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Overview of the City's Demand Management Programs - Providing Water for Future Growth

Dale Lyons
Water Resources Division - City of Santa Fe

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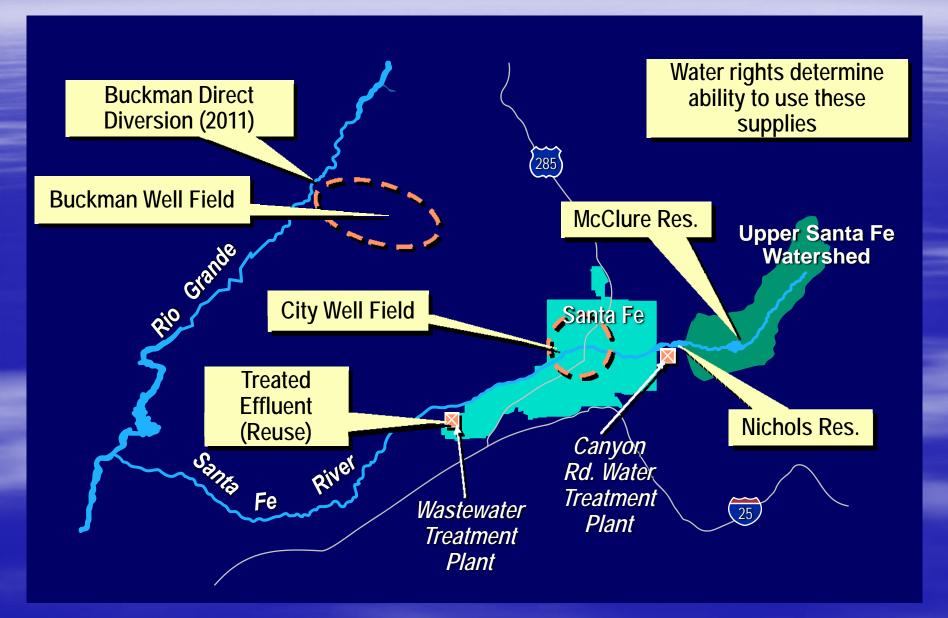


Overview of the City's Demand Management Programs — Providing Water for Future Growth

Dale Lyons
Water Resources Coordinator
City of Santa Fe

October 17th, 2008
Utton Center
Land and Water Planning in the Middle Valley

The City's existing sources of supply



Variability in Supply

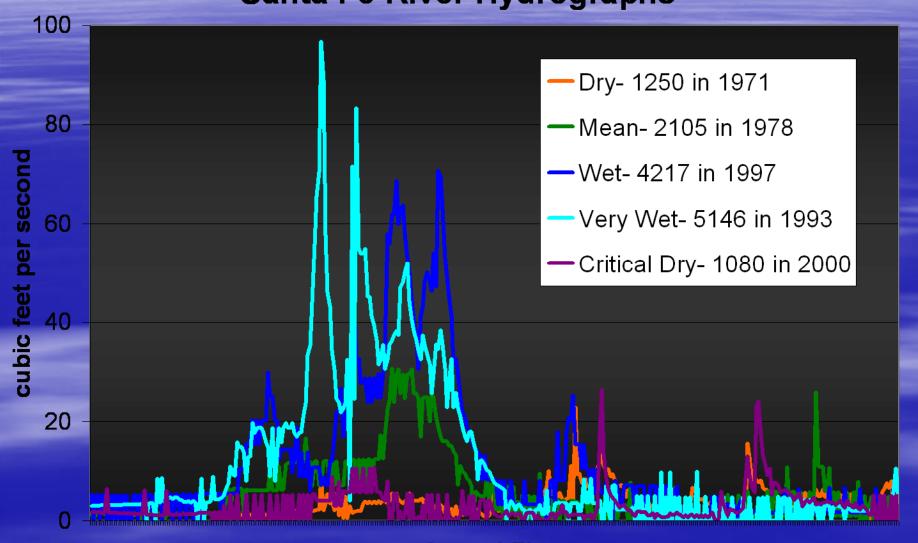


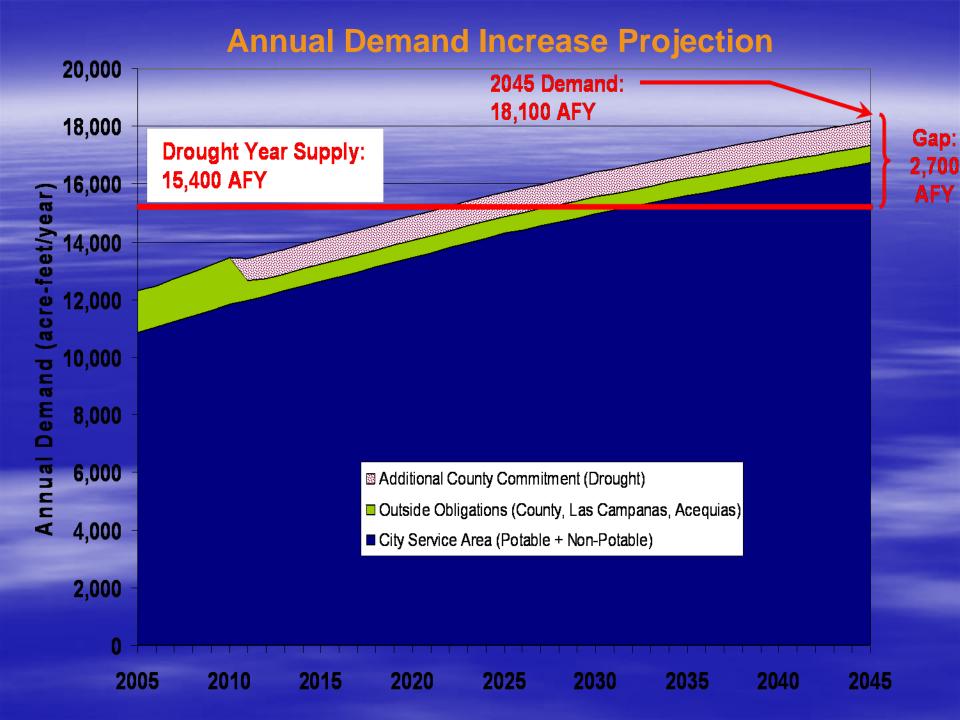


Baseline Production (Typical) (Drought)

Santa Fe River Variable Yield

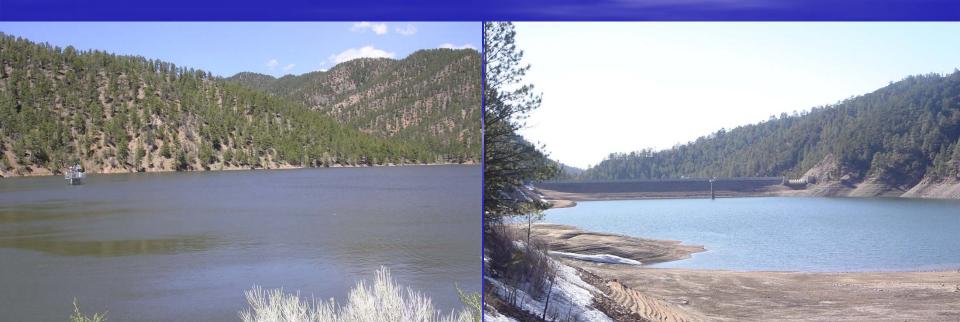
Santa Fe River Hydrographs



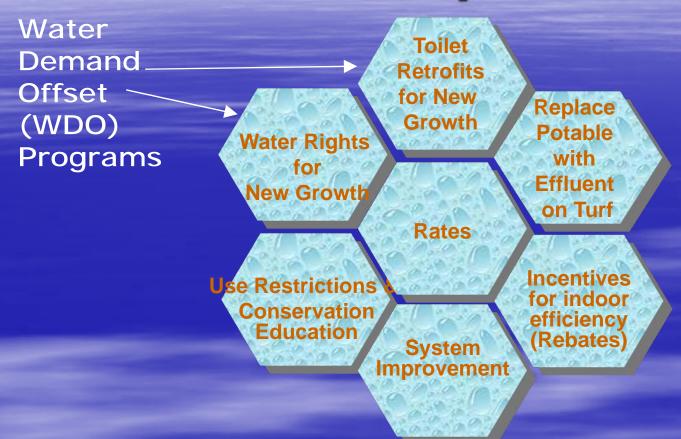


Driver to action

 CRISIS: Droughts of 1996 and 2002- peak summer demand exceeded peak system capacity

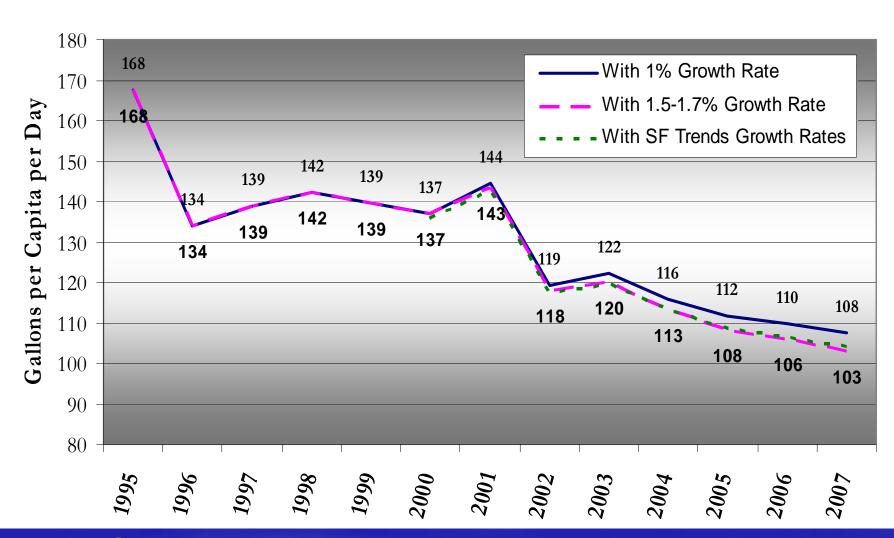


What policies and programs did we implement?



It all began with the Comprehensive Water Conservation Ordinance in 1997...

Effectiveness



Gallons per capita per day 1995-2007

Development Water Budget Determines form of WDO

New Development Demand on City Water Utility (AFY)



Residential < 10 AFY

Commercial < 5 AFY

Offset New Demand with Conservation

Residential > 10 AFY

Commercial >5 AFY

Offset New Demand with Water Rights

Current Water Right Transfer Program

- Requires land developers to bring valid water rights for project in order to build
- Water rights can also be banked, marketed to developers
- Water rights currently being transferred to the City's Buckman Well permit for offsets

Current Retrofit Program

- Developers are required to offset anticipated new water system demand by increasing conservation in existing development through toilet retrofits
- For example: One new housing unit retrofits between 8-12 toilets dependent upon lot size



Problems with Current Retrofit Program

- Running out of toilets to retrofit approx.
 only 20% left
- Speculators, not involved in development, have acquired retrofit credits, partially controlling price developers pay
- Developers prefer to pay a fee for offset water rather than be responsible for doing conservation

Proposed New Water Demand Offset Program – Replacement of the Current Retrofit Program

Rebate Program for Water Fixtures and Appliances

Water Conservation Credit Program

Ψ-

Conserved Water Deposited in City
Water Bank

<u>or</u>

Donation to parks, affordable housing

Free Stuff Program

\$ = City Pays Program Participant

Conserved Water
Sold to Developers

City Water Bank - WDO



Developer Payment to City for Offset Water



















Water Demand Offset for New Development

Water
Customer with
Old Fixtures &
Appliances

Rebate Program

Customer Purchases and Installs New Fixtures/
Appliances







City Water Bank City Pays
Property Owner
Rebate



Verification of Retrofits: City Inspection and Purchase Receipt



Water Conservation Credit Program



Water Customer Signs Conservation Contract



Retrofits or Changes in Use







City Monitoring of Customer Water Use



City Pays Water Customer

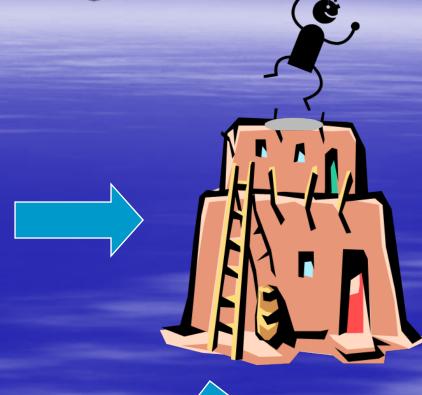


Free Stuff Program

City Water Conservation Group









Water

Bank



50% of Conservation to Water Bank

Evolution of the City's Demand Management Programs

- Despite the fact that conservation requires a a great deal of effort, and buy-in from stakeholders can be a difficult and long process, conservation still remains the cheapest source of water.
- Because of the importance of conserved water to the City's future, the City and stakeholders will continue to explore new ways to conserve water.











