



**Recommendations of the 2007 Informal Water &
Wastewater Retail Rate Structure Advisory Committee**

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RECOMMENDATIONS OF THE 2007 INFORMAL WATER AND WASTEWATER RETAIL RATE STRUCTURE ADVISORY COMMITTEE

This report contains background information and recommendations made by a customer advisory committee on proposed changes to the City of Fort Worth's water and wastewater rates. Opinions are invited and welcome.

This report includes the committee's recommendations and the Water Director's rate recommendations to the City Council. Final rate-setting authority lies with the City Council.

A copy of this report has been placed in each community library and is posted on the Water Department Web site at www.fortworthgov.org/water. All citizens and water customers are invited to provide written comments.

Please send written comments to:

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Comments must be received on or before 5 p.m. Friday, September 7, 2007. The City Council may act on the recommendations as early as Tuesday, September 11, 2007.

Questions may be directed to Mary Gugliuzza, public education coordinator, with the Fort Worth Water Department at 817-392-8253.

Committee Members

The Retail Customer Advisory Committee met six times between January 22, 2007 and August 10, 2007. The committee is comprised of customers from all of the retail customer classes. Members were recommended to the Water Department and volunteered their time to serve.

<u>Name</u>	<u>Company/Association</u>	<u>Customer Class</u>
Mike Gomez	Miller Brewing	Industrial
Don Mitchell	Lockheed Martin	Industrial
Mike Cook	Mike's Garden Centers	Irrigation
Jan Hale	Residential Member	Residential
Johnnie Hurst	Ryanwood Neighborhood Association	Residential
J. D. Jimmerson	Far Greater Northside Neighborhood Association	Residential
George Johnson	Ridglea Hills Neighborhood Association	Residential
LaGina Kissentaner-Thomas	East Fort Worth Neighborhood Coalition	Residential

Fact Sheet:

Public Participation Program on Redesigning the City of Fort Worth's Water and Wastewater Rates

Introduction

For the 13th year, the City of Fort Worth Water Department assembled a Customer Advisory Committee to explore any changes that may be needed in the Water Department's water and wastewater rate structure. The committee did not consider whether any rate increases are needed, as this is not within its charge. Instead, members looked at the ways the rates are structured to ensure each class of customers (residential, industrial, etc.) pays rates that are fair and equitable. The committee's evaluations were made assuming a 3.87 percent system average water increase and an 8.14 percent system average wastewater increase are needed.

Why did the Water Department ask customers to help consider changes in the way the rates are structured?

The department conducted a "cost-of-service" study to determine how much it costs to serve each customer class. Fort Worth Water Department staff conducted this year's study. Previous year's studies have shown that some customer classes pay more than it actually costs to provide service to them while others do not cover the cost of providing service to them. Customer input is sought to ensure equity in any restructuring that is done.

Why is it important for customers to be involved in this process?

The Water Department wants to ensure that the interests of all customers are represented during the rate structuring process.

What has the committee been doing?

The committee reviewed the Water Department's cost studies, portions of its budget and projections for the future before forming its recommendations.

How were the committee members chosen?

Members were recommended to the Water Department staff to be a representative cross-section of the Department's customers.

Cost-of-service study results

A cost-of-service study determines how much it costs a utility to serve a particular group of customers. The Fort Worth Water Department staff completed the cost-of-service studies for both retail water and wastewater. Rates for each customer class should recover the amount of money it takes to serve those customers.

Water cost of service

The cost-of-service study showed that under the current rate structure the industrial class is the only class paying cost of service. The other classes – residential, commercial and irrigation customers – are paying less than the utility’s cost of providing service to them.

Customer Class	Revenue at Current Rates	Cost of Service	Percent Increase
Residential	\$ 64,000,055	\$ 67,819,481	5.97%
Commercial	\$ 37,578,928	\$ 38,313,897	1.96%
Industrial	\$ 8,780,250	\$ 8,218,474	-6.40%
Irrigation	\$ 10,611,478	\$ 11,190,578	5.46%
TOTAL	\$ 120,970,711	\$ 125,542,431	3.78%

Wastewater cost of service

The cost-of-service study showed that under the current rate structure the residential rate class is the only class paying cost of service. The other classes – non-monitored commercial and industrial and monitored commercial and industrial customers – are paying less than what it costs to serve them.

Customer Class	Revenue at Current Rates	Cost of Service	Percent Increase
Residential	\$47,745,679	\$47,373,154	-0.78%
Non-Monitored Commercial & Industrial	\$35,316,966	\$41,248,167	16.79%
Monitored Commercial & Industrial	\$12,717,157	\$15,643,278	23.01%
TOTAL	\$95,779,802	\$104,264,600	8.86%

Goals for water and wastewater rate structures

Equity — The rates must be fair for all customer classes.

Financial integrity — The rates must ensure the water and wastewater utility is in a sound financial position.

Legal/conservation — The rates must meet all legal requirements, including requirements that the utility meet conservation guidelines established by the Texas Water Development Board.

Realism — The rates must be practical to implement.

Revenue stability — As much as possible, the rates must provide stable revenue from year to year.

Responsible to society — The rates should take into account any societal needs unique to Fort Worth.

Understandable — The rates shouldn't be so complex that they are difficult to explain to customers and don't provide the desired pricing signals.

Customer Advisory Committee Recommendations

Overall principles

- The rates for each customer class (residential, commercial and industrial) should be based on the actual cost of providing service to that class. This is to ensure that each customer class pays its fair share of the cost of providing water and wastewater service.
- The transition to cost-based rates should be gradual. This should be done to avoid an excessive rate increase for any particular class of customers. Bringing all customer classes' to cost of service is the stated goal of the committee.
- To maintain stable rates, when an increase is required, no class should see a rate decrease.

Recommendations – Water Rates

- This reflects a system increase of approximately 3.87%.
- Monthly service charges should be adjusted to bring 5/8-inch and 1-inch meters halfway to cost of service with other meter sizes brought to cost of service. The cost-of-service study revealed that monthly service charge for small meters, especially, was substantially below cost of service. The committee recommended a gradual move to cost of service for this charge, starting this year rather than waiting to do it all at once next year. This allows a phase-in so residential users are not substantially impacted in a single year by a significant rate increase.
- The volume rates for all classes are that are under funded should be brought to cost of service.
- To encourage efficient water use and maintain as low a rate as possible for water used for essential needs, a fourth tier should be added to the top of the residential rate structure. The top of the third tier would be 3,000 cubic feet (22,440 gallons). Monthly usage above 3,000 cubic feet would be in the fourth tier.
- The irrigation rate should be an inclining-block structure instead of a uniform structure to encourage efficient irrigation water use. The top of the first tier would be 10,000 cubic feet (74,800 gallons) of monthly usage. All usage above this would fall into the second tier.

Impact of Recommendations on Water Rates

The Water Director has submitted a proposed rate package to the City Council based on the committee’s recommendations. The tables below outline the proposal.

Customer Class	Revenue at Current Rates	Costs of Service	Recommended Revenue Requirement	Percent Increase
Residential	\$64,000,055	\$67,819,481	\$66,893,930	4.52%
Commercial	\$37,578,928	\$38,313,897	\$37,707,604	0.34%
Industrial	\$8,780,250	\$8,218,474	\$8,784,774	0.05%
Irrigation	\$10,611,478	\$11,190,578	\$12,271,350	15.64%
TOTAL	\$120,970,711	\$125,542,431	\$125,657,658	3.87%

It is proposed that the following changes be made in monthly service charges for each meter size.

Meter Size	Current Rate	Cost of service	Proposed Rate
5/8" & 3/4"	\$ 5.50	\$ 6.51	\$ 6.00
1"	\$ 8.00	\$ 9.09	\$ 8.50
1 1/2"	\$ 14.50	\$ 15.47	\$ 15.50
2"	\$ 22.00	\$ 23.17	\$ 23.00
3"	\$ 47.00	\$ 47.56	\$ 47.50
4"	\$ 82.00	\$ 83.45	\$ 83.50
6"	\$180.00	\$ 182.21	\$182.00
8"	\$310.00	\$ 310.44	\$310.00
10"	\$485.00	\$ 489.99	\$490.00

The impact on the volume rate charge would be:

Customer Class	Current Rate	Monthly Volume	Proposed Rate	Monthly Volume
Residential	\$1.77 / CCF	first 8 CCF	\$1.80 / CCF	first 8 CCF
	\$2.44 / CCF	> 8 to 20 CCF	\$2.51 / CCF	>8 to 20 CCF
	\$3.00 / CCF	> 20 CCF	\$3.09 / CCF	> 20 to 30 CCF
			\$3.71 / CCF	> 30 CCF
Commercial	\$1.97 / CCF	All volumes	\$2.01 / CCF	All volumes
Industrial	\$1.70 / CCF	All volumes	\$1.70 / CCF	All volumes
Super User	\$1.55 / CCF	All volumes	\$1.55 / CCF	All volumes
Irrigation	\$2.33 / CCF	All volumes	\$2.47 / CCF	first 100 CCF
			\$2.91 / CCF	>100 CCF

CCF = one hundred cubic feet = 748 gallons

The average residential water bill would increase by 96 cents a month under the proposed rates. (See Exhibit A)

Recommendations – Wastewater Rates

- This reflects a system increase of approximately 8.14% overall.
- The wastewater monthly customer service charge should not change.
- For residential customers, Winter Quarter Averaging and a cap of 1,500 cubic feet (15 CCF) per month should remain in place.
- No customer class’ rates should increase more than 2 times the system average increase (a total of 16.28 percent).
- Residential volume rates should increase 5% to offset high rate increases required for monitored and non-monitored commercial and industrial customers. Residential rates have not changed the past two years.
- Rates for treating BOD (biochemical oxygen demand, a component of wastewater that makes it more expensive to treat) should increase because of increased costs.
- TSS (total suspended solids, another component of wastewater that is more expensive to handle) should increase to match increased costs.

Impact of Recommendations on Wastewater Rates

The Water Director has submitted a proposed rate package to the City Council based on the committee’s recommendations. The tables below outline the proposal.

Customer Class	Revenue at Current Rates	Costs of Service	Recommended Revenue Requirement	Percent Increase
Residential	\$47,745,679	\$47,060,411	\$49,381,687	3.43%
Non-Monitored	\$35,316,966	\$40,975,861	\$39,889,899	12.95%
Monitored	\$12,717,157	\$15,540,006	\$14,304,692	12.48%
TOTAL	\$95,779,802	\$103,576,278	\$103,576,278	8.14%

The impact on the wastewater rate charges would be:

Customer Class	Current Rate			Proposed Rate		
	Volume	BOD (\$/lb.)	TSS (\$/lb.)	Volume	BOD (\$/lb.)	TSS (\$/lb.)
Residential	\$2.51 / CCF	N/A	N/A	\$2.64 / CCF	N/A	N/A
Non-Monitored Commercial & Industrial	\$2.77 / CCF	N/A	N/A	\$3.16 / CCF	N/A	N/A
Monitored Commercial & Industrial	\$2.05 / CCF	\$0.191	\$0.097	\$2.34 / CCF	\$0.2208	\$0.1010

CCF = one hundred cubic feet = 748 gallons

The average residential wastewater bill would increase by 82 cents a month under the proposed rates. (See Exhibit A)

Recommendation – Annual Committee Meetings

The Fort Worth Water Department did not convene a Retail Rate Advisory Committee in 2006 because it was able to offset any rate increase with reserve funds. The Committee reiterated recommendations it had made in previous years that small frequent annual increases are preferable to no increases in one or more consecutive years followed by a large increase.

The committee reiterated a written statement that it had put before the Fort Worth City Council in 2000 that captured its sentiments. It reads:

In an effort to moderate year to year volatility in retail water and sewer rates, and provide more predictable prices for homes and businesses; a majority of the Advisory Committee recommends that rates be evaluated annually taking into account expected costs beyond immediate budgets. While this may result in rates being increased more often, each increase will be smaller and big increases in any year may be avoided.

WATER TERMINOLOGY/GLOSSARY SHEET

BOD (Biochemical Oxygen Demand) – A characteristic of wastewater that can make it more expensive to process at the wastewater treatment plant. Industries that have wastewater with a high BOD level are classified as having “high-strength” wastewater.

CCN (Certificate of Convenience and Necessity) – The exclusive right to provide water or wastewater service to a particular area.

Chloramines – Compound used for disinfection of drinking water made up chlorine and ammonia.

Cost Causal – The way a customer uses water and/or wastewater services that can affect its price. Assignment of cost based on usage.

Cubic Feet (cf) – The unit of measure the Fort Worth Water Department uses to measure water use. CCF = 100 cubic feet; 1 CCF = 748 gallons

EPA – Environmental Protection Agency

Effluent – The discharge stream of water after it has been treated.

Filter Backwash – This is the return of concentrated contaminants already removed by filters and also relates to the return of recycled flow prior to the rapid mix stage.

Grinder Pumps - A device used to facilitate the movement of sewage from a property into a force main sewer system that flows to gravity flow system. The terrain of the property and surrounding area requires the pumping of the sewage to a force main rather than into a gravity flow sewer system.

Impact Fees – The fee charged by the water department to offset the associated impact costs a new customer has on the system. These costs typically are characterized as the price to “buy into” the system.

MGD – million gallons per day

Ozone Disinfection – A method to purify water. Ozone is a strong oxidant that disinfects water. This methodology also utilizes the filtering out of organisms rather than killing the organism itself.

Rules – Requirements/laws set forth by the government that water utilities must meet or exceed.

TSS (Total Suspended Solids) – A characteristic of wastewater that can make it more expensive to process at the wastewater treatment plant. Industries that have wastewater with a high TSS are classified as having “high-strength” wastewater.

Tap Fees – The fee charged to connect service line to a customer. It includes a meter for water only.

TCEQ – Texas Commission on Environmental Quality; the state agency that oversees compliance with drinking water and wastewater regulations.

Storm Water/Surface Water – Water that drains into streams and storm sewers a result of rain or commercial/residential overflow.

Volume – Three-dimensional measurement of a liquid/water

Wastewater – Sewerage water before it is treated

Water – Treated water that is fit for human consumption.

Rate Classes – Customers place different demands on water and wastewater systems, and these demands have long-term effects on the system. Customers are grouped together into “classes” based on similar usage characteristics. Costs are then allocated to each class based on its impact on the system.

- ❖ **Wholesale Customer** – Customers who purchase water to resell within their own municipality or service area.
- ❖ **Retail Customer** – Customers served directly by the utility to meet their own use requirements.
- ❖ **Residential Class** – Individual customers who buy water for their homes.
- ❖ **Commercial Class** – Customers who buy water for their business; water generally not used in the manufacturing process.
- ❖ **Industrial Class** – Customers who use water in the manufacturing process.
- ❖ **Super User Class** – Customers using more than 40 million cubic feet a year and whose usage in any month does not vary from the average monthly use by more than 50 percent.
- ❖ **Irrigation Class** – Customers who buy water for use on landscape; served by a dedicated water meter.
- ❖ **Non-Monitored Customers** – Customers whose use of wastewater services generally does not have an abnormal impact on the solids content of the wastewater system.
- ❖ **Monitored Customers** – Wastewater customers in the nonresidential customer class (i.e. restaurants and industrial plants), whose wastewater is monitored for BOD and TSS strength. These businesses pay a wastewater surcharge based on their wastewater “strength” (the amount of BOD or TSS in the wastewater).

Impact to Residential Bill

	Average User		Efficient User		Large User	
	11.1 CCF Water		4.0 CCF Water		40.0 CCF Water	
	6.3 CCF Sewer		3.00 CCF Sewer		15.00 CCF Sewer	
	Current	Proposed	Current	Proposed	Current	Proposed
Water Volume	\$ 21.72	\$ 22.18	\$ 7.08	\$ 7.20	\$ 103.44	\$ 112.52
Water Service Charge	\$ 5.50	\$ 6.00	\$ 5.50	\$ 6.00	\$ 8.00	\$ 8.50
Water Total	\$ 27.22	\$ 28.18	\$ 12.58	\$ 13.20	\$ 111.44	\$ 121.02
Wastewater Volume	\$ 15.81	\$ 16.63	\$ 7.53	\$ 7.92	\$ 37.65	\$ 39.60
Wastewater Service Charge	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50
Wastewater Total	\$ 20.31	\$ 21.13	\$ 12.03	\$ 12.42	\$ 42.15	\$ 44.10
Combined Total	\$ 47.53	\$ 49.31	\$ 24.61	\$ 25.62	\$ 153.59	\$ 165.12
Monthly Change	\$1.78/mo. (3.73%)		\$1.01/mo. (1.04%)		\$11.53/mo. (7.51%)	