



SOIL AND PLANT SCIENCE DIVISION

Technical Soil Services

South Central Soil Survey Region

Nacogdoches, Ruston, and Pine Bluff Major Land Resource Area (MLRA) Soil Survey Offices (SSOs)

East Texas Pond Investigation

Purpose

Staff in the South Central Soil Survey Region conducted a pond site determination at an East Texas location to identify suitability for the construction of a water-retaining structure and available cost-share incentives (fig. 1).

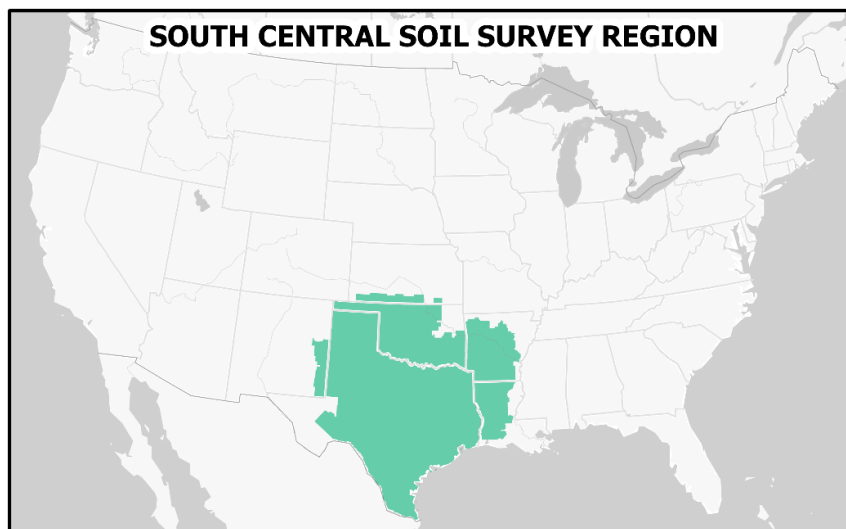


Figure 1.—Map of the South Central Soil Survey Region.

Background

The land uses in the Northeast Texas region have shifted, and much of the available agricultural land is used by producers for livestock production, wildlife habitat, and pasture grazing.



In mid-August, an NRCS producer in Paris, Texas, needed additional water for the producer's cattle operation and requested technical soil services for a potential pond site. Sara Russell, a soil scientist with the Nacogdoches, Texas, SSO teamed up with Engineering Technician Ryan Eatherly and Soil Conservationist Jansen Spann of the Paris, Texas, NRCS field office, and conducted a soils assessment at the potential pond site location (fig. 2).

During the assessment, staff evaluated soil properties, including clay percentage, fragment presence, and bedrock depth, to identify if the soil was conducive for pond construction. Depth to bedrock or a significant clay decrease are always water-retention structure concerns for the Northeast Texas area.



Figure 2.—Location of the potential pond site.

Key Outcomes

The property does have adequate texture for retaining water, a good watershed position to accumulation, and no rock intrusions, which allows the producer the ability to proceed with pond construction.

Some properties are not favorable for traditional pond construction. This occurs for various reasons, but there are feasible alternatives, including water to be piped in from a well and held in troughs. NRCS staff strive to work with landowners to meet their needs no matter the size of their operation or any barriers that may lie within each unique situation.