

Draft Report of the Tennessee Advisory Commission on Intergovernmental Relations

Setting Water and Wastewater Rates for Non-resident Customers of City Utilities

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Setting Water and Wastewater Rates for Non-resident Customers of City Utilities

Having access to clean water is a basic human need. Most people in Tennessee get their water from public utilities, either a city or a utility district, or from an investor-owned utility. Given the varying population densities, sizes of the utilities, the numbers of customers being served, and the complexities of the geography of some regions in Tennessee, rates charged for water vary across the state. They also often vary among customers of the same city utility. In addition to serving their own residents, cities often extend service beyond their city limits to meet the needs of nonresidents. And from time to time, cities may take over other water utilities that are insolvent or in danger of becoming insolvent. When they do this, they usually charge their outside customers more, mainly because of differences in density.

Of the 200 cities that provide water service outside their city limits, 24 charge the same rates inside and outside the city. The other 176 charge rate differentials ranging from 4% to 176% more for water service. Thirteen have outside water rates that are exactly double; 29 have water rates that are exactly one and a half times their inside rates. Rates for sewer service follow a similar pattern. Although utilities commonly use rate studies to determine what to charge their customers, the difficulty of figuring out what it costs to serve customers in different parts of the area they serve may account for some of these seemingly arbitrary rate differentials.

Non-resident city customers are the only utility customers who have no influence over the people who set their rates. City residents can complain to those they elect, who either set rates themselves or appoint those who do. Likewise, utility districts customers can complain to their boards, which are either elected directly by the customers or appointed by the county mayor or executive for whom all county residents vote. While customers of city utilities who live outside the city can complain to the city's utility board, the fact that they don't elect the board or those who appoint its members greatly limits their ability to influence it. In at least one other instance in which non-city-residents' rights or privileges are controlled by city boards, non-residents have been given representation on those boards. This is true in the case of cities' regional land-use planning commissions.¹

Moreover, unlike utility district customers, city customers have no one to appeal to when they believe their rates are too high. It is possible for a city body to provide for representation of those living outside the city; regional planning commissions are an example. Regional planning commissions are municipal planning commissions that the state has given authority to plan and regulate land use beyond their corporate boundaries within the urban growth boundaries established under Tennessee's Growth Policy Act. Two representatives who live in this extraterritorial area are appointed by the city to serve on the planning commission if the

¹ Roehrich-Patrick et al. 2013.

area outside the city limits is at least half of the entire planning region; otherwise, only one need be appointed.²

Customers of utility districts can appeal to the Utility Management Review Board (UMRB) housed in the Comptroller's Office when they believe their water rates are too high. City customers do not have a similar rate appeal process. Their utilities are regulated by the Wastewater Finance Board (WWFB), also housed in the Comptroller's Office, which does not have the UMRB's authority to handle complaints that rates are too high. Investor-owned utilities are regulated by the Tennessee Regulatory Authority and cannot raise rates without their approval.

Residents of Piney Flats in Sullivan County who receive water and sewer service from Johnson City, like all non-resident customers of the city, are charged rates double those charged residents of Johnson City. They believe their rates are unreasonable, and complain that the city utility has not provided any information to justify them. House Bill 600 by Timothy Hill [Senate Bill 735 by Green] was introduced to remedy this situation. If passed, it would cap rates for those who live outside Johnson City and in Sullivan County at one and one-half times the rates charged inside the city.

According to the legislature's Fiscal Review Office, Johnson City could lose more than half a million dollars of revenue if the bill passed. Unless the city utility could find a way to cut costs, the revenue would have to be made up by charging other customers more or by reducing the amount paid to the city for administrative costs or in lieu of taxes. Reducing amounts paid to the city would require cuts elsewhere in Johnson City's budget or an increase in revenue from some other source. Regardless of how the loss was covered, city residents would have to pay it. The utility might be able to use its reserves to mitigate this shift in costs for a year or even several years, but this would be a temporary solution.

Moreover, based on experience in other states, rate caps may become the standard rate. For example, Florida caps water rates for non-resident city customers at one and one-half times the rate charged residents. Outside rates cannot exceed one and one-quarter times inside rates without a public hearing.³ It is estimated that about half of Florida's utilities have set their outside rate at exactly that 125% threshold.⁴ Wyoming gives utilities that receive state grants or loans the option of setting rates for outside customers at a maximum of 125% of the rate charged customers inside the city or the actual cost of providing water service. Those that don't receive grants or loans can charge up to double the rates paid by city residents. Outside customers can appeal rates to the state's Public Service Commission. Most of Wyoming's

² Tennessee Code Annotated Section 13-3-102. (Ten is the maximum number of members allowed on municipal planning commissions per Tennessee Code Annotated Section 13-4-101.)

³ Florida Annotated Statute, Section 180.191(b).

⁴ Telephone interview with Mike Rocca, Director of Florida Operations, Raftelis Financial Consultants, November 25, 2013.

utilities charge at or near the 125% cap. Colorado has had a similar experience with the interest rates charged by payday lenders.⁵

Given the tendency of rate caps to have the unintended consequence of becoming the new standard rate, the Commission does not recommend House Bill 600 in its current form. Nevertheless, rates should be both reasonable and justified. Whether a customer lives inside or outside the city is not enough on its own to justify a rate difference. While using cost studies to determine how rates should vary within a utility's service area is unrealistic, it is the consensus of the Commission that some means of ensuring that rate differentials are fairly set is warranted, either through representation on the utility board similar to the representation non-residents of cities have on regional planning commissions, or as in Wyoming, through an appeal process similar to that provided by the UMRB to utility district customers.

How Tennesseans Get Their Water

Residents of Tennessee get water service from one of three types of water systems—public water systems such as utility districts and city water systems, investor-owned water systems such as Tennessee American Water, or non-public utilities such as community water systems. Both types of public utilities serve residents inside and outside cities. Overall, municipal utilities serve more Tennesseans than utility districts. Generally, utility districts serve customers outside city limits, but they serve some cities.

The Tennessee Utility District Act of 1937 allowed for the creation of utility districts across the state. The USDA initially provided funding for these districts in the form of grants and loans; any district that holds a federal grant or loan cannot be bought by another water system. Utility districts' boundaries are clearly defined and if a city expands its limits within those boundaries the city utility cannot take the district's customers, but they can provide them sewer. Within utility district boundaries all customers are charged the same rate. These uniform rates would apply to city residents that are served by a utility district instead of a municipal system.

⁵ DeYoung 2009.

Table 1. Number of Public Utility Water and Sewer Customers in Tennessee.

Utility	Total	Inside*	Outside*	Outside (%)
Municipal Water	1,421,020	1,048,373	281,130	21%
Municipal Sewer	1,235,033	867,789	59,490	6%
UD Water	640,290	-	-	-
UD Sewer	92,280	-	-	-
Water Authority	51,841	-	-	-
Wastewater Authority	7,604	-	-	-

Across the state, 161 utility districts provide water service to more than 640,000 Tennesseans, primarily in rural areas; only 13 provide sewer service, serving less than 100,000 customers. See table 1.

In contrast, cities provide water service to more than 1.3 million water customers and sewer service to 1.2 million customers. While most residents of Tennessee’s 347 cities receive water or sewer service from their city, 95 municipalities do not provide either of these services. Residents of those cities may get water and sewer service from one of the other types of utilities. For instance, Tennessean American Water provides water to 300,000 people in the Chattanooga area. Of the 252 municipalities that do provide service, 194 (77%) provide both water and sewer.

Beyond providing water to their residents, Tennessee law authorizes cities to provide water and sewer services to people living outside the city.⁶ A total of 252 cities provide water or sewer service or both to customers outside city limits; 200 provide water service, 93 provide sewer, and 89 provide both. Altogether, they provide water to more than 268,000 customers outside city limits and sewer to nearly 60,000. Cities also have the first right to serve customers that are not already in a utility district boundary if they have a population of more than 5,000 and are within five miles or within three miles of the city limit of a city with a population of less than 5,000.

Several cities charge outside customers twice as much as the city rate; a few charge more than double. Residents of one area outside Johnson City, the Piney Flats community in Sullivan County, expressed concern to their state representative about being charged twice the rates their Johnson City neighbors pay. Their representative, Timothy Hill, and Senator Mark Green of Clarksville introduced legislation to cap rates in the area at one and a half times the city rates.

⁶ Tennessee Code Annotated, Section 7-51-401.

Water and Wastewater Rates Across the State

Water rates vary significantly across the state. West Tennessee, the alluvial and coastal plain, is the least expensive region because the water supply is from aquifers and requires little treatment because it has been filtered through layers of sand and clay. East of the alluvial and coastal plain, public water is supplied mainly from surface sources and springs and is costlier to treat. The Highland Rim has some of the most expensive rates because it is hilly and sparsely populated. Water rates in the Nashville Basin are generally lower than the rest of Middle Tennessee and the eastern part of the state largely because it is flatter and more densely populated. Rates increase moving eastward across the Cumberland Plateau and into the ridges and valleys in East Tennessee. These areas have higher elevations and rougher terrain, and much of it is sparsely populated. Sewer rates follow a similar pattern. See tables 2 and 3.

Table 2. Average Water Bills by Region⁷.

Weighted by customers at 5,000 gallons			
Region	Municipal		Utility District
	Inside	Outside	
Alluvial and Coastal Plain	\$14.97	\$25.39	\$27.74
Highland Rim	\$23.06	\$39.33	\$39.30
Nashville Basin	\$16.78	\$36.38	\$34.74
Cumberland Plateau	\$26.21	\$36.00	\$41.99
Ridge and Valley and Smokies	\$20.32	\$33.70	\$33.26
Statewide	\$18.06	\$33.26	\$35.06

Table 3. Average Sewer Bills by Region

Weighted by customers at 5,000 Gallons			
Region	Municipal		Utility District
	Inside	Outside	
Alluvial and Coastal Plain	\$15.98	\$20.13	n/a
Highland Rim	\$26.08	\$42.09	\$47.55
Nashville Basin	\$32.39	\$46.14	\$37.96
Cumberland Plateau	\$34.89	\$46.26	\$51.45
Ridge and Valley and Smokies	\$40.53	\$55.69	\$35.06
Statewide	\$27.46	\$46.29	\$36.27

No two utilities are identically situated. In addition to their location in different parts of the state, they may have older plants, older pipes, or use more expensive treatment methods. Even nearby utilities may have very different costs and rates. For example, Gatlinburg

⁷ A list of utilities and rates can be found in Appendix C.

residents pay only \$15.88 for 5,000 gallons of water, while their neighbors in Pigeon Forge pay \$28.00.

Of the 197 municipal systems that provide water service to residents outside city limits, 174 charge more for outside water service. Rate differentials as large as those in Piney Flats are not common. In Tennessee, 13 water utilities set the outside rate to exactly two times the inside rate. Another 29 are set to one and a half times. Only 18% of outside water customers pay water rates that are double or higher than those paid by inside customers. Outside customers, on average, pay 84% more than residents of cities. However, the most common markups are from 40% to 50% more than the inside rate.

Of the 228 cities with city sewer systems, only 93 serve outside customers; of these, only 22 have more than 100 sewer customers outside their city limits. The 89 that also provide outside water service charge a different rate to outside customers for one or both services.

Of the twenty municipal water systems that charge double the inside-city water rate or greater to outside customers, Jefferson City (276%), Kingsport (270%), Dresden (264%), and Portland (230%) have the largest differences. Only Jefferson City has an outside sewer rate more than double. Eight do not provide sewer service outside the city, three have rates that are less than double, and eight have outside sewer rates that are exactly double. Thirteen have outside water rates that are exactly double. Johnson City, which as noted earlier serves Piney Flats, charges outside customers double for water and sewer. See table 4.

Some outside rates appear to be a simple multiple of the inside rate. Whole number multipliers appear arbitrary but that alone does not mean that they do not approximate the actual cost difference. In many cases, however, cost-based principles are not used to establish these multipliers. This potentially leaves the utility open to a legal challenge.⁸

⁸ American Water Works Association 2012.

Table 4. Cities with double or greater outside water rates.

City	Outside / Inside Water Rate	Outside / Inside Sewer Rate	Region
Jefferson City	276%	281%	Ridge and Valley and Smokies
Kingsport	270%	155%	Ridge and Valley and Smokies
Dresden	264%	n/a	Alluvial and Coastal Plain
Portland	230%	130%	Highland Rim
Monterey	209%	n/a	Cumberland Plateau
Scotts Hill	206%	n/a	Highland Rim
Camden	206%	n/a	Alluvial and Coastal Plain
Jasper	200%	200%	Cumberland Plateau
Sevierville	200%	200%	Ridge and Valley and Smokies
Lafayette	200%	200%	Highland Rim
Martin	200%	200%	Alluvial and Coastal Plain
Englewood	200%	n/a	Ridge and Valley and Smokies
Estill Springs	200%	n/a	Highland Rim
Bristol	200%	109%	Ridge and Valley and Smokies
Waynesboro	200%	200%	Highland Rim
Manchester	200%	200%	Highland Rim
Jellico	200%	200%	Cumberland Plateau
Johnson City	200%	200%	Ridge and Valley and Smokies
Linden	200%	n/a	Highland Rim
Clifton	200%	n/a	Highland Rim

Establishing Water and Wastewater Rates

The most important job of a water utility is delivering safe drinking water to its customers. By law, they must also be financially self-supporting.⁹ To do this, they must have rates sufficient to cover the full cost of producing and delivering water, including the cost of treatment, storage, distribution, debt service, capital expenditures, regulatory compliance, and other operation and maintenance costs. Water and sewer rates must be structured to ensure that utilities have the financial resources to operate effectively and efficiently now and in the future. Doing this involves a detailed look at current and future costs and expenses, rate structure options, and the amount of water customers use.¹⁰ The EPA, in its rate-setting guide for small water systems, sets out a seven-step process:

Step 1: Determine the full cost of doing business by calculating costs.

Step 2: Determine current revenues.

⁹ Tennessee Code Annotated, Section 7-35-414.

¹⁰ United States Environmental Protection Agency, 2006.

Step 3: Consider reserve requirements to provide enough funds to cover asset rehabilitation and repair costs as well as unexpected costs during the next 5 years.

Step 4: Calculate the amount of money needed from customer charges to cover costs and fully fund reserves.

Step 5: Evaluate appropriate rate structures and design an appropriate rate.

Step 6: Implement the rates.

Step 7: Review rates and make changes when appropriate.

Following this or a similar process will ensure that utilities can

- maintain their financial stability by ensuring a sufficient revenue stream;
- collect and reserve the funds needed to cover the costs of future asset rehabilitation and repair projects, security upgrades, and compliance with future regulations, among other things;
- plan ahead for reasonable, gradual rate increases when necessary; and
- deliver fairly priced, high-quality drinking water to customers now and in the future.

Currently there is no requirement that a city utility conduct a cost of service study. The Tennessee Association of Utility Districts recommends that all utilities, except for the very smallest, do a cost of service study every five years. They also recommend that cities, like utility districts, be required to report their rates and their calculation methods in their annual financial reports.¹¹

Variations in Costs that Drive Rate Differences

Costs vary among systems for a number of reasons. Location and population density matter, but they are not the only reasons. According to letters sent by utilities to the Comptroller in 2006, increases in elevation, rockier terrain, and unique financial circumstances, such as the acquisition of a utility district, also matter.¹² And some costs are common to the entire system, such as accounting, water billing, customer service, and administrative and technical support.¹³ Some city utilities have additional costs associated with payments in lieu of taxes made to the city government.

The costs of providing water and sewer service can also vary among customers of the same utility. According to the American Water Works Association,

¹¹ Testimony by executive director Bob Freudenthal at the October 23, 2013, Commission meeting.

¹² Tennessee Comptroller of the Treasury, 2006.

¹³ Raftelis Financial Consultants, 2006.

The ideal solution to developing rates for water utility customers is to assign cost responsibility to each individual customer served and to develop rates that reflect that cost. Unfortunately, it is neither economically practical nor often possible to determine the cost responsibility and applicable rates for each individual customer served. However, the cost of providing service can reasonably be determined for groups or classes of customers that have similar water-use or service requirements.¹⁴

Establishing Rates for Non-resident City Customers

A class of customers that often has different service requirements is those living outside cities. Extending services to customers outside cities may require investment in new facilities or may cost more because of the need to pump water over longer distances or to higher elevations, all of which could be factors inside the city limits as well.¹⁵ Regardless, existing customers should not be required to subsidize new customers. One way to avoid this is to ensure that tap fees, one time fees charged for connecting to the water system, are adequate to cover their share of the investment in fixed assets by the existing customers.

In a review of differences in water rates for customers inside and outside cities, the Water and Wastewater Finance Board made the following general comments:

1. Customers outside the municipal boundary of the city should not be charged a higher rate simply because the debt is backed additionally by the “full faith and credit” of the taxpayers of the municipality. A utility system should be a self-supporting entity paid for by its users.
2. All fees and charges – whether for inside or outside customers - should be studied to determine that they are defensible, equitable and reasonable.
3. Tap fees are for a one time service provided and should be judged differently from the minimum bill or the per thousand gallon rate which are based on the operational costs of the system.

When a utility is considering extending service to new customers, they may find it is not cost effective to do a formal cost of service study. Instead, they may rely on the expertise and knowledge of existing staff and contractors to determine whether it is cost effective to add new customers and what rates to charge them. The University of Tennessee’s Municipal Technical Advisory Services (MTAS) has done cost of service studies for municipal utilities, including a few to determine rates for outside customers.

¹⁴ American Water Works Association 2012, p. 75.

¹⁵ American Water Works Association 2012, p. 167-168.

Utility Oversight

Two separate boards housed in the Comptroller's office regulate public utilities: the Utility Management Review Board (UMRB) and the Water and Wastewater Finance Board (WWFB). Both of these boards primarily oversee the financial health of these utilities. Both review financial reports annually for signs of financial distress. Investor-owned utilities such as Tennessee American Water, the largest in Tennessee, are regulated by the Tennessee Regulatory Authority.

Although the UMRB and the WWFB play the same role in ensuring the financial health of utilities, only the UMRB has a role in reviewing utility rates. The more than 448,000 of Tennessee's water customers—those served by utility districts—have the benefit of an appeals process when they feel that monthly bills are too high or the quality of service is too low. Although city residents can complain to their elected officials about their rates, customers of city utilities have no appeal except to chancery court. The court will presume utility rates are reasonable unless sufficient evidence is presented to demonstrate that they are not.¹⁶

Customers of utility districts and investor-owned utilities can file rate complaints—in the case of utility districts, to the UMRB;¹⁷ in the case of investor-owned water supply or sewer systems, to the TRA,¹⁸ which has the authority to negotiate or force a remedy. A rate review petition to the UMRB must be signed by at least 10% of the system's customers. Three customer petitions for rate reviews were sent to the UMRB in 2012.¹⁹ Two of them were rejected because they did not meet the 10% threshold. The third case was heard in April 2013 where the UMRB dismissed the case because the petitioners failed to meet the burden of proof. The petitioners have appealed the decision to chancery court.²⁰

The WWFB could be given the same authority as the UMRB to hear rate complaints. This would provide outside city customers, as well as city customers, a way to appeal rates. The experience with similar duties of the UMRB suggests that there would be a significant investment of staff time in the Office of the Comptroller to process complaints. Once complaints are filed, it may be possible for staff to help find a local resolution.

Individual customers may also request a UMRB review of other decisions made by their local utility district boards, including the availability of service, quality of service, adjustment of bills, the local utility rules and regulations,²¹ and whether the utility district followed those rules in resolving customer complaints. UMRB reviews occur only after rate decisions are made by their boards or after other complaints have been handled at the local level. UMRB staff received 139 complaints in 2012, 47 of which were referred to them by the TRA. Most

¹⁶ American Water Works Association 2012.

¹⁷ Rules of the Comptroller, Chapter 1715-01.

¹⁸ Wastewater Rule 1220-4-13-.12. Water System Rule 1220-4-3-.23.

¹⁹ Annual Report of the Utility Management Review Board 2012.

²⁰ WJLE 2013.

²¹ Tennessee Code Annotated, Section 7-82-402(b).

complaints were resolved through staff contacts with the utilities. Only four cases were actually heard by the board and all were decided in favor of the utility districts.

Comptroller's Office 2008 Review of Rate Differentials

House Bill 3104 of 2008 by Curtiss [SB 3631 by Ketron, Marrero, and Beavers] would have required any outside rate greater than 20% of the inside rate to be approved by the WWFB. The board's involvement would have been triggered when the outside subscriber base was equal to or greater than 20% of the inside subscriber base. Any subscriber would also have been able to complain to the WWFB about rates. It would have applied to about three-fourths of outside water customers in the state.

An amended version of HB 3104 passed, and became Public Chapter 779, Acts of 2008. Public Chapter 779 did not include any of the limits on outside rates in the original bill. Rather, it directed the WWFB to compile the water rates of every municipal water utility, to require a one-time justification for outside rates that were more than double the inside rate, and to determine whether those rates were reasonable and justified. Letters were sent to 27 municipal water utilities asking them to explain their outside rates. The primary reason given by the water utilities for greater outside rates was lower population density in areas outside the city meaning costs must be spread over fewer customers. Areas outside cities have longer water lines, more pumps and water tanks, and higher energy costs per customer. Distances between meters and facilities are greater. Other possible causes of higher costs outside the city are increases in elevation, rockier terrain, and unique financial circumstances, such as the acquisition of a utility district.

According to board staff, other less convincing explanations for higher outside rates included in these letters were rate comparisons to other utilities, inside customers having to back utility bonds, encouraging voluntary annexation, and inside-city customers having to pay higher taxes. Between 2008 to 2013, 8 of the 27 cities decreased the inside-outside rates difference and two increased them.

Capping Water and Wastewater Rates

House Bill 600, sponsored by Representative Timothy Hill, [Senate Bill 735 by Green] was sent by the House Local Government Committee to the Commission for study in March 2013. The bill, if passed as amended, would cap the rates of water and sewer customers residing outside of Johnson City in Sullivan County at 150% of the rates charged to customers inside Johnson City. The original bill would have applied only to water rates. The current rates for customers outside the city are double the rates paid by city residents. The bill affects only people residing in the Piney Flats community, even though Johnson City serves residents outside the city limits in Washington, Unicoi, and Carter counties, as well as residents in other parts of Sullivan County.

Residents of Piney Flats brought a number of concerns to Representative Hill: first that rates that are exactly double those paid by city residents do not represent the actual cost to serve

them; second that outside rates subsidize transfers to the city; and third that Johnson City has been unresponsive to these concerns and unable to explain the basis for their rates. Johnson City's response to these concerns is that residents of Piney Flats are charged the same rate as all other outside customers, that most of the customers outside the city have been taken in from financially distressed utilities, that they do not have enough information to determine exact costs for each of these areas, and that transfers of utility funds to the city's general fund are for administrative services and payments of in lieu of ad valorem taxes allowed by state law.²²

Johnson City's main concern about the bill is that a cap on rates for outside customers would shift costs to other customers and could potentially shift costs to the city's taxpayers. According to the legislature's Fiscal Review Office, Johnson City could lose \$560,300 if the bill passed.²³ Johnson City raised the specter of being forced to increase property taxes in order to cover this loss; however, because utilities must be self-sustaining, this is unlikely. More likely, a cap on water and sewer could cause a restructuring of current water rates to shift the burden to other parts of their customer base either through increasing rates, decreasing reserves, reducing payments in lieu of taxes, or reducing costs. Regardless of how the loss was covered, other customers would have to pay it.

The only way to avoid shifting costs among customers would be to reduce the amount paid to the city for administrative costs or in lieu of taxes. Reducing amounts paid to the city would require cuts elsewhere in Johnson City's budget or an increase in revenue from some other source. In that case, city residents would have to pay for the loss. The utility might be able to use its reserves to mitigate this shift in costs for a year or even several years, but this would be a temporary solution.

If a similar cap were applied statewide, the municipal utilities whose outside rates are currently above the cap would be affected in the same way. The unintended consequence of capping rates in state law might be to establish an acceptable standard rate differential. The result could be many cities raising outside rates to the cap without determining that the cap reflects actual costs. Some outside-city customers might benefit, but others would pay more.

Once a utility rate cap is identified in law, based on the experience in other states, rates may begin to increase to the new maximum. Only two states cap outside rate differences statewide. Outside rates in Florida cannot exceed one and one-quarter times inside rates without a public hearing; with a public hearing, they can be raised as high as one and half times the inside rates.²⁴ It is estimated that about half of Florida's utilities have set their outside rate at exactly that 125% threshold.²⁵

²² Tennessee Code Annotated, Section 7-34-115.

²³ Fiscal Memorandum 2013.

²⁴ Florida Annotated Statute, Section 180.191(b).

²⁵ Telephone interview with Mike Rocca, director of Florida operations for Raftelis Financial Consultants, November 25, 2013.

Wyoming gives utilities that receive state grants or loans the option of setting rates for outside customers at a maximum of 125% of the rate charged customers inside the city or the actual cost of providing water service. Those that don't receive grants or loans can charge up to double the rates paid by city residents. Outside customers can appeal rates to the state's Public Service Commission. According to utility officials in Wyoming, the 125% cap has become the standard rate. Customers can submit complaints about rates, maintenance, or service to the state's Public Service Commission. The PSC may review the matter, hold hearings, take testimony, and make recommendations. Those recommendations may be appealed to the district court.²⁶

North Carolina has capped the rates in one city, Asheville. The cap has been set at 100% since 1933. The City of Asheville has challenged the cap in court several times, as recently as 2006, but has lost every time.²⁷

Colorado has had that experience with the interest rates charged by payday lenders. The percentage of lenders who charged the maximum rate increased from 67% when the cap was imposed in 2000 to 97% in 2006. According to the study, the cap became a focal point that allowed payday lenders to abandon price competition.²⁸

Utility Board Representation for Outside-city Customers

Non-resident city customers are the only utility customers who have no influence over the people who set their rates. City residents can complain to those they elect, who either set rates themselves or appoint those who do. Likewise, utility districts customers can complain to their boards, which are either elected directly by the customers or appointed by the county mayor or executive for whom all county residents vote. While customers of city utilities who live outside the city can complain to the city's utility board, the fact that they don't elect the board or those who appoint its members greatly limits their ability to influence it.

Municipal water and wastewater boards are either the city legislative bodies themselves or are appointed by them.²⁹ Adding board members that represent customers outside the city could give those customers some influence over rates. In at least one other instance in which non-city-residents' rights or privileges are controlled by city boards, non-residents have been given representation on those boards. This is true in the case of cities' regional land-use planning commissions.³⁰ Regional planning commissions are municipal planning commissions that the state has given authority to plan and regulate land use beyond their corporate boundaries within the urban growth boundaries established under Tennessee's Growth Policy Act.

²⁶ Wyoming Statutes Annotated, 15-7-602.

²⁷ City of Asheville v. State 2006.

²⁸ DeYoung 2009.

²⁹ Tennessee Code Annotated, Section 7-35-408.

³⁰ Roerich-Patrick et al. 2013.

Legislation to give outside customers representation on city utility boards was introduced in 2008, but did not pass. House Bill 3103 by Curtiss [SB 3657 by Ketron] would have created a new five-member governing board for municipalities whose outside customers numbered 50% or more of inside customers. It would have divided the utility service area into five districts. City residents would have been guaranteed at least one district. Districts for outside customers would have been drawn to the extent possible to prevent city residents from dominating them. The bill was never debated.

Affordability of Water and Sewer Services

Tennessee's poorest and those on fixed incomes, such as the elderly and the disabled, pay a larger portion of household income for water because water is a necessity. On top of this, both the number of Tennesseans on fixed incomes and those that live below the poverty line have been increasing. From 1995 to 2003, Tennessee's poverty rate, as a percentage of its total population, tracked with the national percentage, but generally 1% or 2% higher. Beginning in 2003, well before the Great Recession, Tennessee's poverty rate began to trend higher compared to the U.S. and was generally 2.5% to 3% higher for the whole period of 2004 to 2011.³¹ For 2011, the Tennessee poverty rate was 18.4%, and the national poverty rate was 15.9%.³² The University of Tennessee Center for Business and Economic Research (CBER) estimates that by 2020 about one out of every six Tennesseans will be 65 years of age or older.³³

Determining what is an affordable water bill is not a simple task. However, the recommendation of the water and sewer rate dashboards developed by the University of North Carolina's EPA-supported Environmental Finance Center place household water and sewer bills, when billed separately, from 1.5% median household income (MHI) to 4.0% MHI in a dashboard red zone, to be avoided. A yellow caution zone for water bills and sewer bills separately ranges from 1% MHI to 1.5% MHI. When water and sewer bills are combined the red zone range is from 3% MHI to 4% MHI and the yellow caution zone is 2.0% MHI to 3.0% MHI.³⁴

A screening of Tennessee water utilities, assuming 5,000 gallon monthly water and sewer bills, shows that 17 of 87 systems produce combined water and sewer bills in excess of 3% of the MHI for the principal county of their outside service area. Similarly, this screening shows that 41 of 195 utilities produce outside water bills for 5,000 gallons monthly that are in excess of 1.5% MHI for the principal county of their outside service area. The results of this screening analysis suggest that many Tennessee cities should examine the affordability of their outside utility service at the neighborhood level, if they have not done so already. The fact that families in poverty and families on fixed incomes are increasing makes the need for such attention more urgent.

When cities decide it is necessary to take a closer look at affordability, new assessment tools are available. The U.S. Conference of Mayors, the American Water Works Association, and the Water Environment Federation have jointly developed new assessment tools for focusing more closely on the affordability of utility rates.³⁵

³¹ U.S. Census Bureau 2013.

³² American Community Survey 2011.

³³ Detch 2013.

³⁴ University of North Carolina 2013.

³⁵ American Water Works Association 2013.

Cities have two alternatives already available to them to provide relief to affected customers. The first is to accept and distribute voluntary contributions, which is already allowed in state law.³⁶ Programs in which utility bills are rounded up to the next dollar on a separate line of the utility bill are specifically authorized. Such voluntary contributions can be used for relief to the poor or underprivileged.³⁷ The other option is to lower the minimum bill, with a water allowance. This allows for those customers to conserve water and lower their bill.

³⁶ Tennessee Code Annotated, Section 7-34-115(i) (1).

³⁷ Tennessee Code Annotated, Section 7-34-115(i)(3).

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Persons Interviewed

Ralph Cross, Finance and Accounting Consultant
Municipal Technical Advisory Service

Bob Freudenthal, Executive Director
Tennessee Association of Utility Districts

Timothy Hill, State Representative
State of Tennessee

Jerry Kettles, Chief of Economic Analysis and Policy Division
Tennessee Regulatory Authority

Bart Kreps, Manager
Raftelis

Wade Morrell, Executive Vice President – Chief Financial Officer
Tennessee Municipal Bond Fund

Denise Paige, Government Relations
Tennessee Municipal League

M. Denis Peterson, City Manager
City of Johnson City, Tennessee

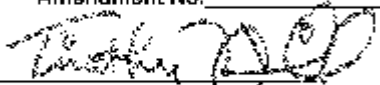
Sharon Rollins, Technical Consultants Program Manager
Municipal Technical Advisory Service

Joyce Wellborn, Legislative Auditor
Tennessee Comptroller of the Treasury

Lex Warmath, Vice President
Raftelis

Tom Witherspoon, Director of Water and Sewer Services
City of Johnson City, Tennessee

Appendix A

Amendment No. _____  Signature of Sponsor _____	FILED Date _____ Time _____ Clock _____ Comm. Amdt. _____
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AMEND Senate Bill No. 735

House Bill No. 600*

by deleting all language after the enacting clause and by substituting instead the following:

SECTION 1. Tennessee Code Annotated, Section 7-35-414(a), is amended by designating the existing language as (a)(1) and adding the following language as (a)(2):

(a)

(2) Any municipality having a population of not less sixty-three thousand one hundred fifty (63,150) nor more than sixty-three thousand one hundred fifty nine (63,159) that operates a waterworks and sewerage system in any county having a population of not less than one hundred fifty-six thousand eight hundred (156,800) nor more than one hundred fifty-six thousand nine hundred (156,900), both according to the 2010 federal census or any subsequent federal census, and that supplies water and sewer services to consumers located outside the corporate limits of such municipality within such county, shall not prescribe water and sewer rates in excess of fifty percent (50%) of the rate charged to consumers located within the corporate limits of such municipality.

SECTION 2. This act shall take effect upon becoming a law, the public welfare requiring it.



Appendix B

TENNESSEE GENERAL ASSEMBLY
FISCAL REVIEW COMMITTEE



FISCAL MEMORANDUM

HB 600 - SB 735

March 11, 2013

SUMMARY OF ORIGINAL BILL: Prohibits the Johnson City waterworks or sewerage system from charging water rates, to customers located outside the corporate limits of the city, in excess of 50 percent of the rate charged to customers located within the corporate limits.

FISCAL IMPACT OF ORIGINAL BILL:

Decrease Local Revenue - \$450,800/Johnson City

SUMMARY OF AMENDMENT (004265): Deletes all language after the enacting clause. Prohibits the Johnson City waterworks or sewerage system from charging water or sewer rates, to customers located outside the corporate limits of the city, in excess of 50 percent of the rates charged to customers located within the corporate limits.

FISCAL IMPACT OF BILL WITH PROPOSED AMENDMENT:

Decrease Local Revenue - \$560,300/Johnson City

Assumptions for the bill as amended:

- According to Johnson City, the average customer living outside the corporate limits of the city uses on average 5,000 gallons of water monthly.
- Based on water rates currently charged to customers within the corporate limits, customers using an average of 5,000 gallons of water pay \$20.18 monthly. Customers located outside the corporate limits of the city using an average of 5,000 gallons of water pay \$40.36 monthly.
- Applying the maximum rate allowed by the bill, customers outside the corporate limits would pay no more than \$30.27 ($\$20.18 \times 150\%$) for every 5,000 gallons of water, a rate difference of \$10.09 ($\$30.37 - \20.18).

HB 600 – SB 735

- According to Johnson City, there are 3,723 customers served outside the corporate limits of the city.
- Setting the maximum rate allowable for water service will result in a recurring decrease in local revenue to Johnson City estimated to be \$450,781 (\$10.09 rate difference x 3,723 customers x 12 months).
- According to Johnson City, the average sewer customer living outside the corporate limits of the city utilizes 5,000 gallons of water per monthly.
- Based on sewer rates currently charged to customers within the corporate limits, customers using an average of 5,000 gallons of water for sewer services pay \$28.60 monthly. Customers located outside the corporate limits of the city using an average of 5,000 gallons of water for sewer services pay \$57.20 monthly.
- Applying the maximum rate allowed by the bill, customers outside the corporate limits would pay no more than \$42.90 (\$28.60 x 150%) for every 5,000 gallons of water used for sewer service, a rate difference of \$14.30 (\$57.20 - \$42.90).
- According to Johnson City, there are 638 sewer customers outside the corporate limits of the city.
- Setting the maximum rate allowable for sewer service will result in a recurring decrease in local revenue to Johnson City estimated to be \$109,481 (\$14.30 rate difference x 638 customers x 12 months).
- The total recurring decrease in local revenue for Johnson City will be \$560,262 (\$450,781 water service + \$109,481 sewer service).

CERTIFICATION:

The information contained herein is true and correct to the best of my knowledge.



Lucian D. Geise, Executive Director

/jrh

Appendix C Water Rates by Utility for 5,000 Gallons

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Anderson	Clinton	Ridge and Valley and Smokies	\$18.18	\$27.31
Anderson	Norris	Ridge and Valley and Smokies	\$42.49	\$53.11
Anderson/Campbell	Lake City	Ridge and Valley and Smokies	\$33.80	\$43.00
Anderson/Morgan/Roane	Oliver Springs	Ridge and Valley and Smokies	\$19.80	\$39.00
Anderson/Roane	Oak Ridge	Ridge and Valley and Smokies	\$30.30	-
Anderson	Water Authority of Anderson County	Ridge and Valley and Smokies	-	\$45.50
Bedford	Bedford County Utility District	Nashville Basin	-	\$34.13
Bedford	Bell Buckle	Nashville Basin	\$31.11	\$43.83
Bedford	Shelbyville	Nashville Basin	\$24.30	\$33.20
Bedford	Wartrace	Nashville Basin	\$45.60	\$51.50
Benton	Harbor Utility District	Highland Rim	-	\$42.50
Benton	Big Sandy	Alluvial and Coastal Plain	\$29.48	\$44.23
Benton	Camden	Alluvial and Coastal Plain	\$17.13	\$35.21
Bledsoe	Pikeville	Cumberland Plateau	\$32.13	\$43.59
Bledsoe	Bledsoe Regional Water Authority	Cumberland Plateau	-	-
Blount	South Blount Utility District	Ridge and Valley and Smokies	-	\$44.48
Blount	Tuckaleechee Utility District	Ridge and Valley and Smokies	-	\$40.67
Blount	Alcoa	Ridge and Valley and Smokies	\$18.15	\$27.30
Blount	Friendsville	Ridge and Valley and Smokies	\$38.22	\$46.73
Blount	Maryville	Ridge and Valley and Smokies	\$17.89	\$26.89
Bradley	Cleveland	Ridge and Valley and Smokies	\$18.98	\$26.19
Campbell	Caryville-Jacksboro	Ridge and Valley and Smokies	\$31.47	\$38.79
Campbell	Jellico	Cumberland Plateau	\$27.60	\$55.20

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Campbell	LaFollette	Ridge and Valley and Smokies	\$29.59	\$49.68
Cannon	Woodbury	Highland Rim	\$18.88	\$33.50
Carroll	Cedar Grove Utility District	Alluvial and Coastal Plain	-	\$34.50
Carroll	Clarksburg Utility District	Alluvial and Coastal Plain	-	\$32.25
Carroll	Atwood	Alluvial and Coastal Plain	\$12.50	\$12.50
Carroll	Bruceston	Alluvial and Coastal Plain	\$31.60	\$37.00
Carroll	Hollow Rock	Alluvial and Coastal Plain	\$45.75	\$47.75
Carroll	Huntingdon	Alluvial and Coastal Plain	\$26.01	\$35.43
Carroll	Trezevant	Alluvial and Coastal Plain	\$16.25	-
Carroll/Henry/Weakley	McKenzie	Alluvial and Coastal Plain	\$16.54	\$21.91
Carter	First Utility District of Carter County	Ridge and Valley and Smokies	-	\$30.96
Carter	Hampton Utility District	Ridge and Valley and Smokies	-	\$30.50
Carter	Roan Mountain Utility District	Ridge and Valley and Smokies	-	\$32.00
Carter	Siam Utility District	Ridge and Valley and Smokies	-	\$41.25
Carter	South Elizabethton Utility District	Ridge and Valley and Smokies	-	\$48.30
Carter	Elizabethton	Ridge and Valley and Smokies	\$20.18	\$38.19
Carter	Watauga River Regional Water Authority	Ridge and Valley and Smokies	-	\$74.17
Cheatham	Pleasant View Utility District	Highland Rim	-	\$39.33
Cheatham	River Road Utility District	Highland Rim	-	\$59.20
Cheatham	Second South Cheatham Utility District	Highland Rim	-	\$47.60
Cheatham	Ashland City	Highland Rim	\$37.56	\$49.34
Chester	Henderson	Alluvial and Coastal Plain	\$17.51	\$29.41

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Claiborne	Arthur-Shawanee Utility District	Ridge and Valley and Smokies	-	\$39.18
Claiborne	Claiborne County Utility District	Ridge and Valley and Smokies	-	\$32.06
Claiborne	Clearfork Utility District	Ridge and Valley and Smokies	-	\$47.25
Claiborne	Cumberland Gap	Ridge and Valley and Smokies	\$36.00	\$36.00
Clay	Northwest Clay Utility District	Highland Rim	-	\$38.50
Clay	Celina	Highland Rim	\$36.88	\$36.88
Cocke	Newport	Ridge and Valley and Smokies	\$21.90	\$29.95
Coffee	Hillsville Utility District	Highland Rim	-	\$35.80
Coffee	Manchester	Highland Rim	\$19.54	\$39.08
Coffee/Franklin	Tullahoma	Highland Rim	\$19.35	\$28.25
Coffee	Coffee County Water & Wastewater Treatment Authority		-	-
Crockett	County Wide Utility District	Alluvial and Coastal Plain	-	\$30.00
Crockett	Crockett Mills Utility District	Alluvial and Coastal Plain	-	\$27.27
Crockett	Alamo	Alluvial and Coastal Plain	\$12.50	\$14.70
Crockett	Bells	Alluvial and Coastal Plain	\$17.50	-
Crockett	Friendship	Alluvial and Coastal Plain	\$27.50	\$27.50
Crockett	Maury City	Alluvial and Coastal Plain	\$31.25	\$31.25
Cumberland	Crab Orchard Utility District	Cumberland Plateau	-	\$33.69
Cumberland	South Cumberland Utility District	Cumberland Plateau	-	\$47.48
Cumberland	West Cumberland Utility District	Cumberland Plateau	-	\$65.75
Cumberland	Crossville	Cumberland Plateau	\$21.30	\$31.95

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Davidson	Harpeth Valley Utility District	Nashville Basin	-	\$20.00
Davidson	Madison Suburban Utility District of Davidson County	Nashville Basin	-	\$21.74
Davidson	Old Hickory Utility District	Nashville Basin	-	\$18.00
Davidson	Lakewood	Nashville Basin	\$23.43	-
Davidson	Nashville-Davidson	Nashville Basin	\$12.35	-
Decatur	Perryville Utility District	Highland Rim	-	\$28.00
Decatur	Decaturville	Highland Rim	\$32.56	\$42.32
Decatur	Parsons	Highland Rim	\$30.51	\$44.66
Decatur/Benton	North Utility District of Decatur and Benton Counties, TN	Highland Rim	-	\$42.00
Decatur/Henderson	Scotts Hill	Highland Rim	\$22.15	\$45.72
DeKalb	DeKalb Utility District	Highland Rim	-	\$40.15
DeKalb	DeKalb Utility District - Silver Point	Highland Rim	-	\$60.00
DeKalb	Alexandria	Nashville Basin	\$40.75	\$63.52
DeKalb	Dowelltown-Liberty	Highland Rim	\$25.72	\$25.72
DeKalb	Smithville	Highland Rim	\$17.50	\$26.25
Dickson	Water Authority of Dickson County	Highland Rim	-	\$47.20
Dickson	Vanleer	Highland Rim	\$39.00	\$47.00
Dyer	Dyersburg Suburban Utility District	Alluvial and Coastal Plain	-	\$35.40
Dyer	Northwest Dyersburg Utility District	Alluvial and Coastal Plain	-	\$25.50
Dyer	Dyersburg	Alluvial and Coastal Plain	\$23.09	\$30.46

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Dyer	Newbern	Alluvial and Coastal Plain	\$21.85	\$33.32
Dyer/Obion	Trimble	Alluvial and Coastal Plain	\$34.50	\$34.50
Fayette	Gallaway	Alluvial and Coastal Plain	\$30.00	\$40.00
Fayette	LaGrange	Alluvial and Coastal Plain	\$30.43	\$30.43
Fayette	Moscow	Alluvial and Coastal Plain	\$27.00	-
Fayette	Rossville	Alluvial and Coastal Plain	\$10.75	-
Fayette/Hardeman	Grand Junction	Alluvial and Coastal Plain	\$14.86	\$22.70
Fayette/Shelby	Collierville	Alluvial and Coastal Plain	\$13.00	\$18.38
Fentress	Fentress County Utility District	Cumberland Plateau	-	\$39.59
Fentress	Allardt	Cumberland Plateau	\$38.36	\$38.36
Fentress	Jamestown	Cumberland Plateau	\$25.76	-
Fentress/Pickett	Chanute Pall Mall Utility District	Cumberland Plateau	-	\$50.00
Franklin	Belvidere Rural Utility District	Highland Rim	-	\$39.11
Franklin	Cowan	Highland Rim	\$24.62	\$29.96
Franklin	Decherd	Highland Rim	\$23.32	\$41.73
Franklin	Estill Springs	Highland Rim	\$17.50	\$35.00
Franklin	Huntland	Highland Rim	\$24.56	\$27.11
Franklin	Winchester	Highland Rim	\$24.89	\$42.38
Franklin/Grundy/Marion	Monteagle	Cumberland Plateau	\$43.60	\$55.10
Franklin/Marion	Sewanee Utility District	Cumberland Plateau	-	\$42.64
Gibson	Gibson County Municipal Water District	Alluvial and Coastal Plain	-	\$32.29
Gibson	Bradford	Alluvial and Coastal Plain	\$31.93	-
Gibson	Dyer	Alluvial and Coastal Plain	\$15.75	\$17.75
Gibson	Gibson	Alluvial and Coastal Plain	\$20.00	\$20.00
Gibson	Milan	Alluvial and Coastal Plain	\$21.78	\$21.78

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Gibson	Rutherford	Alluvial and Coastal Plain	\$27.45	\$27.45
Gibson	Trenton	Alluvial and Coastal Plain	\$22.50	-
Gibson/Madison	Humboldt	Alluvial and Coastal Plain	\$16.50	\$21.50
Giles	Fairview Utility District	Highland Rim	-	\$42.25
Giles	Minor Hill Utility District	Highland Rim	-	\$52.37
Giles	South Giles Utility District	Highland Rim	-	\$41.75
Giles	Tarpley Shop Utility District	Highland Rim	-	\$38.50
Giles	Lynnville	Highland Rim	\$35.88	\$38.99
Giles	Pulaski	Highland Rim	\$19.77	\$27.61
Grainger	Bean Station Utility District	Ridge and Valley and Smokies	-	\$31.35
Grainger	Rutledge	Ridge and Valley and Smokies	\$32.99	\$32.99
Greene	Cross Anchor Utility District	Ridge and Valley and Smokies	-	\$39.76
Greene	Glen Hills Utility District	Ridge and Valley and Smokies	-	\$36.41
Greene	Old Knoxville Highway Utility District	Ridge and Valley and Smokies	-	\$30.15
Greene	Baileyton	Ridge and Valley and Smokies	\$41.23	-
Greene	Greeneville	Ridge and Valley and Smokies	\$12.90	\$22.12
Greene	Mosheim	Ridge and Valley and Smokies	\$21.64	\$21.64
Greene/Washington	Chuckey Utility District	Ridge and Valley and Smokies	-	\$39.77
Grundy	Big Creek Utility District	Cumberland Plateau	-	\$33.50
Grundy	Tracy City	Cumberland Plateau	\$40.46	\$44.74
Hamblen	Witt Utility District	Ridge and Valley and Smokies	-	\$45.43
Hamblen/Hawkins	Russellville-Whitesburg Utility District	Ridge and Valley and Smokies	-	\$32.70
Hamblen/Jefferson	Morristown	Ridge and Valley and Smokies	\$14.90	\$25.15
Hamblen/Jefferson	White Pine	Ridge and Valley and Smokies	\$18.96	\$27.62
Hamblen/Jefferson	Alpha-Talbott Utility District	Ridge and Valley and Smokies	-	\$32.25

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Hamilton	Eastside Utility District	Ridge and Valley and Smokies	-	\$26.16
Hamilton	Hixson Utility District	Ridge and Valley and Smokies	-	\$17.93
Hamilton	Lone Oak Utility District	Ridge and Valley and Smokies	-	\$47.14
Hamilton	Mowbray Utility District	Ridge and Valley and Smokies	-	\$44.33
Hamilton	Sale Creek Utility District	Ridge and Valley and Smokies	-	\$43.48
Hamilton	Savannah Valley Utility District	Ridge and Valley and Smokies	-	\$30.75
Hamilton	Soddy-Daisy-Falling Water Utility District	Ridge and Valley and Smokies	-	\$30.85
Hamilton	Union Fork-Bakewell Utility District	Ridge and Valley and Smokies	-	\$26.25
Hamilton	Walden's Ridge Utility District	Ridge and Valley and Smokies	-	\$39.40
Hamilton	Signal Mountain	Ridge and Valley and Smokies	\$22.60	\$28.89
Hancock	Sneedville Utility District	Ridge and Valley and Smokies	-	\$52.41
Hardeman	Spring Creek Utility District of Hardeman County	Alluvial and Coastal Plain	-	\$31.42
Hardeman	Bolivar	Alluvial and Coastal Plain	\$13.27	\$19.86
Hardeman	Hornsby	Alluvial and Coastal Plain	\$25.25	\$27.75
Hardeman	Middleton	Alluvial and Coastal Plain	\$19.75	\$28.35
Hardeman	Toone	Alluvial and Coastal Plain	\$20.00	\$21.00
Hardeman	Whiteville	Alluvial and Coastal Plain	\$16.55	\$16.55
Hardin	First Utility District of Hardin County	Highland Rim	-	\$30.42
Hardin	Saltillo Utility District	Highland Rim	-	\$13.80
Hardin	Savannah	Highland Rim	\$16.68	\$29.72
Hardin/McNairy	Adamsville	Highland Rim	\$29.72	\$31.24
Hawkins/Sullivan	Kingsport	Ridge and Valley and Smokies	\$11.71	\$31.59

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Hawkins	First Utility District of Hawkins County	Ridge and Valley and Smokies	-	\$35.16
Hawkins	Lakeview Utility District	Ridge and Valley and Smokies	-	\$60.20
Hawkins	Mid-Hawkins County Utility District	Ridge and Valley and Smokies	-	\$46.18
Hawkins	Mooresburg Utility District	Ridge and Valley and Smokies	-	\$45.00
Hawkins	New Canton Utility District	Ridge and Valley and Smokies	-	\$44.60
Hawkins	Persia Utility District	Ridge and Valley and Smokies	-	\$48.50
Hawkins	Striggersville Utility District	Ridge and Valley and Smokies	-	\$59.00
Hawkins	Surgoinsville Utility District	Ridge and Valley and Smokies	-	\$28.50
Hawkins	Rogersville	Ridge and Valley and Smokies	\$27.01	\$44.50
Haywood	Brownsville	Alluvial and Coastal Plain	\$13.96	\$22.16
Haywood	Stanton	Alluvial and Coastal Plain	\$14.87	\$17.77
Henderson	Lexington	Alluvial and Coastal Plain	\$18.50	\$31.50
Henderson	Sardis	Alluvial and Coastal Plain	\$21.00	\$24.00
Henry	Northeast Henry County Public Utility District	Alluvial and Coastal Plain	-	\$33.51
Henry	Northwest Henry Utility District	Alluvial and Coastal Plain	-	\$49.32
Henry	Henry	Alluvial and Coastal Plain	\$35.63	\$42.51
Henry	Paris	Alluvial and Coastal Plain	\$17.33	\$26.00
Henry	Puryear	Alluvial and Coastal Plain	\$19.95	\$29.94
Hickman	Bon Aqua-Lyles Utility District	Highland Rim	-	\$55.57
Hickman	Centerville	Highland Rim	\$27.88	\$50.62
Houston	Erin	Highland Rim	\$22.48	\$34.28
Houston/Stewart	Tennessee Ridge	Highland Rim	\$28.46	\$36.60
Humphreys	McEwen	Highland Rim	\$22.00	\$36.00

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Humphreys	New Johnsonville	Highland Rim	\$18.00	\$25.35
Humphreys	Waverly	Highland Rim	\$34.30	\$54.50
Jackson	Jackson County Utility District	Highland Rim	-	\$46.13
Jackson	Gainesboro	Highland Rim	\$28.99	\$36.66
Jefferson	New Market Utility District	Ridge and Valley and Smokies	-	\$43.40
Jefferson	Shady Grove Utility District	Ridge and Valley and Smokies	-	\$39.25
Jefferson	Dandridge	Ridge and Valley and Smokies	\$24.08	\$40.72
Jefferson	Jefferson City	Ridge and Valley and Smokies	\$15.01	\$41.43
Johnson	Brownlow Utility District	Ridge and Valley and Smokies	-	\$47.50
Johnson	Carderview Utility District	Ridge and Valley and Smokies	-	\$43.66
Johnson	Cold Springs Utility District	Ridge and Valley and Smokies	-	\$67.93
Johnson	Dry Run Utility District	Ridge and Valley and Smokies	-	\$56.00
Johnson	Mountain City	Ridge and Valley and Smokies	\$23.30	\$42.21
Knox	Copper Basin Utility District	Ridge and Valley and Smokies	-	\$47.58
Knox	County	Ridge and Valley and Smokies	-	\$17.59
Knox	Hallsdale-Powell Utility District	Ridge and Valley and Smokies	-	\$46.18
Knox	Knox-Chapman Utility District	Ridge and Valley and Smokies	-	\$41.71
Knox	Northeast Knox Utility District	Ridge and Valley and Smokies	-	\$30.03
Knox	West Knox Utility District	Ridge and Valley and Smokies	-	\$24.14
Knox	Knoxville	Ridge and Valley and Smokies	\$19.47	\$25.99
Lake	Reelfoot Utility District	Alluvial and Coastal Plain	-	\$25.10
Lake	Ridgely	Alluvial and Coastal Plain	\$24.05	\$36.58
Lake	Tiptonville	Alluvial and Coastal Plain	\$29.95	\$29.95
Lauderdale	Gates	Alluvial and Coastal Plain	\$22.13	-
Lauderdale	Halls	Alluvial and Coastal Plain	\$14.42	\$16.47
Lauderdale	Henning	Alluvial and Coastal Plain	\$30.61	\$32.14

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Lauderdale	Ripley	Alluvial and Coastal Plain	\$16.37	\$16.37
Lawrence	Fall River Utility District	Highland Rim	-	\$49.75
Lawrence	Leoma Utility District	Highland Rim	-	\$22.00
Lawrence	Northeast Lawrence Utility District	Highland Rim	-	\$44.75
Lawrence	Summertown Utility District	Highland Rim	-	\$32.00
Lawrence	West Point Utility District	Highland Rim	-	\$36.50
Lawrence	Lawrenceburg	Highland Rim	\$36.13	\$51.21
Lawrence	Loretto	Highland Rim	\$23.90	\$23.90
Lawrence	Saint Joseph	Highland Rim	\$14.00	\$20.89
Lawrence/Wayne	Iron City Utility District	Highland Rim	-	\$56.40
Lewis	Hohenwald	Highland Rim	\$21.68	\$42.02
Lincoln	Fayetteville	Highland Rim	\$31.24	\$40.61
Lincoln/Marshall	Petersburg	Highland Rim	\$40.21	\$59.53
Lincoln	Lincoln County BPU	Highland Rim	-	\$40.07
Loudon	Martel Utility District	Ridge and Valley and Smokies	-	\$36.00
Loudon	Lenoir City	Ridge and Valley and Smokies	\$27.70	\$27.70
Loudon	Loudon	Ridge and Valley and Smokies	\$21.65	\$28.00
Macon	Lafayette	Highland Rim	\$23.07	\$46.16
Macon	Red Boiling Springs	Highland Rim	\$22.39	\$32.35
Madison	Jackson	Alluvial and Coastal Plain	\$21.84	\$31.57
Marion	Foster Falls Utility District	Cumberland Plateau	-	\$57.75
Marion	Griffith Creek Utility District	Cumberland Plateau	-	\$77.76
Marion	Jasper	Cumberland Plateau	\$13.10	\$26.25
Marion	South Pittsburg	Cumberland Plateau	\$14.73	\$22.04
Marion	Whitwell	Cumberland Plateau	\$34.61	\$40.43
Marshall	Horton Highway Utility District	Nashville Basin	-	\$15.75

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Marshall	Chapel Hill	Nashville Basin	\$29.15	\$29.15
Marshall	Lewisburg	Nashville Basin	\$21.66	\$30.88
Marshall	Marshall County BPU	Nashville Basin	-	\$47.20
Maury	Columbia	Nashville Basin	\$20.00	\$27.75
Maury	Mount Pleasant	Nashville Basin	\$20.78	\$27.27
Maury	Maury County BPU	Nashville Basin	-	\$39.50
Maury/Williamson	Spring Hill	Nashville Basin	\$20.87	\$29.54
McMinn	Riceville Utility District	Ridge and Valley and Smokies	-	\$36.13
McMinn	Athens	Ridge and Valley and Smokies	\$23.00	\$24.00
McMinn	Englewood	Ridge and Valley and Smokies	\$20.56	\$41.12
McMinn	Etowah	Ridge and Valley and Smokies	\$25.80	\$34.48
McMinn	Niota	Ridge and Valley and Smokies	\$21.45	\$29.48
McMinn/Bradley	Calhoun-Charleston Utility District	Ridge and Valley and Smokies	-	\$34.65
McMinn/Monroe	Sweetwater	Ridge and Valley and Smokies	\$20.02	\$30.00
McNairy	Bethel Springs	Alluvial and Coastal Plain	\$46.00	\$46.00
McNairy	Michie	Alluvial and Coastal Plain	\$27.40	\$29.90
McNairy	Ramer	Alluvial and Coastal Plain	\$23.65	-
McNairy	Selmer	Alluvial and Coastal Plain	\$14.41	\$26.54
Meigs	Decatur	Ridge and Valley and Smokies	\$25.70	\$30.80
Monroe	Sylvia-Tennessee City-Pond Utility District	Ridge and Valley and Smokies	-	\$51.29
Monroe	Madisonville	Ridge and Valley and Smokies	\$31.14	\$51.60
Monroe	Tellico Plains	Ridge and Valley and Smokies	\$17.00	\$25.00
Montgomery	Cumberland Heights Utility District	Highland Rim	-	\$49.79
Montgomery	Cunningham Utility District	Highland Rim	-	\$35.00

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Montgomery	East Montgomery Utility District	Highland Rim	-	\$32.25
Montgomery	Woodlawn Utility District	Highland Rim	-	\$52.28
Montgomery	Clarksville	Highland Rim	\$20.70	\$38.40
Morgan	Plateau Utility District	Cumberland Plateau	-	\$48.50
Morgan	Sunbright Utility District	Cumberland Plateau	-	\$53.77
Morgan/Roane	Harriman	Cumberland Plateau	\$38.06	\$46.47
	Center Grove-Winchester			
Obion	Springs Utility District	Alluvial and Coastal Plain	-	\$28.75
Obion	Hornbeak Utility District	Alluvial and Coastal Plain	-	\$28.80
Obion	Samburg Utility District	Alluvial and Coastal Plain	-	\$51.00
Obion	Obion	Alluvial and Coastal Plain	\$24.50	\$48.29
Obion	South Fulton	Alluvial and Coastal Plain	\$10.80	\$16.20
Obion	Troy	Alluvial and Coastal Plain	\$22.67	\$33.95
Obion	Union City	Alluvial and Coastal Plain	\$14.50	\$25.35
Overton	East Fork Utility District	Cumberland Plateau	-	\$53.00
Overton	North Overton Utility District	Highland Rim	-	\$37.30
Overton	West Overton Utility District	Highland Rim	-	\$43.88
Overton	Livingston	Highland Rim	\$30.44	\$51.88
Perry	Linden	Highland Rim	\$19.81	\$39.61
Perry	Lobelville	Highland Rim	\$18.92	\$28.48
Pickett	Byrdstown	Cumberland Plateau	\$24.43	\$46.68
Polk	Cherokee Hills Utility District	Ridge and Valley and Smokies	-	\$25.00
Polk	Ocoee Utility District	Ridge and Valley and Smokies	-	\$29.00
Polk	Benton	Ridge and Valley and Smokies	\$26.99	\$29.90
Polk	Copperhill	Ridge and Valley and Smokies	\$35.40	\$46.80
Putnam	Bangham Utility District	Highland Rim	-	\$27.70

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Putnam	Cookeville Boat Dock Road Utility District	Highland Rim	-	\$40.69
Putnam	Double Springs Utility District	Highland Rim	-	\$37.37
Putnam	Old Gainesboro Road Utility District	Highland Rim	-	\$37.40
Putnam	Algood	Highland Rim	\$20.97	\$27.29
Putnam	Baxter	Highland Rim	\$33.75	\$47.24
Putnam	Cookeville	Highland Rim	\$18.89	\$28.19
Putnam	Monterey	Cumberland Plateau	\$22.81	\$47.71
Rhea	Grandview Utility District	Ridge and Valley and Smokies	-	\$38.60
Rhea	North Utility District of Rhea County	Ridge and Valley and Smokies	-	\$46.25
Rhea	Dayton	Ridge and Valley and Smokies	\$19.57	\$26.98
Rhea	Graysville	Ridge and Valley and Smokies	\$25.33	\$38.77
Rhea	Spring City	Ridge and Valley and Smokies	\$39.42	\$51.66
Roane	Roane Central Utility District	Ridge and Valley and Smokies	-	\$56.17
Roane	Watts Bar Utility District	Ridge and Valley and Smokies	-	\$49.75
Roane	Kingston	Ridge and Valley and Smokies	\$32.24	\$60.78
Roane	Rockwood	Ridge and Valley and Smokies	\$22.69	\$34.00
Roane/Morgan	Cumberland Utility District of Roane and Morgan Counties	Ridge and Valley and Smokies	-	\$52.67
Robertson	Adams-Cedar Hill	Highland Rim	\$41.50	\$47.50
Robertson	Greenbrier	Highland Rim	\$24.27	\$28.12
Robertson	Springfield	Highland Rim	\$21.59	\$32.18
Robertson, Sumner	White House Utility District	Highland Rim	-	\$38.98
Robertson/Sumner	Portland	Highland Rim	\$22.47	\$51.67

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Rutherford	Consolidated Utility District of Rutherford County	Nashville Basin	-	\$41.09
Rutherford	LaVergne	Nashville Basin	\$24.35	\$29.80
Rutherford	Murfreesboro	Nashville Basin	\$21.92	\$32.88
Rutherford	Smyrna	Nashville Basin	\$17.10	\$23.00
Scott	Huntsville Utility District	Cumberland Plateau	-	\$39.04
Scott	Oneida	Cumberland Plateau	\$25.76	\$38.78
Sequatchie	Cagle-Fredonia Utility District	Cumberland Plateau	-	\$48.44
Sequatchie	Dunlap	Cumberland Plateau	\$28.30	\$51.50
Sevier	East Sevier County Utility District	Ridge and Valley and Smokies	-	\$26.75
Sevier	Webb Creek Utility District	Ridge and Valley and Smokies	-	\$60.24
Sevier	Gatlinburg	Ridge and Valley and Smokies	\$15.88	\$19.85
Sevier	Pigeon Forge	Ridge and Valley and Smokies	\$28.00	\$41.20
Sevier	Sevierville	Ridge and Valley and Smokies	\$23.39	\$46.85
Shelby	Bartlett	Alluvial and Coastal Plain	\$11.20	\$16.80
Shelby	Germantown	Alluvial and Coastal Plain	\$6.75	-
Shelby	Memphis	Alluvial and Coastal Plain	\$13.60	\$20.15
Shelby	Millington	Alluvial and Coastal Plain	\$20.05	-
Smith	Cordell Hull Utility District	Highland Rim	-	\$70.00
Smith	Smith Utility District	Nashville Basin	-	\$33.40
Smith	South Side Utility District	Nashville Basin	-	\$45.25
Smith	Twenty Five Utility District	Nashville Basin	-	\$50.71
Smith	Carthage	Nashville Basin	\$20.48	\$26.87
Stewart	North Stewart Utility District	Highland Rim	-	\$41.44
Stewart	Cumberland City	Highland Rim	\$30.25	\$46.50
Stewart	Dover	Highland Rim	\$31.10	\$60.80

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Sullivan	Bloomington Utility District	Ridge and Valley and Smokies	-	\$26.40
Sullivan	Blountville Utility District	Ridge and Valley and Smokies	-	\$29.00
Sullivan	Bristol-Bluff City Suburban Utility District	Ridge and Valley and Smokies	-	\$40.65
Sullivan	Holston Utility District	Ridge and Valley and Smokies	-	\$44.45
Sullivan	Intermont Utility District	Ridge and Valley and Smokies	-	\$40.80
Sullivan	South Bristol-Weaver Pike Utility District	Ridge and Valley and Smokies	-	\$40.80
Sullivan	Bluff City	Ridge and Valley and Smokies	\$32.47	\$55.15
Sullivan	Bristol	Ridge and Valley and Smokies	\$18.70	\$37.40
Sumner	Castalian Springs-Bethpage Utility District	Nashville Basin	-	\$45.05
Sumner	Hendersonville Utility District	Nashville Basin	-	\$20.85
Sumner	Gallatin	Nashville Basin	\$24.19	\$27.16
Sumner	Westmoreland	Highland Rim	\$37.60	\$56.39
Tipton	First Utility District of Tipton County	Alluvial and Coastal Plain	-	\$23.00
Tipton	Poplar Grove Utility District	Alluvial and Coastal Plain	-	\$22.50
Tipton	Atoka	Alluvial and Coastal Plain	\$24.00	\$31.68
Tipton	Covington	Alluvial and Coastal Plain	\$25.24	\$34.49
Tipton	Mason	Alluvial and Coastal Plain	\$21.50	\$33.75
Tipton	Munford	Alluvial and Coastal Plain	\$11.25	\$16.20
Unicoi	Unicoi Water Utility District	Ridge and Valley and Smokies	-	\$37.83
Unicoi	Erwin	Ridge and Valley and Smokies	\$16.86	\$25.29
Union	Luttrell-Blaine-Corryton Utility District	Ridge and Valley and Smokies	-	\$31.69
Union	Maynardville	Ridge and Valley and Smokies	\$37.95	\$56.96

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Van Buren	Spencer	Cumberland Plateau	\$10.25	\$13.00
Van Buren/Bledsoe	Fall Creek Falls Utility District	Cumberland Plateau	-	\$24.20
Warren	Warren County Utility District	Highland Rim	-	\$33.00
Warren	West Warren-Viola Utility District	Highland Rim	-	\$43.00
Warren	McMinnville	Highland Rim	\$23.95	\$36.45
Washington	Jonesborough	Ridge and Valley and Smokies	\$27.50	\$46.90
Washington/Carter/Sullivan	Johnson City	Ridge and Valley and Smokies	\$19.31	\$38.62
Wayne	Clifton	Highland Rim	\$20.90	\$41.75
Wayne	Waynesboro	Highland Rim	\$28.78	\$57.56
Weakley	Dresden	Alluvial and Coastal Plain	\$13.70	\$36.17
Weakley	Gleason	Alluvial and Coastal Plain	\$23.10	-
Weakley	Greenfield	Alluvial and Coastal Plain	\$12.00	\$16.00
Weakley	Martin	Alluvial and Coastal Plain	\$16.81	\$33.62
Weakley	Sharon	Alluvial and Coastal Plain	\$16.11	\$16.11
White	Bon De Croft Utility District	Cumberland Plateau	-	\$50.50
White	O'Connor Utility District	Highland Rim	-	\$41.00
White	Quebeck-Walling Utility District	Highland Rim	-	\$44.40
White	Sparta	Highland Rim	\$22.92	\$32.88
White/DeKalb	Dewwhite Utility District	Highland Rim	-	\$44.00
Williamson	H.B. and T.S. Utility District	Nashville Basin	-	\$44.79
Williamson	Mallory Valley Utility District	Nashville Basin	-	\$22.50
Williamson	Milcrofton Utility District	Nashville Basin	-	\$45.90
Williamson	Nolensville-College Grove Utility District	Nashville Basin	-	\$30.41
Williamson	Brentwood	Nashville Basin	\$23.83	\$23.83

County	Water System	Region	Cost of 5,000 Gallons	
			Inside	Outside
Williamson	Franklin	Nashville Basin	\$26.54	\$37.28
Wilson	Gladeville Utility District	Nashville Basin	-	\$46.60
Wilson	Laguardo Utility District	Nashville Basin	-	\$44.76
Wilson	West Wilson Utility District	Nashville Basin	-	\$51.49
Wilson	Lebanon Water and Wastewater Authority of Wilson County	Nashville Basin	\$33.62	\$50.20
Wilson	Watertown	Nashville Basin	-	56.65
Wilson		Nashville Basin	\$35.24	\$52.87