

Project Update

Former State Senator & Curry County Commissioner Caleb Chandler, Secretary
Portales Mayor Sharon King, Vice-Chairwoman
Paul van Gulick, PE, Program Manager

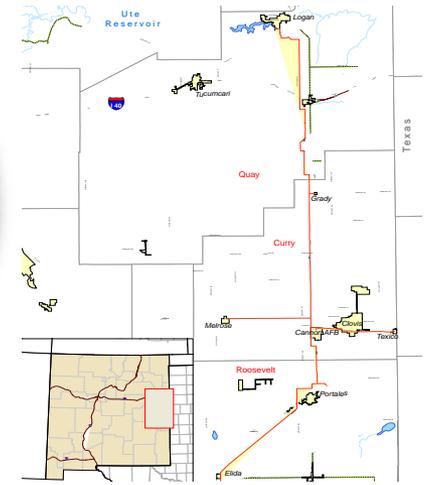
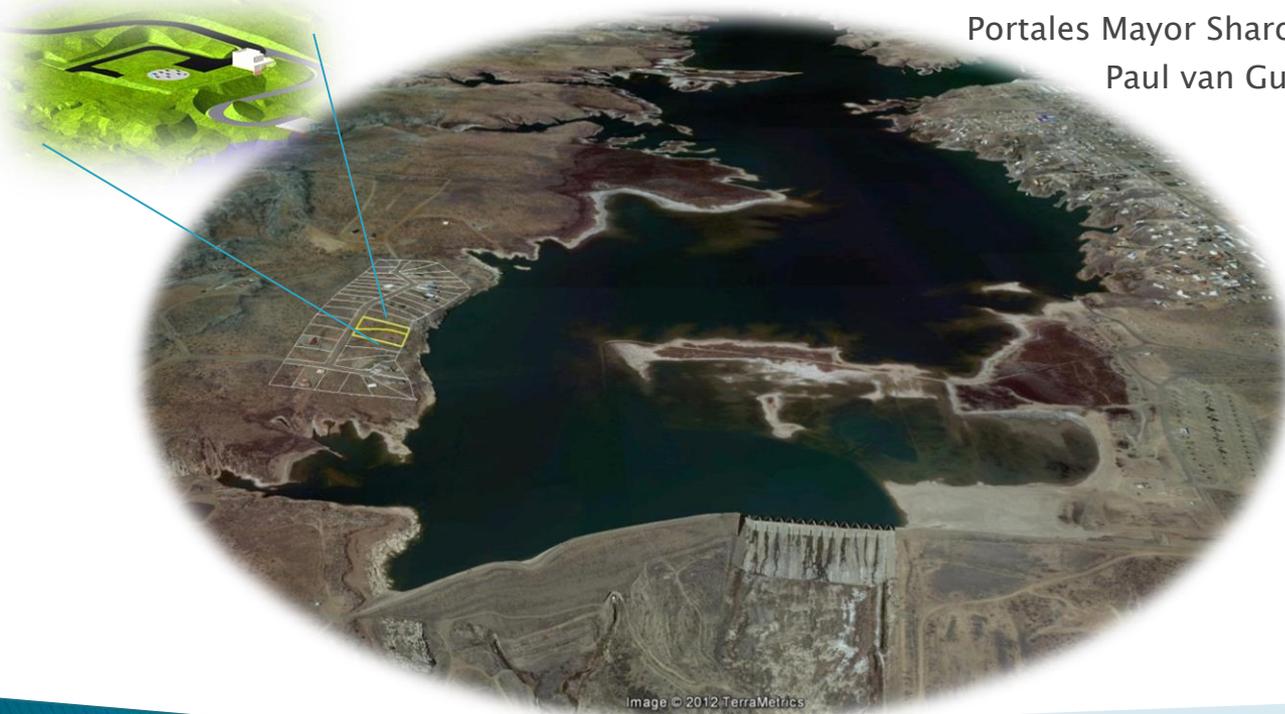


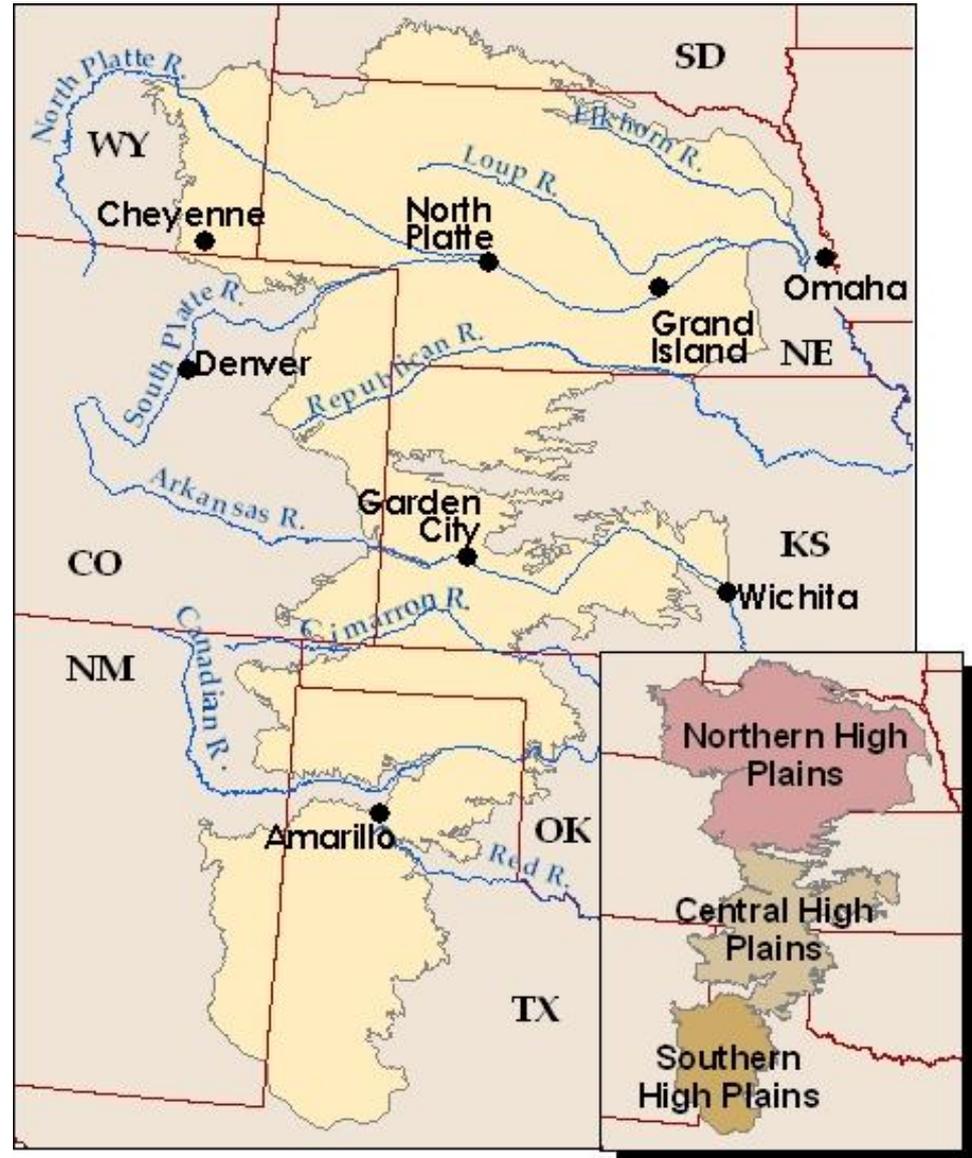
Image © 2012 TerraMetrics

Talking Points

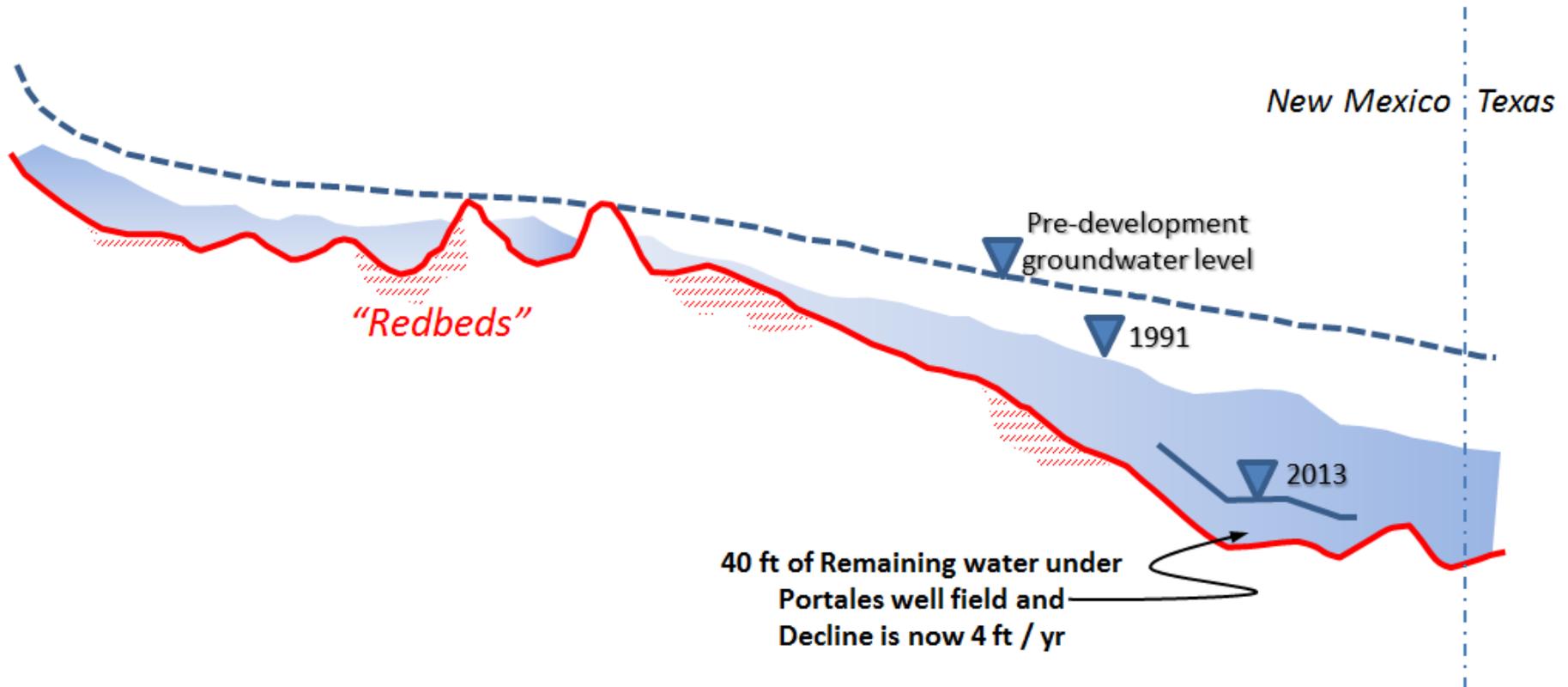
- ▶ Background
- ▶ Project Purpose
- ▶ Status of ENMRWS water supply
- ▶ Project timeline
- ▶ Construction
- ▶ Next Steps...

Background

Ogallala Aquifer



Background

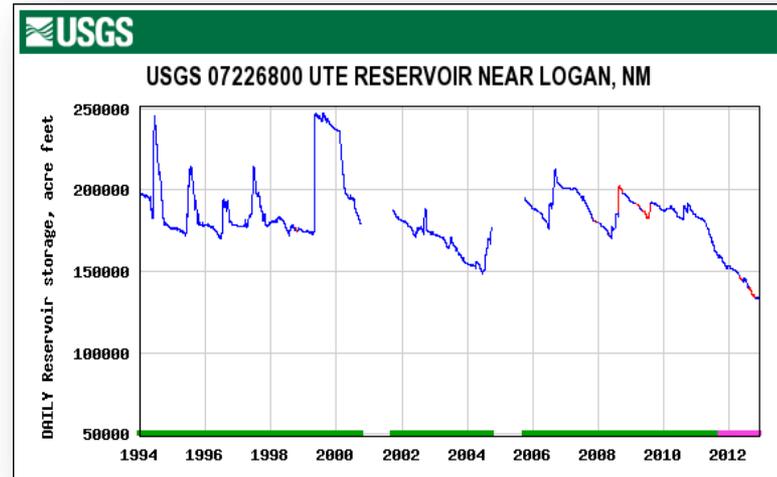
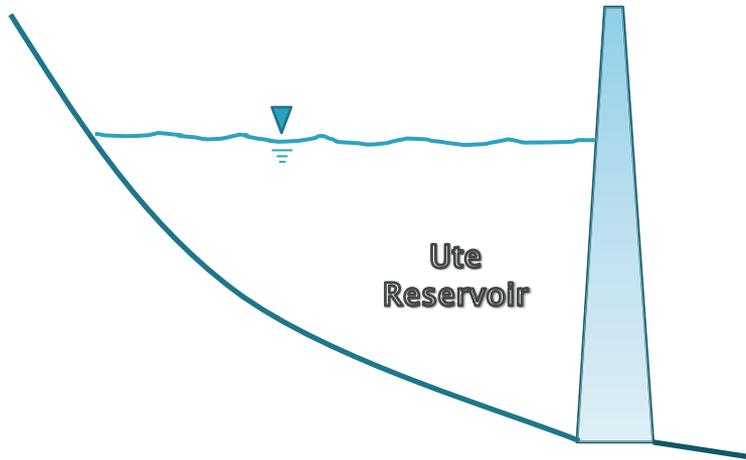


Ogallala Aquifer in Eastern NM

Background

- ▶ Canadian River Compact (TX,NM,OK) ~ 1951
- ▶ ENMRWS first conceived ~ 50 years ago
- ▶ Ute Reservoir constructed, owned and operated by State of NM and administered by the Interstate Stream Commission
- ▶ Ute Reservoir built for Municipal and Industrial (M & I) water supply
- ▶ Eastern NM Water Utility Authority
 - Members – Clovis, Curry County, Portales, Grady, Melrose, Texico, and Elida
 - Plan, design, construct, operate and maintain the ENMRWS project

Purpose of ENMRWS Project



Sustainable ENMRWS Water Supply

- ▶ Ute Reservoir – built to deliver water for municipal and industrial (M&I) use
- ▶ Sufficient yield in all but extreme drought
- ▶ Manageable through drought mitigation planning

Purpose of ENMRWS Project

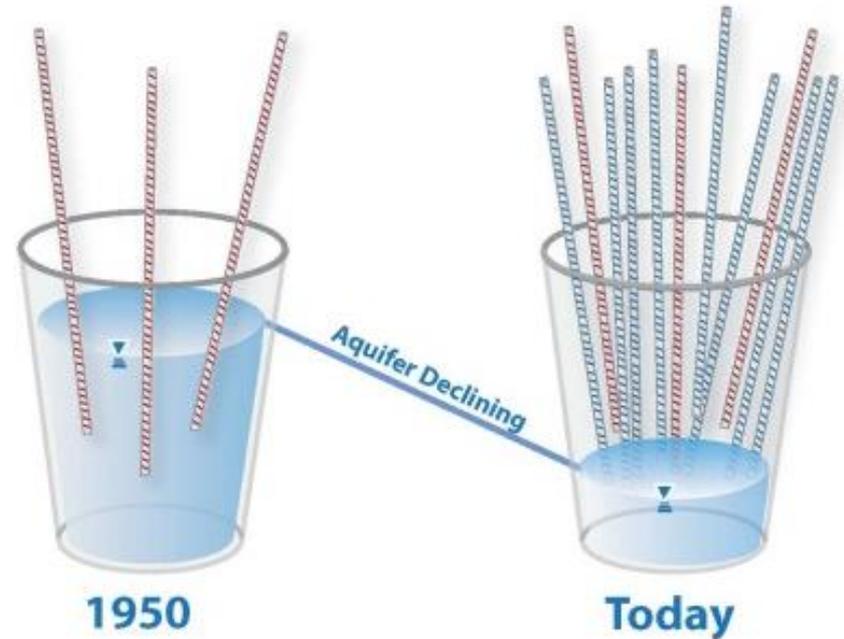


- ▶ Rapidly declining water supply from Ogallala Aquifer
- ▶ We are racing to complete the project before the aquifer fails
- ▶ Purpose of ENMRWS is to provide a reliable and sustainable supply through a regional water system to members in eastern NM

Status of Existing Water Supply

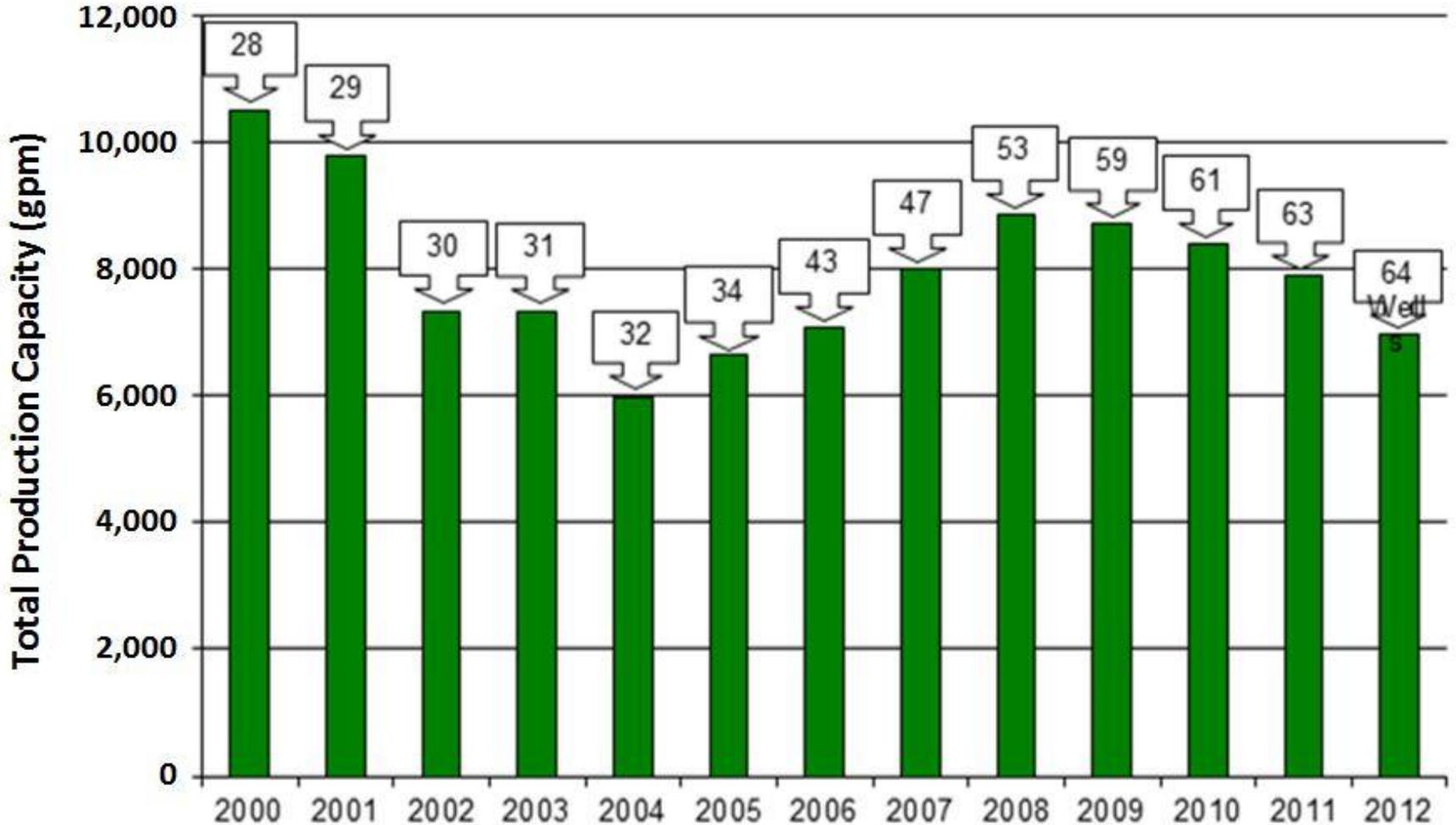
Groundwater

- ▶ Ogallala Aquifer – current supply
- ▶ Water levels rapidly declining from 0.5 to 5.8 feet each year
- ▶ Decline is outside of communities' control
- ▶ Members have spent approximately \$30 million in the last 10 years on new wells just to maintain flat demand



Status of Existing Water Supply

Number of Wells vs. Production Capacity



Provided Courtesy of EPCOR

Status of ENMRWS Water Supply

Cannon Air Force Base

- ▶ “...AFSOC commissioned a study to assess the condition of the Ogallala Aquifer beneath Cannon AFB...”
- ▶ “That study...reveals that the aquifer is declining at such rate that we will begin experiencing impacts by the end of this decade.”
- ▶ “The conclusions from the study will assist Cannon AFB and HQ AFSOC to leverage support from other Air Force agencies and the Department of Defense.”
- ▶ “...the recently completed study clearly highlights the urgency of the Ute Pipeline Project.”



DEPARTMENT OF THE AIR FORCE
27TH SPECIAL OPERATIONS WING (AFSOC)
CANNON AIR FORCE BASE NEW MEXICO

Colonel Albert M. Elton II
Commander
100 S DL Ingram Blvd Suite 100
Cannon AFB NM 88103-5214

Ms. Caryl Brumfield
Chair, Eastern New Mexico Water Utility Authority
PO Box 700
Farmington, NM 88401-0760

7 SEP 2012

Dear Ms. Brumfield:

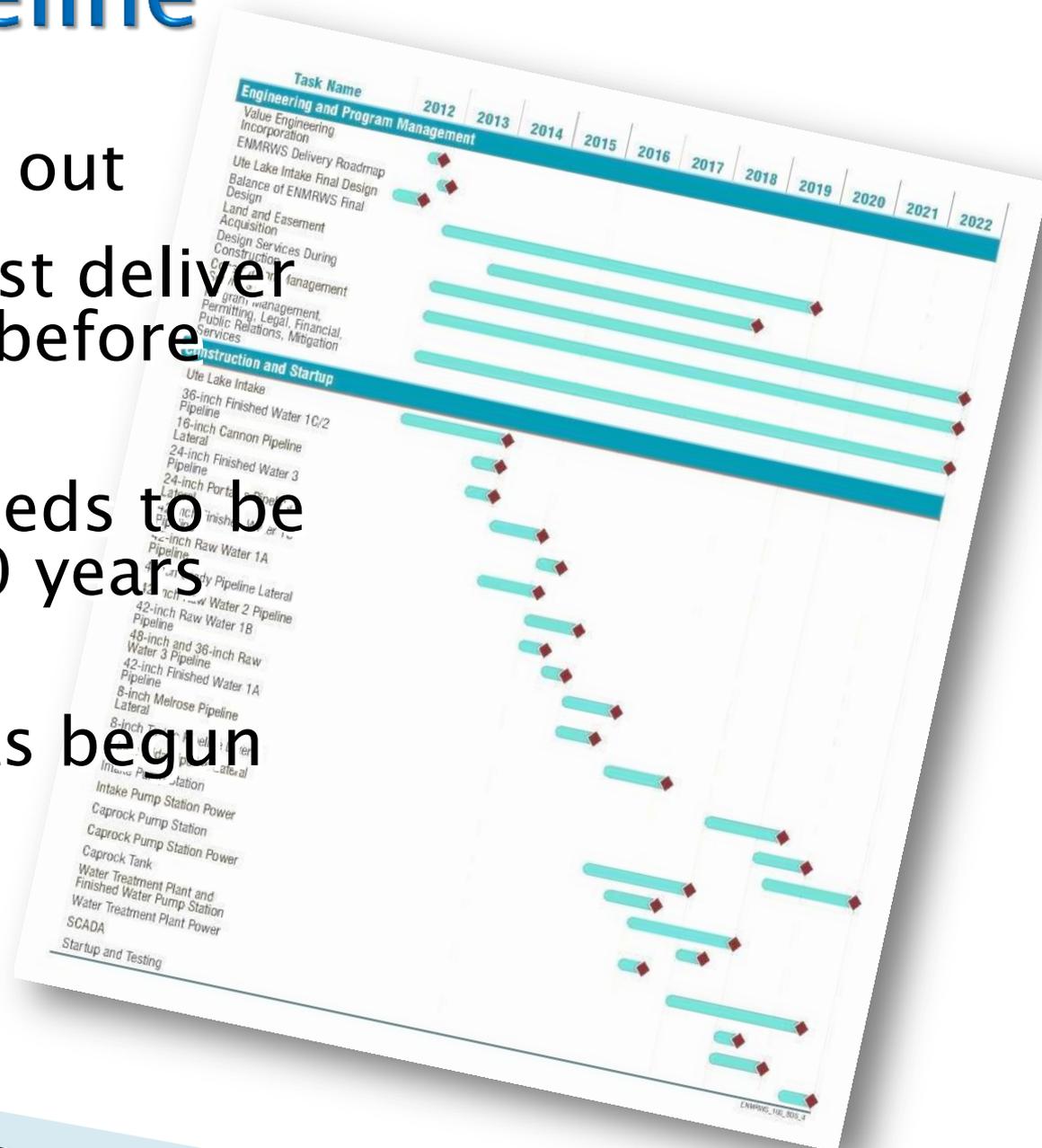
Thank you for your time out of the office to meet with me and key members of the Eastern New Mexico Water Utility Authority (ENMWA) on 29 June 2012 to brief me and key members of the Ute Pipeline Project. Clearly, the Ute Pipeline Project is a high priority for member communities, and Cannon Air Force Base (AFB) is committed to assisting them to the extent authorized.

As the Air Force Operations Command (HQ AFSOC) commissioned a study to assess the Ogallala Aquifer beneath Cannon AFB, the study indicates to the position of the aquifer until the Ute Pipeline Project begins and the impacts by the end of this decade. The study recommended a further study to determine the rate of decline of the aquifer and the impact of the Ute Pipeline Project on the aquifer. The study also recommended that Cannon AFB and HQ AFSOC leverage support from other Air Force agencies and the Department of Defense. My staff will keep you updated on this matter. Should you have any questions or need further information, please contact Lt Col Anthony Figuera at (575) 784-2008.


ALBERT M. ELTON II, Colonel, USAF

Project Timeline

- ▶ Time is running out
- ▶ This project must deliver reservoir water before the aquifer fails
- ▶ Construction needs to be completed in 10 years or less
- ▶ Construction has begun



Overall Intake Facility

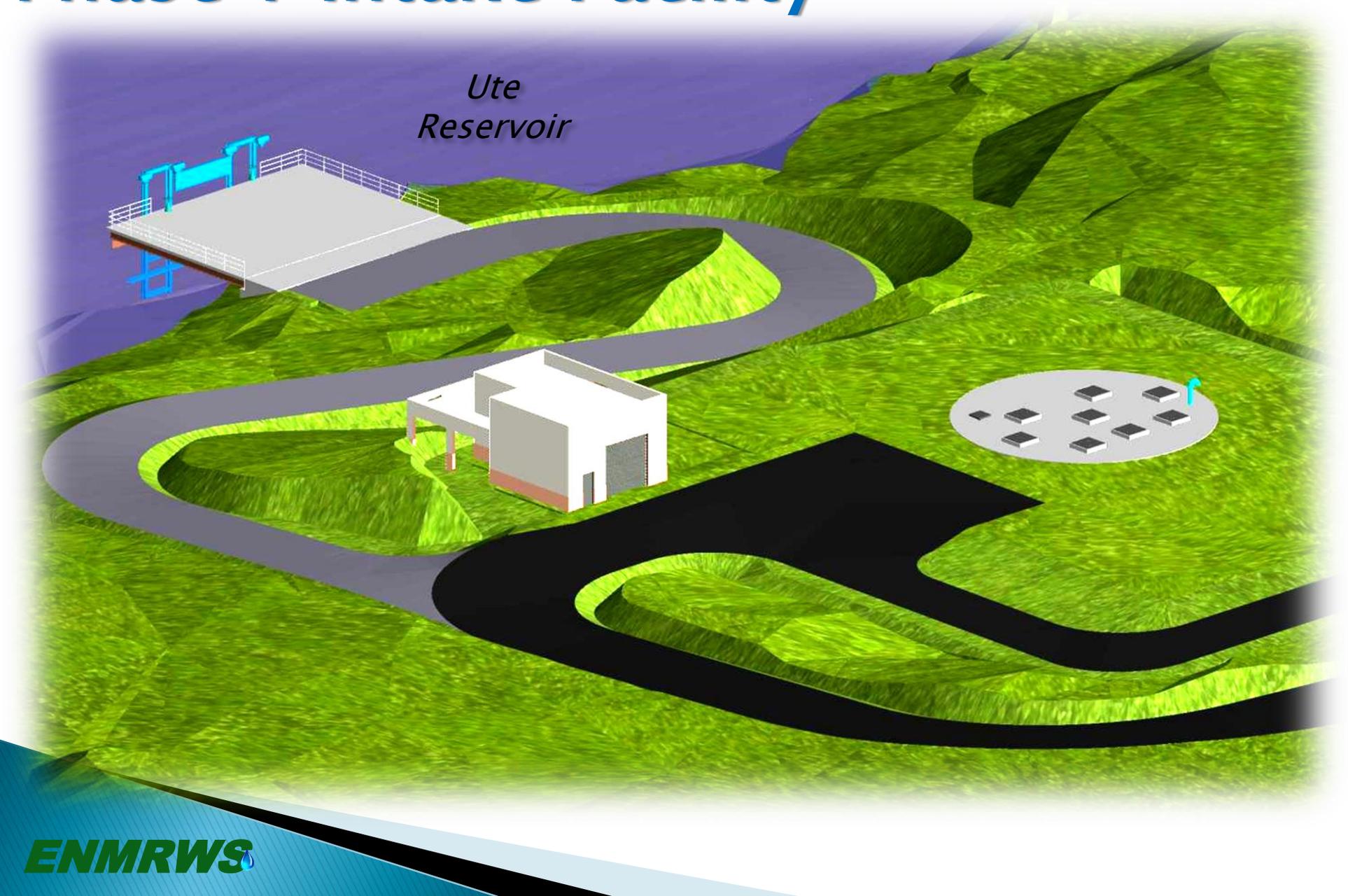
Ute
Reservoir

South Shore Drive

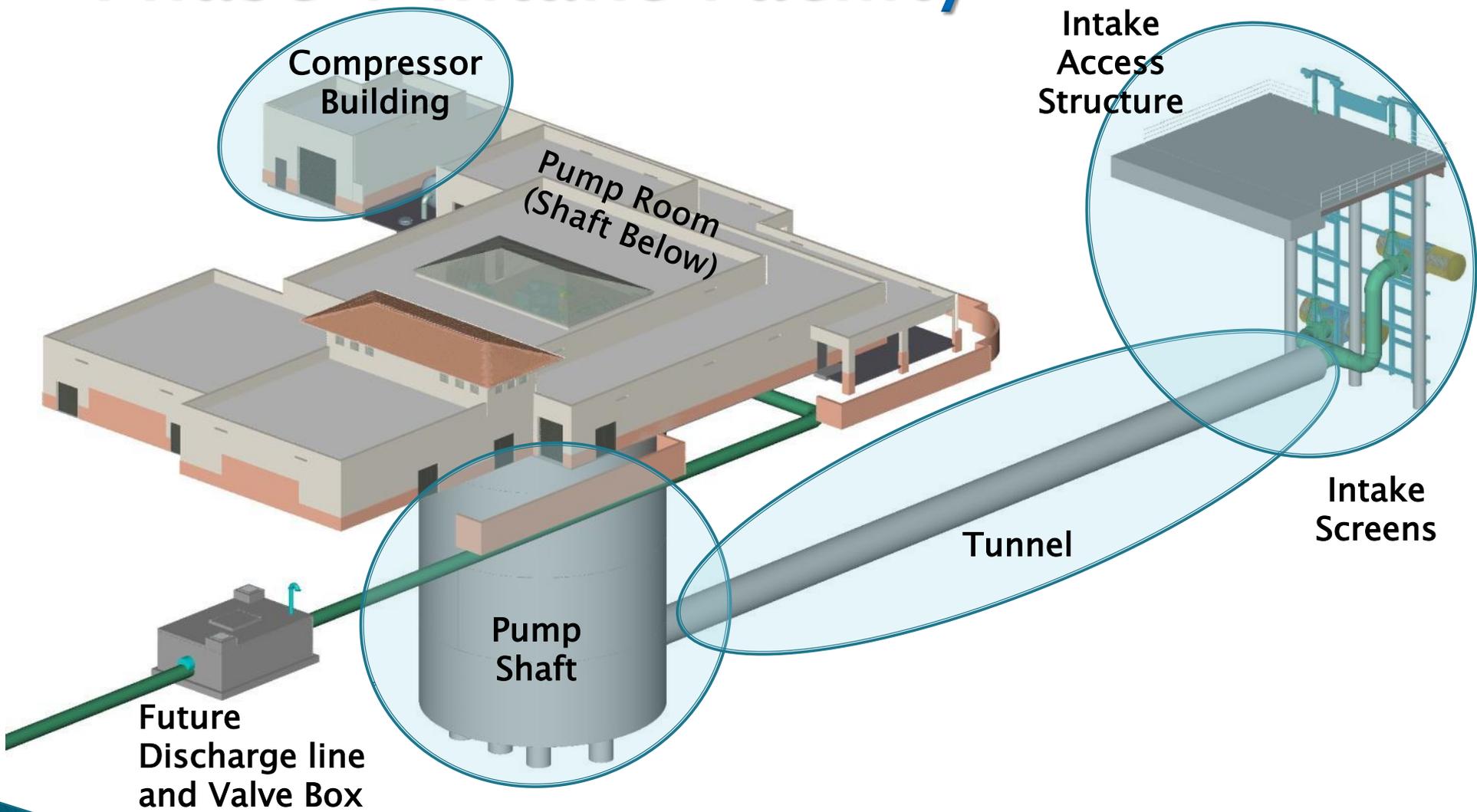


Phase 1 Intake Facility

*Ute
Reservoir*



Phase 1 Intake Facility



Project is Under Construction



- **Notice to Proceed issued February 4, 2013**
- **20 Month Schedule**



- **All Permits and Best Management Practices are in place**
- **Excavation of 50' dia. Vertical Shaft is Underway**

- **4 Controlled Blasts to Date and Shaft Depth presently at 42 feet**
- **Turbidity curtain installed in reservoir**



Project is Under Construction

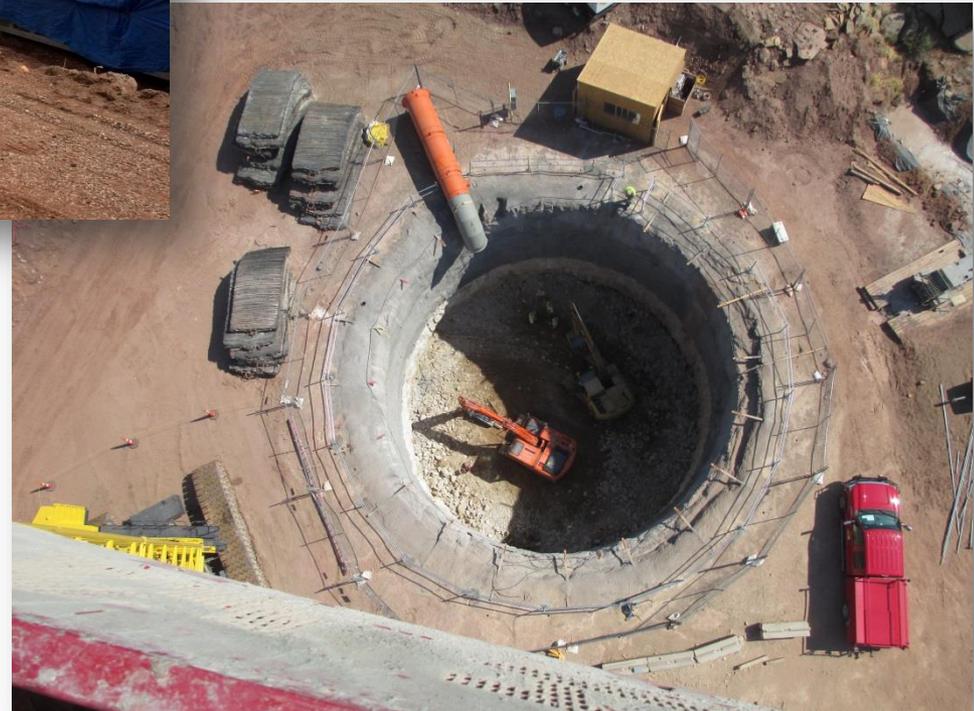


- **Notice to Proceed issued February 4, 2013**
- **20 Month Schedule**



- **All Permits and Best Management Practices are in place**
- **Excavation of 50' dia. Vertical Shaft is Underway**

- **Turbidity curtain installed in reservoir**
- **Excavation of Underwater Bench is next**

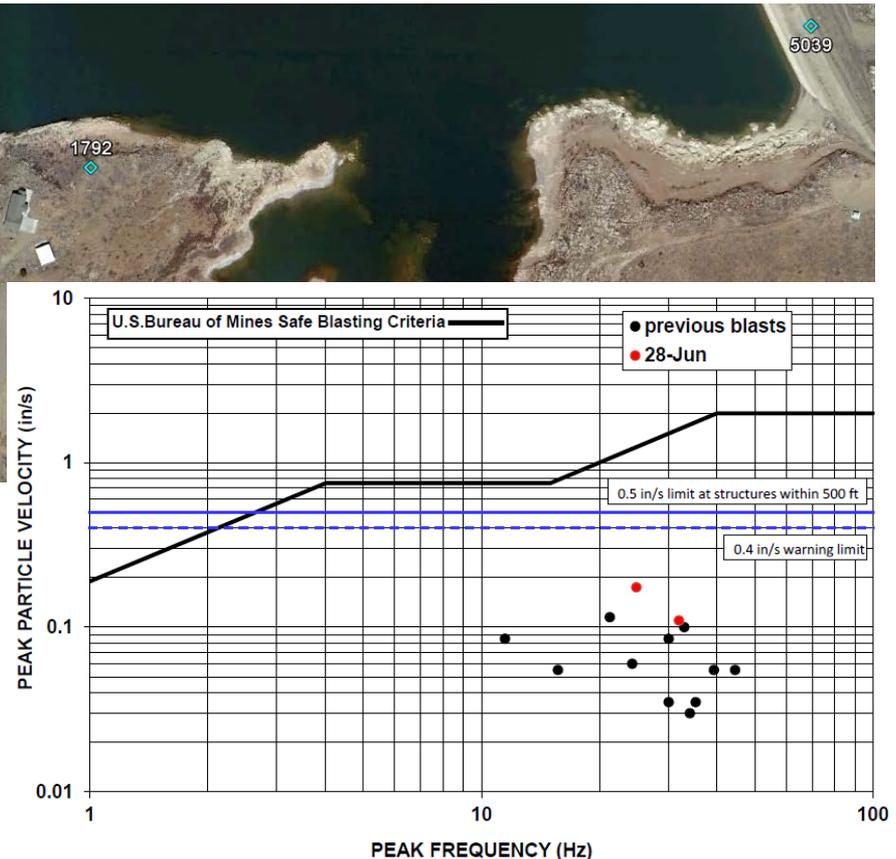


Controlled Blasting Used for Excavation

Seismograph Array



- ❑ **4 Controlled Blasts to Date and Shaft Depth presently at 42 feet**
- ❑ **Monitored by Dr. Cathy Aimone-Martin**
- ❑ **No Damage to Closest Structures**
- ❑ **Blast Response dissipates within 500 feet of shaft**

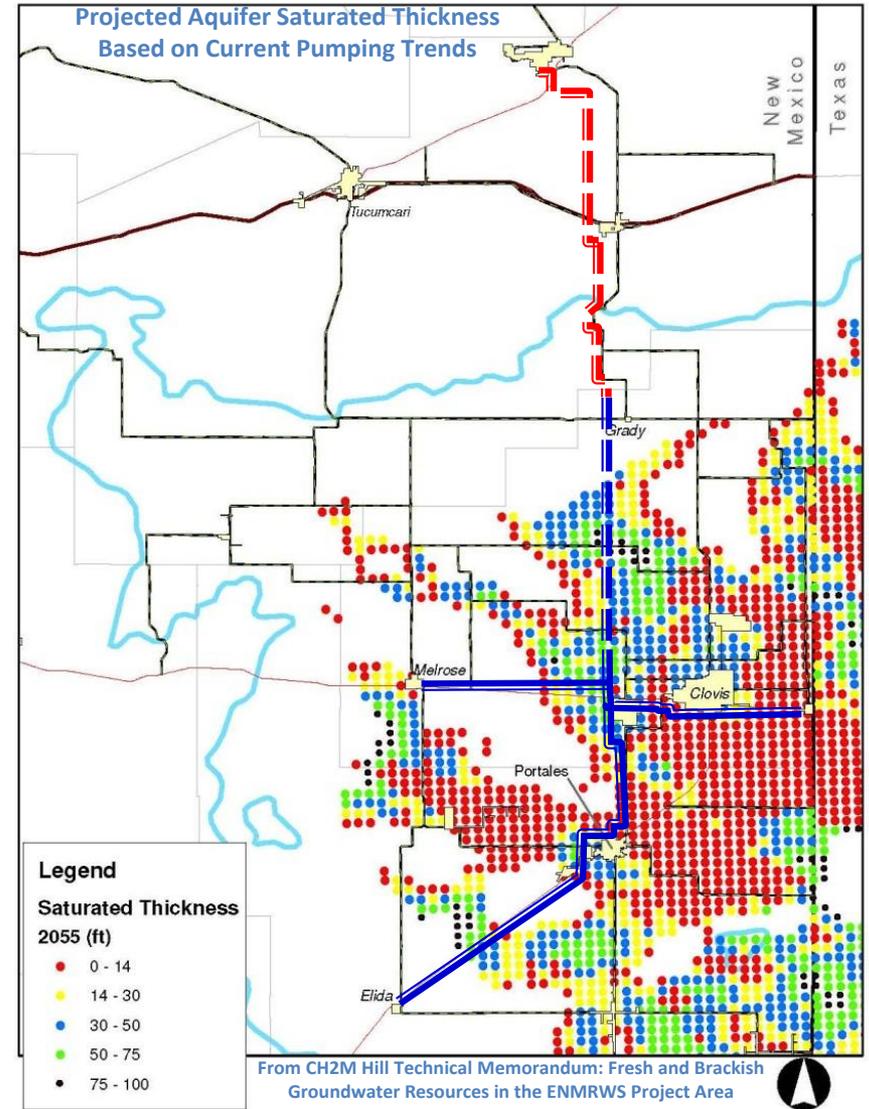


Graph of Measurements Recorded at Closest Structures

Next Steps...

- ▶ Construct Cannon AFB, Texico, Portales and Elida laterals
- ▶ Develop “Interim” Groundwater Supply
 - Build the System Backbone
 - Connect Member Communities
 - Deliver Interim Groundwater From Outlying Areas
- ▶ Ute Reservoir Management
 - Watershed/Water Quality
 - Drought Planning and Mitigation
 - Member Conservation Programs

Interim Groundwater Pipeline



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Questions?

