

The effect of groundwater fluctuation on evapotranspiration of inland saltgrass



Research team members:

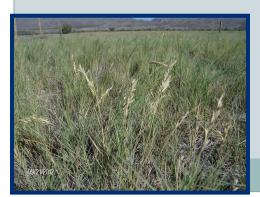
- Skylar Lyle REU Participant
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Study Site

Caballo Reservoir, NM (Saltgrass testbed)

Objectives:

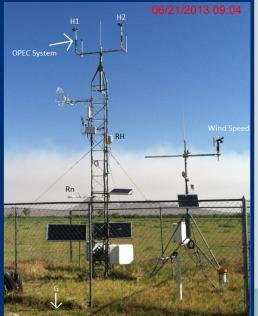
- Quantify ET of saltgrass under different depths to groundwater
- Determine if inland saltgrass can suppress germination of saltcedar
- Determine if there is a relationship between salinity, growth and ET of saltgrass





Scope

- Measure evapotranspiration (ET) of saltgrass using energy budget method
- Measure chemical properties of soil and groundwater from the site
- Make recommendations to manage land after saltcedar removal in order to improve diversity of native vegetation and control spread of saltcedar



- Major Outcomes of Research
- A sharp increase in ET occurred after depth to groundwater decreased from over 4 ft to 3.5 ft
- Salinity decreases
 with soil depth
 indicating downward
 salt movement via
 soil drainage







