Water Rates in Delaware and Surrounding States

Final Draft September 2012

Prepared by:

University of Delaware
Water Resources Agency
Institute for Public Administration
School of Public Policy and Administration
DGS Annex, Academy Street
Newark, DE 19716
www.wra.udel.edu www.ipa.udel.edu

Water Rates in Delaware and Surrounding States

Final Draft September 2012

Introduction

The Water Resources Agency at the University of Delaware Institute for Public Administration conducted an inventory of water rates for public- and investor-owned water utilities within Delaware and the surrounding states of Pennsylvania, New Jersey, and Maryland. This 2012 survey is an update of previous reports prepared in 2000, 2004, 2008, and 2011.

Note that the costs and rates charged for water services differ in many respects between public and investor-owned purveyors. For example, public purveyors have tax payer sources of capital and revenue that are assumed by the tax payers but are not reflected in the water rates. For such public purveyors, finances can be intermingled with other municipal departments, thus revenues and costs are shared with other municipal functions. Investor-owned purveyors, unlike public purveyors, can charge rates to cover operating costs and reap a potential profit. Additionally, expenses paid by investor-owned purveyors, primarily taxes, are not paid by the public purveyor. It is important to consider this information related to water service and rates charged for water service (which often varies by state) when comparing public and investor-owned purveyors. Additional information on this topic can be found by reading the EPA *Four Pillars Approach – Rates that Reflect the Full Cost of Services* at http://www.epa.gov/waterinfrastructure/.

Methods

We contacted the water utilities by e-mail, telephone, or website and collected water rate and tariff data from over 50 water purveyors in the four states.

We used the following assumptions to compute residential water rates:

- Quarterly residential water use equal to 15,000 gallons per customer.
- The average residential water meter is 5/8 inch or 3/4 inch diameter.

The following formula was used to calculate the average residential water rate per quarter:

$$AQC = SC + FP + X(QCR) + QU + DC$$

Where:

AQC = Average Quarterly Charge (\$/quarter)

SC = Service Charge (\$/quarter) FP = Fire Protection Fee (\$/quarter)

X = Quarterly Residential Water Use (15,000 gallons/quarter)

QCR = Quarterly Consumption Rate (\$/1,000 gallons)

QU = Quarterly Use Fee (\$/quarter) DC = Distribution Charge (\$/quarter)

Assuming the average residential unit uses an average of 15,000 gallons per quarter, AQC (\$/quarter) is divided by 15 and this value is equal to the quarterly rate per 1,000 gallons. Two additional

conversions are important for analysis. If the water purveyor charges monthly fees rather than quarterly fees, the water rates must be converted to quarterly rates by multiplying the monthly rate by 3. If the water purveyor charges fees based on cubic feet rather than gallons, the rates must be converted given that 1 cubic foot = 7.48 gallons.

See the sample calculation of residential water rates for hypothetical Town of White Clay.

Given:

AQC = Average Quarterly Charge = \$X/quarter

SC = Service Charge = \$20.00/quarter FP = Fire Protection Fee = \$5.00/quarter X = 15,000 gallons used quarterly

QCR = Quarterly Consumption Rate = \$2.00/1,000 gallons

QU = Quarterly Use Fee = \$0.00/quarter DC = Distribution Charge = \$0.00/quarter

Therefore:

AQC = \$20.00 + \$5.00 + 15,000(\$2.00/1,000 gal) + \$0.00 + \$0.00 = \$55.00/quarter

Average Quarterly Rate = AQC/15 = \$55.00/15 = \$3.67/1,000 gal

Summary

The 2012 water rate survey includes public- and investor-owned utilities in New Castle County, Delaware. The 2011 water rate survey includes public- and investor-owned utilities in Delaware and surrounding states of Pennsylvania, New Jersey, and Maryland. The 2011 data set includes 48 public- and 6 investor-owned water purveyors. For the 54 water purveyors, the mean water rate is \$5.69/1,000 gallons and the rates range from \$1.73/1000 gallons to \$11.14/1000 gallons (Table 1). Tables 2 through 7 summarize water rates for the water purveyors in Delaware, Maryland, New Jersey, and Pennsylvania in 2000, 2004, 2008, 2011, and 2012.

Table 1. Residential Water Rate Summary, 2000, 2004, 2008, and 2011

| Purveyor Category | 2000 Mean (\$/1,000 gal.) | 2004 Mean (\$/1,000 gal.) | 2008 Mean (\$/1,000 gal.) | 2011 Mean (\$/1,000 gal.) |
|----------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Public | 2.97 | 3.32 | 4.44 | 5.34 |
| Investor | 4.85 | 6.24 | 6.46 | 9.02 |
| All | 3.29 | 3.70 | 4.78 | 5.69 |

Table 2. Residential Water Rates in New Castle County, Delaware (2000, 2004, 2008, 2011, 2012)

| Purveyor | 2000 Average Quarterly Rate (\$/1,000 gal.) | 2004 Average Quarterly Rate (\$/1,000 gal.) | 2008 Average Quarterly Rate (\$/1,000 gal.) | 2011 Average Quarterly Rate (\$/1,000 gal.) | 2012 Average Quarterly Rate (\$/1,000 gal.) |
|---------------------------|--|--|--|--|--|
| Artesian Water Company | 4.90 | 6.17 | 8.43 | 10.31 | 10.34 |
| Delaware City | 3.14 | 4.24 | 5.85 | 5.85 | 5.85 |
| Middletown | | 3.08 | 2.56 | 2.56 | |
| Newark | | | | | |
| Inside City | | 3.34 | 3.34 | 5.17 | 5.92 |
| (Dec-Aug) | 1.82 | | | | |
| (Sep-Nov) | 2.11 | | | | |
| Outside City | | 4.65 | 4.65 | 6.93 | 8.16 |
| (Dec-Aug) | 2.43 | | | | |
| (Sep-Nov) | 2.82 | | | | |
| New Castle MSC | 3.40 | 4.28 | | 7.23 | |
| (Oct-Jun) | | | 5.20 | | 6.84 |
| (Jul-Sep) | | | 5.38 | | 9.47 |
| Tidewater Utilities | 4.89 | 5.95 | 8.60 | 11.14 | 12.48 |
| United Water Delaware | 4.90 | 4.70 | 5.44 | 6.11 | 6.28 |
| Wilmington | | | | | |
| Inside City | 1.70 | 1.77 | 2.95 | 4.53 | 4.88 |
| Outside City | 2.86 | 3.34 | 4.97 | 7.47 | 8.23 |

Table 3. Residential Water Rates in Kent County, Delaware (2000, 2004, 2008, 2011)

| Purveyor | 2000 Average Quarterly Rate (\$/1,000 gal.) | 2004 Average Quarterly Rate (\$/1,000 gal.) | 2008 Average Quarterly Rate (\$/1,000 gal.) | 2011 Average Quarterly Rate (\$/1,000 gal.) |
|----------------|--|--|--|--|
| Camden-Wyoming | | 6.16 | 7.14 | 7.14 |
| Clayton Water | | 2.17 | 3.83 | 4.10 |
| Dover | | | | |
| Inside City | 1.90 | 2.35 | 2.53 | 3.08 |
| Outside City | 2.85 | 3.53 | 3.76 | 4.48 |
| Felton | | | 2.53 | |
| In Town | | 2.53 | | 2.53 |
| Outside Town | | 3.80 | | |
| Frederica | | 3.33 | 4.33 | 4.33 |
| Greenwood | | 4.00 | 6.40 | 6.40 |
| Harrington | | 2.24 | 5.58 | 6.41 |
| Magnolia | | | | |
| In Town | | 3.33 | 3.67 | 3.67 |
| Outside Town | | 4.00 | 4.33 | 4.33 |
| Smyrna | | 2.87 | | |
| In Town | | | 2.87 | 5.40 |
| Outside Town | | | 5.33 | 10.80 |

Table 4. Residential Water Rates in Sussex County, Delaware (2000, 2004, 2008, 2011)

| Purveyor | 2000 Average Quarterly Rate (\$/1,000 gal.) | 2004 Average Quarterly Rate (\$/1,000 gal.) | 2008 Average Quarterly Rate (\$/1,000 gal.) | 2011 Average Quarterly Rate (\$/1,000 gal.) |
|--------------------|--|--|--|--|
| Bridgeville | | 3.58 | 3.00 | 3.53 |
| Delmar | | 2.50 | 2.50 | 4.55 |
| Georgetown | 2.75 | | | |
| In Town | | 2.82 | 5.43 | 5.43 |
| Outside Town | | 4.23 | 6.98 | 6.98 |
| Laurel | | 3.95 | 3.74 | 3.74 |
| Lewes Public Works | 1.72 | 2.71 | | |
| In Town | | | 2.46 | 4.56 |
| Outside Town | | | 3.20 | 6.69 |
| Milford | 2.33 | | | |
| In Town | | 2.20 | 3.67 | 3.67 |
| Outside Town | | 3.50 | 5.50 | 5.50 |
| Millsboro | | 1.70 | 3.00 | 3.00 |
| Milton | | 3.63 | | |
| In Town | | | 5.33 | 5.33 |
| Outside Town | | | 7.67 | 7.67 |
| Rehoboth | | | | |
| In Town | | | | |
| (Oct-Mar) | 1.33 | 1.49 | 2.00 | 2.30 |
| (Apr-Sep) | 1.83 | 2.15 | 2.87 | 3.30 |
| Outside Town | | | | |
| (Oct-Mar) | 2.67 | 2.98 | 4.00 | 4.60 |
| (Apr-Sep) | 3.67 | 4.30 | 5.74 | 6.60 |
| Seaford | | 2.08 | 2.08 | 2.08 |
| Selbyville | | 3.60 | 4.27 | 4.27 |
| Sussex County DPW | 2.45 | 3.80 | 2.95 | 3.09 |

Table 5. Residential Water Rates in Pennsylvania (2000, 2004, 2008, 2011)

| Purveyor | 2000 Average Quarterly Rate (\$/1,000 gal.) | 2004 Average Quarterly Rate (\$/1,000 gal.) | 2008 Average Quarterly Rate (\$/1,000 gal.) | 2011 Average Quarterly Rate (\$/1,000 gal.) |
|--------------------------|--|--|--|--|
| Ambler Borough | | 3.84 | 5.79 | 5.79 |
| Aqua Pennsylvania | 5.36 | 7.02 | 10.27 | 10.27 |
| Bucks County WSA | | 3.45 | | |
| New Hope, Solebury | | | 4.82 | 4.82 |
| Middletown Township | | | 3.93 | 3.93 |
| Langhorne & Penndel | | | 4.02 | 4.02 |
| Chester Water Authority | | | | |
| Village Green East | 4.20 | 5.40 | 6.14 | 9.18 |
| Village Green West | 5.33 | 6.28 | 7.06 | 10.22 |
| Coatesville (now PAWCo) | 5.88 | 6.50 | 9.21 | 10.49 |
| Downingtown MWA | 5.75 | 6.50 | 7.65 | 9.58 |
| Lehigh County Authority | | 2.70 | | |
| Madison Park North | | | | 8.28 |
| Upper Milford | | | | 6.87 |
| Welshtown Road | | | | 6.55 |
| Newtown Artesian Water | | 5.58 | 8.46 | |
| Newtown Artesian | | | | 5.68 |
| Indian Rock Area | | | | 6.64 |
| North Wales Water Auth. | 4.40 | 4.40 | | |
| (Nov-Mar) | | | 4.40 | 4.40 |
| (Apr-Oct) | | | 6.00 | 6.00 |
| PA American Water Co. | | 7.38 | 9.21 | 10.49 |
| Philadelphia Water Dept. | 2.17 | 2.91 | 3.93 | 5.18 |
| Phoenixville Water Dept. | | 4.10 | | 8.45 |

Table 6. Residential Water Rates in New Jersey (2000, 2004, 2008, 2011)

| Purveyor | 2000 Average Quarterly Rate (\$/1,000 gal.) | 2004 Average Quarterly Rate (\$/1,000 gal.) | 2008 Average Quarterly Rate (\$/1,000 gal.) | 2011 Average Quarterly Rate (\$/1,000 gal.) |
|--------------------------|--|--|--|--|
| Berlin Borough | | 3.00 | 4.33 | 4.33 |
| Brick Township MUA | | 4.18 | | |
| Camden | 3.70 | 3.70 | 3.70 | 4.76 |
| Evesham MUA | | 2.78 | | |
| AMR system | | | 2.25 | 7.70 |
| Exempt AMR system | | | 2.65 | 7.09 |
| Medford Twp. Utilities | | 2.30 | 2.49 | 4.00 |
| Merchantville-Pennsauken | | 1.86 | | 2.43 |
| NJ American Water Co. | 5.22 | 5.96 | | |
| Non-exempt | | | 6.83 | 7.70 |
| Exempt | | | 5.92 | 7.09 |
| Salem | 2.89 | 5.71 | 2.93 | 2.93 |
| Trenton | 3.27 | 3.27 | 7.09 | 7.09 |
| Washington Twp.MUA | | 2.17 | 1.73 | 1.73 |

Table 7. Residential Water Rates in Maryland (2000, 2004, 2008, 2011)

| Purveyor | 2000 Average Quarterly Rate (\$/1,000 gal.) | | | 2011 Average Quarterly Rate (\$/1,000 gal.) |
|------------------------|--|------|------|--|
| Baltimore City DPW | | | 1.51 | 3.75 |
| Cecil County DPW | | | 7.00 | 7.00 |
| Elkton | 1.62 | | | |
| In Town | | 1.75 | 2.15 | 2.80 |
| Out of Town | | 3.50 | 4.30 | 5.60 |
| Perryville Water Dept. | 3.00 | 3.00 | 6.67 | 7.25 |

Appendix A Residential Water Rate Data 2011

| | А | В | | С | | D | E | E/15= G |
|--------------------|------------------------|----------------------|--------------------------------|---------------------------------------|-------------------------------------|--|---|---|
| Water Utility | Service Charge (\$) | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Use Fee (\$) | Total Average Quarterly Charge (A+B+C+D=E) | Average Quarterly Rate (\$/1,000) |
| Artesian Water Co. | | | \$5.89/1,000 gal (0-5,000) | \$6.37/1,000 gal (5,001-15,000) | \$6.786/1,000 gal (>20,000) | Distribution Improvement Charge, 0.68% | | |
| | \$41.57 | \$15.82 | \$29.45 | \$63.69 | \$0.00 | \$4.09 | \$154.62 | \$10.31 |
| Bridgeville | Inside town | | \$2.75/1,000 gal (0-5,000) | \$3.35/1,000 gal (5,000-10,000) | \$3.75/1,000 gal (10,000-15,000) | | | |
| 2. agoviiio | \$3.50 | \$0.00 | \$13.95 | \$16.75 | \$18.75 | \$0.00 | \$52.95 | \$3.53 |
| Camdan Wyamina | | | \$5.22/1 | ,000 gal | | | | |
| Camden-Wyoming | \$28.83 | \$0.00 | \$78.30 | | \$0.00 | \$0.00 | \$107.13 | \$7.14 |
| Clayton | | | \$9.50 (0-2,000 gal) | \$4.00/1,000 gal (2,000-15000 gal) | | | | |
| | \$0.00 | \$0.00 | \$9.50 | \$52.00 | \$0.00 | \$0.00 | \$61.50 | \$4.10 |
| Delaware City | | | \$3.25/1,000 gal (0-15,000) | | | | | |
| 20.0 | \$39.00 | \$0.00 | \$48.75 | \$0.00 | \$0.00 | \$0.00 | \$87.75 | \$5.85 |
| Delmar | Per EDU | | \$3.50/1 | ,000 gal | | | | |
| Deliliai | \$15.75 | \$0.00 | \$52 | 2.50 | \$0.00 | \$0.00 | \$68.25 | \$4.55 |
| Dover ¹ | | | | | | | | |
| Incide City | | | \$3.00/1 | ,000 gal | | | | |
| Inside City | \$1.25 | \$0.00 | \$45 | 5.00 | \$0.00 | \$0.00 | \$46.25 | \$3.08 |
| Outoide City | | | \$4.50/1 | ,000 gal | | | | |
| Outside City | \$1.25 | \$0.00 | \$67 | 7.50 | \$0.00 | \$0.00 | \$68.75 | \$4.58 |

| | Α | В | | С | | D | F | F/15= G | |
|---------------------------------------|-------------------------|--------|-----------------------|-------------------------------|------------------------|------------------------|--------------------------------------|--|---|
| Water Utility | Service Charge (\$) | | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Use Fee (\$) | Total Average Quarterly Charge (A+B+C+D=F) | Average Quarterly Rate (\$/1,000) |
| | | | | | | | | | |
| Dover Air Force Base | | | The resident | ts of the base are not | charged for their wat | er usage | | | |
| Felton | \$38.00/15000 gal | | \$38.00/15,000 gal | \$2.00/1,000 gal (>15,000) | | | | | |
| | \$38.00 | \$0.00 | \$0.00 | \$0.00 | | | \$38.00 | \$2.53 | |
| Fundamina | \$65.00 | | | | | | | | |
| Frederica | \$65.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$65.00 | \$4.33 | |
| Georgetown | Service Availability | | | | | | | | |
| Inside Town | | | \$3.10/1,000 gal | | | | | | |
| | \$35.00 | \$0.00 | \$40 | 6.50 | | | \$81.50 | \$5.43 | |
| Outside Town | | | \$4.65/1 | ,000 gal | | | | | |
| | \$35.00 | \$0.00 | \$69 | 9.75 | | | \$104.75 | \$6.98 | |
| Greenwood | \$32/month/ EDU | | | | | | | | |
| G. 55.111.554 | \$96.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$96.00 | \$6.40 | |
| Harrington | \$96.17/ 20,000 gal | | | | | | | | |
| · · · · · · · · · · · · · · · · · · · | \$96.17 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$96.17 | \$6.41 | |
| Laurel | \$18.70/month /EDU | | | | | | | | |
| | \$56.10 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$56.10 | \$3.74 | |

| | Α | В | | С | | D | F | F/15= G |
|-----------------------------------|------------------------------|-------------------------|-----------------------------------|--|----------------------------------|--------------------------------------|--|---|
| Water Utility | Service Charge (\$) | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Use Fee (\$) | Total Average Quarterly Charge (A+B+C+D=F) | Average Quarterly Rate (\$/1,000) |
| Lewes Board of Public Works | | | | | | | | |
| Inside City | | | \$0.90/1,000 gal (0-4,500) | \$1.65/1,000 gal (4,501-9,000) | \$2.00/1000 gal (9,000-15000) | | | |
| maide Oity | \$45.00 | \$0.00 | \$4.05 | \$7.43 | \$12.00 | \$0.00 | \$68.48 | \$4.56 |
| Outside City | | | \$1.31/1000 gal (0-4,500) | \$2.39/1000 gal (4,501-9,000) | \$2.90/1000 gal (9,000-15000) | | | |
| Odiside Oity | \$65.25 | \$0.00 | \$5.89 | \$10.75 | \$17.40 | \$0.00 | \$100.29 | \$6.69 |
| Magnolia | | | | | | | | |
| Inside Town | \$55.00 | | | | | | | |
| inside rown | \$55.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$55.00 | \$3.67 |
| Outside Terror | \$65.00 | | | | | | | |
| Outside Town | \$65.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$65.00 | \$4.33 |
| Middletown | \$8.50 (0-3,330 gal) | | | \$2.55/1000 gal (3,330-15 000 gal) | | | | |
| | \$8.50 | \$0.00 | \$0.00 | \$29.84 | \$0.00 | \$0.00 | \$38.34 | \$2.56 |
| Milford | | | | | | | | |
| Inside Town | \$3.25 base (0-1,000 gal) | | \$3.25/1,000 gal (1,001-4,000) | \$3.50/1,000 gal (4,001-8,000) | \$4.00/1,000 gal (>8,001) | | | |
| moide rown | \$3.25 | \$0.00 | \$9.75 | \$14.00 | \$28.00 | \$0.00 | \$55.00 | \$3.67 |
| Outside Town | \$4.88 base (0-1,000 gal) | | \$4.88/1,000 gal (1,001-4,000) | \$5.25/1,000 gal (4,001-8,000) | \$6.00/1,000 gal (>8,001) | | | |
| | \$4.88 | \$0.00 | \$14.64 | \$21.00 | \$42.00 | \$0.00 | \$82.52 | \$5.50 |

| | Α | В | | С | | D | F | F/15= G |
|----------------------------------|-----------------------------|----------------------|---|---------------------------------------|------------------------|--------------------------------------|---|---|
| Water Utility | Service Charge (\$) | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Use Fee (\$) | Total Average Quarterly Charge (A+B+C+D=F) | Average Quarterly Rate (\$/1,000) |
| Millsboro | Based on 7,500 gal usage | | | 0/1000 gal -15000 gal) | | | | |
| | \$22.50 | \$0.00 | \$ | 22.50 | \$0.00 | \$0.00 | \$45.00 | \$3.00 |
| Milton | Per Unit | | | | | | | |
| Inside Town | | | \$3.00 |)/1,000 gal | | | | |
| inside rown | \$35.00 | \$0.00 | \$ | 45.00 | \$0.00 | \$0.00 | \$80.00 | \$5.33 |
| Outside Town | | | \$3.00 | \$3.00/1,000 gal | | | | |
| Outside Town | \$70.00 | \$0.00 | \$ | 45.00 | \$0.00 | \$0.00 | \$115.00 | \$7.67 |
| Newark | | | | | | | | |
| Inside City | | | \$4.70/1000 gal (0-9,522 gal) ⁴ | \$5.99/1000 gal (9,523-15,000 gal) | | | | |
| maide Oity | \$0.00 | \$0.00 | \$44.75 | \$32.81 | \$0.00 | \$0.00 | \$77.56 | \$5.17 |
| Outside City | | | \$6.24/1000 gal (0-9,522 gal) ⁴ | \$8.13/1000 gal (9,523-15,000 gal) | | | | |
| Cutsiae Oity | \$0.00 | \$0.00 | \$59.42 \$44.53 | | \$0.00 | \$0.00 | \$103.95 | \$6.93 |
| New Castle Municipal Services | | | \$4.90/1000 gal (0-15,000) | | | | | |
| Commission | \$30.00 | \$5.00 | \$73.50 | \$0.00 | \$0.00 | \$0.00 | \$108.50 | \$7.23 |

| | Α | В | | С | | D | E | E/15= F |
|-------------------|------------------------|-------------------------|--------------------------------|-----------------------------------|------------------------|--------------------------------------|---|---|
| Water Utility | Service Charge (\$) | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Use Fee (\$) | Total Average Quarterly Charge (A+B+C+D=E) | Average Quarterly Rate (\$/1,000) |
| Rehoboth | | | | | | | | |
| Inside Town | | | | | | | | |
| Winter (Oct Mar) | | | \$1.67/1 | ,000 gal | | | | |
| Winter (Oct-Mar) | \$9.50 | \$0.00 | \$25 | 5.05 | \$0.00 | \$0.00 | \$34.55 | \$2.30 |
| Summer (Apr-Sept) | | | \$2.67/1,000 gal | | | | | |
| Summer (Apr-Sept) | \$9.50 | \$0.00 | \$40 | 0.05 | \$0.00 | \$0.00 | \$49.55 | \$3.30 |
| Out of Town | | | | | | | | |
| Mintor (Oct Mor) | | | \$3.34/1 | ,000 gal | | | | |
| Winter (Oct-Mar) | \$19.00 | \$0.00 | \$50 | 0.01 | \$0.00 | \$0.00 | \$69.01 | \$4.60 |
| Cummer (Apr Cent) | | | \$5.34/1 | ,000 gal | | | | |
| Summer (Apr-Sept) | \$19.00 | \$0.00 | \$80 | 0.10 | \$0.00 | \$0.00 | \$99.01 | \$6.60 |
| Seaford | | | \$18.70/montl 56.10/quarter | n for 9,000 gal for 27,000 gal | | | | |
| Courora | \$0.00 | \$0.00 | \$56 | 6.10 | \$0.00 | \$0.00 | \$56.10/27 | 2.08 |
| Selbyville | \$64.00/ 18,000 gal | | | | | | | |
| 30.23 ¥1110 | \$64.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$64.00 | \$4.27 |

| | Α | В | | С | | D | E Total Average Quarterly Charge (A+B+C+D=E) | E/15= F Average Quarterly Rate (\$/1,000) |
|------------------------------------|--|------------------------------------|-------------------------------------|--------------------------------------|--|--|--|--|
| Water Utility | Service Charge (\$) | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Use Fee (\$) | | |
| Smyrna | | | | | | | | |
| Inside Town | Minimum Charge \$9.00/1000 gal (first 3,000 gal) | \$3.00/1000 gal (3001-4000 gal) | \$4.00/1,000 gal (4001-6000 gal) | \$5.00/1,000 gal (6001-7000 gal) | \$6.00/1,000 gal (7001-10000 gal) | \$4.00/1,000 gal (10001-15000 gal) | | |
| | \$27.00 | \$3.00 | \$8.00 | \$5.00 | \$18.00 | \$20.00 | \$81.00 | \$5.40 |
| Outside Town | Minimum Charge \$18.00/1000 gal (first 3,000 gal) | \$6.00/1000 gal (3001-4000 gal) | \$8.00/1,000 gal (4001-6000 gal) | \$10.00/1,000 gal (6001-7000 gal) | \$12.00/1,000 gal (7001-10000 gal) | \$8.00/1,000 gal (10001-15000 gal) | | |
| | \$54.00 | \$6.00 | \$16.00 | \$10.00 | \$36.00 | \$40.00 | \$162.00 | \$10.80 |
| Sussex County DPW (Dewey Beach) | \$185.18/yr \$46.29/quarter | | | | | \$44.30 | | |
| | \$46.29 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$46.29 | \$46.29 | \$3.09 |
| Tidewater Utilities | | | \$6.78/1,000 gal | | | Distribution Improvement Charge, 1.07% | | |
| | \$47.62 | \$10.86 | \$10 | 1.70 | \$0.00 | \$6.86 | \$167.04 | \$11.14 |
| United Water | | | \$3.12/1,000 gal (0-5,000) | \$3.72/1000 gal (5,001-20,000) | | | | |
| Delaware | \$38.88 | \$0.00 | \$15.60 | \$37.20 | | \$0.00 | \$91.68 | \$6.11 |
| Wilmington | | | | | | | | |
| Inside City | Includes Quarterly Allowance of 8,000 gallons | | \$0/1,000 gal (0-8,000) | \$3.64/1000 gal (8,001-15,000) | | | | |
| | \$42.44 | \$0.00 | \$0.00 | \$25.48 | \$0.00 | \$0.00 | \$67.92 | \$4.53 |
| Outside City | Includes Quarterly Allowance of 8,000 gallons | | \$0.00/1000 gal (0-8,000) | \$6.59/1000 gal (8,001-15,000) | \$5.765/1000 gal (>15,000) | | | |
| | \$65.91 | \$0.00 | \$0.00 | \$46.13 | \$0.00 | \$0.00 | \$112.04 | \$7.47 |

| | Α | В | | С | | D | E Total Average Quarterly Charge (A+B+C+D=E) | E/15= F Average Quarterly Rate (\$/1,000) |
|---|----------------------------------|----------------------|-------------------------------------|-------------------------------------|------------------------|--------------------------------------|--|--|
| Water Utility | Service Charge (\$) | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Use Fee (\$) | | |
| Ambler Borough | | | \$2.84/1,000 gal (0-110,000 gal) | | | | | |
| ŭ | \$7.73 | \$36.51 | \$42.59 | | | | \$86.83 | \$5.79 |
| AQUA Pennsylvania (Main Division) ¹ | | | \$7.047/1,000 (0-2,000) | \$8.031/1,000 (2000-15,000 gal) | | | | |
| | \$13.15 | \$0.00 | \$14.09 | \$24.09 | \$0.00 | \$0.00 | \$154.01 | \$10.27 |
| Bucks County Water & Sewer Authority | | | | | | | | |
| New Hope, Solebury | Minimum Charge (4,000 gal) | | \$4.25/1,000 | gal (to 19,000) | | | | |
| | \$25.48 | \$0.00 | \$46.75 | | \$0.00 | \$0.00 | \$72.23 | \$4.82 |
| Middletown Twp. | Minimum Charge (4,000 gal) | | \$3.19/1,000 gal | | | | | |
| | \$23.88 | \$0.00 | \$35.09 | | \$0.00 | \$0.00 | \$58.97 | \$3.93 |
| Langhorne, Penndel | Minimum Charge (4,000 gal) | | \$3.14/1 | ,000 gal | | | | |
| | \$25.69 | \$0.00 | \$3 | 4.54 | \$0.00 | \$0.00 | \$60.23 | \$4.02 |
| Chester Water Authority | | | | | | | | |
| Village Green East | \$12.10/mo. | | \$4.61/1000 gal. (0-25,000 gal.) | \$2.96/1000 gal. (>25,000 gal.) | | | | |
| | \$36.30 | \$32.30 | \$69.15 | \$0.00 | | | \$137.75 | \$9.18 |
| Village Green West | \$9.40/mo. | | \$5.92/1000 gal. (0-25,000 gal.) | \$4.15/1000 gal. (>25,,000 gal.) | | | | |
| ŭ | \$28.20 | \$36.30 | \$88.80 | \$0.00 | | | \$153.30 | \$10.22 |

| | Α | В | | С | | D | E | E/15= F |
|-------------------------------------|------------------------|----------------------|-----------------------------------|----------------------------------|---------------------------|----------------------------------|--|---|
| Water Utility | Service Charge (\$) | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Fee (\$) | Total Quarter Charge (A+B+C+D=E) | Average Quarterly Rate (\$/1,000) |
| Downingtown Municipal Water | | | \$1.50/1000 gal. (<5,000 gal.) | \$7.69/1000 gal. (>5000 gal.) | | | | |
| Authority | \$57.00 | \$2.32 | \$7.50 | \$76.90 | \$0.00 | | \$143.72 | \$9.58 |
| Lehigh Co. Authority | | | | | | | | |
| Madison Park North | | | \$7.50/1000 gal. | | | | | |
| | \$11.70 | \$0.00 | \$112.50 | | | | \$124.20 | \$8.28 |
| Upper Milford | | | \$5.47/1000 gal. | | | | | |
| | \$21.00 | \$0.00 | \$82.05 | | | | \$103.05 | \$6.87 |
| Welshtown Road | | | \$60 (0-8,000 gal) | \$5.47/1000 gal. (>8000 gal.) | | | | |
| | \$0.00 | \$0.00 | \$60.00 | \$38.29 | | | \$98.29 | \$6.55 |
| Newtown Artesian Water Company | | | • | | Purchase water adjustment | | | |
| Newtown Artesian | | | \$4.37/1000 gal. | | \$0.1909/ 1000 gal. | | | |
| | \$16.72 | \$0.00 | \$65.55 | | \$2.86 | | \$85.13 | \$5.68 |
| Indian Rock Area | | | \$5.33/1 | 000 gal. | \$0.1909/ 1000 gal. | | | |
| | \$16.72 | \$0.00 | \$79 | 9.95 | \$2.86 | | \$99.53 | \$6.64 |
| North Wales Water Authority | | | | | | | | |
| Nov-Mar | | | \$3.60/1000 gal. | | | | | |
| TVOV IVIGI | \$12.00 | \$0.00 | \$54 | 4.00 | | | \$66.00 | \$4.40 |
| April-Oct | | | \$5.20/1 | 1000 gal | | | | |
| April-Oct | \$12.00 | \$0.00 | \$78 | 3.00 | | | \$90.00 | \$6.00 |
| Pennsylvania American Water Co. | \$13.00/mo. | | \$7.89/1000 gal (0-15000 gal.) | | | | | |
| (includes Coatesville Authority) | \$39.00 | \$0.00 | \$118.35 | | | | \$157.35 | \$10.49 |
| Philadelphia Water | \$5.94/mo. | | 3.99/1000 gal (0-14,960 gal | | | | | |
| Department ¹ | 17.82 | \$0.00 | \$59.85 | | | | \$77.67 | \$5.18 |
| Phoenixville Water Department | | | | 5,000 gal | | | | |
| Inside Borough | 0-12,500 gal | \$288.15 per year | | 1000 gal 5,000 gal) | | | | |
| | \$44.13 | \$72.04 | \$10 | 0.55 | | | \$126.72 | \$8.45 |

| | Α | В | С | D | E | E/15= F | | Α |
|--|------------------------------|-------------------------|--|------------------------------------|------------------------------------|--------------------------------------|---|---|
| Water Utility | Service Charge (\$) | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Use Fee (\$) | Total Average Quarterly Charge (A+B+C+D=E) | Average Quarterly Rate (\$/1,000) |
| Berlin Borough | | | \$3.10/1,000 gal (first 5,000) | \$3.10/1,000 gal (5,000-10,000) | \$3.20/1,000 gal (5,000-15,000) | | | |
| Doroug. | \$18.00 | \$0.00 | \$15.50 | \$15.50 | \$16.00 | \$0.00 | \$65.00 | \$4.33 |
| Camden | | | \$3.00/1000 gal (0-11,220 gal) | \$4.50/1000 gal 11220-15000 | | | | |
| | \$20.75 | \$0.00 | \$33.66 | \$17.01 | \$0.00 | \$0.00 | \$71.42 | \$4.76 |
| Evesham Municipal Utilities Authority | | | \$1.65/1,000 gal (1,000-16,000) | | | | | |
| AMR System | \$9.00 | \$0.00 | \$24.75 | | | \$0.00 | \$33.75 | \$2.25 |
| No AMR System | \$15.00 | \$0.00 | \$24.75 | \$0.00 | \$0.00 | \$0.00 | \$39.75 | \$2.65 |
| Medford Township | Min. Charge (0-5,000 gal) | | \$3.50/1,000 gal (5,001-20,000) | | | | | |
| | \$25.00 | \$0.00 | \$35.00 | \$0.00 | \$0.00 | \$0.00 | \$60.00 | \$4.00 |
| Merchantville- Pennsauken Water | (0-6732 gal) | | \$2.14/1000 gal (6732-15000) gal | | | | | |
| | \$18.75 | | \$17.68 | | | | \$36.43 | \$2.43 |
| N.J. American Water Company | | | | | | | | |
| Non-exempt | | | \$5.70/1,000 gal | | | | | |
| Non-exempt | \$30.00 | \$0.00 | \$85.50 | | \$0.00 | \$0.00 | \$115.55 | \$7.70 |
| Exempt | | | \$5.09/1,0 | 000 gal | | | | |
| Ехетрі | \$30.00 | \$0.00 | \$76. | 35 | \$0.00 | \$0.00 | \$106.35 | \$7.09 |
| Salem ⁵ | 15,000 gal/6 mon \$52.16 | | \$2.39/1,0 (7500-150 | | | | | |
| Jaiem | \$26.08 (3 months) | \$0.00 | \$17.92 | | \$0.00 | \$0.00 | \$44.01 | \$2.93 |
| Washington | Allowance 10,000 gal | | \$1.60/1,000 gal (10,000-15,000 gal | | | | | |
| Township MUA | \$18.00 | \$0.00 | \$8.00 | \$0.00 | \$0.00 | \$0.00 | \$26.00 | \$1.73 |
| Trenton | | (charge per hydrant) | \$15.11/1, \$2.02/10 | | | | | |
| | \$33.03 | \$42.96 | \$30. | 30 | \$0.00 | \$0.00 | \$106.29 | \$7.09 |

| | Α | В | | С | | D | E | E/15= F |
|---|------------------------|----------------------|--|---------------------------------------|------------------------|--------------------------------------|---|---|
| Water Utility | Service Charge (\$) | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Use Fee (\$) | Total Average Quarterly Charge (A+B+C+D=E) | Average Quarterly Rate (\$/1,000) |
| Baltimore City Dept. of Public Works | | | \$2.691 (first 50 units per quarter) | | | | | |
| | \$29.34 | \$0.00 | \$26.91 | \$0.00 | \$0.00 | \$0.00 | \$56.25 | \$3.75 |
| Cecil County | | | \$7.00/ | 1000 gal. | | | | |
| Dept. of Public Works | \$0.00 | \$0.00 | \$105.00 | | | | \$105.00 | \$7.00 |
| Elkton | | | | | | | | |
| Inside Town | | | 0-9,000 gal. min. | \$2.80/1000 gal (9,000-15,000 gal) | | | | |
| maide rown | \$0.00 | \$0.00 | \$25.20 | \$16.80 | | | \$42.00 | \$2.80 |
| Outside Town | | | 0-9,000 gal. min. | \$5.60/1000 gal (9,000-15,000 gal) | | | | |
| Outside Town | \$0.00 | \$0.00 | \$50.40 | \$33.60 | | | \$84.00 | \$5.60 |
| Perryville | First 2500 gal | | | 1000 gal 5000 gal. | | | | |
| Dept. of Water | \$18.13 | \$0.00 | \$9 | 0.63 | | | \$108.75 | \$7.25 |

¹Billed monthly rather than quarterly
²1 EDU=200 gallons per day
³ 1 EDU=9,000 gallons per day
⁴ 1 cubic foot = 7.48 gallons and 15,000 gallons = 1,995 cubic feet
⁵Billed every six months
⁶1 unit=748 gallons

Appendix B New Castle County Residential Water Rate Data 2012

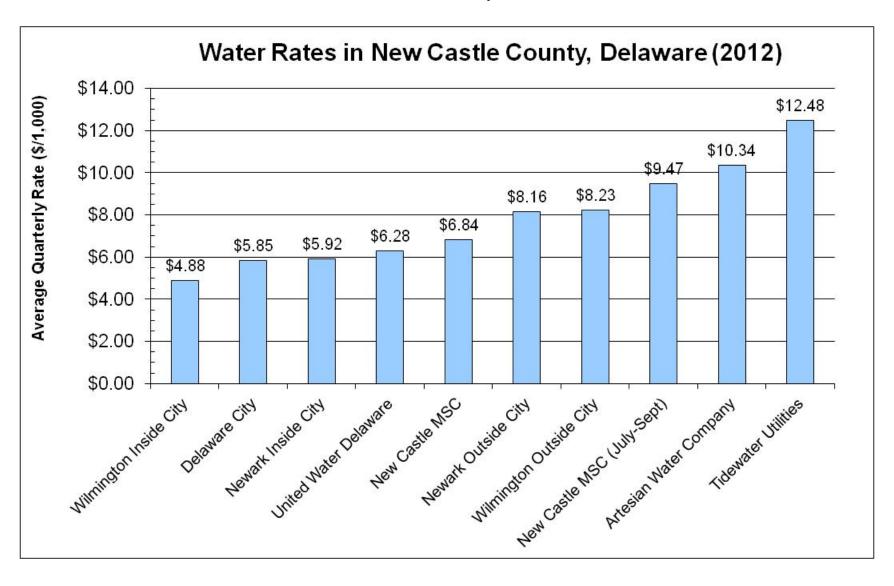
| | Α | В | | С | | D | E | E/15= G |
|---|------------------------|----------------------|---|---|---------------------------------|---|---|---|
| Water Utility | Service Charge (\$) | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Use Fee (\$) | Total Average Quarterly Charge (A+B+C+D=E) | Average Quarterly Rate (\$/1,000) |
| Artesian Water Co. ¹ | | | \$6.565/1,000 gal (0-2,000 gal) | \$7.098/1,000 (2,001-7,000 gal) | \$8.277/1,000 (>7,000 gal) | Distribution improvement charge (0.14%) after 07/01/12 | | |
| | \$13.22 | \$4.00 | \$13.13 | \$21.29 | \$0.00 | \$0.07 | \$155.15 | \$10.34 |
| Delaware City ¹ | | | \$3.25/1,000 gal (0-15,000 gal) | | | | | |
| Dolamaro Ony | \$13.00 | \$0.00 | \$16.25 | \$0.00 | \$0.00 | \$0.00 | \$87.75 | \$5.85 |
| Newark | | | | | | | | |
| Inside City | | | \$4.03/100 cubic feet (0-1,273 cubic feet) ² | \$5.13/100 cubic feet (>1,273 cubic feet) | | | | |
| | \$0.00 | \$0.00 | 51.30 | 37.57 | \$0.00 | \$0.00 | \$88.87 | \$5.92 |
| Outside City | | | \$5.36/100 cubic feet (0-1,273 cubic feet) | \$6.96/100 cubic feet (over 1,273 cubic feet) | | | | |
| | \$0.00 | \$3.26 | \$68.23 | \$50.97 | \$0.00 | \$0.00 | \$122.46 | \$8.16 |
| New Castle Municipal Services Commission ¹ | | | \$.0067/gal | | | | | |
| | \$7.75 | \$5.43 | \$2 | 1.00 | \$0.00 | \$0.00 | \$102.54 | \$6.84 |
| | | | 0.0067/gal (0-4,000 gal) | 0.00735/gal (>4,000 gal) | | | | |
| July-September | \$7.75 | \$5.43 | \$26.80 | \$7.35 | \$0.00 | \$0.00 | \$141.99 | \$9.47 |
| Tidewater ¹ | | | \$7.9469/1,000 gal (0-5,000 gal) | \$8.0493/1,000 (5,001-20,000 gal) | \$8.1517/1,000 (>20,000 gal) | | | |
| | \$17.62 | \$5.03 | \$39.73 | \$0.00 | \$0.00 | | \$187.15 | \$12.48 |

Appendix B (continued)

| | Α | В | | С | | D | E | E/15= F |
|---------------------------------------|--|----------------------|---------------------------------|-------------------------------------|-------------------------------|---|---|---|
| Water Utility | Service Charge (\$) | Fire Protection (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Quarterly Rate (\$) | Average Quarterly Use Fee (\$) | Total Average Quarterly Charge (A+B+C+D=E) | Average Quarterly Rate (\$/1,000) |
| United Water Delaware ¹ | | | \$3.3819/1,000 gal (0-5,000) | \$4.0280/1000 gal (5,001-20,000) | \$6.786/1000 gal (>20,000) | Distribution Improvement Charge (1.89%) | | |
| Belaware | \$11.70 | \$2.21 | \$16.91 | \$0.00 | 0.00 | \$0.58 | \$94.21 | \$6.28 |
| Wilmington | | | | | | | | |
| Inside City | Includes Quarterly Allowance of 8,000 gallons | | \$0/1,000 gal (0-8,000) | \$4.22/1000 gal (8,001-15,000) | \$5.276/1000 gal (>15,000) | | | |
| | \$43.66 | \$0.00 | \$0.00 | \$29.54 | \$0.00 | \$0.00 | \$73.20 | \$4.88 |
| Outside City | Includes Quarterly Allowance of 8,000 gallons | | \$0.00/1000 gal (0-8,000) | \$7.642/1000 gal (8,001-15,000) | \$5.765/1000 gal (>15,000) | | | |
| | \$69.89 | \$0.00 | \$0.00 | \$53.49 | \$0.00 | \$0.00 | \$123.38 | \$8.23 |

Billed monthly rather than quarterly 21 cubic foot = 7.48 gallons and 15,000 gallons = 1,995 cubic feet

Appendix C Average Quarterly Rate New Castle County 2012



Appendix D Average Annual Water Bill New Castle County 2012

