

# This presentation premiered at WaterSmart Innovations

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# Development of a Strategic Wholesale Provider Water Conservation Implementation Plan

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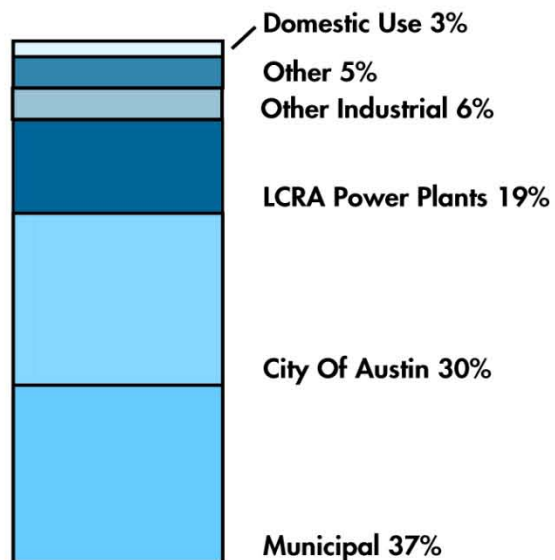
October 9, 2009

# Presentation Overview

- LCRA Customers and Service Area
- Water Conservation Planning Process
- Wholesale Provider Benchmarking
- Stakeholder Involvement
- Evaluating Conservation Measures
- Recommendations
- Conservation Plan Implementation

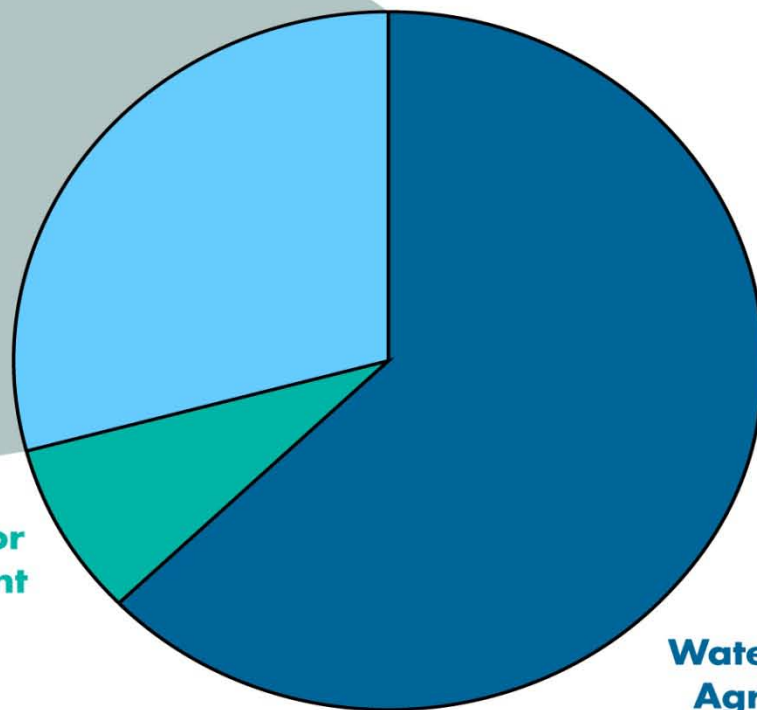
# LCRA Total Water Use – 2008

## Firm Water Use for Communities, Cities and Industry (24%)



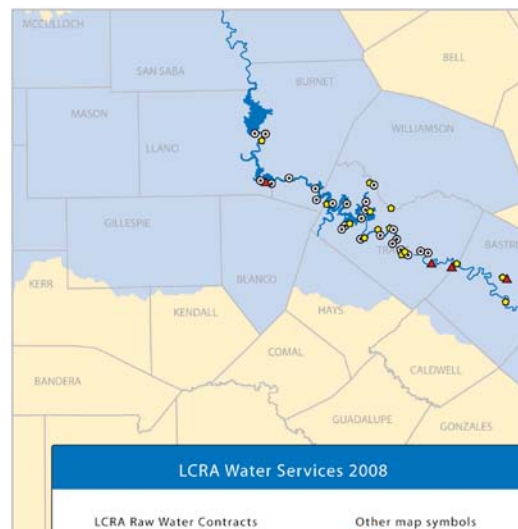
**Releases for  
Environment  
(9%)**

**Water Use by  
Agriculture  
(67%)**



# LCRA's Firm Water Customers

- Approximate 200 water contracts
  - Municipal raw
  - Municipal treated
  - Irrigation
  - Recreation
  - Industrial
  - Power plants
  - Domestic use



# Historical Approach to Conservation

## ➤ Agricultural

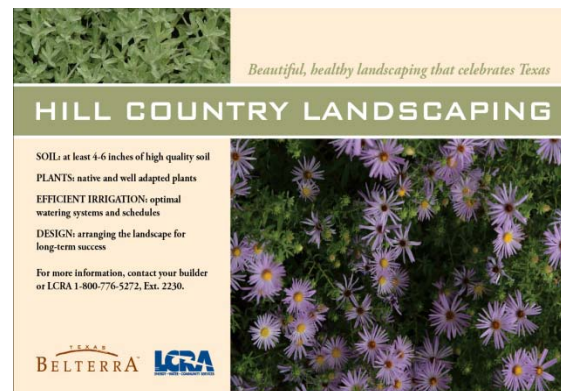
➤ Acre-ft savings

## ➤ Municipal and Industrial

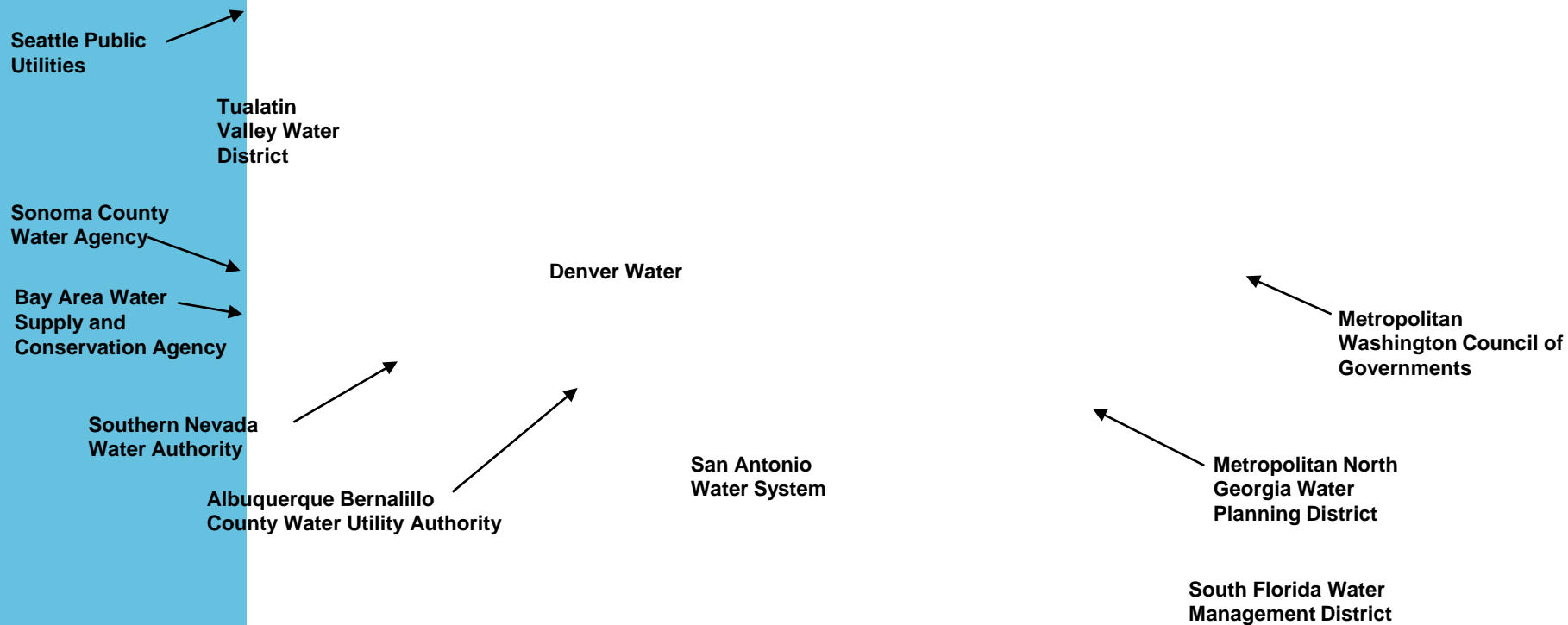
➤ Contract rules

➤ Education and outreach

➤ Technical assistance



# Water Utility Benchmarking



# Common Success Factors

- Strong communication and customer service orientation
- Realistic and well-defined goals
- Conservation grows over time; programs change
- Long-term, dedicated funding source supports permanent savings
- Mix of conservation measures for all end users – education, incentives and regulation



# Water Conservation Task Force

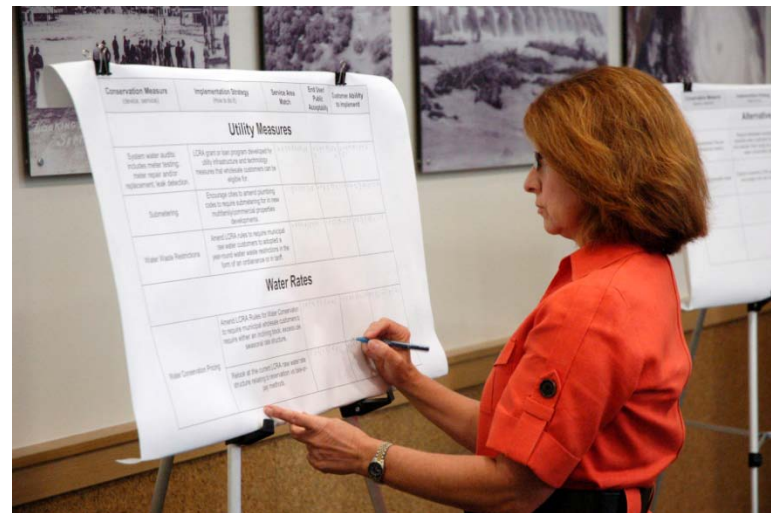
- **Identified potential conservation measures**
  - Policy Modifications
  - Regulations/ conservation rules
  - Incentives/rebates
  - Education and outreach
- **Prioritized measures**
- **Recommended actions**



# Water Conservation Criteria

- Cost effectiveness
- Technology maturity
- Certainty of savings
- Potential magnitude of savings
- Service area match
- End User/Public Acceptability
- LCRA customer ability to implement

Criteria based on AWWA Manual M52:  
Water Conservation Programs – A Planning  
Manual (except for potential magnitude of savings).



# 20 Measures Evaluated for Savings

- Based on Task Force rankings and ability to be quantified
- Developed economic evaluation model
- Compared by water savings and estimated cost per acre-foot
- Focused on existing or new residential, Industrial, Commercial and Institutional, and wholesale customers
- Some measures not evaluated were included in plan

# Task Force Major Findings

- Conservation is most cost-effective way to extend water resources; it is expected
- Long-term focus and continual stakeholder involvement is critical; establish advisory council
- Partnerships with customers and community interests are critical
- Continuous source of funding is needed

# Conservation Plan: Water Savings and Costs

- **LCRA Board approved goals and strategies on March 25, 2009**
  
- **5-year plan:**
  - **Water savings: 3,000 acre-feet/year**
  - **Cost: \$4 million**
  
- **10-year plan**
  - **Water savings: 6,200 acre-feet/year**
  - **Cost: \$10 million**

# Conservation Plan: Education and Outreach

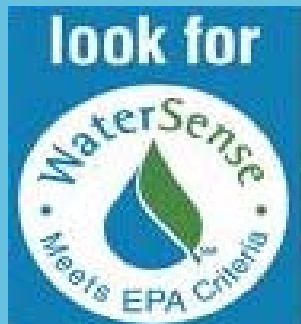
- Continue Water IQ
- Water saver new home program
- Golf course certification program
- Landscape irrigation audit training
- LCRA Nature Parks



**"YOUR DRIVEWAY WON'T GROW IF YOU WATER IT."**  
—THE COLORADO RIVER

# Conservation Plan: Incentives

- **Residential rebates: high efficiency toilets, clothes washers, showerheads, irrigation technology, rainwater harvesting**
- **Industrial, commercial and institutional rebates**
- **Firm water customer grants**





# Conservation Plan: Rules and Enforcement

- **Landscape irrigation audits for large water users**
- **Industrial audits**
- **Irrigation and soil standards**
- **Better enforcement mechanisms**





# Phased Approach for Implementation

- **First year:**
  - Focus on residential customers with incentives and water saver new home program
  - Develop metrics for tracking and evaluation
  - Establish Water Conservation Advisory Council
- **Second year:**
  - Add additional measures for residential and commercial customers
  - Add wholesale customer grant program
  - Add golf course certification program
- **Third year:**
  - Develop proposed rules for irrigation use and new development
  - Potentially increase enforcement

# Summary

- LCRA has implemented conservation plans historically
- Customer and public input supports conservation programs
- Successful programs balance education, incentives and rules
- LCRA Board approval of the conservation plan is innovative for raw water whole sale providers

# Current Status

- In a possible drought worse than the drought of record
- Mandatory water restrictions
- Discussions of possible pro-rata curtailment
- New conservation initiatives delayed; hope to begin in early 2010

