



# City of Napoleon, Ohio

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## WATER RATE AND COST OF SERVICE STUDY

November 7, 2011

Courtney & Associates

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# SCOPE OF SERVICES\*

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- Data Acquisition/Verification
- Projected Revenue Requirements
- Cost of Service Analysis
- Rate Review/Design

*\* Previously Presented on September 12 and October 10, 2011*

# DETERMINATION OF OVERALL REVENUE ADJUSTMENT

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	<u>Net Revenue Requirements*</u>	<u>Revenues at Current Rates</u>	<u>Revenue Adjustment Amount</u>	<u>%</u>
2012	\$ 2,743,342	\$ 2,438,401	\$ 304,941	12.5%
2013	\$ 2,815,300	\$ 2,438,401	\$ 376,899	15.5%
2014	\$ 3,905,610	\$ 2,438,401	\$1,467,209	60.2%

\* Includes Anticipated Debt Service for Proposed WTP Improvements Starting in 2014.



# Conclusions & Recommendations

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- Revenues at Current Rates are NOT Sufficient to Meet Projected Revenue Requirements.
- Revenues Need to be Increased by Approximately 16% in Order to Meet the Projected Near-Term (2013) Revenue Requirements.
- Considering the Anticipated Debt Service Associated with the Proposed Water Treatment Plant Improvements, We Recommend Increasing Revenues by Approximately 20% by the Start of 2013.



# COST OF SERVICE RESULTS

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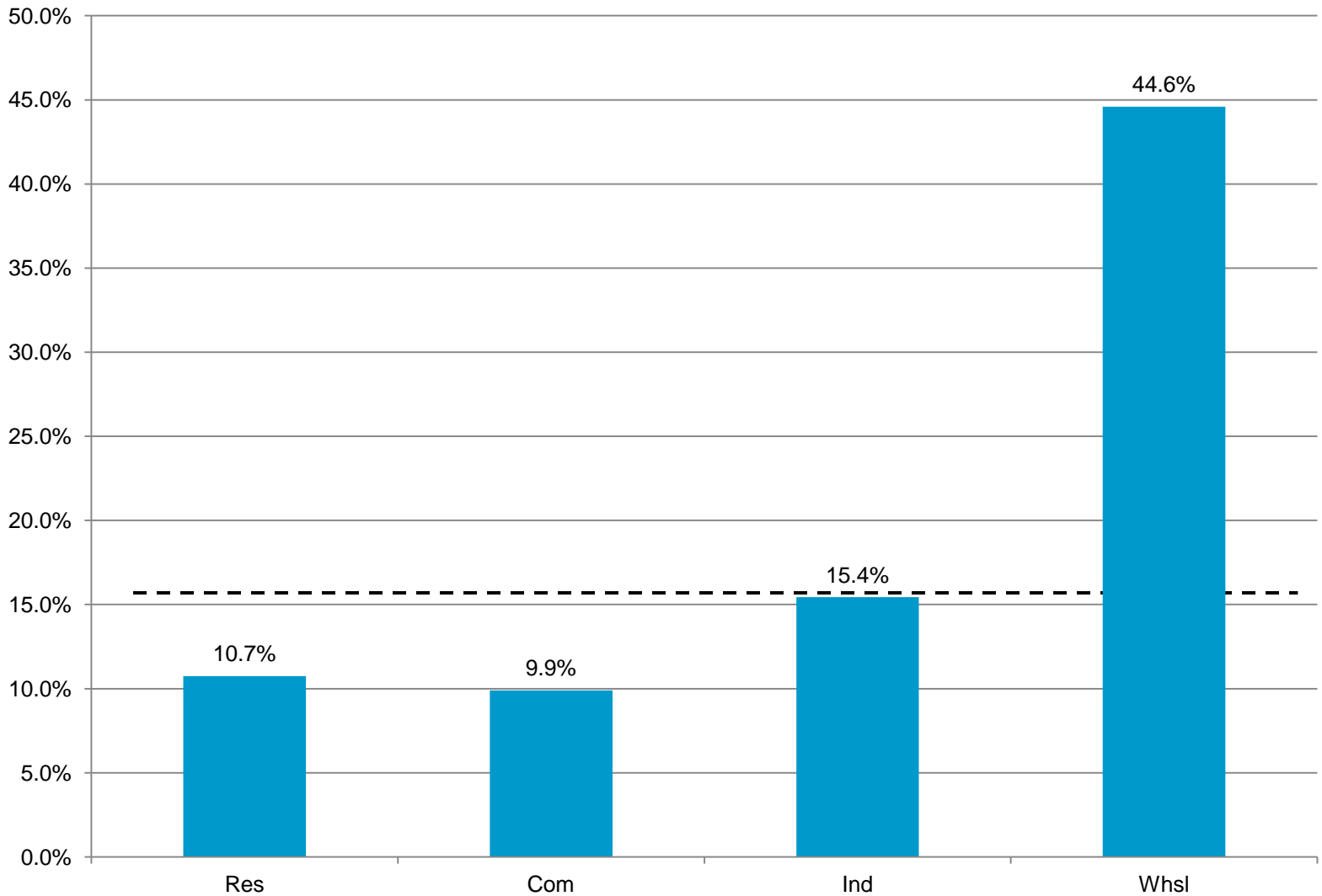
	<u>2013</u>	<u>2014</u>
Base Cost	\$ 3.29/ccf	\$ 4.71/ccf
Extra Capacity Cost		
Maximum Day	\$ 200.21/ccfpd	\$ 418.30/ccfpd
Maximum Hour	\$ 142.59/ccfpd	\$ 146.85/ccfpd
Customer Costs		
Meters & Services	\$ 6.48/Month	\$ 6.79/Month
Billing & Collection	\$ 1.06/Bill	\$ 1.11/Bill

# COS vs. CURRENT RATES

<u>Customer Class</u>	<u>Revenue at Current Rates</u>	<u>COS Results(1)</u>	<u>Under(Over)Recovery</u>	
			<u>\$</u>	<u>%</u>
Residential	\$ 1,178,600	\$ 1,305,300	\$ 126,700	10.7%
Commercial	720,500	791,800	71,300	9.9%
Industrial	211,200	243,800	32,600	15.4%
Wholesale	328,100	474,400	146,300	44.6%
Totals	\$ 2,438,400	\$ 2,815,300	\$ 376,900	15.5%

(1) Reflects 2013 Test Year.

# Required Revenue Adjustment



--- Overall Increase (15.5%)



# Conclusions & Recommendations

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- Residential and Small Commercial/Industrial Customers are Subsidizing the Large Commercial /Industrial and Wholesale Customers.
- Future Rate Adjustments Should Move Towards Cost of Service Results.
- Continue to Monitor Revenues and Expenses and Adjust Rates as Needed.





# RATE REVIEW/DESIGN

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- Review Current Rates
- Identify Problem Areas
- Develop Rate Adjustments to Meet Future Revenue Requirements

*Previously Presented on September 12 and October 10, 2011.*

# INSIDE RATES\*

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- Effective 1/1/11
- Usage Charge:
  - First 25,000 cu ft. @ \$ 3.91 / ccf
  - Over 25,000 cu ft. @ 2.24 / ccf
- Capacity Charge:
  - 1.00 Inch and Less \$ 11.07/Month
  - 1.25 Inch 39.72/Month
  - 1.50 Inch 62.93/Month
  - 2.00 Inch 128.01/Month
  - 3.00 Inch and Up 353.14/Month

\* Outside Rates are Approximately 50% Greater than the Inside Rates



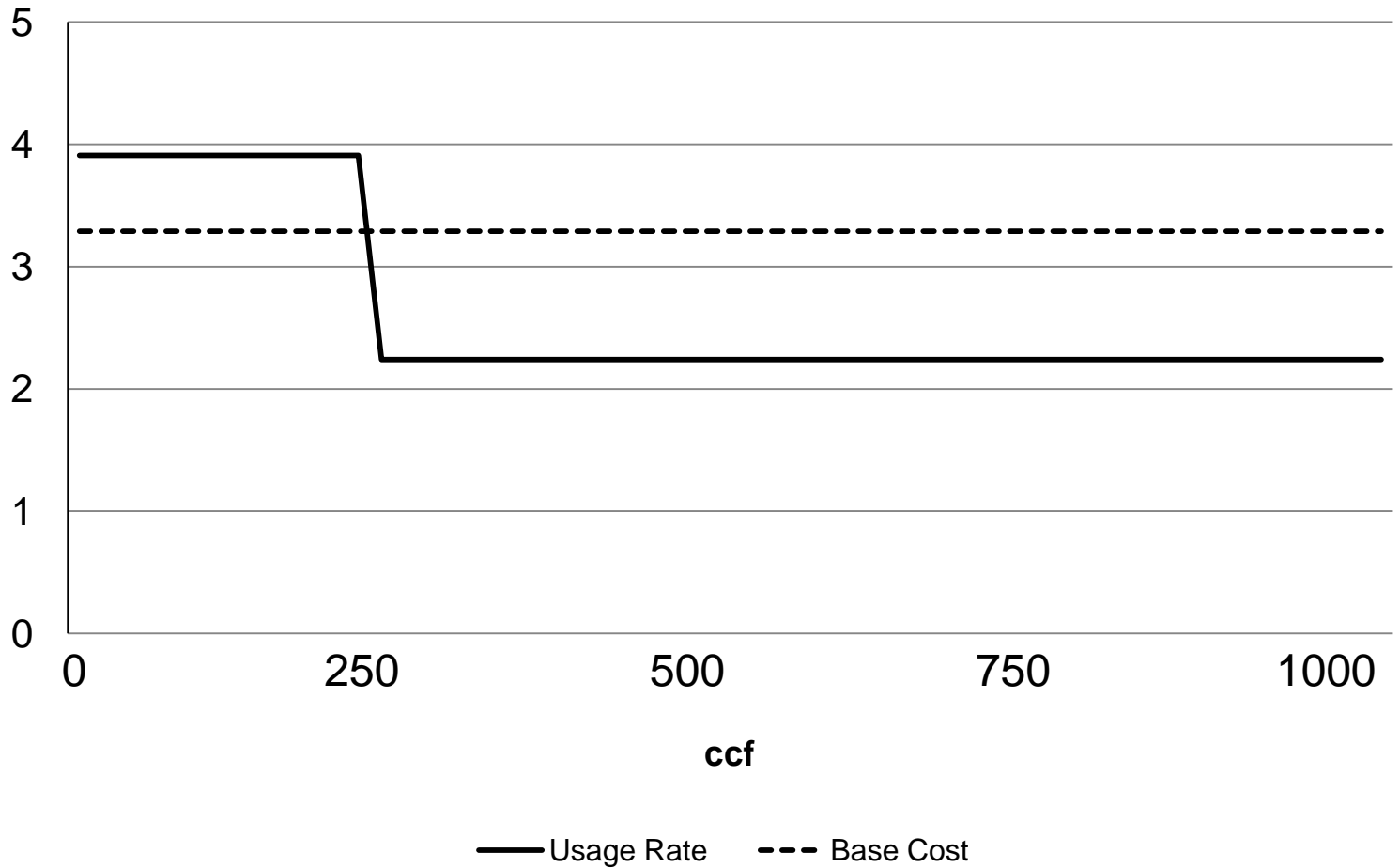
# WHOLESALE RATES\*

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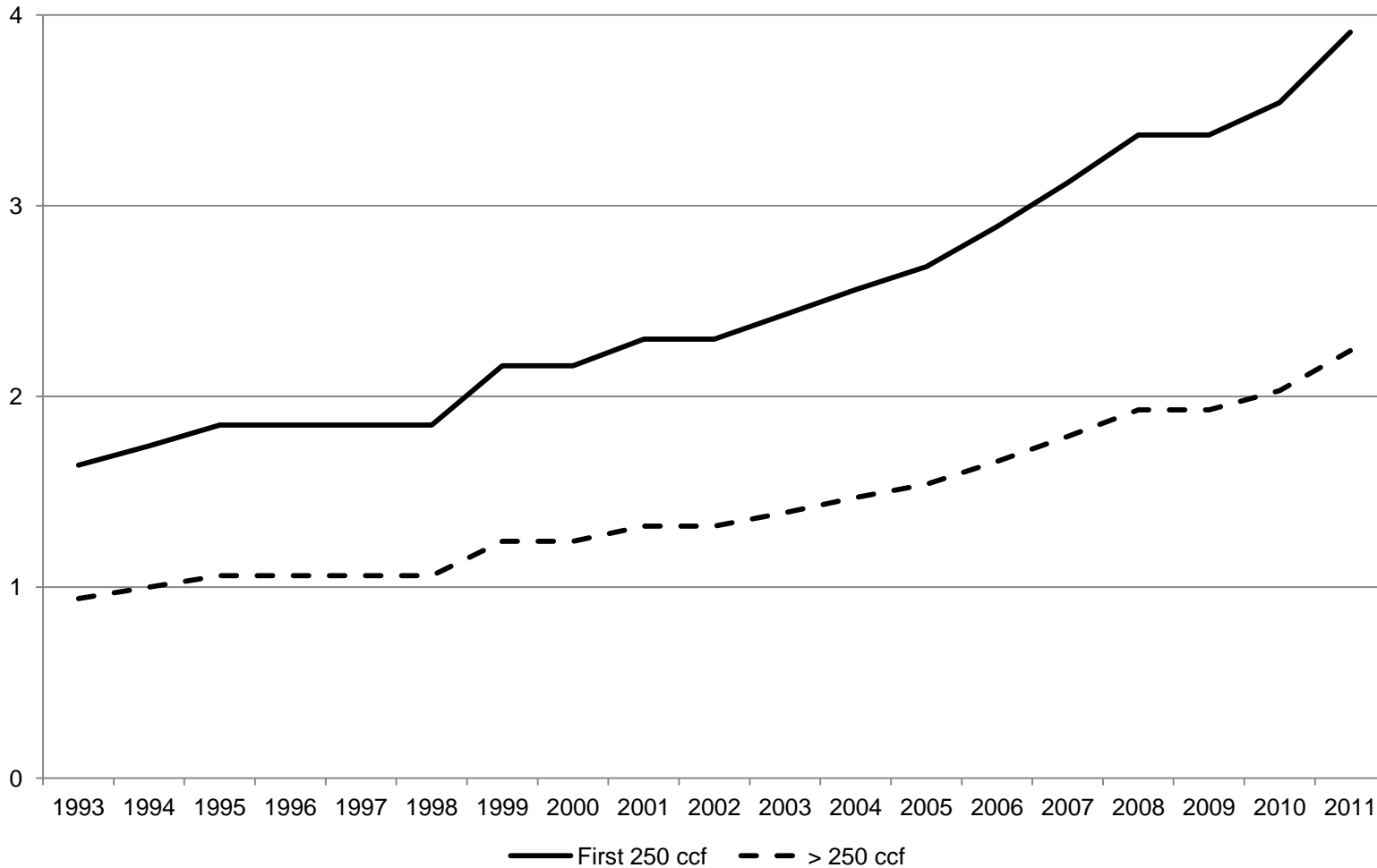
- Rates Applicable to Wholesale Customers (Such as Florida, Liberty Center, Malinta and HCWSD) are equal to the City's Inside Rates plus 25%, per Contracts.

# Napoleon Water Rate Study

## USAGE RATES VS. BASE COST



Napoleon Water Rate Study  
HISTORICAL USAGE RATES  
\$/CCF



# CONCLUSIONS

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- Current Rates are not Reflective of the Cost of Providing Service.
- Tail-Block Rate (\$2.24 per ccf) is Substantially Lower Than the Base Cost (\$3.29 per ccf).



# SUGGESTED RATE MODIFICATIONS

1. Set the Tail-Block Rate Equal to the Base Cost.
2. Add an Initial-Block of 0-10 ccf.
3. Add Capacity Charges for Meters Greater than 3 inch.

# EXISTING VS. PROPOSED RATES\*

Usage Charge: (Per ccf)	Existing	Proposed Rates	
		2012	2013
First 1,000 cu ft.	\$ 3.91	\$ 4.44	\$ 4.75
Next 24,000 cu ft.	3.91	4.28	4.50
Over 25,000 cu ft.	2.24	2.90	3.30
Capacity Charge: (Per Month)			
1.00 Inch	\$ 11.07	\$ 11.07	\$ 11.07
1.25 Inch	39.72	39.72	39.72
1.50 Inch	62.93	62.93	62.93
2.00 Inch	128.01	128.01	128.01
3.00 Inch	353.14	353.14	353.14
4.00 Inch	353.14	500.00	600.00
6.00 Inch	353.14	800.00	1,000.00
8.00 Inch	353.14	1,200.00	1,500.00
10.00 Inch	353.14	1,500.00	2,000.00

\* Reflects inside Rates. Outside Rates are Approximately 50% Greater than the Inside Rates.



# TYPICAL WATER BILL COMPARISON EXISTING VS. PROPOSED

Line No	Usage	Existing Rates	Proposed 2013 Rates	Increase (Decrease)	
				Amount	%
<b><u>Residential</u></b>					
1	500 cu ft.	\$ 30.62	\$ 34.82	4.20	13.72%
2	1,000 cu ft.	\$ 50.17	\$ 58.57	8.40	16.74%
<b><u>Commercial (1.5")</u></b>					
3	2,500 cu ft.	\$ 160.68	\$ 177.93	17.25	10.74%
4	5,000 cu ft.	\$ 258.43	\$ 290.43	32.00	12.38%
5	25,000 cu ft.	\$ 1,040.43	\$ 1,190.43	150.00	14.42%
<b><u>Industrial (2")</u></b>					
6	25,000 cu ft.	\$ 1,105.51	\$ 1,255.51	150.00	13.57%
7	50,000 cu ft.	\$ 1,665.51	\$ 2,080.51	415.00	24.92%
8	100,000 cu ft.	\$ 2,785.51	\$ 3,730.51	945.00	33.93%
<b><u>Wholesale (4")</u></b>					
9	100,000 cu ft.	\$ 3,763.30	\$ 5,253.13	1,489.83	39.59%
10	250,000 cu ft.	\$ 7,963.30	\$ 11,440.63	3,477.33	43.67%
11	500,000 cu ft.	\$ 14,963.30	\$ 21,753.13	6,789.83	45.38%

# SUMMARY

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- Revenues at Current Rates are NOT Sufficient to Meet Projected Revenue Requirements.
- Revenues Need to be Increased by Approximately 16% in Order to Meet the Projected Near-Term (2013) Revenue Requirements.
- Residential and Small Commercial/Industrial Customers are Subsidizing the Large Commercial/Industrial and the Wholesale Customers.
- Current Rates are NOT Reflective of the Cost of Providing Service.



# RECOMMENDATIONS

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- Adopt the Projected Rates, Which Will Result In a 12.5% Overall Increase In Revenues in 2012 and an Additional 7.5% Overall Increase in 2013.
- Following Development of the Financing Plan for the Proposed Water Treatment Plant Improvements, Update the Rate Analysis and Adjust Rates, as Needed.

