

The Mitchell Rate Structure

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Presentation Outline

1. Definitions: Conservation and Fairness
2. Assumptions with Conservation and Fairness
3. Literature Support
4. Case Rate Analysis

Definitions

Conservation = The preservation and careful management of the environment and of natural resources (The Free Dictionary online)

Fairness = Just, equitable, unbiased treatment (The Free Dictionary online)

Assumptions

Conservation = We all need to conserve water now so that future generations have the use of a sustainable water supply.

Fairness = There is no one customer that should pay more for an equal amount of water than another customer. (There are variances.)

Literature Support

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Florida Water Rates Evaluation of Single-Family Homes

John B. Whitcomb, PhD

2005

Literature Support

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1. Socioeconomic Profiles
2. Demand Curves
3. Price Breakpoint (Price Elasticity)
4. Conclusion

Literature Support

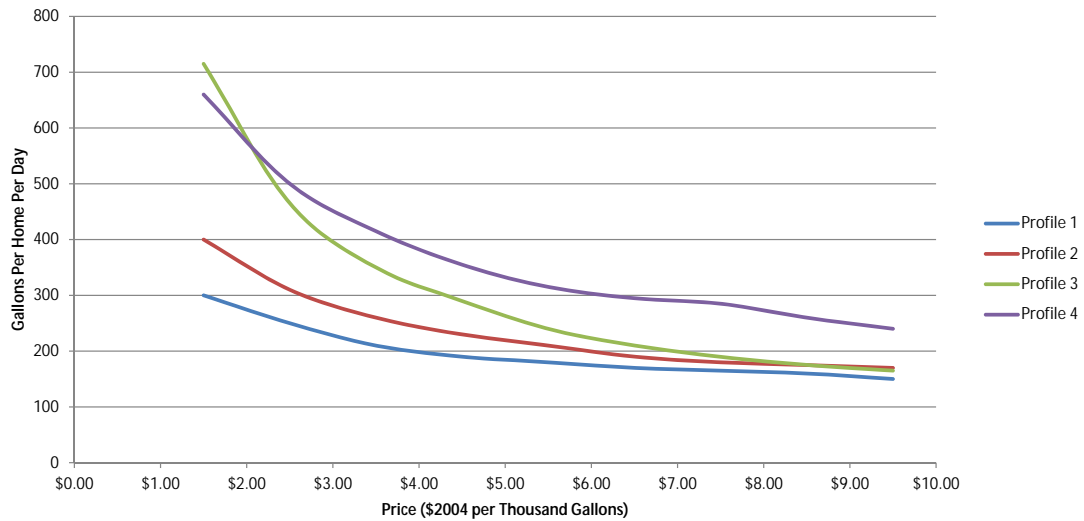
Socioeconomic Profiles

Property Value <u>Percentile</u>	Assessed Property <u>Value</u>	House Size <u>(Sq Ft)</u>
Profile 1 25%	\$57,890	1,350
Profile 2 50%	\$84,330	1,727
Profile 3 75%	\$126,932	2,197
Profile 4 90%	\$197,400	2,841

Literature Support

Demand Curves

Florida Water Demand Curves



Literature Support

Price Breakpoint (Price elasticity)

“As price exceeds \$6, additional water savings become progressively harder to achieve as customers have cut back to core water uses (e.g., indoor water for toilets, showers, clothes washers, and cooking)

Literature Support

Conclusion

“The fixed monthly charge has no correlation to usage, hence water systems can make revenue neutral changes in their rate structure by decreasing fixed charges and increasing quantity charges, so as to increase the price signal and lower total water consumption.”

Literature Support

Conclusion

- Removes the requirement to police additional connections at a meter.
- Makes customers pay their share of the consumption.

Case Rate Analysis

Scenario #1

Current Water Rates	
Minimum (0 - 2,000 gallons)	\$ 15.50
All Over 2,000 gallons	\$ 2.50
Average Monthly Water Bill	\$ 20.56
Average Monthly Revenue	\$ 4,416
Average Monthly Cost per 100 gal:	\$0.57

Case Rate Analysis

Scenario #1

Equitability Table				
Customer Usage Category	Use Range	% Total Customers	% Total Usage	% Total Revenues
Minimum Users	0-2K	41.9%	11.6%	31.6%
Low End Users	2K - 5K	32.7%	31.6%	30.6%
Middle Users	5K - 10K	23.5%	48.7%	33.4%
High End Users	Above 10K	1.8%	8.1%	4.3%

Case Rate Analysis

Scenario #1 (Mitchell Rate Structure)

Current Water Rates	
Rate Minimum (0 - 1,000 gallons)	\$ 6.00
Every 1,000 gallons after	\$ 6.00
Average Monthly Water Bill	\$ 21.22
Average Monthly Revenue	\$ 4,604
Average Monthly Cost per 100 gal:	\$.60

Case Rate Analysis

Scenario #2 (Mitchell Rate Structure)

Equitability Table				
Customer Usage Category	Use Range	% Total Customers	% Total Usage	% Total Revenues
Minimum Users	0-2K	41.9%	11.6%	13.32%
Low End Users	2K - 5K	32.7%	31.6%	33.00%
Middle Users	5K - 10K	23.5%	48.7%	47.56%
High End Users	Above 10K	1.8%	8.1%	6.12%

Conclusion

Summary

- Studies show that price does have an impact on consumption (Florida study).
- The Mitchell Rate Structure promotes fairness, maintains revenue, and triggers conservation.



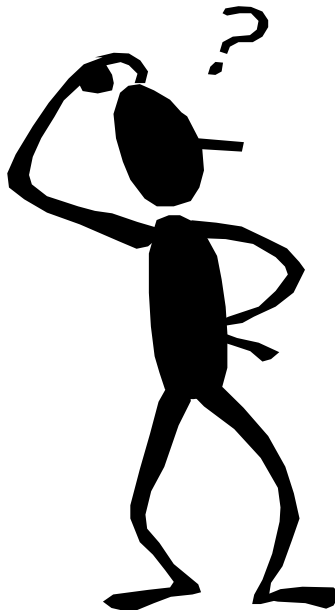
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Questions

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