



# Special Issues Study

February 2008



# Scope of Study

- The scope for this special study was limited to two specific areas of review:
  - Development of a conservation water rate
  - Evaluation of our current summer wastewater discount policy



# Conservation Water Rate

- Are there factual reasons that would suggest we need a conservation rate?
  - System Peaks
    - Winter peak: 4.4 MGD
    - Summer peak: 13.2 MGD
    - Peaking factor of 3
    - Must build sufficient infrastructure to supply peak demands
    - Off peak, this infrastructure produces no revenue but carries ongoing expense throughout the year



## **Are there factual reasons that would suggest we need a conservation rate? (Continued)**

- Cost-of-service based rates
  - During our last rate review we began the process of implementing cost-of-service based rates
  - This philosophy states that the cost the customer pays for service is based on our cost to serve the class of customers.
  - In this case, the class of customers under review include those with second meters or those used specifically for irrigation purposes.
  - This study does not effect primary meter accounts



## **Are there factual reasons that would suggest we need a conservation rate? (Continued)**

- Past history usage trends
  - July, 2007 class W04 customers consumed 120,910,900 gallons for irrigation purposes
    - Includes 4,278 accounts
    - Customers in this class include residential and commercial users
    - Commercial class customers include the following:
      - Motels, restaurants, banks, home owner associations, churches, grocery stores, home builders, etc.
    - Average consumption for this class is 28,263 gallons for the month with a bill of \$75.83



## **Are there factual reasons that would suggest we need a conservation rate? (Continued)**

- Past usage trends (continued)
  - 92.1% of these users used less than 50,000 gallons
  - 7.9% used over 50,000 gallons (400 accounts)
  - 2.4% used over 100,000 gallons (90 accounts)
  - 2.2% used over 200,000 gallons (31 accounts)
  - 2.1% used over 300,000 gallons (18 accounts)
  - 1.9% used over 400,000 gallons (12 accounts)
    - Average bill ranged from \$1,164 to \$2,368 for one month
    - Several of these accounts used over 1,000,000 gallons in one month



## **Are there factual reasons that would suggest we need a conservation rate? (Continued)**

- Past usage trends continued
  - July, 2007 class Wo4C customers consumed 5,437,700 gallons for irrigation purposes
    - Includes 31 accounts
    - Customers in this class include schools, recreational fields, municipal, etc.
    - Average consumption for this class is 175,410 gallons with a bill of \$462.83
  - 58.1% used less than 50,000 gallons
  - 41.9% used more than 50,000 gallons (13 accounts)
  - 22.6% used more than 100,000 gallons (11 accounts)
  - 12.9% used more than 400,000 gallons (5 accounts)
    - Average bill ranged from \$1,277 to \$2,168



## **Are there factual reasons that would suggest we need a conservation rate? (Continued)**

- Cost of water
  - We currently have two sources to purchase supplemental water
    - Limestone County Water & Sewer Authority (2 MGD)
      - Source has not been tested to prove reliability during drought conditions
      - Cost approximates \$1.90 per 1,000 gallons
    - Huntsville Utilities (3 MGD)
      - Very reliable source and was used during drought of 2007
      - Rates increased in October to \$3.45 per 1,000 gallons
      - Increases to \$4.11 per 1,000 gallons in September, 2008
  - Current customer cost for water is \$2.63 per 1,000 gallons
    - Any purchased water from Huntsville this summer will result in a loss of money



# Options Under Evaluation

- Option 1
  - Create a one-step conservation rate
    - Rate would only effect irrigation accounts using more than 50,000 gallons a month
    - Tiered rate
      - 1<sup>st</sup> 50,000 gallons at \$2.63 per 1,000 with excess billed at \$3.45 per 1,000 gallons
  - Rate tied to cost to purchase water from Huntsville
  - Rate would apply for the months June, July and August
  - This would impact approximately 413 accounts



## Options Under Evaluation (continued)

- Option 2
  - Create a two-step rate
    - Step 1 – 50,000 to 150,000 gallons at \$3.04 per 1,000 gallons – 15.5% increase
    - Step 2 – greater than 150,000 gallons at \$3.45 per 1,000 gallons – 31% increase
  - Step 1 impact
    - 344 customers
  - Step 2 impact
    - 69 customers



# Expected Outcome

- While conservation rates are relatively new in design, it is projected by our consultant that we would see the following results:
  - Option 1
    - Reduction in consumption by 11,350,000 gallons
    - Net revenue gain of \$13,300
  - Option 2
    - Reduction in consumption by 7,400,000 gallons
    - Net revenue gain of \$15,100
- Due to uncertainty, we feel it will be critical to review data after our first year to determine if results were as projected
- As new supply comes online and as we ultimately reach the river, this rate may be short-term in nature



# Summer Wastewater Discount Policy

- Current policy states:
  - “Notwithstanding the schedule of rates established during the months of June, July and August of each year, for each residential customer within the City of Madison who does not have in use a secondary meter for water not serviced by the Sanitary Sewer System, the amount of water consumption used to calculate the wastewater surcharge established in this section, shall be reduced by 30% from the amount actually consumed by such wastewater customer...”

# Summer Wastewater Discount Policy (continued)

- Why are we considering a change in policy?
  - Is current policy fair to customer?
    - Everyone receives discount regardless of outdoor watering habits
    - Applies to apartment complexes that are commercial in nature but whose end user is residential
  - Does customer value outweigh lost revenue?
    - Current discount is calculated to be approximately \$215,000 annually



# Options Considered

- Option 1
  - Exempt customers in Classes W01 and W01S from charge for wastewater services for usage above 10,000 gallons per month during June-August
    - Cap set at 150% of class average
  - Reduce discount from 30% to 20% for W01X customers
  - Changes would result in an additional loss in revenue of \$74,000 annually



# Options Considered (continued)

- Option 1
  - Issues
    - 85% of customers would lose discount altogether
    - Only small percentage of customers would benefit from changes
    - Board would lose additional revenue under this option



## Options Considered (continued)

- Option 2
  - 10% discount up to 10,000 gallons
  - Exempt all usage greater than 10,000 gallons
  - Results in Board savings of approximately \$38,000 annually
- Option 3
  - 20% discount up to 10,000 gallons
  - Exempt all usage greater than 10,000 gallons
  - Results in Board savings of approximately \$2,000 annually



## Options Considered (continued)

- Option 4
  - 20% discount on first 20,000 gallons
  - Exempt all usage greater than 20,000 gallons
  - Results in Board savings of \$34,000



# Next Steps

- Water Conservation Rates
  - Continue evaluation of options
    - Calculate impact of proposed options on various customers within each class
    - Offer to hold meetings with different customer classes
      - Home Owner Associations (coordinate with Ed Collins)
      - Home Builders Association (coordinate with Joe Gehrdes)
      - One at-large meeting for other customers
    - Post options on web site
  - Present final recommendation to the Board on April 7
  - Effective date of June 1, 2008



# Next Steps (Continued)

- Summer Wastewater Discount Policy
  - Calculate impact of proposed options on various customers within each class
  - Assemble a review team to allow feedback
    - Team will include customers who have voiced feedback in the past
    - Post options on web site encouraging feedback during March
  - Present final recommendation to the Board on April 7
  - Effective date of June 1, 2008



# Other Pending Items

- Water Availability Fees
  - Last year the Board approved increases to availability fees to be effective April 1 of each year through 2009
  - On February 22, we met with our Impact Fee Team for our annual review
    - Team members include Ken McDaniel, Mark Hunter, Roy Johnson, Sandra Steele and Joe Gehrdes
    - Concerns expressed over increasing fees again with economy being sluggish
  - Meeting again with Team on March 12
  - If changes are proposed, they will be presented at the April 7 Board meeting



# Comments