TexMesonet

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Meteorologist, Hydrologist

TexMesonet - Project Lead

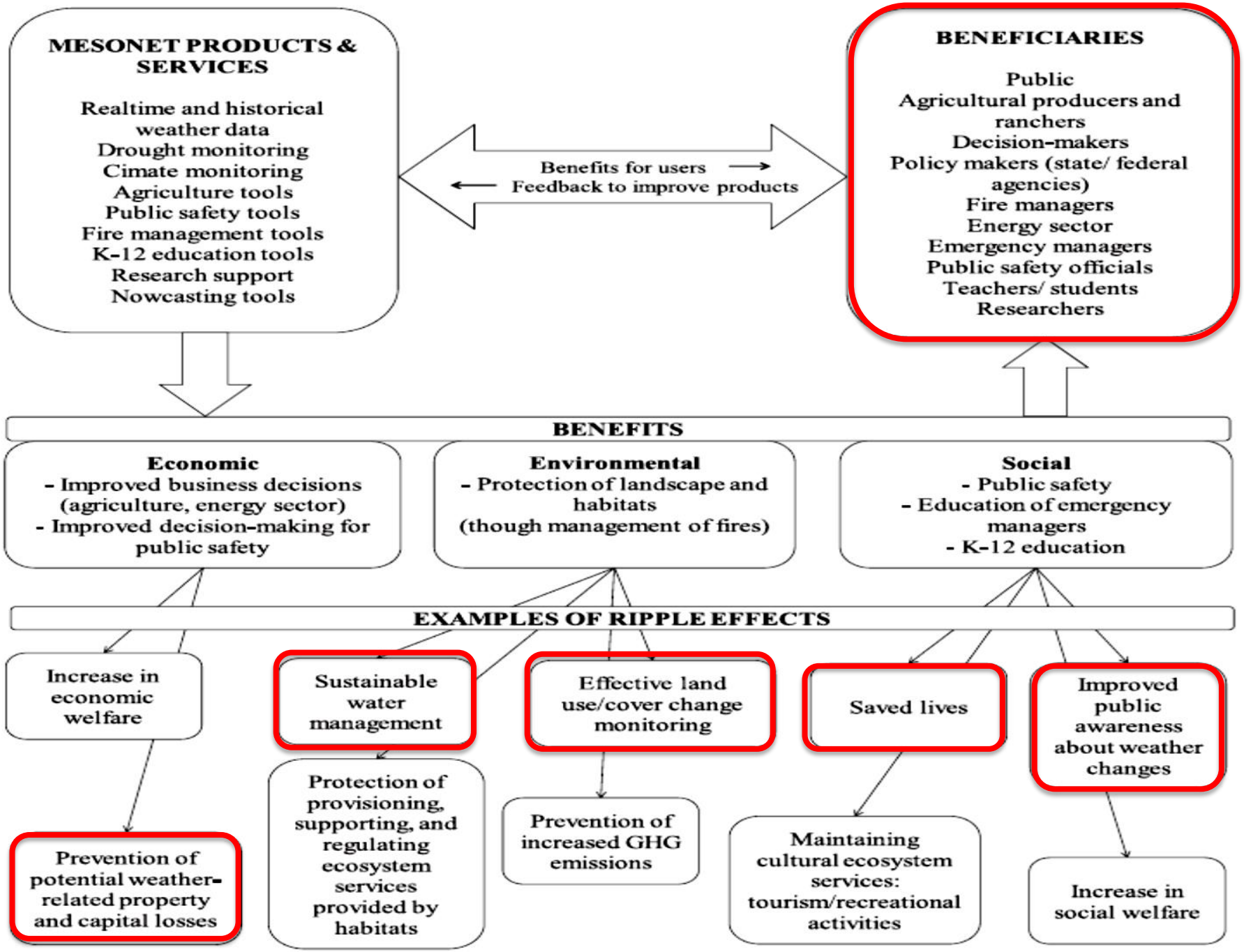
Texas Water Development Board*

** Unless specifically noted, this presentation does not necessarily reflect official Board positions or decisions.*

TexMesonet

- TexMesonet was envisioned as a direct response to the 2015/16 Memorial Day Floods.
- TexMesonet goal is to help mitigate the impacts of floods and extreme weather events.
- TexMesonet objectives are to:
  - Complete the water cycle to include surface, groundwater & atmospheric monitoring
  - Develop a statewide monitoring network
  - Integrate existing networks into the statewide network

    (i.e., network-of-networks)



Source: Benefits of a statewide mesonet. Ziolkowska et al., 2017, Weather, Climate and Society, Vol 9, pg 499-519.

La Escalera site - Pecos County

Secondary Site

- 10 ft tower
- 24’ x 24’ enclosure
- 4’H x 16’W hog panels as needed

Equipment

- 2m windspeed & direction
- 2m temperature & relative humidity
- Precipitation
- Soil moisture & temperature

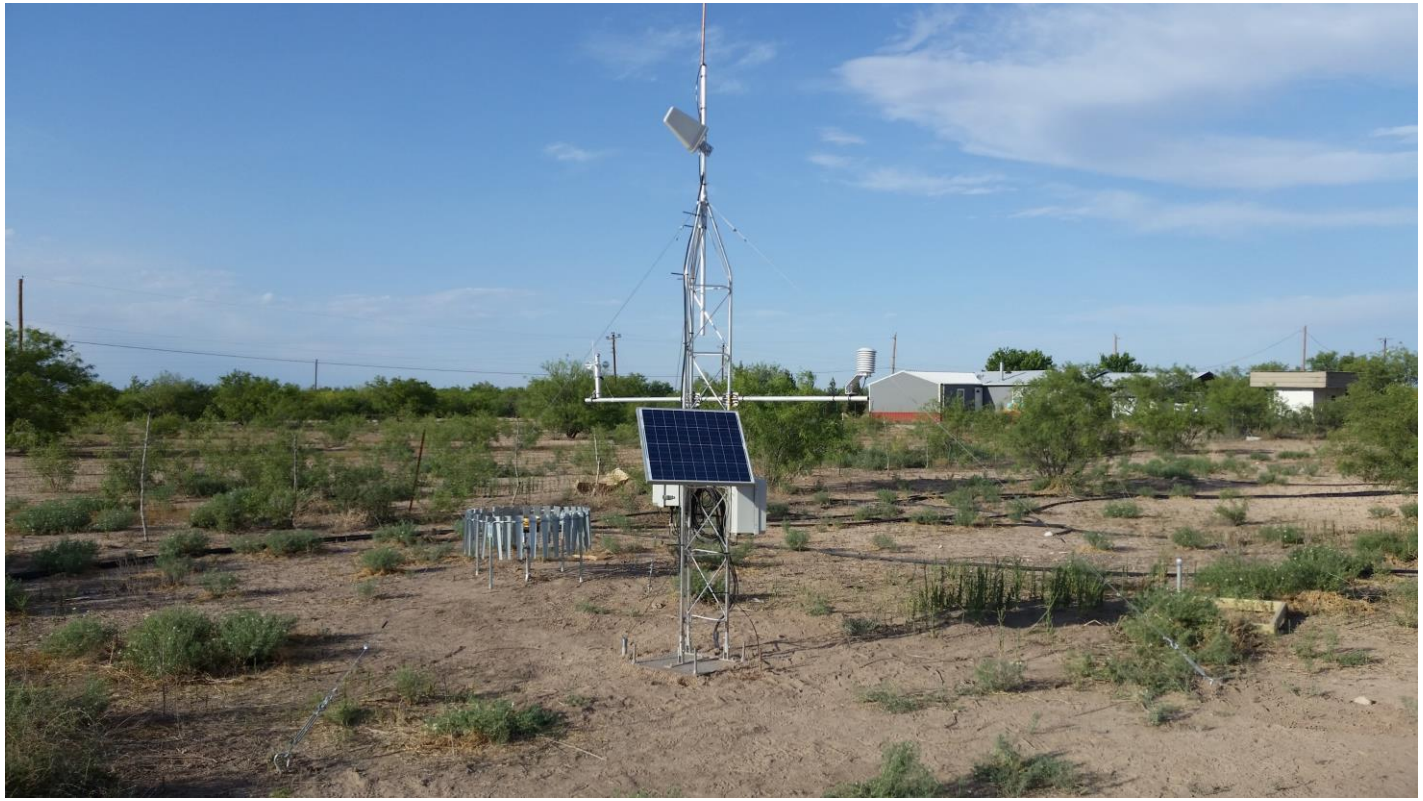
Primary Site

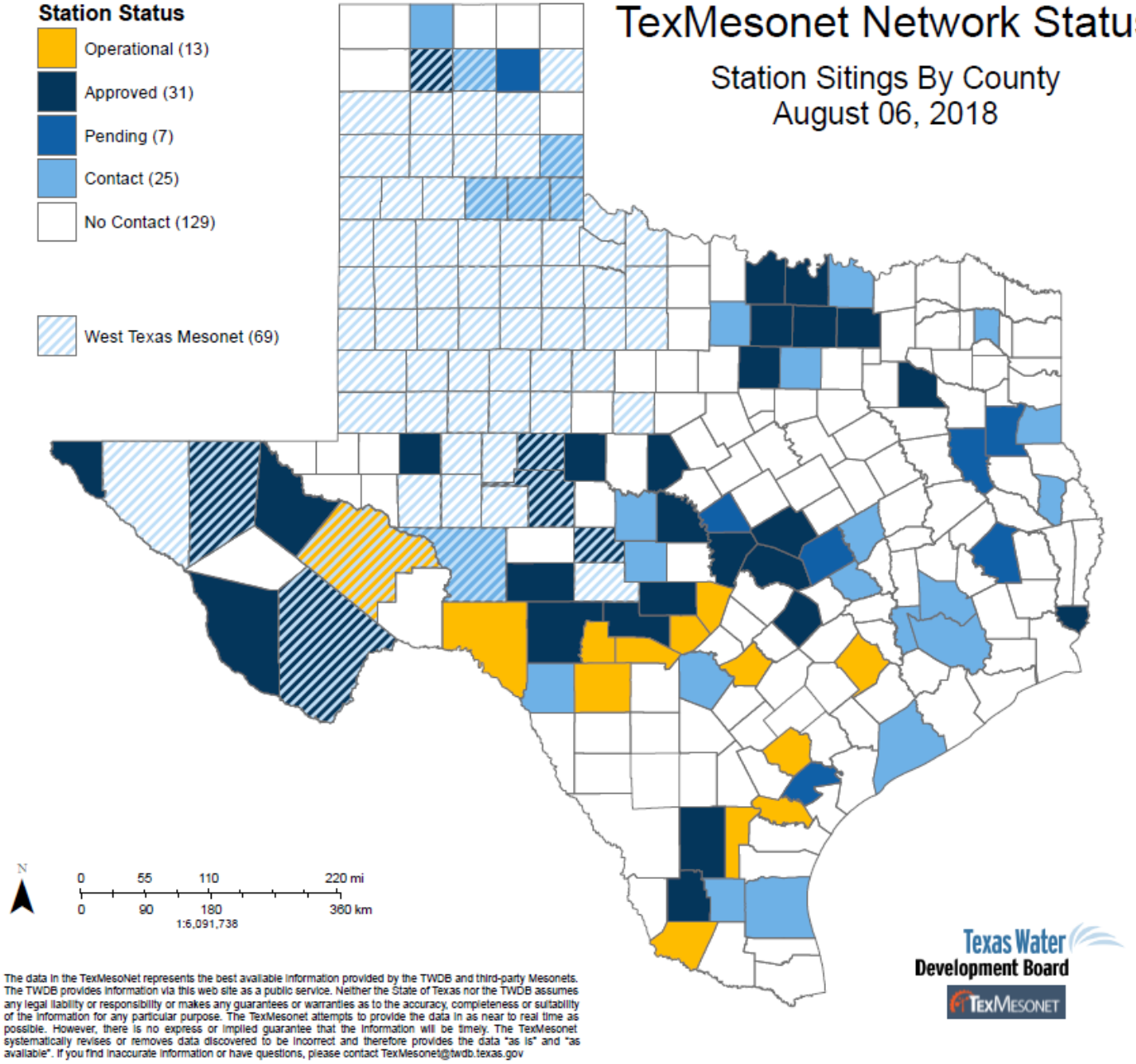
- 30 ft tower
- 40’ x 40’ enclosure
- 4’H x 16’W hog panels as needed

Equipment

- 2m windspeed & direction
- 2m temperature & relative humidity
- Precipitation
- Soil moisture & temperature
- 10 meter windspeed & direction
- 9 meter temperature
- Barometric pressure
- Solar radiation

Edwards Station – Pecos County





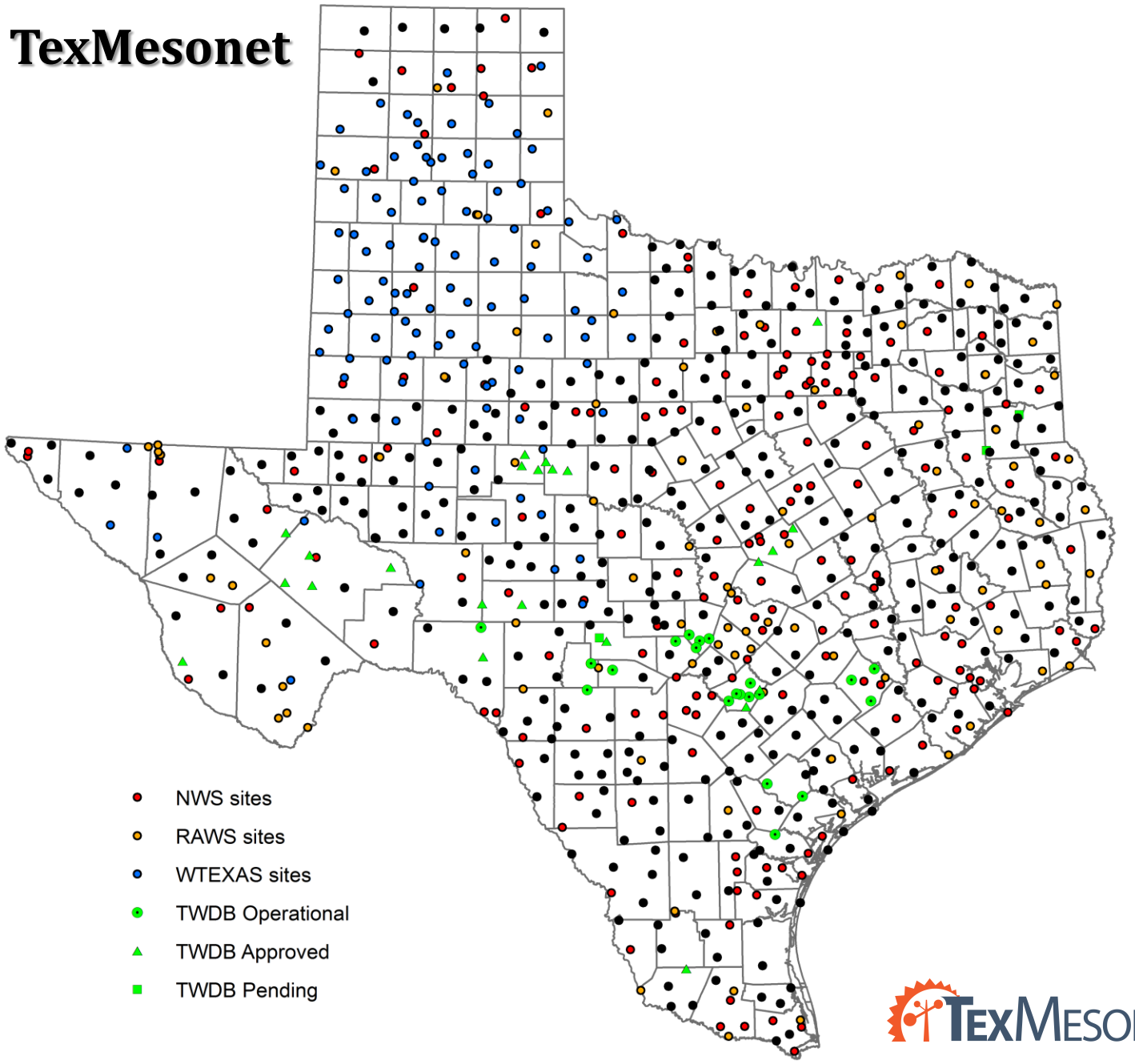
Status

- 36 sites
- 3 full time field staff
- 2 part-time IT staff
- 2 person installation

TexMesonet
State Coverage ~30%

TWDB & WTEXAS Mesonet
State Coverage ~48%

Idealized TexMesonet

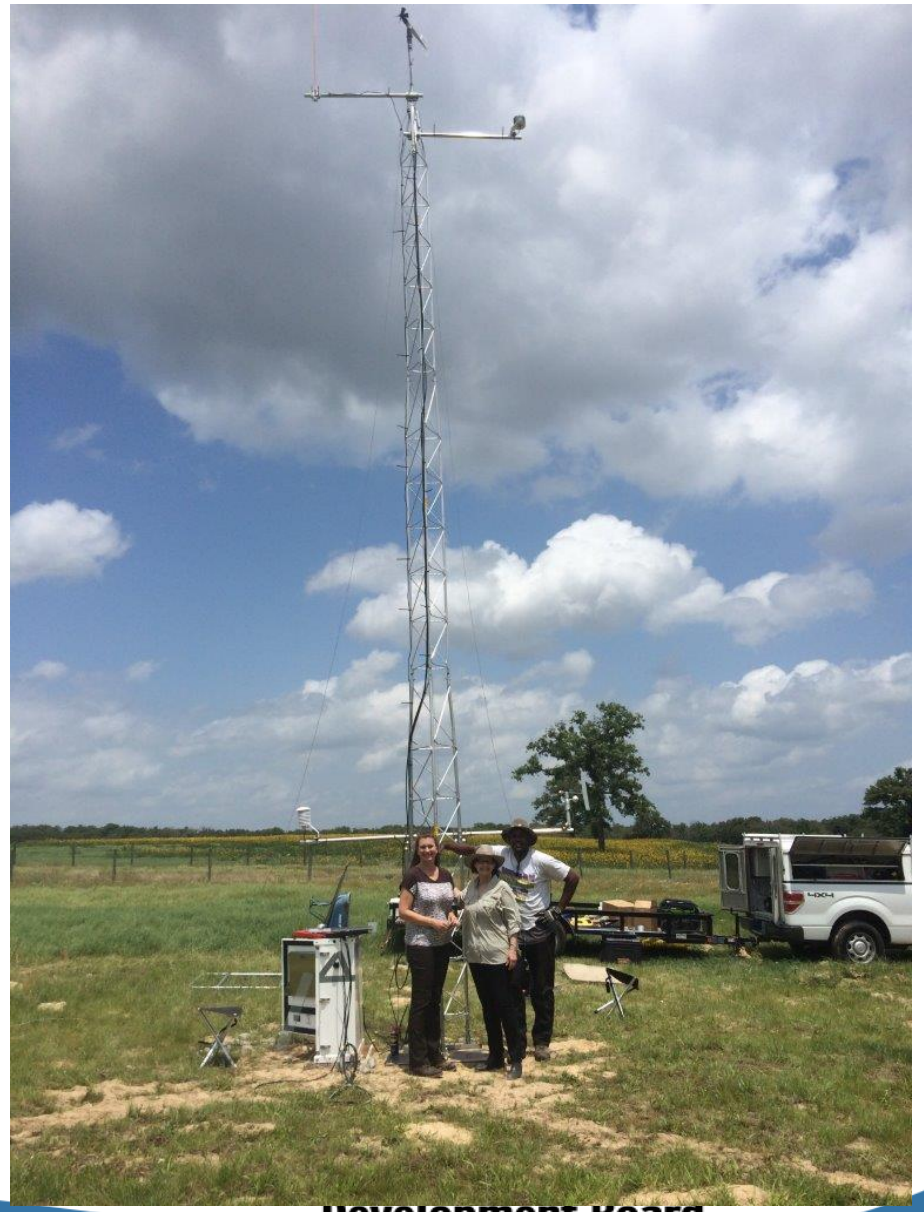


TexMesonet

Temporary TexMesonet field staff assisting with site installation

Dirk Aaron – Manager Clearwater UWCD

Ms. Jackson – TWDB Board Member
Kelly Vickers – Executive Administrator, Guadalupe County GCD



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