



Soils at Oso Bay Wetlands  
Preserve and  
Hans & Pat Suter Wildlife  
Refuge

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# Soil – “Sponge” Model



Mineral Particles – “glued together” into aggregates. Fungi produce glomalin (glue-like substance) that binds the particles

Pores in soil are like the holes in a sponge – allow water, air, and root movement in soils

## Helpful Resources:

Walter Jehne, Australian Soil Microbiologist  
Part of a lecture on YouTube - WGBH Forum Network

The Soil "Sponge"  
<https://youtu.be/qo3vyminy6E>

Lessons and Activities - Soils  
Soils 4 Teachers

<https://www.soils4teachers.org/lessons-and-activities/>

# Review:

## Soil Orders in South Texas

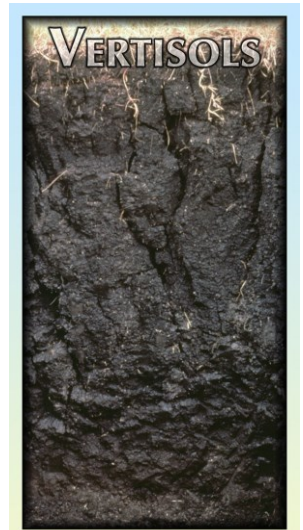
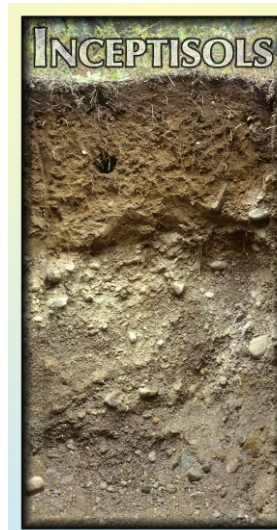
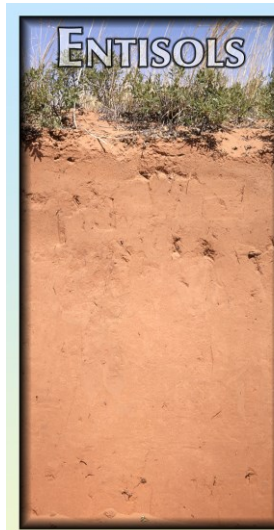
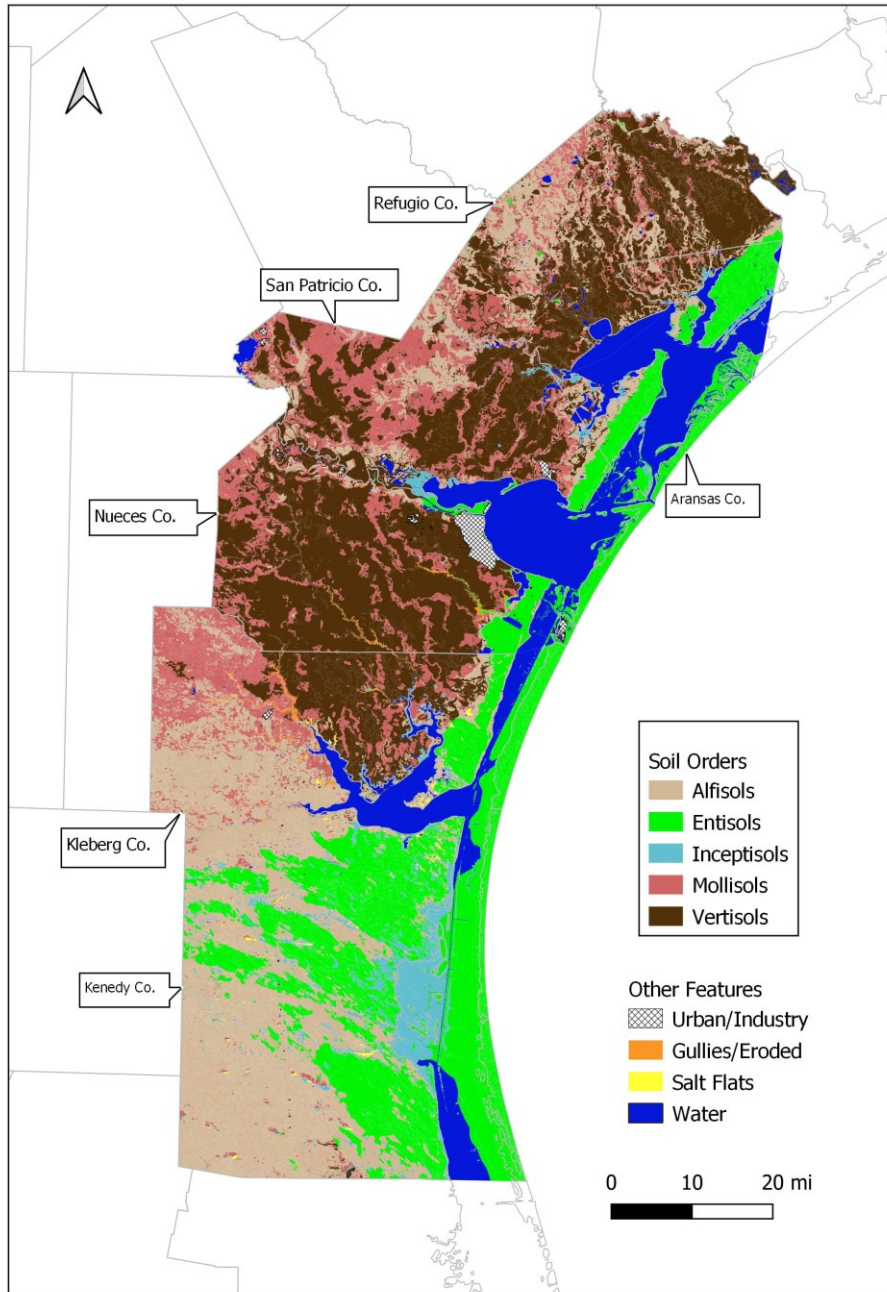
Alfisols (**Al** & **Fe**) – clay enriched subsoil

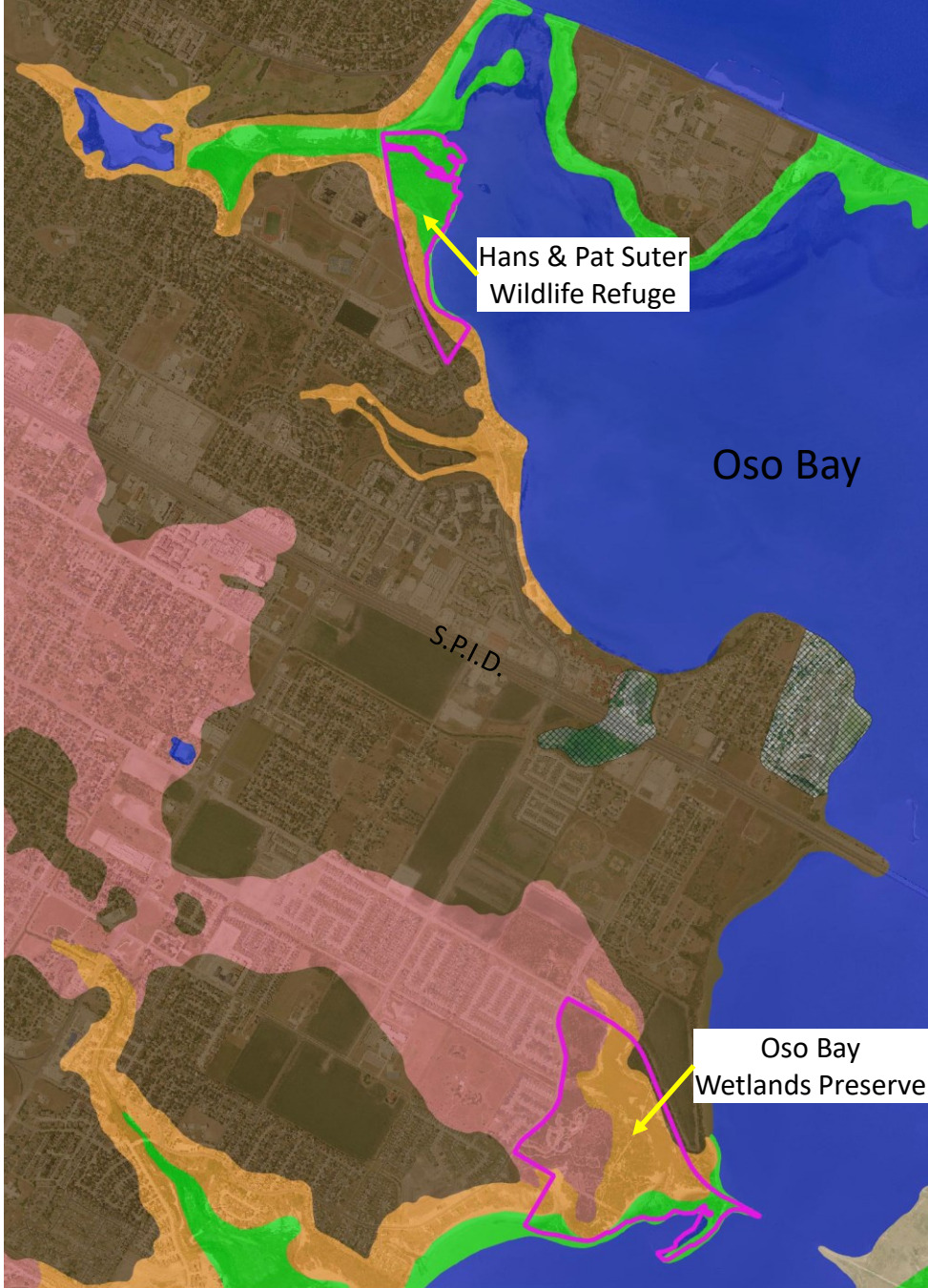
Entisols (**Recent**) – unaltered parent material, no diagnostic horizons

Inceptisols (Latin: **Inceptum**, beginning) – some alteration of parent material

Mollisols (Latin: **Mollis**, soft) – “prairie soils”, dark

Vertisols (Latin: **Verto**, turn) – clayey, shrink/swell



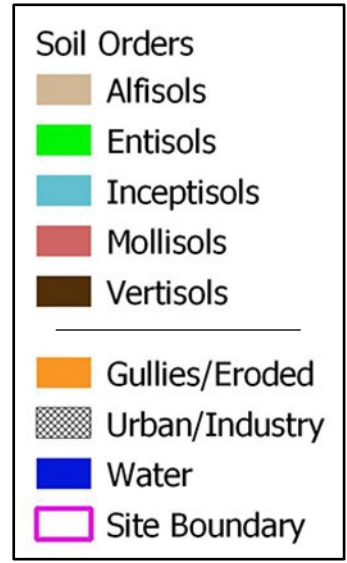


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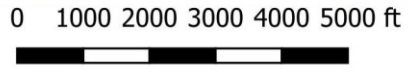
Oso Bay

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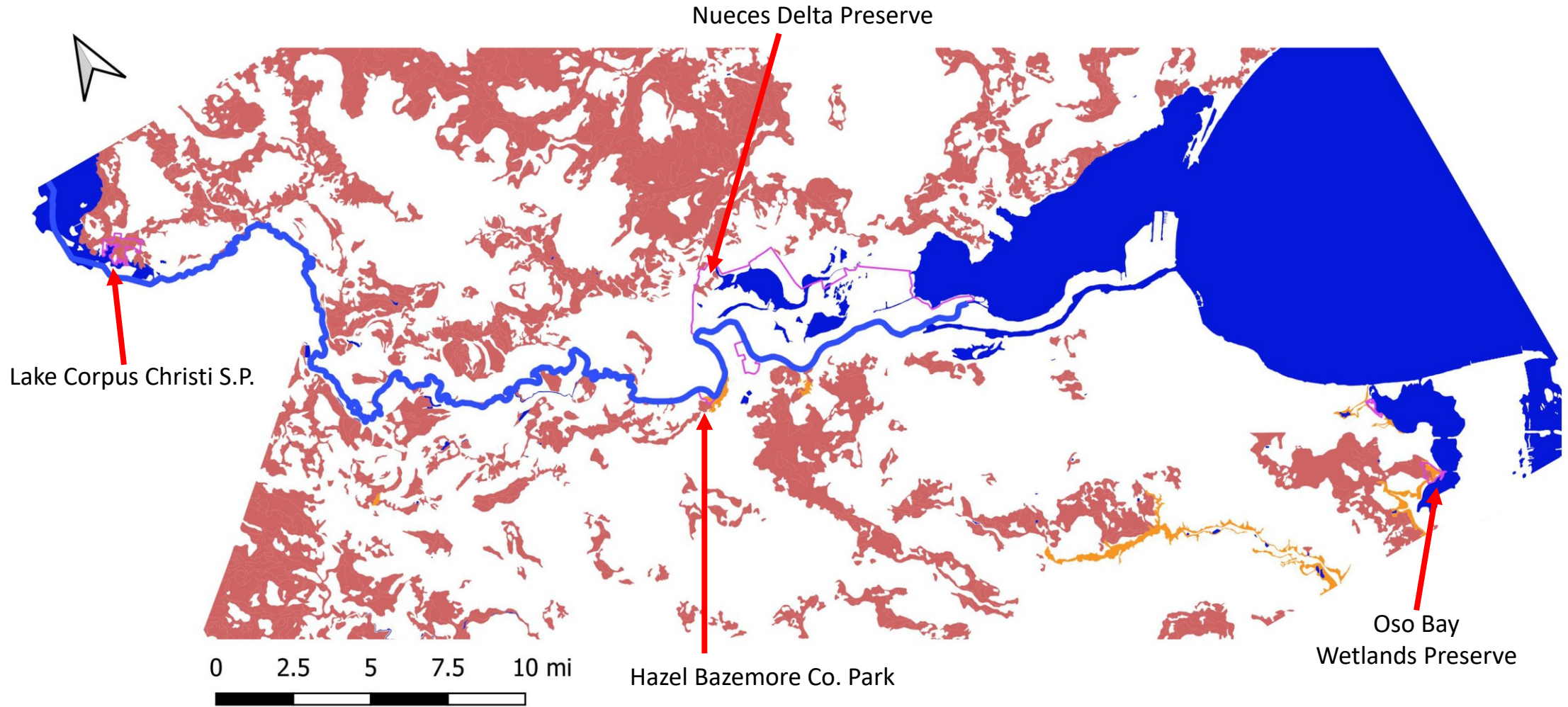
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Based on USDA-NRCS, SSURGO database for Nueces Co., published 11 June 2020

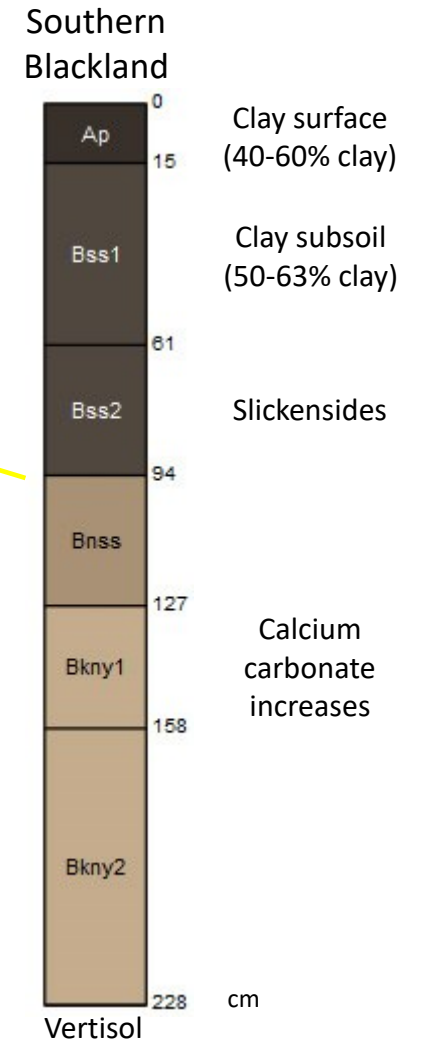
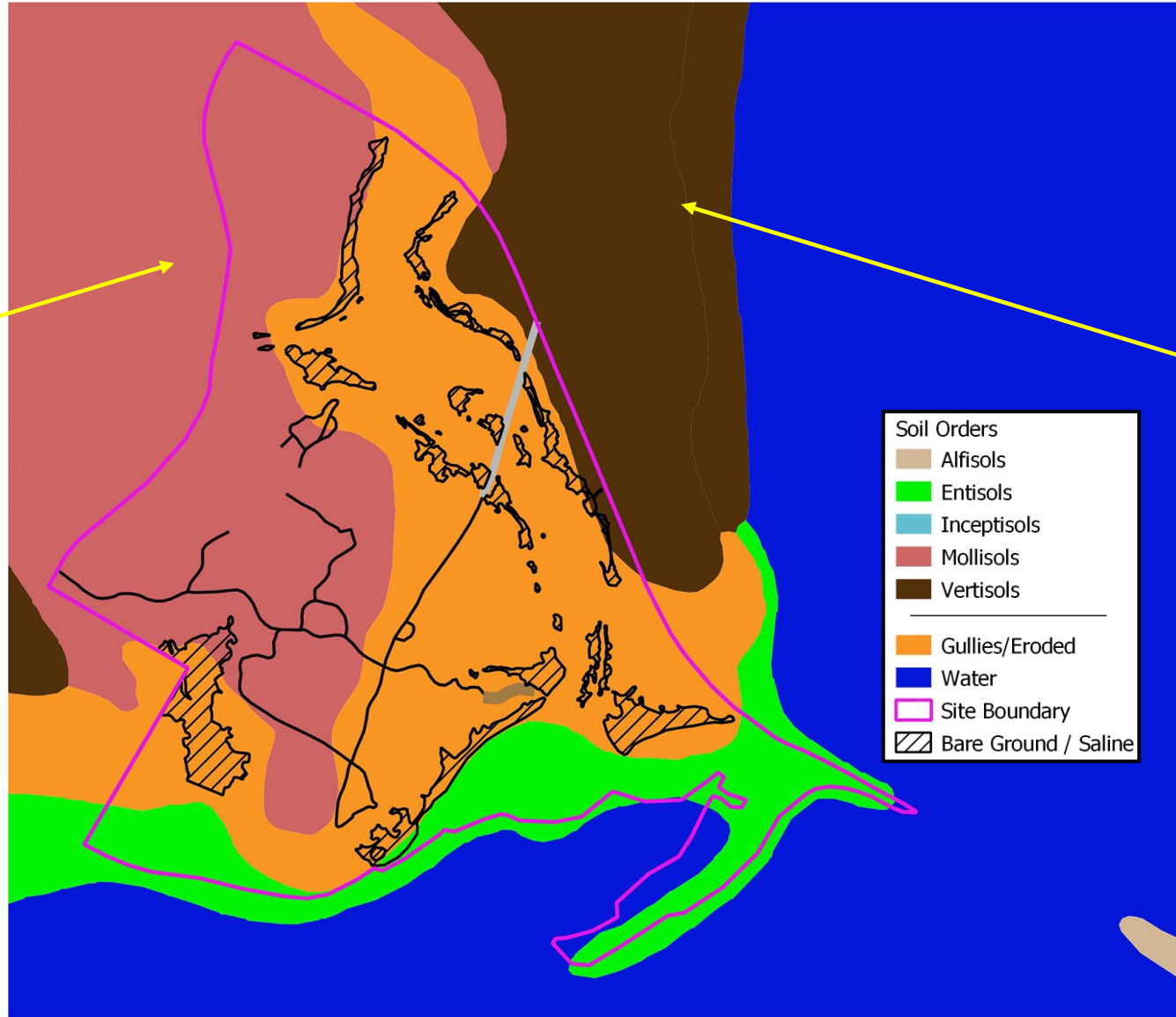
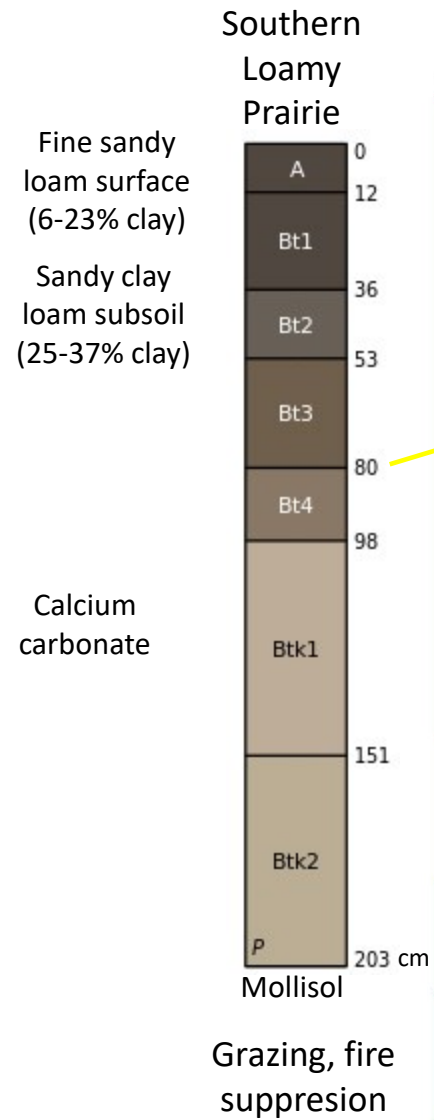


# Distribution of Mollisols



Based on USDA-NRCS, SSURGO  
database for Nueces Co., published 11  
June 2020

# Oso Bay Wetlands Preserve

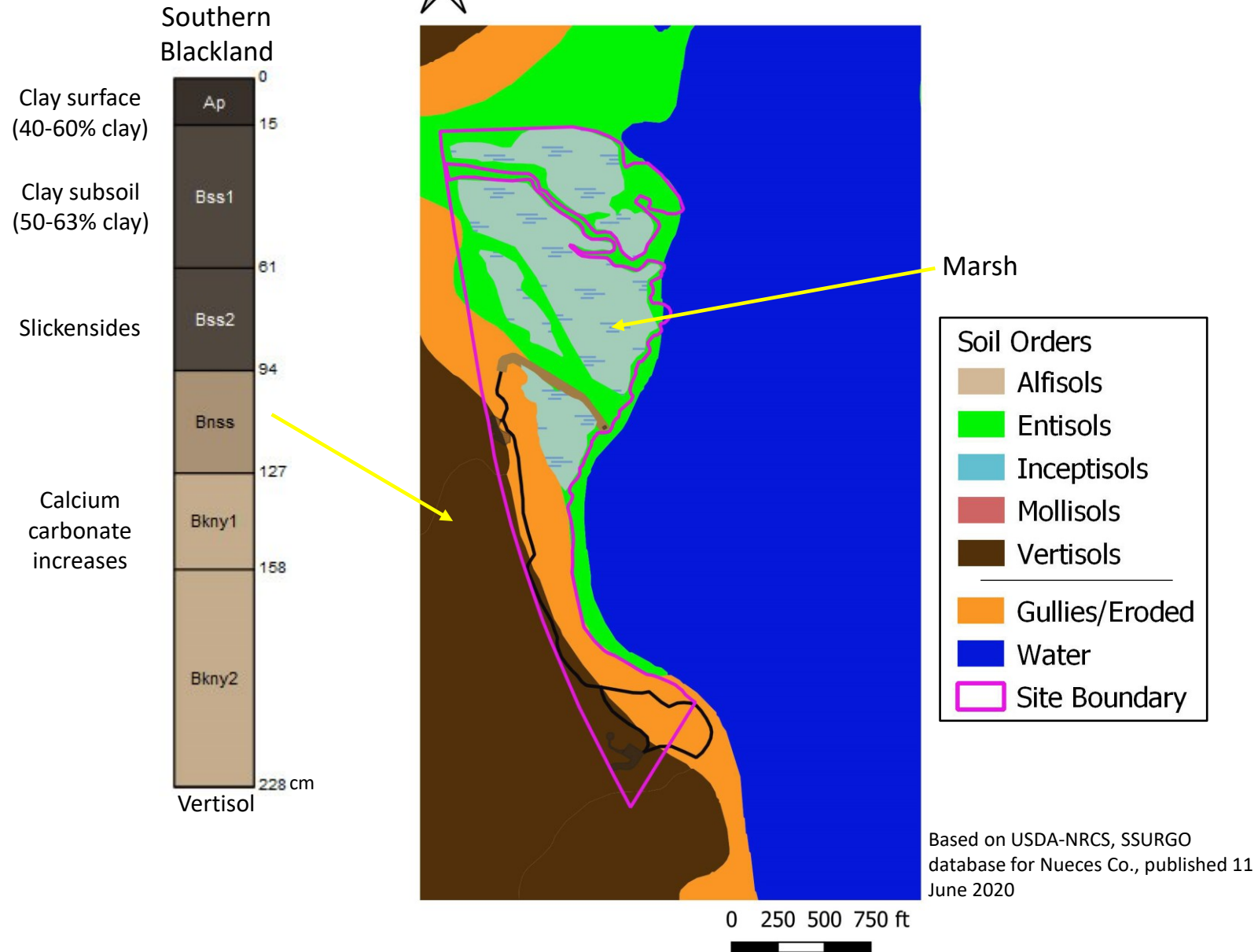


0 500 1000 1500 ft

Based on USDA-NRCS, SSURGO database for Nueces Co., published 11 June 2020



# Hans & Pat Suter Wildlife Refuge







0 250 500 750 ft

