

Climate and Conservation

2018 Texas Land Conservation Conference

Dr. Matthew Berg

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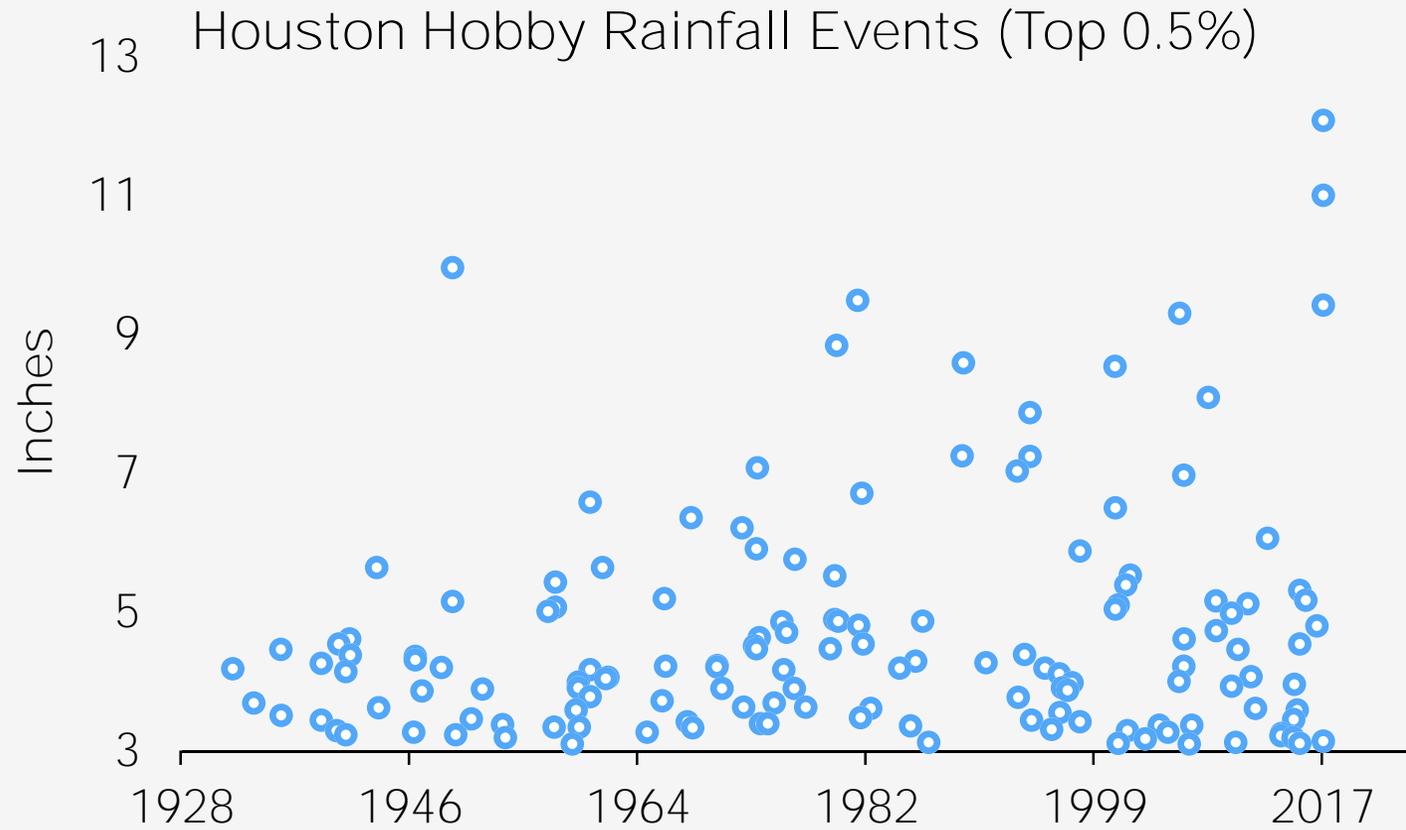


*Location:
Southeast Texas*

*Trend:
Increasing rainfall intensity*

*Issue:
Flooding*





Location: Southeast Texas

Trend: Increasing rainfall intensity

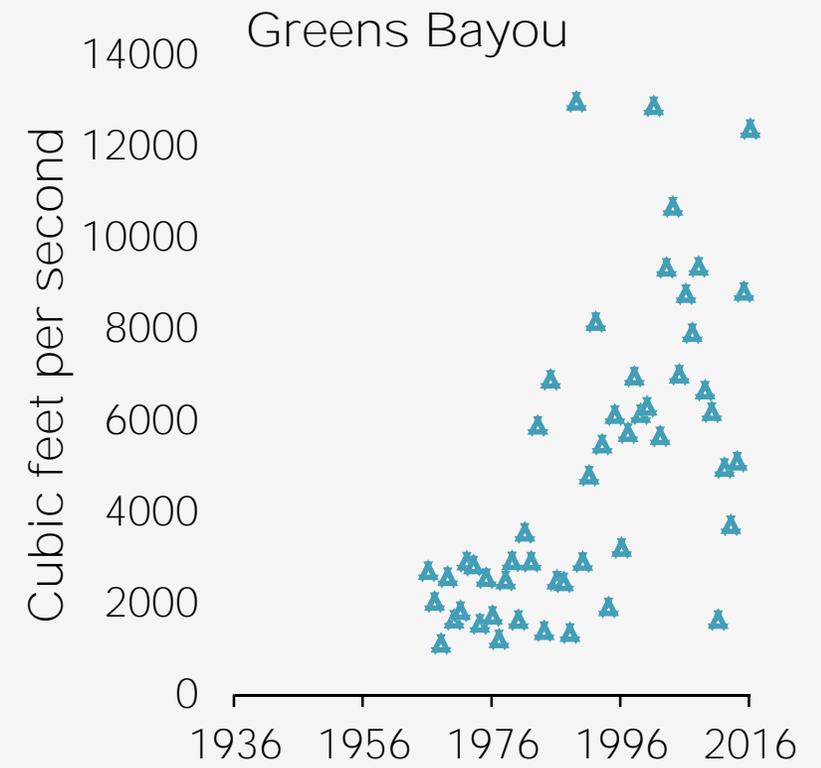
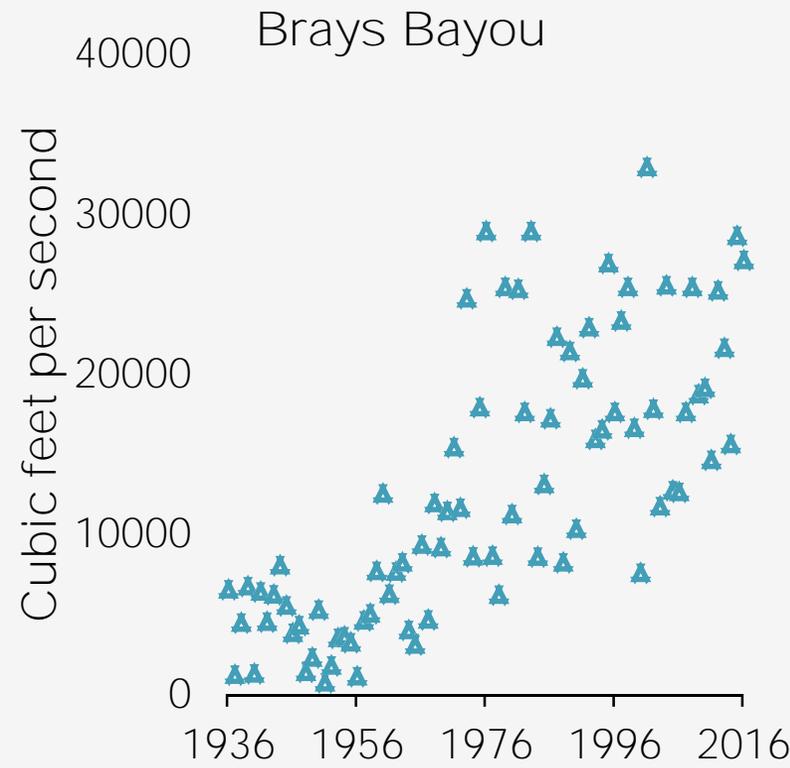
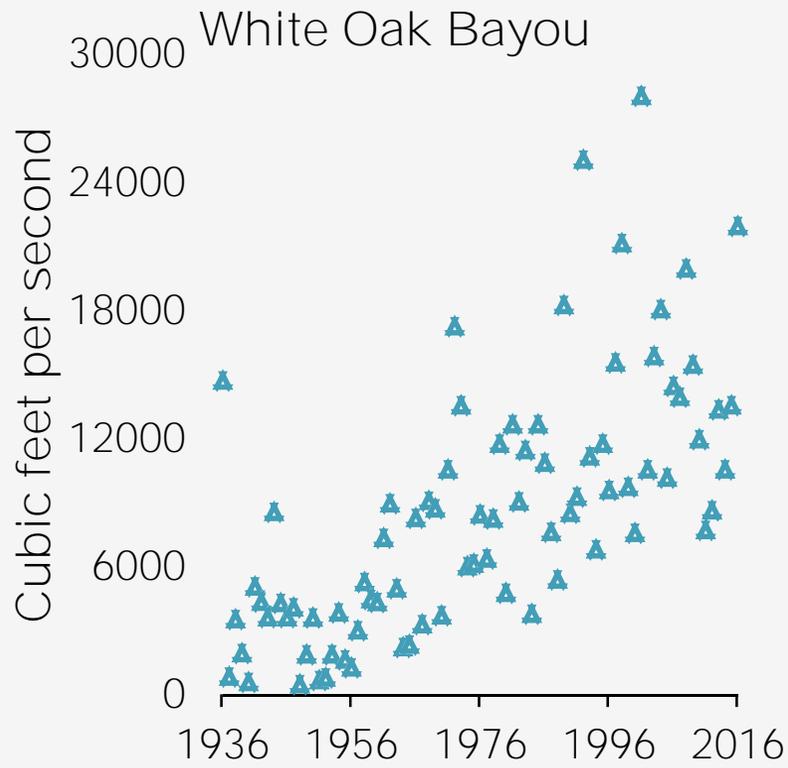
Issue: More frequent bankfull streamflows, channel migration, land loss



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Trend: Increasing rainfall intensity

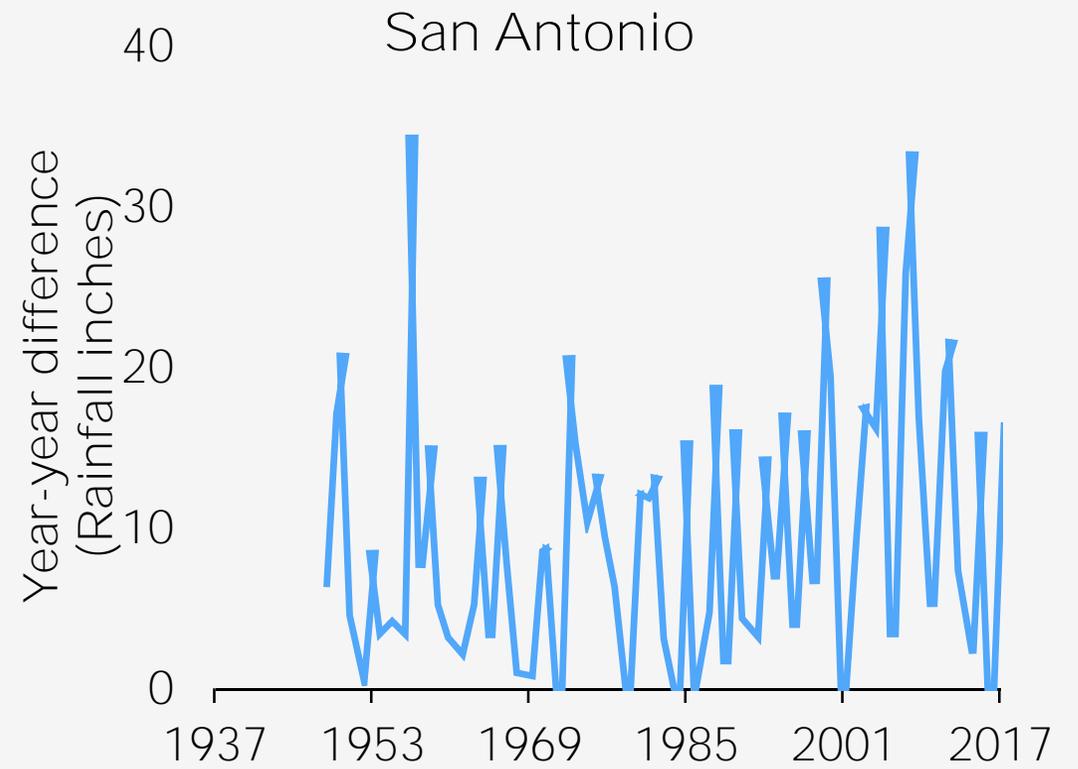
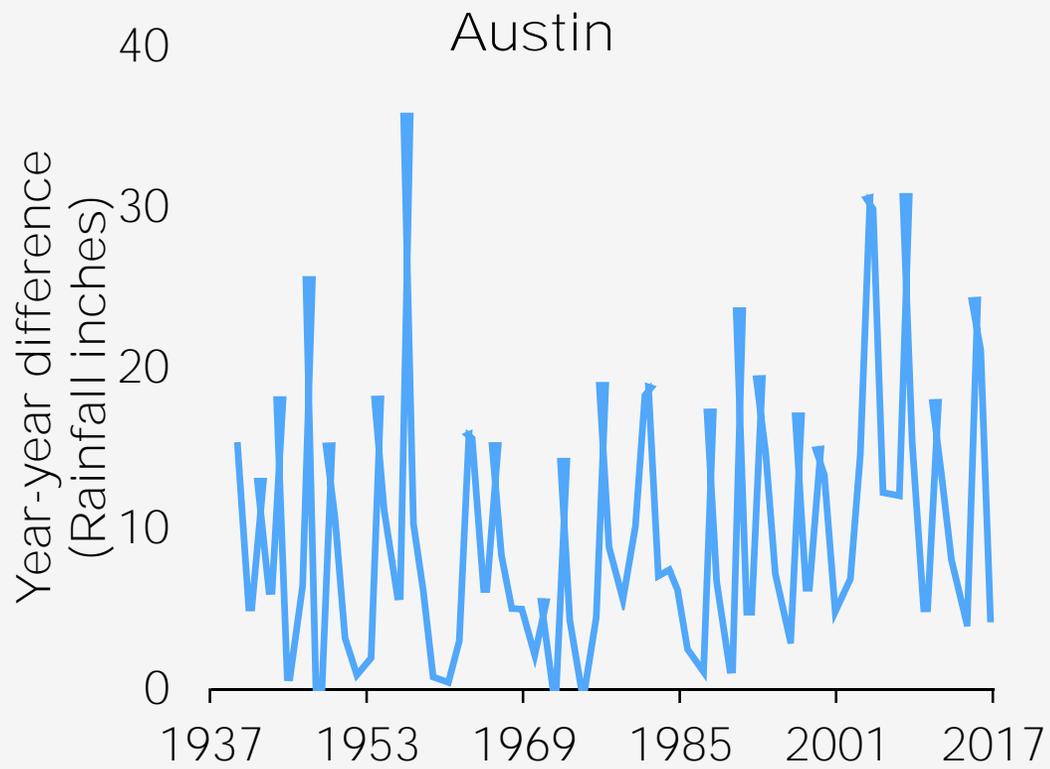
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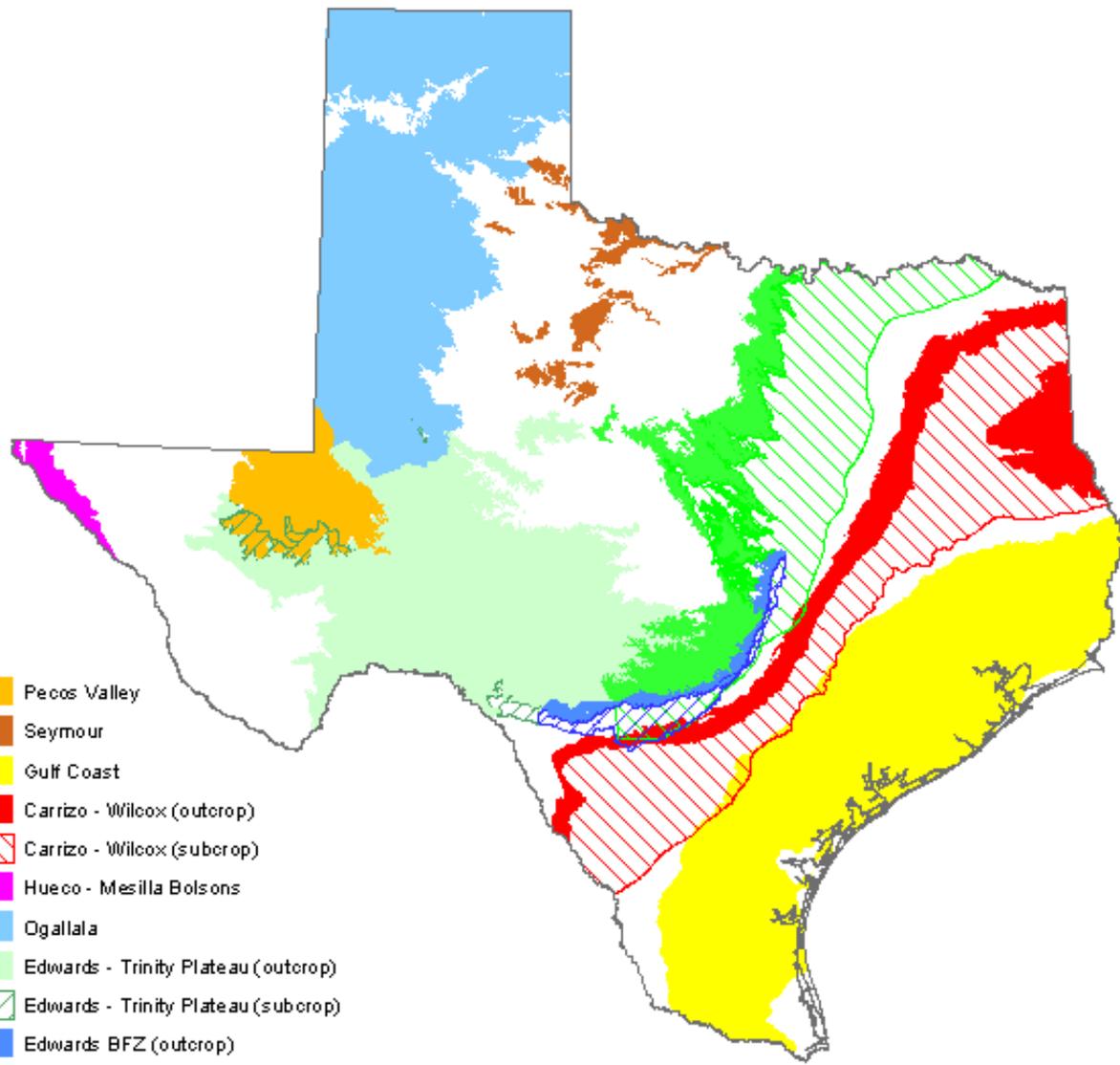


Location: Central Texas

Trend: Rainfall variability

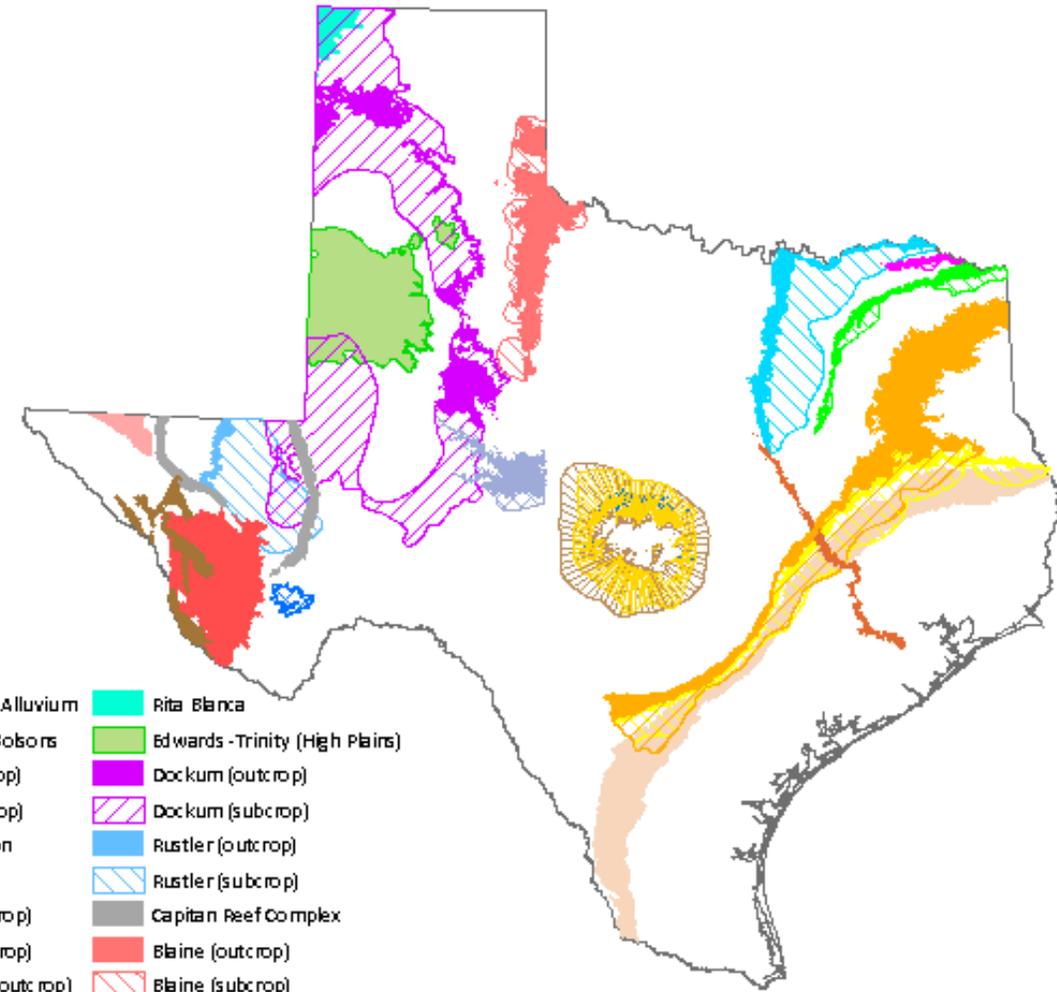
Issue: Flood-drought cycles, unreliable water supplies





- Pecos Valley
- Seymour
- Gulf Coast
- Carrizo - Wilcox (outcrop)
- Carrizo - Wilcox (subcrop)
- Hueco - Mesilla Bolsons
- Ogallala
- Edwards - Trinity Plateau (outcrop)
- Edwards - Trinity Plateau (subcrop)
- Edwards BFZ (outcrop)
- Edwards BFZ (subcrop)
- Trinity (outcrop)
- Trinity (subcrop)

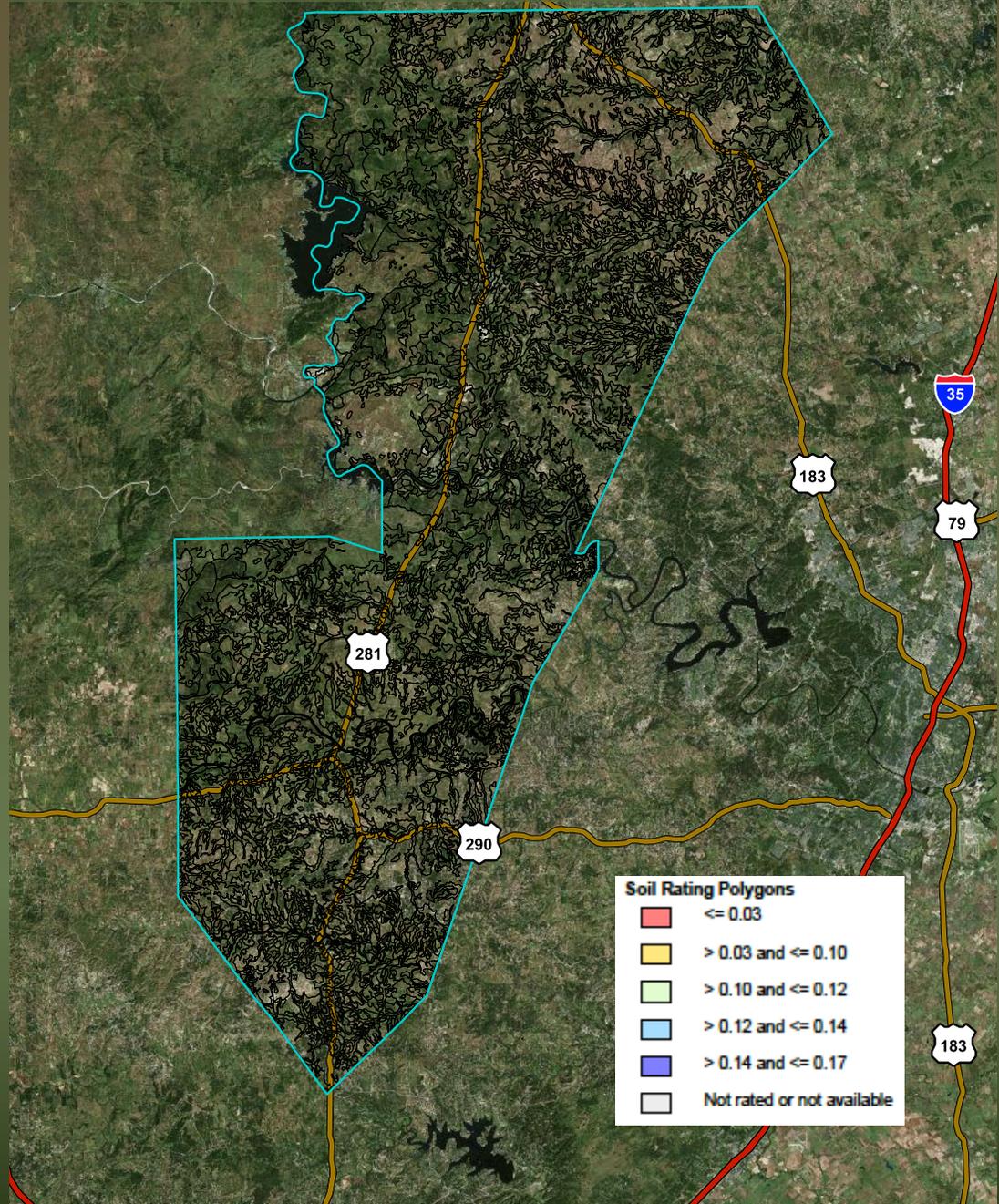
Major Aquifers



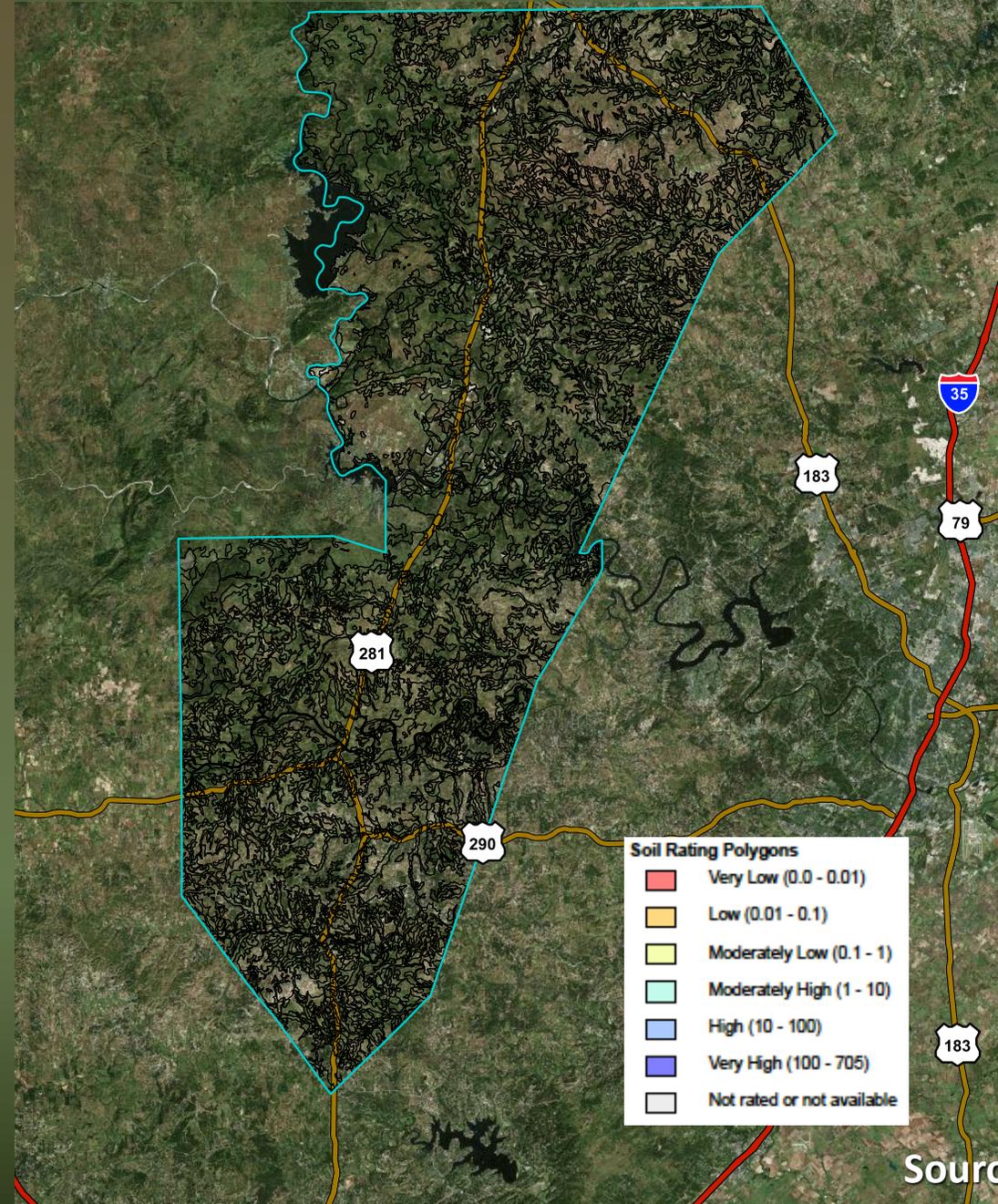
- Brazos River Alluvium
- West Texas Bolsons
- Lipan (outcrop)
- Lipan (subcrop)
- Yegua Jackson
- Igneous
- Sparta (outcrop)
- Sparta (subcrop)
- Queen City (outcrop)
- Queen City (subcrop)
- Nacatoch (outcrop)
- Nacatoch (subcrop)
- Blossom (outcrop)
- Blossom (subcrop)
- Woodbine (outcrop)
- Woodbine (subcrop)
- Rita Blanca
- Edwards - Trinity (High Plains)
- Dogkum (outcrop)
- Dogkum (subcrop)
- Rustler (outcrop)
- Rustler (subcrop)
- Capitan Reef Complex
- Blaine (outcrop)
- Blaine (subcrop)
- Bone Spring - Victoria Peak
- Marble Falls
- Marathon
- Ellenburger - San Saba (outcrop)
- Ellenburger - San Saba (subcrop)
- Hickory (outcrop)
- Hickory (subcrop)

Minor Aquifers

Soil Water Capacity



Soil Infiltration Rate



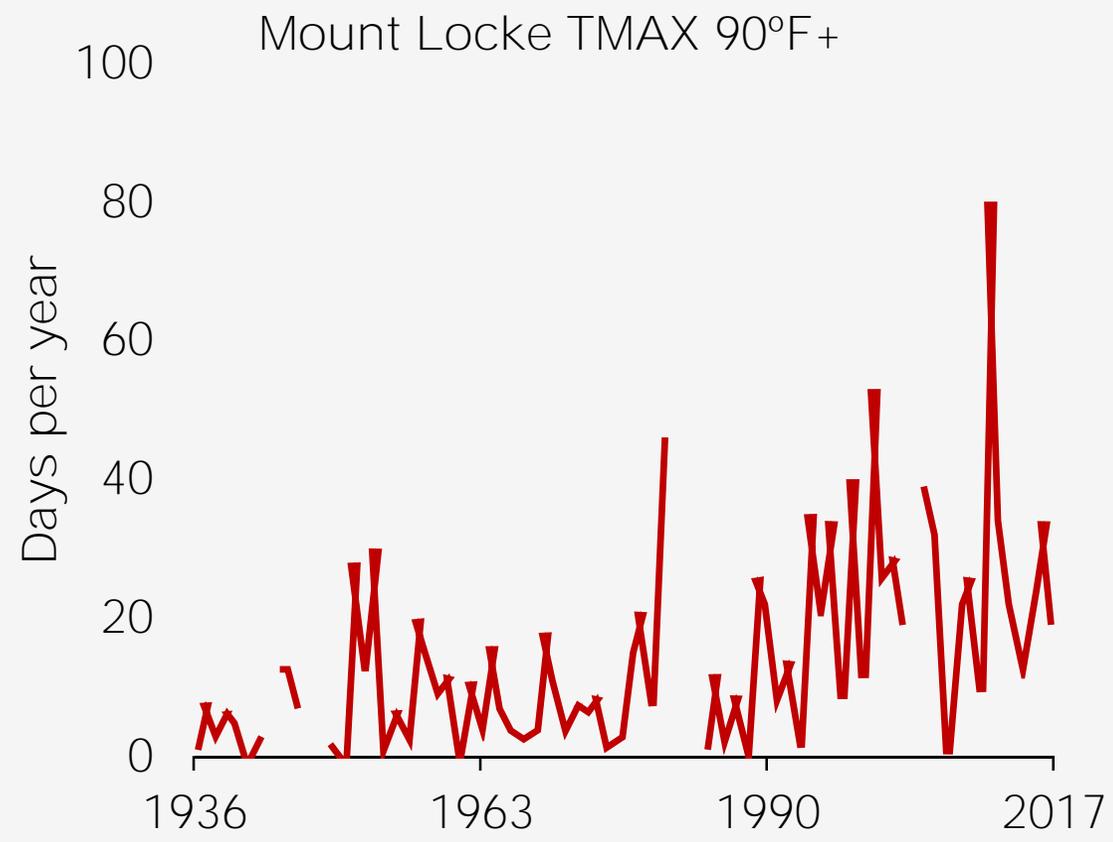


Location: West Texas Mountains

Trend: Increasing extreme temperatures

Issue: Migrations, ecosystem collapses, local extinctions

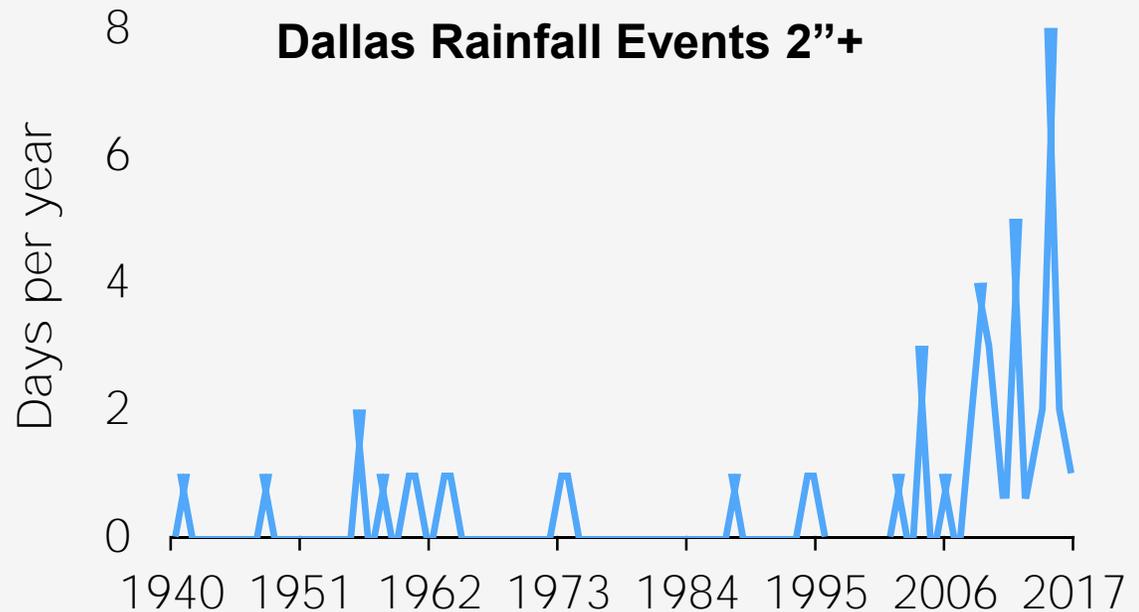
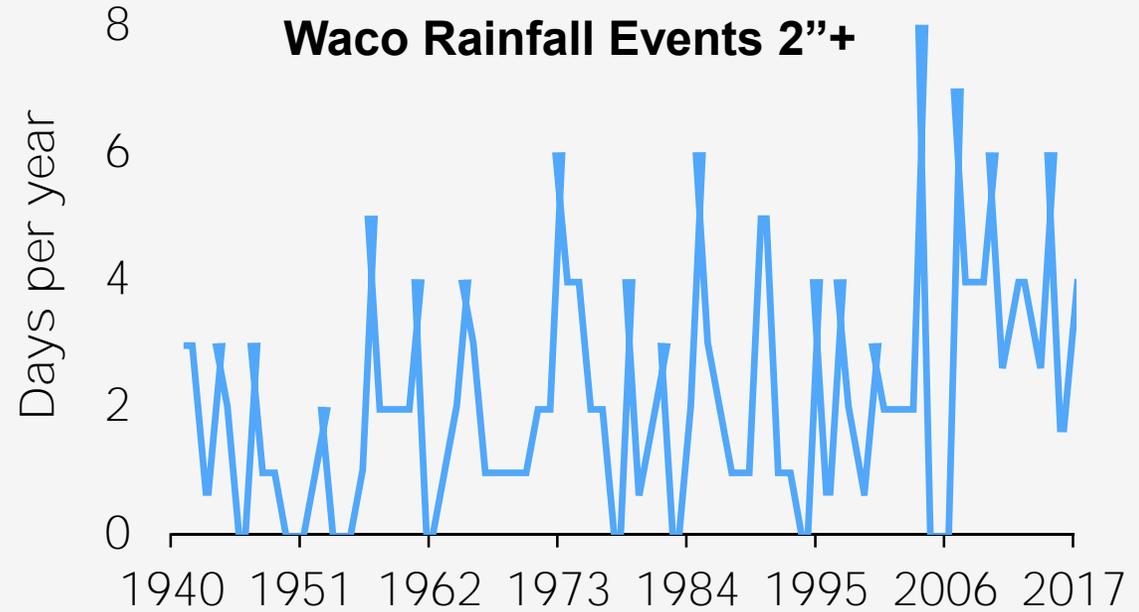




*Location:
Blackland Prairie*

*Trend:
Increasing rainfall intensity*

*Issue:
Soil erosion, nitrogen loss,
coastal dead zones*



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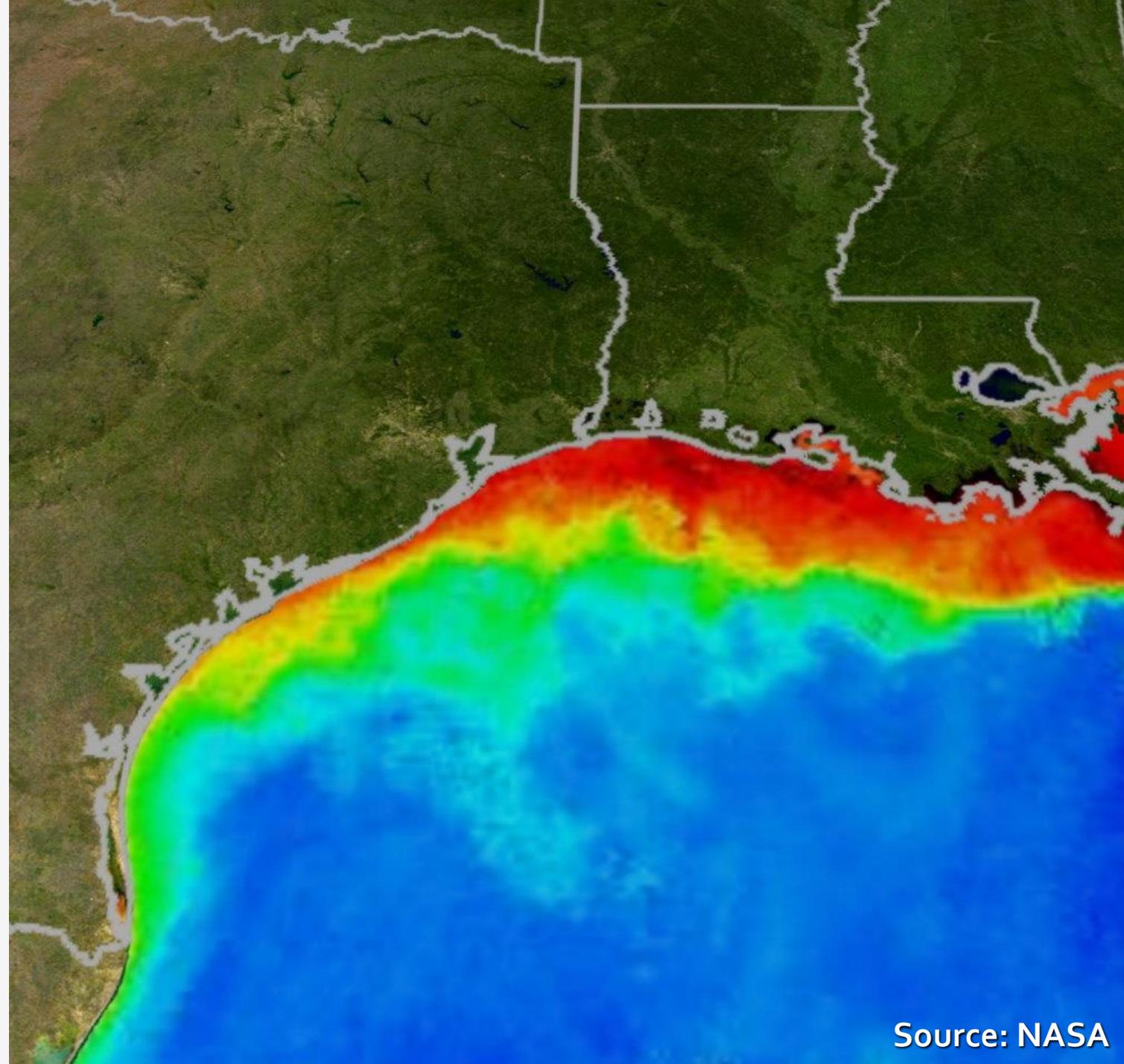
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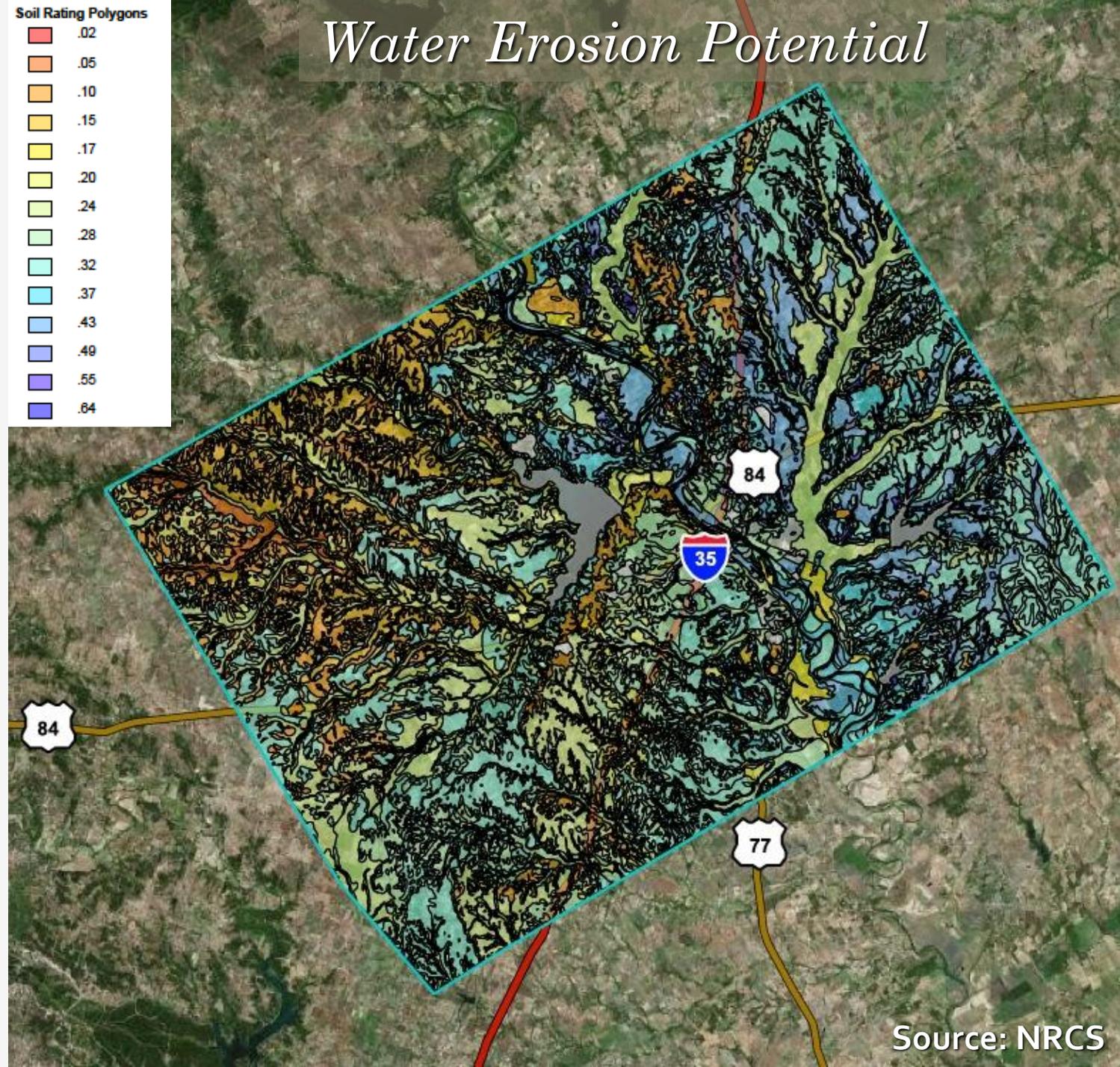


Water Erosion Potential

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