



Recommendations of the 2005 Informal Water & Wastewater Retail Rate Structure Advisory Committee



Table of Contents

	Page
Director’s Letter.....	1
Committee Members.....	2
Fact Sheet.....	3
Goals for water and wastewater rate structures.....	5
Overall principles.....	5
Water Terminology/Glossary.....	8
 WATER	
Cost-of-service study results.....	4
Committee Recommendations.....	6
Impact of Recommendations on Rates.....	6
 WASTEWATER	
Cost-of-service study results.....	4
Committee Recommendations.....	7
Impact of Recommendations on Rates.....	7
 EXHIBITS	
Exhibit A: Proposed Changes in Residential Rate Tiers.....	10
Exhibit B: Proposed Changes in Commercial Rate Tiers	11
Exhibit C: Sample Combined Residential Bill.....	12

**RECOMMENDATIONS OF THE
2005 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. All citizens and water customers are invited to provide written comments.

Please send written comments to:

**Mr. S. Frank Crumb, P.E.
Acting Director
Fort Worth Water Department
1000 Throckmorton
Fort Worth, Texas 76102
Fax: 817-392-8195
Email: WPE@fortworthgov.org**

Comments must be received on or before 5 p.m. Wednesday, September 14, 2005. The City Council may act on the recommendations as early as Tuesday, September 20, 2005.

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 quarterly from October 2004 through May 2005 and four times between June 22, 2004 and July 20, 2005. 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>
Moises Hurtado	Mrs. Baird's Bakeries	Commercial
Jim Ledbetter	Chili's	Commercial
Stan Curry	Miller Brewing	Industrial
Don Mitchell	Lockheed Martin	Industrial
Mike Cook	Mike's Garden Centers	Irrigation
Jan Hale		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
Gray McBride		Residential

Fact Sheet:

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

Introduction

For the 11th 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 5.11 percent systemwide average water increase and a 2.85 percent systemwide 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 all classes – residential, commercial, industrial, and irrigation customers – are paying less than the utility’s cost of providing service to them.

Customer Class	Current Revenues	Current Costs	% (Above)/ Below Cost
Residential	\$57,106,188	\$60,413,907	5.79 %
Commercial	\$32,252,074	\$33,639,454	4.30 %
Industrial	\$ 7,631,620	\$ 8,035,548	5.29 %
Irrigation	\$ 9,354,234	\$ 9,690,936	3.60 %

Wastewater cost of service

The cost-of-service study showed that under the current rate structure all classes – residential, non-monitored, and monitored customers – are paying less than what it costs to serve them.

Customer Class	Current Revenues	Current Costs	% (Above)/ Below Cost
Residential	\$40,030,307	\$40,066,392	0.09%
Non-Monitored Commercial & Industrial	\$33,470,010	\$36,928,348	10.33%
Commercial & Industrial. Monitored	\$ 12,942,566	\$11,907,534	-8%

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 has been 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 this goal of stable, cost-based rates, an adjustment should be made to the class that is below cost of service, while leaving the other rate classes unaffected.
- To maintain stable rates, when an increase is required, no class should see a rate decrease.

Recommendations – Water Rates

- There should be no change in monthly service charges.
- All classes are underfunded and the increase for each class should be to cost of service.
- This reflects a systemwide increase of approximately 5.11%.
- In an effort to encourage efficient water use and maintain as low a rate as possible for water used for essential needs, a change in where the tiered-residential rates break is recommended. The change would lower the top of the first tier to 800 cubic feet from 1,000 cubic feet and the top of the second tier to 2,000 cubic feet from 3,000 cubic feet. The top of the first tier is still above the winter quarter average water use of 630 cubic feet. (See Exhibit A)
- To comply with state rules and encourage efficient water use, industrial and commercial customers should be charged based on a uniform rate instead of the existing declining block structure. (See Exhibit B)
- Based on data collected and analyzed, create a separate customer class for very large water users (super users). This class would be for 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.

Impact of Recommendations on Water Rates

The Acting Water Director has submitted a proposed rate package to the City Council based on the committee’s recommendations that all customers pay cost-of-service. The committee recommends the tier structure be modified for all classes, except irrigation. The tables below outline the proposal.

The impact on the volume rate charge would be:

Customer Class	Proposed Rate	Monthly Volume	Current Rate	Monthly Volume
Residential	\$1.77 / CCF	first 8 CCF	\$1.77 / CCF	first 10 CCF
	\$2.44 / CCF	> 8 to 20 CCF	\$2.21 / CCF	>10 to 30 CCF
	\$3.00 / CCF	> 20 CCF	\$2.90 / CCF	> 30 CCF
Commercial	\$1.97 / CCF	All volumes	\$1.93 / CCF	first 2,500 CCF
			\$1.46 / CCF	above 2,500 CCF
Industrial	\$1.70 / CCF	All volumes	\$1.78 / CCF	first 2,500 CCF
			\$1.46 / CCF	above 2,500 CCF
Super User	\$1.55/CCF	All volumes	N/A	N/A
Irrigation	\$2.33/ CCF	All volumes	\$2.24 / CCF	All volumes

CCF = one hundred cubic feet = 748.1 gallons

The average residential water bill would increase by \$1.55 a month under the proposed rates. (See Exhibit C)

Recommendations – Wastewater Rates

- Customer rates should be adjusted to keep wastewater rates at cost of service
- This reflects a systemwide increase of approximately 2.85% overall.
- For residential customers, Winter Quarter Averaging and a cap of 1,500 cubic feet (15 CCF) per month should remain in place.
- Rates for treating BOD (biochemical oxygen demand, a component of wastewater that makes it more expensive to treat) should decrease to match decreased costs.
- TSS (total suspended solids, another component of wastewater that is more expensive to handle) should decrease to match decreased costs.
- Volume charges for Non-Monitored and Monitored customers should increase to meet revenue requirements, with no change in the residential volume rates since these are at cost-of-service.
- The current practice of charging monitored customers for their monitoring activity should continue. The committee did not support spreading these costs across the class or across all customer classes.

Impact of Recommendations on Wastewater Rates

The Acting Water Director has submitted a proposed rate package to the City Council based on the committee’s recommendations that all customer classes pay cost of service for wastewater charges. The tables below outline the proposal.

The impact on the wastewater rate charges would be:

CUSTOMER CLASS	PROPOSED RATE			CURRENT RATE		
	Volume	BOD (\$/lb.)	TSS (\$/lb.)	Volume	BOD (\$/lb.)	TSS (\$/lb.)
Residential	\$2.51 / CCF	N/A	N/A	\$2.51 / CCF	N/A	N/A
Non-Monitored Commercial & Industrial	\$2.77 / CCF	N/A	N/A	\$2.51 / CCF	N/A	N/A
Monitored Commercial & Industrial	\$2.05 / CCF	\$0.191	\$0.097	\$1.97 / CCF	\$0.248	\$0.129

There is no change to residential wastewater bills under the proposed rates.

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 = 748.1 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/surface water before it is treated

Water – Treated water that is fit for human consumption.

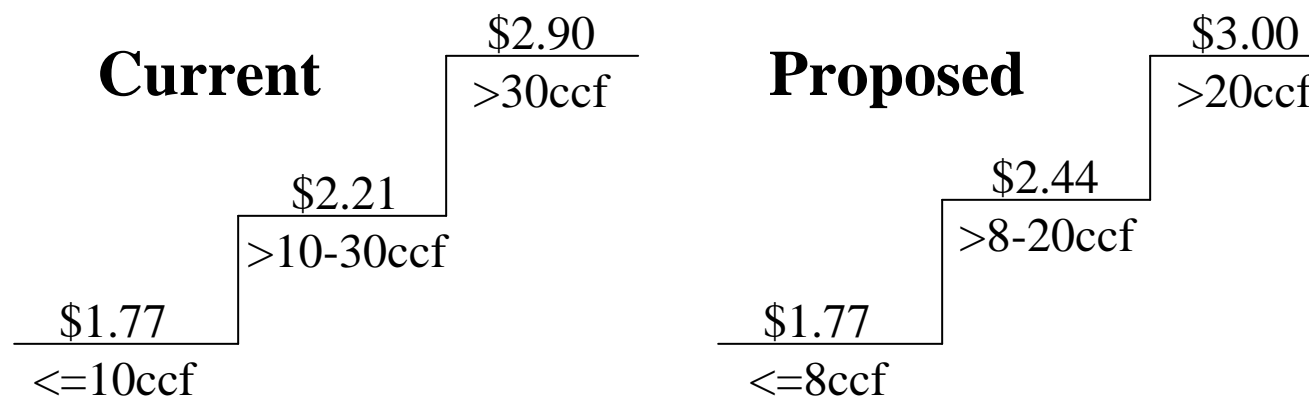
Rate Classes – Customers place different demands on water and wastewater systems, and these demands have long-term effects on the system. Customers are grouped together into “classes” based on similar usage characteristics. Costs are then allocated to each class based on its impact on the system.

- ❖ **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).



Comparison of Current Residential Rates to Recommended Rates for 2006

Water Volume Charges



- * Adjusts thresholds for each inclining tier.
- * Maintains current rate for first tier eliminating a rate increase for almost half of the customer base.
- * Further encourages conservation by sending a pricing signal to customers with high water use.



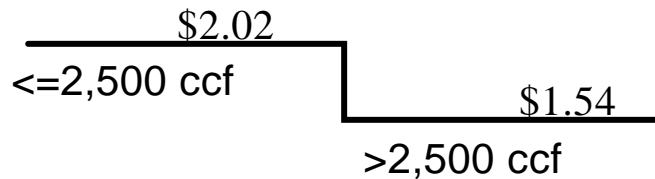
Water Rates

Commercial and Industrial

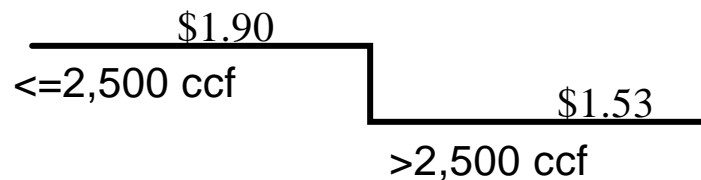
Exhibit B

Rates with Current Structure

Commercial



Industrial



Rates with Proposed Structure

Commercial

\$1.97

All volumes

Industrial

\$1.70

All volumes

Super User

\$1.55

All volumes

Impact to Residential Bill

	Typical User		Efficient User		Large User	
	Current	Proposed	Current	Proposed	Current	Proposed
Water	\$ 19.69	\$ 21.24	\$ 14.16	\$ 14.16	\$ 90.90	\$ 103.44
Service fee	\$ 5.50	\$ 5.50	\$ 5.50	\$ 5.50	\$ 8.00	\$ 8.00
Wastewater	\$ 15.81	\$ 15.81	\$ 7.53	\$ 7.53	\$ 37.65	\$ 37.65
Service fee	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50	\$ 4.50
Total	\$ 45.50	\$ 47.05	\$ 31.69	\$ 31.69	\$ 141.05	\$ 153.59
	\$1.55/mo. (3.41%)		No Change		\$12.54/mo. (8.89%)	

Typical user: water use = 10.9 ccf per month; wastewater volume = 6.3 ccf

Efficient user: water use = 8 ccf per month; wastewater volume = 3 ccf

Large user: water use = 40 ccf per month; wastewater volume = 15 ccf

ccf=100 cubic feet=748.1 gallons