	Median
Residential Connections	152	11,471	2,142
Non-residential Connections	150	770	197
Monthly Residential Rate (In) per 5,000 gallons	160	\$32.03	\$29.80
Monthly Residential Rate (Out) per 5,000 gallons	70	\$47.86	\$43.22
Monthly Non-Residential Rate per 1 million gallons	137	\$5,791	\$5,065

Wastewater	Replies	Avg.	Median
Residential Connections	139	10,977	1,697
Non-residential Connections	138	829	192
Monthly Residential Rate (In) per 5,000 gallons	149	\$41.83	\$41.00
Monthly Residential Rate (Out) per 5,000 gallons	49	\$62.82	\$57.37
Monthly Non-Residential Rate per 1 million gallons	126	\$7,234	\$6,633

Key to rate tables listed on the following pages: "Cost" means customer pays the cost of making the connection, "Cost +" means the customer pays the cost to make the connection, plus an additional fee, "dfu" means customer is charged that fee per the number of drainage fixture units in the household, "Fixture" means customer is charged that fee per the number of fixture units in the household. The billing frequency column indicates how often the user is billed for water usage: "B" = bi-monthly, "M" = monthly and "Q" indicates a quarterly billing schedule.

Water Data

Locality	# Residential Water Units	# Non-Residential Water Units	Residential Water Rate Inside (5,000 gallons /month)	Residential Water Rate Outside (5,000 gallons /month)	Billing Frequency	Last Water Rate Change	Water Rate- Business Inside (1 million gal. /month)	Residential Connection Fee	Residential Capital Recovery Charge
Albemarle County Service Authority	23,105	1,375	\$34.00		M	2015	\$7,446.70	\$3,026	\$4,760
Alleghany County	2,824	188	\$41.00		M	2015	\$8,249.75	\$1,000	
Altavista, Town of	1,640	56	\$10.90	\$21.80	Q	2015	\$2,140.00	\$1,500	
Amelia County	294	147	\$22.44		M	2000	\$4,716.00	Cost + 100%	\$3,000
Amherst County Service Authority	6,707	522	\$36.73		B	2015	\$5,366.60	\$1,285	\$2,790
Amherst, Town of	1,112	158	\$49.75	\$99.50	M	2015	\$11,484.62	\$1,000	\$1,700
Appomattox, Town of	942	244	\$27.40		M	2012	\$5,798.40	\$1,500	\$2,500
Arlington County	35,241	2,069	\$21.05		Q	2015	\$4,200.00	\$3,200	\$85/DFU
Augusta County Service Authority	16,033	1,069	\$32.42		B	2015	\$5,188.60	\$1,060	\$2,645
Bath County Service Authority	826	105	\$23.40		M	2007	\$3,008.40	\$100	\$1,175
Bedford Regional Water Authority (Town of Bedford)			\$29.30		B	2015	\$3,476.85	\$1,000	\$2,500
Bedford Regional Water Authority (Adjacent to Town)	11,623	1,037	\$37.10		B	2015	\$5,740.13	\$1,000	\$2,500
Bedford Regional Water Authority (County)			\$44.00		B	2015	\$5,550.08	\$1,000	\$2,500
Big Stone Gap, Town of	3,538	303	\$37.80	\$59.27	M	2015	\$5,848.60	\$550	
Blacksburg, Town of	9,399	394	\$29.14	\$50.84	M	2015	\$5,213.09	\$1,789	\$624
Bluefield, Town of	2,200	100	\$39.84	\$59.76	M	2013	\$5,405.09	\$350	
Boones Mill, Town of	245	38	\$44.63	\$61.80	M	2015		\$2,500	
Bridgewater, Town of	2,026	187	\$21.34	\$28.14	M	2015	\$4,056.94	\$250	
Broadway, Town of	1,626	116	\$23.41		B	2015	\$4,895.22	\$4,500	
Buckingham County	319	95	\$35.28		M	2015	\$11,336.30	\$2,000	
Campbell County Utilities and Service Authority	9,926	538	\$39.06		B	2012	\$6,293.59	\$1,500	\$1,900
Cape Charles, Town of	1,060	70	\$39.05		M	2015	\$4,995.00	\$875	\$4,000
Carroll County Public Service Authority	3,356	229	\$43.80		M	2009	\$4,137.50	\$1,250	
Charlotte Court House, Town of	184	57	\$42.00		M	2012			
Charlottesville, City of	13,123	1,529	\$39.09		M	2015	\$7,021.58	\$325	\$3,100
Chesapeake, City of	60,755	3,117	\$40.60		B		\$6,710.70	\$3,697	
Chesterfield County	120,029	5,457	\$20.31		B	2015	\$2,414.43	\$1,980	\$5,200
Chilhowie, Town of	2,087	144	\$27.56	\$55.44	M	2015	\$4,195.26	\$700	
Chincoteague, Town of	2,510	1,040	\$22.75		Q	2013	\$5,280.33		
Christiansburg, Town of	9,356	797	\$28.20	\$42.30	B	2015	\$3,618.70	\$3,000	
Clarksville, Town of	737	134	\$44.00	\$87.65	B	2014	\$7,009.00	\$1,000	\$1,000
Clifton Forge, Town of	1,600	200	\$26.50		M	2013	\$5,448.75	\$600	
Coeburn, Town of	1,550	165	\$37.62	\$54.78	M	2015		\$50 + Cost	
Colonial Beach, Town of	2,576	110	\$24.10	\$36.15	Q	2012	\$1,224.10	\$2,250	
Courtland, Town of	667	48	\$11.00	\$13.00	M	1994			
Craig-New Castle Public Service Authority	441	60	\$33.75		M	2013	\$10,011.50	\$2,000	
Culpeper, Town of	6,263	657	\$30.20		M	2014	\$3,639.00	\$6,500	\$3,250
Danville, City of	15,015	2,420	\$24.93		M	2014	\$3,437.50	\$1,500	
Dinwiddie County Water Authority	3,507	179	\$21.77		M	2013	\$2,494.04		\$2,260
Dublin, Town of	2,536	154	\$31.14	\$39.89	M	2015	\$4,370.53	\$630	
Dungannon, Town of	211	23	\$32.00	\$35.00	M	2009	\$5,082.00	\$750	
Eastville, Town of	134		\$28.94	\$32.84	Q	2015	\$4,003.94		
Edinburg, Town of	513	49	\$36.75	\$55.21	M	2014		\$5,000	
Emporia, City of	6,297	944	\$47.48		M	2015	\$5,781.93	\$3,000	
Exmore, Town of	635	125	\$26.50	\$29.50	M	2013		\$500	
Fairfax Water	355,523	12,480	\$16.02		Q	2015	\$2,591.45	\$1,090	\$13,700

Water Data		# Residential Water Units	# Non-Residential Water Units	Residential Water Rate Inside (5,000 gallons /month)	Residential Water Rate Outside (5,000 gallons /month)	Billing Frequency	Last Water Rate Change	Water Rate- Business Inside (1 million gal. /month)	Residential Connection Fee	Residential Capital Recovery Charge
Locality										
Farmville, Town of		3,066	626	\$23.00	\$34.51	M	2012	\$4,990.50	\$1,000	
Fauquier County Water and Sanitation Authority		6,202	250	\$40.79		M	2015			\$8,900
Ferrum Water & Sewer Authority		188	29	\$32.00		M	2014	\$5,065.00	Cost + \$500	\$1,500
Floyd-Floyd County Public Service Authority		394	142	\$26.95		M	2013		\$1,000	
Franklin, City of		3,248	252	\$26.77	\$33.54	M	2008	\$2,842.62	\$3,500	
Frederick County Sanitation Authority		13,460	734	\$28.26		B	2014	\$4,064.79	\$2,250	\$6,080
Front Royal, Town of				\$26.94	\$53.88	M	2014	\$8,494.39	\$4,340	
Galax, City of		3,200	500	\$20.50	\$41.00	B	2010	\$3,030.63	\$1,000	
Gate City, Town of				\$51.85	\$59.95	M	2013	\$7,930.25	\$650	
Glasgow, Town of		516	2	\$48.80		M	2015	\$572.50	\$2,500	
Goochland County		1,278	228	\$33.33		B	2015	\$7,722.82	\$4,000	
Grayson County		380	10	\$48.29		B	2015		\$900	
Greensville County Water and Sewer Authority		1,692	92	\$28.25		M	2014	\$4,880.00	\$960	\$400
Gretna, Town of		678	75	\$32.37	\$60.58	B	2015	\$4,599.42	\$300	
Halifax County Service Authority (Clover District)				\$33.00		B	2015			\$1,250
Halifax County Service Authority (Halifax District)				\$28.00		B	2015	\$5,031.20		\$1,250
Halifax County Service Authority (Riverdale District)		4,000	500	\$28.75		B	2015	\$3,697.40		\$1,250
Halifax County Service Authority (South Boston)				\$28.00	\$30.25	B	2015	\$3,090.80		\$1,250
Halifax County Service Authority (VIR District)							2015	\$9,874.00		\$1,250
Hanover County		18,290	1,705	\$21.82		B	2015	\$2,473.86	\$5,982	
Harrisonburg, City of		14,536	1,258	\$13.38	\$27.60	M	2015	\$2,261.33	\$1,250	\$1,250
Henrico County		90,660	5,357	\$26.19		B	2015	\$4,066.75	\$2,630	\$4,710
Henry County Public Service Authority		12,483	926	\$34.70		M	2013	\$7,017.00	\$1,750	
Herndon, Town of		7,908	472	\$17.37		Q	2009	\$2,959.45	\$3,120	\$4,863
Hillsville, Town of		1,130	168	\$28.02	\$39.87	B	2015	\$5,774.37	\$690	
Hurt, Town of		615	598	\$34.85		Q	2015		\$1,000 or Cost+15%	
Isle of Wight County				\$59.98		B	2015	\$7,959.63	\$4,000	
Ivor, Town of		212	28	\$21.50		B	2013	\$4,018.00	\$1,500	
James City Service Authority		19,848	1,010	\$14.76		Q	2015	\$3,710.17	\$500/fixture	\$1,300
Jonesville, Town of		712	30	\$43.35	\$69.74	M	2010	\$8,600.35	\$100	
Kenbridge, Town of		488	96	\$26.15	\$34.71	M	2011	\$5,498.65	\$500	
Kilmarnock, Town of		796	254	\$20.75	\$31.13	B	2006	\$5,613.50	\$345	\$1,710
Lawrenceville, Town of		843	151	\$20.20	\$35.35	M	2010	\$3,406.40	\$400	
Lebanon, Town of		1,529	265	\$27.39	\$35.76	M	2015	\$5,013.03	\$150	
Leesburg, Town of		16,021	997	\$29.43	\$39.17	Q	2015	\$5,642.01	Cost + 15%	\$4,683
Lexington, City of		2,267	593	\$24.73	\$29.68	B	2015	\$10,750.00	Cost or \$1,500	
Louisa County Water Authority (Northeast Creek)		95	71	\$27.50		M	2012	\$5,500.00	\$1,000	\$3,750
Louisa County Water Authority (Zion Crossroad)		457	46	\$27.50		M	2012	\$5,500.00	\$1,001	\$3,750
Lovettsville, Town of		737	34	\$33.50	\$83.75	Q	2014	\$6,700.00	\$1,000	\$8,100
Luray, Town of		1,883	273	\$45.17	\$67.76	M	2015	\$5,510.17	\$1,200	\$3,320
Lynchburg, City of		22,000	2,000	\$19.41		M	2014	\$3,290.11	\$1,045	\$1,220
Marion, Town of		3,200	500	\$28.01	\$55.91	M	2015	\$6,117.41	\$900	
Martinsville, City of		6,700	500	\$25.50	\$32.68	M	2012	\$2,672.00		
Middleburg, Town of		470	60	\$78.33	\$114.97	B	2014	\$15,839.13	Cost + 10%	\$7,018
Middletown, Town of		456	55	\$42.75	\$64.13	B	2013			\$5,500
Mineral, Town of		255	50	\$42.50	\$48.00	M	2013	\$8,002.50	\$4,000	

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Locality										
Montgomery County Public Service Authority		2,700	25	\$44.50		M	2015		\$750	\$2,500
Montross, Town of		229	82	\$15.00	\$22.50	M	2014		Cost + \$500	
Nelson County		86	13	\$36.00		M	2013		\$2,000	
Nelson County Service Authority (Livingston)		532	121	\$48.70		M	2011	\$10,496.00	\$4,000	
Nelson County Service Authority (Wintergreen)		2,250	24	\$52.35		M	2011	\$10,500.00	\$4,000	
New Kent County		2,558	103	\$37.38		B	2015	\$8,368.18	\$4,650	
New Market, Town of		1,015	120	\$24.01	\$42.02	M	2015	\$4,312.46	\$4,000	
Newport News Waterworks		113,435	7,517	\$36.79		B	2015	\$5,083.00	\$1,030	\$2,520
Norton, City of		1,856	347	\$36.05	\$57.15	M	2015	\$4,568.30	\$240	
Orange, Town of		2,039	372	\$26.60	\$64.90	M	2007	\$4,013.20		\$3,000
Pearisburg, Town of		1,461	149	\$36.63	\$64.10	M	2013	\$5,050.00	\$500	
Phenix, Town of		129	3	\$27.00		B	2011		\$600	
Pittsylvania County Service Authority		3,736	235	\$30.00		B	2013	\$7,000.00	\$955	
Port Royal, Town of		75	10	\$35.00		M	2014		\$500	\$500
Powhatan County		5	80	\$38.32		B	2015	\$5,770.38		\$4,100
Prince Edward County		10		\$33.91		B	2009	\$6,071.82	\$4,500	
Prince George County		2,700	260	\$21.68		B	2015		\$3,000	
Prince William County Service Authority		113,647	3,222	\$21.40		M	2015	\$3,816.25	\$4,600	
Pulaski County Public Service Authority		4,318	298	\$31.43		M	2015	\$4,011.75	\$700	
Pulaski, Town of		3,558	331	\$24.05	\$44.35	M	2014	\$2,144.20	\$900	
Purcellville, Town of		2,385	299	\$50.93	\$86.85	B	2013	\$45,828.27	\$25,754	
Rapidan Service Authority		7,320	491	\$20.35		M	2015	\$3,473.97	Cost	\$10,000
Remington, Town of		566	33	\$31.50	\$46.75	M	2014	\$3,514.00	\$7,500	
Richlands, Town of		2,363	276	\$25.50	\$34.50	M	2009	\$3,768.50	\$400	
Richmond, City of		52,636	10,084	\$37.11		M	2015	\$5,047.51	\$5,000	\$650
Rockbridge County Pubic Service Authority		2,400	310	\$34.58		M	2015	\$4,928.00	\$1,025	\$4,000
Rockingham County		3,761	239	\$15.67		M	2011	\$3,797.00	\$625	\$2,650
Rocky Mount, Town of		2,427	470	\$22.21	\$44.42	M	2015	\$3,161.46	\$1,000	
Rural Retreat, Town of		1,070	120	\$32.55	\$56.40	M	2015	\$6,712.60	\$1,000	
St. Paul, Town of		625	56	\$25.38	\$44.13	M	2015	\$4,254.13	\$750	
Salem, City of		9,930	1,671	\$37.38		M	2015	\$6,041.92	\$1,500	
Scott County Public Service Authority		4,636	78	\$48.69		M	2015	\$8,313.30	\$1,500	
Shenandoah, Town of		919	79	\$28.65	\$47.50	M	2015	\$4,507.30	\$4,000	
Smithfield, Town of		3,195	342	\$32.87	\$39.98	B	2014		\$660	\$2,720
Smyth County		2,630	28	\$54.24		M	2014	\$10,532.50	\$535	
South Hill, Town of		2,197	419	\$27.75	\$55.50	M	2013	\$3,800.00	\$1,000	
Spotsylvania County		27,805	1,785	\$29.53		M	2015	\$9,896.62	\$1,290	\$4,920
Stafford County		33,020	1,498	\$22.55		M	2015	\$4,287.25	\$1,450	\$6,900
Stanley, Town of		1,523	82	\$20.53	\$31.90	M	2014	\$844.28	\$2,500	\$1,325
Strasburg, Town of		2,520	159	\$59.20	\$82.88	M	2013	\$16,511.97	\$8,000	
Surry County		143	12	\$38.80		M	2015		\$2,184	
Sussex Service Authority		1,149	104	\$20.00		M	2015	\$4,000.00	\$1,500	
Tappahannock, Town of		1,084	277	\$21.39	\$32.06	B	2015		\$2,200	
Tazewell, Town of		1,759	261	\$29.60	\$60.00	M	2015	\$6,609.80	\$540	
Timberville, Town of		1,334	44	\$19.27	\$27.02	B	2014	\$4,087.57	\$4,000	
Troutdale, Town of		97	7	\$38.50		M	2015	\$7,515.00	\$150	

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Locality										
Urbanna, Town of		519	78	\$19.80	\$31.70	M	2012		\$3,500	
Victoria, Town of		847	10	\$36.08		M	2015	\$4,802.13	\$200	
Vienna, Town of		9,337	528	\$25.80		Q	2014	\$5,907.47	\$12,850	
Vinton, Town of		5,000	525	\$26.43		B	2015	\$4,443.59	\$2,560	
Virginia Beach Public Utilities, City of		180,911	6,454	\$26.46		B	2010	\$4,469.01	\$493	\$2,267
Warrenton, Town of		4,812	560	\$13.30	\$19.95	M	2003	\$3,100.00	\$2,000	\$4,950
Washington County Service Authority		19,307	1,731	\$44.80		M	2015		\$920	\$708
Waverly, Town of		973	67	\$19.00	\$28.50	M	2014	\$5,700.00	\$1,500	
Waynesboro, City of		7,663	878	\$29.58	\$31.78	B	2012	\$4,563.40	\$800 + Cost	\$2,725
West Point, Town of		1,101	194	\$22.45		B	2014	\$4,798.45	\$500	\$3,500
Western Virginia Water Authority (Botetourt County)		1,056	182	\$36.00		M	2015	\$7,180.00	\$2,000	\$3,000
Western Virginia Water Authority (Franklin County)		1,728	161	\$30.00		M	2013	\$5,400.00	\$2,000	\$3,000
Western Virginia Water Authority (Roanoke City/Co.)		51,944	8,036	\$25.25		M	2015	\$3,970.00	\$2,000	\$3,000
Westmoreland County (Rt. 3 / Monroe Hall)		26	9	\$33.90		B	2009	\$5,705.40	\$500 or Cost	
Westmoreland County (Coles Point)		654	109	\$34.75		B	2009			
Williamsburg, City of		3,700	800	\$25.60	\$30.75	Q	2015	\$5,120.00	\$800	\$5,000
Winchester, City of		9,800	1,410	\$39.40	\$59.27	B	2013	\$5,907.23	\$5,000	
Windsor, Town of		1,107	56	\$35.00	\$39.35	B	2014	\$7,000.00	\$1,030	\$5,000
Wise County Public Service Authority		4,367	181	\$62.50		M	2015	\$7,516.75	\$1,000	
Wise, Town of		1,729	218	\$37.38	\$59.80	M	2015	\$5,758.63	\$500	
Woodway Water Authority		1,350	26	\$47.00		M			\$500	
Wythe County		2,630	186	\$56.70		M	2015	\$9,459.45	\$1,000	
Wytheville, Town of		4,011	687	\$38.81	\$77.62	M	2013	\$3,685.96	\$1,500 + Cost	

The following utilities who responded to the wastewater questions are provided wastewater treatment services by the Hampton Roads Sanitation District (HRSD): the City of Chesapeake, the City of Hampton, Isle of Wight County, James City Service Authority, the City of Virginia Beach, the City of Williamsburg, and the Town of Smithfield. The survey questionnaire asked these utilities to include the HRSD wastewater treatment charges in their responses. As a result, the data listed for these utilities includes \$27.67 per month for residential customers using 5,000 gallons (or 670 cubic feet) of water per month and \$5,534.20 for non-residential customers using 1,000,000 gallons (or 134,000 cubic feet) of water per month. Additionally, where connection charges or capital recovery charges are listed, the HRSD facility charge of \$1,895 is included.

Wastewater Data		# Residential Wastewater Units	# Non-residential Wastewater Units	Residential WW Rate Inside (5,000 gal./month)	Residential WW Rate Outside (5,000 gal./month)	Billing Frequency	Last Wastewater Rate Change	Wastewater Rate-Business Inside (1 million gal./month)	Residential Connection Fee	Residential Capital Recovery Charge
Locality										
Albemarle County Service Authority		20,271	1,085	\$40.50		M	2015	\$8,100.00	\$2,830	\$3,670
Alexandria Renew Enterprises		22,540	3,969	\$47.83		M	2013	\$8,519.00		
Alleghany County		2,077	135	\$41.00		M	2015	\$9,493.50	\$1,000	
Altavista, Town of		1,276	54	\$13.05	\$26.10	Q	2015	\$2,669.00	\$2,000	\$600
Amelia County		239	119	\$20.25		M	1995		Cost + 100%	\$4,000
Amherst County Service Authority		1,120	247	\$36.52		B	2015	\$7,303.00	\$1,200	\$3,530
Amherst, Town of		669	136	\$54.00		M	2015	\$13,384.62	\$700	\$2,500
Appomattox, Town of		758	204	\$78.35		M	2015	\$16,247.10	\$2,200	\$3,000
Arlington County		34,860	1,735	\$45.30		Q	2015	\$9,060.00		\$115/DFU
Augusta County Service Authority		10,565	741	\$53.67		B	2015	\$8,693.77	\$1,000	\$4,900
Bath County Service Authority		2,058	45	\$24.00		M	2007	\$2,513.50	\$100	\$1,300
Bedford Regional Water Authority (Town of Bedford)			753	\$47.25		B	2015	\$5,413.71	\$1,000	\$3,500

Wastewater Data		# Residential Wastewater Units	# Non-residential Wastewater Units	Residential WW Rate Inside (5,000 gal./month)	Residential WW Rate Outside (5,000 gal./month)	Billing Frequency	Last Wastewater Rate Change	Wastewater Rate-Business Inside (1 million gal./month)	Residential Connection Fee	Residential Capital Recovery Charge
Locality										
Bedford Regional Water Authority (Adj. to Town)		4,623	753	\$56.86		B	2015	\$7,157.09	\$1,000	\$3,500
Bedford Regional Water Authority (County)				\$54.00		B	2015	\$7,258.08	\$1,000	\$3,500
Big Stone Gap, Town of		2,327	258	\$38.48	\$64.39	M	2015	\$5,292.08	\$400	
Blacksburg, Town of		8,835	359	\$30.27	\$52.95	M	2015	\$5,433.12	\$940	\$2,500
Boones Mill, Town of		39	26	\$44.63	\$61.80	M	2015		\$3,000	
Bridgewater, Town of		1,924	172	\$39.57		M	2015		\$6,500	
Broadway, Town of		1,568	90	\$18.51		B	2015	\$3,794.22	\$4,600	
Buckingham County		178	42	\$49.82		M	2015	\$11,718.31	\$2,500	
Campbell County Utilities and Service Authority		2,919	285	\$38.73		M	2012	\$6,556.81	\$1,900	\$2,200
Cape Charles, Town of		1,052	70	\$75.33		M	2015	\$7,806.00	\$875	\$6,600
Carroll County Public Service Authority		825	84	\$49.00		M	2011	\$8,518.00	\$1,250	
Charlottesville, City of		13,041	1,470	\$51.19		M	2015	\$9,442.96		\$5,350
Chesapeake, City of		60,123	2,967	\$54.95		B	2015	\$11,664.58	\$5,414	
Chesterfield County		105,217	3,617	\$28.30		B	2015	\$3,011.98		\$5,100
Chilhowie, Town of		878	129	\$27.56	\$55.44	M	2015	\$5,421.25	\$900	
Christiansburg, Town of		8,663	371	\$40.50	\$60.75	B	2015	\$8,498.00	\$3,000	
Clarksville, Town of		686	130	\$39.38	\$89.25	B	2015	\$11,813.71	\$800	\$800
Clifton Forge, Town of		1,600	200	\$69.50		M	2013	\$9,470.00	\$600	
Coeburn, Town of		995	130	\$48.91	\$71.21	M	2015		\$50 + Cost	
Colonial Beach, Town of		2,508	115	\$54.23		Q	2014		\$3,750	
Craig-New Castle Public Service Authority		441	60	\$46.75		M	2013	\$6,296.00	\$2,000	
Culpeper, Town of		6,061	600	\$37.85		M	2015	\$6,650.26	\$1,000	\$5,000
Danville, City of		14,092	2,157	\$31.29		M	2015	\$3,810.20	\$1,500	
Dinwiddie County Water Authority		3,398	134	\$31.35		M	2013	\$3,317.12		\$4,305
Dublin, Town of		1,172	131	\$17.91	\$20.03	M	2015	\$3,062.18	\$400	
Dungannon, Town of		190	21	\$32.00	\$35.00	M	2009	\$5,007.00	\$750	
Edinburg, Town of		557	46	\$36.00	\$54.06	M	2014		\$10,000	
Emporia, City of		6,297	944	\$44.78		M	2015	\$6,128.33	\$4,000	
Exmore, Town of		300	50	\$39.50		M	2013		\$500	
Fairfax County		337,702	28,136	\$39.97		Q	2015	\$7,153.75	\$15,250	\$7,750
Farmville, Town of		3,042	626	\$27.60	\$41.42	M	2012	\$5,988.60	\$1,000	
Fauquier County Water and Sanitation Authority		4,525	250	\$60.03		M	2015			\$14,000
Ferrum Water & Sewer Authority		146	29	\$41.00		M	2014	\$6,615.00	Cost + \$500	\$2,500
Floyd-Floyd County Public Service Authority		301	130	\$48.00		M	2013		\$1,000	
Franklin, City of		3,208	252	\$36.56	\$45.43	M	2008	\$3,946.91	\$4,500	
Frederick County Sanitation Authority		13,043	673	\$35.83		B	2014	\$4,896.67	\$1,575	\$11,394
Front Royal, Town of				\$43.99	\$87.98	M	2014	\$13,884.44	\$9,750	
Galax, City of		3,200	500	\$20.50	\$41.00	B	2010	\$3,030.63	\$1,000	
Gate City, Town of				\$51.04		M	2013	\$8,146.68	\$900	
Glasgow, Town of		520	7	\$30.00	\$35.00	M	2015	\$1,029.00	\$2,500	
Goochland County		954	164	\$46.23		B	2015	\$11,869.22	\$6,000	
Greensville County Water and Sewer Authority		1,545	86	\$38.82		M	2014	\$6,850.00	\$1,320	\$835
Gretna, Town of		518	50	\$21.42	\$42.86	B	2015	\$3,215.37	\$400	
Halifax County Service Authority (Clover District)		4,000	500	\$50.50		B	2015			\$1,500
Halifax County Service Authority (Halifax District)				\$43.00		B	2015	\$4,783.20		\$1,500
Halifax County Service Authority (Riverdale District)				\$43.00		B	2015	\$4,783.20		\$1,500

Wastewater Data									
Locality	# Residential Wastewater Units	# Non-residential Wastewater Units	Residential WW Rate Inside (\$,000 gal./month)	Residential WW Rate Outside (\$,000 gal./month)	Billing Frequency	Last Wastewater Rate Change	Wastewater Rate-Business Inside (million gal./month)	Residential Connection Fee	Residential Capital Recovery Charge
Halifax County Service Authority (South Boston)			\$43.00		B	2015	\$4,783.20		\$1,500
Halifax County Service Authority (VIR District)						2015	\$9,816.50		\$1,500
Hampton, City of	42,638	2,154	\$37.59		B	2010	\$7,517.40	Front Footage	\$1,895
Hanover County	17,808	1,620	\$38.06		B	2015	\$5,151.83	\$6,149	
Harrisonburg, City of	13,799	114	\$27.60	\$41.11	M	2015	\$5,450.45	\$3,250	\$1,250
Henrico County	88,459	4,559	\$33.95		B	2015	\$4,315.78	\$3,875	\$5,755
Henry County Public Service Authority	7,387	676	\$34.70		M	2013	\$7,017.00	\$1,750	
Herndon, Town of	7,908	472	\$25.42		Q	2011	\$5,050.00	\$600	\$7,490
Hillsville, Town of	1,050	184	\$33.89	\$48.70	B	2015	\$6,347.67	\$683	
Hopewell Regional Wastewater Treatment Facility	7,991	589	\$22.65		M	2013	\$4,640.15	\$150	\$500
Hurt, Town of	13	10	\$25.00		Q	2015		\$1,000 or Cost+15%	
Isle of Wight County			\$57.87		B	2015	\$10,334.30	\$5,595	
James City Service Authority	21,349	1,226	\$44.21		Q	2015	\$8,551.37	\$400 Fix.	\$2,945
Jonesville, Town of	240	10	\$47.71		M	2014	\$7,492.30		
Kenbridge, Town of	433	86	\$55.57		M	2015	\$5,110.17	\$500	
Kilmarnock, Town of	794	253	\$39.38	\$59.07	B	2006	\$12,516.25	\$250	\$7,790
Lawrenceville, Town of	728	130	\$18.20	\$31.85	M	2010	\$3,402.40	\$400	
Lebanon, Town of	1,397	241	\$28.39	\$36.76	M	2015	\$5,014.13		
Leesburg, Town of	1,638	977	\$32.51	\$47.61	Q	2015	\$5,905.25	Cost + 15%	\$7,292
Lexington, City of	2,190	538	\$58.48	\$70.18	B	2015	\$25,068.00	Cost or \$1,500	
Louisa County Water Authority (Northeast Creek)	37	46	\$41.45		B	2014	\$8,290.00	Cost	\$5,250
Louisa County Water Authority (Zion Crossroad)	457	36	\$41.45		B	2014	\$8,290.00	Cost	\$5,250
Lovettsville, Town of	740	321	\$53.20	\$133.01	Q		\$10,640.00	\$1,000	\$11,900
Luray, Town of	1,822	257	\$59.96	\$89.94	M	2015	\$7,389.16	\$1,200	\$5,940
Lynchburg, City of	18,500	2,000	\$43.45		M	2015	\$7,875.17	\$1,210	\$1,950
Marion, Town of	2,300	500	\$27.14	\$54.17	M	2015	\$5,827.99	\$900	
Martinsville, City of	6,300	450	\$23.37		M	2012	\$2,739.72		
Middleburg, Town of	461	60	\$68.78	\$99.82	B	2015	\$13,700.28	Cost + 10%	\$10,331
Middletown, Town of	509	58	\$50.50	\$75.75	B	2011			\$8,000
Mineral, Town of	110	33	\$53.10		M	2012	\$8,858.85	\$8,000	
Montgomery County Public Service Authority	1,480	25	\$43.80		M	2013	\$7,466.50	\$750	\$3,000
Nelson County	178	17	\$45.45		M	2013		\$2,000	
Nelson County Service Authority (Lovingston)	325	121	\$56.95		M	2011	\$9,907.45	\$4,000	
Nelson County Service Authority (Wintergreen)	2,223	22	\$56.95		M	2011	\$9,907.45	\$4,000	
New Kent County	1,279	73	\$51.89		B	2015	\$11,910.68	\$9,275	\$5,075
New Market, Town of	925	110	\$76.94	\$134.66	M	2015	\$14,375.09	\$6,000	
Norton, City of	1,644	387	\$49.97	\$99.30	M	2015	\$7,972.65	\$175	
Orange, Town of	1,693	338	\$52.88	\$99.72	M	2012	\$5,594.00		\$12,330
Pearisburg, Town of	1,338		\$34.88		M		\$5,150.00	\$400	
Pittsylvania County Service Authority	1,384	183	\$25.00		B	2011	\$6,000.00	\$1,555	
Powhatan County	69	120	\$42.68		B	2015	\$6,150.68		\$8,100
Prince Edward County	10	2	\$37.30		B	2009	\$6,679.00	\$4,500	
Prince George County	3,130	700	\$43.82		B	2015		\$4,000	
Prince William County Service Authority	111,757	3,168	\$40.95		M	2015	\$7,355.00	\$10,800	
Pulaski County Public Service Authority	843	91	\$42.73		M	2015	\$5,996.88	\$700	
Pulaski County Sewerage Authority	881	140	\$23.00		M	2010		\$500	

Wastewater Data									
Locality	# Residential Wastewater Units	# Non-residential Wastewater Units	Residential WW Rate Inside (\$,000 gal./month)	Residential WW Rate Outside (\$,000 gal./month)	Billing Frequency	Last Wastewater Rate Change	Wastewater Rate-Business Inside (million gal./month)	Residential Connection Fee	Residential Capital Recovery Charge
Pulaski, Town of	3,558	331	\$49.13	\$92.51	M	2014	\$6,422.71	\$600	
Purcellville, Town of	2,385	299	\$83.90	\$152.80	B	2015	\$14,154.97	\$21,600	
Rapidan Service Authority	5,992	284	\$49.96		M	2015	\$8,390.41	Cost	\$10,000
Rappahannock County Water & Sewer Authority	180	39	\$40.00		Q	2014		\$7,500	
Richlands, Town of	2,212	264	\$25.50	\$34.50	M	2009	\$3,768.50	\$300	
Richmond, City of	51,306	8,241	\$59.05		M	2015	\$8,855.40	\$200	\$1,250
Rockbridge County Pubic Service Authority	1,230	220	\$56.77		M	2015	\$8,279.00	\$850	\$4,500
Rockingham County	3,797	239	\$25.45		M	2011	\$5,090.00	\$625	\$5,300
Rocky Mount, Town of	1,723	326	\$22.21	\$44.22	M	2015	\$3,062.11	\$1,000	
Rural Retreat, Town of	863	95	\$32.10		M	2015	\$6,145.30	\$400	
St. Paul, Town of	368	56	\$32.99	\$57.37	M	2013	\$5,530.37	\$350	
Salem, City of	9,635	941	\$49.65		M	2015	\$5,480.82	\$2,100	
Scott County Public Service Authority	966	65	\$57.87		M	2015	\$11,053.76	\$2,000	
Shenandoah, Town of	830	68	\$28.65	\$47.50	M	2015	\$4,507.30	\$5,000	
Smithfield, Town of	3,102	325	\$54.17	\$61.58	B	2012		\$1,580	\$7,595
Smyth County	1,040	64	\$54.21		M	2014	\$10,532.50	\$675	
South Hill, Town of	2,197	419	\$30.52	\$61.05	M	2013	\$4,180.00	\$1,500	
Spotsylvania County	26,981	1,729	\$29.11		M	2015	\$5,659.65	\$2,220	\$4,920
Stafford County	30,293	1,186	\$36.28		M	2015	\$5,439.18	\$2,100	\$3,500
Stanley, Town of	928	60	\$33.32	\$35.30	M	2014	\$1,772.00	\$3,000	\$1,625
Strasburg, Town of	2,465	137	\$50.02	\$70.03	M	2013	\$12,874.72	\$8,000	
Surry County	131	13	\$43.40		M	2015		\$2,184	
Sussex Service Authority	1,597	172	\$34.00		M	2015		\$2,000	
Tappahannock, Town of	965	277	\$55.04	\$82.56	B	2015		\$6,900	
Tazewell, Town of	1,642	233	\$48.25	\$68.10	M	2015	\$7,013.25	\$540	
Timberville, Town of	1,185	44	\$24.20	\$33.40	B	2014	\$4,460.55	\$4,000	
Urbanna, Town of	363	64	\$65.00		B	2015		\$1,789	
Victoria, Town of	837	10	\$23.08		M	2015	\$4,789.13	\$200	
Vienna, Town of	6,306	528	\$31.25		Q	2014	\$7,196.67	\$7,745	
Vinton, Town of	5,000	525	\$38.98		B	2015	\$4,068.98	\$2,675	
Virginia Beach Public Utilities, City of	180,118	5,768	\$58.42		B	2014	\$5,908.28	\$450	\$3,440
Warrenton, Town of	4,356	515	\$29.40	\$44.10	M	2003	\$6,200.00	\$3,000	\$7,300
Washington County Service Authority	2,059	278	\$66.33		M	2015		\$750	\$2,485
Waynesboro, City of	7,158	785	\$50.05	\$53.85	B	2011	\$7,691.15	\$800 + Cost	\$4,250
Western Virginia Water Authority (Botetourt County)			\$31.75		M	2015	\$3,891.25	\$2,000	\$3,000
Western Virginia Water Authority (Franklin County)	6	32	\$49.00		M	2010	\$8,012.50	\$2,000	\$3,000
Western Virginia Water Authority (Roanoke City/Co.)	47,982	8,741	\$31.75		M	2015	\$3,891.25	\$2,000	\$3,000
Westmoreland County (Coles Point)	654	109	\$34.75		B	2009		\$6,193 or Cost	
Westmoreland County (Montross Westmoreland)	319	99	\$27.50		B	2009	\$10,130.04	\$4,995	
Westmoreland County (Washington District I)	753	12	\$36.00		B	2009		\$7,935	
Williamsburg, City of			\$27.65		Q	2015	\$5,530.00	\$800	\$4,895
Winchester, City of	9,825	1,425	\$50.80		B	2013	\$10,160.00	\$7,400	
Wise County Public Service Authority	812	17	\$65.75		M	2015	\$12,503.25	\$1,100	
Wise, Town of	1,430	146	\$46.72	\$74.75	M	2015	\$7,198.28	\$500	
Wythe County	595	95	\$35.80		M	2015	\$8,869.60	\$5,000	\$5,000
Wytheville, Town of	3,831	687	\$29.19	\$58.38	M	2013	\$6,450.44	\$1,500	



Draper Aden Associates

Engineering • Surveying • Environmental Services

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