



# National Geographic Magazine

"Two-year-old Annalea
Garcia is bathed nightly by
her mother, Crystal, in a
bucket filled with water
hauled from town. Their well
and the wells of some 30
other families on the
outskirts of Clovis, New
Mexico, have run dry."

August 2016



# CLOVIS, NEW MEXICO

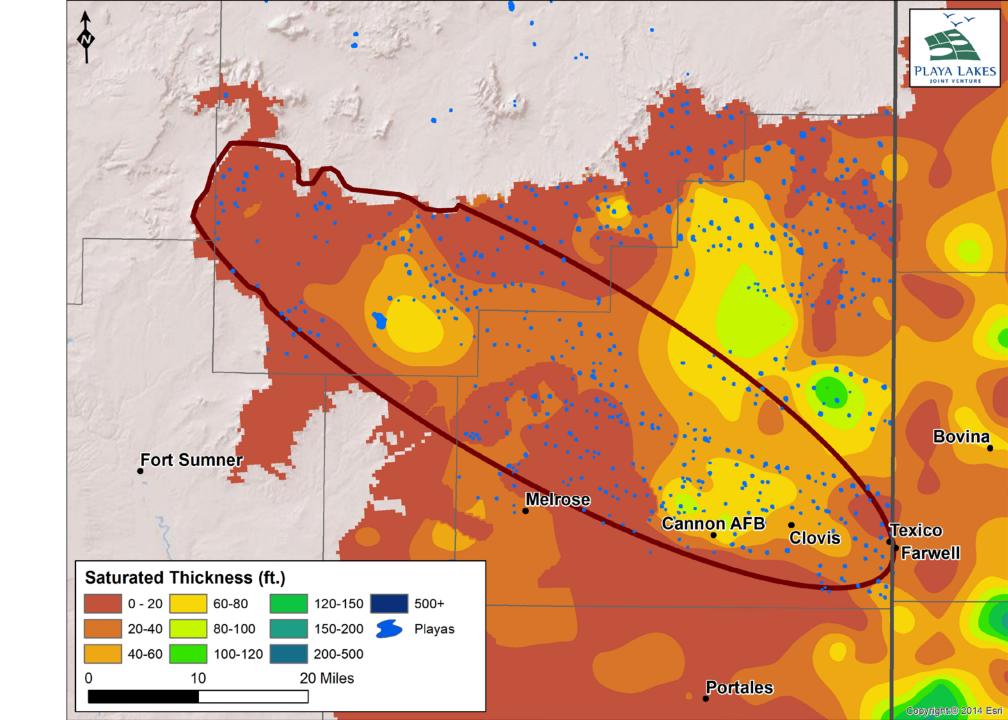
- 40,000 residents
- 40% Hispanic
- Near Cannon Air Force Base
- Farming community
- Sense of place



Remaining Aquifer Water

&

Playas Over the Aquifer





I'm restoring playas
as part of my operation.
But, if our community
is going to be sustainable, the
key is shutting off irrigation wells.

-Vincent de Maio, local rancher

If we manage surface water better, we can increase recharge through playas by 50%.

—Blake Prather, local rancher





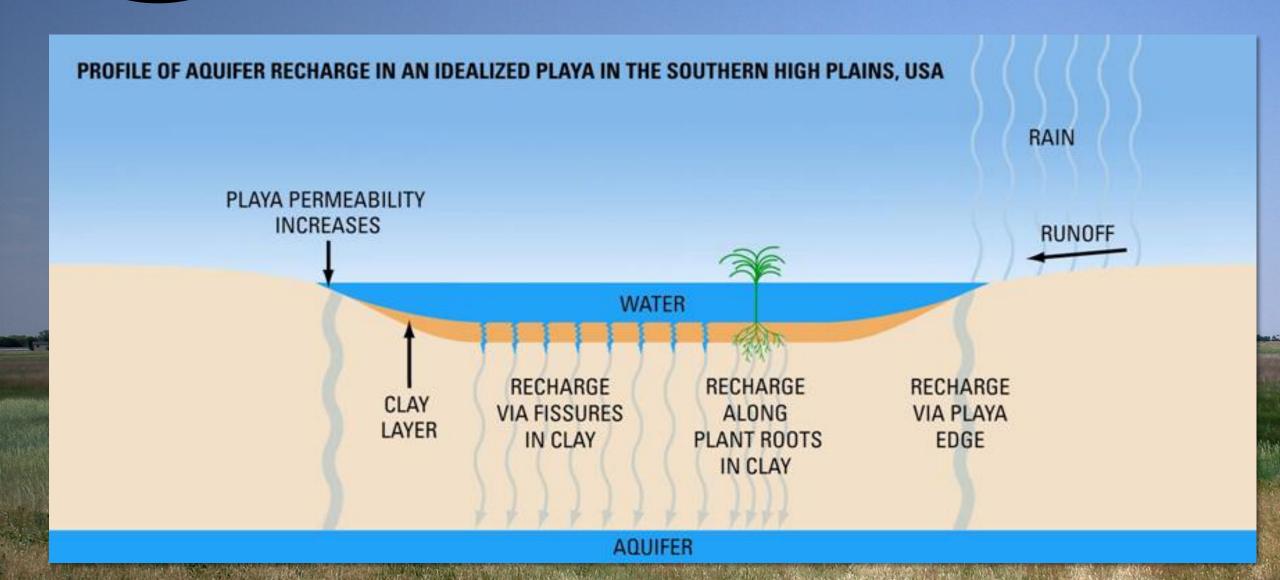


Water security is national security, community security.

We will protect our water through easements and water protection zones.

—David Lansford, Clovis Mayor

### **PLAYAS**





#### From Awareness to Action

#### 2004-2013

- 10 years of PLJV capacity grants
- Ongoing playa outreach and education
- An assessment of all playas in the area

#### 2015-2017

- 2 Clovis Water Summits
- Received a NAWCA Small Grant
- City's Water Assurance Plan includes playas

| PROJECT   | FUNDING NEEDED  | LAUNCH DATE   | COMPLETED                              |
|---|---|---|--|
| Action Plan #1 Effluent Water Reuse Project (City of Clovis) Study indirect potable reuse | \$11 Million to<br>complete<br>(grant submitted to<br>complete<br>Phase II-1C)  | In progress     City of Clovis     has completed     Phase I                        | • July 2019 • 6 months                 |
| concept (EPCOR)  Action Plan #2  Paleochannel  Water Banking (approximately 70  wells)    | • \$2.4 Million Y1 • Perpetual lease of water rights begins Y2 • \$40 Million Total   | • January 1, 2018   | January 2021                           |
| Action Plan #3 Playa Lake Restoration   | \$3.5 Million Total      \$3.5 Million     provided through     grant (matching     dollars derived     from water     banking project) | <ul> <li>February 2018 submit grant</li> <li>Begin restoration July 2018</li> </ul> | • December 2021                        |
| Action Plan #4 Conservation Land & Water Trust  | Stacking the Benefits (TBD) Water-Surface-Air Tax Credits Enhanced land and water management area In perpetuity                         | • July 2017   | • December 2017                        |
| Action Plan #5 Ute Water Pipeline Project (CAFB to Portales and Clovis)                   | • TBD   | • July 2019   | • July 2024 (1 <sup>st</sup> pipeline) |



# Water Potential from Playas

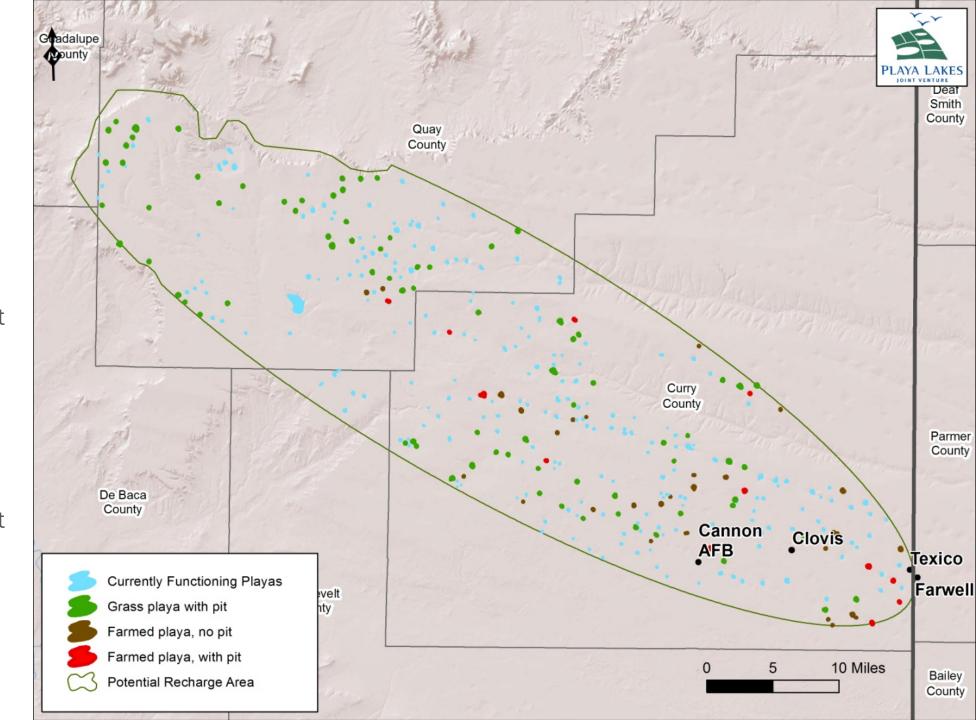
#### **TODAY**

2,752 functional playa-acres recharge about 225 million gallons (15% of municipal use)

#### **FUTURE**

4,137 functional playa-acres recharge about 337 million gallons (23% of municipal use)

= 8% INCREASE





#### Playa Restoration Costs and Benefits

| PLAYA<br>CONDITION          | PLAYAS | ACRES | RESTORATION<br>COSTS | AVERAGE<br>BENEFIT | % GOAL<br>BCR 18 NM |                |
|-----------------------------|--------|-------|----------------------|--------------------|---------------------|----------------|
|                             |        |       |                      | DUDs               | Wet year            | "Average" Year |
| Functional Now, Not in 2040 | 181    | 1,411 | \$243,000            | 189k               | 5.7%                | 0.57%          |
| Grass, Pit                  | 83     | 1,039 | \$415,000            | 139k               | 4.2 %               | 0.42%          |
| Farmed, No Pit              | 31     | 196   | \$1,390,000*         | 26k                | 0.8%                | 0.08%          |
| Farmed, Pit                 | 12     | 149   | \$1,100,000*         | 20k                | 0.6%                | 0.06%          |
| Total                       | 307    | 2,795 | \$3,148,000          | 373k               | 11.3%               | 1.13%          |

<sup>\*</sup> Restoration estimate for farmed playas does not include easement or offset for lost revenue

#### **SUCCESS**

# You know you're succeeding when...

#### **THEY**

- ✓ Call you
- ✓ Offer funds and resources
- ✓ Offer their time and effort
- ✓ Are your ambassador

#### YOU

- ✓ Support rather than lead
- ✓ Push rather than pull
- ✓ Are challenged to keep up with them
- ✓ Are their ambassador

#### **YOU ALL**

- ✓ Talk about similarities rather than differences
- ✓ Involve community segments
- ✓ Debate about how rather than what



#### **OUR HUMAN DIMENSIONS JOURNEY**

## 2006

- Survey to 1,800 farmers/ranchers
- Ogallala Aquifer
   #1 conservation
   concern
- 50% didn't know if playas recharge

# 2007

- Started promoting role of playas in groundwater recharge
- Literature review, film, website, radio, fact sheet

# 2013

- 13 focus groups with landowners
- Majority would conserve playas to help aquifer, if convinced
- Fewer conserve playas for wildlife
- Need more info from credible source

# 2015

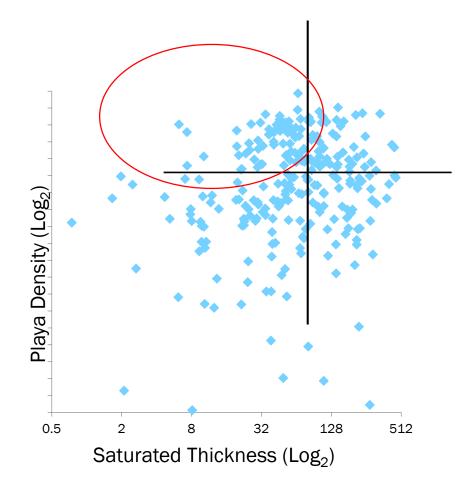
- Asked the experts at Playa Summit what we could say about playas and recharge
- Recharge averages 3" per year & is cleaner
- You can't save irrigators but enough for towns

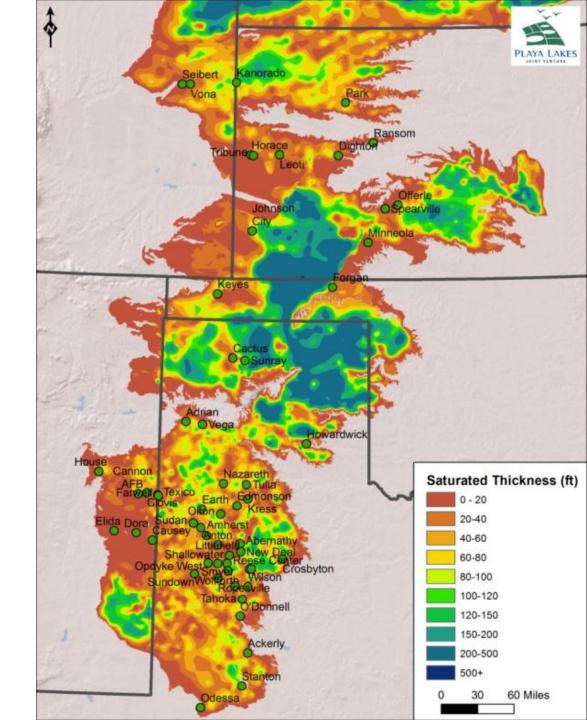
# 2016

- Early meetings with Clovis leadership
- City of Clovis
   asked us to
   participate in
   their Water
   Conservation
   Summit and talk
   about playas



#### **56 Towns Like Clovis**







"Conserve playas, prairies and landscapes of the western Great Plains for the benefit of birds, other wildlife, and PEOPLE."

