

# Rate Study

## Businesses

# Harrington's Goal

- ▶ To set and maintain utility rates and fees that are FAIR and ADEQUATE to sustain our system.
  
- ▶ “If there is not enough money to run the business, the business won't run.”

# The Proposed Rates

- ▶ Adequately cover system costs.
- ▶ Enables the system to build reserves
- ▶ Will be fair to all rate payers.
- ▶ Proportional to use versus flat rates.
- ▶ No usage allowance.

# History of Rates

- ▶ Water and Sewer Rates were last changed in June, 2010 for FY11.
- ▶ These rates were part of a five year phase in process.
- ▶ Rates have not changed since although there have been significant changes to operations and capital since 2010.

# The Need for Rate Adjustments

- ▶ Since FY11, several factors have impacted the ability of the current rate structure to fully support the Water and Sewer Systems:
  - Implementation of Kent County Contract and related Fees
  - Increase in Debt Service
  - Establishment of Reserve and Contingency Funds
  - Change in Accounting Practices to better allocate General Fund Support to Water and Sewer(no net effect to entire budget).
  - Re-evaluation of Transfer to General Fund (budget distribution)
  - Water meter installation and desire to bill based on usage

# Costs – Not Open for Debate

- ▶ Debt Service and
- ▶ Kent County Fees for Sewer.
  - Costs related to these items cannot be adjusted in the short term.
  - There is no debate as to how to apply these costs to the rate calculation as they are direct and unavoidable costs to the Water & Sewer Systems.

# Increase in Sewer Fixed Costs

- ▶ Sewer Debt Service has increased by \$271,000 annually since FY11 due to the construction of Force Main Project.
- ▶ The contract with Kent County for sewage treatment has increased costs annually by \$134,000.\*
- ▶ This is a total increase of \$405,000 per year.

\*\$420,000 County Fees less Operations Savings of \$286,000.

\*The current year's charges to Kent County are expected to be \$485,000 an additional \$60,000

# Water Costs

<b>Total Annual System Costs:</b>	
Personnel Costs	\$159,602
General Fund Expense Allocation	\$45,675
Water G&A Costs	\$43,916
Water System Ops & Maintenance	\$27,765
Debt Service & Reserves Costs	\$180,512
<b>TOTAL ANNUAL SYSTEM COSTS</b>	<b>\$457,470</b>

# Sewer Costs

<b>Total Annual System Costs:</b>	
Personnel Costs	\$367,035
General Fund Expense Allocation	\$160,902
Waste Water G&A Costs	\$91,741
Waste Water System Ops & Maintenance	\$442,456
Debt Service & Reserves Costs	\$653,683
<b>TOTAL ANNUAL SYSTEM COSTS</b>	<b>\$1,715,817</b>

# Water Rate Components

- ▶ Base Charge – charge required to cover the cost of:
  - Reserves
  - Contingency
  - ~~Transfer to General Fund~~
  - Water Debt Service
  - These costs need to be paid even if no water is sold.
  - Customers will be billed for the number of EDUs they required during the calendar year prior to Harrington's fiscal year.
- ▶ Usage Rate – charge required to cover the cost of operating the water utility which includes personnel costs, insurance, general and administrative costs and costs specific to the utility such as chemicals, line repair etc.
- ▶ Note: EDU = 250 gallons per day or 91,250 gallons per year.

# Sewer Rate Components

- ▶ Base Charge – charge required to cover the cost of:
  - Reserves
  - Contingency
  - ~~Transfer to General Fund~~
  - Sewer Debt Service
  - These costs need to be paid even if no sewer is transmitted.
  - Customers will be billed for the number of EDUs they transmitted during the calendar year prior to Harrington’s fiscal year.
- ▶ Usage Rate – Charge required to cover the cost of operating the wastewater utility which include personnel costs, insurance, general and administrative costs and costs specific to the utility such as chemicals, line repair etc.
- ▶ KCSA Charge– Charge to cover the cost of treatment at Kent County. This charge is currently \$2.34/Tgal
- ▶ Note: EDU = 250 gallons per day or 91,250 gallons per year.

# Quarterly Water Rate

## ▶ Proposed

- Base Charge = \$35 per EDU
- Usage Charge = \$3.25 per 1,000 gallons (Tgals)

## ▶ Current

- Minimum Charge = \$96.17
- Usage charge greater than 20,000 TGals = \$1.50 (Commercial Only)

# Quarterly Sewer Rate

## ▶ Proposed

- Base Charge = \$80 per EDU
- Usage charge = \$8.10 (includes \$2.34 Kent County Sewer Treatment Charge)

## ▶ Current

- Minimum Charge = \$140
- Usage charge greater than 20,000 TGals = \$6.08 (Commercial Only)

# Base Bill Calculations

- ▶ Base Charge – Based on the number of Equivalent Dwelling Units (EDU) or billable units consumed or transmitted during the calendar year prior to the upcoming City Fiscal Year.
  - An Equivalent Dwelling Unit (EDU) equals 250 gallons per day or 91,250 gallons per year
  - Usage from January 2013 thru December 2013

# Example Base Bill Calculation

- Business uses 155,388 gallons during period of 1/13 – 12/13.
- $155,388 \text{ gallons} / 91,250$  (250gallons per day X 365)
- Equals 1.70
- Billable units rounded to the nearest whole number equals 2
- Base Bill Charge
  - Water =  $2 \times \$35 = \$70$
  - Sewer =  $2 \times \$80 = \$160$

# Example Base Bill Calculation

- Business uses 117,534 gallons during period of 1/13 – 12/13.
- $117,534 \text{ gallons} / 91,250$  (250gallons per day X 365)
- Equals 1.29
- Billable units rounded to the nearest whole number equals 1
- Base Bill Charge
  - Water =  $1 \times \$35 = \$35$
  - Sewer =  $1 \times \$80 = \$80$

# Quarterly Base Bill Calculation

EDUs	Quarterly Base Bill Charge
20	\$700
19	\$665
18	\$630
17	\$595
16	\$560
15	\$525
14	\$490
13	\$455
12	\$420
11	\$385
10	\$350
9	\$315
8	\$280
7	\$245
6	\$210
5	\$175
4	\$140
3	\$105
2	\$70
1	\$35

Water

EDUs	Quarterly Base Bill Charge
20	\$1,600
19	\$1,520
18	\$1,440
17	\$1,360
16	\$1,280
15	\$1,200
14	\$1,120
13	\$1,040
12	\$960
11	\$880
10	\$800
9	\$720
8	\$640
7	\$560
6	\$480
5	\$400
4	\$320
3	\$240
2	\$160
1	\$80

Sewer

# Usage Charge

- ▶ Based on actual usage during the quarter
- ▶ Equals \$5.76 per 1000 gallons
  
- ▶ Example:
- ▶ 12,200 consumption
  - Water  $12,200/1000 \times \$3.25 = \$39.65$
  - Sewer  $12,200/1000 \times \$5.76 = \$70.28$

# Kent County Sewer Treatment Charge

- ▶ Equals \$2.34 per 1000 gallons.
- ▶ Kent County Charge to Harrington for treating sewer.
  
- ▶ Example
- ▶ 12,200 consumption
  - Sewer  $12,200/1000 \times \$2.34 = \$28.55$

# Proposed Rate Comparison Chart

		Proposed			Current				
		Water	Sewer		Water	Sewer			
Base Bill		35.00	80.00		\$ 96.17	\$ 140.00			
Usage Rate		3.25	8.10		\$ 1.50	\$ 6.08	> 20,000 gal.		
Quarterly Consumption	EDU	Water	Sewer	Total Bill	Water	Sewer	Total Bill	Quarterly (Savings)/ Increase	Annual (Savings)/ Increase
5,000	1	\$ 51.25	\$ 120.50	\$ 171.75	\$ 96.17	\$ 140.00	\$ 236.17	\$ (64.42)	\$ (257.68)
6,000	1	\$ 54.50	\$ 128.60	\$ 183.10	\$ 96.17	\$ 140.00	\$ 236.17	\$ (53.07)	\$ (212.28)
7,000	1	\$ 57.75	\$ 136.70	\$ 194.45	\$ 96.17	\$ 140.00	\$ 236.17	\$ (41.72)	\$ (166.88)
8,000	1	\$ 61.00	\$ 144.80	\$ 205.80	\$ 96.17	\$ 140.00	\$ 236.17	\$ (30.37)	\$ (121.48)
9,000	1	\$ 64.25	\$ 152.90	\$ 217.15	\$ 96.17	\$ 140.00	\$ 236.17	\$ (19.02)	\$ (76.08)
10,000	1	\$ 67.50	\$ 161.00	\$ 228.50	\$ 96.17	\$ 140.00	\$ 236.17	\$ (7.67)	\$ (30.68)
11,000	1	\$ 70.75	\$ 169.10	\$ 239.85	\$ 96.17	\$ 140.00	\$ 236.17	\$ 3.68	\$ 14.72
12,000	1	\$ 74.00	\$ 177.20	\$ 251.20	\$ 96.17	\$ 140.00	\$ 236.17	\$ 15.03	\$ 60.12
13,000	1	\$ 77.25	\$ 185.30	\$ 262.55	\$ 96.17	\$ 140.00	\$ 236.17	\$ 26.38	\$ 105.52
14,400	1	\$ 81.80	\$ 196.64	\$ 278.44	\$ 96.17	\$ 140.00	\$ 236.17	\$ 42.27	\$ 169.08
14,000	1	\$ 80.50	\$ 193.40	\$ 273.90	\$ 96.17	\$ 140.00	\$ 236.17	\$ 37.73	\$ 150.92
15,000	1	\$ 83.75	\$ 201.50	\$ 285.25	\$ 96.17	\$ 140.00	\$ 236.17	\$ 49.08	\$ 196.32
16,000	1	\$ 87.00	\$ 209.60	\$ 296.60	\$ 96.17	\$ 140.00	\$ 236.17	\$ 60.43	\$ 241.72
17,000	1	\$ 90.25	\$ 217.70	\$ 307.95	\$ 96.17	\$ 140.00	\$ 236.17	\$ 71.78	\$ 287.12
18,000	1	\$ 93.50	\$ 225.80	\$ 319.30	\$ 96.17	\$ 140.00	\$ 236.17	\$ 83.13	\$ 332.52
19,000	1	\$ 96.75	\$ 233.90	\$ 330.65	\$ 96.17	\$ 140.00	\$ 236.17	\$ 94.48	\$ 377.92
20,000	1	\$ 100.00	\$ 242.00	\$ 342.00	\$ 96.17	\$ 140.00	\$ 236.17	\$ 105.83	\$ 423.32

# Advantages of Removing General Fund Transfer from the Utilities

- ▶ Better Accounting and Accountability
  - All funds will be self supporting.
  - Revenues are aligned with expenses.
- ▶ Rate payers are paying for only services they are provided.
- ▶ Rates are fair.

# Funding \$236,000 from Taxes

- ▶ Current tax rate is 71 cents per \$100 of assessed value.
- ▶ Tax rate would increase 23 cents.
- ▶ Last tax increase – 12 years ago
  - 20 cents on June 17, 2002

# Projected Tax Increase Impact

	<b>Tax Rate</b>	<b>Current \$.71/\$100</b>	<b>Proposed \$.94/\$100</b>		
		<b>0.0071</b>	<b>0.0094</b>		
	<b>Assessed Value</b>	<b>Current Bill</b>	<b>Proposed Bill</b>	<b>Annual Increase</b>	<b>Qtrly Increase</b>
	\$ 24,900	\$ 176.79	\$ 234.06	\$ 57.27	\$ 14.32
	\$ 28,000	\$ 198.80	\$ 263.20	\$ 64.40	\$ 16.10
	\$ 30,000	\$ 213.00	\$ 282.00	\$ 69.00	\$ 17.25
	\$ 31,250	\$ 221.88	\$ 293.75	\$ 71.88	\$ 17.97
	\$ 31,500	\$ 223.65	\$ 296.10	\$ 72.45	\$ 18.11
	\$ 35,000	\$ 248.50	\$ 329.00	\$ 80.50	\$ 20.13
<b>Average</b>	<b>\$ 38,700</b>	<b>\$ 274.77</b>	<b>\$ 363.78</b>	<b>\$ 89.01</b>	<b>\$ 22.25</b>
	\$ 40,000	\$ 284.00	\$ 376.00	\$ 92.00	\$ 23.00
	\$ 43,300	\$ 307.43	\$ 407.02	\$ 99.59	\$ 24.90
	\$ 45,000	\$ 319.50	\$ 423.00	\$ 103.50	\$ 25.88
	\$ 50,000	\$ 355.00	\$ 470.00	\$ 115.00	\$ 28.75
	\$ 55,000	\$ 390.50	\$ 517.00	\$ 126.50	\$ 31.63
	\$ 59,000	\$ 418.90	\$ 554.60	\$ 135.70	\$ 33.93
	\$ 60,000	\$ 426.00	\$ 564.00	\$ 138.00	\$ 34.50
	\$ 65,000	\$ 461.50	\$ 611.00	\$ 149.50	\$ 37.38
	\$ 70,000	\$ 497.00	\$ 658.00	\$ 161.00	\$ 40.25
	\$ 75,000	\$ 532.50	\$ 705.00	\$ 172.50	\$ 43.13
	\$ 80,000	\$ 568.00	\$ 752.00	\$ 184.00	\$ 46.00
	\$ 85,000	\$ 603.50	\$ 799.00	\$ 195.50	\$ 48.88
	\$ 90,000	\$ 639.00	\$ 846.00	\$ 207.00	\$ 51.75
	\$ 95,000	\$ 674.50	\$ 893.00	\$ 218.50	\$ 54.63
	\$ 100,000	\$ 710.00	\$ 940.00	\$ 230.00	\$ 57.50
	\$ 105,000	\$ 745.50	\$ 987.00	\$ 241.50	\$ 60.38
	\$ 110,000	\$ 781.00	\$ 1,034.00	\$ 253.00	\$ 63.25
	\$ 113,500	\$ 805.85	\$ 1,066.90	\$ 261.05	\$ 65.26
	\$ 125,000	\$ 887.50	\$ 1,175.00	\$ 287.50	\$ 71.88
	\$ 150,000	\$ 1,065.00	\$ 1,410.00	\$ 345.00	\$ 86.25
	\$ 169,600	\$ 1,204.16	\$ 1,594.24	\$ 390.08	\$ 97.52
	\$ 282,000	\$ 2,002.20	\$ 2,650.80	\$ 648.60	\$ 162.15

# How Does this Effect Rate Payers

- ▶ Dependent on the Assessed Value of Property.
- ▶ Dependent on the Actual Usage of Property.

# Questions?

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