



**Draper Aden Associates**

**The  
16th  
Annual  
Virginia  
Water &  
Wastewater  
Rate  
Report  
2004**



Welcome to Draper Aden Associates' 16th Annual Virginia Water and Wastewater Rate Report. We feel this year's report is especially relevant due to the strong 55% response rate from a wide range of Virginia water and wastewater providers. Once again we have reported those numbers that were of primary interest, according to you, our readers. Included in this year's edition are water and wastewater rates, billing cycles, connection and facility fees and a special section on facility vulnerability assessments.

Special thanks to all who participate and help to make this report a continuing success. Feel free to contact us with any suggestions you may have to improve next year's survey. Please send comments to [wssurvey@daa.com](mailto:wssurvey@daa.com).

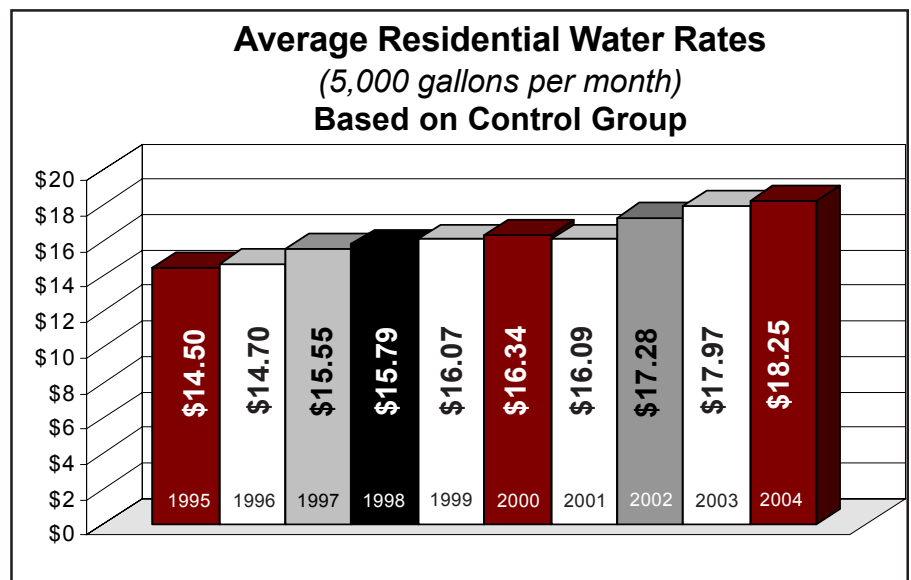
**Abbreviations:**  
 DFU = Drainage Fixture Unit  
 ERU = Equivalent Residential User  
 B/C/I = Business/Commercal/Industrial

Our control group is comprised of 21 water and wastewater providers who have faithfully participated in the survey for the past 10 years. They represent a cross section of providers across the state.

Based on the control group, the 2004 average residential water rate experienced a \$.28 or 2% increase over last year. Over the past ten years residential rates have increased by \$3.75 or 26%.

Of all participants in the survey, 91% indicated some type of connection fee, while 37% reported some type of facility fee. \*

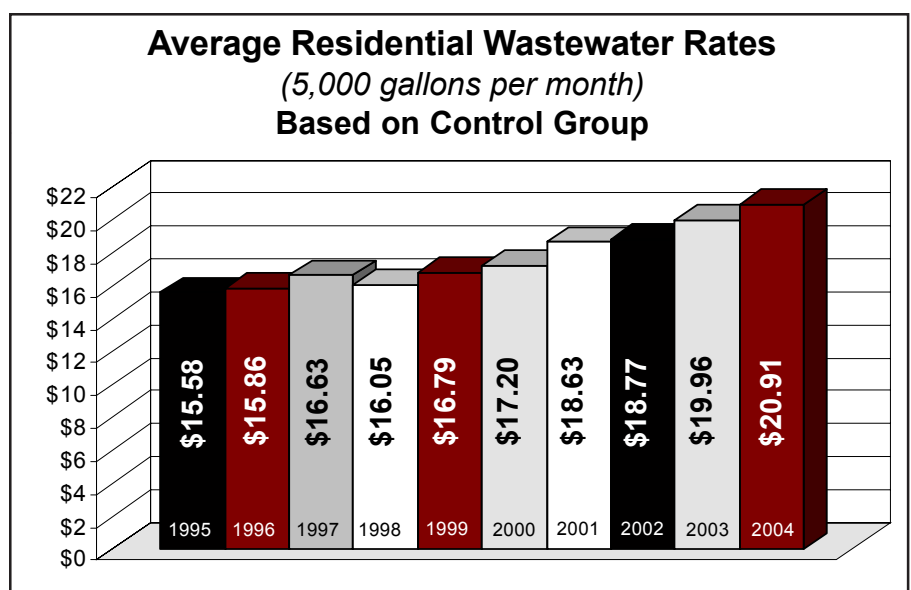
The average charge for a B/C/I customer, inside municipal boundaries, who uses 500,000 gallons of water, is \$1,633. The average fee for 500,000 gallons outside municipal boundaries is \$2,249.\*



Based on the control group, the average residential wastewater rate has increased 5.33 or 34% over the past ten years. Since 2003, the average residential wastewater rate has increased \$.95 or 5%.

Of all responding to the survey, 92% indicated some type of connection fee, while 40% reported some type of facility fee. \*

The average charge for a B/C/I customer, inside municipal boundaries, who uses 500,000 gallons, is \$1,991. The average fee for 500,000 gallons outside municipal boundaries is \$2,589.\*

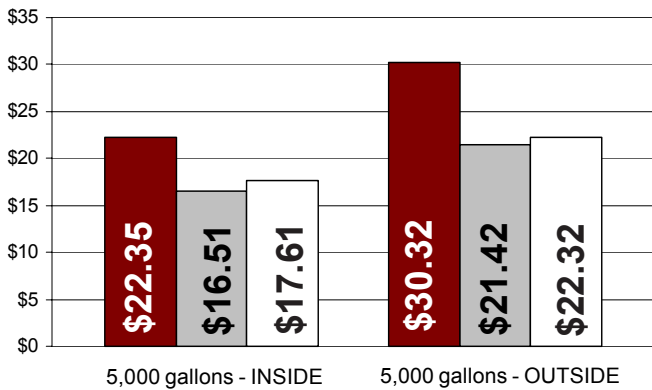


The information in this report was provided by respondents to a survey and is presumed to be correct. In some cases, the respondents were contacted by telephone and interviewed to clarify responses. However, Draper Aden Associates, the Virginia Association of Counties and the Virginia Municipal League do not warrant the accuracy of the information presented in the report.

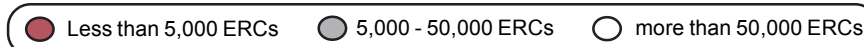
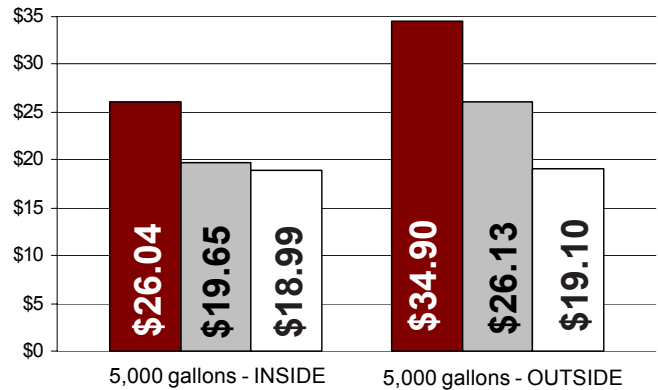
\* These calculations are based on all responses to the survey and not limited to the control group only.

## Average Monthly Residential Rates by System Size

### Water



### Wastewater



## Miscellaneous Survey Facts

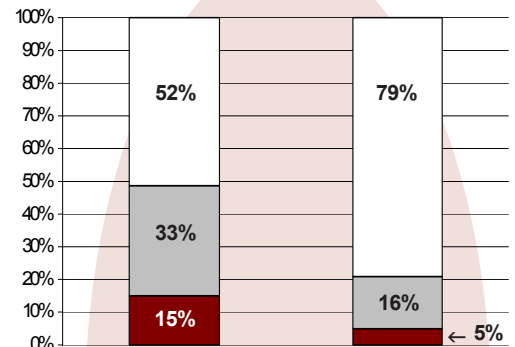
The 2004 Virginia Water and Wastewater Rate Survey received a 56% response rate with 165 responding out of a possible 297. Of those responding 81 were towns, 24 cities, 18 counties, 39 authorities/boards/sanitary districts and 3 private systems.

## Vulnerability Assessments

Most systems conducting water or sewer Vulnerability Assessments (VA) reported that they have definite plans for security upgrades. In the water section, 54% or 51 systems identified upgrades to improve detection on critical sites. Fifty-six percent (56%) or 53 systems will upgrade to delay intrusion to their site and 35% or 33 systems will increase their ability to respond to intrusion. For sewer systems 62% (16) will improve detection, 48% (14) will upgrade to delay intrusion and 39% (11) will improve their response to intrusion.

Of those systems that reported completing a VA, 17% indicated receiving funding from an outside source for a water security assessment and 5% reported receiving outside funds for a sewer system vulnerability assessment. Sources of funding listed were the Environmental Protection Agency, the Virginia Department of Health, the Virginia Rural Water Association, a Community Development Block Grant and one unspecified source.

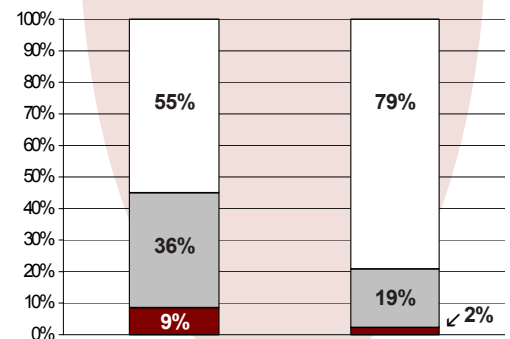
Did the assessment reveal significant security concerns previously unrealized?



Water Systems

Wastewater Systems

Did you receive funding from an outside source for the vulnerability assessment?

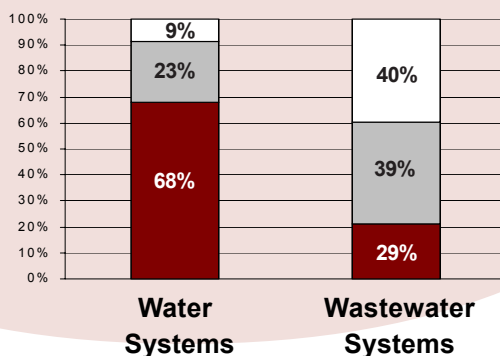


Water Systems

Wastewater Systems

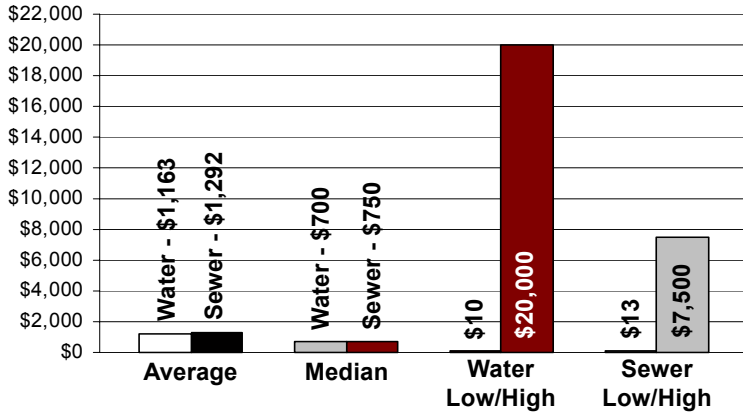
Have you completed a vulnerability assessment for your system?

■ yes  
■ no  
■ other/  
 no answer

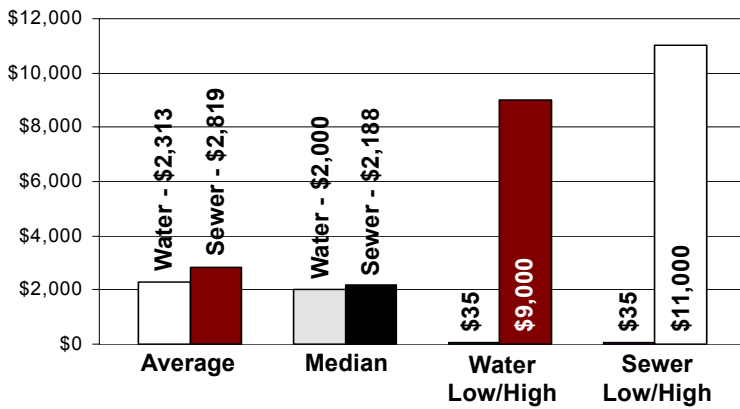


# Connection & Facility Fees

## Residential Connection Fees



## Residential Facility Fees



Of the 123 survey respondents providing data regarding the last connection fee increase, 19% or 23 increased connection fees in 2004. Of the 50 survey participants responding to the same question regarding facility fees, 14 or 28% increased facility fees in 2004.

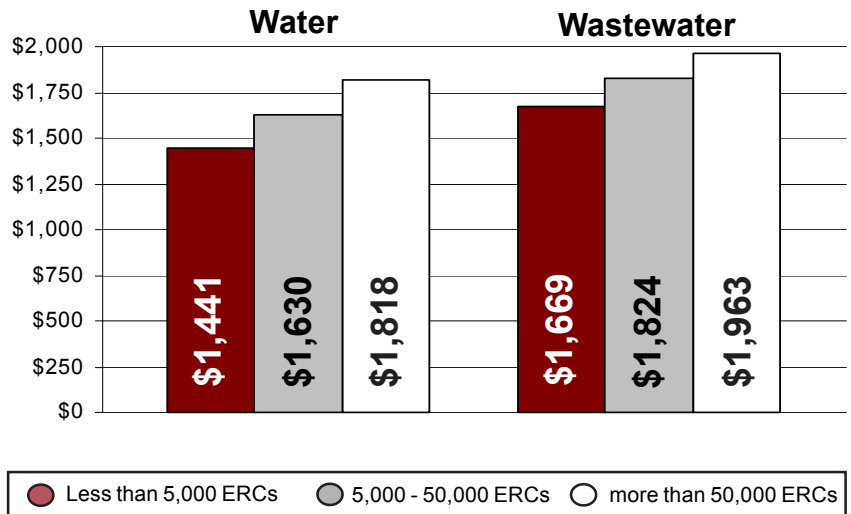
### Definitions

**Connection Fee:** Charge made by the utility to recover cost of connecting the customer's service line to the utility's facilities per AWWA M26. The connection fee is a one-time charge.

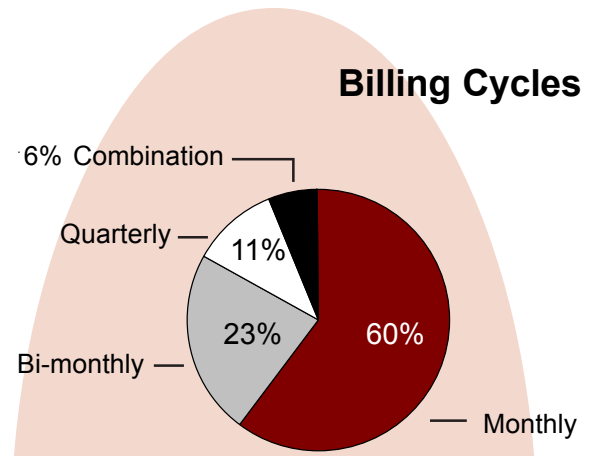
**Facility Fee:** This charge has the purpose of providing funds to be used to finance all or part of capital improvements necessary to serve new customers and are raised outside of capital received from general water/sewer use rates. These fees are capital recovery fees that are established as one-time charges assessed against developers or new water or wastewater customers to recover part or all of the cost of additional system capacity constructed for their use. AWWA's M26 defines them as a contribution of capital towards recently completed or planned future plant or distribution facilities necessary to meet the service needs of new customers to which such fees apply.

This chart represents the combined average residential connection and facility fees by system size. These charges reflect the fees paid by new residential customers to initiate service.

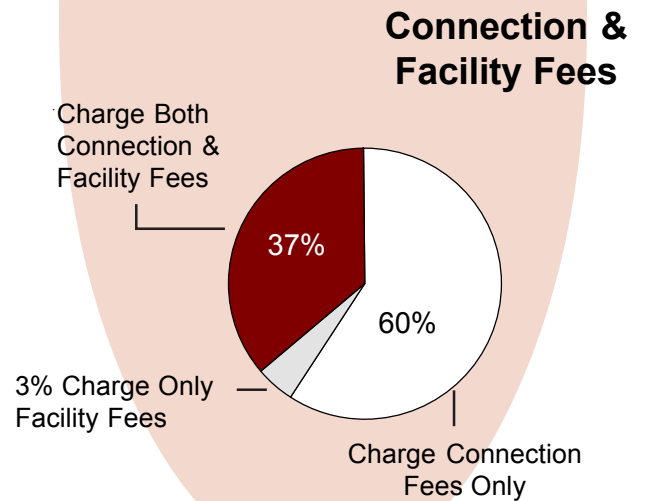
## Average Combined Residential Connection & Facility Fees by System Size



Water Rate Summary	Number of Responses	Average	Median
Equivalent Residential Connections (ERCs)	127	15,601	2,914
Monthly Residential Rate Inside (5,000 gal.)	157	\$20.59	\$18.95
Monthly Residential Rate Outside (5,000 gal.)	124	\$27.97	\$25.95
Residential Connection Fee	148	\$1,163	\$700
Residential Facility Fee	54	\$2,313	\$2,000
Monthly B/C/I Rate Inside (1 million gal.)	138	\$3,205	\$2,977
Monthly B/C/I Rate Outside (1 million gal.)	106	\$4,173	\$3,834



Wastewater Rate Summary	Number of Responses	Average	Median
Equivalent Residential Connections (ERCs)	106	16,682	2,424
Monthly Residential Rate Inside (5,000 gal.)	140	\$23.78	\$23.39
Monthly Residential Rate Outside (5,000 gal.)	102	\$31.86	\$30.92
Residential Connection Fee	123	\$1,292	\$750
Residential Facility Fee	52	\$2,819	\$2,188
Monthly B/C/I Rate Inside (1 million gal.)	125	\$3,951	\$3,600
Monthly B/C/I Rate Outside (1 million gal.)	91	\$5,900	\$4,656



The tables and charts on this page were compiled from all data received and not limited to the control group.

## Water Survey Data

Several localities have indicated separate rate structures for commercial and industrial water customers. Commercial rates have been printed where applicable.

Locality	# Residential Water Units	# Non-Residential Water Units	# Equivalent Residential Water Connections	Residential Water Rate Inside (5,000 gallons per month)	Billing Cycle (M=monthly; B=bimonthly; Q=quarterly)	Last Water Rate Increase	Water Rate-Business Inside (1,000,000 gallons/month)	Residential Connection Fee	Residential Facility Fee
Albemarle County Service Authority	22,329	1,086	16,915	\$19.73	M	2003	\$3,102.00	\$587.00	
Alberta, Town of	197	36	233	\$33.83	B	2001		\$1,000.00	
Altavista, Town of	1,465	87	8,000	\$8.25	M/Q	2003	\$1,650.00	\$250.00	
Amherst County Service Authority	6,335	312	4,429	\$20.53	B/M	2003	\$3,050.00	\$650.00	\$1,500.00
Amherst, Town of	1,121	165	1,513	\$17.50	B/M	2003	\$4,833.33	\$700.00	
Appalachia, Town of	1,220	59	1,277	\$25.00	M	2003	\$4,100.00	\$300.00	
Appomattox, Town of	964	102	724	\$14.60	M	2004	\$2,850.35	\$1,200.00	
Arlington County				\$12.35	Q	2004	\$2,470.00	\$40/dfu	\$1,600.00
Augusta County Service Authority	13,200	1,250	13,326	\$20.47	B	2004	\$2,815.35	\$870.00	\$2,185.00
Bath County Public Service Authority	980	50	980	\$17.40	M		\$2,987.40	\$500.00	
Bedford County Public Service Authority	6,286	370	5,335	\$26.95	B	2002	\$3,758.00	\$700.00	\$2,250.00
Big Stone Gap, Town of	2,079	1,804	2,963	\$26.00	M	2004	\$3,508.50	\$20.00	
Blacksburg, Town of	7,633	328	13,007	\$16.68	M	2004	\$2,922.08	\$1,080.00	\$458.00
Blackstone, Town of	1,395	236	1,320	\$24.85	M	2004	\$4,822.97	\$800.00	

# Water Survey Data

Locality	# Residential Water Units	# Non-Residential Water Units	# Equivalent Residential Water Connections	Residential Water Rate Inside (5,000 gallons per month)	Billing Cycle (W=monthly; B=bimonthly; Q=quarterly)	Last Water Rate Increase	Water Rate-Business Inside (1,000,000 gallons/month)	Residential Connection Fee	Residential Facility Fee
Bluefield, Town of	2,500	100	4,400	\$30.40	M	2004	\$6,301.65	\$350.00	
Boones Mill, Town of	232	34	320	\$25.50	35	2004	\$3,020.00	\$1,000.00	
Botetourt County	400	90		\$24.95	M	2004	\$3,319.80	\$700.00	\$2,000.00
Bowling Green, Town of	618	96		\$14.13	B	1999	\$1,551.88	\$500.00	\$3,000.00
Bridgewater, Town of	1,851	150		\$15.85	M	2004	\$3,020.20	\$1,200.00	
Bristol Virginia Utilities Board	6,755	1,113	10,840	\$17.22	M	2001	\$1,856.90	\$900.00	
Broadway, Town of	1,176	97	1,400	\$13.74	B		\$2,957.98	\$1,500.00	
Brodnax, Town of	163	16	102	\$29.63	M	2004	\$5,895.82	\$750.00	
Brookneal, Town of	469	9		\$18.95	M	2003		\$600.00	\$35.00
Buckingham County	260	125	1,400	\$27.45	M	1994	\$5,490.00	\$2,000.00	
Buena Vista, City of	2,408	179		\$23.60	M	2004	\$4,720.00	\$135.00	\$500.00
Campbell County Utilities & Service Authority	7,514	415	8,588	\$27.61	B	2002	\$4,233.00	\$950.00	\$1,500.00
Cape Charles, Town of	834	90		\$30.40	M	2003		\$875.00	\$1,750.00
Capron, Town of	98	15	86	\$9.50	Q	2003		\$275.00	
Carroll County Public Service Authority	1,908	157		\$28.50	M		\$4,950.00	\$750.00	
Charlotte Court House, Town of	196	52	180	\$30.50	B	2004		\$25.00	
Chesapeake, City of			60,269	\$24.57		2004	\$4,038.00	\$2,970.00	
Chesterfield County	102,189	3,949	115,191	\$11.18	B	2003	\$1,673.77	\$500.00	\$3,592.00
Chilhowie, Town of	2,015	164	1,943	\$15.38	M	2001	\$1,825.38	\$350.00	
Chincoteague, Town of	2,466	895	1,992	\$16.75	Q	1999	\$3,650.00	\$550.00	
Christiansburg, Town of	8,838	881		\$13.05	B	2004	\$3,905.85	\$1,500.00	
Claremont, Town of	280	4	284	\$11.75	B	1982		\$750.00	
Clarksville, Town of	726	140		\$21.76	B	2004	\$2,753.41	\$800.00	
Cleveland, Town of	143	4		\$20.00	M	2000		\$250.00	
Clifton Forge, Town of	1,500	300	1,800	\$19.00	M	2002		\$600.00	
Coeburn, Town of	898	136	1,034	\$19.70	M	2001	\$2,407.70	\$400.00	
Colonial Beach, Town of	1,950	100		\$11.75	Q			\$1,250.00	\$1,250.00
Craig/New Castle Public Service Authority				\$29.75	M	2003	\$10,000.50	\$1,000.00	
Culpeper, Town of	4,119	539	11,500	\$21.35	M	2004	\$2,650.01	\$5,000.00	
Danville, City of	15,553	2,272	28,000	\$13.15	M		\$1,865.53	\$500.00	
Dayton, Town of	564	105	7,200	\$12.18	M	2003	\$2,061.88	\$1,200.00	
Dendron, Town of	135	6		\$17.50	M	2001		\$1,000.00	
Dinwiddie County Water Authority	2,624	176	4,348	\$16.60	M	2004	\$1,729.10	\$1,700.00	
Dublin, Town of	2,365	175	1,562	\$24.25	M	2003	\$3,755.50	\$450.00	
Eastville, Town of	110	12	122	\$5.00	Q	1942	\$573.00		
Edinburg, Town of	538	39	600	\$22.60	M	2003	\$2,609.60	\$1,000.00	
Emporia, City of	2,264	353	2,617	\$16.68	M	2004	\$2,374.28	\$800.00	\$100.00
Exmore, Town of				\$17.50	M	1989	\$616.50	\$500.00	
Falls Church, City of	31,600	3,000	53,360	\$13.74	M/Q	2003	\$2,420.00	\$900.00	\$5,775.00
Farmville, Town of	2,741	535	3,273	\$16.34	B	2003	\$2,424.24	\$660.00	\$550.00
Fauquier County Water and Sanitation Authority	4,021	46	5,298	\$28.40	M	2000	\$5,168.84		\$4,400.00
Ferrum Water & Sewerage Authority	140	24	350	\$21.00	M	2001	\$3,523.00	\$750.00	
Floyd-Floyd County Public Service Authority	186	81	397	\$23.00	M	2003	\$4,749.25	\$1,000.00	
Fluvanna County	397	44	1,262	\$37.40	M	2002	\$4,851.74	\$1,050.00	
Franklin, City of	2,900	300	3,200	\$23.64	M	2004	\$2,511.14	\$1,200.00	
Frederick County Sanitation Authority	10,454	430	20,154	\$19.63	B	2002	\$2,923.14	\$2,225.00	\$2,220.00
Front Royal, Town of	5,000			\$19.25	M		\$5,111.09	\$2,800.00	
Galax, City of	2,600	250	1,750	\$11.84	Q	2003	\$1,413.54	\$500.00	

# Water Survey Data

Locality	# Residential Water Units	# Non-Residential Water Units	# Equivalent Residential Water Connections	Residential Water Rate Inside (\$,000 gallons per month)	Billing Cycle (M=monthly; B=bimonthly; Q=quarterly)	Last Water Rate Increase	Water Rate-Business Inside (1,000,000 gallons/month)	Residential Connection Fee	Residential Facility Fee
Gate City, Town of	1,090	120	1,420	\$33.00	M	2002	\$6,003.00	\$350.00	
Glasgow, Town of	376	35	446	\$11.00		2004	\$191.03	\$500.00	
Gloucester County	4,661	838	5,499	\$33.25	M	2004	\$6,878.10	\$3,000.00	\$500.00
Goshen, Town of	275	5		\$12.00	B	2000		\$250.00	
Greenville County Water and Sewer Authority	1,782	108	4,400	\$15.75	M	2002	\$3,150.00	\$800.00	
Hamilton, Town of	648	23	500	\$26.00	M			\$20,000.00	
Hanover County	16,900	1,400	19,200	\$13.65	B	2004	\$2,323.00		\$3,479.00
Harrisonburg, City of	10,143	2,497	20,560	\$11.18	M	2004	\$1,821.33	\$600.00	\$1,000.00
Henrico County	81,000	5,200	150,000	\$16.63	B	2004		\$1,545.00	\$1,215.00
Herndon, Town of	5,514	490	9,259	\$11.60	Q	1997	\$2,018.67	\$2,130.00	\$2,760.00
Highland County	57	15	59	\$22.28	B	1996	\$3,783.38	\$200.00	
Hillsville, Town of	1,240	199	1,500	\$17.76	B/M	2002	\$2,074.17	\$550.00	
Isle of Wight County Public Utilities	2,026	57		\$25.00	B	2004	\$3,500.00	\$4,000.00	
Ivor, Town of	176	24	176	\$16.00	B	2001	\$5,000.00	\$2,000.00	
James City Service Authority	14,777	478	18,400	\$11.50	Q	2004	\$2,700.00	\$1,300.00	\$300.00
Kenbridge, Town of	524	89	613	\$17.56	M	2002	\$3,450.88	\$500.00	
Keysville, Town of	489	94	307	\$25.00	M	2004	\$3,013.00	\$500.00	
Kilmarnock, Town of	627	251	726	\$15.26	B	1999	\$4,137.61	\$1,500.00	
King George County Service Authority				\$17.18	B/M	2003	\$3,435.00	\$585.00	
King William County	1	12	30	\$33.50	B		\$5,506.00	\$3,750.00	
Lawrenceville, Town of	720	126	3,400	\$18.59	B	2004	\$2,179.87	\$400.00	
Leesburg, Town of	16,954	820	16,297	\$14.68	Q	1992	\$2,670.00	\$50+cost	\$4,103.00
Lexington, City of	2,210	400	3,610	\$12.00	B	2004	\$5,186.00	\$500.00	
Loudoun County Sanitation Authority	54,009	1,499	55,800	\$14.51	Q	1995	\$2,284.25	\$80.00	\$3,575.00
Louisa County Water Authority (Zion)	0	2	108	\$15.00	M	2003	\$3,000.00	\$1,000.00	\$2,500.00
Louisa County Water Authority (NEC)	1,005	172	814	\$12.50	M	2000	\$2,500.00	\$1,000.00	\$1,000.00
Louisa, Town of	448	123		\$17.30	M	2004		\$1,500.00	\$1,000.00
Lynchburg, City of	20,500	2,400	44,000	\$11.73	M	2004	\$2,339.57	\$550.00	\$1,220.00
Marion, Town of	3,620	100	4,452	\$15.90	M	2003	\$3,300.00	\$450.00	
Martinsville, City of	7,000	500	12,000	\$10.89	M	2001	\$1,260.50	\$525.00	
Middleburg, Town of	328	121	249	\$58.75	Q	2004	\$9,760.00	\$500.00	\$8,000.00
Montgomery County PSA	3,600	200	2,800	\$33.65	M	2004	\$5,804.65	\$725.00	\$2,000.00
Montross, Town of	212	63	7,581	\$11.00	M	1992	\$605.00	\$500.00	
Mount Jackson, Town of	750	100		\$17.95	M	2004	\$3,590.00	\$2,000.00	
Nelson County Service Authority	2,538		2,538	\$28.50		2004		actual cost	\$2,000.00
New Kent County	1,199	27	1,830	\$18.50	Q	2004	\$4,085.40	\$3,000.00	
New Market, Town of	804	62	391	\$13.74	B	1996	\$2,666.49	\$2,000.00	
Newport News, City of	142,772	7,940	176,000	\$20.08	B/M	2004	\$3,520.57	\$690.00	\$1,033.00
Norfolk, City of	57,877	5,376	91,719	\$26.16	M	2004	\$4,631.75	\$125.00	
Norton, City of	1,983	324	912	\$26.30	M	2001	\$2,618.30	\$240.00	
Onancock, Town of	600	117		\$28.14	Q	2004	\$5,938.44	\$1,150.00	
Orange, Town of	1,655	545	1,817	\$27.00	M	2004	\$3,642.00	\$2,000.00	
Pearisburg, Town of	1,450	150	971	\$21.50	M	2002	\$2,267.00	\$400.00	
Pembroke, Town of	694	100		\$30.84	M	2002		\$450.00	
Pennington Gap, Town of	963	132		\$25.40	M	1999	\$6,691.90	\$10.00	
Petersburg, City of	14,208	1,166		\$14.60	B/M	2004	\$1,089.31	\$250.00	
Portsmouth, City of			59,000	\$20.71	B/M	2004	\$3,073.89	\$500.00	
Pound, Town of	1,083	84	582	\$22.55	M	2004	\$3,203.35	\$250.00	

# Water Survey Data

Locality	# Residential Water Units	# Non-Residential Water Units	# Equivalent Residential Water Connections	Residential Water Rate Inside (5,000 gallons per month)	Billing Cycle (M=monthly; B=bimonthly; Q=quarterly)	Last Water Rate Increase	Water Rate-Business Inside (1,000,000 gallons/month)	Residential Connection Fee	Residential Facility Fee
Prince William County Service Authority	61,750	3,250	86,000	\$12.85	M	2001	\$2,381.35		\$4,100.00
Pulaski County Public Service Authority	3,795	212	13,200	\$21.50	M	2004	\$1,500.00	\$350.00	
Pulaski, Town of	4,195	160	6,800	\$17.01	M	2004	\$1,688.26	\$470.00	\$330.00
Purcellville, Town of	1,849	235	1,960	\$10.88	B	2004	\$2,176.00	\$235.00	\$9,000.00
Radford, City of	4,587	465	12,292	\$10.00	M	2003	\$2,052.00	\$490.00	\$1,000.00
Rapidan Service Authority	5,900	316	5,044	\$19.50	M	2001	\$3,303.00		\$3,700.00
Remington, Town of	524	33	400	\$11.00	Q	2003	\$2,001.00	\$1,000.00	\$3,000.00
Richlands, Town of	2,277	267	4,800	\$18.50	M	1994	\$3,003.50	\$400.00	
Richmond, City of	50,191	9,969	285,053	\$22.01	M	2004	\$1,717.44	\$35.00	
Ridge Utilities	485			\$32.83	Q	2003		\$5,000.00	
Rockbridge County PSA	1,247	268	2,549	\$22.12	B	2004	\$3,575.59	\$600.00	\$1,100.00
Rockingham County	2,223	214	3,900	\$12.57	M	2002	\$2,420.47	\$1,000.00	
Rocky Mount, Town of	2,234	373	2,914	\$17.25	M	2004	\$2,704.50	\$750.00	
Round Hill, Town of	934	6	2,344	\$20.00	B	2004	\$5,006.00	\$12.50	
Rural Retreat, Town of	935	85	530	\$20.75	M	2001	\$3,998.00	\$900.00	\$1,000.00
Rye Valley Water Authority	507	21	560	\$30.00	M	2001	\$4,012.00	\$450.00	
Salem, City of	7,573	1,343		\$15.25	M	2003	\$2,943.25	\$850.00	
Scott County Water & Sewer Authority	2,800	90	2,952	\$35.00	M	2004		\$400.00	
Shenandoah Retreat Land Corp.	152	0	60	\$60.70	M	2001		\$5,000.00	
South Boston, Town of	4,900	600	5,675	\$20.58	B	2004	\$1,975.52	\$300.00	
South Hill, Town of	2,089	416	3,320	\$24.36	M	2004	\$2,210.00	\$1,000.00	
Southampton County	740	90	968	\$24.50	M	2003		\$450.00	
Spotsylvania County	24,072	1,365	25,250	\$11.89	M	2001	\$3,755.23	\$1,355.00	\$3,950.00
Stafford County	28,519	1,833	35,080	\$11.63	M	1997	\$1,776.09	\$500.00	\$3,600.00
Stanley, Town of	1,364	81	1,445	\$14.50	M/Q	2002	\$838.25	\$2,000.00	
Staunton, City of				\$13.40	B	2000	\$2,673.78	\$1,500.00	\$1,625.00
Stephens City, Town of	550	50	500	\$18.89	B	2003	\$2,576.04		\$3,000.00
Stoney Creek Sanitary District	1,251	10	1,381	\$24.00	B	2004	\$2,966.00	\$3,750.00	
Suffolk, City of	20,566	350	21,520	\$19.80	B/M	2004	\$3,663.00	\$1,000.00	\$4,390.00
Tazewell County Public Service Authority	4,145	223	3,585	\$28.00	M	2003	\$4,203.00	\$450.00	
Tazewell, Town of	1,725	235	465	\$27.36	M	2003	\$3,131.76	\$400.00	
Timberville, Town of	854	32	660	\$13.33	Q	2004	\$1,517.50	\$750.00	
Toms Brook-Maurertown Sanitary District	497	18	523	\$32.00	M	2004	\$4,012.00	\$3,000.00	
Troutville, Town of	237	69		\$23.50	M	2002	\$3,295.50	\$700.00	\$2,000.00
Vienna, Town of	9,430	574	10,000	\$13.55	Q	2004	\$2,710.00		\$3,875.00
Virginia Beach, City of	164,548	6,131	129,179	\$21.15	B	1999	\$3,598.50	\$285.00	\$66/dfu
Warrenton, Town of	3,844	236	4,420	\$13.30	M	1997	\$3,097.80	\$1,500.00	\$4,950.00
Washington County Service Authority	17,982	1,022	18,881	\$25.40	M	2004	\$2,612.40	\$850.00	\$300.00
Western VA Water Authority (Roanoke City)	33,073	2,118	70,720	\$14.12	Q	2003	\$2,530.66	\$1,170.00	
Western VA Water Authority (Roanoke Co.)	23,641	1,762	20,873	\$22.12	M	1995	\$3,995.25	\$500.00	\$2,690.00
West Point, Town of	1,200	0		\$9.95	B	2003	\$3,022.50	\$1,100.00	
Williamsburg, City of	3,500	750	14,000	\$13.00	M/Q	2004	\$2,600.00	\$450.00	\$1,500.00
Winchester, City of	9,400	1,270	28,970	\$18.15	B/M	2001	\$2,158.00		\$2,200.00
Windsor, Town of	900	55	1,600	\$16.00	B	2004	\$2,748.00	\$3,000.00	
WPOA Water Authority		72	72		Q	1989		\$125.00	
Wythe County	1,756	111	1,200	\$32.00	M	1999	\$5,499.50	\$500.00	
Wytheville, Town of	3,046	533	4,850	\$23.80	M	2004	\$1,806.55	\$750/meter	
York County	418			\$6.88	B	1998	\$1,375.00	\$2,850.00	

# Wastewater Survey Data

Several localities have indicated separate rate structures for commercial and industrial wastewater customers. Commercial rates have been printed where applicable.

Locality	# Residential Sewer Units	# Non-Residential Sewer Units	# Equivalent Residential Sewer Connections	Residential Sewer Rate Inside (\$1,000 gallons per month)	Billing Cycle (M=monthly; B=bimonthly; Q=quarterly)	Last Sewer Rate Increase	Sewer Rate-Business Inside (1,000,000 gallons/month)	Residential Connection Fee	Residential Facility Fee
Abingdon, Town of	2,505	548	6,000	\$27.72	M	2003	\$4,165.30	\$1,000.00	
Albemarle County Service Authority	18,906	818	12,179	\$18.70	M	2003	\$3,740.00	actual cost	
Alberta, Town of	197	36	233	\$33.83	B	2001		\$1,500.00	
Altavista, Town of	1,021	78	7,600	\$9.86	M/Q	2003	\$1,972.00	\$1,000.00	
Amherst County Service Authority	974	168	1,200	\$20.17	B/M	2003	\$4,013.34	\$600.00	\$1,800.00
Amherst, Town of	603	140	1,138	\$24.60	B/M	2003	\$6,353.33	\$2,500.00	
Appalachia, Town of	811	59	870	\$28.75	M	2003			
Appomattox, Town of	819	102	622	\$34.25	M	2004	\$6,132.25	\$1,900.00	
Arlington County				\$18.65	Q	2004	\$3,730.00	\$76/dfu	
Augusta County Service Authority	7,900	847	9,489	\$26.37	B	2004	\$4,140.31	\$820.00	\$4,055.00
Bath County Public Service Authority	2,180	80	2,180	\$17.00	M	1998	\$4,048.00	\$500.00	
Bedford County Public Service Authority	694	125	1,103	\$28.00	B	2002	\$4,008.00	actual cost	\$2,750.00
Big Stone Gap, Town of	2,001	663	2,963	\$30.00	M	2004	\$4,705.50		
Blacksburg, Town of	7,049	303	10,224	\$19.51	M	2004	\$3,482.11	\$624.00	\$2,500.00
Blackstone, Town of	1,375	221	1,227	\$24.70	M	2004	\$4,925.18	\$800.00	
Boones Mill, Town of	36	18		\$25.50	M	2004	\$3,020.00	\$1,500.00	
Botetourt County	2,000	65		\$24.95	M	2004	\$3,319.80	\$1,000.00	\$1,500.00
Bowling Green, Town of	366	82		\$32.50	B	1999	\$3,884.50	\$500.00	\$3,500.00
Bridgewater, Town of	1,776	137		\$17.05	M	2004	\$3,416.90	\$1,200.00	
Bristol Virginia Utilities Board	6,596	1,029	11,779	\$19.40	M	2001	\$2,418.50		
Broadway, Town of	1,100	77	1,300	\$13.71	B	2004	\$2,634.92	\$1,600.00	
Brodnax, Town of	161	12	124	\$28.77	M	2004	\$5,206.47	\$1,750.00	
Brookneal, Town of	432				M			\$600.00	\$35.00
Buckingham County	134	75	200	\$27.45	M	1994	\$5,490.00	\$2,500.00	
Buena Vista, City of	2,408	179		\$24.60	M	2004	\$4,920.00		\$330.00
Campbell Co. Utilities & Service Authority	1,698	216	2,427	\$22.11	B	2002	\$4,412.00	\$750.00	\$1,900.00
Cape Charles, Town of	834	90		\$30.40	M	2003		\$875.00	\$1,375.00
Carroll County Public Service Authority	721	60		\$34.75	M		\$7,295.50	\$750.00	
Chesapeake, City of			58,461	\$8.49		2004	\$1,050.00	\$1,980.00	
Chesterfield County	87,957	3,338	96,750	\$16.29	B	2003	\$1,804.48		\$1,465.00
Chilhowie, Town of	1,016	146	1,144	\$15.38	M	2001	\$1,825.38	\$350.00	
Christiansburg, Town of	8,838	881		\$16.00	B	2004	\$4,000.00	\$100.00	
Clarksville, Town of	680	140		\$33.72	B	2004	\$5,986.59	\$600.00	
Cleveland, Town of	137	5		\$20.00	M			\$250.00	
Clifton Forge, Town of	1,500	300	1,800	\$31.00	M	2002		\$600.00	
Coeburn, Town of	633	97	730	\$25.61	M	2001	\$3,130.01	\$375.00	
Colonial Beach, Town of	1,950	100		\$38.25	Q			\$2,250.00	\$2,250.00
Craig/New Castle Public Service Authority				\$36.75	M	2003	\$6,259.50	\$1,000.00	
Culpeper, Town of	3,922	507		\$22.05	M	2004	\$3,911.25	\$7,500.00	
Cumberland County	210	55	265	\$20.00	B		\$2,000.00	\$800+costs	
Danville, City of	14,651	2,230	56,000	\$14.50	M		\$2,157.40	\$675.00	
Dayton, Town of	538	75	7,200	\$15.80		2003	\$2,597.40	\$1,200.00	
Dinwiddie County Water Authority	2,539	135	3,824	\$24.00	M	2004	\$2,294.95	\$3,100.00	
Dublin, Town of	1,149	120	550	\$14.14	M	2002	\$2,501.96	\$400.00	
Edinburg, Town of	467	39	450	\$21.60	M	2003	\$2,608.60	\$1,500.00	
Emporia, City of	2,264	353	2,617	\$22.92	M	2004	\$3,310.82	\$800.00	\$100.00
Exmore, Town of	70		70	\$47.50	M	2004		\$500.00	
Fairfax County Wastewater Mgt. Program	319,086	17,722	425,000	\$15.15	Q	2003	\$3,030.00	\$600.00	\$5,431.00
Falls Church, City of	3,500	520	5,600	\$32.24	M/Q	2003	\$5,385.00	\$5,305.00	\$2,750.00
Farmville, Town of	2,720	532	3,252	\$17.97	B	2003	\$2,666.66	\$660.00	\$550.00

# Wastewater Survey Data

Locality	# Residential Sewer Units	# Non-Residential Sewer Units	# Equivalent Residential Sewer Connections	Residential Sewer Rate Inside (\$5,000 gallons per month)	Billing Cycle (M=monthly; B=bimonthly; Q=quarterly)	Last Sewer Rate Increase	Sewer Rate-Business Inside (1,000,000 gallons/month)	Residential Connection Fee	Residential Facility Fee
Fauquier Co. Water & Sanitation Authority	2,816	46	4,112	\$39.65	M		\$5,124.05		\$6,000.00
Ferrum Water & Sewerage Authority	100	24	580	\$28.50	M	2001	\$4,782.50	\$500.00	
Floyd-Floyd County PSA	131	59	345	\$28.50	M	2003	\$6,997.00	\$1,000.00	
Franklin, City of	2,900	300	3,200	\$31.17	M	2004	\$3,364.42	\$2,500.00	
Frederick County Sanitation Authority	9,943	352	17,086	\$23.62	B	1995	\$3,145.65	\$1,575.00	\$3,220.00
Front Royal, Town of	5,000			\$19.25	M		\$5,888.75	\$2,800.00	
Galax, City of	2,600	250	1,750	\$11.84	Q	2003	\$1,413.54	\$500.00	
Gate City, Town of	990	10	1,278	\$29.70	M	2002	\$5,402.70	\$650.00	
Glasgow, Town of	349	36	394	\$17.00		1991	\$399.57	\$500.00	
Gloucester County	767	617	1,384	\$17.02	M	1989	\$2,215.85	\$2,800.00	\$1,200.00
Greensville Co. Water & Sewer Authority	1,509	92	2,420	\$18.38	M	2002	\$4,200.00	\$1,100.00	
Hamilton, Town of	498	23	320	\$35.50	M			\$6,500.00	
Hanover County	15,300	1,200	18,800	\$30.42	B	2004	\$3,385.00		\$5,899.00
Harrisonburg, City of	8,906	2,062	16,446	\$14.22	M	2004	\$2,770.47	\$600.00	\$1,000.00
Henrico County	78,000	4,600	200,000	\$21.71	B	2004		\$3,110.00	\$1,820.00
Herndon, Town of	5,514	490	11,306	\$15.77	Q	1997	\$3,120.00	\$600.00	\$4,621.00
Hillsville, Town of	1,030	184	1,800	\$25.00	B/M	2002	\$3,953.02	\$400.00	
Isle of Wight County Public Utilities	2,034	104		\$14.00	B	2004	\$2,500.00	\$4,000.00	
James City Service Authority	16,293	478	16,800	\$13.50	Q	2004	\$2,700.00	\$1,050.00	\$300.00
Kenbridge, Town of	490	100	590	\$22.21	M	2002	\$2,380.36	\$500.00	
Keysville, Town of	431	91	453	\$30.00	M	2003	\$4,014.00	\$750.00	
Kilmarnock, Town of	591	238		\$19.00	B	1999	\$7,996.00	\$2,500.00	
King George County Service Authority				\$29.82	B/M	2003	\$5,965.00	\$585.00	
King William County	0	12	30	\$42.50	B		\$7,007.50	\$3,750.00	
Lawrenceville, Town of	700	126	2,680	\$14.30	B	2004	\$2,859.99	\$400.00	
Leesburg, Town of	17,030	820	16,007	\$17.38	Q	1992	\$3,210.00	\$50+cost	\$6,390.00
Lexington, City of	2,160	400	3,610	\$28.21	B	2004	\$12,099.00	\$500.00	
Loudoun County Sanitation Authority	54,162	1,514	55,800	\$18.49	Q	1995	\$3,235.85	\$80.00	\$4,933.00
Louisa County Water Authority ( <i>Zion</i> )	0	1	120	\$20.00	M	2003	\$4,000.00	\$1,000.00	\$3,500.00
Louisa County Water Authority ( <i>NEC</i> )	650	150	42	\$12.50	M	2000	\$2,500.00	\$1,000.00	\$1,000.00
Louisa, Town of	427	123		\$28.40	M	2004		\$1,500.00	\$1,000.00
Lynchburg, City of	17,500	2,400	50,000	\$30.82	M	2004	\$6,149.73	\$770.00	\$1,950.00
Marion, Town of	2,600	100	2,967	\$15.42	M	2003	\$3,140.00	\$300.00	
Martinsville, City of	6,500	500	12,000	\$11.04	M	2001	\$1,443.84	\$500.00	\$200.00
Middleburg, Town of	310	119	239	\$44.50	Q	2004	\$7,706.00	\$500.00	\$11,000.00
Montgomery County PSA	2,300	75	2,700	\$34.00	M	2004	\$6,004.50	\$725.00	\$2,500.00
Montross/Westmoreland Sewer Authority	136	78	5,612	\$25.00	M	2003	\$8,300.00	\$3,000.00	
Mount Jackson, Town of	750	100		\$16.75	M	2004	\$3,350.00	\$3,000.00	
Nelson County Service Authority	2,175	0	2,172	\$33.40	M	2004	\$6,998.40	actual cost	\$2,000.00
New Kent County	125	27		\$26.00	Q	2004	\$5,245.60	\$6,000.00	
New Market, Town of	800	60	250	\$26.47	B	1996	\$4,554.97	\$2,000.00	
Norfolk, City of	57,877	5,376	27,895	\$16.52	M	2004	\$3,302.14	\$250.00	
Norton, City of	1,619	312	775	\$28.20	M	2001	\$3,908.70	\$175.00	
Onancock, Town of	605	117		\$36.16	Q	2004	\$8,523.51	\$1,200.00	
Orange, Town of	1,478	321	1,426	\$33.00	M	2004	\$3,638.00	\$2,500.00	
Pearisburg, Town of	1,250	150	812	\$24.00	M	2003	\$3,146.50	\$250.00	
Pembroke, Town of	642	100		\$31.00	M	2002		\$500.00	
Pennington Gap, Town of	946	126		\$33.10	M	1995	\$4,909.60		
Petersburg, City of	14,208	1,116		\$14.60	B/M	2004	\$1,089.31	\$250.00	
Portsmouth, City of	0	0	32,000	\$11.89	B/M	2004	\$2,268.80	\$1,250.00	\$150.00

# Wastewater Survey Data

Locality	# Residential Sewer Units	# Non-Residential Sewer Units	# Equivalent Residential Sewer Connections	Residential Sewer Rate Inside (\$5,000 gallons per month)	Billing Cycle (M=monthly, B=bimonthly, Q=quarterly)	Last Sewer Rate Increase	Sewer Charge-Business Inside (1,000,000 gallons/month)	Residential Connection Fee	Residential Facility Fee
Pound, Town of	551	69	304	\$27.45	M	2004	\$3,745.01	\$350.00	
Prince William Co. Service Authority	61,750	3,250	86,000	\$23.15	M	2001	\$4,320.65		\$5,700.00
Pulaski County PSA	3,554	70	1,730	\$24.00	M	2004		\$500.00	
Pulaski County Sewerage Authority	838	121		\$13.00	M	1987		\$300.00	
Pulaski, Town of	3,702	150	4,800	\$32.63	M	2004	\$3,945.53	\$450.00	
Purcellville, Town of	1,665	235	1,800	\$15.82	B	2004	\$3,164.00		\$8,000.00
Radford, City of	4,553	460	12,258	\$7.60	M	2003	\$3,800.00	\$450.00	\$1,500.00
Rapidan Service Authority	3,919	235	3,166	\$36.66	M	2001	\$3,303.00		\$3,700.00
Richlands, Town of	2,145	253	4,400	\$18.50	M	1994	\$3,003.50	\$300.00	
Richmond, City of	48,786	8,526	96,514	\$33.36	M	2004	\$3,691.97	\$30.00	
Rockbridge County PSA	413	147	817	\$25.65	B	2004	\$4,395.31	\$400.00	\$1,750.00
Rockingham County	2,655	214	3,600	\$13.30	M	2002	\$2,660.00	\$1,500.00	
Rocky Mount, Town of	1,585	287	2,417	\$17.05	M	2004	\$2,542.80	\$750.00	
Round Hill, Town of	872	6	2,344	\$35.00	B	2004	\$6,350.81	\$12.50	
Rural Retreat, Town of	805	75	530	\$22.12			\$3,998.30	\$350.00	\$1,000.00
Salem, City of	7,117	1,161		\$17.50	M	2003	\$3,599.50	\$1,800.00	
Scott County Water & Sewerage Authority	951	76	1,089	\$37.00	M	2004		\$500.00	
South Boston, Town of	5,175	600	5,420	\$25.22	B	2004	\$1,891.83	\$450.00	
South Hill, Town of	1,784	364	3,200	\$29.23	M	2004	\$2,652.00	\$1,500.00	
Southampton County	1,123	154		\$35.50	M	2003	\$1,120.00	\$900.00	
Spotsylvania County	24,072	1,365	25,250	\$15.19	M	2001	\$2,920.59	\$1,875.00	\$3,850.00
Stafford County	26,065	1,817	30,472	\$21.30	M	1997	\$3,176.29	\$500.00	\$3,500.00
Stanley, Town of	816	54	870	\$21.00	M	2002	\$1,761.00	\$2,500.00	
Staunton, City of				\$18.89	B	2003	\$3,767.52	\$2,000.00	\$2,100.00
Stephens City, Town of	525	575	500	\$50.78	B	2003			\$3,000.00
Stoney Creek Sanitary District	1,281	10	1,411	\$24.00	B	2004	\$2,966.00	\$3,750.00	
Suffolk, City of	17,882	350	21,520	\$11.90	B/M	2004	\$2,380.00	\$1,310.00	\$2,125.00
Tazewell County PSA	1,860	146	2,184	\$28.00	M	2003	\$5,528.00	\$275.00	
Tazewell, Town of	1,618	212	436	\$27.36	M	2003	\$3,131.76	\$400.00	
Timberville, Town of	836	48		\$10.83	Q	2004		\$1,250.00	
Toms Brook-Maurertown Sanitary Dist.	568	23	698	\$33.00	M	2004	\$10,948.00	\$4,500.00	
Vienna, Town of	5,853	517		\$17.85	Q	2003	\$3,390.00		\$4,413.00
Virginia Beach, City of	163,778	4,872		\$14.34	B	2003	\$179.88	\$450.00	\$69/dfu
Warrenton, Town of	3,414	220	4,070	\$29.40	M	1997	\$6,198.40	\$3,000.00	\$6,200.00
Washington County Service Authority	1,216	158	1,849	\$39.00	M	2003	\$5,424.65	\$800.00	\$1,600.00
Western VA Water Authority (Roanoke City)	32,085	2,118	140,000	\$12.93	Q	2003	\$2,586.66	\$452.26	
Western VA Water Authority (Roanoke Co.)	14,617	1,252	22,015	\$16.60	M	2002	\$2,996.94	\$100.00	\$2,500.00
Williamsburg, City of	3,000	650		\$9.55	M/Q	2004	\$1,910.00	\$500.00	\$1,500.00
Winchester, City of	9,400	1,270	28,970	\$19.55	B/M	2001	\$3,910.00		\$3,200.00
Wythe County	355	36	580	\$35.80	M	2003	\$8,869.60	\$500.00	
Wytheville, Town of	2,912	533	4,669	\$16.74	M	2001	\$3,867.39		
York County	17,088			\$17.25	B	2002	\$1,500.00	\$3,300.00	

The following utilities responded to the wastewater questions and are provided wastewater treatment services by the Hampton Roads Sanitation District (HRSD): City of Chesapeake, City of Norfolk, City of Virginia Beach, City of Williamsburg, Gloucester County, Isle of Wight County, and James City Service Authority.

We have reviewed the responses to the questions regarding the monthly sewer bill for a residential customer and have determined that none of the utilities listed above included in their response the charge paid to HRSD for wastewater treatment. Based on usage of 5,000 gallons of water in a month, the HRSD fee for wastewater treatment would be an additional \$9.60 per month.

Similarly, HRSD charges a facility fee to new connections. For a single-family home using a 5/8 inch meter, the facility charge collected by HRSD is \$1,355. This fee is in addition to any fees charged by the local utility. Again, this fee is NOT included in the responses listed above.

As a result, when comparing the monthly sewer fees or facility fees in the communities served by HRSD to other localities, it is important to be aware that the fees reflected in the table above do NOT reflect the total cost of wastewater service in these localities.



# Draper Aden Associates

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