

TEXAS PLAYA CONSERVATION INITIATIVE

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TEXAS
PARKS &
WILDLIFE

TEXAS PLAYA
CONSERVATION INITIATIVE



Clean Water for Texans & Wildlife

The logo features a stylized green and white graphic of a lake or wetland with three birds flying above it.
PLAYA LAKES
JOINT VENTURE

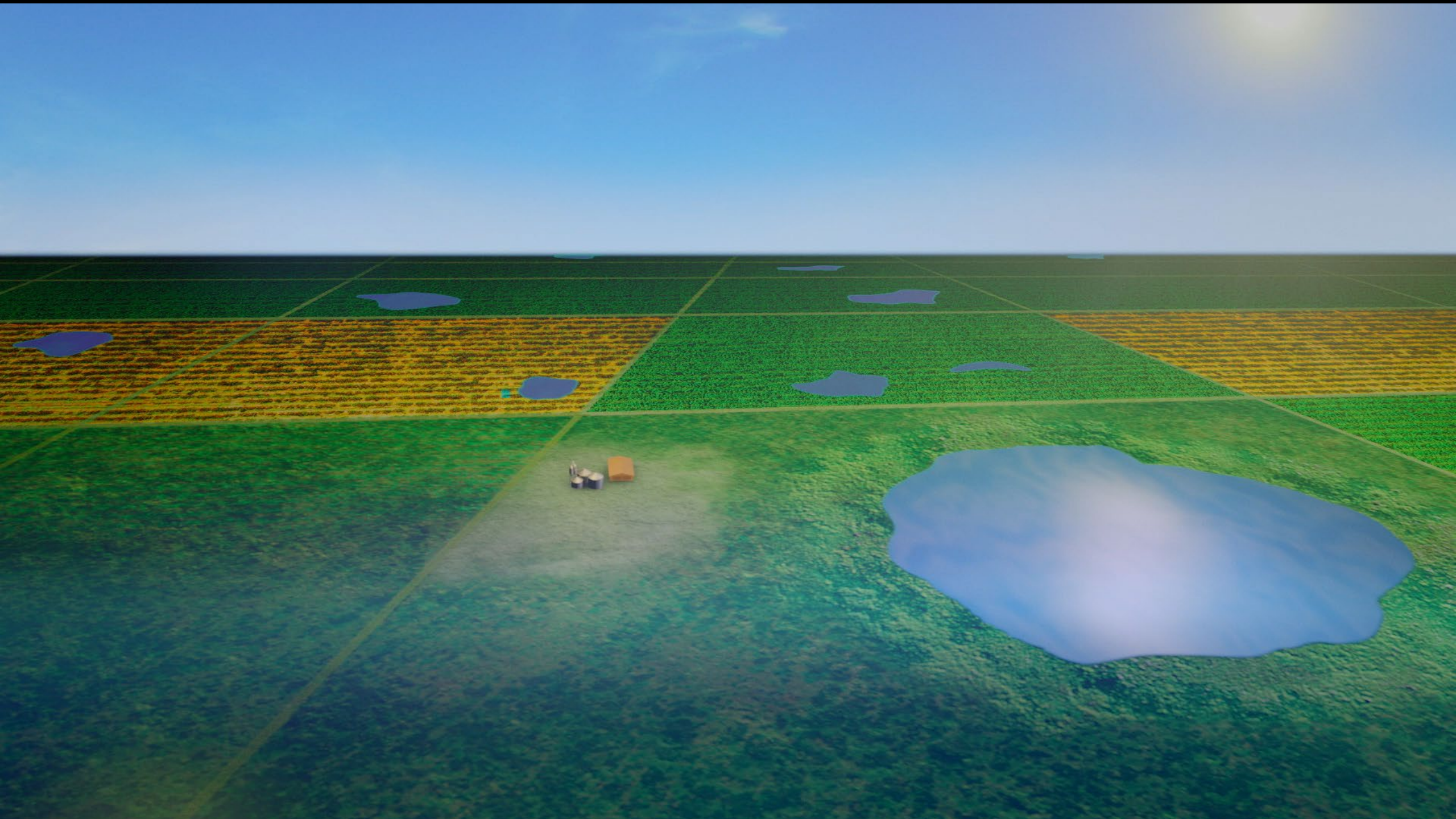


WHAT ARE PLAYAS?

PLAYAS

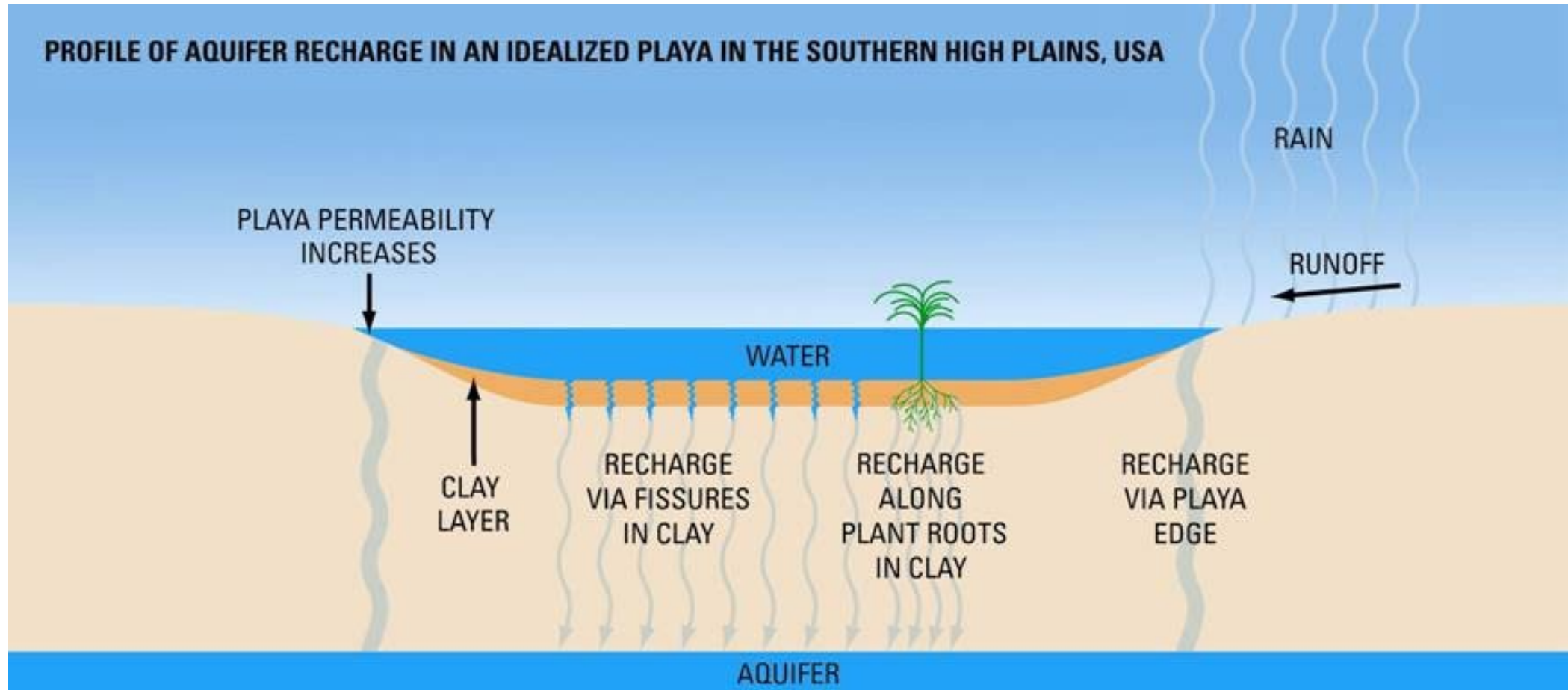
- Great amounts of diversity when wet
 - Plants – 350 species
 - Animals
 - Birds – 185 species
 - Mammals – 37 species
 - Amphibians – 13 species
 - Invertebrates – 60+ species
- Dry periods are vital to their function





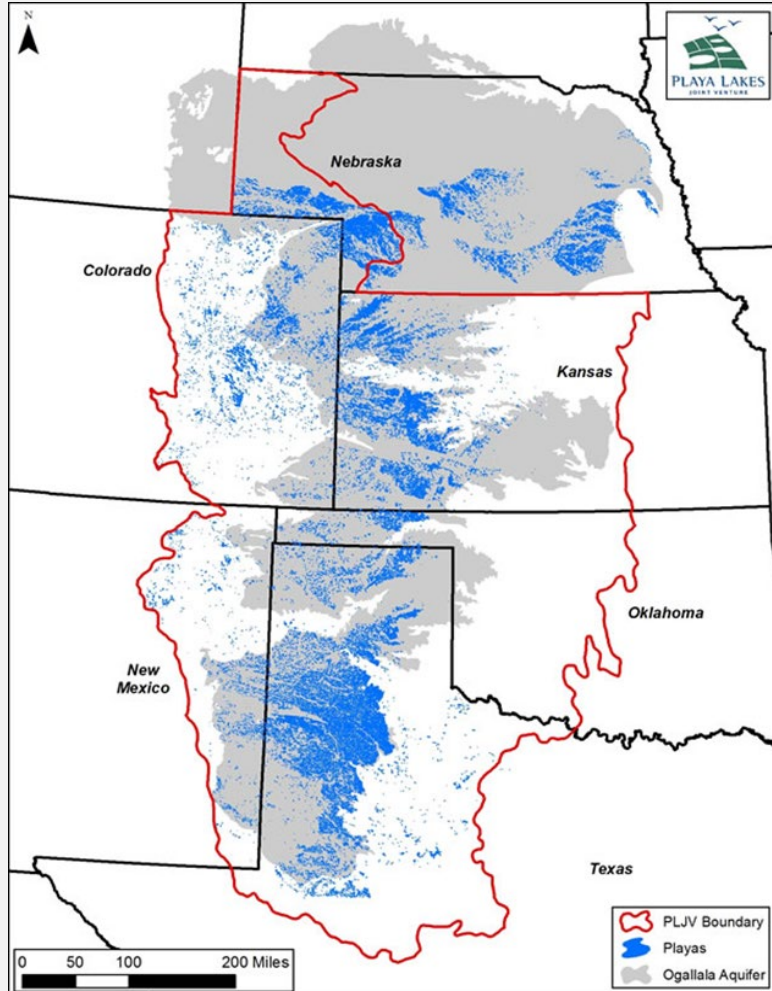


PROFILE OF AQUIFER RECHARGE IN AN IDEALIZED PLAYA IN THE SOUTHERN HIGH PLAINS, USA



PLAYAS AND GROUNDWATER

Source : PLJV



Recharge of aquifers associated with playas is slow

10-50 years

Rate of recharge through playas is 10-100x greater than through other areas

Healthy playas ensure we put cleaner water into the aquifer

The Ogallala is compartmentalized

Water flowing through your playa benefits your wells

3" of recharge through a 4-acre playa produces 326,000 gallons of water

Enough to support a family of 4 for 2 years

PLAYAS IN TEXAS



STATE	NUMBER	AVERAGE SIZE (Ac)	RANGE (Ac)
Colorado *	8,047	5.5	0.01 - 248
Kansas	22,045	3.7	0.08 - 464
Nebraska	21,900	1.2	0.01 - 79.5
New Mexico *	2,231	14.3	0.04 - 1,241
Oklahoma *	2,886	4.7	0.01 - 600
Texas	23,041	17.0	0.01 - 841

* Playas were mapped using mostly SSURGO and LANDSAT data. This study tends to omit many small playas compared with National Wetland Inventory data for other states (NE, KS, TX).

4,080 functional
5,631 at risk
13,326 not functional

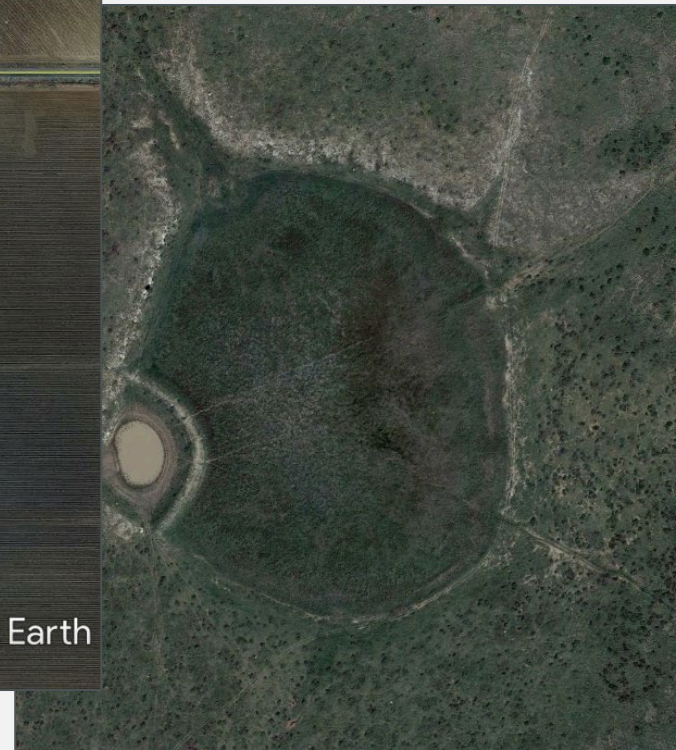
THREATS



#1 existing impact today is pits

Something we can remedy easily, quickly

Sediment accumulation



TXPCI PROGRAM

- Partnership created in 2015
- Pit backfilling in grass buffered playas and/or grass buffer plantings
- Producer / landowner friendly program
 - TxPCI pays 100% cost of restoration
 - We hire and pay the contractor directly
 - Pay one-time incentive payment (\$80/acre)
 - 10-year agreement attached – prevents future pit creation



TXPCI – HOW WE OPERATE

- Use satellite imagery to ID potential projects
- Collect landowner contact information
- Mail informational flyers
- Make site visits and produce a contract for interested parties
- Fix the playa



SUCCESS AND PROGRESS

- **83 restoration projects completed**
 - 3,425 playa and saline lake acres restored + equal amount of surrounding grassland buffer.
 - 243 Million Gallons of clean, groundwater recharge annually.
 - 20 of these projects (609 acres) within the last year
- Committed \$223,000 directly to landowners as incentive payments
- Additional 62 acres in queue



SUCCESS AND PROGRESS



Understanding playas

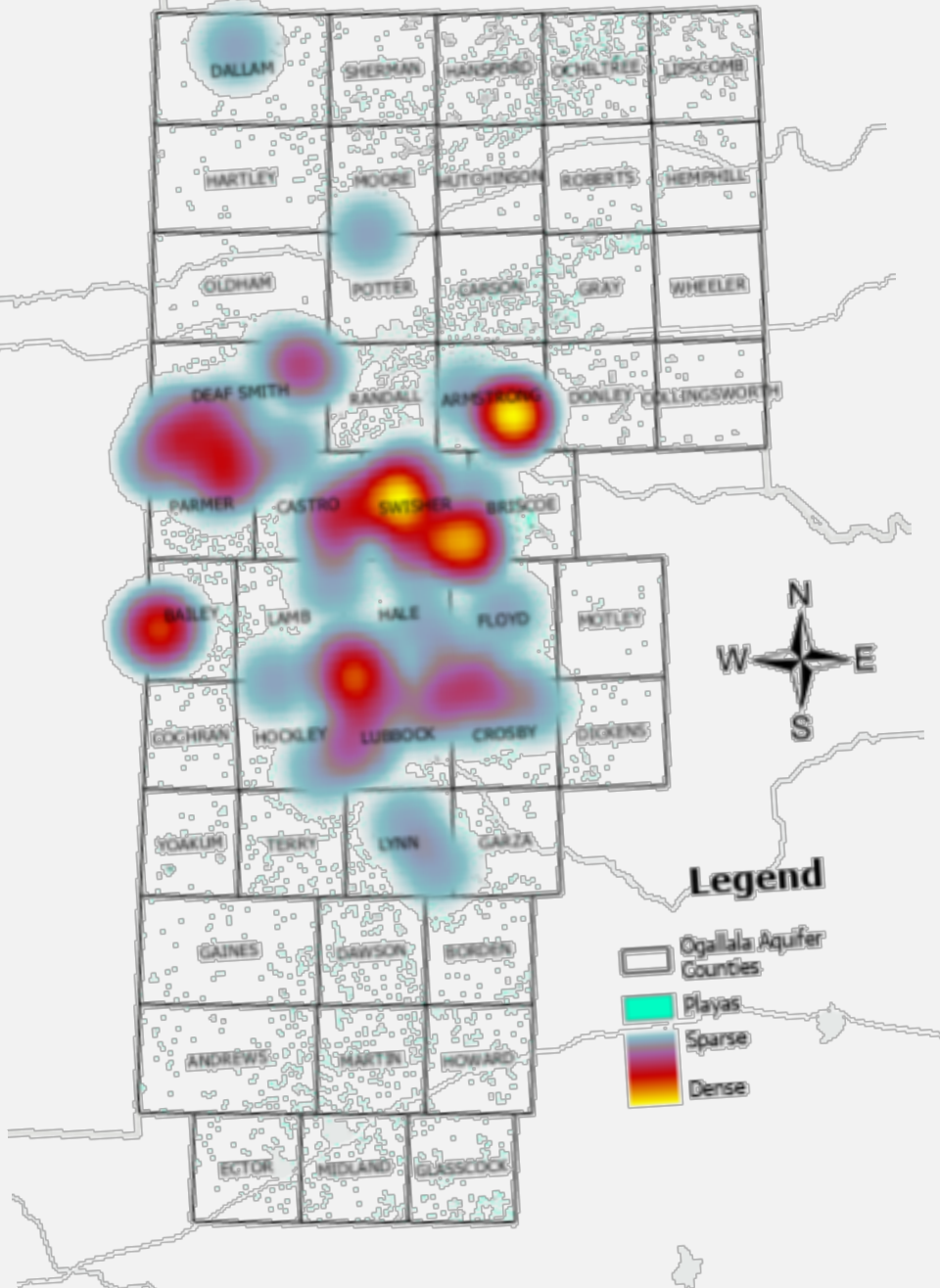
Project overview

Impact on the landscape

Public engagement

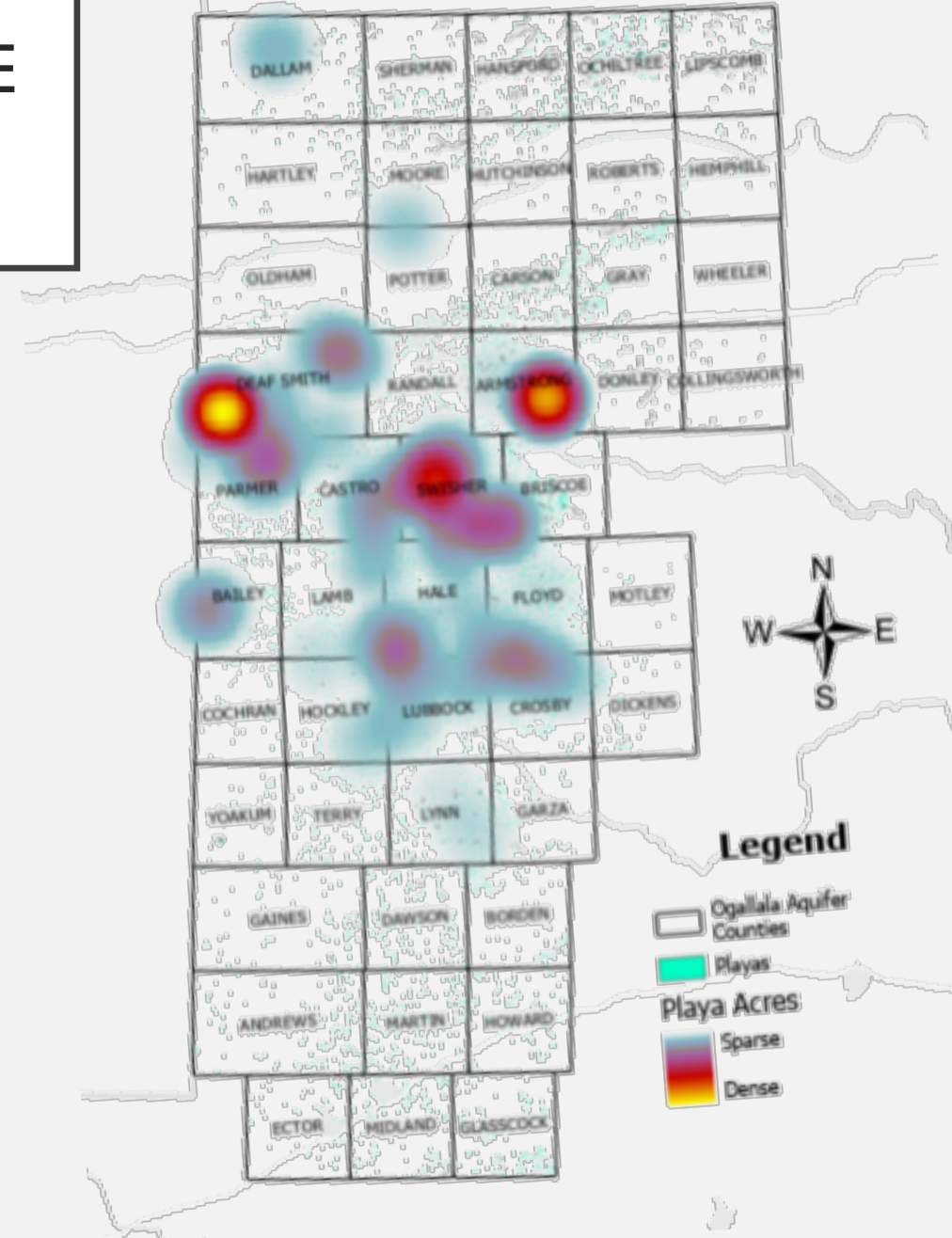
Future directions

Project Density

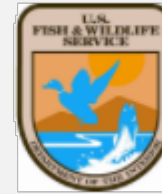


LANDSCAPE IMPACT

Acreage Density



PARTNERSHIPS



Understanding plays

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PUBLIC ENGAGEMENT



Playa field days



Targeted mailings
to landowners

Fellow Texans,

Generations of Texans have cared for Texas's natural resources. As we build homes, grow food, raise livestock, and foster strong communities, Texans must remember that each and every person has a stake in the economic and environmental future of this beautiful state.

Playas in the Texas panhandle are primary points of recharge to the Ogallala Aquifer, with a much faster recharge rate than other parts of the landscape. They help provide water to over 1.2 million Texans. However, without swift action, and as the state's population grows, the demand on these resources may outpace the natural supply. Each of us has a stake in the future of our water supply and, therefore, the economic viability of the Panhandle and beyond.

The people and the land are what makes Texas great. When working in harmony, everyone benefits. Since playas are a primary source of recharge to the Ogallala, and Texas has more playas than any other state, Texans stand to benefit the most by keeping their playas in good shape. Join the Texas Playa Conservation Initiative in caring for what makes everyone proud to call Texas home, and what makes each of us Texan by Nature.

From Deep in the Heart of Texas,
Your Neighbors at **TEXAN by NATURE**

"The Texans who came before us were drawn to our state with the hope that the land would reshape their destiny. And today, I believe Texans are capable of ensuring that those dreams exist for our children and grandchildren to experience."

—Laura Bush
Founder, Texan by Nature
Former First Lady of the United States

Your playa is the key to the future of water in the Panhandle

HELP PRODUCERS, COMMUNITIES, AND WILDLIFE CONTINUE TO THRIVE.
The Texas Playa Conservation Initiative needs the help of landowners across the panhandle as they restore playa wetlands, allowing them to recharge millions of gallons of water to the Ogallala.

- **YOU HAVE A LINK IN THE CHAIN.** Playas contain unique soil layers that provide critical filtering for groundwater.
- **YOU CAN SAVE TEXAS WATER.** Healthy playas are important for recharging the Ogallala Aquifer.
- **YOUR WATER STAYS HERE.** Flow rates within the aquifer are extremely slow – 0.5-1 mile per 10 years. This means the water you save today will be available for future generations of Texans.
- **YOU CAN HELP.** Restoring playas is easy, and costs landowners nothing.
- **YOU ARE APPRECIATED.** Landowners even receive a "thank you" payment for their participation.

PLAYAS AT WORK

PLAYA PERMEABILITY INCREASES

RAIN

RUNOFF

WATER

CLAY

RECHARGE VIA FISSURES IN CLAY

RECHARGE ALONG PLANT ROOTS IN CLAY

RECHARGE VIA PLAYA EDGE

AQUIFER

TEXAN by NATURE
3500 Jefferson St, Suite 301
Austin, Texas 78723

CONTACT THE PROGRAM TODAY TO SEE IF YOU HAVE PLAYAS ON YOUR LAND THAT QUALIFY
PLAYASWORKFORTHETEXANS.COM
Rachel Fern, Texas Parks and Wildlife, 737-218-3955 or rachel.fern@tpwd.texas.gov

Understanding playas

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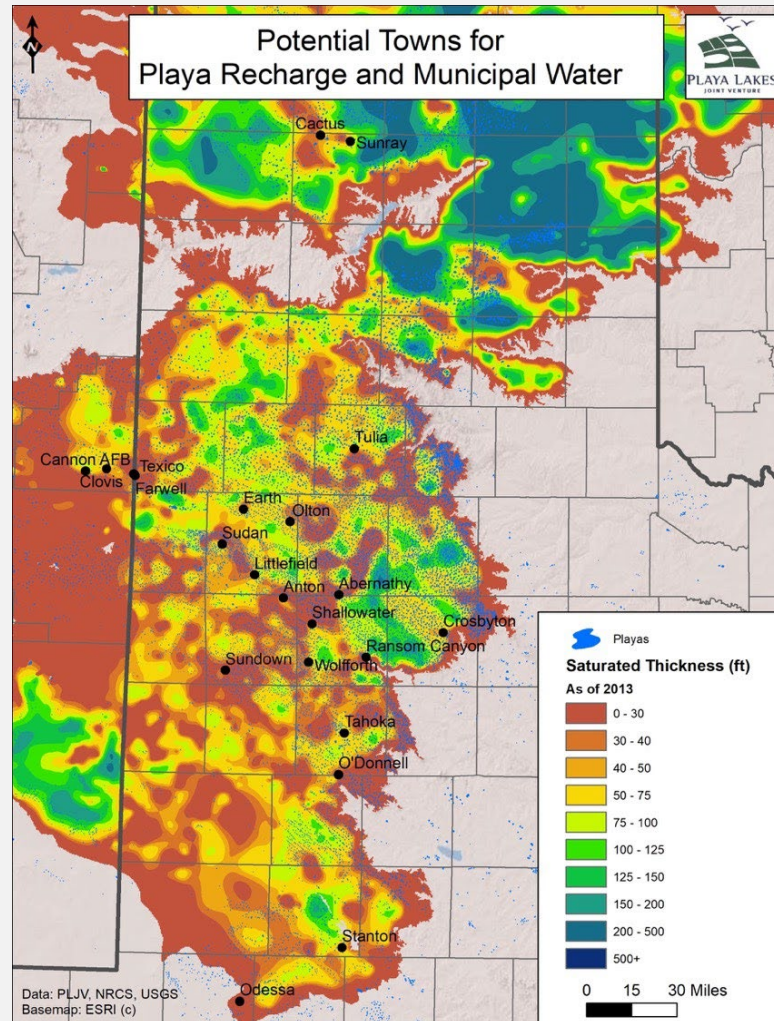
INTO THE FUTURE

Clovis, NM

Groundwater success story



Partnerships with municipalities key



*Water security is
national security,
community security.*

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

—David Lansford, Clovis Mayor

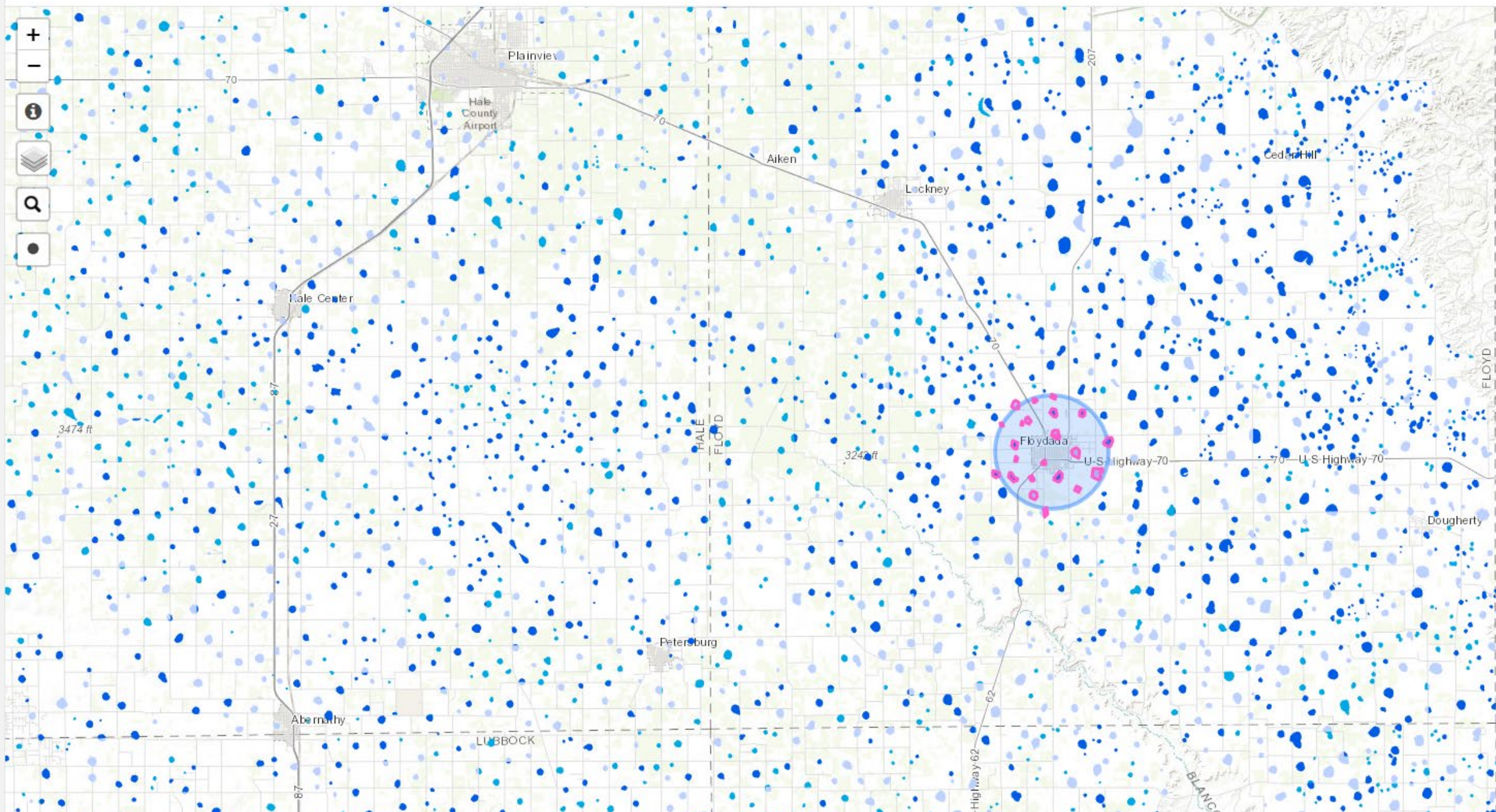
Understanding playas

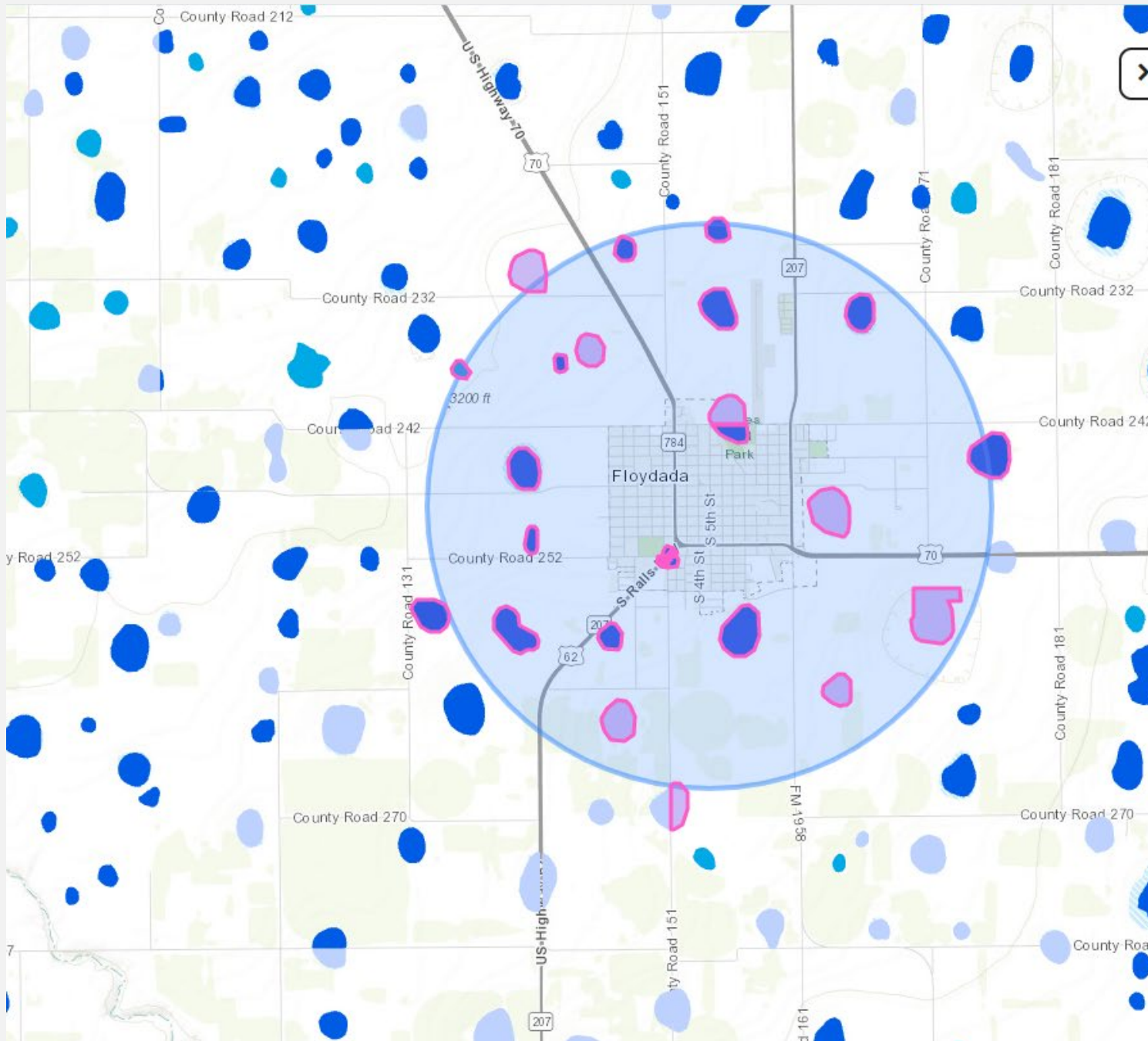
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RECHARGE

WETNESS

Estimated Recharge Potential for Future Generations

Playas are a primary source of recharge for the Ogallala Aquifer, contributing up to 95% of water flowing into the aquifer and improving its quality. Click on up to 7 playas, or use the circle tool to select more than 7 in one area, to view the potential amount of recharge they can provide. ⓘ

~ 33,584,000
gallons of water per year ⓘ

Gallons

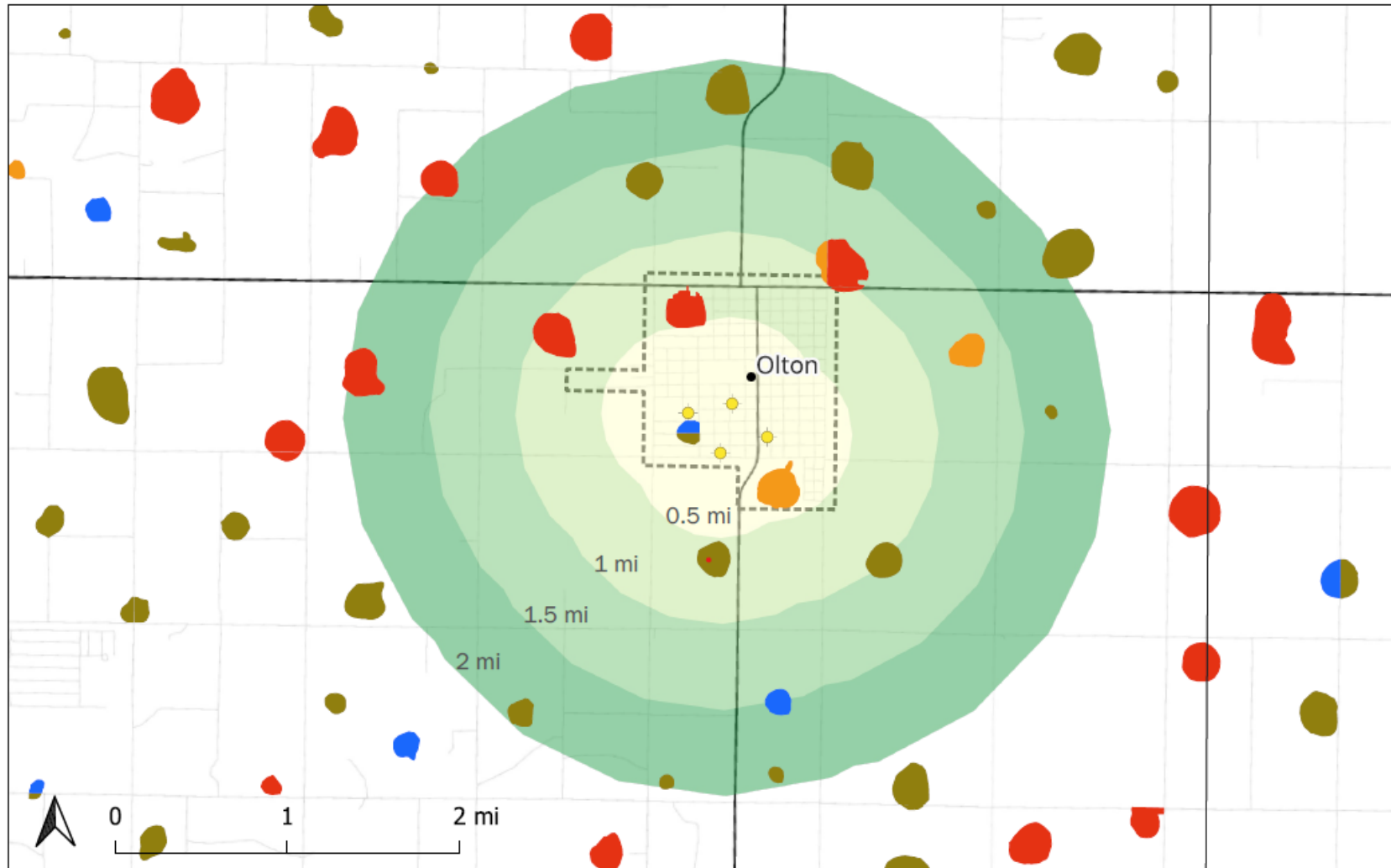
Acre-feet

CLEAR SELECTION

Playa Classification ⓘ

- Grassland = Included in the recharge estimate.
- Farmed = Included in the recharge estimate, but these playas are at risk of losing their recharge capacity if their functionality is not restored.
- Modified (e.g., pits, ditches, berms) = Not included in the recharge estimate. There is no scientific evidence to determine recharge amount.

Olton, TX Playas Near Municipal Water Supplies



Playas by Condition

- Healthy
- Pitted
- Farmed
- Pitted and farmed

Municipal wells
Public water supply area

Distance from wells	Intersecting playa acres
0.5	36.13
1	168.91
1.5	253.19
2	408.16

<– 33,236,802 gallons/yr
nearly enough for half the
population of Olton

<https://playaestimators.com>

SUCCESS STORY



TEXAS
PARKS &
WILDLIFE

Chris Grotegut
Landowner
Tierra de Esperanza

2022 Recipient

LONE STAR

**LAND
STEWARD**





*We have mixed emotions
about playas.*

*But, on most days,
we're thankful for them.*

*These playas offer a lot of private benefits— aesthetic
and recreational value,
improved water quality,
as well as **aquifer recharge.***

—Vance & Louise Ehmke, Farmers, Lane County KS

Take-homes

#1

Playas are a major source of recharge to aquifer

#2

Recharge cannot make up for losses from irrigation

#3

It is enough to support rain-fed systems, grazing operations and municipalities

#4

If you conserve a playa, that water is yours

#5

Healthy playas with buffers improve YOUR water quality



“A rising tide lifts all boats”



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BE BIG.
BE BOLD.
BE TEXAN  by
NATURE.™

JOIN US



PlayasWorkForTexans.com

