



2009 Proposed Water Management Plan

April 9, 2009

Joint Meeting of the EARIP Steering Committee & Stakeholders

Calvin Finch
Director of Water Resources

Refreshing Ideas

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Managing Our Resources

Overview

- Supply and Demand
- The Permitted Supply Gap
- Conservation
- The Proposed Water Management Plan
 - Filling the Permitted Supply Gaps

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2009 Proposed 50-Year Water Management Plan



Managing Our Resources

History of Planning

| | 1998 Study & Feasibility | 2005 Implementation | 2009 Management |
|------------------------|------------------------------|--|--|
| Population | Pre-Census 2000 | Refined Projections | Improved Accuracy |
| Conservation | Taking Root | Tangible Success | Proven Results |
| EAA | Permits not settled | Permits facing reduction to 400K acre-feet | Mature Edwards market with statutory triggers |
| Diversification | Pre – Recycled Water and ASR | Recycled Water System, ASR and Trinity completed | Increased ASR Storage & nation's largest Recycled Water System |
| | No Regional Supplies | Simsboro and LGWSP re-evaluated | Western Canyon and Local Carrizo on-line |

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Supply and Demand

Proposal - New Parameters

- Plan to meet SAWS Service Area Demand
 - Acknowledge and honor feedback from other communities and purveyors.
 - Recognize the high ongoing cost to SAWS ratepayers to meet peaking demands of regional water purveyors.
 - Continuing to plan with other communities, as requested, on an equitable partnership basis.
- Plan for Demand using the Drought of Record
 - Region L uses the Drought of Record
 - State of Texas uses the Drought of Record

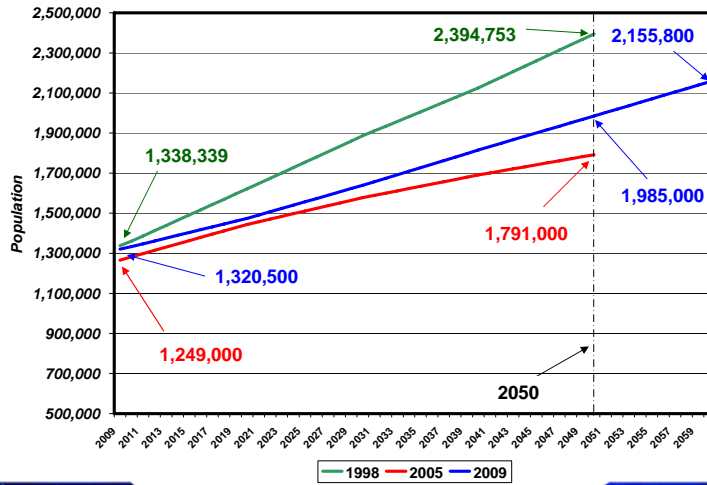
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Supply and Demand

Proposal - SAWS Service Area Population



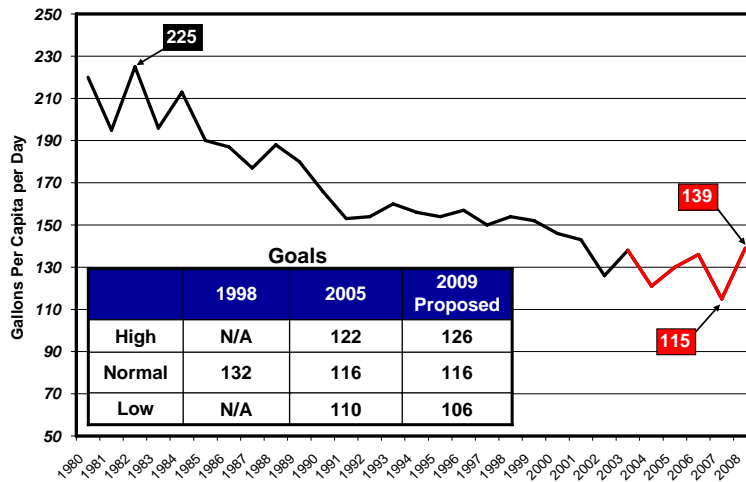
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Supply and Demand

Proposal - Demand Goals (GPCD)



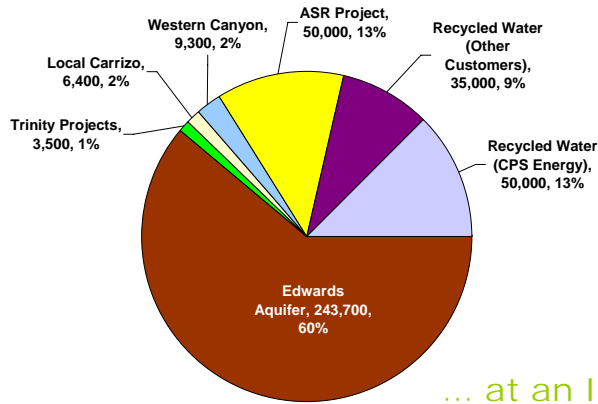
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Supply and Demand

Successful Diversification...



... at an Investment of over \$600 Million

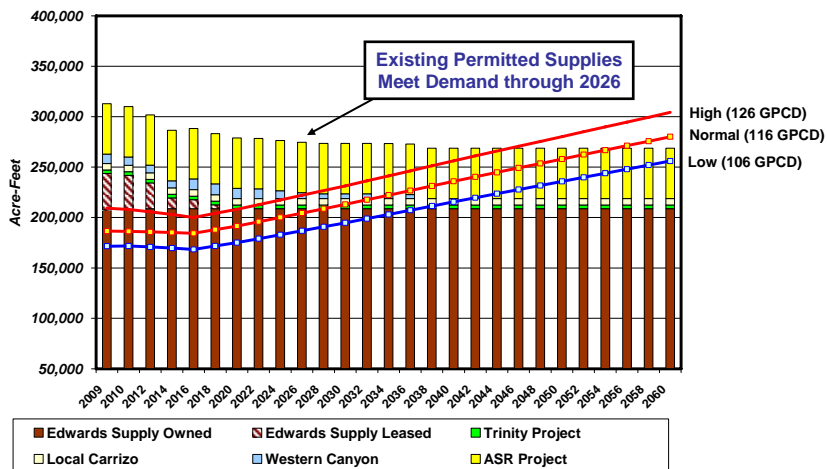
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Supply and Demand

Assuming Unrestricted Use of Existing Permitted Supplies



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Existing Supplies

Impact of the Drought of Record

- What happens if
 - SAWS doesn't add supplies,
- AND
- We get no measurable rain until 2014?

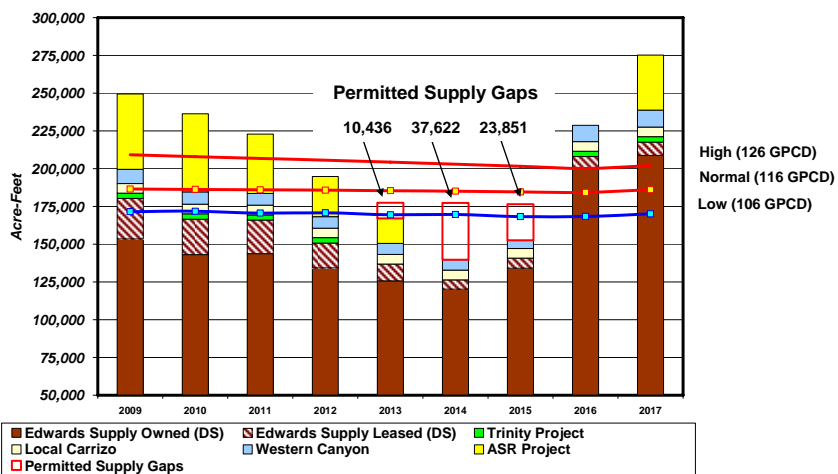
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Existing Permitted Supplies

Drought of Record Impact Today



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Permitted Supply Gap

Assuming *Stage IV Restrictions* of Existing Permitted Supplies

- Permitted Supply Gaps at midpoint of Normal and Low demands
 - 2014: 37,000 acre-feet
 - 2034: 81,000 acre-feet
 - 2060: 141,000 acre-feet

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Water Management - Conservation

Reasonable Landscape Irrigation Use

| | Potable Supplies |
|-------------------------------|----------------------|
| Total produced in 2007 | 168,921 af |
| Total produced in 2008 | 208,722 af |
| Permitted Supplies | 262,900 af |
| In Reserve (ASR) | 50,000 af |
| | Non-Potable Supplies |
| Recycled Water | 85,000 af |

Average household annual use = .287 af (93,456 gals.)
 Top 1%* household annual use = 1.33 af (432,000 gals.)
 One Acre-Foot = 325,851 gallons

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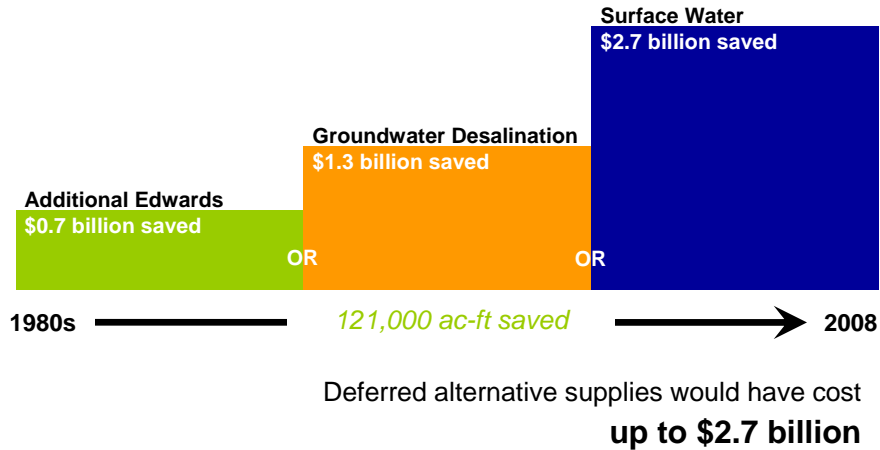
*1% of residential bills in 2007 & 2008 used 8.5% of total water billed

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Water Management - Conservation

Water Supply Savings



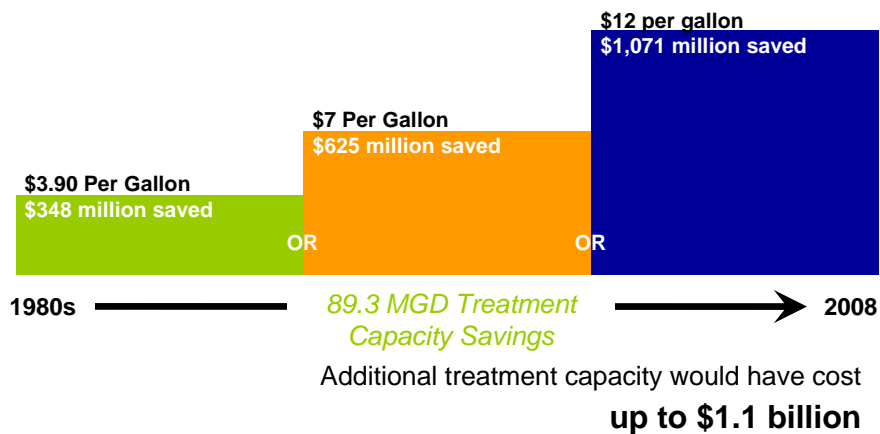
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Water Management - Conservation

Wastewater Treatment Savings



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Filling the Permitted Supply Gap

Successful Management through Conservation

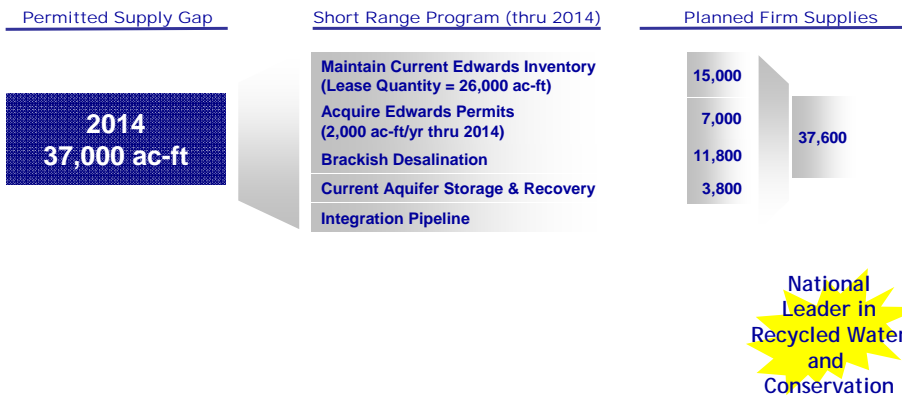
- Adjusted Drought Triggers
- Increase Resources
- Targeted Education and Awareness
- Review Rate Structure
- Consistent Landscape Irrigation Policy
- Analyze Unbilled Water
- Pursue Regulatory Reform at State and Federal Levels

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Filling the Permitted Supply Gap*



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*Assuming the Single Worst Year of the Drought of Record

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Filling the Permitted Supply Gap*



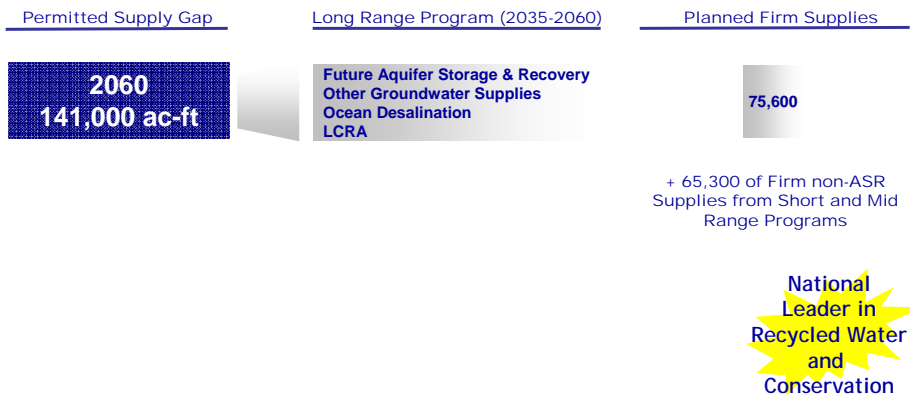
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*Assuming the Single Worst Year of the Drought of Record

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Filling the Permitted Supply Gap*

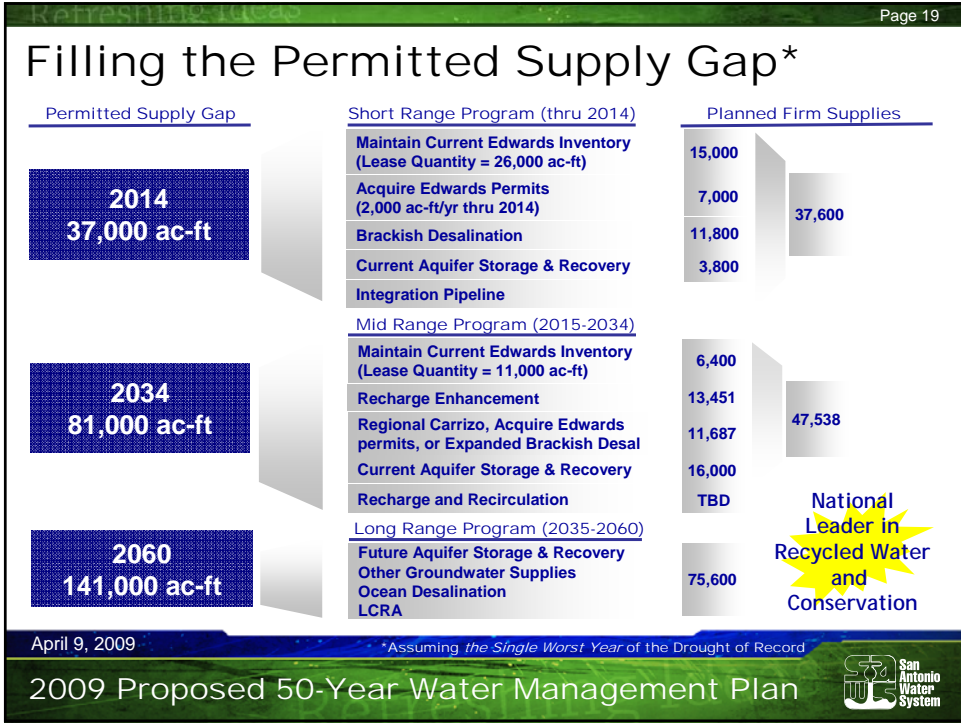


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*Assuming the Single Worst Year of the Drought of Record

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- ## Filling the Permitted Supply Gap
- ### Summary of Changes
- Planning for the Drought of Record and the SAWS Service Area
 - Brackish Desalination
 - Initially in Bexar County, expandable to other counties
 - Soliciting the assistance of the State to help change the Regulatory Environment
 - Regional Carrizo
 - Focus on Western Gonzales permit application
 - Aquifer Storage and Recovery (ASR)
 - Additional supplies
 - Study optimal and maximum storage, and additional sites
 - Study Recharge and Recirculation
 - Study Ocean Desalination
 - Issue RFP for Groundwater Supplies in Texas
 - Enhanced Conservation
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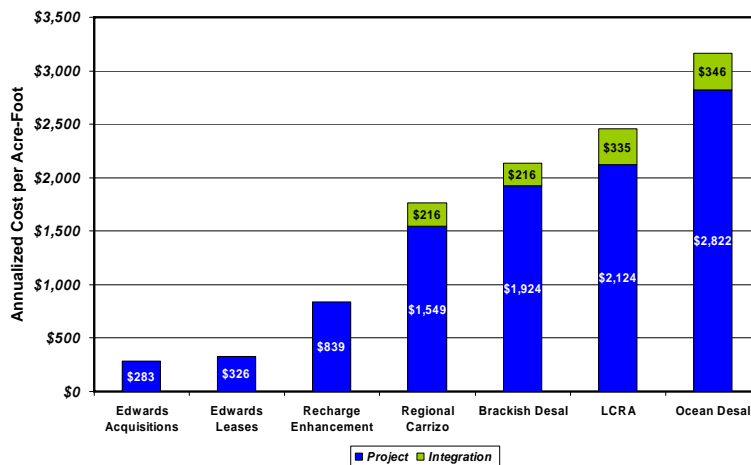
EARIP Meeting

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Refreshing Ideas

Project Costs

Annualized



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