

# Sandoval County Water Issues

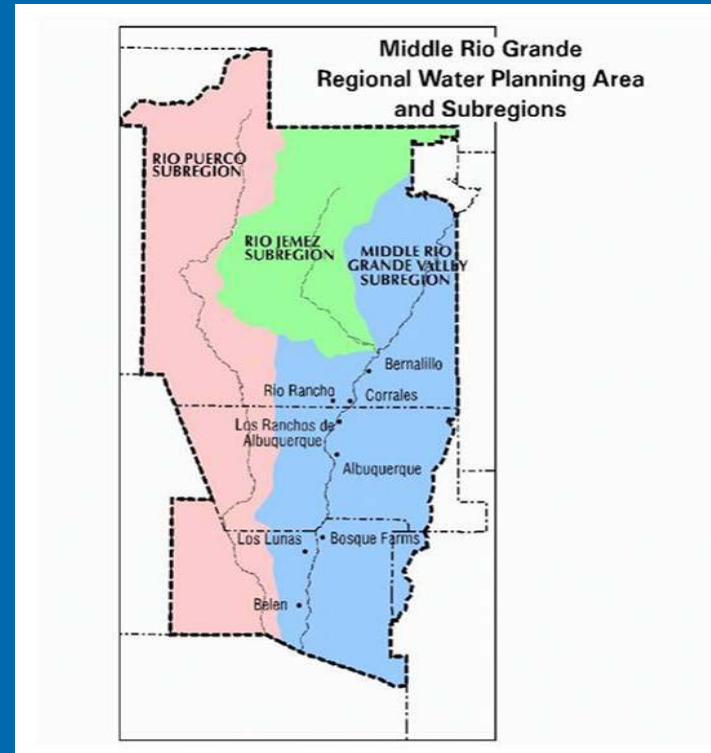
## *Introductory Presentation for the Sandoval County Unit, League of Women Voters*

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[www.WaterAssembly.org](http://www.WaterAssembly.org)

797-4306

# Why Are We Here?

To Inform the League About Water Issues

and

To Seek Your Participation in Working the Problems

# Outline of Briefing

- General Background - Regional Aspects
- The Diffuse Regulatory Environment
- Key Pressures on Viable Water
- Situations in Sandoval County
- What Can/Should You Do?

# General Background

Diverse Region; Over Spending

# Selected Regional Attributes – all numbers approximate

- Three Counties; Three Watersheds
- 12 Tribes
- Over 20 Local Government Entities
- Over 130 Public Water Supply Providers
- Over 30 Acequias
- 40% of the State's Population, Predicted Doubling in 50 Years
- 60% Component of the State's Economy
- Substantial Agricultural Interests
- Habitat for Several Endangered and Threatened Species
- More Unadjudicated Paper Water than Wet Water
- Heavily Studied Hydrology - Mainstem
- Seriously Drawn Down Aquifer – In Critical Management Areas
- A Leaky Transmission Line for Downstream Uses – The Riverbed)
- We're Thirsty and We Have Thirsty Neighbors

**Critical, Complex, Contentious**

# Regional Water Plan

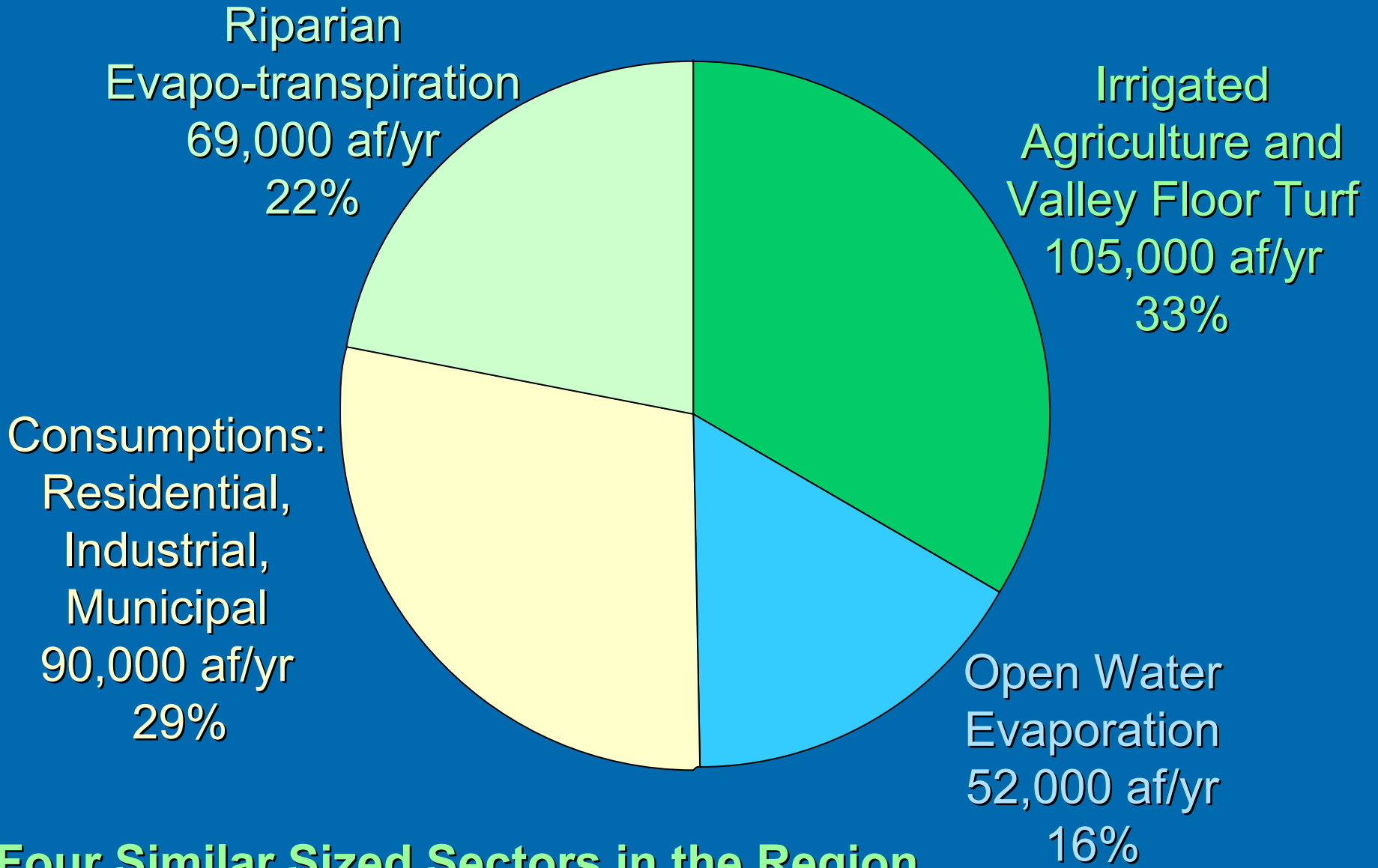
- Accepted 2004 by All 20 Local Governments in the Region
- Accepted by New Mexico Interstate Stream Commission

Result of:

- Seven Year Open and Inclusive Process
- More than 100 Public Meetings throughout Region
- About 100 Briefings to Agencies, Groups, Governing Bodies
- About 500 Water Assembly Meetings
- About 60 Water Resources Board Meetings
- Over 30,000 Water Assembly Volunteer Person-Hours
- \$1.2 Million in State, Local Government and Private Funds
- Extensive Analysis Studies and Computer Modeling

**A Basis for Moving Forward**

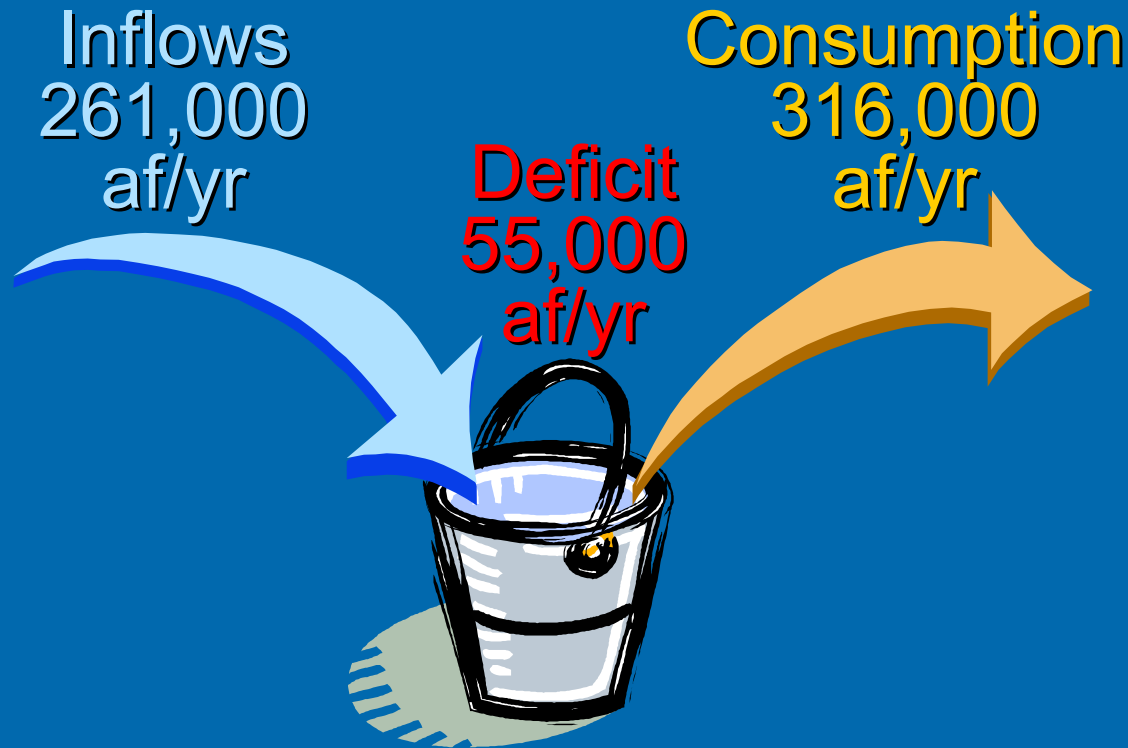
# The Regional Water Budget – 1972-1997



**Four Similar Sized Sectors in the Region**

# The Regional Water Budget Bottom Line

Ongoing Deficit Spending of Water – 15-20%  
Last Quarter of the 20<sup>th</sup> Century



**55,000 Acre Feet is 18 Billion Gallons**

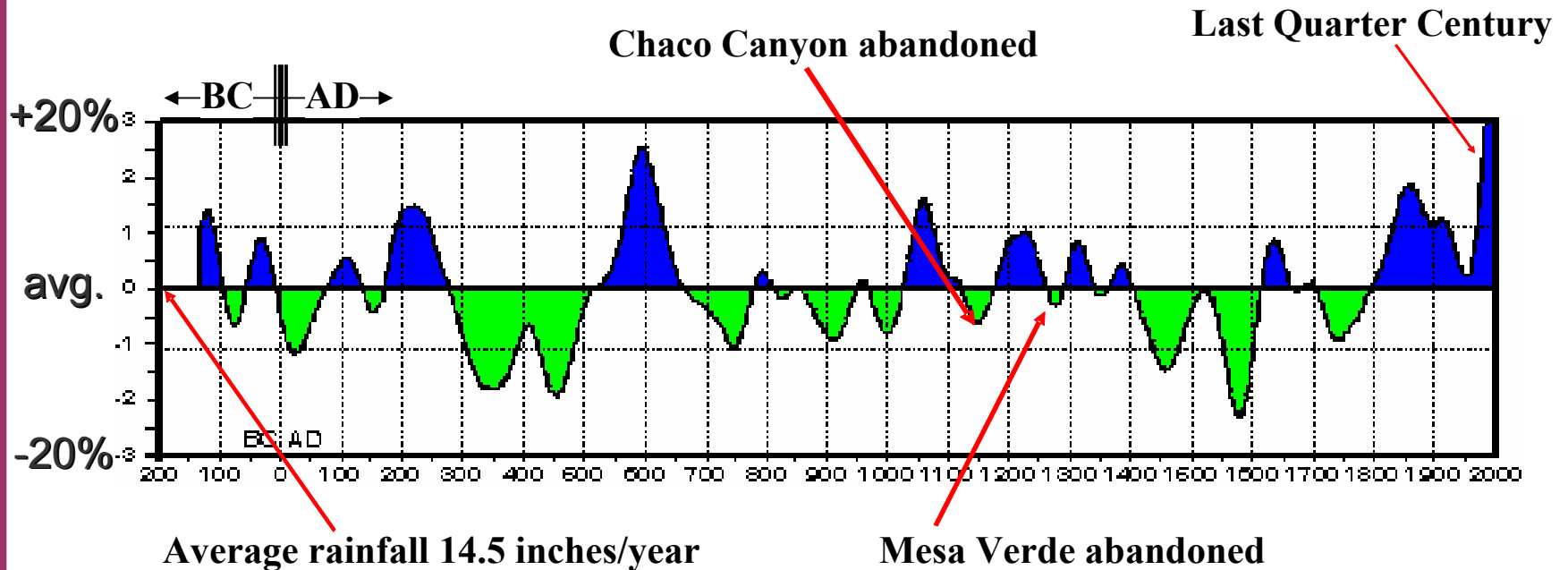
**Enough to Fill a Football Field 7 Miles Deep, Every Year !**



# Wettest Quarter Century in 2000 Years

## Rainfall Over 2000 Years in New Mexico

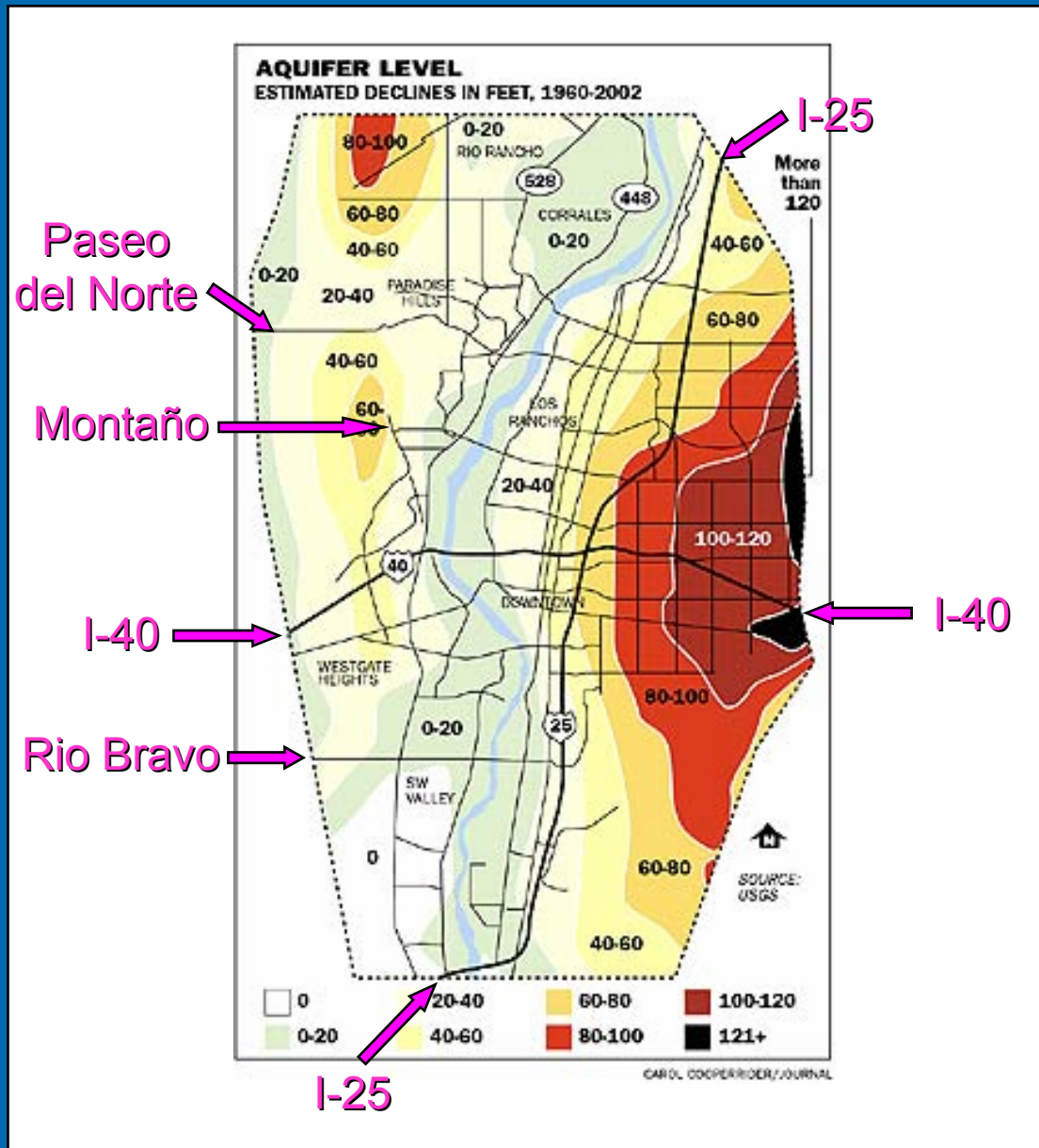
Tree rings from El Malpais National Monument (Henri Grissino-Mayer)



**We Were Overspending When We Were Flush**

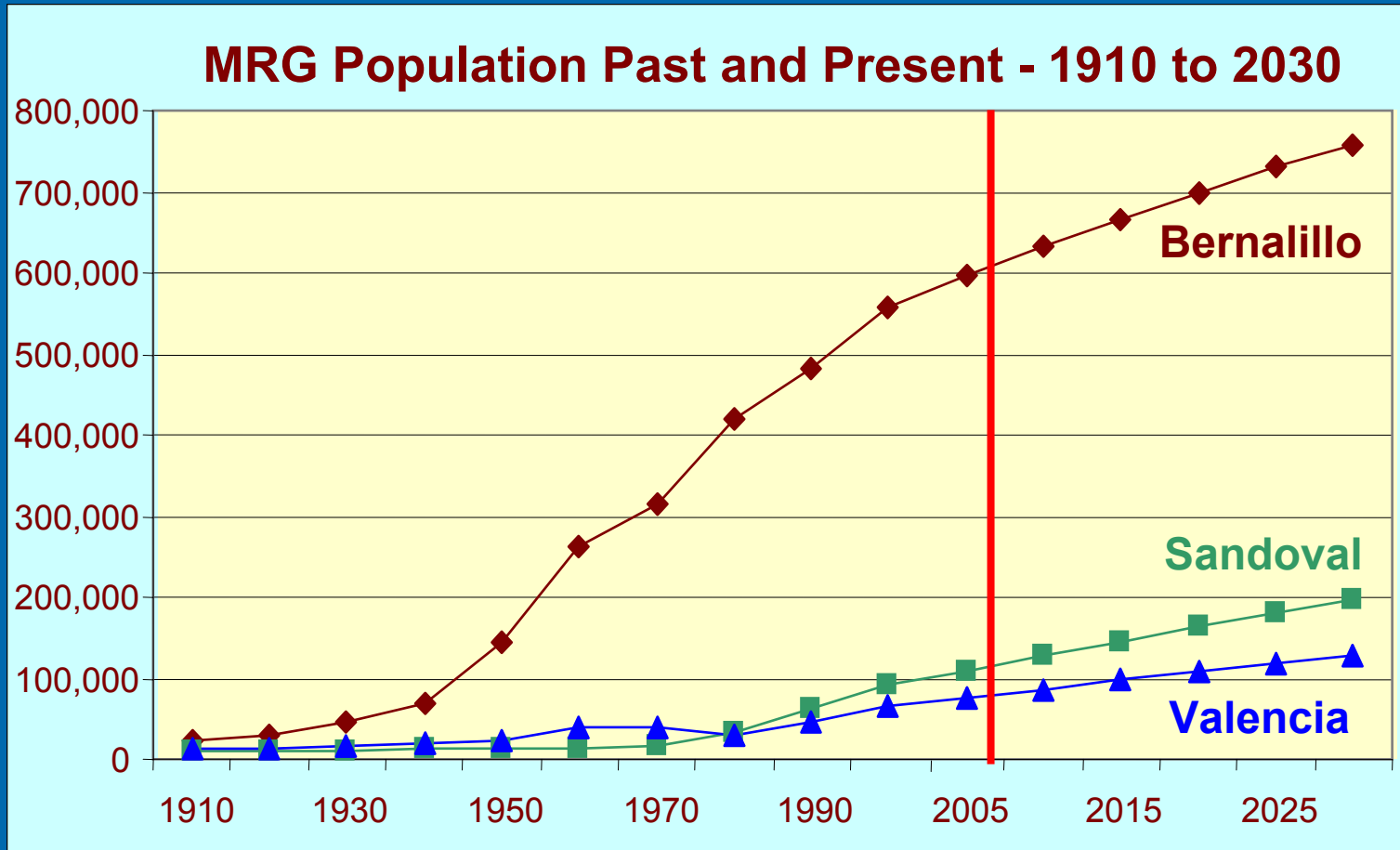
# Aquifers in the Albuquerque Area are Drawn Down 1960 to 2000

Source: U.S. Geological Survey - 2003



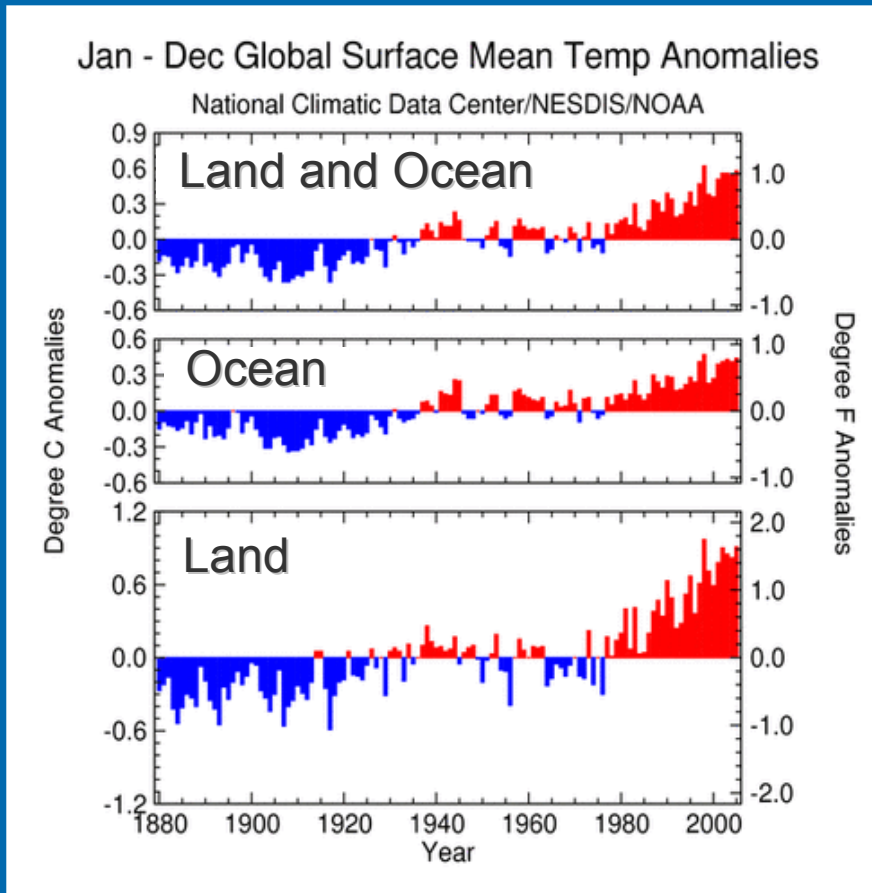
Puts a Substantial Drain on River Flows

# The Population is Growing

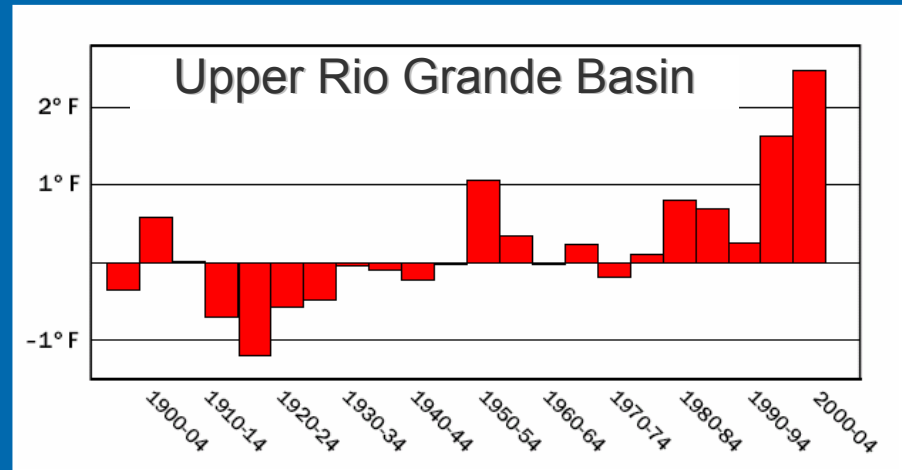


Three Quarters of New Mexico's New Residents Move Here

# ... and the World is Warming



Globally 1880-2000



Northern New Mexico 1900-2004

**Expect a Reduction in Surface Water Inflows**

Regional Planning Mission

Balance Use

with

Renewable Supply

# The Diffuse Regulatory Environment

Some Call it Anarchy

# The Regulatory Players

- NM Office of the State Engineer
- NM Interstate Stream Commission
- NM Environment Department
- NM Oil Conservation Division
- US Corps of Engineers
- US Bureau of Reclamation
- US Fish and Wildlife Service
- Tribes and Pueblos
- Federal and State Courts
- Conservancy Districts
- Flood Control Agencies
- Counties
- Municipalities
- Acequia Associations
- Water Suppliers / Utilities
- Farmers
- Businesses
- Residents

**Who's In Charge?**

**Everyone and No One**

# Dealing With Water – A Few Aspects

- Wet Water – Physical Water
  - Annual Precipitation; Underground Reserves
- Paper Water – Water Rights
  - Permission to Use Wet Water, If You Can Find It
  - Constitution – Beneficial Use, Oldest Use Has Priority
  - Owned – Rights Can Be Bought, Sold or Leased
  - Mobile – Location Can Be Transferred (horizontally, vertically)
  - Community Constraints – Impairment, Conservation, Public Welfare
  - Most Rights Are Claimed, Not Adjudicated
  - Rule Enforcement Is Minimal
- Other Paper Water – Permits

**Conflicts Between Private and Public Interests**



# Key Pressures on Viable Water

Which Will Hit Us First?

# Coming “Attractions”

- **The Rio Grande Compact**
  - State Obligation to Deliver Downstream
  - Draconian Costs for Predicted Failures
- **The Endangered Species Act**
  - Just About the Only Environmental “Right”
- **Aboriginal American Rights to Water**
  - Unquantified, Highest Priority
- **Insufficient / Expensive Water**
  - Supply and Demand for Rights,  
Reduction in Precipitation,  
Energy for:
    - Deep Pumping and Desalination
    - Long Distance Pumping

**The Issue Is Not “If”; The Issue Is “When?”**

# Situations In Sandoval County

Each Has Its Own Implications

# Selected Areas

- City of Vision - Rio Rancho
- Town of Bernalillo
- Unincorporated Placitas Area
- Jemez Valley
- Proposed Major Development - Rio West

**Each Sees a Piece of the Elephant in the Room**

# City of Vision - Rio Rancho

- Current Population Estimate Is About 70,000
- 6% Annual Population Growth, Double in Ten Years
- New Construction Yields Most Government Funding
- Typical Residential Use Is 1/6 Acre Foot per Person
- Water Rights Cost \$20,000 to \$35,000 per Acre Foot
- City Is Pursuing Aggressive Water ReUse Program
- Utility Possesses 12,000 Acre Feet of Water Rights
- Utility Is Seeking 12,000 More Acre Feet of Rights

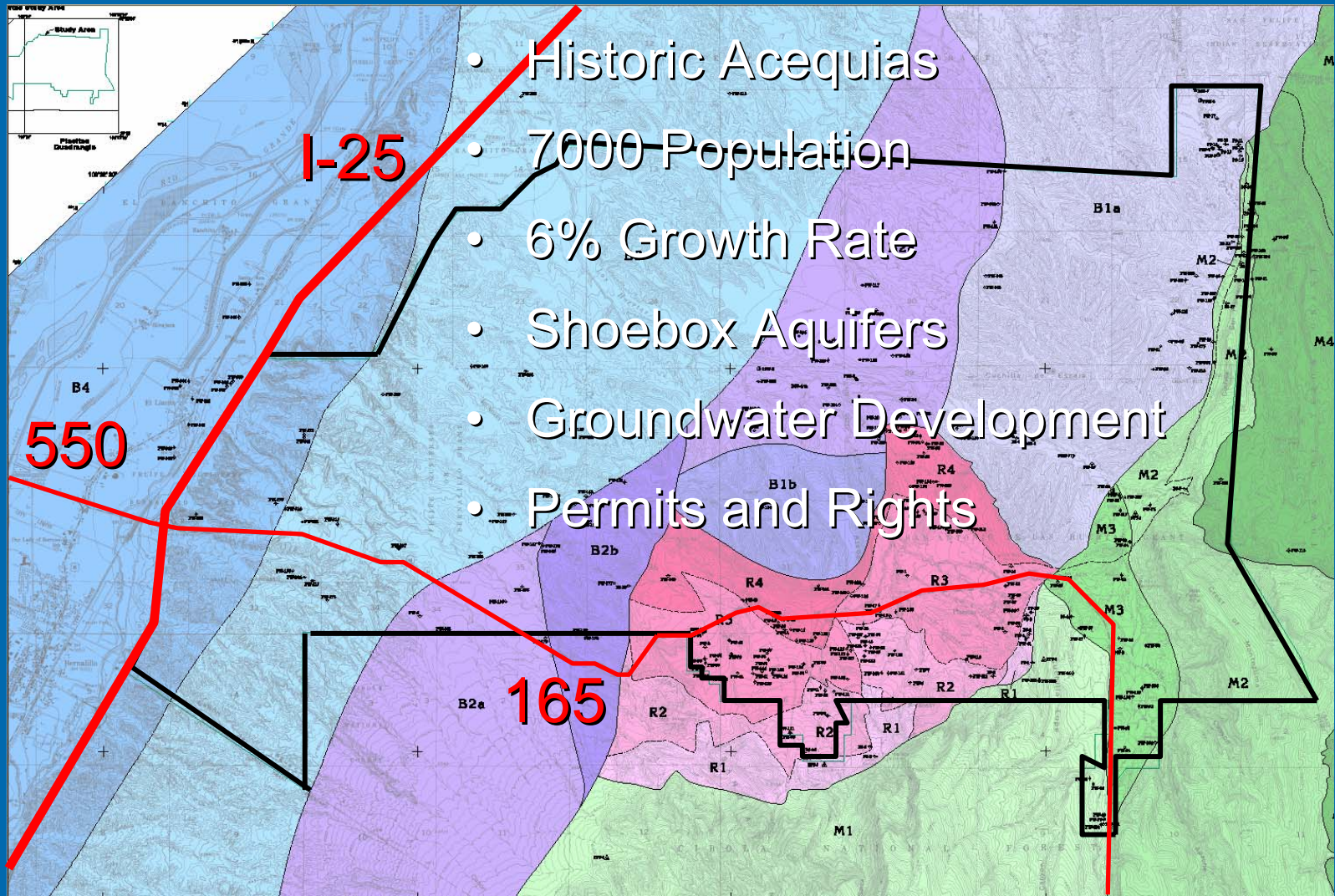
**Groundwater Is the Only Current Source of Wet Water**

# Town of Bernalillo

- Current Population Estimate Is About 8,000
- 2.77% Annual Population Growth, Double in 26 Years
- Utility Is Seeking More Rights
- Severe Wastewater Treatment Requirements
  - Seeking Funding for New Plant
- Severe Fresh Water Treatment Requirements
  - Prototype Plant In Use

**Struggling with Quantity and Quality Issues**

# Unincorporated Placitas Area



Conflicts among Lifestyles

# Jemez Valley

- Current Population Estimate Is About 4,500
- 1.17% Annual Population Growth, Double in 40 Years
- Traditional Agricultural, Rural Lifestyle
- Sense of Cultural Value of Water
- Concern for Protecting Rural Lifestyle / Economy
- Migration of Wet and Paper Water to Rio Rancho
  - Wary of Both Voluntary and Forced Transfers
- County Administrative Regionalization Effort
- Concern for Loss of Multiple Local Autonomies

**Dancing with 800 Pound Gorillas**



# Proposed Major Development - Rio West

- Current Population Estimate Is 0 – West of Rio Rancho
- Predict 70,000 Population within 25 years – Need 20 kaf
- Pump Deep Water; Desalinate; Deliver for Drinking
- Water Issues –
  - Find 50 kaf Water, Acquire Energy, Dispose of Waste
  - Cost of Delivered Water; Lifetime of Water Supply
- County Partnership with Arizona Developer
  - Goal: Sell Surplus to Rio Rancho; Relieve RR and JV Pressures
- Two Test Wells Drilled; Test Wind Towers Built
  - One a Gusher at 3400 Feet; the Other Dribbles by 5600 Feet

**No Answers Yet to Fundamental Questions**

# What Can / Should You Do?

Take Vigorous Actions

# Take Family/Home Actions

## ➤ Minimize Outdoor Uses:

- Drought Tolerant Plantings
- Maintain Smaller Lawns
- Irrigate More Efficiently
- Reduce Hose Washing
- Water with Harvested Rain



## ➤ Minimize Indoor Uses:

- Low Flow Devices
- Hands-Free Valves
- Grey Water Systems
- Heat at/near Point of Use
- Measure Water Flows



**Seek City / State Advisory Flyers and Rebate Programs !**

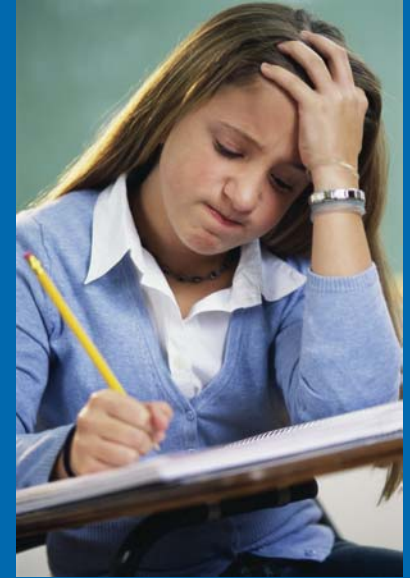
# Take Neighborhood/Business Actions

- Patronize Conserving Businesses
- Suggest/Implement Workplace Savings
- Speak Out at Church and Social Groups
- Encourage Neighbors to Act



**Get Everyone Involved !**

# Advocate for Political Actions



- Write to Your Local Media
- Telephone Your Elected Officials
- Press for Water Conserving Regulations
- Vote for Water Sensitive Candidates
- Encourage Incentive Programs
- Demand Long Term Views and Solutions

**Make for Your Voice Heard !**

# The Challenge:

For Each Person, For Each Entity, For Each Level

- Think Cooperatively
  - Think Broadly
  - Think Wet Water
- Beyond Boundaries of Jurisdiction
  - Beyond Duration of Term of Office
  - Beyond One's Own Special Interests
  - Beyond Our Current Generation

**Think Water First !**

**For Our Grandchildren, and for Their Grandchildren**



# Further Info ?

See The Regional Water Plan

at

[www.WaterAssembly.org](http://www.WaterAssembly.org)

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**Water Assembly**



**water unites us  
el agua nos une**

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