Conservation and Reuse Water Savings (Task 3.2)

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Agenda

- Introductory Comments
- Region C – Reuse Activities
- Region C – Water Conservation Activities
- Region C – Expected Water Savings
- Summary
Reuse Activities
Region C Water Reuse Progress

**Major Reuse Advancements Since 2006 Plan**

- Key reuse activities
  - TRWD’s Richland Chambers Reuse Water Supply
  - NTMWD’s East Fork Raw Water Supply
  - Upper Trinity Regional Water District – Lake Lewisville Water Supply
  - Trinity River Authority return flow permits
  - Dallas return flow contracts

- **Projects under Construction**
  - *Fort Worth Village Creek Reclaimed Water Delivery System* (startup anticipated by end of 2010)
Region C Water Reuse

Region C Ahead of Rest of State in Reuse

2007 State Water Plan - 2060 Projections
Region C Water Reuse Progress

Region C reuse represents major water supply

- Greater than 200,000 acre-feet/year of existing reuse available to Region C in 2010 \(^{(1)}\)
- Reuse (existing and planned) anticipated to grow to almost 665,000 acre-feet by 2060 \(^{(1)}\)

\(^{(1)}\) Based on projections developed during 2009.
Water Conservation Activities
Region C Water Conservation Progress - Conservation Measurement Issues

- Quantification of water conservation savings achieved is difficult
  - Appropriate data are not always collected and not consistently utilized
  - Long timeframes required to model water demand fluctuations

- Normalized comparisons of GPCD, between utilities or regions are difficult to make accurately
Region C Conservation Savings Measurement Approach

- Consider implementation of water conservation measures as being significant even though accurate savings cannot be calculated.
- Consider calculated municipal GPCD, recognizing limitations, for assessing relative water savings.
Region C Water Conservation Progress

- Region C has experienced regionwide implementation of water conservation strategies
- Basic and additional strategies
  - Various strategies selected for implementation by different municipalities
- Key strategies employed
  - Regional coordination for public awareness
  - Growing implementation of time of day irrigation restrictions
  - Water Conservation Symposium (3rd Annual)
## Region C Updated 2011 Municipal GPCD

<table>
<thead>
<tr>
<th>Condition</th>
<th>Projections (municipal gpcd)</th>
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<tbody>
<tr>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>No Conservation or Reuse</td>
<td>210</td>
</tr>
<tr>
<td>With Recommended Conservation and Reuse</td>
<td>173</td>
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</table>
Region C Municipal
GPCD Projections

Conservation Task Force Goal
No Conservation or Reuse
With Recommended Conservation and Reuse (Preliminary recommendations for 2011 Region C Plan)
Expected Water Savings
Region C Expected Water Savings (Preliminary 2011 Region C Plan)

- Municipal GPCD Reduction\(^{(1)}\)
  - 2010: 210 GPCD
  - 2060: 133 GPCD

- Reduction of municipal water demand
  - Reduction = 30 to 35%

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\(^{(1)}\) Based on preliminary recommendations of conservation measures, including reuse, being considered by Region C Regional Planning Group.
Summary

- Region C leader in the state in reuse
- Region C water conservation implemented strategies are effective
- Region C implemented and planned water conservation measures, including reuse, projected to reduce water demands from slightly greater than 200 gpcd to about 130 gpcd (preliminary 2011 Region C Plan)