

South Florida Water Management District

2022 Utility Rate Survey

Rosinés Colón Ortega

Water Supply Bureau

South Florida Water Management District



sfwmd.gov

The South Florida Water Management District is a regional governmental agency that manages the water resources in the southern half of the state, covering 16 counties from Orlando to the Florida Keys and serving a population of 9 million residents. It is the oldest and largest of the state's five water management districts. Created in 1949, the agency is responsible for managing and protecting water resources of South Florida by balancing and improving flood control, water supply, water quality, and natural systems. Our mission is to safeguard and restore South Florida's water resources and ecosystems, protect our communities from flooding, and meet the region's water needs while connecting with the public and stakeholders.

TABLE OF CONTENTS

Introduction..... 1

Water Conservation 2

Water Conservation Rate Structure Considerations..... 2

Goals of Water Conservation Rate Structures 3

Water Rate Structures 4

 Flat Rate..... 4

 Decreasing (or Declining) Block Rate 4

 Uniform Rate 4

 Increasing (or Inclining) Block Rate..... 4

 Water Budgets..... 5

Impacts of Base Fees and Tier Spacing 5

Water Rate Structure Resources 6

SFWMD’s 2022 Utility Rate Survey 7

 Utility Base Fees in the SFWMD 8

 Water Pricing Structures in the SFWMD 10

 Costs to Customers in the SFWMD..... 10

Price Signaling Efficacy 12

Comparing Regional and State Averages 12

Conclusion 14

Resources for Utilities..... 14

References..... 15

Appendix..... A-1

LIST OF TABLES

Table 1. Comparison of the effective rates of two rate structures.....	5
Table 2. Distribution of sewer billing caps within the SFWMD.....	6
Table 3. Complementary utility service pairings used to calculate costs residential users are charged in the figures in the appendix of this survey.....	7
Table 4. Distribution of all rate structure types used by utilities within the SFWMD.....	10

LIST OF FIGURES

Figure 1. South Florida Water Management District.....	1
Figure 2. The number of utilities within each range of monthly water base fees.....	8
Figure 3. The number of utilities within each range of monthly wastewater base fees.....	9
Figure 4. The number of utilities within each range of monthly water and wastewater combined base fees.....	9
Figure 5. Range of monthly residential water bills (including fees and taxes) for water (top) as well as water and wastewater services combined (bottom) for three levels of water use.....	11
Figure 6. Average monthly water bills (water only) by water supply planning area for three levels of water use.....	12
Figure 7. Average monthly water and wastewater bills (combined) by water supply planning area for three levels of water use.....	13
Figure 8. Total average monthly bills for water (left) as well as water and wastewater combined (right) within the SFWMD's boundaries and statewide (Statewide data from Raftelis Financial Consultants 2022).....	13

INTRODUCTION

In mid-2022, the South Florida Water Management District (SFWMD or District) reviewed the water and wastewater rates of 97 utilities within the District boundaries (**Figure 1**). Rate structures are set by individual water service providers and vary widely in complexity and cost, reflecting differences in water supply sources, treatment processes, infrastructure, debt service, and other factors. Through economic incentivization, a well-designed rate structure can encourage efficient water usage. This survey inventories the region’s utilities use of rate structures and documents the pricing of water within the District.

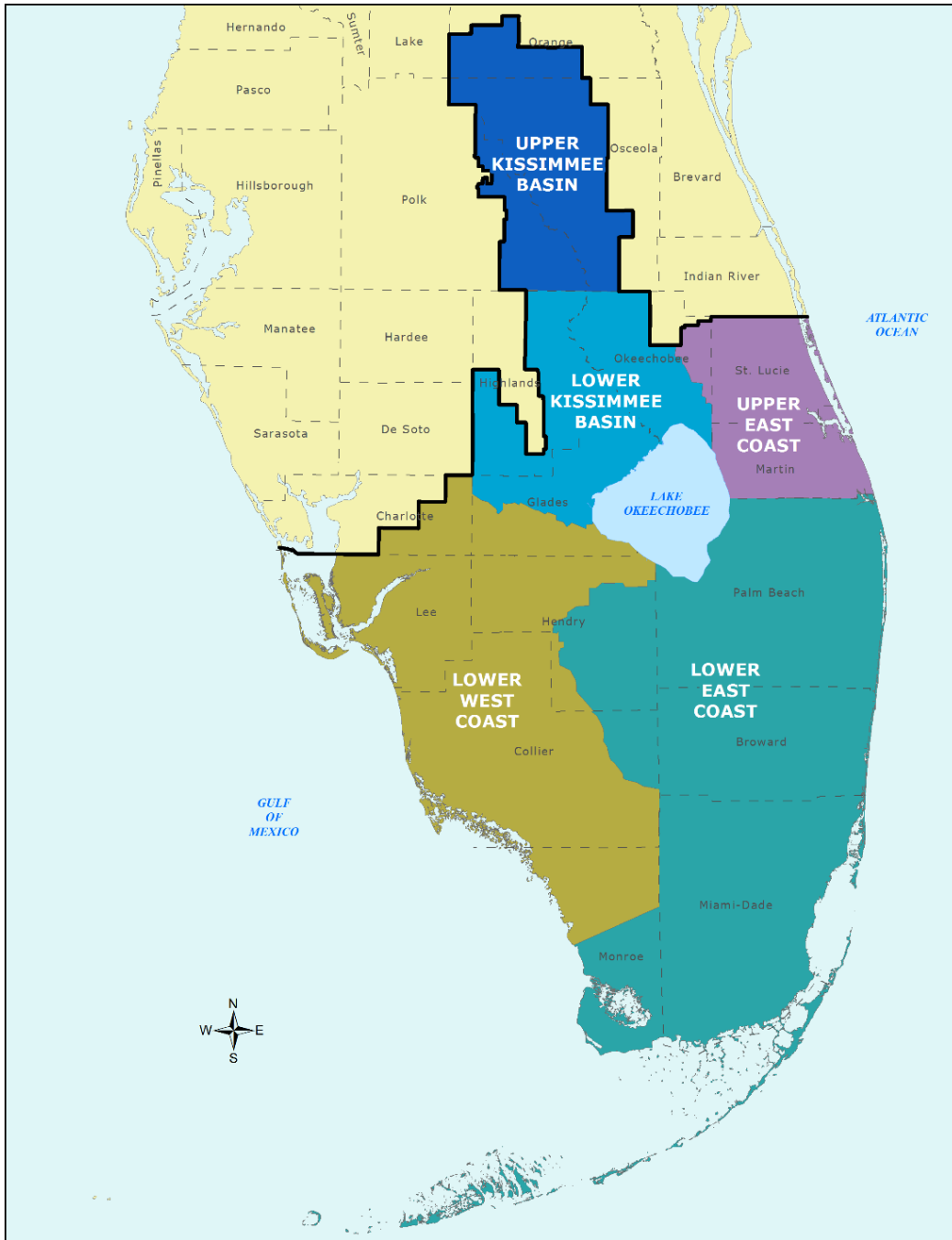


Figure 1. South Florida Water Management District.

WATER CONSERVATION

In many areas of South Florida, water supplies are stressed as population growth fuels higher demands for water. While these demands can be met through development of non-traditional water supply sources such as brackish, ocean, or reclaimed water, those alternatives are costlier and impose greater impacts on the environment than reducing demands via water conservation. Therefore, conservation strategies should be part of local and regional planning efforts to meet future demands for water. While all water use classes are encouraged to do their part to conserve South Florida's natural resources, public water supply is the largest and fastest growing water use class and are of particular interest to the District because of their potential to save water.

To obtain a water use permit from the SFWMD, public water supply utilities must develop and submit a water conservation plan. One of the five elements required for the standard water conservation plan is a rate structure designed to, "promote the efficient use of water by providing economic incentives. The rate structures may include, but not be limited to, increasing block rates, seasonal rates, quantity-based surcharges, and/or time of day pricing as a means of reducing demands" (SFWMD 2021). As part of the permit application process, the utility must explain how the proposed plan and rate structure will effectively promote water conservation.

WATER CONSERVATION RATE STRUCTURE CONSIDERATIONS

Promoting the efficient use of water (i.e., water conservation) can be achieved by setting rates and rate structures that successfully influence consumers to lower their water consumption. According to general economic theory, the quantity demanded of a commodity decreases as the price increases. This effect, as pertaining to water rates and subsequent water use behavior, is widely recognized and has been verified through empirical data (Whitcomb 2005, Equinox Center 2009, Baerenklau et al. 2013, Tiger et al. 2014).

Creating a rate structure that balances reducing demand while maintaining the utility's financial integrity is a complex process with many factors to consider. Generating revenue to maintain, upgrade, and sometimes expand a utility's existing system can be at odds with water conservation as operational costs and other financial considerations must be met while selling less of the service that provides revenue. In addition, rates must be kept low enough that water for basic needs is affordable for low-income residents.

Utilities should consider the following factors when developing a water conservation rate structure (Tiger et al. 2014):

- Fixed operating expenses (detailed below)
- Costs of replacing older infrastructure
- Costs of expanding treatment and distribution capacity to meet future population growth
- Service area demographic trends (e.g., level of affluence)
- Passive water use reductions (from the increased use of more efficient water-using appliances and water efficiency building codes)
- Weather-related water shortage events

For readers less familiar with the expenses utilities incur during standard operations, consider the expenses listed below.

For Utilities Providing Potable Water Service

- Collecting and pumping water from its original source to the treatment plant
- Treating (purifying) water to meet drinking water standards, the cost of which varies depending on source (e.g., brackish versus fresh groundwater)
- Disposing of concentrate or byproduct water resulting from the treatment process
- Distributing treated water to end users (homes and businesses)
- Monitoring and analytical testing as well as leak detection and repair
- Infrastructure maintenance and repair

For Utilities Providing Wastewater Treatment Service

- Collecting wastewater and pumping it to the wastewater treatment facility
- Treating wastewater before final disposal
- Disposing of or reusing treated wastewater (which may include pumping and other costs)
- Infrastructure maintenance and repair

Note: Most utilities in South Florida offer both potable and wastewater services.

Consumer behavior must also be considered when creating a realistic and effective water conservation rate structure. There are two main behavioral factors that should be considered: 1) the time it takes for consumer behavior to respond to a change, and 2) the willingness of consumers to pay more for additional water. Whitcomb (2005) estimated that consumer water use behavior takes 2 to 3 years to respond to changes in water rates. However, once those water use habits adjust, they tend to endure long term (Whitcomb 2005, Equinox Center 2009). The willingness of consumers to pay more is an important factor to the utility's ability to continue generating revenue needed to cover the costs described above while providing less water to its service area. Baerenklau et al. (2013) and Tiger et al. (2014) showed a utility can reduce demand overall while remaining revenue neutral, in part because of the subset of consumers willing to pay more for additional water.

GOALS OF WATER CONSERVATION RATE STRUCTURES

The primary goal of a utility's water rate structure is to generate revenue needed to continue providing water supply services. When developing a rate structure that encourages water conservation, that goal expands to include the following objectives:

- Reduce per capita use, overall demand, or peak demand.
- Financially reward customers for making investments in water-efficient fixtures, technologies, and behaviors.
- Curb discretionary water uses such as excessive landscape irrigation.
- Delay the need, through reduced demand, for costly water supply expansion project.
- Avoid the imposition of financial hardships on low-income customers.

WATER RATE STRUCTURES

A typical water bill consists of a fixed monthly base fee and volumetric, or consumption, charges. The base fee can include a customer service charge, a ready-to-serve charge, utility taxes, and other fees that remain the same month to month regardless of consumption. The volumetric charge is based on the amount of water used and is typically billed in 1,000-gallon increments.

These two components can be structured to maximize water conservation while maintaining revenue stability for the utility. For example, the price of water at lower levels of use could be reduced and the price for higher volume tiers increased. A well-designed rate structure keeps costs low for the average volume of water required for basic household needs, while charging substantially more for discretionary or excessive use, thus encouraging water conservation. Commonly implemented water rate structures include flat, decreasing block, uniform, increasing block, and water budgets. Some utilities also employ seasonal rates when experiencing peak demands (e.g., during warmer weather when lawns and landscapes require the most water or when populations temporarily increase); however, there appear to be no utilities applying seasonal rates in the District. The number of utilities that have implemented the various types of rate structures is inventoried later in this report.

Flat Rate

In a flat rate structure, the same fee is charged to all users regardless of the amount of water used. The price per unit of water is not a factor. A flat rate commonly is charged in systems where customers do not have monitored water meters. The flat rate structure is considered an ineffective means for promoting water conservation.

Decreasing (or Declining) Block Rate

In a decreasing block rate structure, the price per unit of water decreases as consumption increases. This rate structure is beneficial to customers who use excessive amounts of water. Decreasing block rates do not encourage water conservation and are not in accordance with SFWMD requirements under the standard conservation plan for a "...rate structure designed to promote the efficient use of water by providing economic incentives."

Uniform Rate

In a uniform rate structure, the price per unit of water is kept constant regardless of consumption. This rate structure can moderately encourage conservation as the cost of water is directly proportional to the amount of water used. However, because uniform rates have limited conservation effectiveness, the SFWMD discourages their use.

Increasing (or Inclining) Block Rate

With an increasing block rate structure, the price per unit of water increases as consumption increases. In other words, the more water a customer uses, the higher the cost per unit. Typically, the cost per unit increases incrementally and the rate structure will have between two and six tiers. An increasing block rate structure is more effective at promoting water conservation if the cost difference between tiers is substantial and the volumes between tiers are not too far apart to send the desired signals to the user. The SFWMD encourages all utilities to adopt an increasing block rate structure with multiple, reasonably spaced tiers that substantially increase in cost as customer water use increases.

Water Budgets

A water budget is a relatively new type of rate structure that is being used where water resources are notably stressed (e.g., California). This structure establishes water use budgets for individual properties based on the number of persons per household, lot size or landscape square footage, seasonal weather variability, estimates of indoor use (per person or per home), historical use, or a combination of the above. A water budget structure has lower costs for customers who use less than their water budget and has higher punitive costs for customers who exceed their budget. This is considered an effective structure to promote water conservation, depending on the costs applied within the structure.

IMPACTS OF BASE FEES AND TIER SPACING

Base fees, service fees, and other fixed monthly charges influence water use behavior due to their impact on the overall cost of water. Typically, higher base fees provide a utility with greater revenue stability, but also reduce the utility’s ability to incentivize conservation through consumption tiers (Walton 2017). Conversely, when base fees are low, a greater portion of a utility’s fixed costs must be paid for by consumption-derived revenue, which can be detrimental to the utility’s financial stability during unforeseeable events such as droughts, recessions, or long-term wet weather. In general, the greater the ratio of variable to fixed revenue, the greater the conservation incentive (Tiger et al. 2014).

The effectiveness of a water-conserving rate structure depends on the structure’s design. Increasing block rate structures are intended to discourage excessive water use through price controls. By making the water in higher tiers increasingly expensive, residents are encouraged to conserve to avoid buying water at higher prices. Whitcomb (2005) noted that when costs are low for lower tiers of water use and charges increase for higher tiers, utilities can effectively send price signals to high water users while maintaining revenue neutrality. However, the increasing block rate structure is less likely to promote water conservation if the number of tiers is small and/or the price at each tier is low and increases only slightly between tiers.

Table 1 presents the effective rates per 1,000-gallons of use for two hypothetical utilities with differing rate structures. The effective rate is the amount of money paid for each Kgal (1,000 gallons) and is calculated by dividing the water portion of the utility bill by the total Kgal consumed.

Table 1. Comparison of the effective rates of two rate structures.

Base Charge	Tiers (gal)	Volumetric Charge	4,000 gal		12,000 gal	
			Bill	Effective rate per Kgal ^a	Bill	Effective rate per Kgal ^b
Utility 1						
\$30.00	0–10,000	\$1.00	\$34.00	\$8.50	\$42.50	\$3.54
	10,001–20,000	\$1.25				
	20,001–40,000	\$1.60				
	>40,001	\$1.90				
Utility 2						
\$5.35	0–2,000	\$0.50	\$9.75	\$2.44	\$37.20	\$3.10
	2,001–5,000	\$1.70				
	5,001–10,000	\$3.15				
	10,001–20,000	\$5.00				
	>20,001	\$7.50				

^a Total bill cost for 4,000 gallons divided by 4.

^b Total bill cost for 12,000 gallons divided by 12.

In this hypothetical scenario, both utilities have increasing block rates. However, once the base fees are factored in, customers of Utility No.1 that use 12,000 gal per month are paying less per 1,000 gal (Kgal) of water (i.e., \$3.54 per Kgal) than customers using only 4,000 gal of water per month (\$8.50 per Kgal). Furthermore, the total difference between the bill for 4,000 gal and the bill for 12,000 gal is only \$8.50, even though one customer uses three times more water than the other. The high base charges, combined with larger tiers and small price increases, cause the average cost per unit (Kgal) to be less for the higher users, making the rate for Utility No. 1 less effective in promoting water conservation.

In contrast, the rate for Utility No.2 uses a lower base charge, smaller tiers, and more significant price increases to affect the amount paid by high users. In this case, customers using 4,000 gal of water are only paying \$2.44 per Kgal, and customers using 12,000 gal are paying \$3.10 per Kgal. The customers that use 12,000 gal pay almost four times more in their total bill (\$37.20) than the customers using 4,000 gal (\$9.75).

Many utilities provide wastewater and water services. Wastewater fees typically are based on the volume of potable water consumed because a household’s wastewater return flows usually are not metered. It is common for utilities to cap sewer fees. Within the District, 49 utilities have a billing cap for sewer fees. **Table 2** presents the distribution of billing caps for sewer service providers in the District. Typically, charges for water and sewer services are combined into one monthly bill. This practice can interfere with the conservation message being sent by the water use rate.

Table 2. Distribution of sewer billing caps within the SFWMD.

Cap for sewer fees (gal/month)	Number of utilities
20,000	2
16,000	2
15,000	7
14,000	2
12,000	6
11,000	1
10,000	18
9,000	1
8,000	6
7,000	1
6,000	3
Total	49

WATER RATE STRUCTURE RESOURCES

There is no one-size-fits-all approach for setting rate structures to achieve water conservation goals and maintain financial stability. It is important to consider a variety of factors when selecting a rate structure, including priority objectives, service area characteristics, and customer values and demographics (Chesnutt et al. 2014). Furthermore, rates and rate structures should be reassessed annually and adjusted for utility objectives and progress (Tiger et al. 2014). Fortunately, there are guidance documents and tools available to utilities to assist in designing rates and rate structures that will balance a utility’s multiple objectives. Please refer to the Resources for Utilities section on Page 14 for more information.

SFWMD'S 2022 UTILITY RATE SURVEY

Water use rates for single-family residential users (i.e., smallest meter connection) from 97 water service providers within the SFWMD were compiled during the fall of 2022 from posted information on utility websites and/or municipal ordinances. If rates could not be located online, the utility was contacted directly by phone or email. If rates were not provided or able to be obtained, rates from the SFWMD's 2021 Utility Rate Survey were used.

The utility rate information within this survey is presented with two objectives. The first is to show what residents pay for water and wastewater service at various levels of use. Most figures in this report display billed rates. The second objective is to show the raw rates charged by each surveyed utility. **Table A-1** in the **Appendix** shows the base fees and rates each surveyed utility charges to meet the second objective.

Some utilities within the District provide only one service (water or wastewater) to a specific service area. In those cases, rates of single-service utilities (those providing either water or wastewater, but not both) were paired with the rates of the utility providing the complementary service to the first utility's service area. For example, the Greater Pine Island utility provides only water service; wastewater services for residents served by Greater Pine Island are provided by Lee County Utilities. The rate structures from those two utilities were combined to produce total costs to rate payers within the Greater Pine Island service area. In these instances, complementary service providers appear together. In the example above, the combined water and wastewater costs for Greater Pine Island are shown as "Greater Pine Island (Lee County)." **Table 3** shows the complementary utility service pairings used to calculate costs residential users are charged.

Table 3. Complementary utility service pairings used to calculate costs residential users are charged in the figures in the appendix of this survey.

Utility	Service Provided		Comments
	Water Only	Wastewater Only	
Fort Myers Beach	✓		Wastewater service provided by Lee County Utilities
Greater Pine Island Water Association	✓		Wastewater service provided by Lee County Utilities
Hillsboro Beach	✓		Wastewater service provided by Broward County
Island Water Association	✓		Wastewater service provided by City of Sanibel
Jupiter	✓		Wastewater service provided by Loxahatchee River District
Orlando		✓	Water service provided by Orlando Utilities Commission
Orlando Utilities Commission	✓		Wastewater service provided by City of Orlando
Sanibel		✓	Water service provided by Island Water Association
South Shore Water Association	✓		Wastewater service provided by City of Clewiston (<600 connections only)
Taft Water Association 88	✓		Wastewater service provided by City of Orlando for approximately 10% of service area (remainder on septic)
Tequesta	✓		Wastewater service provided by Loxahatchee River District

From the 97 utilities surveyed, 124 water and wastewater rate structures were obtained for this utility rate survey and are summarized below. The rate structures include utilities providing both water and wastewater services, combinations of utilities providing only water with those providing only wastewater to the same service areas, and utilities providing a separate rate structure for residents served outside of the

corresponding municipal city limits. The 27 rate structures for customers served outside of the city limits were not considered for this survey. A surcharge ranging from 10% to 25% is normally applied to these customers. **Table A-1** of the **Appendix** provides the individual rates for all utilities surveyed.

- Total utilities in survey: 97
- Utilities providing water and wastewater service: 85
- Utilities providing only water service: 9
- Utilities providing only wastewater service: 3 (includes Loxahatchee River District)
- Utilities having a separate rate structure for users outside of their city limits: 27
- Total number of water-only structure sets: 94
- Total number of complete water and wastewater combined structure sets: 93

Utility Base Fees in the SFWMD

Within the SFWMD, the base fee charged by utilities varies widely, ranging from \$0 to more than \$130 per month for combined water and wastewater services. The distribution of utilities in each base fee price range is displayed in **Figures 2 to 4**.

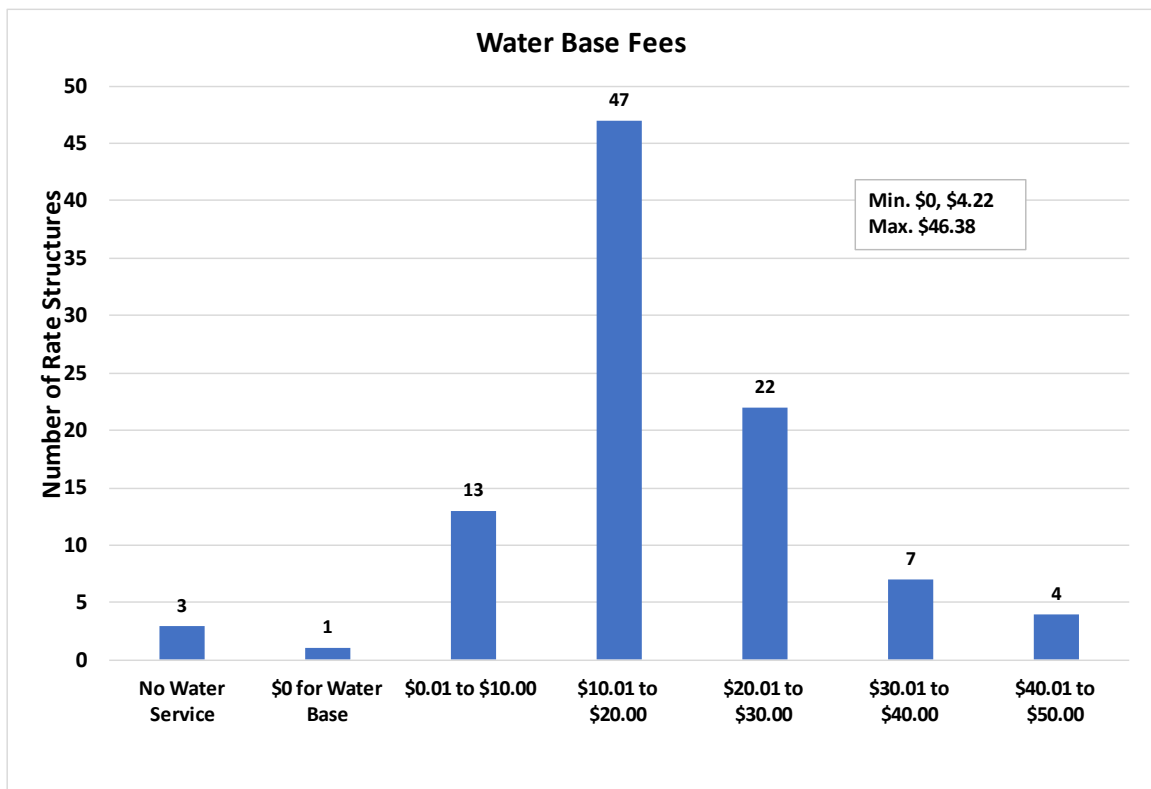


Figure 2. The number of utilities within each range of monthly water base fees.

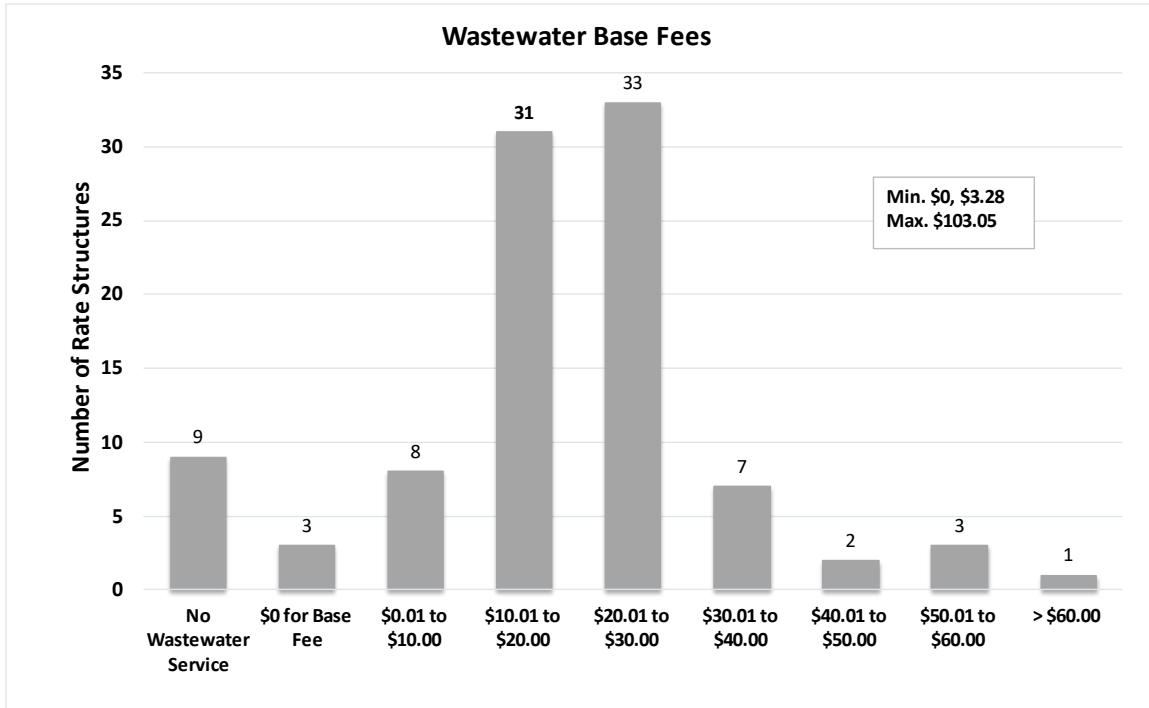


Figure 3. The number of utilities within each range of monthly wastewater base fees.

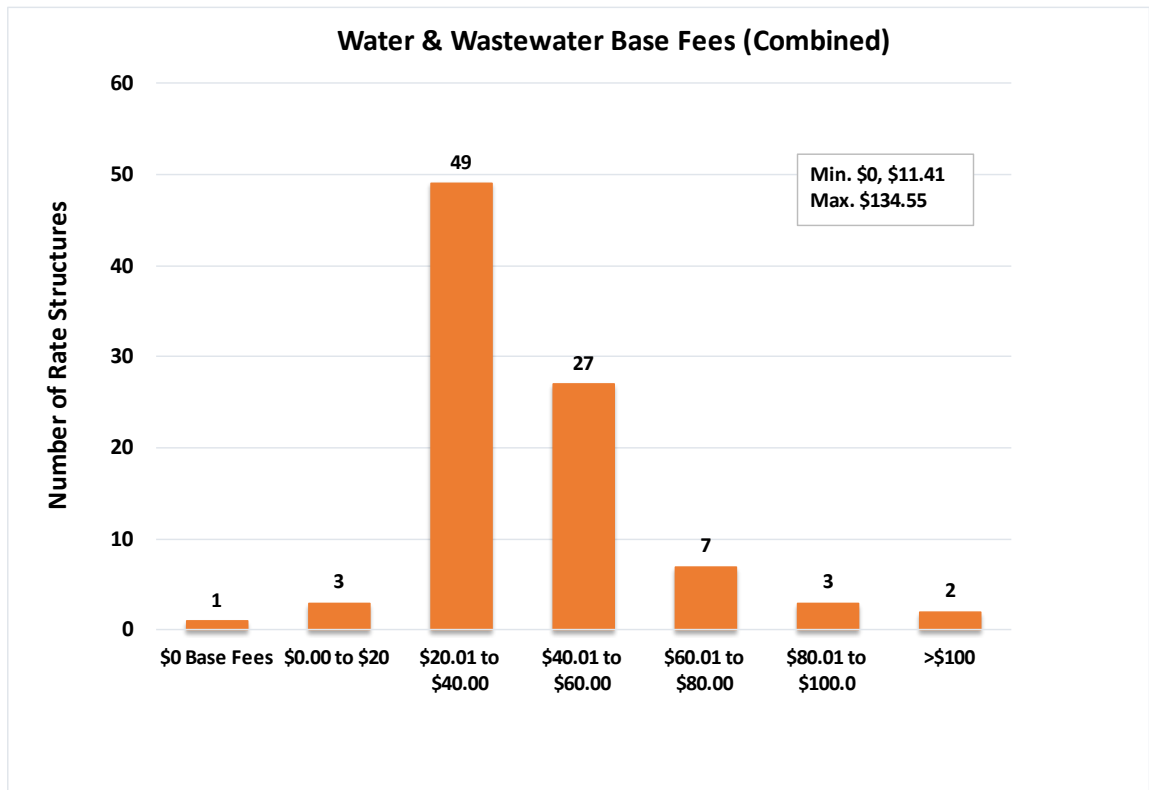


Figure 4. The number of utilities within each range of monthly water and wastewater combined base fees.

Water Pricing Structures in the SFWMD

As stated earlier, the SFWMD encourages all utilities to adopt an increasing block rate structure with multiple, reasonably spaced tiers that substantially increase in cost as customer water use increases. **Table 4** shows the number of each type of structure employed by utilities within the District as of October 2022. Of note is that 1 utility employs a budget-based rate structure (with 4-tiers) based on lot size. In **Table 4**, the budget-based rate structure is included with the 4-tier structures. There are no utilities in the SFWMD that employ a declining block rate structure.

Table 4. Distribution of all rate structure types used by utilities within the SFWMD.

Type/Tiers	Count
Water Utility^a	
Uniform	14
Inclining	
2 Tiers	7
3 Tiers	16
4 Tiers	30
5 Tiers	19
6 Tiers	8
Total	94
Wastewater Utility^b	
Flat	9
Uniform	66
Inclining	
2 Tiers	11
3 Tiers	0
4 Tiers	1
5 Tiers	1
Total	88

^a Includes 85 utilities providing both water and wastewater service and 9 utilities providing only water service.

^b Includes 85 utilities providing both water and wastewater service and 3 utilities providing only wastewater service.

Costs to Customers in the SFWMD

To illustrate costs paid by public water supply customers within the SFWMD, costs were calculated and reported for three representative monthly use volumes: 4,000 (minimum), 8,000 (midpoint), and 15,000 (maximum) gallons. A use volume of 4,000 gallons per month represents a typical household's indoor water use for basic needs such as bathing, cooking, and laundry (Raftelis Financial Consultants 2019). Use of 8,000 gallons per month would include additional water being used for sporadic outdoor irrigation. A household using 15,000 gallons per month likely represents an average house with an in-ground irrigation system. The range of total monthly bills for water alone and water and wastewater combined, for all surveyed utilities in the District, under these three residential usage scenarios is presented in **Figure 5**. The total bill includes the base fee, any other fixed service charges, and utility taxes, if they were discovered during the data collection effort.

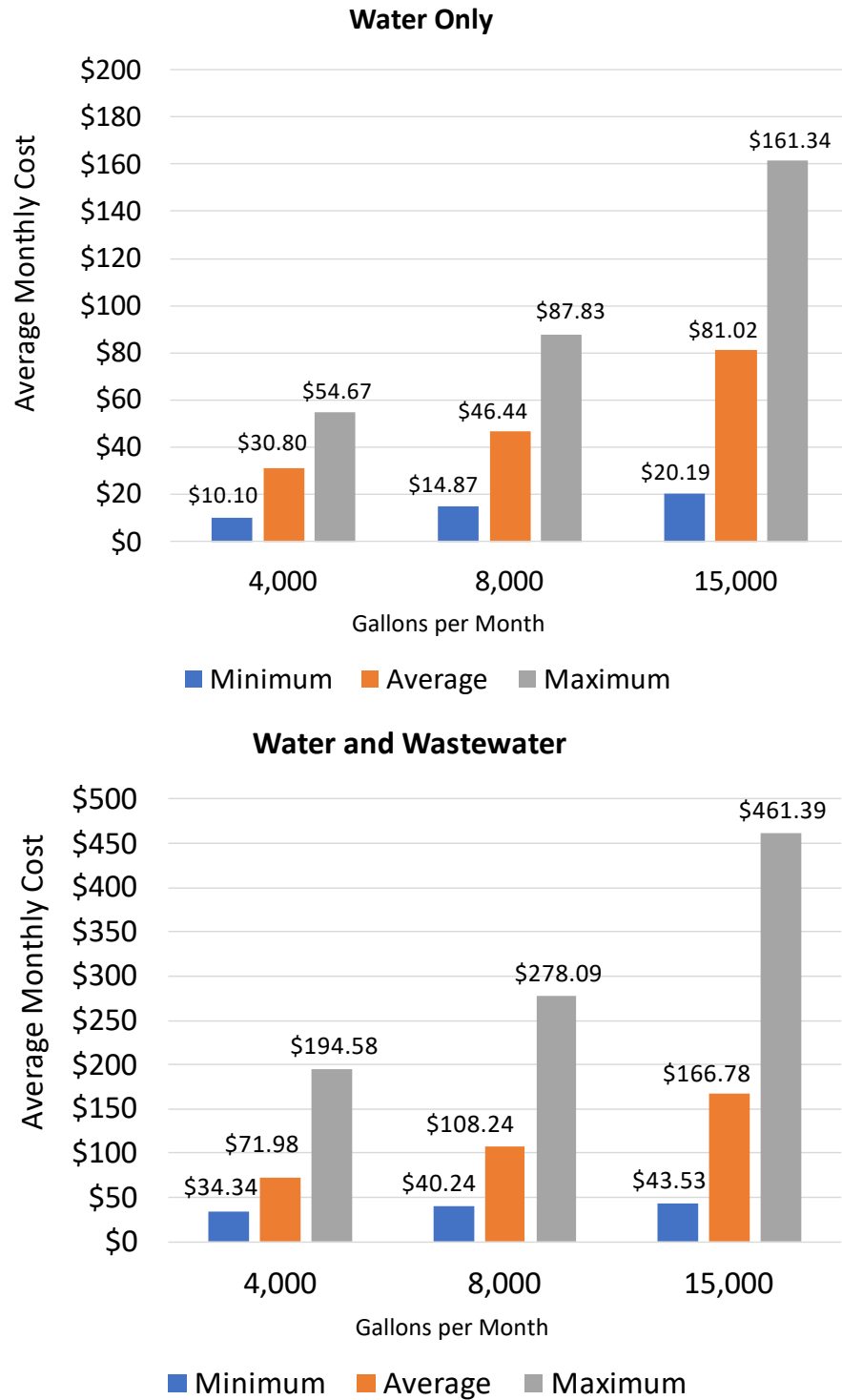


Figure 5. Range of monthly residential water bills (including fees and taxes) for water (top) as well as water and wastewater services combined (bottom) for three levels of water use.

PRICE SIGNALING EFFICACY

As stated earlier, (Whitcomb 2005) noted utilities can maintain revenue neutrality while effectively sending price signals to high water users when costs are low for lower tiers of water use relative to charges at higher tiers. In addition, (Walton 2017) reported that higher base fees provide a utility with greater revenue stability, but also can reduce the utility’s ability to incentivize conservation through consumption tiers.

Figures A-7 to A-14 of the **Appendix** show the relative effectiveness of the structures used by utilities within the District. When considering only water service charges (exclusive of wastewater service charges and base fees), 72 of the 94 water service rate structures analyzed charged more per 1,000 gallons of water at 15,000 gallons of use, than at 4,000 gallons of use. Of those 72, when base fees are factored in, only 9 of the 94 rate structures charged more per 1,000 gallons at 15,000 gallons of use versus 4,000 gallons of use, which supports the findings of Walton (2017).

COMPARING REGIONAL AND STATE AVERAGES

Prices charged by water service providers are influenced by water availability, treatment methods, service area size/pumping distances, age of the distribution system, operational and maintenance costs, debt service, and composition of the customer base. For water supply planning purposes, the SFWMD is divided into five water supply planning areas (**Figure 1**): Upper Kissimmee Basin (UKB; this includes only utilities within the District’s portion of the Central Florida Water Initiative), Lower Kissimmee Basin (LKB), Upper East Coast (UEC), Lower West Coast (LWC), and Lower East Coast (LEC). **Figures 6 and 7** present the average total water cost to customers and the average combined water and wastewater costs, respectively, at three use levels in each of the SFWMD’s water supply planning areas.

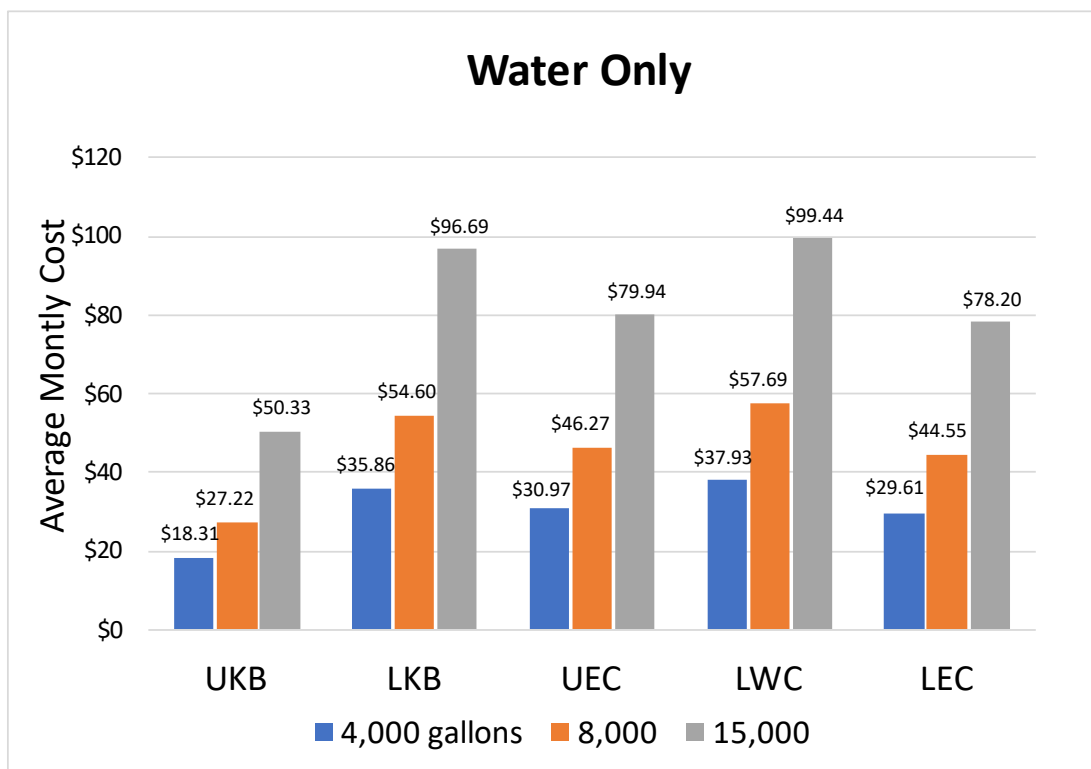


Figure 6. Average monthly water bills (water only) by water supply planning area for three levels of water use.

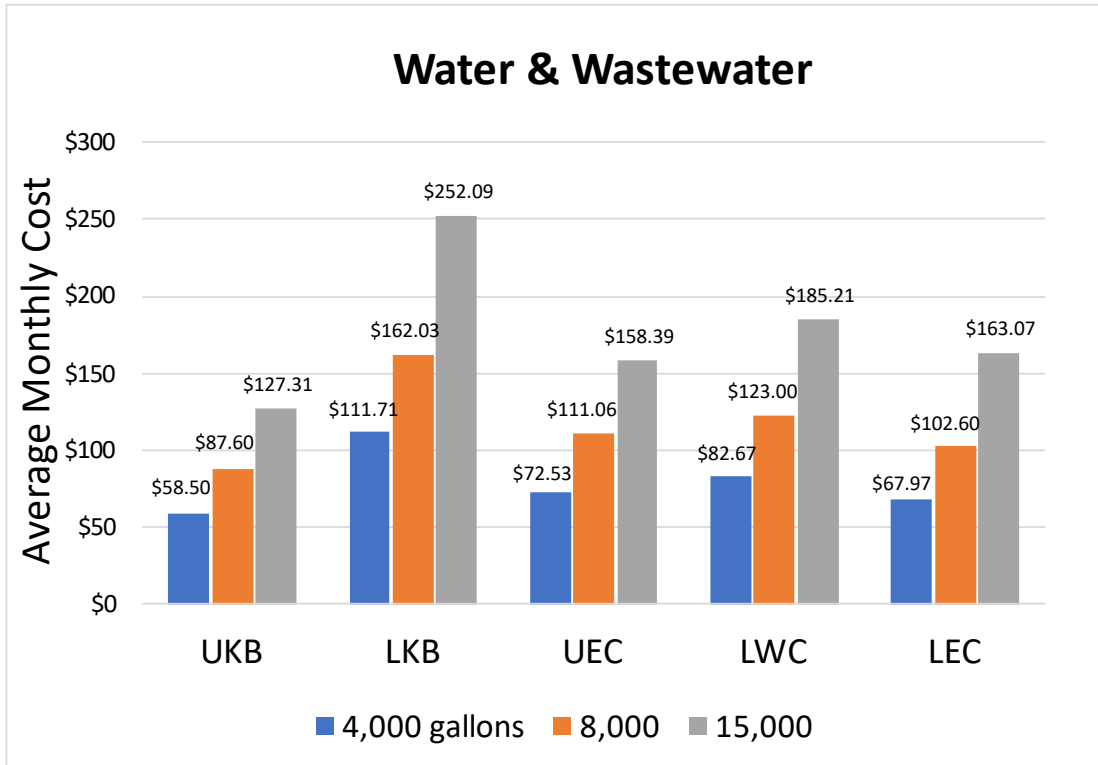


Figure 7. Average monthly water and wastewater bills (combined) by water supply planning area for three levels of water use.

Figure 8 compares the average cost to customers in the SFWMD with average Florida statewide cost for water as well as water and wastewater combined. Statewide data were available only at 4,000- and 8,000-gallon levels.

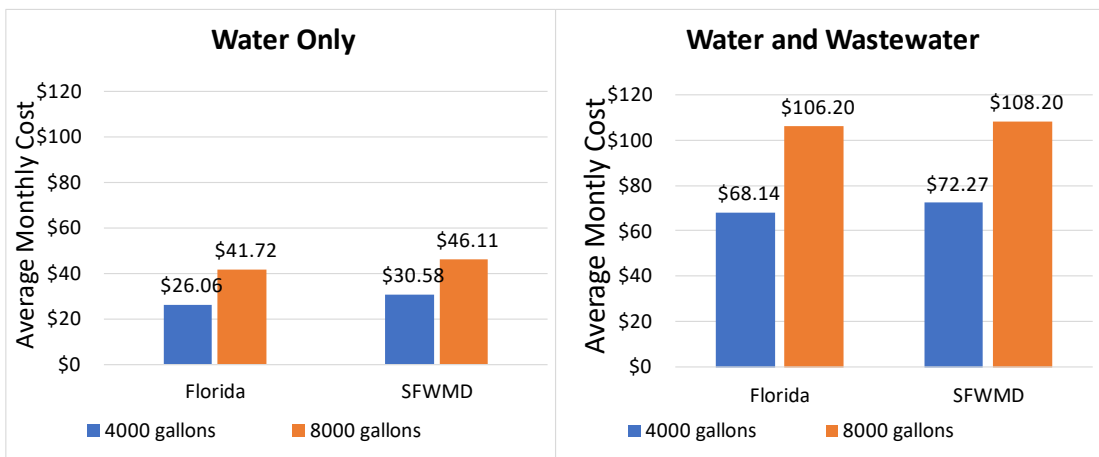


Figure 8. Total average monthly bills for water (left) as well as water and wastewater combined (right) within the SFWMD's boundaries and statewide (Statewide data from Raftelis Financial Consultants 2022).

CONCLUSION

The effectiveness of a utility's water-conserving rate structure depends on how well it is designed. Increasing block rate structures and budget-based structures are recognized as having the most potential to effectively promote water conservation, depending on the cost and volume of use in each tier and the budgeted allowances. Currently, 80 of the 94 surveyed utilities that provide water service use increasing block rate structures, of those, 1 uses a budget-based structure. Fourteen of the 94 surveyed utilities have uniform structures. Of the 88 utilities that provide wastewater treatment services, 13 have inclining rate structures, 66 have uniform structures, and 9 have flat rates for wastewater use. Lastly, considering the rate structure relative effectiveness, 9 of the 94 water rate structures result in charging customers more per 1,000 gallons at 15,000 gallons of use versus 4,000 gallons of use.

Each water utility within the SFWMD's boundaries has a unique mix of single-family residential profiles and other customers and circumstances to consider when setting rates. Studies have shown that changes in water price can impact residential per capita water use (Chesnutt and Beecher 1998, Whitcomb 2005, Tiger et al. 2014). By lowering fixed charges and increasing volumetric charges (those based on how much water is used), utilities can reduce demand without decreasing revenues. A rate structure that combines reasonable base fees with substantial increases in volumetric rates for higher use tiers is a valuable tool to motivate customers to conserve while ensuring the utility's financial stability. SFWMD staff are available to provide technical assistance to utilities looking to maximize their water savings and ensure a sustainable water supply for South Florida.

RESOURCES FOR UTILITIES

The following resources are available to utilities to help create effective rate structures:

- Alliance for Water Efficiency. AWE Sales Forecasting and Rate Model.
<https://www.financingsustainablewater.org/tools/awe-sales-forecasting-and-rate-model>
- Alliance for Water Efficiency. Building Better Water Rates for an Uncertain World.
<https://www.financingsustainablewater.org/tools/building-better-water-rates-uncertain-world>
- Alliance for Water Efficiency. Water Rates.
<https://www.allianceforwaterefficiency.org/resources/rates>
- American Water Works Association. *M1 Principles of Water Rates, Fees and Charges, Seventh Edition*.
<https://engage.awwa.org/PersonifyEbusiness/Store/Product-Details/productId/61556627>
- Southwest Florida Water Management District. WATERATE Model.
<https://www.swfwmd.state.fl.us/residents/water-conservation/water-rates>

REFERENCES

- Baerenklau, K.A., K.A. Schwabe, and A. Dinar. 2013. *Do Increasing Block Rate Water Budgets Reduce Residential Water Demand? A Case Study in Southern California*. Working Paper 01-0913, Water Science and Policy Center, University of California, Riverside, CA. September 2013.
- Chesnutt, T.W. and J.A. Beecher. 1998. Conservation rates in the real world. *Journal AWWA* 90(2):60-70.
- Chesnutt, T.W., D. Mitchell, E. Rothstein, J. Beecher, and J. Farnkopf. 2014. *Building Better Water Rates for an Uncertain World: Balancing Revenue Management, Resource Efficiency, and Fiscal Sustainability*. Alliance for Water Efficiency, Chicago, IL, and California Urban Water Conservation Council, Sacramento, CA. August 2014. Available online at <https://www.financingsustainablewater.org/sites/www.financingsustainablewater.org/files/assets/6%20-%20AWE%20Rates%20Handbook.pdf>
- Equinox Center. 2009. *A Primer on Water Pricing in the San Diego Region*. October 2009. Available online at https://energycenter.org/sites/default/files/Equinox%20Water_Pricing_Brief%20102609.pdf.
- Raftelis Financial Consultants. 2022. *2022 Florida Water and Wastewater Rate Survey*. Raftelis Financial Consultants, Inc., Maitland, FL. Available online at http://www.raftelis.com/wp-content/uploads/2022/07/Florida-Rate-Survey_2022_v4.pdf.
- SFWMD. 2021. *Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District*. South Florida Water Management District, West Palm Beach, FL. March 2021.
- Tiger, M., J. Hughes, and S. Eskaf. 2014. *Designing Water Rate Structures for Conservation & Revenue Stability*. University of North Carolina Environmental Finance Center, Chapel Hill, NC, and the Sierra Club, Lone Star Chapter, Austin, TX. February 2014.
- Walton, B. 2017. *Price of Water 2017: Four Percent Increase in 30 Large U.S. Cities*. Circle of Blue, Traverse City, MI. May 18, 2017. Available online at <http://www.circleofblue.org/2017/water-management/pricing/price-water-2017-four-percent-increase-30-large-u-s-cities/>.
- Whitcomb, J.B. 2005. *Florida Water Rates Evaluation of Single-Family Homes*. Prepared for and funded by Southwest Florida Water Management District, Brooksville, FL; St. Johns River Water Management District, Palatka, FL; South Florida Water Management District, West Palm Beach, FL; and Northwest Florida Water Management District, Havana, FL. July 13, 2005.

APPENDIX

This appendix presents the costs of water and wastewater services from 97 water service providers within the South Florida Water Management District (District) boundaries. In total, 94 water and 93 water and wastewater (combined service) structures were analyzed. **Figures A-1 to A-6** present monthly charges paid by consumers for use amounts corresponding to typical indoor domestic water use of a household for basic needs (4,000 gallons/month), basic domestic needs plus additional water for occasional outdoor irrigation (8,000 gallons/month), and basic domestic needs plus an in-ground irrigation system use (15,000 gallons/month). Some large users (30,000 gallons or more) could be very large estates with substantial landscaping and high irrigation needs.

Figures A-7 to A-14 compare the use charges per 1,000 gallons at use rates of 4,000 and 15,000 gallons/month, including and excluding base fees. **Figures A-11 to A-14** show percent differences in charges for 4,000 gallons and 15,000 gallons of water (including and excluding base fees) on a per 1,000-gallon basis. Those figures show relative effectiveness of the rate structures used by utilities within the District. **Table A-1** shows full rate data for utilities surveyed within the SFWMD's boundaries.

Note: The rates and fees presented herein were compiled by District staff in late 2022 from information publicly available online and through correspondence with utility staff. The information has not been reviewed by the utilities and may differ slightly from actual customer bills. Utilities are invited to contact the District at conservation@sfwmd.gov to make corrections or updates to their rates and fees.

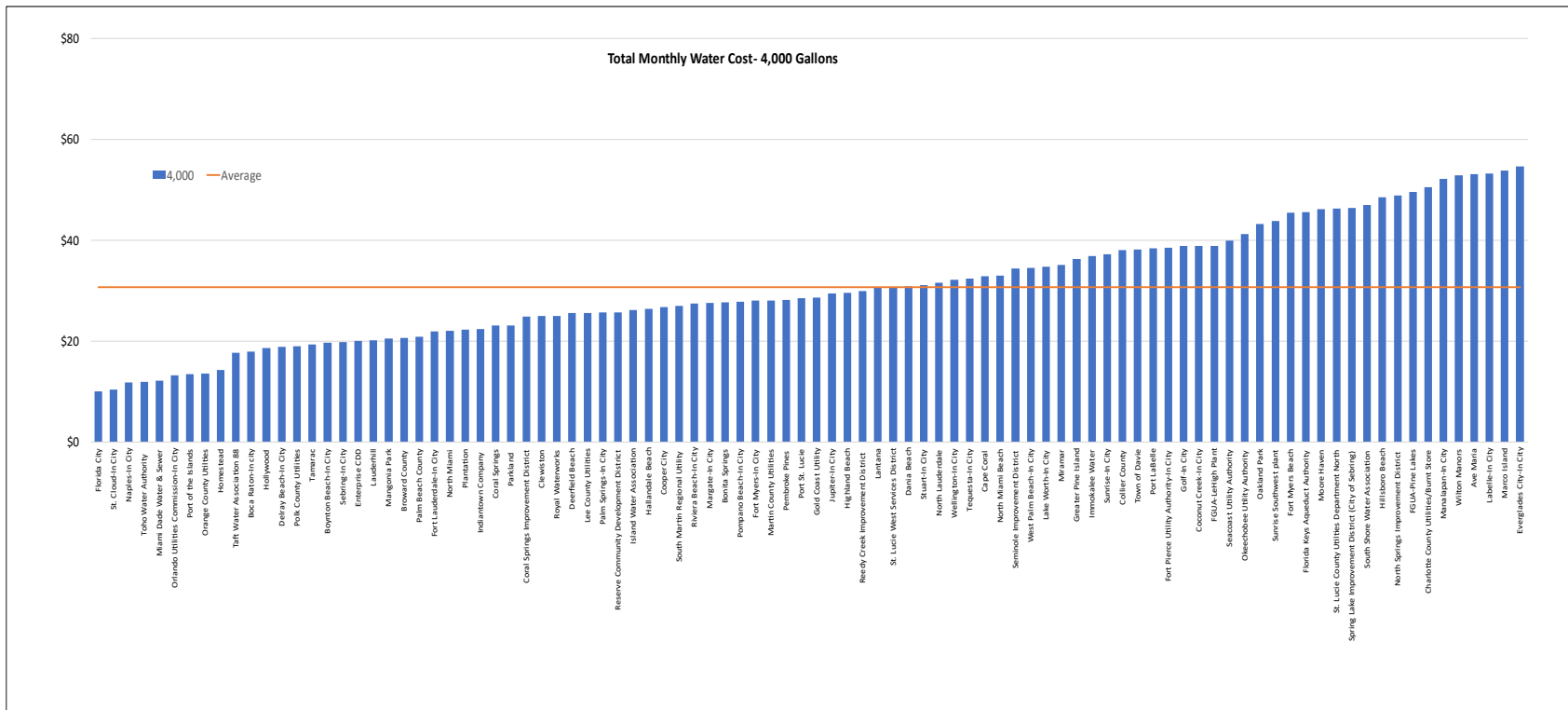


Figure A-1. Total monthly cost for 4,000 gallons of water use (including base fees) for 94 rate structures from 97 water providers within the SFWMD’s boundaries (water only, does not include wastewater).

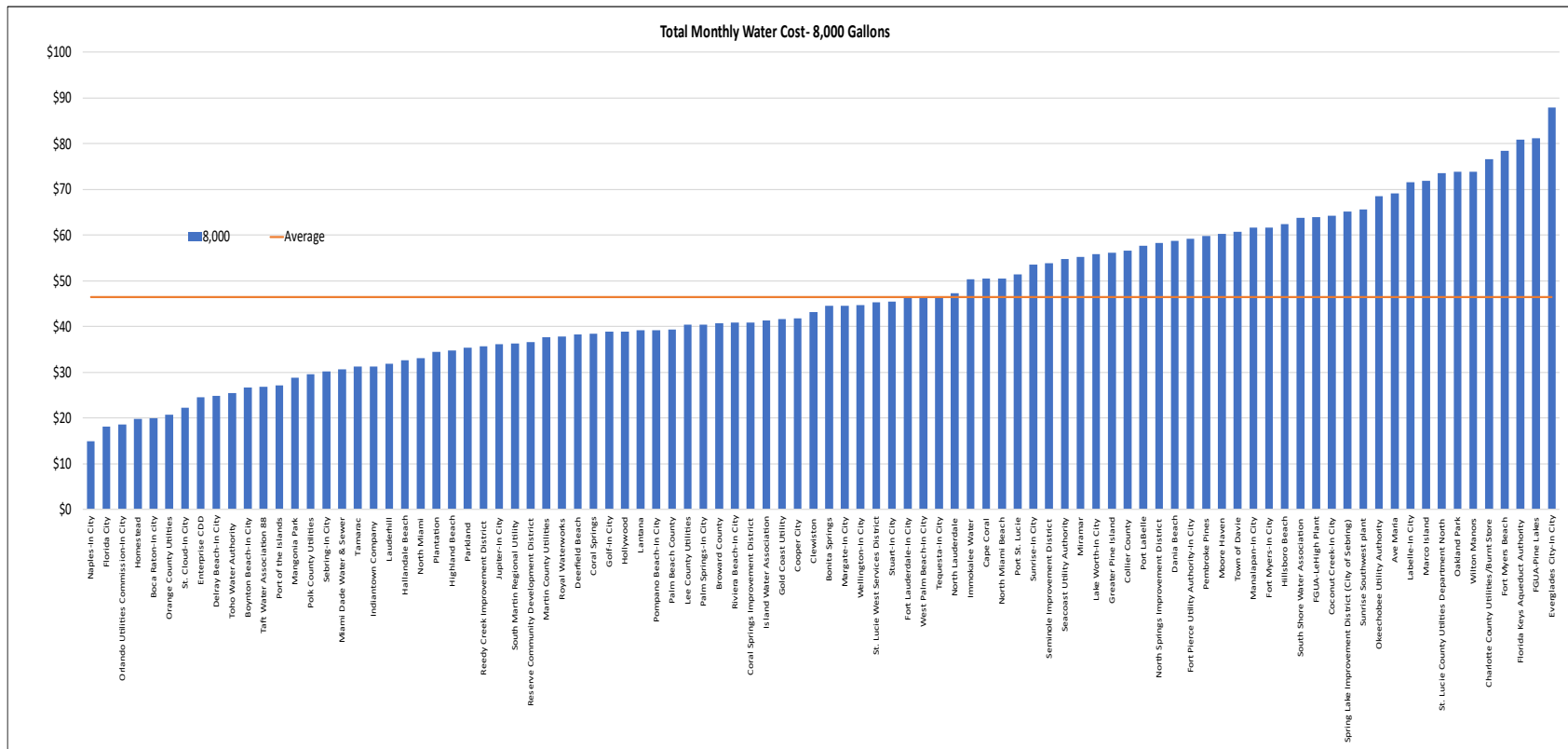


Figure A-2. Total monthly cost for 8,000 gallons of water use (including base fees) water providers within the SFWMD’s boundaries (water only, does not include wastewater).

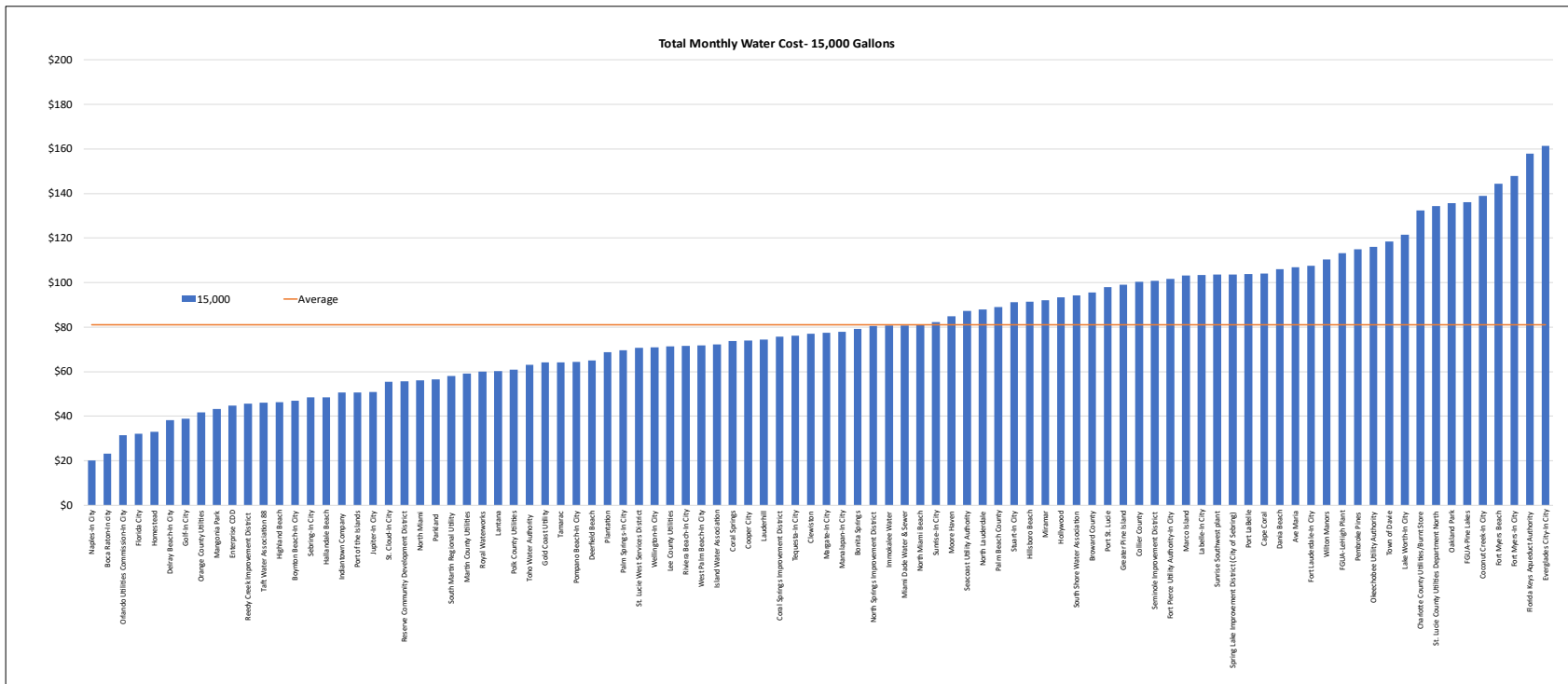


Figure A-3. Total monthly cost for 15,000 gallons of water use (including base fees) for 94 rate structures from 97 water providers within the SFWMD’s boundaries (water only, does not include wastewater).

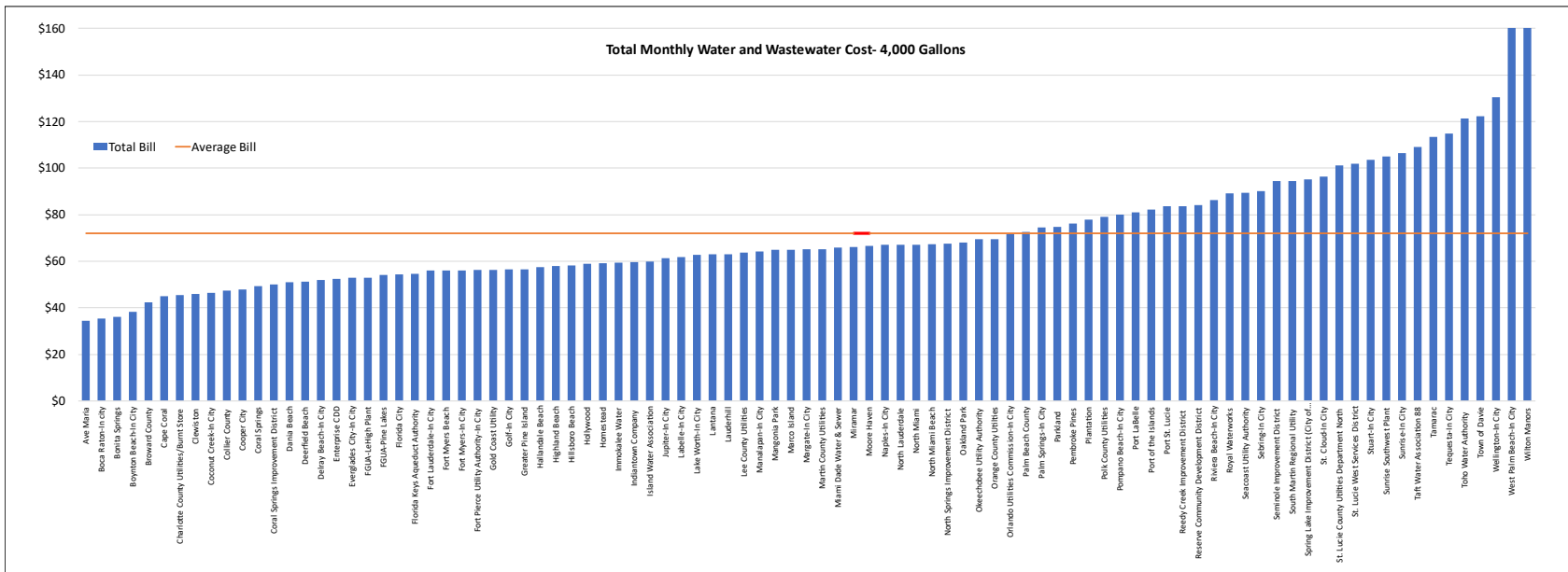


Figure A-4. Total monthly cost for 4,000 gallons of combined water and wastewater use (including base fees) for 93 rate structures from 97 utilities within the SFWMD's boundaries.

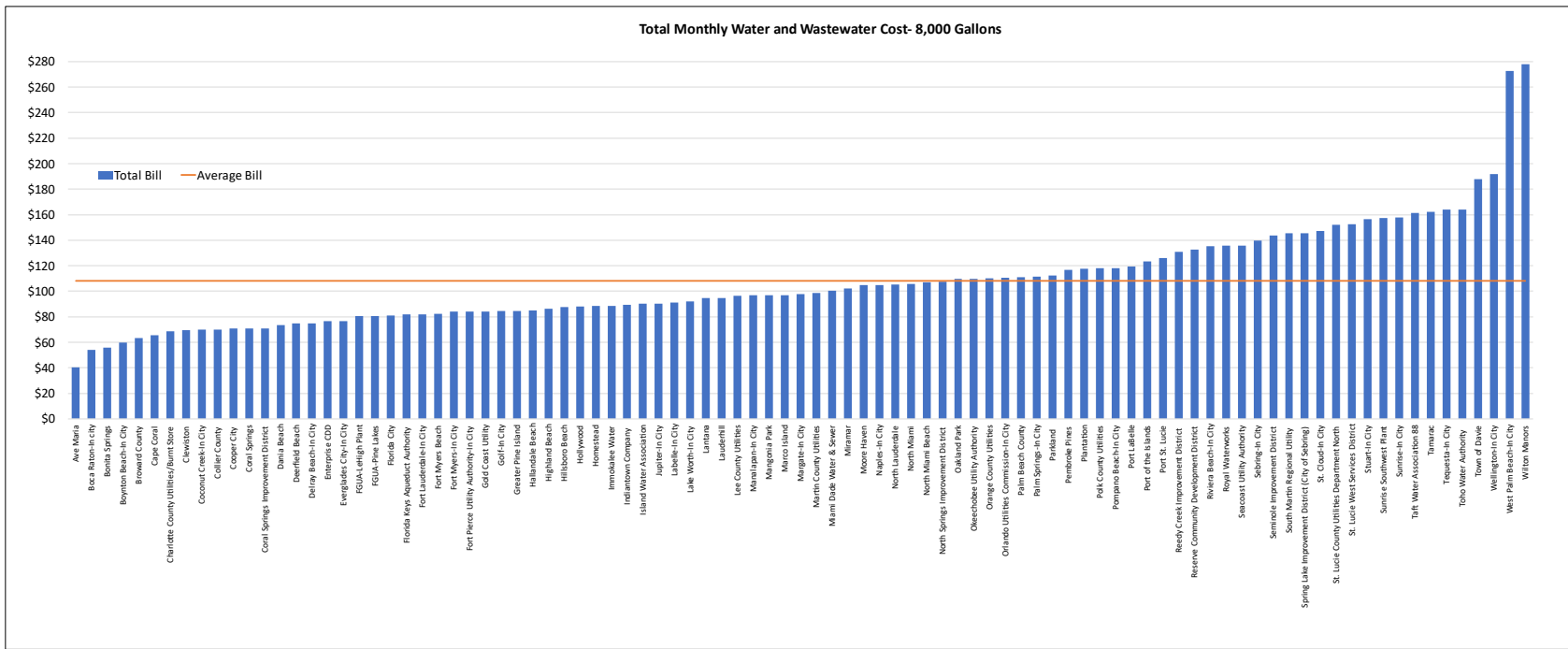


Figure A-5. Total monthly cost for 8,000 gallons of combined water and wastewater use (including base fees) of 93 rate structures from 97 utilities within the SFWMD’s boundaries.

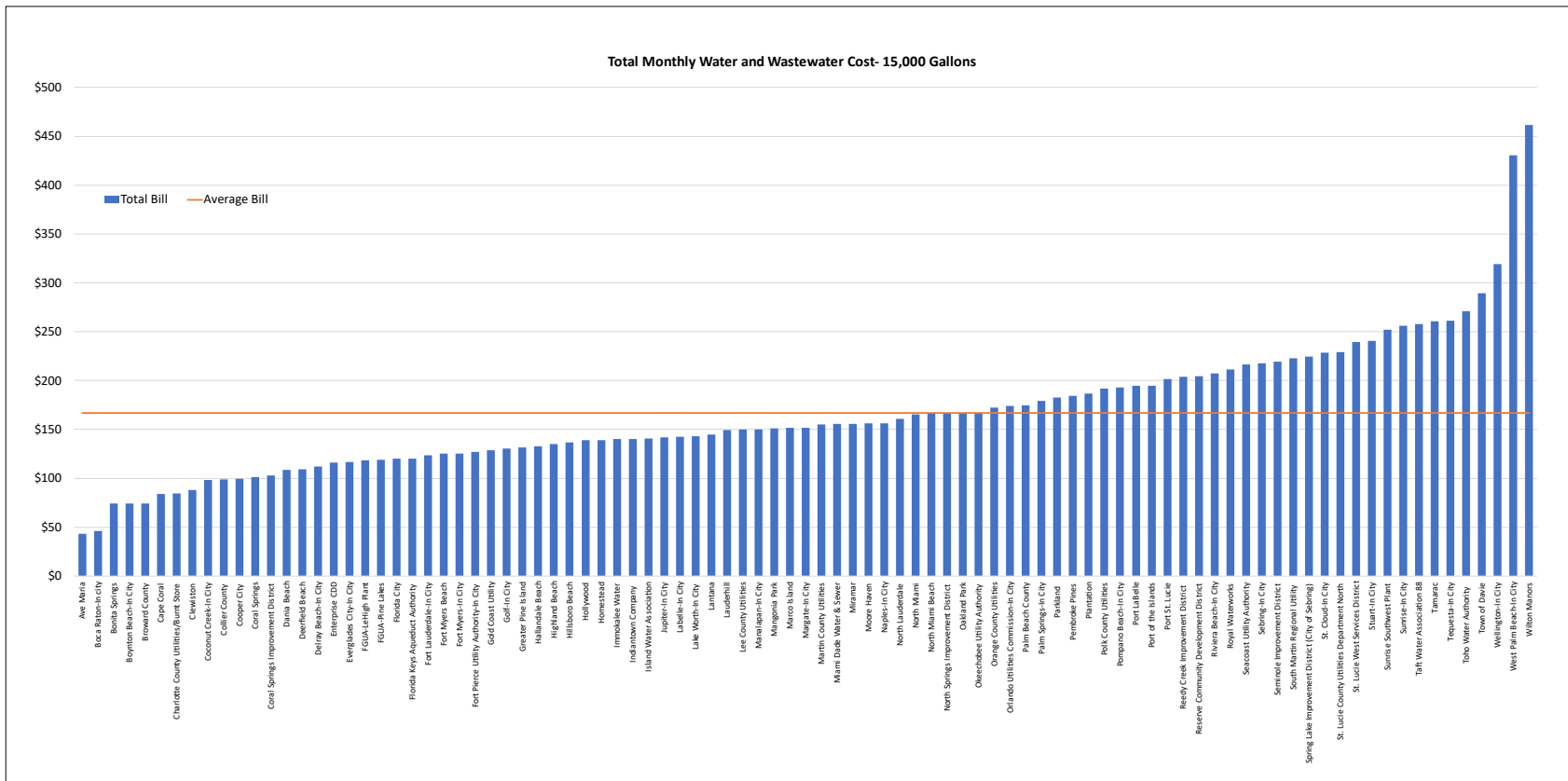


Figure A-6. Total monthly cost for 15,000 gallons of combined water and wastewater use (including base fees) of 93 rate structures from 97 utilities within the SFWMD's boundaries.

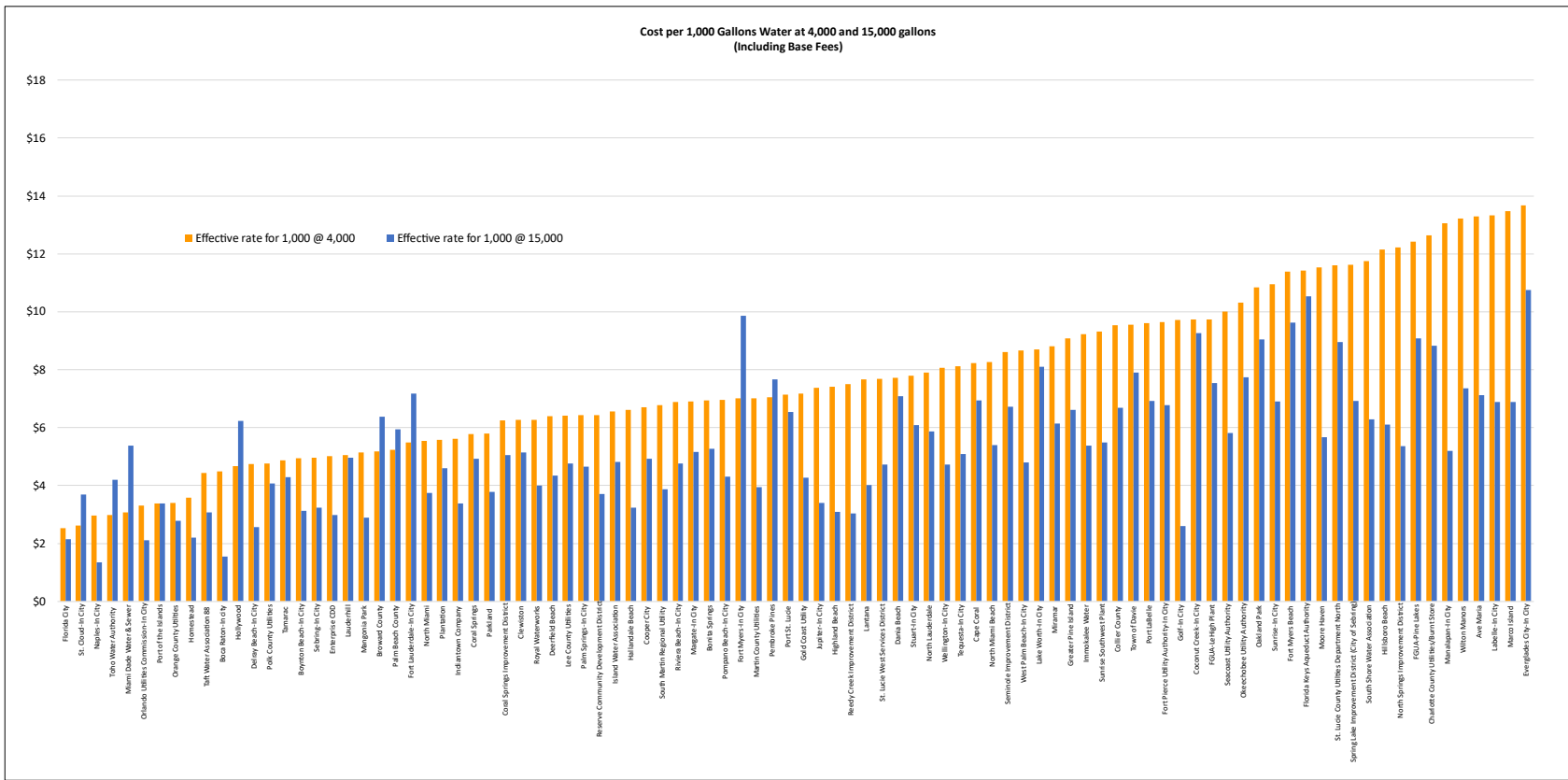


Figure A-7. Effective rate per 1,000 gallons at 4,000 and 15,000 gallons of use, including base fees.

Note: Amount of volumetric charges for water and base fees, divided by number of 1,000-gallon units used, equals cost per 1,000 gallons for each use level. Structures that charge more per 1,000 gallons at 15,000 gallons of use versus 4,000 gallons of use (where blue bars are taller than orange ones) generally are considered more effective at sending price signals meant to encourage conservation by users. Base fees can be used by utilities to enhance or dampen the effects of their conservation rate structures.

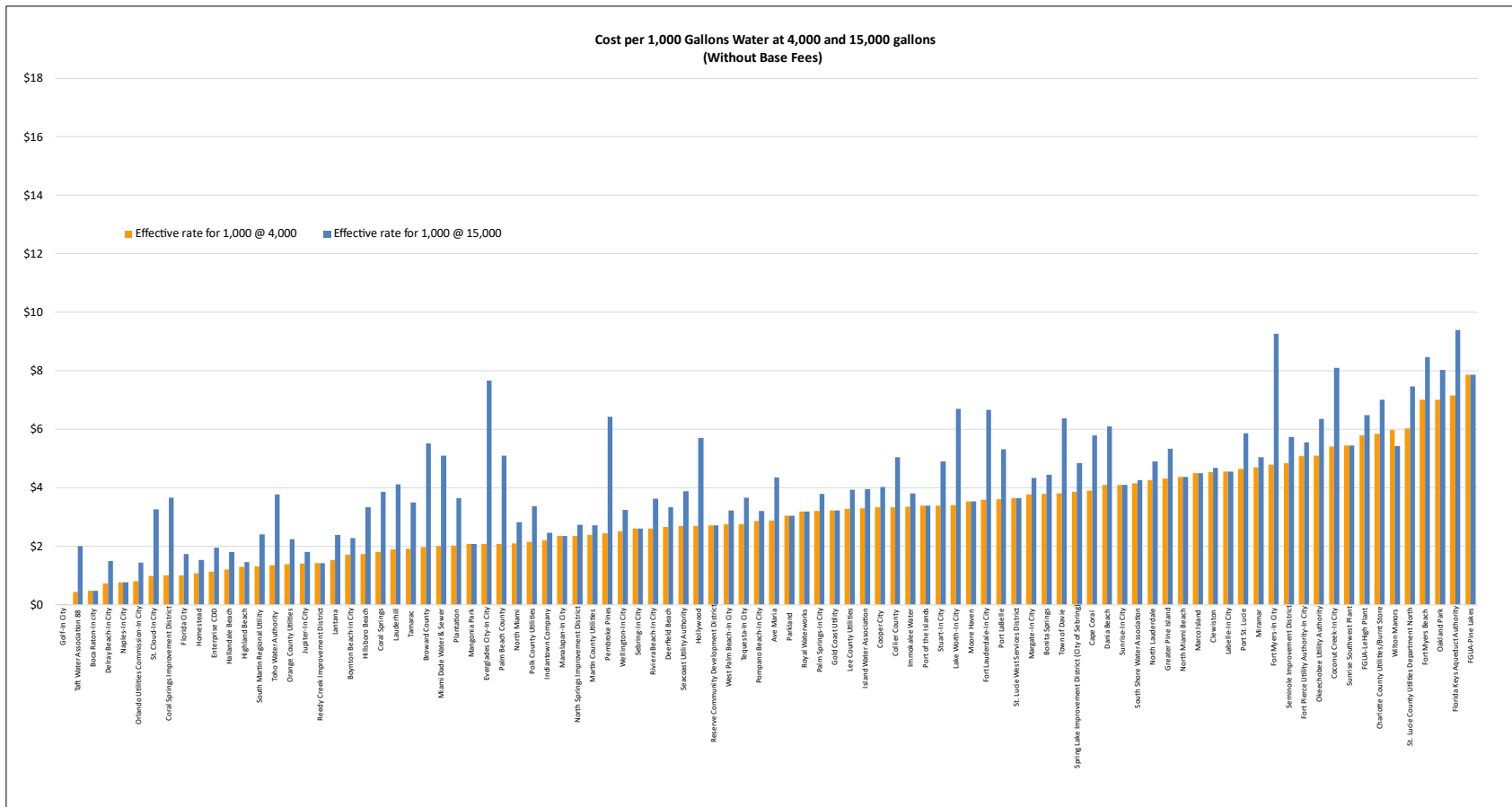


Figure A-8. Effective rate per 1,000 gallons at 4,000 and 15,000 gallons of use, not including base fees.

Note: Amount of volumetric charges for water, divided by number of 1,000-gallon units used, equals cost per 1,000 gallons for each use level. Structures that charge more per 1,000 gallons at 15,000 gallons of use versus 4,000 gallons of use (where blue bars are taller than orange ones) generally are considered more effective at sending price signals meant to encourage conservation by users. Base fees can be used by utilities to enhance or dampen the effects of their conservation rate structures.

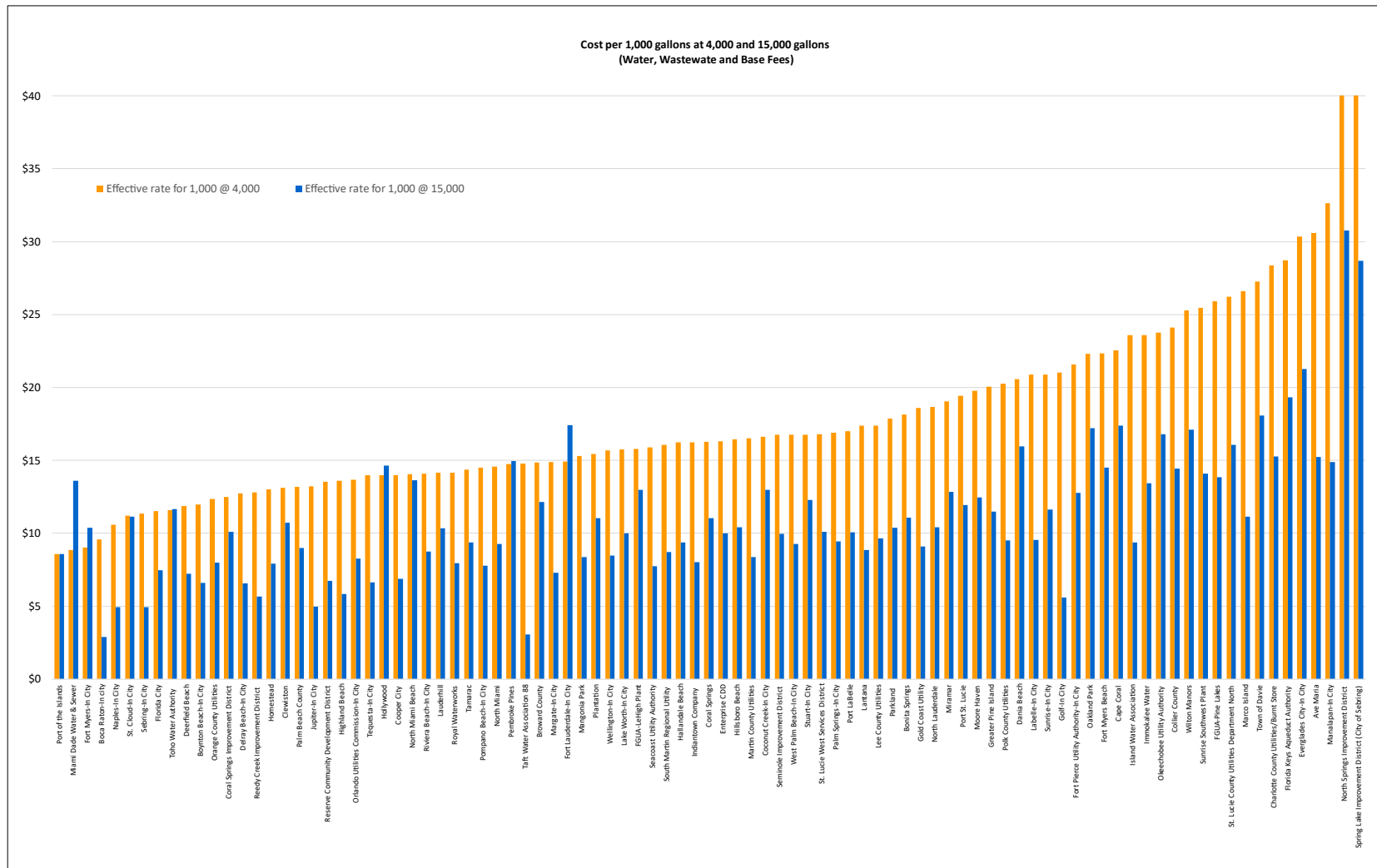


Figure A-9. Effective rate per 1,000 gallons at 4,000 and 15,000 gallons uses of combined water and wastewater services, including base fees.

Note: Amount of volumetric charges for water and wastewater services and base fees, divided by number of 1,000-gallon units used, equals cost per 1,000 gallons for each use level. Structures that charge more per 1,000 gallons at 15,000 gallons of use versus 4,000 gallons of use (where blue bars are taller than orange ones) generally are considered more effective at sending price signals meant to encourage conservation by users. Base fees can be used by utilities to enhance or dampen the effects of their conservation rate structures.

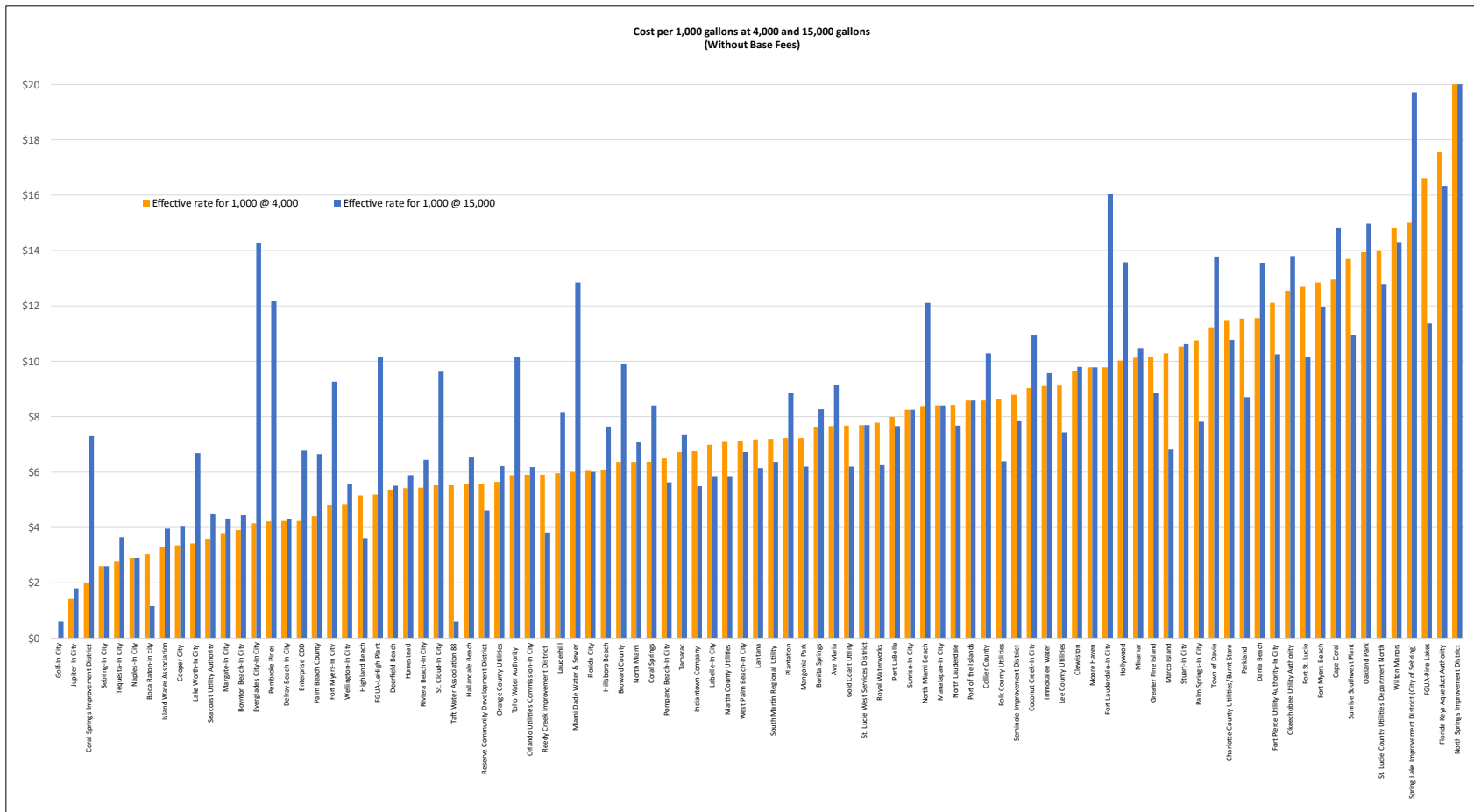


Figure A-10. Effective rate per 1,000 gallons at 4,000 and 15,000 gallons uses of combined water and wastewater services, not including base fees.

Note: Amount of volumetric charges for water and wastewater services, divided by number of 1,000-gallon units used, equals cost per 1,000 gallons for each use level. Structures that charge more per 1,000 gallons at 15,000 gallons of use versus 4,000 gallons of use (where blue bars are taller than orange ones) generally are considered more effective at sending price signals meant to encourage conservation by users. Base fees can be used by utilities to enhance or dampen the effects of their conservation rate structures.

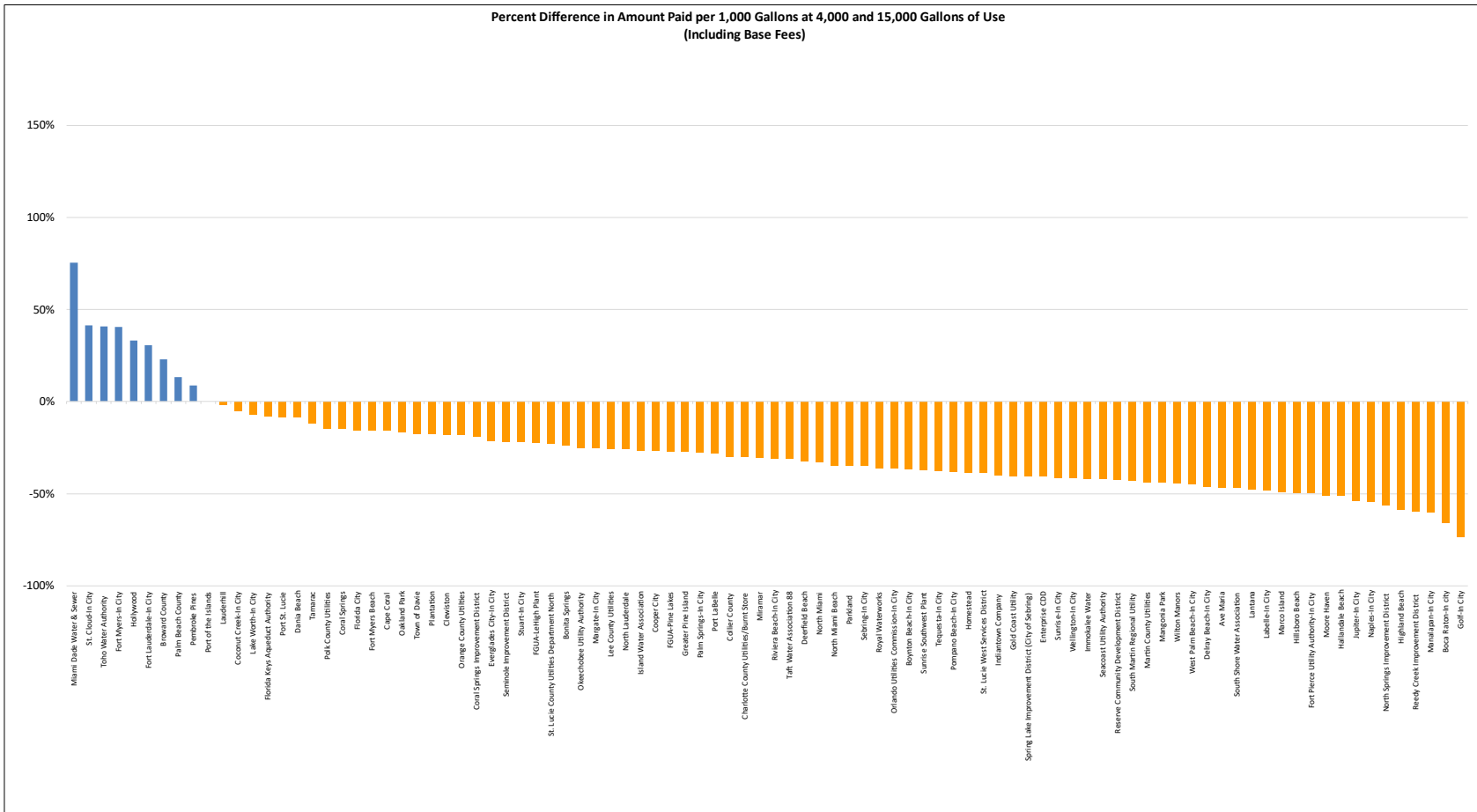


Figure A-11. Percent difference in charges for 4,000 versus 15,000 gallons of water (including base fees) on a per 1,000-gallon basis.

Note: Utilities with negative values (orange) charge less per 1,000 gallons at 15,000 gallons of use than at 4,000 gallons of use. Utilities with positive values (blue bars) charge more per 1,000 gallons at 15,000 gallons of use than at 4,000 gallons of use, which is a design objective of an effective conservation rate structure. The greater the percentage, the greater the price difference between using 4,000 and 15,000 gallons of water. Percent difference = (cost per 1,000 gallons at 15,000 gallons – cost per 1,000 gallons at 4,000 gallons) ÷ cost per gallon at 4,000 gallons. Base fees can be used by utilities to enhance or dampen the effects of their conservation rate structures.

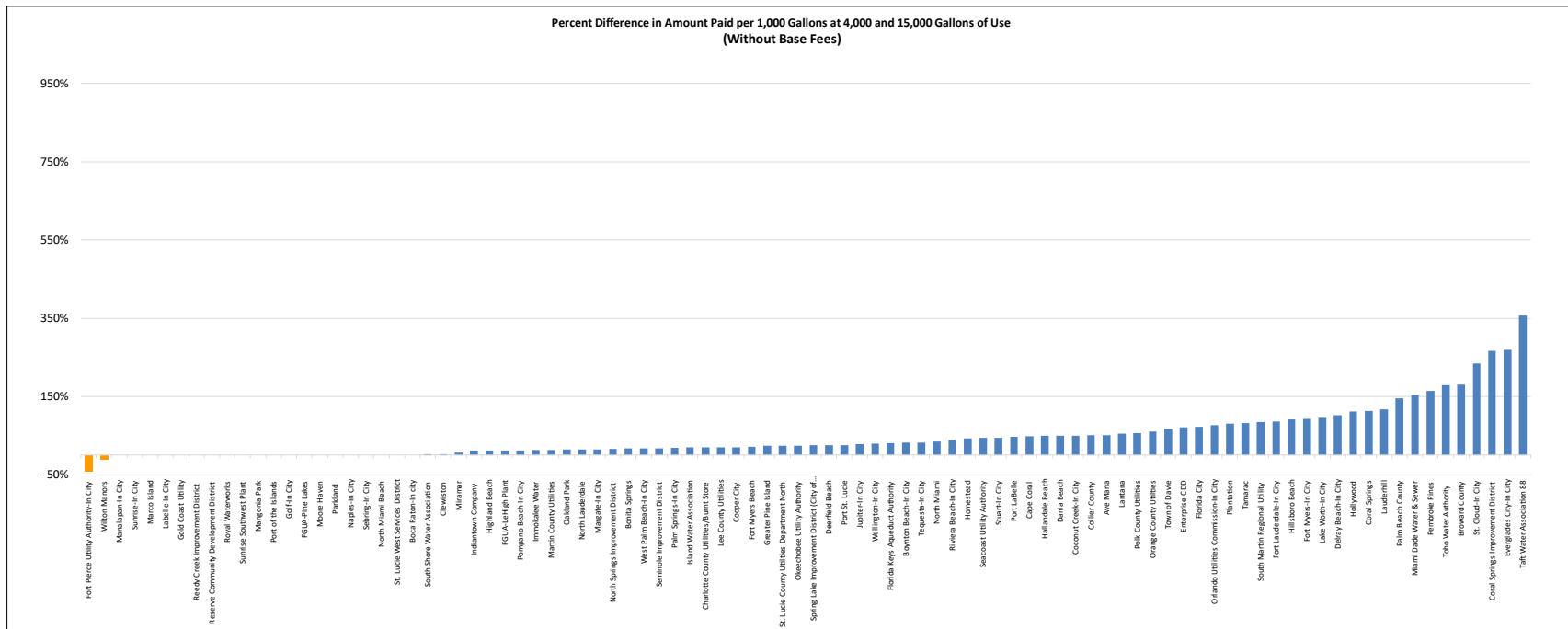


Figure A-12. Percent difference in charges for 4,000 versus 15,000 gallons of water (not including base fees) on a per 1,000-gallon basis.

Note: Utilities with negative values (orange) charge less per 1,000 gallons at 15,000 gallons of use than at 4,000 gallons of use. Utilities with positive values (blue bars) charge more per 1,000 gallons at 15,000 gallons of use than at 4,000 gallons of use, which is a design objective of an effective conservation rate structure. The greater the percentage, the greater the price difference between using 4,000 and 15,000 gallons of water. Percent difference = (cost per 1,000 gallons at 15,000 gallons – cost per 1,000 gallons at 4,000 gallons) ÷ cost per gallon at 4,000 gallons. Base fees can be used by utilities to enhance or dampen the effects of their conservation rate structures.

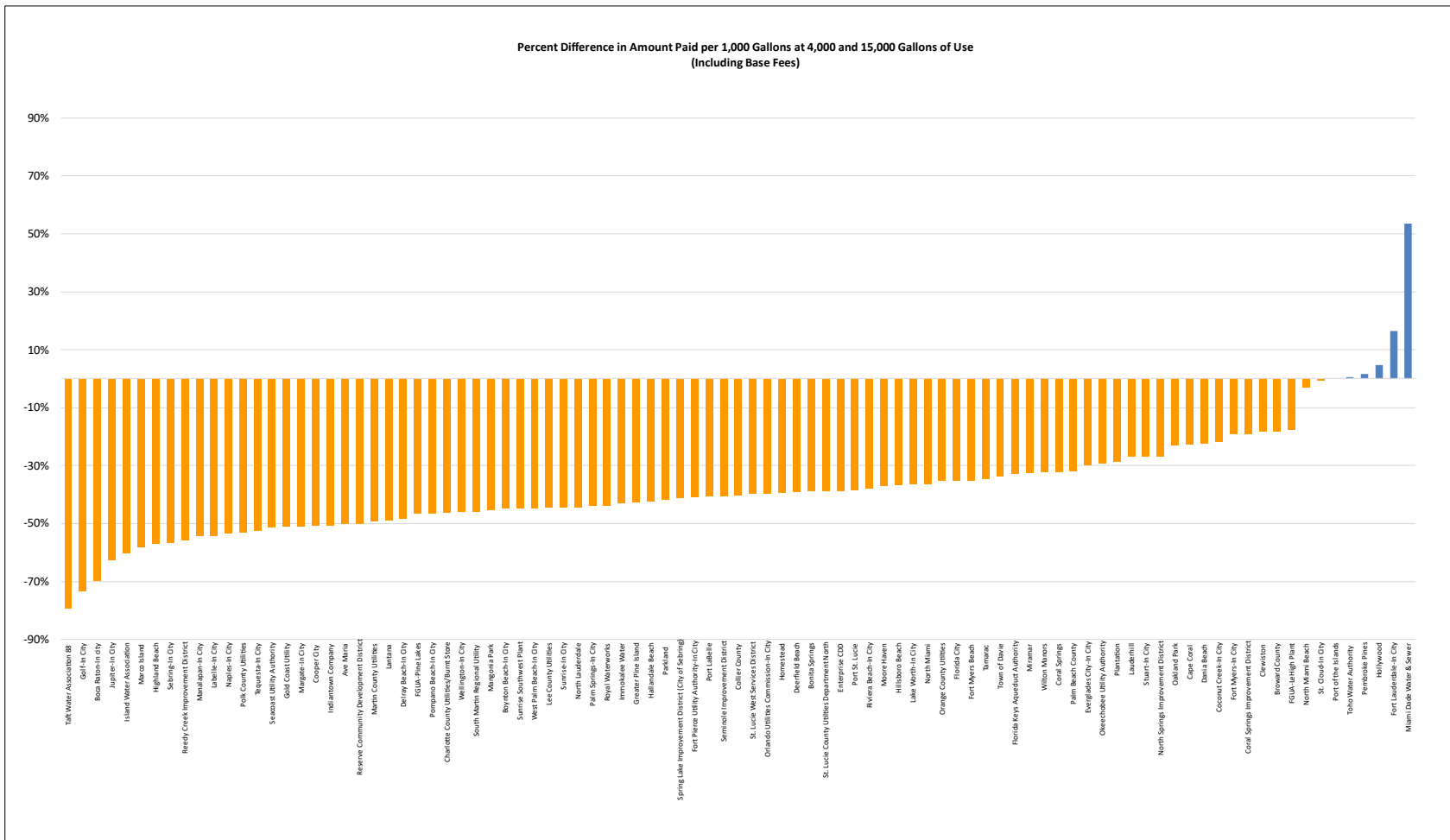


Figure A-13. Percent difference in charges for 4,000 versus 15,000 gallons of water and wastewater services (including base fees) on a per 1,000-gallon basis.

Note: Utilities with negative values (orange) charge less per 1,000 gallons at 15,000 gallons of use than at 4,000 gallons of use. Utilities with positive values (blue bars) charge more per 1,000 gallons at 15,000 gallons of use than at 4,000 gallons of use, which is a design objective of an effective conservation rate structure. The greater the percentage, the greater the price difference between using 4,000 and 15,000 gallons of water. Percent difference = (cost per 1,000 gallons at 15,000 gallons – cost per 1,000 gallons at 4,000 gallons) ÷ cost per gallon at 4,000 gallons. Base fees can be used by utilities to enhance or dampen the effects of their conservation rate structures.

Table A-1. Individual rates for utilities surveyed within the SFWMD’s boundaries.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Broward	Broward County	\$12.89	0	\$1.63	\$20.74	\$40.72	\$95.65	\$21.20	0	\$4.37	\$59.42	\$96.88	\$182.40	Sewer capped at 15,000 gallons
			4,000	\$2.96										
			7,000	\$7.03										
			12,000	\$8.46										
	Coconut Creek-In City	\$17.33	0	\$4.29	\$38.93	\$64.21	\$138.95	\$12.99	0	\$3.29	\$66.48	\$110.52	\$194.64	Sewer capped at 10,000 gallons
			3,001	\$5.85					3,001	\$4.69				
			8,001	\$7.65										
			12,001	\$12.87										
			20,001	\$14.44										
	Cooper City ^a	\$13.47	0	\$3.34	\$26.83	\$41.75	\$73.92	\$29.14			\$55.97	\$70.89	\$103.06	
			5,001	\$3.86										
			10,001	\$4.89										
			20,001	\$6.43										
	Coral Springs	\$15.88	0	\$1.81	\$23.12	\$38.41	\$73.84	\$23.85	0	\$4.54	\$65.13	\$98.58	\$165.79	
			4,001	\$2.78										
			8,001	\$4.17										
			12,001	\$6.25										
			20,001	\$9.38										
	Coral Springs Improvement District	\$20.99	0	\$0.00	\$24.97	\$40.89	\$75.77	\$20.99	0	\$0.00	\$49.94	\$81.78	\$151.54	
			3,001	\$3.98					3,001	\$3.98				
			12,601	\$6.32					12,601	\$6.32				
			25,200	\$8.65					25,200	\$8.65				
	Dania Beach	\$14.55	0	\$4.09	\$30.91	\$58.71	\$106.12	\$21.52	0	\$7.46	\$82.27	\$139.91	\$239.54	
			5,001	\$6.54										
		14,001	\$8.17											

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Broward	Town of Davie	\$23.01	0	\$3.80	\$38.21	\$60.69	\$118.50	\$41.22	0	\$7.42	\$109.11	\$161.27	\$271.02	Sewer capped at 15,000 gallons
			5,001	\$6.23										
			10,001	\$9.07										
			20,001	\$12.31										
			30,001	\$15.95										
			50,001	\$19.91										
	Deerfield Beach	\$15.00	0	\$2.65	\$25.60	\$38.24	\$65.01	\$10.98	0	\$2.71	\$47.42	\$70.90	\$108.51	Sewer capped at 12,000 gallons
			6,001	\$3.67										
			12,001	\$4.03										
	Fort Lauderdale-In City	\$7.61	0	\$2.76	\$21.97	\$46.29	\$107.54	\$12.98	0	\$4.76	\$59.75	\$126.15	\$261.04	
			4,000	\$6.08					3,000	\$10.52				
			9,000	\$7.61										
			13,000	\$10.27										
			20,000	\$14.91										
	Hallandale Beach	\$21.59	0	\$1.16	\$26.41	\$32.55	\$48.56	\$21.02	0	\$4.29	\$64.91	\$89.42	\$140.46	
			2,001	\$1.25					2,001	\$4.45				
			5,001	\$1.63					5,001	\$4.64				
			10,001	\$2.55					10,001	\$5.15				
			25,001	\$2.79					25,001	\$5.42				
	Hillsboro Beach ^b	\$41.63	0	\$0.00	\$48.57	\$62.45	\$91.54	\$0.00	0	\$4.32	\$65.85	\$97.01	\$156.34	
2,001			\$3.47	17,001					\$5.02					
9,001			\$4.27											
17,001			\$4.97											

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Broward	Hollywood	\$7.91	0	\$2.53	\$18.68	\$38.92	\$93.40	\$7.92	0	\$7.34	\$55.96	\$105.56	\$219.54	Sewer capped at 11,000 gallons
			3,747	\$5.06										
			11,227	\$10.11										
	Lauderhill	\$12.60	0	\$1.90	\$20.20	\$31.80	\$74.36	\$20.19	0	\$4.05	\$56.59	\$84.39	\$155.30	
			4,001	\$2.90										
			8,001	\$5.48										
			12,000	\$6.88										
	Margate-In City ^a	\$12.58	0	\$3.76	\$27.62	\$44.54	\$77.44	\$31.94			\$59.56	\$76.48	\$109.38	
			6,001	\$4.70										
			15,001	\$5.65										
			25,001	\$6.58										
	Miramar	\$16.41	0	\$3.90	\$35.21	\$55.28	\$92.08	\$19.21	0	\$5.43	\$76.14	\$117.93	\$192.74	
			5,001	\$4.78										
			15,001	\$6.00										
	North Lauderdale	\$14.60	0	\$3.54	\$31.64	\$47.21	\$88.06	\$26.45	0	\$4.16	\$74.73	\$106.94	\$156.11	Sewer capped at 10,000 gallons
			10,001	\$6.01										
	North Springs Improvement District	\$39.52	0	\$2.35	\$48.92	\$58.32	\$80.43	\$23.81	0	\$2.86	\$167.97	\$272.61	\$461.39	
			12,601	\$4.71										
			25,201	\$7.06										
	Oakland Park	\$15.32	0	\$6.80	\$43.33	\$73.77	\$135.64	\$18.15	0	\$6.94	\$89.24	\$147.44	\$257.89	Sewer capped at 15,000 gallons
			4,000	\$7.61										
9,000			\$8.69											
15,000			\$9.73											
Royal Waterworks	\$12.35	0	\$3.18	\$25.07	\$37.79	\$60.05	\$13.10	0	\$4.61	\$56.61	\$87.77	\$119.25	Sewer capped at 10,000 gallons	

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Broward	Pembroke Pines	\$18.45	0	\$0.00	\$28.18	\$59.73	\$114.94	\$23.61	0	\$0.00	\$58.96	\$119.19	\$224.59	
			3,001	\$7.17					3,001	\$7.17				
	Plantation	\$14.24	0	\$2.02	\$22.32	\$34.46	\$68.87	\$18.65	0	\$5.21	\$61.81	\$94.79	\$165.67	
			6,001	\$4.05										
			12,001	\$6.07										
			20,001	\$8.08										
			30,001	\$10.11										
	50,001	\$12.13												
	Pompano Beach-In City	\$16.41	0	\$2.85	\$27.81	\$39.21	\$64.46	\$15.61	0	\$3.64	\$57.98	\$83.94	\$116.47	Sewer capped at 10,000 gallons
			11,000	\$3.91										
			16,000	\$5.44										
			25,000	\$7.65										
	Parkland	\$10.99	0	\$3.04	\$23.15	\$35.31	\$56.59	\$14.36	0	\$8.50	\$71.51	\$117.67	\$155.95	Sewer capped at 10,000 gallons
	Seminole Improvement District	\$15.01	0	\$4.85	\$34.41	\$53.81	\$100.92	\$16.86	0	\$3.95	\$67.07	\$102.27	\$149.38	Sewer capped at 8,000 gallons
			8,001	\$6.73										
			16,001	\$8.61										
			24,001	\$10.49										
	Sunrise-In City	\$20.87	0	\$4.09	\$37.23	\$53.59	\$82.22	\$29.68	0	\$4.16	\$83.55	\$116.55	\$174.30	Sewer capped at 16,000 gallons
			30,001	\$5.18										
	Sunrise Southwest plant	\$22.05	0	\$5.44	\$43.81	\$65.57	\$103.65	\$25.04	0	\$8.26	\$101.89	\$156.69	\$211.29	Sewer capped at 10,000 gallons

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes	
					4,000	8,000	15,000				4,000	8,000	15,000		
Broward	Tamarac	\$11.77	0	\$1.77	\$19.44	\$31.28	\$64.21	\$18.85	0	\$4.80	\$57.49	\$88.53	\$140.56	Sewer capped at 12,000 gallons	
			3,001	\$2.36											
			6,001	\$3.56											
			12,001	\$6.23											
	Wilton Manors	\$29.03	0	\$4.76	\$52.88	\$73.82	\$110.47	\$12.85	0	\$8.87	\$101.21	\$157.63	\$256.37		Sewer capped at 15,000 gallons
			16,000	\$5.81											
31,000			\$7.26												
Charlotte	Charlotte County Utilities/Burnt Store	\$27.18	0	\$5.85	\$50.58	\$76.59	\$132.38	\$40.41	0	\$5.63	\$113.51	\$162.04	\$229.09	Sewer capped at 10,000 gallons	
			6,000	\$6.72											
			11,000	\$8.47											
			16,000	\$9.64											
			26,000	\$11.11											
Collier	Ave Maria	\$41.68	0	\$2.88	\$53.20	\$69.16	\$106.83	\$50.01	0	\$4.79	\$122.37	\$157.49	\$228.69		
			5,001	\$4.36											
			10,001	\$5.79											
			150,001	\$8.66											
	Collier County	\$24.79	0	\$3.34	\$38.15	\$56.64	\$100.29	\$37.30	0	\$5.25	\$96.45	\$135.94	\$216.34		Sewer capped at 15,000 gallons
			6,000	\$5.05											
			11,000	\$6.71											
			21,000	\$8.38											
			31,000	\$10.05											
			50,000	\$13.40											
Everglades City-In City	\$46.38	0	\$0.00	\$54.67	\$87.83	\$161.34	\$58.46	0	\$0.00	\$121.40	\$187.64	\$319.04			
		3,001	\$8.29					3,001	\$8.27						
		10,000	\$10.87												

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Collier	Immokalee Water	\$23.49	0	\$3.35	\$36.89	\$50.29	\$80.69	\$34.42	0	\$5.76	\$94.35	\$130.79	\$201.51	Sewer capped at 15,000 gallons
			10,001	\$4.74										
	Marco Island	\$35.96	0	\$4.49	\$53.92	\$71.88	\$103.31	\$29.32	0	\$5.79	\$106.40	\$135.94	\$167.37	Sewer capped at 6,000 gallons
			21,001	\$6.74										
			32,001	\$8.99										
	Naples-In City	\$17.58	0	\$1.52	\$11.83 ^c	\$14.87	\$20.19	\$43.98	0	\$4.27	\$42.36	\$53.94	\$74.21	Sewer capped at 20,000 gallons
			15,001	\$2.66										
			30,001	\$3.78										
			45,001	\$4.54										
	Glades	Moore Haven	\$32.04	0	\$3.53	\$46.16	\$60.28	\$84.99	\$8.00	0	\$6.25	\$79.16	\$118.28	\$186.74
Hendry	Clewiston	\$6.95	0	\$4.53	\$25.07	\$43.19	\$77.15	\$6.90	0	\$5.12	\$52.45	\$91.05	\$160.85	
			11,000	\$4.98										
			20,001	\$5.48										
	Labelle-In City	\$35.08	0	\$4.55	\$53.28	\$71.48	\$103.33	\$20.52	0	\$2.43	\$83.52	\$111.44	\$143.29	Sewer capped at 8,000 gallons
	Port LaBelle	\$24.00	0	\$3.30	\$38.40	\$57.60	\$103.80	\$12.00	0	\$4.40	\$68.00	\$104.80	\$151.00	Sewer capped at 8,000 gallons
			2,001	\$3.90										
			4,001	\$4.80										
			8,001	\$6.60										
	South Shore Water Association ^b	\$30.41	0	\$4.15	\$47.01	\$63.81	\$94.26							Clewiston provides Sewer service for less than 600 connections
			5,000	\$4.20										
			10,000	\$4.25										
			15,000	\$5.00										
20,000			\$5.45											

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Highlands	Sebring-In City ^a	\$9.43	0	\$2.60	\$19.83	\$30.23	\$48.43	\$25.64			\$45.47	\$55.87	\$74.07	
	Spring Lake Improvement District (City of Sebring)	\$31.05	0	\$3.57	\$46.47	\$65.10	\$103.74	\$103.50	0	\$8.11	\$194.58	\$278.09	\$430.27	
			3,000	\$4.14					2,500	\$16.22				
			6,000	\$4.83										
			9,000	\$5.52										
16,000	\$6.21													
Lee	Bonita Springs	\$12.59	0	\$3.79	\$27.75	\$44.53	\$79.13	\$29.48	0	\$3.83	\$72.55	\$104.65	\$166.06	Sewer capped at 16,000 gallons
			6,001	\$4.60										
			12,001	\$5.40										
			18,001	\$6.21										
	Cape Coral	\$17.32	0	\$3.90	\$32.92	\$50.47	\$104.12	\$21.07	0	\$9.04	\$90.15	\$143.86	\$260.79	
			5,001	\$4.55										
			10,001	\$6.86										
			15,001	\$10.25										
			20,001	\$11.32										
			30,001	\$12.44										
	FGUA-Pine Lakes	\$18.24	0	\$7.86	\$49.68	\$81.12	\$136.14	\$18.90	0	\$8.75	\$103.58	\$152.52	\$207.54	Sewer capped at 6,000 gallons
	Fort Myers-In City ^a	\$8.89	0	\$4.79	\$28.05	\$61.58	\$147.79	\$29.00			\$36.05	\$69.58	\$155.79	
			5,001	\$9.58										
			10,001	\$13.41										
			20,001	\$18.77										
	FGUA-Lehigh Plant	\$15.81	0	\$5.79	\$38.97	\$63.89	\$113.13	\$26.53	0	\$9.14	\$63.09	\$145.26	\$194.50	Sewer capped at 6,000 gallons
			7,000	\$6.67										
			13,000	\$7.52										
			18,000	\$8.67										

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Lee	Fort Myers Beach ^b	\$17.51	0	\$7.00	\$45.51	\$78.39	\$144.47	\$20.45	0	\$5.85	\$89.36	\$145.64	\$217.57	Sewer service provided by Lee County
			6,001	\$9.44										
			15,001	\$10.49										
			30,001	\$13.99										
	Lee County Utilities	\$12.59	0	\$3.27	\$25.67	\$40.39	\$71.48	\$20.45	0	\$5.85	\$69.52	\$107.64	\$144.58	Sewer capped at 9,000 gallons
			6,001	\$4.09										
			12,001	\$4.91										
			18,001	\$6.54										
	Greater Pine Island ^b	\$19.04	0	\$4.07	\$36.30	\$56.07	\$99.13	\$20.45	0	\$5.85	\$80.15	\$123.32	\$172.23	Sewer service provided by Lee County
			3,000	\$4.56										
			6,000	\$5.07										
			11,000	\$6.33										
			15,000	\$7.60										
	Island Water Association ^b	\$13.00	0	\$3.30	\$26.20	\$41.35	\$72.25	\$68.14			\$94.34	\$109.49	\$140.39	Sewer service provided by Sanibel Island
			6,000	\$3.95										
			11,000	\$4.60										
			16,000	\$5.25										
			21,000	\$5.90										
			25,000	\$6.55										
	Sanibel Island ^{a, c}	\$13.00	0	\$3.30	\$26.20	\$41.35	\$72.25	\$68.14			\$94.34	\$109.49	\$140.39	Water service provided by Island Water Assoc.
			6,000	\$3.95										
			11,000	\$4.60										
			16,000	\$5.25										
			21,000	\$5.90										
25,000			\$6.55											
Port of the Islands	\$0.00	0	\$3.38	\$13.52	\$27.04	\$50.70	\$0.00	0	\$6.94	\$34.34	\$68.68	\$128.78		

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes	
					4,000	8,000	15,000				4,000	8,000	15,000		
Martin	Indiantown Company	\$13.62	0	\$2.21	\$22.46	\$31.30	\$50.62	\$24.32	0	\$4.54	\$64.94	\$91.94	\$120.34	Sewer capped at 10,000 gallons	
			8,001	\$2.76											
			15,001	\$3.32											
	Martin County Utilities	\$18.56	0	\$2.38	\$28.08	\$37.60	\$59.26	\$19.25	0	\$4.70	\$66.13	\$94.45	\$125.51	Sewer capped at 10,000 gallons	
			10,001	\$3.38											
			15,001	\$4.32											
			25,001	\$5.26											
	South Martin Regional Utility	\$21.86	0	\$0.98	\$27.09	\$36.25	\$58.03	\$13.66	0	\$5.88	\$64.27	\$96.95	\$130.49	Sewer capped at 10,000 gallons	
			3,001	\$2.29											
			10,001	\$3.44											
			20,001	\$4.59											
			40,001	\$5.73											
	Stuart-In City	\$17.65	0	\$3.38	\$31.17	\$45.37	\$91.17	\$7.33	0	\$7.15	\$67.10	\$109.90	\$184.30	Sewer capped at 12,000 gallons	
			4,001	\$3.55											
			8,001	\$6.11											
12,001			\$7.12												
25,001			\$8.12												
Miami-Dade	Florida City ^a	\$6.10	0	\$0.00	\$10.10	\$18.10	\$32.10	\$15.79			\$46.04	\$70.00	\$111.93		
			2,001	\$2.00											
	Homestead	\$10.03	0	\$0.98	\$14.33	\$19.77	\$33.06	\$20.31	0	\$4.35	\$52.04	\$74.88	\$118.62		
			3,001	\$1.36											
			9,001	\$1.88											
			14,001	\$2.53											
	Miami Dade Water & Sewer	\$4.22	0	\$0.00	\$12.26	\$30.58	\$80.70	\$7.19	0	\$0.00	\$35.44	\$90.20	\$204.09		
			2,245	\$4.58					2,245	\$9.11					
			12,217	\$11.07											

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Miami-Dade	North Miami	\$13.79	0	\$2.09	\$22.15	\$33.03	\$56.03	\$19.14	0	\$5.00	\$58.29	\$86.17	\$138.92	
			5,001	\$2.93										
			12,001	\$3.76										
			20,001	\$4.19										
	North Miami Beach	\$15.63	0	\$4.36	\$33.07	\$50.51	\$81.03	\$7.19	0	\$0.00	\$56.25	\$110.13	\$204.42	
			22,000	\$4.85					2,245	\$9.11				
			36,000	\$6.05										
Monroe	Florida Keys Aqueduct Authority	\$17.04	0	\$7.16	\$45.68	\$80.92	\$157.95	\$27.53	0	\$10.42	\$114.89	\$191.81	\$289.68	Sewer capped at 10,000 gallons
			6,001	\$10.46										
			12,001	\$11.73										
			30,001	\$13.08										
			50,001	\$14.36										
Okeechobee	Okeechobee Utility Authority	\$20.91	0	\$4.52	\$41.27	\$68.47	\$116.07	\$23.97	0	\$7.46	\$95.08	\$152.12	\$251.94	
			3,001	\$6.80										
Orange	Orange County Utilities	\$8.02	0	\$1.27	\$13.59	\$20.63	\$41.65	\$18.77	0	\$4.26	\$49.40	\$73.48	\$120.06	Sewer capped at 14,000 gallons
			4,000	\$1.76										
			11,000	\$3.50										
			21,000	\$6.99										
			31,000	\$13.95										
	Orlando Utilities Commission- In City ^b	\$10.00	0	\$0.69	\$13.24	\$18.60	\$31.55	\$21.06			\$54.66	\$80.38	\$123.87	Sewer service provided by City of Orlando
			3,001	\$1.17										
			7,001	\$1.85										
			19,001	\$6.30										
			30,001	\$10.75										

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Orange	Orlando-In City ^c	\$10.00	0	\$0.69	\$13.24	\$18.60	\$31.55	\$21.06	0	\$5.09	\$54.66	\$80.38	\$123.87	Water service provided by Orlando Utilities Commission Sewer capped at 14,000 gallons
			3,001	\$1.17										
			7,001	\$1.85										
			19,001	\$6.30										
			30,001	\$10.75										
	Reedy Creek Improvement District	\$24.34	0	\$1.41	\$30.00	\$35.66	\$45.56	\$3.28	0	\$4.49	\$51.24	\$74.86	\$84.76	Sewer capped at 8,000 gallons
	Taft Water Association 88 ^b	\$16.00	0		\$17.75	\$26.75	\$46.00	\$21.06	0	5.09	\$59.17	\$88.53	\$46.00	Sewer service provided by City of Orlando
			3,001	\$1.75										
			6,001	\$2.75										
			15,001	\$3.25										
Osceola	Enterprise CDD	\$15.54	0	\$1.13	\$20.06	\$24.58	\$44.70	\$32.76	0	\$3.11	\$65.26	\$82.22	\$149.85	
			8,401	\$2.98					8,401	7.01				
	St. Cloud-In City	\$6.54	0	\$0.60	\$10.44	\$22.20	\$55.38	\$16.26	0	\$2.05	\$44.88	\$84.80	\$167.26	
			4,000	\$2.10					3,000	7.04				
			7,000	\$3.78										
			13,000	\$6.02										
			19,000	\$9.07										
			31,000	\$6.07										
	Toho Water Authority	\$6.54	0	\$0.60	\$11.94	\$25.38	\$63.04	\$16.26	0	\$2.05	\$46.38	\$87.98	\$174.92	
			2,001	\$2.10					2,001	7.04				
			5,001	\$3.78										
			10,001	\$6.02										
			20,001	\$9.07										

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Palm Beach	Boca Raton-In City ^a	\$32.21	0	\$0.94	\$17.99 ^c	\$19.87	\$23.16	\$20.37			\$38.36	\$40.24	\$43.53	
			25,001	\$2.27										
			50,001	\$2.92										
	Boynton Beach-In City	\$12.90	0	\$1.72	\$19.78	\$26.66	\$46.92	\$19.33	0	\$2.18	\$47.83	\$63.43	\$98.95	
			9,001	\$3.09										
			30,001	\$4.13										
			50,001	\$5.09										
	Delray Beach-In City	\$16.01	0	\$0.49	\$18.95	\$24.83	\$38.36	\$18.04	0	\$3.50	\$50.99	\$70.87	\$98.40	Sewer capped at 12,000 gallons
			3,001	\$1.47										
			12,001	\$2.55										
			25,001	\$4.21										
			50,001	\$5.49										
	Golf-In City	\$38.87	0	\$0.00	\$38.87	\$38.87	\$38.87	\$36.13	0	\$0.00	\$84.02	\$84.02	\$84.02	
			35,001	\$1.60					30,001	\$2.80				
			40,001	\$2.00										
			50,001	\$2.42										
			60,001	\$2.83										
	Highland Beach	\$48.84	0	\$2.60	\$29.62 ^c	\$34.82	\$46.22	\$18.70	0	\$3.05	\$54.42	\$65.72	\$87.80	Sewer capped at 20,000 gallons
			10,001	\$3.52										
			20,001	\$5.46										
			55,001	\$7.94										
			80,001	\$10.38										
	Jupiter-In City ^b	\$23.88	0	\$1.41	\$29.52	\$36.16	\$51.00	\$23.44			\$52.96	\$59.60	\$74.44	Sewer service provided by Loxahatchee River District
			6,001	\$1.91										
14,001			\$3.38											
30,045			\$4.45											

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Palm Beach	Lake Worth-In City ^a	\$21.14	0	\$3.41	\$34.78	\$55.78	\$121.54	\$28.23			\$63.01	\$84.01	\$149.77	
			4,001	\$5.25										
			8,001	\$7.11										
			12,001	\$12.44										
			20,001	\$15.61										
	Lantana	\$24.57	0	\$1.53	\$30.69	\$39.18	\$60.27	\$16.27	0	\$5.64	\$69.52	\$100.57	\$132.94	Sewer capped at 10,000 gallons
			5,001	\$2.32										
			10,001	\$3.29										
			20,001	\$3.96										
			40,001	\$4.08										
	Loxahatchee River District ^{a, d}	\$0.00			\$0.00	\$0.00	\$0.00	\$23.44			\$0.00	\$0.00	\$0.00	
	Manalapan-In City	\$42.85	0	\$2.34	\$52.21	\$61.57	\$77.95	\$54.06	0	\$6.07	\$130.55	\$164.19	\$223.06	
	Mangonia Park	\$12.28	0	\$2.07	\$20.56	\$28.84	\$43.33	\$20.06	0	\$5.16	\$61.26	\$90.18	\$125.31	Sewer capped at 12,000 gallons
	Palm Beach County	\$12.64	0	\$2.08	\$20.96	\$39.32	\$89.10	\$22.54	0	\$2.33	\$52.82	\$80.50	\$134.94	Sewer capped at 10,000 gallons
			5,000	\$4.59										
11,000			\$8.12											
25,000			\$9.37											
Palm Springs-In City	\$12.89	0	\$3.20	\$25.69	\$40.45	\$69.71	\$11.65	0	\$7.55	\$67.54	\$112.50	\$141.76	Sewer capped at 8,000 gallons	
		7,000	\$4.18											
		21,000	\$5.15											

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Palm Beach	Riviera Beach-In City	\$17.10	0	\$2.61	\$27.54	\$40.86	\$71.50	\$17.54	0	\$2.82	\$56.36	\$80.96	\$131.34	
			5,001	\$3.57										
			10,001	\$4.70										
			20,001	\$5.91										
	Seacoast Utility Authority	\$29.24	0	\$2.69	\$40.00	\$54.70	\$87.32	\$20.01	0	\$0.90	\$63.61	\$81.91	\$116.33	Sewer capped at 10,000 gallons
			7,000	\$4.66										
			31,000	\$5.64										
	Tequesta-In City ^b	\$21.50	0	\$2.75	\$32.50	\$46.50	\$76.25	\$23.44			\$55.94	\$69.94	\$99.69	Sewer service provided by Loxahatchee River District
			6,001	\$4.25										
			15,001	\$6.00										
			30,001	\$8.00										
	Wellington-In City	\$22.18	0	\$2.51	\$32.22	\$44.72	\$70.90	\$21.16	0	\$2.33	\$62.70	\$84.52	\$127.01	Sewer capped at 15,000 gallons
			6,001	\$3.74										
			15,001	\$5.01										
			25,001	\$8.23										
	West Palm Beach-In City	\$23.66	0	\$2.74	\$34.62	\$46.45	\$71.86	\$14.89	0	\$4.39	\$67.07	\$96.46	\$139.29	Sewer capped at 12,000 gallons
			6,732	\$3.43										
			12,716	\$4.04										
			27,676	\$4.73										
			57,596	\$5.45										
			150,348	\$6.13										
Gold Coast Utility	\$15.84	0	\$3.22	\$28.72	\$41.60	\$64.14	\$27.85	0	\$4.46	\$74.41	\$105.13	\$136.59	Sewer capped at 10,000 gallons	

Table A-1. Continued.

County	Utility	Water Base Fee	Usage Tiers (gals)	Rate	Water Bill			Sewer Base Fee	Usage Tiers (gals)	Rate	Water & Sewer Bill			Notes
					4,000	8,000	15,000				4,000	8,000	15,000	
Polk	Polk County Utilities	\$10.43	0	\$1.99	\$19.03	\$29.55	\$60.96	\$36.14	0	\$6.48	\$81.09	\$111.05	\$142.46	Sewer capped at 7,000 gallons
			4,000	\$2.63										
			11,000	\$5.23										
			21,000	\$7.87										
			31,000	\$10.48										
			41,000	\$18.37										
St. Lucie	Fort Pierce Utility Authority-In City	\$18.24	0	\$4.04	\$38.54	\$59.14	\$101.61	\$19.64	0	\$7.04	\$86.34	\$135.10	\$191.65	Sewer capped at 10,000 gallons
			3,001	\$4.68										
			10,001	\$5.85										
			15,001	\$7.02										
	Port St. Lucie	\$9.92	0	\$4.65	\$28.52	\$51.35	\$97.97	\$17.13	0	\$8.03	\$77.77	\$132.72	\$179.34	Sewer capped at 8,000 gallons
			5,001	\$6.06										
			12,001	\$7.46										
	Reserve Community Development District	\$14.84	0	\$2.72	\$25.72	\$36.60	\$55.64	\$16.99	0	\$2.86	\$54.15	\$76.47	\$101.23	Sewer capped at 10,000 gallons
	St. Lucie County Utilities Department North	\$22.30	0	\$6.02	\$46.38	\$73.55	\$134.35	\$26.57	0	\$7.99	\$104.91	\$164.04	\$240.82	Sewer capped at 10,000 gallons
			5,001	\$7.05										
			10,001	\$9.34										
			15,001	\$10.90										
	St. Lucie West Services District	\$16.19	0	\$3.64	\$30.75	\$45.31	\$70.79	\$20.25	0	\$4.05	\$67.20	\$97.96	\$151.79	

^a Flat rate for sewer.

^b No sewer service provided by utility.

^c No water service provided by utility.

^d Only provides sewer service.

^e Billing is bimonthly. Total charge divided by 2 to show "monthly charge."