

Concerned Citizens of Curry and Roosevelt Counties

*Request a Halt to the
Intake Structure and Pump Facility in Logan, NM
Redirect \$10.3 million of State Funds*

*Insist that the Eastern New Mexico Rural Water
Authority Work with Citizens and
Consider Alternatives*

July 26, 2013

Our Purpose Today

- ▶ “The price of greatness is responsibility.”
Winston Churchill, 1943
- ▶ As community leaders, we share the following primary responsibilities:
 - To collect information, data and statistics, and provide that information — unfiltered — to elected and other local officials
 - To make recommendations to those same officials based on that information

All Eastern New Mexico Counties Need Water

Chaves	Colfax	Curry	De Baca	Eddy
Guadalupe	Harding	Lea	Lincoln	Mora
Otero	Quay	Rio Arriba	Roosevelt	San Miguel
Sandoval	Santa Fe	Taos	Torrance	Union

Eastern NM Counties Want Representation

- ▶ The Ute Lake Pipeline Project contemplates spending over \$550 million in the next 20 years, but is designed to benefit a population of under 50,000 and a physical area of under 500 square miles
- ▶ With a singular focus on this small-yield project to Washington, DC what do we tell the other Counties and Communities in Eastern New Mexico?
- ▶ Are broader, more cost effective solutions available in less than 20 years? YES!

Consider this . . .

- ▶ Total 2012 water consumption in Curry and Roosevelt County was 321,000 AFY
- ▶ Domestic, Municipal and Commercial uses totaled 13,000 AFY for the same period
- ▶ That is just 4.0% of the current consumption in Curry and Roosevelt Counties
- ▶ The Agricultural Community makes up the balance at 95.2%
- ▶ Why would the State or Federal Government spend \$550 million for just 4.0% of the total needs of the area?



Comparables in our Region to Consider



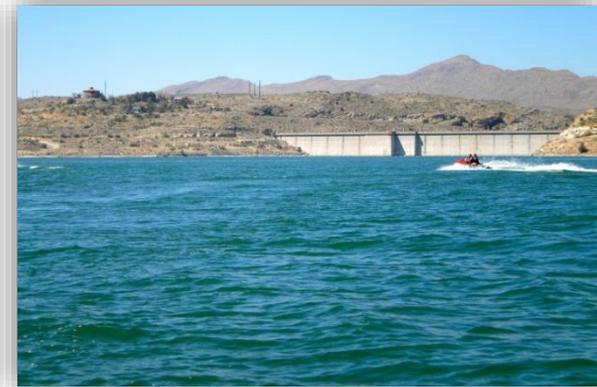
Lake Meredith – 0.0%

Conchas Lake – 0.3%

Elephant Butte Lake – 5.0%



Above: Harbor Bay at Lake Meredith, Texas 1999 (50 feet deep in center at this location)
Below: same location 2011 (small portion of the Lake can still be seen, notice the dust)



CLIMAS and USGS

- ▶ We agree that we are in a Condition of Extreme Drought
- ▶ Surface water in New Mexico cannot be considered a sustainable, predictable source
- ▶ How much of the volume in the Lake is sediment?

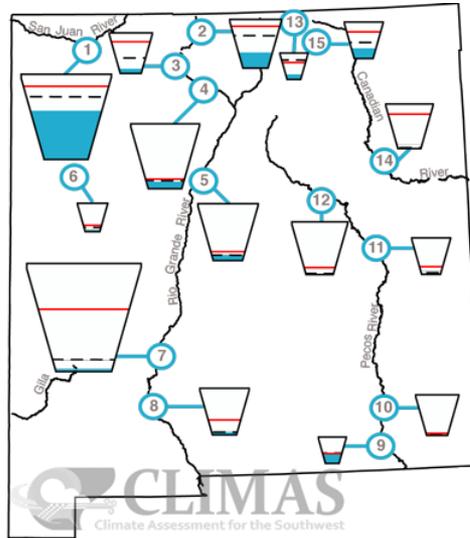
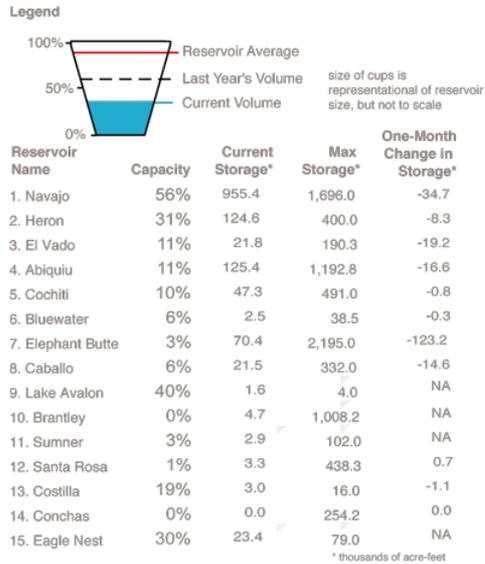
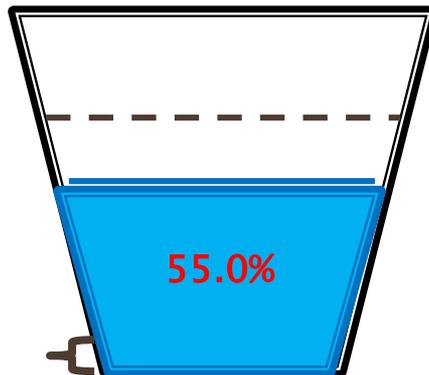


Figure 7. New Mexico reservoir volumes for June as a percent of capacity. The map depicts the average volume and last year's storage for each reservoir. The table also lists current and maximum storage, and change in storage since last month.

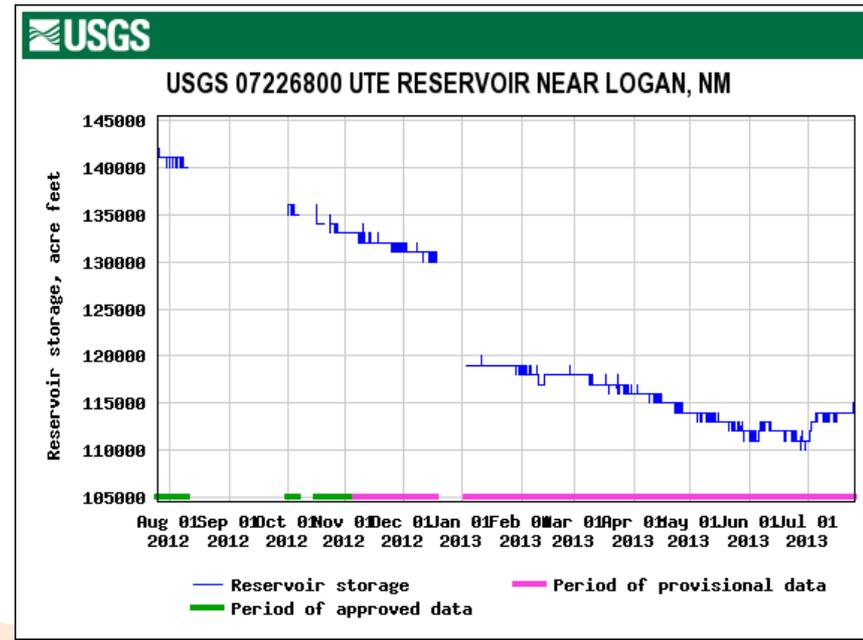
207,000 AFY

142,000 AFY

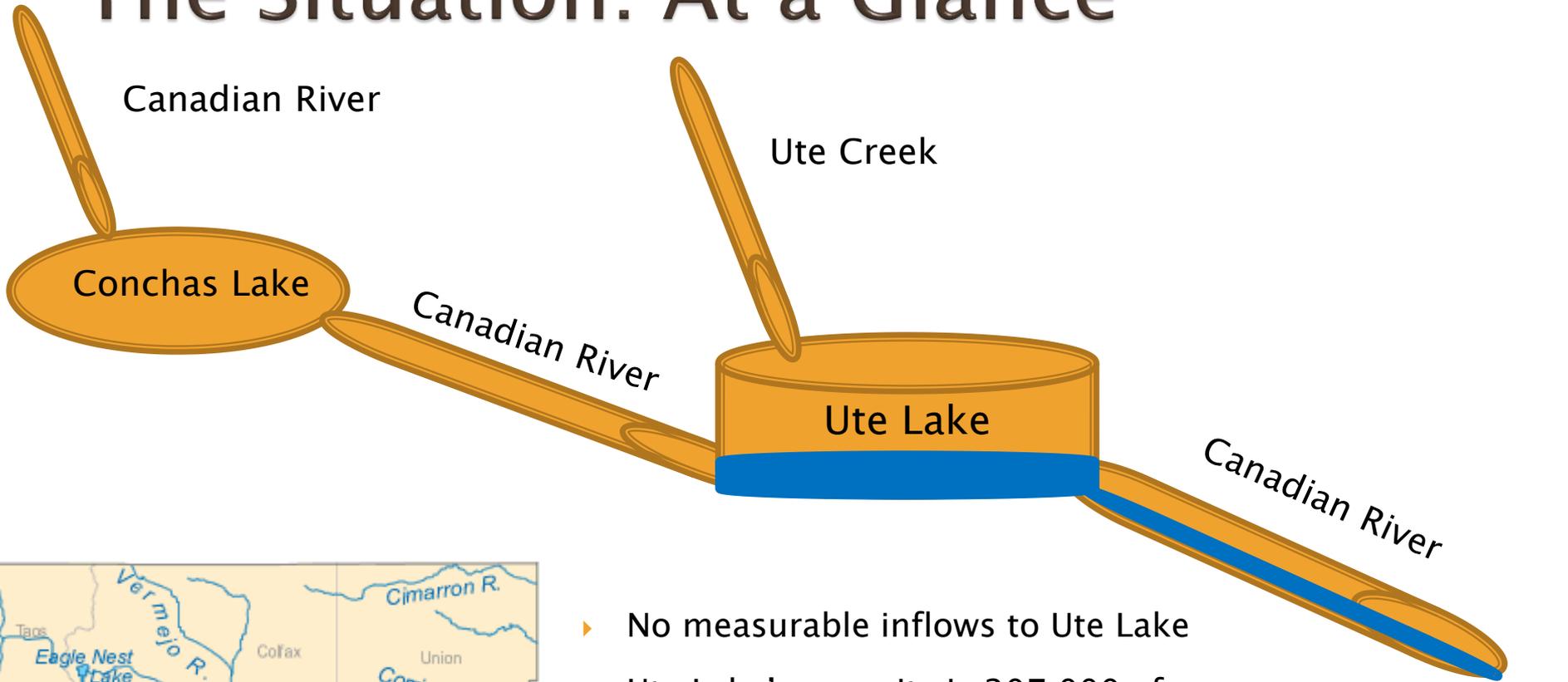
114,000 AFY



Sediment?



The Situation: At a Glance



- ▶ No measurable inflows to Ute Lake
- ▶ Ute Lake's capacity is 207,000 afy
- ▶ Ute Lake is at about 114,000 afy
- ▶ The Lake has lost 50,000 afy in the last 2 years to evaporation, with low inflows
- ▶ Now at 3,771', based on current conditions, the Lake Level will be below the 3,763' by the end of 2013

3,620 afy
Dam Leakage

Ute Lake - Sustainable? March, 2013



Ute Lake - Ready to Deliver 7.8 Billion Gallons?



Ute Lake - Worthy of \$600 Million Investment?



Aerial Photo Taken April 6, 2013



Aerial Photo Taken April 6, 2013



Aerial Photo Taken April 6, 2013



Aerial Photo Taken April 6, 2013



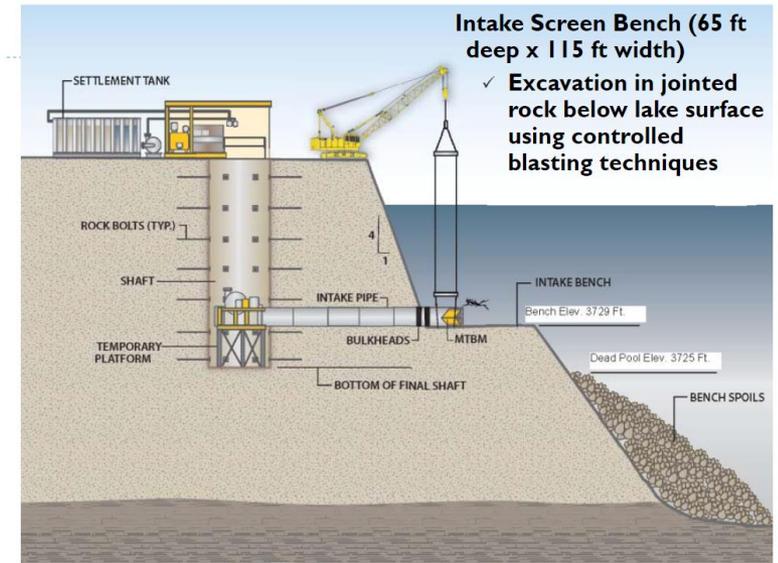
Aerial Photo Taken April 6, 2013



What Was Not Said . . . About the Intake Structure and Pump Facility

- ▶ The Authority recently reported that \$10.3 million remains on the plan to spend \$14.0 million on this Phase
- ▶ The completed structures will be mothballed for a minimum of 12 years, producing no water during that period
- ▶ The construction could be stopped and the funds redirected to activities that will produce water

Intake Screen Bench Construction



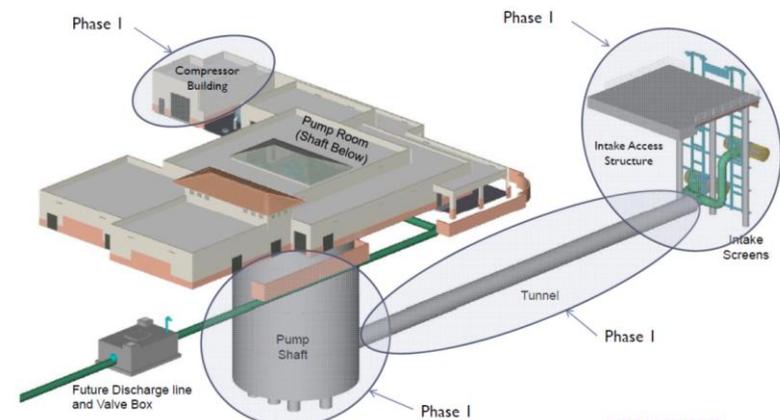
ENMRWS

Phase 1 Intake Screens, Tunnel, Shaft & Compressor Room (looking southwest toward Tucumcari)



ENMRWS

Overall Intake & Pump Station Underground at Build-Out (looking northwest from south side of reservoir)



ENMRWS

Images of Current Construction

- ▶ Discourages Tourism, Commerce and Investment in Quay County
- ▶ Property values have fallen by over 40% since construction announced
- ▶ No new development or investment in the area because of Pipeline Threat of draining the Lake
- ▶ The equipment and personnel could be demobilized, the site secured and sealed
- ▶ The \$10.3 million could be repurposed
- ▶ If and when the Lake proves sustainable, the Federal funding is obtained this Phase could resume
- ▶ The Authority claims the Legislature will not let them deviate from the Plan and Total Spending



UNM Water Resource Research



- ▶ In 2010–2011, Dr. Bruce Thomson tasked his 20 Graduate Students to study and then model Ute Lake as a Reservoir
- ▶ 5 groups of 4 students each – took different approaches
- ▶ Each group arrived at the same answer – 24,000 AFY withdrawals will drain the Lake in 3 years or less
- ▶ Dr. Thomson briefed CH2MHill and shared his findings
 - 8,000 AFY available in drought
 - 10,000 AFY available in best of times
- ▶ The Authority has accepted another \$12 million from the State and Federal sponsors knowing that the Lake is not sustainable for the advertised demand – no public disclosure

Why Halt the Intake Structure and Pump Facility Construction?

► Unsatisfactory Answers and Real Issues

- Of the 23,600 AFY to be harvested – what percentage has been sold? **None**
- Who has purchased, how many gallons or AFY and for how long? **No one**
- What is the negotiated rate for the water supplied? **Not available**
- Are the agreements with ENMRWS or ENMWUA? **No agreements**
- What are the estimates for the electric energy required to move 24,000 AFY (Peak 30 MGD) approximately 96 miles and vertical elevation of 1,600'? **Not available**
- NEPA now requires a Carbon analysis for new projects that involve Federal land or funds – has this been taken into account? **Department of Interior examining**
- What is the estimated cost for land acquisition? How far along is this process? **\$2.0 million. Not started.**
- Will all customers of the pipeline pay the same rate? **Yes. Regardless of distance and volume**
- How much is the operation and maintenance? How much will Members pay? **\$3.30 per thousand, assuming FREE FEDERAL MONEY – \$425 million by 2018**
- If more cost effective alternatives are available, will the Members be compelled to purchase from the Ute Lake Pipeline? **No answer**

Ute Water Commission Apportionment

Entity or Member	Reservation	Notes
City of Clovis	12,292 AFY	About 2X Current Consumption
Village of Elida	50 AFY	
Village of Grady	75 AFY	
Village of Melrose	250 AFY	
City of Portales	3,333 AFY	About 1X Current Consumption
Town of Texico	250 AFY	
Curry County	100 AFY	
Roosevelt County	100 AFY	
Village of San Jon	150 AFY	
City of Tucumcari	6,000 AFY	
Quay County	1,000 AFY	
Cannon AFB	UNKNOWN	Served by the City of Clovis?
Easements	UNKNOWN	How much will it take for access?
Total	23,600 AFY	

Interim Groundwater Pipeline

- ▶ The Authority and its Consultants admit that an abundance of Groundwater is available
- ▶ Shifting the pumping activity away from the current well fields will allow for re-charge of the aquifer
- ▶ The collection and transmission grid can be a permanent solution
- ▶ This Phase of the Project should be put out for RFP and competitive bidding
- ▶ New ideas, engineering approaches and efficiencies will be identified through the competitive process
- ▶ The Concerned Citizens will support the financing and development of this solution if competitively sourced

ENMRWS

Eastern New Mexico Rural Water System

Project Update

July 2013

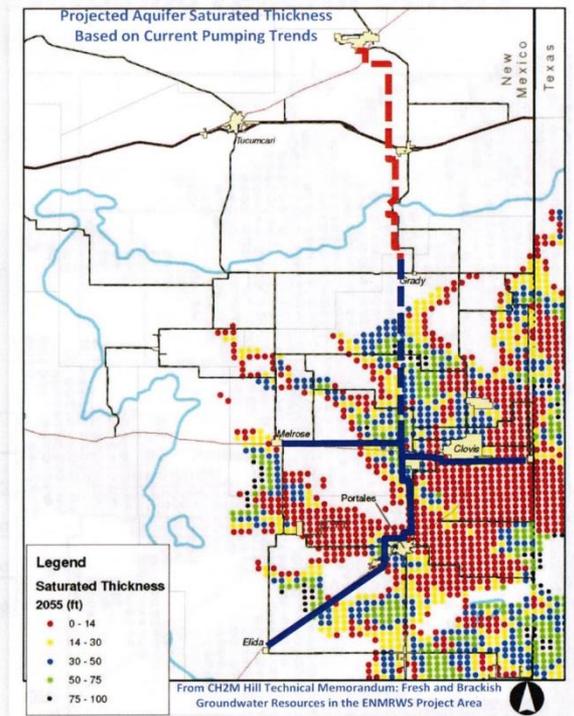
Overview

The Interim Groundwater Pipeline (IGWP) is intended to provide Eastern New Mexico Water Utility Authority (ENMWUA) members an interim regional solution to localized problems with declining well production. The IGWP comprises a distinct set of components of the “backbone” of the Eastern New Mexico Rural Water System (ENMRWS) that can be constructed in phases that deliver groundwater to the member communities and Cannon Air Force Base (CAFB) several years before water is delivered from Ute Reservoir.

Purpose

The purpose of the IGWP is to build first those portions of the project in proximity to member communities and CAFB to mitigate ongoing water supply quantity and quality problems while the remainder of the pipeline is built in future phases. Presently, members are constrained to their existing well fields which are in proximity to their municipal water transmission infrastructure. The ENMRWS pipeline passes through outlying areas where water production is identifiably better as indicated by the density of both wells and irrigated crops.

Interim Groundwater Pipeline

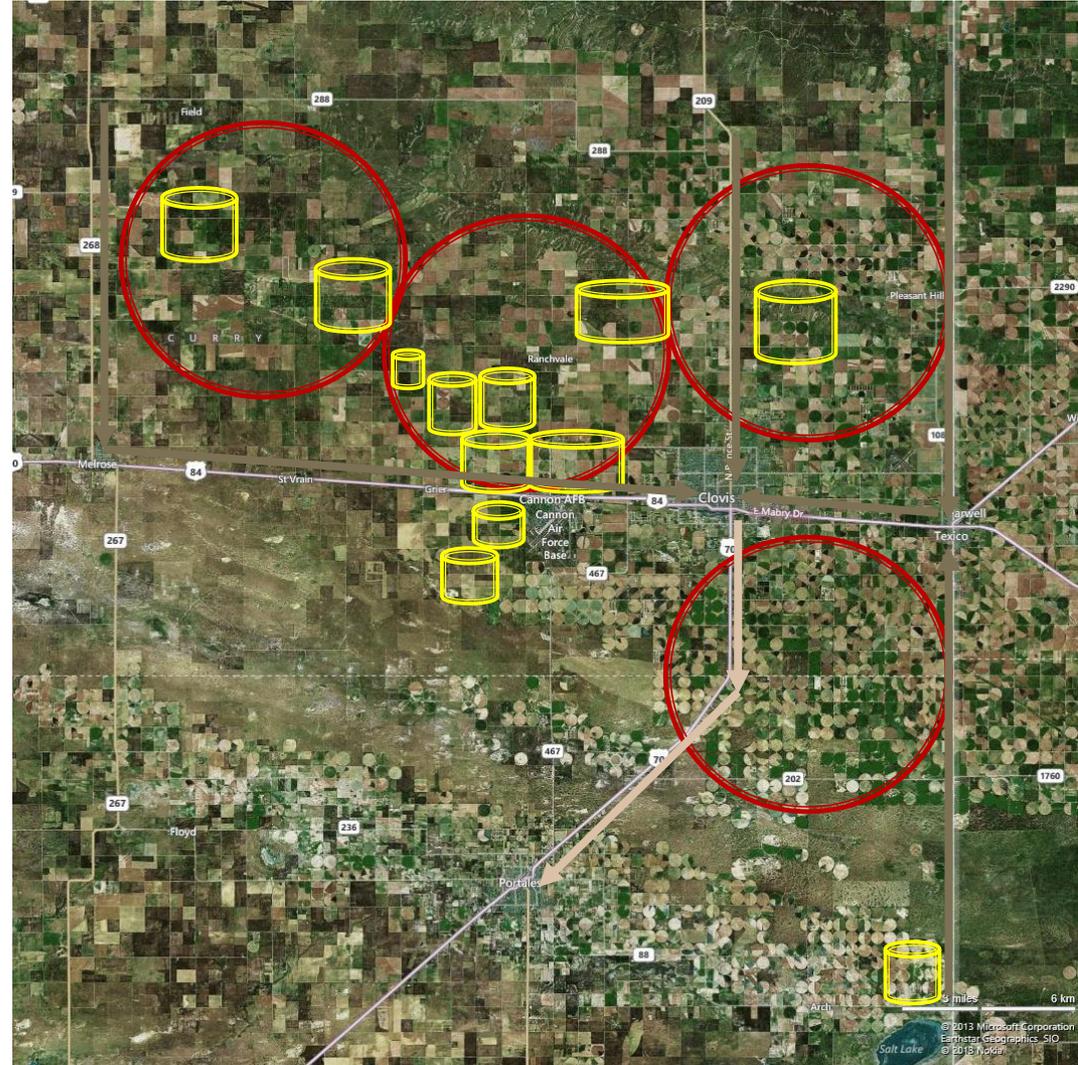


First 20 AG Leaders in Curry/Roosevelt

Agricultural Irrigation	GPM	AFY
1	700	1,129
2	950	1,532
3	2,000	3,226
4	7,600	12,259
5	1,550	2,500
6	1,000	1,613
7	900	1,452
8	500	807
9	1,500	2,420
10	1,400	2,258
11	1,000	1,613
12	500	807
13	3,000	4,839
14	600	968
15	3,500	5,646
16	3,600	5,807
17	1,250	2,016
18	1,500	2,420
19	1,200	1,936
20	300	484
Total		55,731
AVG Annual Domestic Consumption – Clovis	4,200	6,775
AVG Annual Domestic Consumption – Portales	2,100	3,387
Total		10,162
AG % Contribution Toward Sustainable Plan		548.4%

Water Sources w/ Transmission Schema

- ▶ The 4 Red Circles represent 10-mile diameters of quantifiable water producing areas
- ▶ The 12 Yellow Cylinders represent land and wet water holdings of Agricultural Owners who are interested in Conservation and a Sustainable Plan
- ▶ The Blue Lines represent Intake Lines for Water conveyance to a Central distribution hub
- ▶ The Beige Line represents Transmission to Portales, based on current and future demand to augment current wells
- ▶ Every small circular green area, as a result of Pivot Irrigation, represents an amount of water equal to the annual consumption of 700–2,800 households (1/4-mile to 1 Mile span)
- ▶ The Agriculture Community of Curry and Roosevelt Counties are ready to meet NOW and make water available



Santa Rosa/Dockum Aquifer Footprint

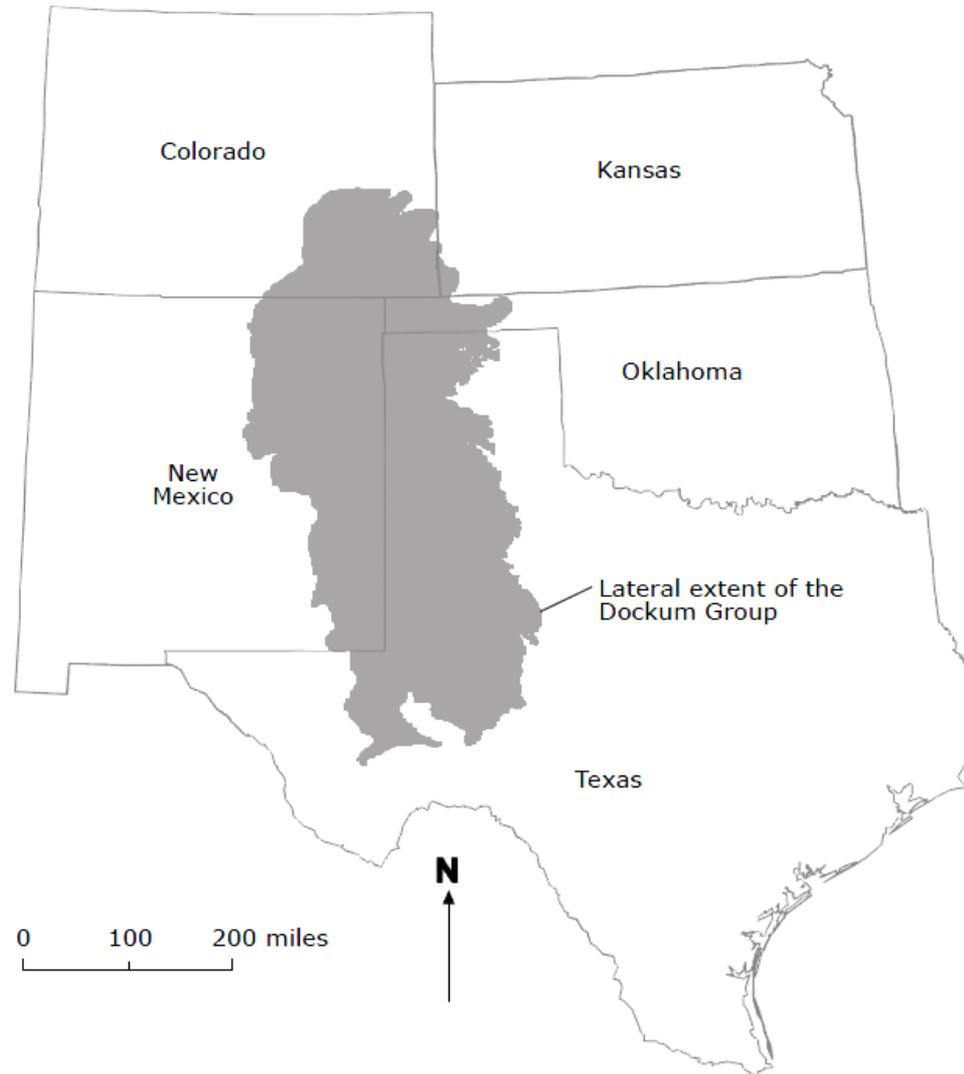
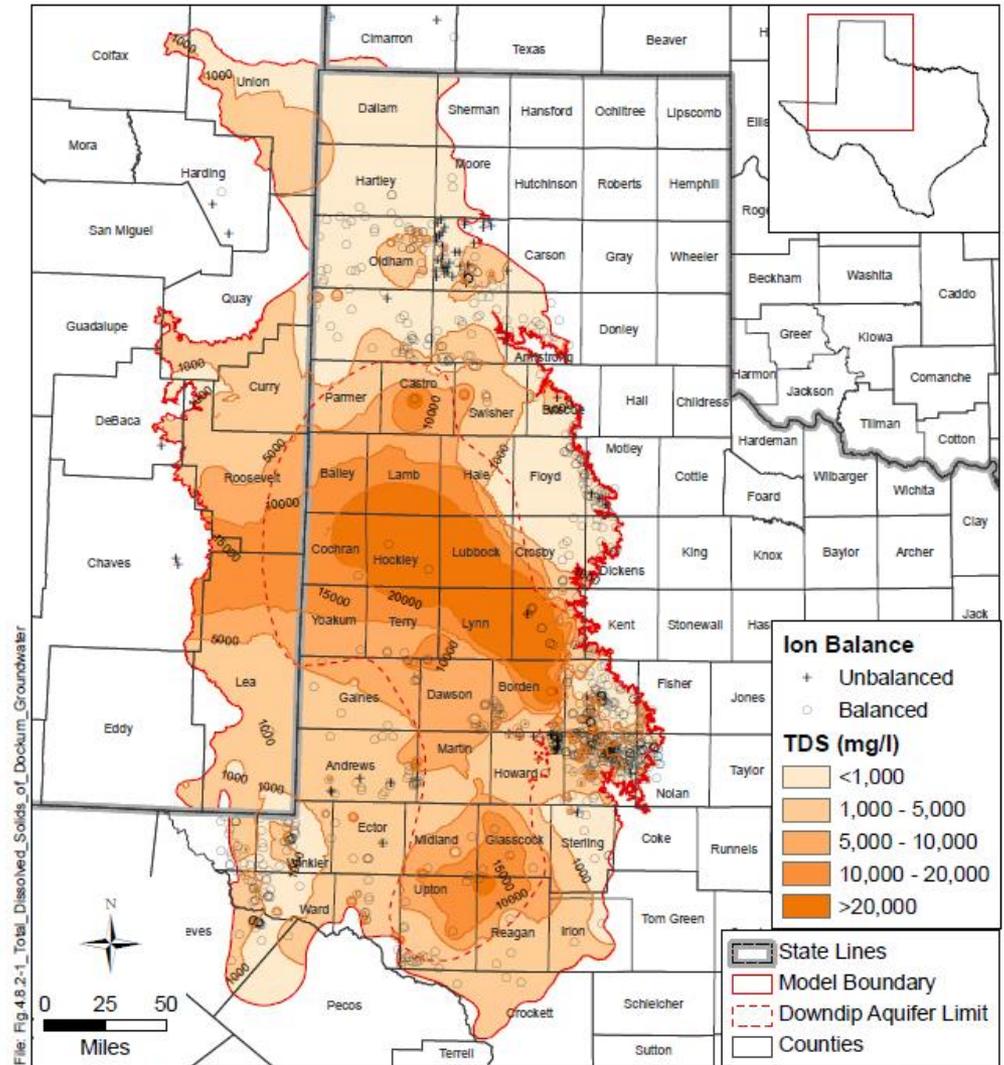


Figure 12-1: Location of the Dockum Group in Texas, New Mexico, Colorado, Kansas, and Oklahoma.

Let's Ask the Private Sector to Explore the Santa Rosa / Dockum Aquifer

- ▶ The State of Texas is successfully developing this aquifer along the New Mexico border
- ▶ The Cities of Dalhart, Tulia and Hereford, Texas are utilizing this water
- ▶ The EPCOR experience was “bad luck”
- ▶ As the Authority to consider purchasing water, full treated and potable from private operators
- ▶ Well drillers know where the best potential sites are located



Texas will Develop if We Don't

- ▶ We need to first explore Quay and Harding Counties
- ▶ Source: Texas Water Development Board

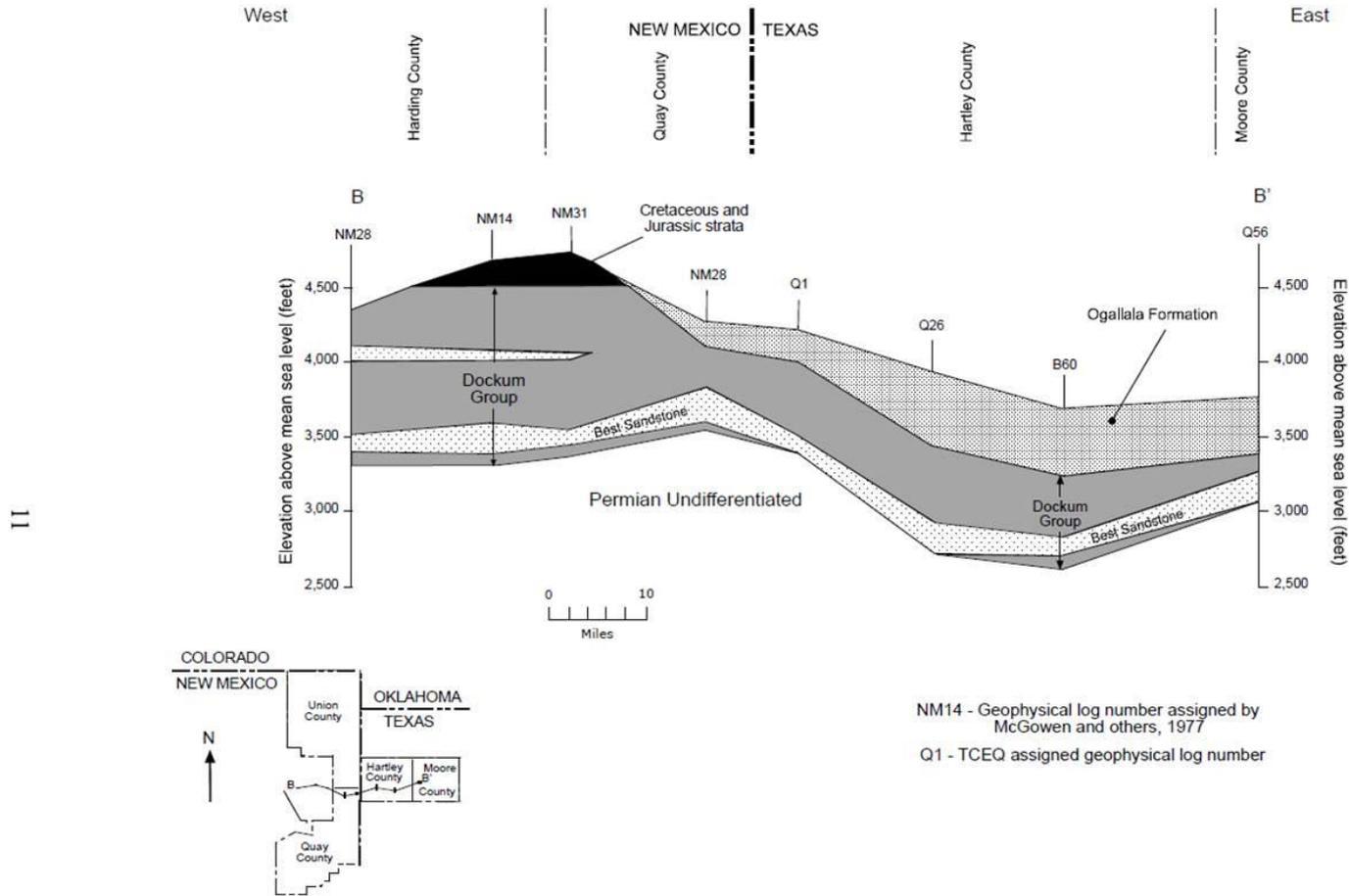


Figure 4-3. Geologic cross-section B-B'.

Conclusions

- ▶ Concerned Citizens call for an immediate halt on the use of State Funds for the Intake Structure and Pump Facility
 - Water alternatives can be recommended within the next 60 days
 - The focus can be on aiding Curry, Quay, Roosevelt and other Eastern Counties
 - A pipeline connecting current Authority members with available groundwater can be envisioned, put out to bid, estimated, funded and easements secured
- ▶ The Authority is fixed on the 114,000 AFY in Ute Lake and spending State money
- ▶ Only the Legislature can change the direction
 - Meet with Citizens
 - Consider alternatives