Funding Mechanisms for Watershed Protection
The Central Arkansas Water Story

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Chief Executive Officer
Central Arkansas Water
Central Arkansas Water

- Created in 2001
- Seven member Board appointed by North Little Rock and Little Rock City Boards
- Serves 450,000 Customers in Pulaski County and surrounding areas
- Two reservoirs with a combined yield of 121 MGD (Lakes Winona and Maumelle)
- Two surface water treatment plants
- Average daily demand of 62 MGD with peak of 126 MGD
Lake Maumelle

- Completed 1959
- 8900 acres surface area
- 25 ft avg / 60 ft max depth
- Solely for water supply
- No body contact allowed
- 93 MGD yield
Lake Maumelle Watershed

- 88,000 acres / 137 sq. miles
- 91% forested, 8% grassland
- <1% urban (paved roads)
- 53% private ownership
Proposed developments 2004

Legend:
- Lake Maumelle
- Zone 1
- Zone 2
- Proposed Land Development
- Watershed Border
- Major Highways

Zone 1
Proposed Land Development #1
87 Houses

Zone 2
Proposed Land Development #2
185 Houses

Lake Maumelle Watershed Protection

Water Intakes
Findings:
• Existing water quality is very good
• Future water quality will not meet goals under build-out scenarios

Recommendations:
• Regulatory management initiatives
  • New development design
  • Wastewater discharges
  • Sedimentation controls
  • Legacy exemptions
  • Watershed protection ordinance
• Nonregulatory management initiatives
  • Hazardous spill mitigation
  • Unpaved road management
  • Improved lake management
  • Improved CAW land management
• Voluntary stewardship practices
• Adaptive management approach
How Did CAW Pay for Implementing the Watershed Management Plan? (prior to 2009)

• Recurring O & M costs funded by raising rates (> $1M annually)

• Land purchases were funded by capital reserves and by issuing debt
Why Use Land Conservation as a Key Component of Watershed Management Plan?

• Core element of plan was to conserve land by limiting development in the watershed

• Conservation allows land cover to assist in “pre-treating” runoff
  ✓ Helps meet target lake water quality goals
  ✓ Reduces chemical costs at the treatment plant

• Offers CAW the most control in preserving natural characteristics

• One of the most expensive of the plan elements to implement
What Type of Funding Mechanisms were Evaluated for Land Purchases?

- Dedicating a portion of monthly bill’s fixed charge toward the purchase of land or conservation easements
- Funding an annual “set” amount through user rates
- Frequently issuing revenue bonds
- A fixed fee charge on the monthly water bill (Watershed Protection Fee)
## Monthly Watershed Protection Fee (WPF)

<table>
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<th>METER SIZE (diameter)</th>
<th>EFFECTIVE MAY 1, 2009</th>
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<tbody>
<tr>
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<tr>
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<tr>
<td>1”</td>
<td>.68</td>
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<tr>
<td>1 ½”</td>
<td>1.13</td>
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<td>3”</td>
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<td>4”</td>
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<td>6”</td>
<td>11.25</td>
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<tr>
<td>8”</td>
<td>22.50</td>
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<tr>
<td>10”</td>
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Total Annual Revenue Generated from WPF - $1M
### Utility Billing Services

**Account No**: [Redacted]

**Service Address**: [Redacted]

**Class**: RESIDENTIAL

**Bill Date**: 6/22/2015

**Previous Balance**: $0.00

**Current Charges**: $75.45

**Total Amount Due**: $75.45

**Payment Due Date**: 7/13/2015

<table>
<thead>
<tr>
<th>Meter</th>
<th>Size</th>
<th>Prior Meter Read</th>
<th>Date</th>
<th>Current Meter Read</th>
<th>Date</th>
<th>CCFs</th>
<th>Description</th>
<th>Days</th>
</tr>
</thead>
</table>

#### BILLING DETAILS

- **Previous Billing**: 73.52
- **Payment 06/09/2015 - Thank You**: -73.52
- **Previous Balance Due**: $0.00

**Current Charges**:

**Central Arkansas Water Use Charges**

- **Water Charge**: 12.23
- **Watershed Protection Fee**: 0.45
- **Franchise Fee**: 1.27
- **Sales Tax**: 1.25
- **Fed. Safe Drinking Water Act**: 0.30

**Total Use Charges**: $15.67

**Little Rock Wastewater Use Charges**

- **Monthly Charges (6 = Average Winter Consumption)**: 31.71
- **Service Line Replacement Fee**: 1.00
- **Franchise Fee**: 3.17

**Total Use Charges**: $35.88

**Little Rock Solid Waste Charges**

- **Monthly Charges**: 22.02
- **Sales Tax**: 1.93

**Total Use Charges**: $24.00

**Total Current Charges**: $75.45

**Total Amount Due**: $75.45

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*Your 2014 WATER QUALITY REPORT provides important information regarding the quality and sources of your drinking water. The report is now available at carkw.com/water-quality-report. For a paper copy of the report, call 501.372.5161, or email waterqualityreport@carkw.com. WISE WATERING - over-watering laws and gardens can cause as much damage to landscapes as under-watering. For more tips and information visit carkw.com/sprinkler.*
Watershed Protection Fee

- Primarily used for land purchases or conservation easements

- Can be used for other watershed activities as long as it is for water quality protection or improvement
Summary

- Watershed Protection Fee provides steady revenue stream and allows land purchases without raising rates
- Other plan elements are funded by revenues from water rates
- Little pushback from community for implementing Water Protection Fee
Questions?