

# Water and Wastewater Utility System Rate and Fee Study

Presented to:

The City of  
  
**Fellsmere**

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HCD #05.080.00

 HARTMAN CONSULTING & DESIGN

## Goals and Objectives

- Provide For Revenue Sufficiency
- Charge Customers Based On Costs Of Services (Rate Parity)
- Promote Resource Conservation
- Identify Appropriate Capital Recovery
- Retain Administrative Compatibility
- Public Understandability

## Elements of Rate Making

- Fiscal Requirements
- Rate Revenues
- Other Sources of Income
- Customer Characteristics
- Future Needs (CIP)
- Community Standards
- Compliance with Florida Statutes

## What was Done?

- Fiscal Requirements/Operating Analysis
- Capital Improvement Analysis
- Capital Structure and Bond Covenant Analysis
- Other Fiscal Needs and Revenue Analysis
- Customer Analysis (Determinants)
- Obtained Understanding of Community Standards and Goals
- Developed Interactive Computer Model

## Fiscal Requirements

- Operating and Maintenance (O&M) Expenses
- Debt Service and Covenant Requirements
- Renewal & Replacement and Transfers
- Pay-as-you-go Capital

# Rate Revenue Requirements

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Total Fiscal Requirements

*Less*

Other Income & Sources

*Equal*

Net Rate Revenue Requirements

## Current City Rates

Do Rates Generate Sufficient Income?

- Answer: **Yes**
  - The current rate structure does generate sufficient income for the Utility.

Is there a reasonable relationship between services and charges for those services ?

- Answer: **Yes**
  - The current rate structure uses equivalencies that are accepted by the AWWA to calculate the base charge.

## Current City Rates

Do the Rates Promote resource conservation?

- Answer: **No**
  - The City's current water rate structure includes a minimum amount of gallonage in the base charge and then a flat rate per thousand gallons of usage thereafter. This type of rate structure has not been shown as an acceptable method of promoting water conservation.

## Rate Structure Modifications

- Water Equivalent Residential Units (ERUs)
  - The City should continue to use the meter equivalencies established by AWWA with modifications to round up the ERUs for 3/4" and 1.0" meters.
- Inclining Block Rate Structure
  - Block 1: 0 – 5,000 gallons per month per ERU
  - Block 2: 5,001 – 10,000 gallons per month per ERU
  - Block 3: 10,001 – 15,000 gallons per month per ERU
  - Block 4: 15,001 – 20,000 gallons per month per ERU
  - Block 5: Above 20,000 gallons per month per ERU

## Proposed Rates - Water

COMPONENT	RATE
<b>Base Charge (5/8" Meter)</b>	\$11.07
<b>Gallonage Charge</b>	
Block 1	\$3.59
Block 2	\$4.49
Block 3	\$5.39
Block 4	\$6.46
Block 5	\$7.90

## Proposed Rates - Wastewater

<b>COMPONENT</b>	<b>RATE</b>
<b>Base Charge (per ERU)</b>	<b>\$18.06</b>
<b>Gallonge Charge (per 1,000 gallons)</b>	<b>\$4.17</b>

# Typical Residential Monthly Bill: Water

Commodity Usage	Existing	Proposed	Difference	
			Amount	Percent
-	\$ 21.88	\$ 11.07	\$ (10.81)	-49.41%
2,000	\$ 21.88	\$ 18.25	\$ (3.63)	-16.59%
3,000	\$ 21.88	\$ 21.84	\$ (0.04)	-0.18%
4,000	\$ 25.85	\$ 25.43	\$ (0.42)	-1.62%
5,000	\$ 29.82	\$ 29.02	\$ (0.80)	-2.68%
6,000	\$ 33.79	\$ 33.51	\$ (0.28)	-0.83%
8,000	\$ 41.73	\$ 42.49	\$ 0.76	1.82%
10,000	\$ 49.67	\$ 51.47	\$ 1.80	3.62%
15,000	\$ 69.52	\$ 78.42	\$ 8.90	12.80%

# Typical Residential Monthly Bill: Wastewater

Commodity Usage	Existing	Proposed	Difference	
			Amount	Percent
-	\$ 17.81	\$ 18.06	\$ 0.25	1.40%
2,000	\$ 25.99	\$ 26.40	\$ 0.41	1.58%
3,000	\$ 30.08	\$ 30.57	\$ 0.49	1.63%
4,000	\$ 34.17	\$ 34.74	\$ 0.57	1.67%
5,000	\$ 38.26	\$ 38.91	\$ 0.65	1.70%
6,000	\$ 42.35	\$ 43.08	\$ 0.73	1.72%
8,000	\$ 50.53	\$ 51.42	\$ 0.89	1.76%
10,000	\$ 58.71	\$ 59.76	\$ 1.05	1.79%
15,000	\$ 79.16	\$ 80.61	\$ 1.45	1.83%

# Typical Residential Monthly Bill: Combined Water and Wastewater

Commodity Usage	Existing	Proposed	Difference	
			Amount	Percent
-	\$ 39.69	\$ 29.13	\$ (10.56)	-26.61%
2,000	\$ 47.87	\$ 44.65	\$ (3.22)	-6.73%
3,000	\$ 51.96	\$ 52.41	\$ 0.45	0.87%
4,000	\$ 60.02	\$ 60.17	\$ 0.15	0.25%
5,000	\$ 68.08	\$ 67.93	\$ (0.15)	-0.22%
6,000	\$ 76.14	\$ 76.59	\$ 0.45	0.59%
8,000	\$ 92.26	\$ 93.91	\$ 1.65	1.79%
10,000	\$ 108.38	\$ 111.23	\$ 2.85	2.63%
15,000	\$ 148.68	\$ 159.03	\$ 10.35	6.96%

# Projected Operating Results: Combined System

	Fiscal Year				
	2006/07	2007/08	2008/09	2009/10	2010/11
<b>Operating Revenues</b>					
Water	\$ 630,800	\$ 700,300	\$ 768,500	\$ 837,700	\$ 903,400
Wastewater	182,300	256,900	335,400	415,700	487,700
<b>Subtotal</b>	<b>\$ 813,100</b>	<b>\$ 957,200</b>	<b>\$ 1,103,900</b>	<b>\$ 1,253,400</b>	<b>\$ 1,391,100</b>
<b>Other Operating Revenues</b>	<b>124,200</b>	<b>124,900</b>	<b>132,700</b>	<b>132,500</b>	<b>136,400</b>
<b>Total Operating Revenues</b>	<b>\$ 937,300</b>	<b>\$ 1,082,100</b>	<b>\$ 1,236,600</b>	<b>\$ 1,385,900</b>	<b>\$ 1,527,500</b>
<b>Total O &amp; M Expenses</b>	<b>\$ 492,400</b>	<b>\$ 517,900</b>	<b>\$ 548,700</b>	<b>\$ 580,400</b>	<b>\$ 613,000</b>
<b>Net Revenues</b>	<b>\$ 444,900</b>	<b>\$ 564,200</b>	<b>\$ 687,900</b>	<b>\$ 805,500</b>	<b>\$ 914,500</b>
<b>Total Debt Service</b>	<b>\$ 138,300</b>	<b>\$ 138,300</b>	<b>\$ 138,300</b>	<b>\$ 138,300</b>	<b>\$ 138,300</b>
<b>Balance after Debt Service</b>	<b>\$ 306,600</b>	<b>\$ 425,900</b>	<b>\$ 549,600</b>	<b>\$ 667,200</b>	<b>\$ 776,200</b>
<b>Other (Revenues) / Expenses</b>					
Capital From Rates	\$ 70,100	\$ 72,200	\$ 74,300	\$ 76,600	\$ 78,900
Renewal & Replacement	107,000	107,000	107,000	107,000	107,000
Transfer to Operating Reserve	-	80,000	195,000	290,000	390,000
Transfer (G&A)	90,400	93,600	96,800	100,200	103,700
<b>Total Other (Revenues) / Expenses</b>	<b>\$ 267,500</b>	<b>\$ 352,800</b>	<b>\$ 473,100</b>	<b>\$ 573,800</b>	<b>\$ 679,600</b>
<b>Available for Other Uses</b>	<b>\$ 39,100</b>	<b>\$ 73,100</b>	<b>\$ 76,500</b>	<b>\$ 93,400</b>	<b>\$ 96,600</b>

## What Does This Mean?

- Continue to generate sufficient revenues to meet fiscal requirements.
- Equitable allocation of costs between and among user classes.
- Rate structure suitable for future operating, debt service, renewal & replacement, and other needs.
- Rate structure manageable for existing billing system.
- Rate structure that encourages conservation.

## Recommendations

- Proceed to notify all customers as required by Florida Statute 180.136.
- Modify the rate structure and adjust the rates per Rate Study findings with an effective date of October 1, 2006.
- Continue to address the effects of inflation on revenue sufficiency by annually indexing user rates and charges each October 1<sup>st</sup> for inflation.
- Monitor water usage by customer class to identify impact of conservation measures and rate adjustments on revenues.