

WORKSHOP BRIEFING DOCUMENT: *Comprehensive Water and Wastewater Rate and Charge Study*



July 31, 2007

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HCD HARTMAN CONSULTING & DESIGN

A Subsidiary of GAI Consultants, Inc.

Purpose of Rate Study

- Provide For Revenue Sufficiency
- Charge Customers Based On Costs Of Services (Rate Parity)
- Continue to Promote Resource Conservation
- Provide for the Five-Year Capital Improvement Plan
- 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 Debt Coverage Analysis
- Other Fiscal Needs and Revenue Analysis
- Developed Interactive Computer Model

Fiscal Requirements

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

Rate Revenue Requirements

Total Fiscal Requirements

Less

Other Income & Sources

Equals

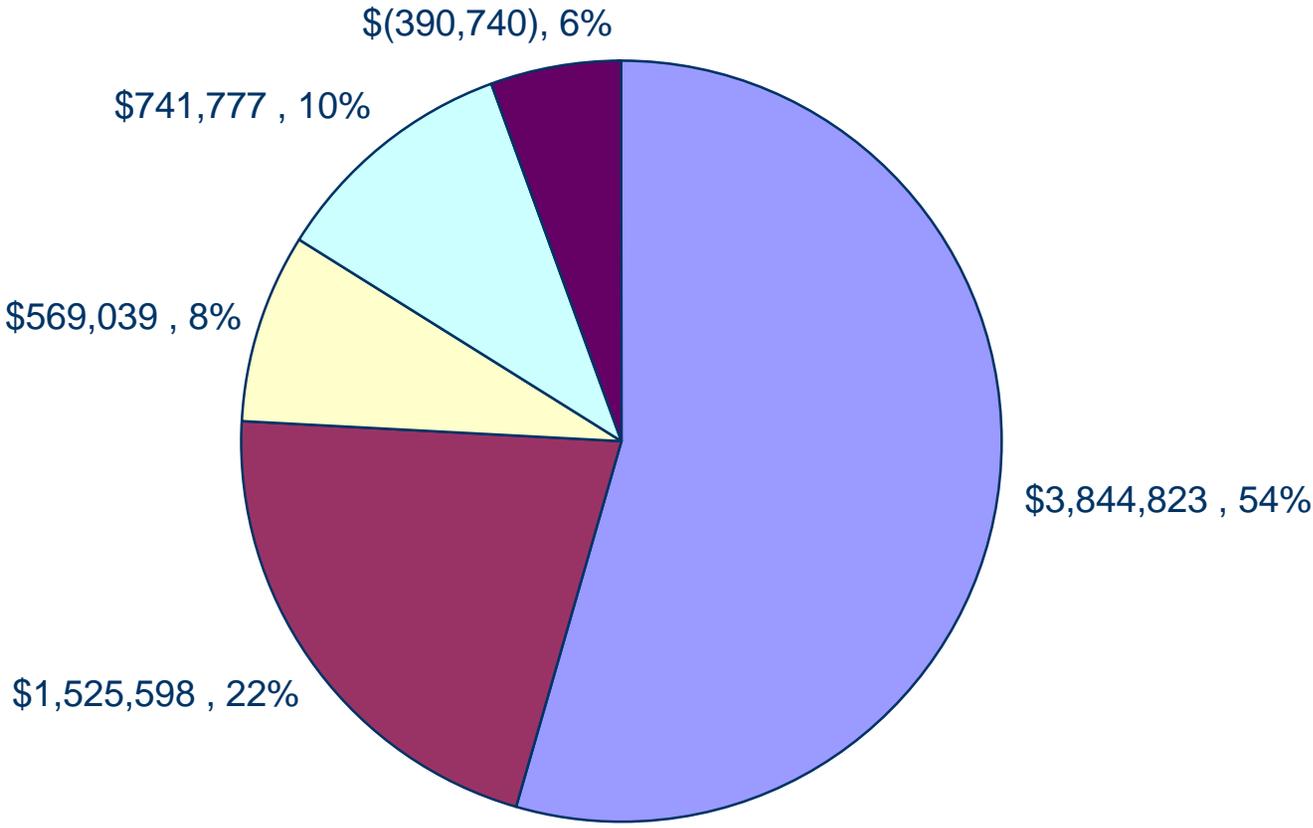
Net Rate Revenue Requirements

Rate Revenue Requirements

Adjusted Test Year 2007/08

<u>Description</u>	<u>Water</u>	<u>Wastewater</u>	<u>Combined</u>
O&M Expenses	\$ 2,120,999	\$ 1,723,824	\$ 3,844,823
Debt Service	638,573	887,024	1,525,598
Capital From Rates	264,700	304,339	569,039
Other Expenses/Transfers	670,658	71,119	741,777
Other Operating Revenues	<u>(316,000)</u>	<u>(74,740)</u>	<u>(390,740)</u>
Net Rate Revenue Requirements	\$ 3,378,930	\$ 2,911,566	\$ 6,290,496

Rate Revenue Requirements



O&M Expenses	Debt Service	Capital From Rates
Other Expenses/Transfers	Other Operating Revenues	

Existing Rate Structure – Water

- Flat Base Charge per Month per Account.
- Up to 4,000 Gallons of Usage included in the Base Charge.
- Inclining Block Rate Structure with 10 Usage Blocks.

Existing Rate Structure – Wastewater

- Commercial and Units Base Charge based on Meter Size. Residential Base Charge is flat rate per Residential Account.
- 2 Block Rate Structure:
 - Block 1: 0 – 7,000 gallons
 - Block 2: >7,000 gallons
- Cap on Residential Billed Flow at 15,000 gallons per month.

Rate Structure Modifications

- Modify the Base Charge to not include any gallonage.
- Base Charge to be Billed based on Meter Size for Residential and Commercial Customers Utilizing Meter Equivalencies Established by the AWWA.
- Multi-Unit Base Charge to be Billed Based on Dwelling Units per Account.
- Multi-Family Equivalencies to be set at 0.8 ERUs per Unit

Rate Structure Modifications

- Implement a “Lifeline” Rate. This rate will be used to help low income individuals with their Bill. Individuals will have to qualify for this rate through entities such as the Lake Wales Care Center.
- Modify Potable Water and Wastewater Blocks and Charge Differentials (incremental factors) Between Blocks

Rate Structure Modifications

- American Water Works Association (AWWA) recommends the following meter equivalencies:

Meter Size	ERC Factor
5/8" x 3/4"	1.00
1.0"	2.50
1.5"	5.00
2.0"	8.00
3.0"	16.00
4.0"	25.00
6.0"	50.00

Rate Structure Modifications

	Existing (Per Account)		Proposed (Per ERU)	
	Gallons (000s)	Incremental	Gallons (000s)	Incremental
WATER				
Block 1	Included in Base	Included in Base	0 - 5	1.00
Block 2	4 - 10	1.00	5 - 10	1.35
Block 3	10 - 15	1.12	10 - 25	2.09
Block 4	15 - 25	1.23	Above 25	3.45
Block 5	25 - 35	1.35		
Block 6	35 - 50	1.49		
Block 7	50 - 65	1.63		
Block 8	65 - 80	1.77		
Block 9	80 - 100	1.93		
Block 10	Above 100	2.12		
WASTEWATER				
Block 1	0 - 7	1.00	0 - 5	1.00
Block 2	Above 7	1.50	Above 5	1.75

Proposed Rates - Water

<u>Component</u>	<u>Rate</u>	
	<u>Inside City</u>	<u>Outside City</u>
Base Charge:		
Residential (Per ERU)	\$ 4.95	\$ 6.19
Multi-Family (Per Dwelling Unit)	\$ 3.96	\$ 4.95
Commercial (Per ERU)	\$ 4.95	\$ 6.19
Irrigation (Per ERU)	\$ 4.95	\$ 6.19
Gallonage Charge:		
Block 1	\$ 1.96	\$ 2.45
Block 2	\$ 2.65	\$ 3.32
Block 3	\$ 4.11	\$ 5.14
Block 4	\$ 6.77	\$ 8.47

Proposed Rates - Wastewater

<u>Component</u>	<u>Rate</u>	
	<u>Inside City</u>	<u>Outside City</u>
Base Charge:		
Residential (Per ERU)	\$ 17.59	\$ 21.99
Multi-Family (Per Dwelling Unit)	\$ 14.08	\$ 17.60
Commercial (Per ERU)	\$ 17.59	\$ 21.99
Gallonage Charge: (1)		
Block 1	\$ 2.31	\$ 2.89
Block 2	\$ 4.05	\$ 5.07

Note (1): Residential Billed Flows capped at 15,000 gallons per month per ERU and Multi-Family Billed Flows capped at 12,000 gallons per month per Dwelling Unit)

Monthly Bill Comparison - Residential

Meter Size	Gallorage	Existing	Proposed	Difference		Customers at Gallorage	Total Customers Using Amount or Less
				Amount	Percent		
0.75"	0	\$ 32.12	\$ 22.54	\$ (9.58)	-29.83%	11.49%	11.70%
0.75"	1,000	\$ 33.31	\$ 26.81	\$ (6.50)	-19.51%	6.87%	18.36%
0.75"	2,000	\$ 34.50	\$ 31.08	\$ (3.42)	-9.91%	9.31%	27.66%
0.75"	3,000	\$ 35.69	\$ 35.35	\$ (0.34)	-0.95%	9.94%	37.60%
0.75"	4,000	\$ 36.88	\$ 39.62	\$ 2.74	7.43%	9.57%	47.17%
0.75"	5,000	\$ 40.21	\$ 43.89	\$ 3.68	9.15%	8.32%	55.49%
0.75"	6,000	\$ 43.54	\$ 50.59	\$ 7.05	16.19%	7.13%	62.61%
0.75"	7,000	\$ 46.87	\$ 57.29	\$ 10.42	22.23%	5.89%	68.50%
0.75"	8,000	\$ 50.78	\$ 63.99	\$ 13.21	26.01%	4.88%	73.38%
0.75"	9,000	\$ 54.69	\$ 70.69	\$ 16.00	29.26%	4.08%	77.45%
0.75"	10,000	\$ 58.60	\$ 77.39	\$ 18.79	32.06%	3.42%	80.87%
0.75"	15,000	\$ 79.40	\$ 118.19	\$ 38.79	48.85%	1.15%	90.08%
0.75"	20,000	\$ 92.60	\$ 138.74	\$ 46.14	49.83%	0.59%	94.22%
0.75"	25,000	\$ 105.80	\$ 159.29	\$ 53.49	50.56%	0.33%	96.40%
0.75"	30,000	\$ 120.25	\$ 193.14	\$ 72.89	60.62%	0.20%	97.66%
0.75"	40,000	\$ 150.65	\$ 260.84	\$ 110.19	73.14%	0.07%	98.89%
0.75"	50,000	\$ 182.55	\$ 328.54	\$ 145.99	79.97%	0.04%	99.37%

Monthly Bill Comparison - Multi-Family

Units	Total Gallonage	Existing	Proposed	Difference		Gallonage Per Unit	Bill Per Unit
				Amount	Percent		
2	2,000	\$ 34.50	\$ 44.62	\$ 10.12	29.33%	1,000	\$ 22.31
2	4,000	\$ 36.88	\$ 50.19	\$ 13.31	36.09%	2,000	\$ 25.10
2	6,000	\$ 43.54	\$ 58.73	\$ 15.19	34.89%	3,000	\$ 29.37
2	8,000	\$ 50.78	\$ 67.27	\$ 16.49	32.47%	4,000	\$ 33.64
2	10,000	\$ 58.60	\$ 80.67	\$ 22.07	37.66%	5,000	\$ 40.34
2	12,000	\$ 66.92	\$ 94.07	\$ 27.15	40.57%	6,000	\$ 47.04
2	14,000	\$ 80.27	\$ 107.47	\$ 27.20	33.89%	7,000	\$ 53.74
2	16,000	\$ 89.09	\$ 120.87	\$ 31.78	35.67%	8,000	\$ 60.44
2	20,000	\$ 97.91	\$ 153.51	\$ 55.60	56.79%	10,000	\$ 76.76
4	12,000	\$ 66.92	\$ 123.40	\$ 56.48	84.40%	3,000	\$ 30.85
4	30,000	\$ 187.86	\$ 234.28	\$ 46.42	24.71%	7,500	\$ 58.57
7	22,000	\$ 151.33	\$ 220.22	\$ 68.89	45.52%	3,143	\$ 31.46
9	60,000	\$ 338.16	\$ 476.88	\$ 138.72	41.02%	6,667	\$ 52.99
40	95,000	\$ 663.35	\$ 1,127.25	\$ 463.90	69.93%	2,375	\$ 28.18
56	133,000	\$ 901.13	\$ 1,578.15	\$ 677.02	75.13%	2,375	\$ 28.18

Monthly Bill Comparison - Multi-Family

Units	Total Gallonage	Gallons per Unit	Existing Rates			Proposed Rates		
			Single Family	Multi-Family Per Unit	% of Single Family	Single Family	Multi-Family Per Unit	% of Single Family
2	2,000	1,000	\$ 33.31	\$ 17.25	52%	\$ 26.81	\$ 22.31	83%
2	4,000	2,000	\$ 34.50	\$ 18.44	53%	\$ 31.08	\$ 25.10	81%
2	6,000	3,000	\$ 35.69	\$ 21.77	61%	\$ 35.35	\$ 29.37	83%
2	8,000	4,000	\$ 36.88	\$ 25.39	69%	\$ 39.62	\$ 33.64	85%
2	10,000	5,000	\$ 40.21	\$ 29.30	73%	\$ 43.89	\$ 40.34	92%
2	12,000	6,000	\$ 43.54	\$ 33.46	77%	\$ 50.59	\$ 47.04	93%
2	14,000	7,000	\$ 46.87	\$ 40.14	86%	\$ 57.29	\$ 53.74	94%
2	16,000	8,000	\$ 50.78	\$ 44.55	88%	\$ 63.99	\$ 60.44	94%
2	20,000	10,000	\$ 58.60	\$ 48.96	84%	\$ 77.39	\$ 76.76	99%
4	12,000	3,000	\$ 35.69	\$ 16.73	47%	\$ 35.35	\$ 30.85	87%
4	30,000	7,500	\$ 50.78	\$ 46.97	92%	\$ 63.99	\$ 58.57	92%
7	22,000	3,143	\$ 35.69	\$ 21.62	61%	\$ 35.35	\$ 31.46	89%
9	60,000	6,667	\$ 46.87	\$ 37.57	80%	\$ 57.29	\$ 52.99	92%
40	95,000	2,375	\$ 34.50	\$ 16.58	48%	\$ 31.08	\$ 28.18	91%
56	133,000	2,375	\$ 34.50	\$ 16.09	47%	\$ 31.08	\$ 28.18	91%

Monthly Bill Comparison - Commercial

Meter Size	Gallonage	Existing	Proposed	Difference	
				Amount	Percent
0.75"	6,000	\$ 43.54	\$ 50.59	\$ 7.05	16.19%
0.75"	20,000	\$ 101.45	\$ 158.99	\$ 57.54	56.72%
0.75"	75,000	\$ 379.00	\$ 740.79	\$ 361.79	95.46%
1.50"	65,000	\$ 421.31	\$ 488.80	\$ 67.49	16.02%
1.50"	90,000	\$ 563.81	\$ 713.35	\$ 149.54	26.52%
1.50"	150,000	\$ 938.41	\$ 1,269.45	\$ 331.04	35.28%
2.00"	120,000	\$ 819.10	\$ 930.67	\$ 111.57	13.62%
2.00"	200,000	\$ 1,323.90	\$ 1,583.47	\$ 259.57	19.61%
2.00"	300,000	\$ 1,954.90	\$ 2,665.47	\$ 710.57	36.35%

Comparison With Other Utilities

	Typical Residential Single-Family Service					
	Monthly Usage (in gallons)					
	5,000		8,000		15,000	
Existing	\$	40.21	\$	50.78	\$	79.40
Proposed	\$	43.89	\$	63.99	\$	118.19
<u>Other Utilities - Existing</u>						
Auburndale	\$	37.31	\$	40.51	\$	51.71
Bartow		44.72		56.26		82.23
Davenport		33.97		46.06		58.92
Dundee		71.75		74.60		86.00
Eagle Lake		38.58		53.70		91.19
Fort Meade		32.20		40.18		58.80
Frost Proof		66.53		86.03		151.03
Haines City		41.73		55.02		69.63
Lake Alfred		53.49		55.49		62.49
Lakeland		36.52		48.47		72.15
Mulberry		51.27		64.87		100.22
Polk City		51.27		56.40		94.73
Polk County		61.05		72.56		89.84
Winter Haven		38.94		57.57		101.84
Average of Other Utilities	\$	47.10	\$	57.69	\$	83.63

Findings and Conclusions

- Existing Level of User Rates are Insufficient to Provide for the Fiscal Requirements as Budgeted and Forecasted.
- Reductions or Postponement of Budgeted and Forecasted Fiscal Requirements can Diminish the Ability to Provide for the Health, Safety, Welfare, and Economic Development of the Community.

Proposed Rate Structure

- Will generate sufficient revenues to meet fiscal requirements.
- Provides for an Equitable Allocation of costs between and among user classes.
- Is suitable for future operating, debt service, renewal & replacement, and other needs.
- Is manageable for existing billing system.
- Continues to encourage conservation.

What's Next

- City Implements the Proposed Rate Structure Adjustments and Modifications
- Customers Have Been Notified per 180.136 F.S.
- Public Hearing Scheduled for August 7, 2007
- City should Continue the Practice of Automatic Annual Indexing of Rates to Help Address the Affects of Inflation.