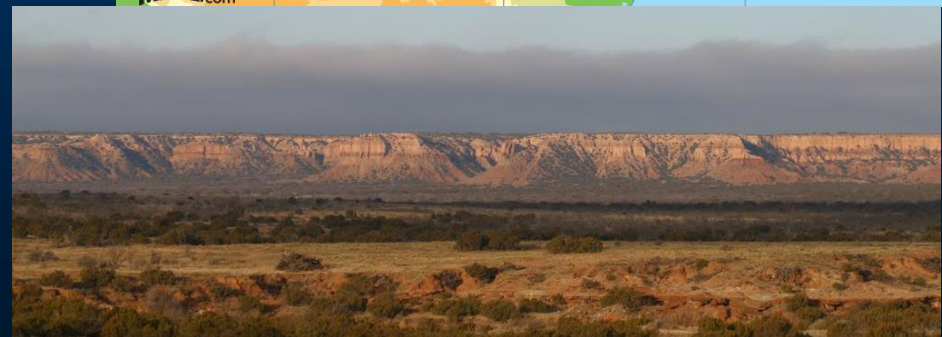


Playas in the Texas High Plains



Texas High Plains

- Llano Estacado (Staked Plains)
 - Caprock Escarpment
- Flat to gently rolling
- Shortgrass prairie
 - Little surface water
 - Semi-arid
- Last in settlement



Playas



What are Playas?

- Clay-lined basins, which are the lowest point of a self-contained watershed.
 - Runoff dependent



- Ephemeral
 - Dynamic
 - Diverse
- Unappreciated

Playas



- Ephemeral
 - Dynamic
 - Diverse
- Unappreciated

Playas



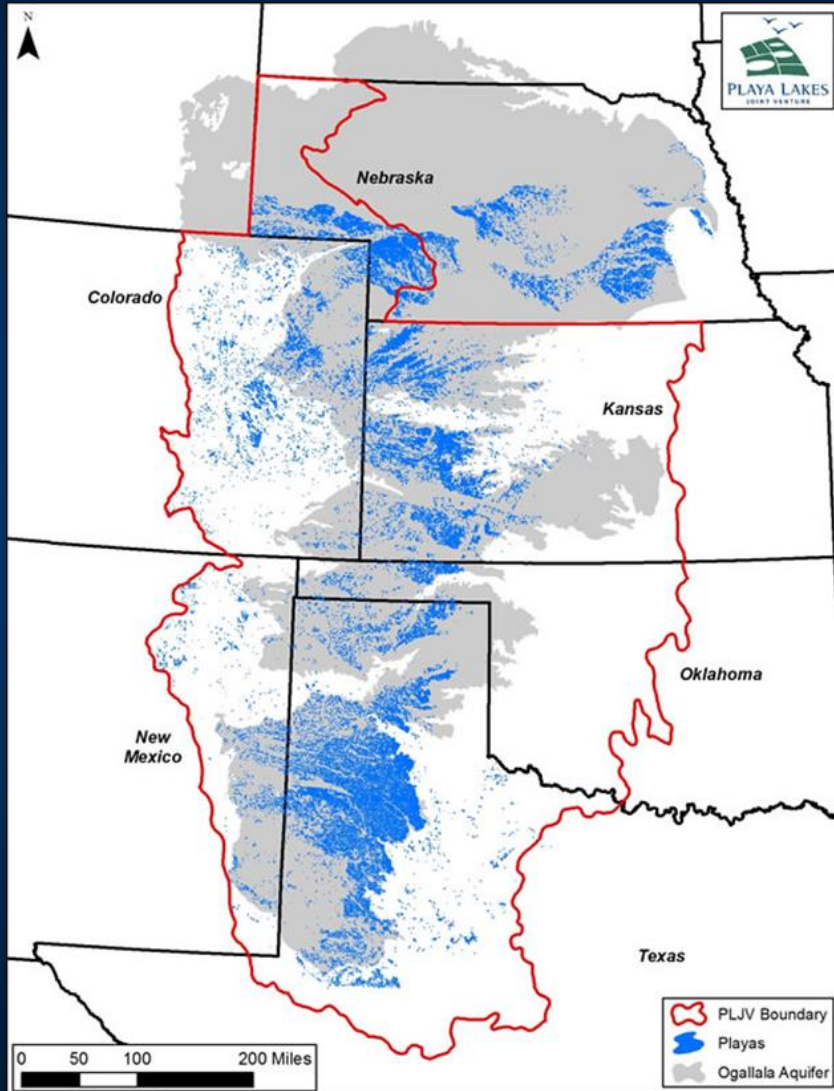
- Ephemeral
- Dynamic
- Diverse
- Unappreciated
- Average 17 acres

Playas



Playas of Texas

- 23,037 playas in Texas
 - 80,000+ in Great Plains
- Source of focused recharge for the Ogallala Aquifer
- Vital to migratory shore birds and waterfowl



Source : PLJV

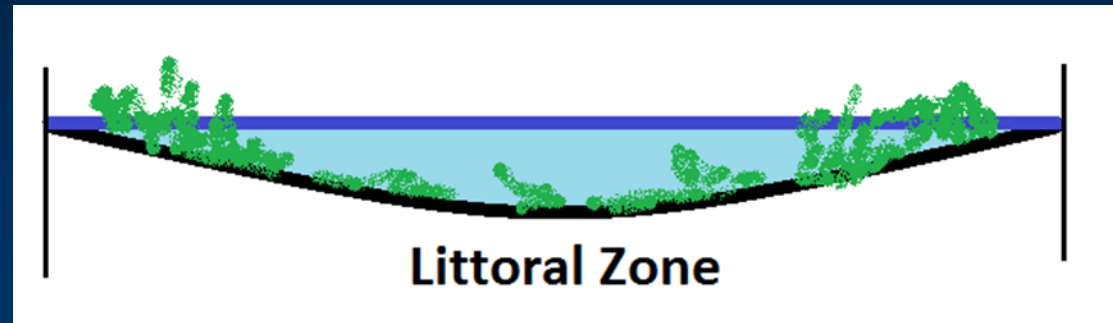


Poll Question 1

- Characteristics of a playa include
 - A) Self-contained watershed
 - B) Clay-lined basin
 - C) Ephemeral
 - D) All of the above

Playas

- Nature's moist-soil unit
- Great amounts of diversity when wet
 - Plants – 350 species
 - Animals
 - Birds – 185 species
 - Mammals – 37 species
 - Amphibians – 13 species
 - Invertebrates
- Dry periods are vital to their function



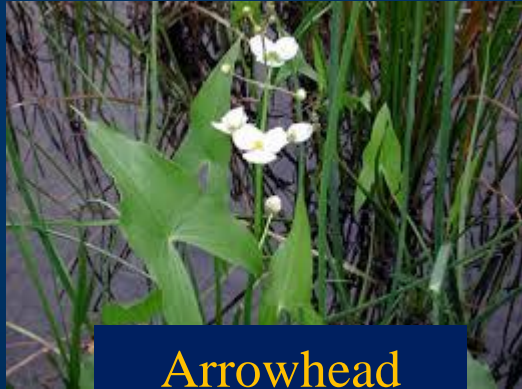
Common Wetland Plants



Barnyard Grass



Pink Smartweed



Arrowhead



Bulrush



Curly Dock



Green Sprangletop



Yellow Nutsedge



Johnsongrass



Pondweed

Wildlife



Great Plains Toad



Barred Tiger Salamander



Plains Spadefoot Toad



Northern Pintail



American Avocet



Mallard



Fairy Shrimp



Long-billed Curlew



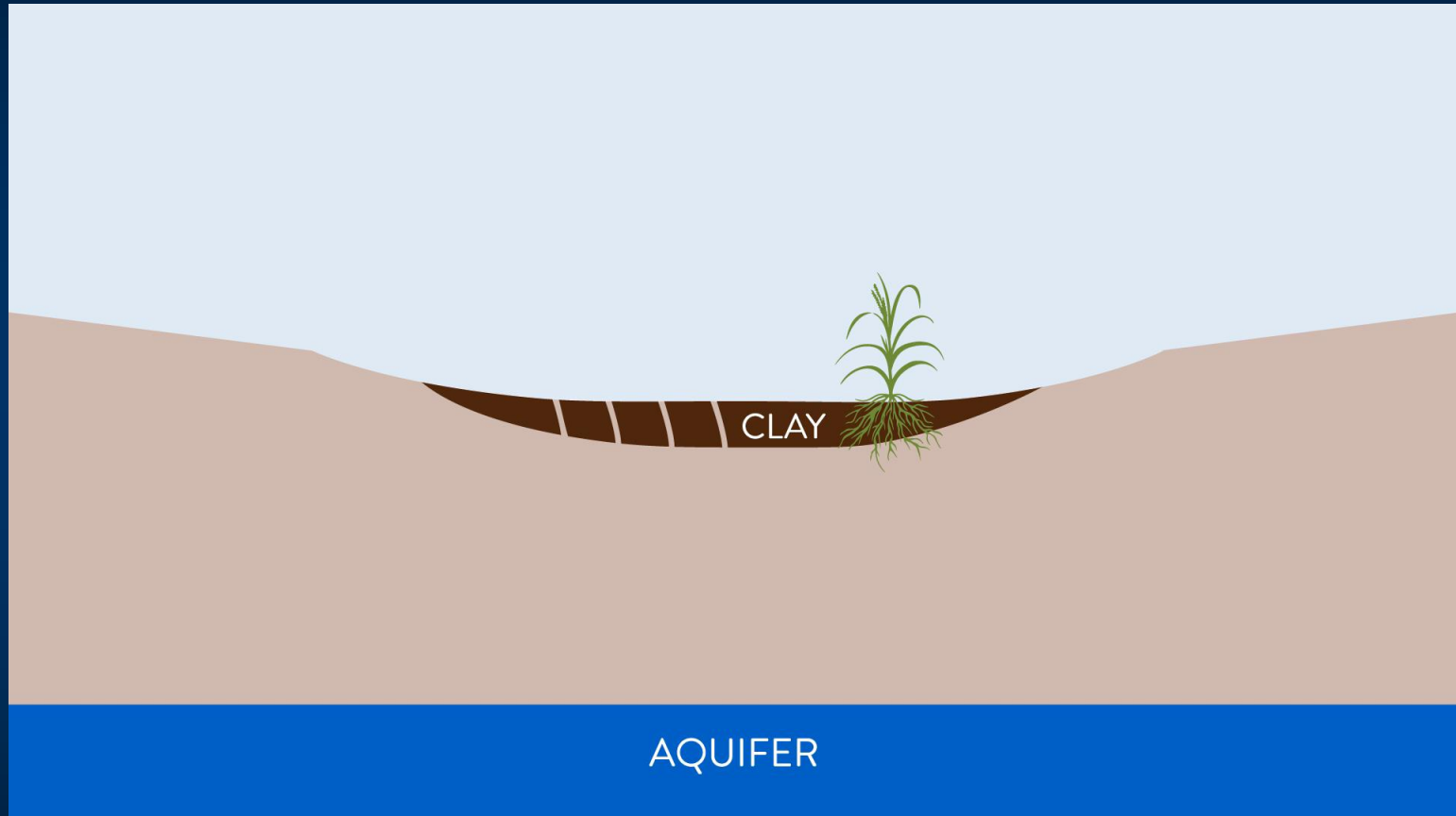
Sandhill Crane



Tadpole Shrimp



Aquifer Recharge via Playas



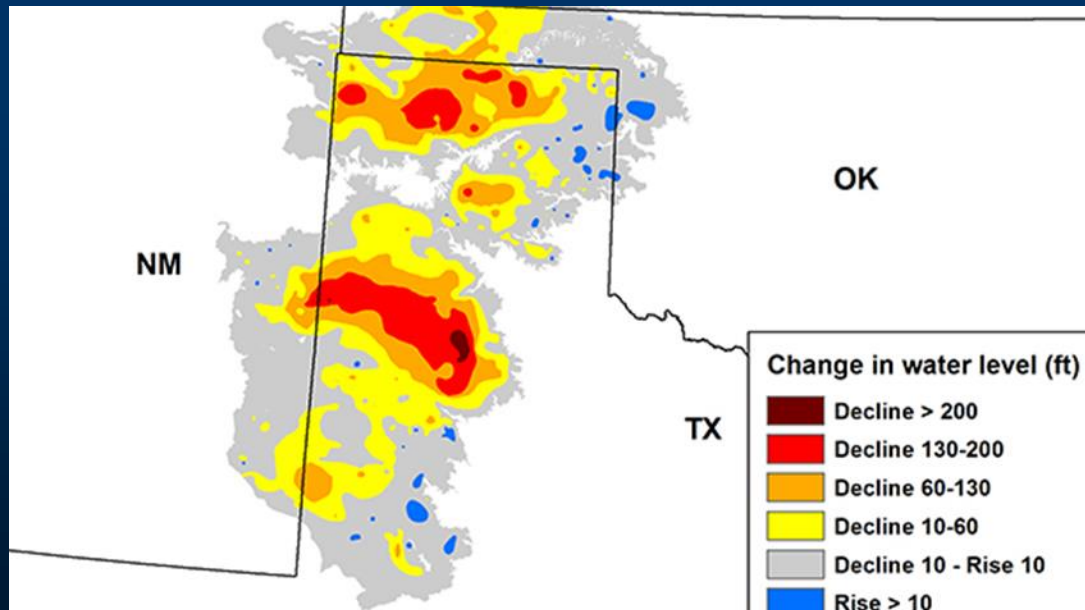
Created by: Texan by Nature and PLJV

Playas and Groundwater

- 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

Health of the Ogallala

- Massive historical declines
 - Cropland irrigation
 - Residential use



Source: <http://factsheets.okstate.edu>

Poll Question 2

- Primary channels of recharge through a playa includes
 - A) Fissures in a dry clay pan
 - B) Percolation through saturated clay soils
 - C) Annular ring
 - D) A and C
 - E) All of the above

Playas in Texas

- 23,037 playas
 - 4,080 functional
 - 5,631 functional but at risk
 - 13,326 not functional



Functional



Functional - at Risk



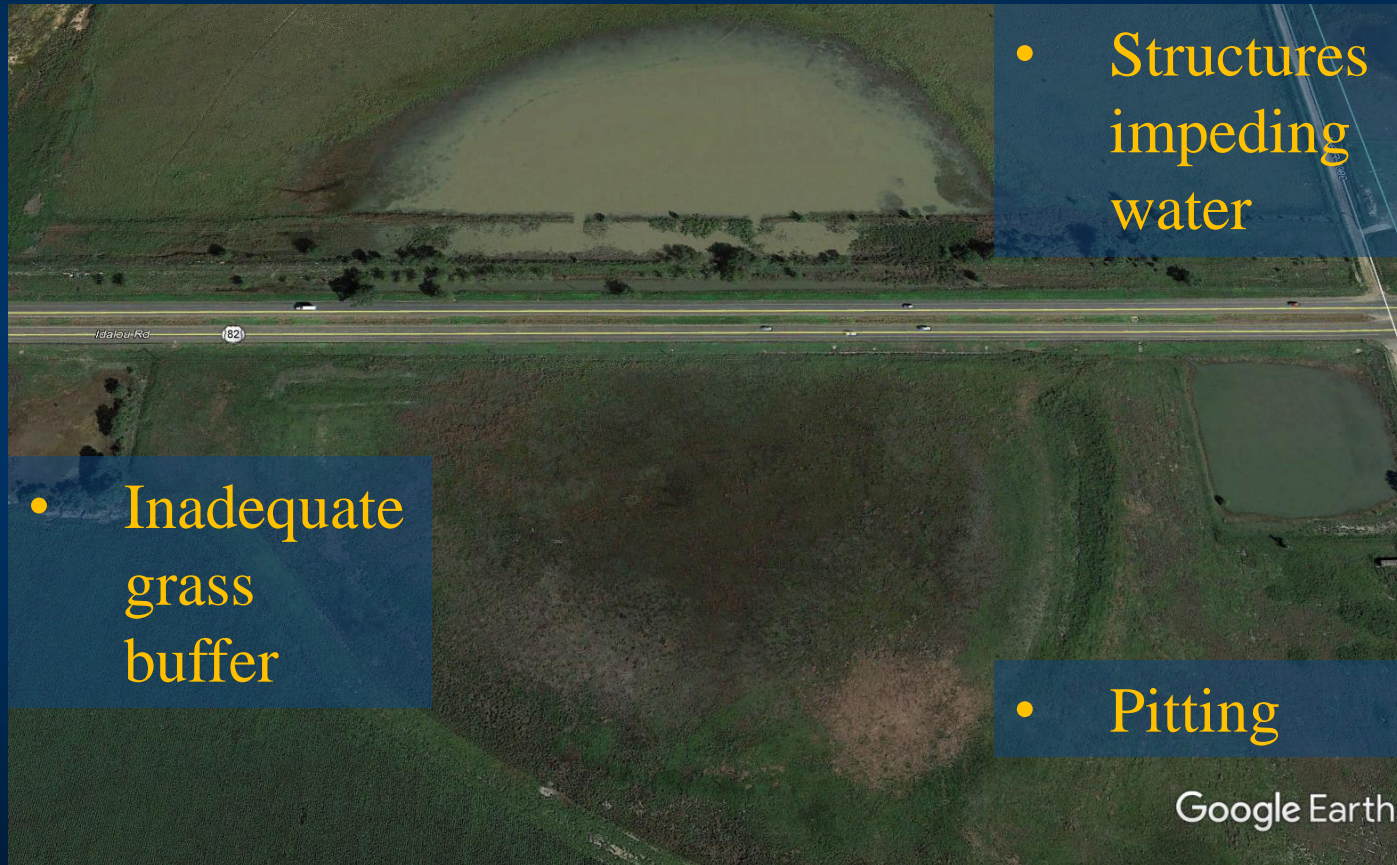
Not Functional



Not Functional



Not Functional



Poll Question 3

- Which factor does not affect playa functionality?
 - A) Lack of an adequate grass buffer
 - B) Structures impeding run-off
 - C) Water wells within the watershed
 - D) Pitting within the basin
 - E) Siltation of the basin

Texas Playa Conservation Initiative (TxPCI)



TxPCI Program Development

- 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
 - 10 year agreement attached – prevents future pit creation



Restoration



Restoration



Restoration



How to get Involved



Water for Texans & Wildlife

PlayasWorkForTexans.com



- Spread the word
- If you own a playa,
let's get to work

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