

GMDA Summer Conference Water Planning for Municipal Use




Ed Archuleta, P.E.
President and CEO
El Paso Water Utilities Public Service Board
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Background

- El Paso is located in the northern extreme of the Chihuahuan Desert and shares diverse water resources amongst two U.S. states and two countries




Background Cont.

- El Paso is the fifth largest city in Texas
- The PSB is charged with setting policy, adopting fiscal budgets, rates and fees to provide water, wastewater, reclaimed water, and stormwater service to its customers
- The PSB develops rates and fees based on a cost of service basis
- EPWU provides water service to 97 percent of El Paso County (750,000+ residents)




Background Cont.

- PSB receives limited grants or other fees. All costs must be borne by existing rate payers
- EPWU practices total water management & diversification of water resources is an essential planning objective
- Residents have embraced the value of water, i.e., "cheap water" is gone
- Eventually need to import water from our lands in west Texas, i.e.... circa 2030




Water Management

	El Paso, TX	Las Cruces, NM	Cd. Juárez, Chihuahua
Municipal & Industrial Supply	Hueco Bolson Mesilla Bolson Rio Grande	Mesilla Bolson	Hueco Bolson
Agricultural Supply	Rio Grande	Rio Grande	Rio Grande



Water Management (cont.)

	El Paso, TX	Las Cruces, NM	Cd. Juárez, Chihuahua
Ground Water Law	Common Law	Prior Appropriation	Mexican Federal
Surface Water Law	International Treaty Rio Grande Compact	Prior Appropriation International Treaty Rio Grande Compact	

Driving Forces Affecting Water Management in Paso Del Norte Region

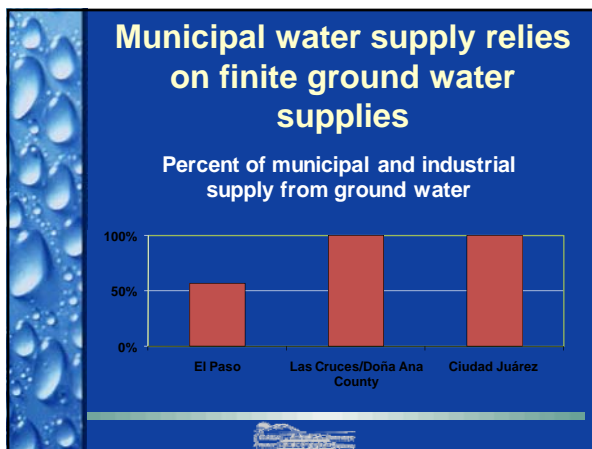
- ▶ International dynamics
- ▶ Open water market
- ▶ Energy trends and pricing/deregulation
- ▶ Regional, bi-state and bi-national planning requirements
- ▶ Acquisition & availability of quality water

Driving Forces Affecting Water Management in Paso Del Norte Region (Cont.)

- ▶ Ensuring affordable rates and financial integrity
- ▶ Increasing Safe Drinking Water Act regulations such as revised Arsenic Standard
- ▶ Need for effective communication with all stakeholders
- ▶ Customer awareness and confidence

Regional Partners share the Following:

- ▶ Same groundwater/surface water supplies
- ▶ Growing population and growing water demands resulting in decrease in water supplies.
- ▶ Increased need for expanding infrastructure.
- ▶ Need to promote, develop, and implement regional planning efforts along with regional water management policies



Planning

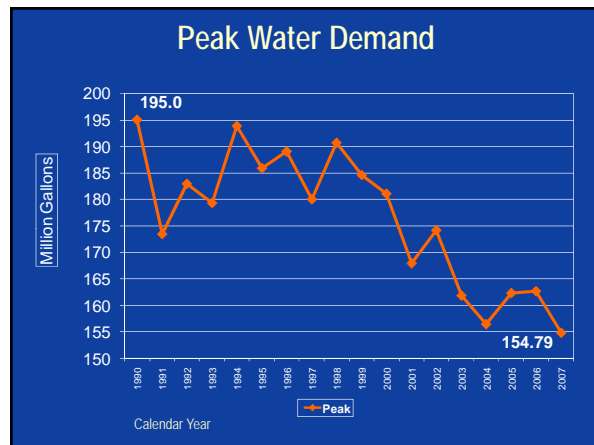
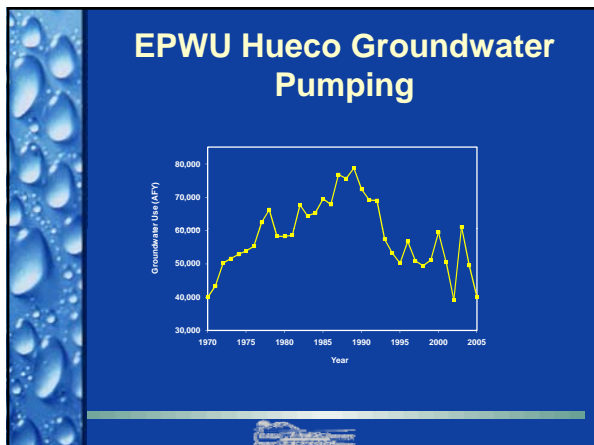
- 50 – Year Water Resource Management Plan *(updated every 5 years)*
- 10 – Year Strategic Plan *(updated every year)*
- 10 – Year Capital Improvement Plan *(updated every year)*
- 5 – Year Financial Plan *(updated every year)*
- Formal Customer Surveys *(updated every two years)*

Historical Hueco Bolson Management

- ▶ High Pumping
- ▶ El Paso
 - Major source of supply since 1903
- ▶ City of Juárez
 - 100% of municipal supply
- ▶ Groundwater levels declined
- ▶ Brackish water intruded

Present Hueco Bolson Management

- ▶ Decreased pumping due to:
 - ▶ Improved data and analytical tools
 - ▶ Planning and policy implementation
- ▶ Less than 27,204 AF pumped in 2007
 - ▶ First time since 1967
- ▶ After 100 years
 - ▶ 75% of 2002 fresh groundwater storage in El Paso will remain



Growth in El Paso

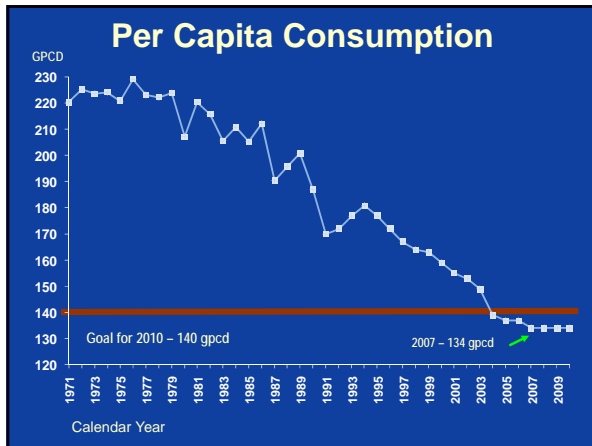
- ▶ By 2013, Fort Bliss will realize a net increase of over 28,000 active duty personnel (30K additional family members) - the largest net gain from any military installation in America.
- ▶ The estimated population within this region is expected to more than double within the next 20 years.
- ▶ El Paso Water Utilities total capital improvement needs over the next 10 years are projected to be over \$800 million.

Water Conservation Ordinance

The 50-Year plan along with the final report of the Citizens Committee became the basis for El Paso's Water Conservation Ordinance

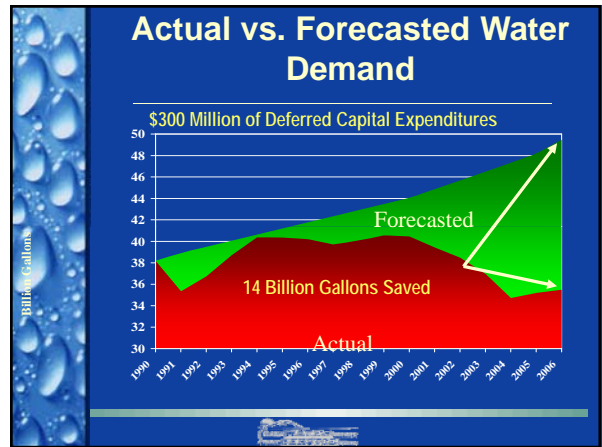
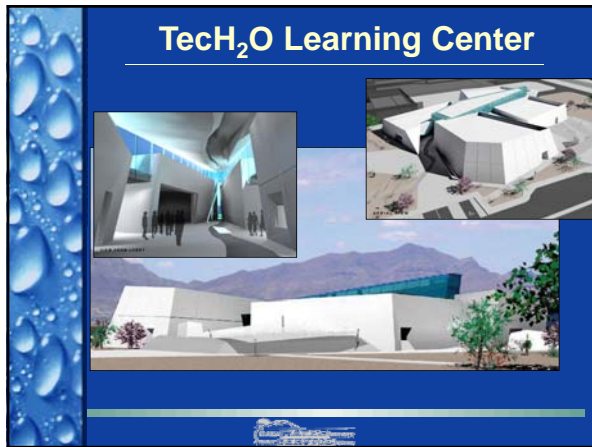
Components:

- Landscape watering days (odd/even)
- Watering times restrictions (April - September)
- Illegal to waste water/allow runoff
- Leaks to be repaired within 5 days
- Exceptions and Permits available



Public Education

- ▶ Since 1991, EPWU has been involved in many activities to increase public awareness of water issues, including:
 - Monthly conservation messages and bill stuffers
 - TV, radio and newspaper ads
 - Displays at city events
 - Presentations to civic organizations and school groups with interactive “hands-on” demonstrations and programs



Reclaimed Water

Reclaimed Water

Recycled wastewater that has received advanced treatment to improve its quality

- ▶ Uses include applications that do not require potable (drinkable) water, including landscape irrigation, industrial processes including cooling, and construction projects.
- ▶ Reduces use of potable water during peak demands and used for drought protection.

Desalination

Desalination Facilities Project

- EPWU was planning a 20 MGD facility, and the Army a 7.5 MGD facility
- EPWU proposed a joint, 27.5 MGD facility
- EPWU/Army negotiated single, combined plant for project economy and efficiency
- Construction of \$90+Million Project was completed in Summer 2007
- Provides for unified management of Aquifer

Region E Planning

- The Far West Texas Water Planning Area (Region E) is comprised of 7 counties (16 planning regions) in Far West Texas, created under Senate Bill 1
- Requires all areas of the state of Texas conduct a comprehensive water planning program to meet the water needs of the region for the next 50 years
- The plan provides an evaluation of current and future water demands and strategies
- State Water Plan indicates estimated capital costs to develop the recommended strategies for Region E are \$688 Million (\$675 Million for El Paso County)

EPWU's Strategies for Ensuring Future Water Supplies

- Increased conservation
- Increased reclaimed water use
- Increased desalination
- Increased use from the Rio Grande (developed conjunctively with local groundwater)
- Importation of groundwater from the Capitan Reef aquifer (Culberson and Hudspeth Counties)
- Importation of groundwater from the Bone Spring-Victorio Peak aquifer in the Dell City area (Hudspeth County)

Summary

The Public Service Board:

- Will continue to encourage conservation and the wise use of land resources
- Will continue to plan and execute solutions that secure our water resources
- Will continue to invest in existing infrastructure
- Will continue to forge cooperative relationships

Questions/Comments??

Ed Archuleta, P.E.,
President and CEO
El Paso Water Utilities
Public Service Board

Office: 915-594-5501
earchuleta@epwu.org