The Western Frontier: Shortleaf Pine Restoration in Texas

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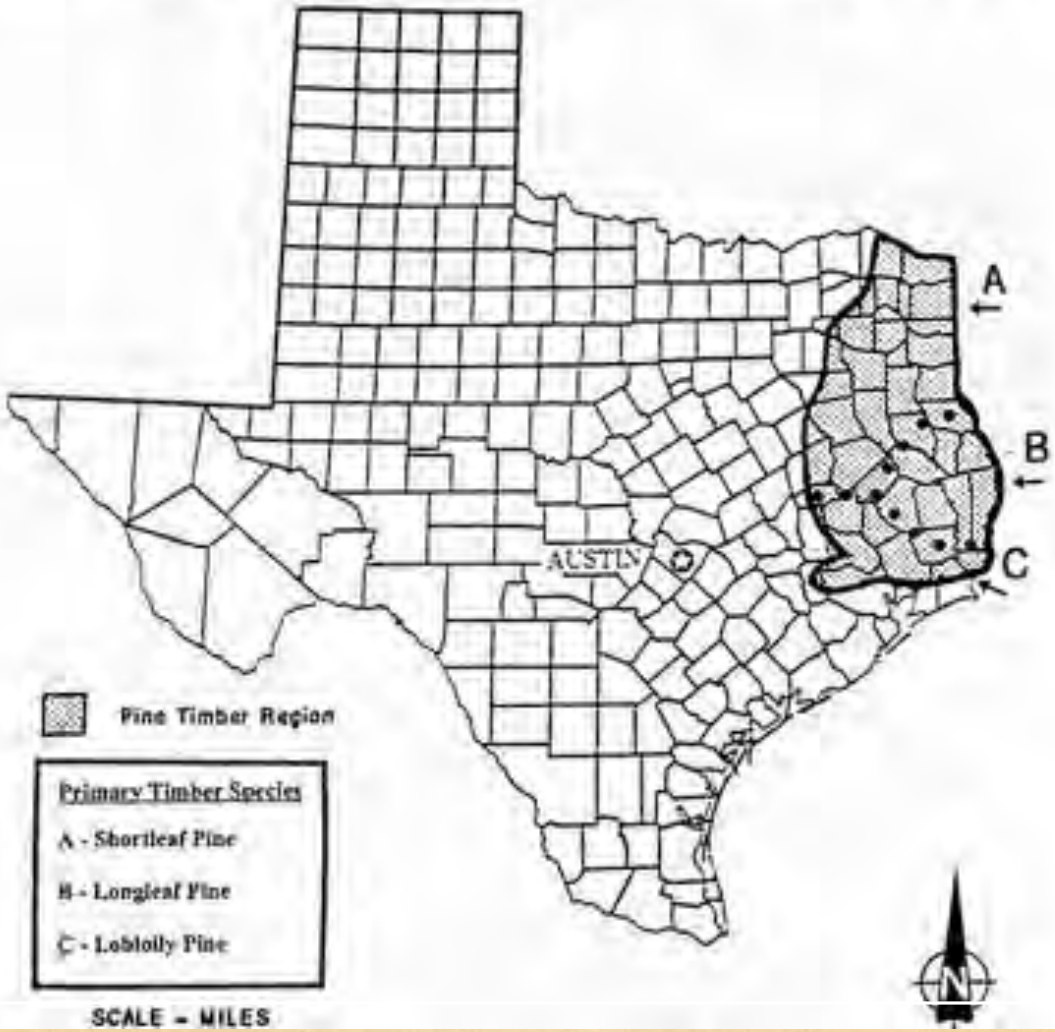
Nacogdoches, Texas


Shortleaf pine.
Pinon pine (Pretutis), Rocky
Mountain oaks (Quercus grisea
and Q. emoryi), and cedars
(Juniperus pachyphlæa, J. flaccida,
J. monosperma)

From: Aldridge Sawmill Website



From: Maxwell and Martin, 1970

Historic Literature

- W. R. Mattoon, 1919-1920 – Life History of Shortleaf Pine
- J. H. Foster et al, 1917 – Forest Resources of Eastern Texas
- Bray, 1904 – Forest Resources of Texas
- Maxwell and Baker, 1983 – Sawdust Empire
- L. C. Walker and H.V. Wiant, 1966 – Forestry Bulletin No. 9 – Silviculture of Shortleaf Pine
- Will, Rodney et al, 2013 – Strategic Assessment of Shortleaf Pine

Some Notes from the Literature

- "There is no typical site for shortleaf pine; often in the coves, the growth is very good"…….from Walker and Wiant, 1966
- "Available soil moisture is the most important variable influencing survival and growth"…….from Bray, 1904
- "Prefers clay in surface and subsurface horizons"…..Will et al 2013
- "Can grow on rocky uplands to saturated floodplains"….Will et al 2013

Soil Attributes Used for Query

- pH > 6 = 0
- Hydric Soils = 0
- Excessively drained = 0
- Somewhat excessively drained = 1
- Well drained = 3
- Moderately well drained = 3
- Somewhat poorly drained = 2
- Poorly drained = 1
- Very poorly drained = 0
- Calcium Carbonate = 0

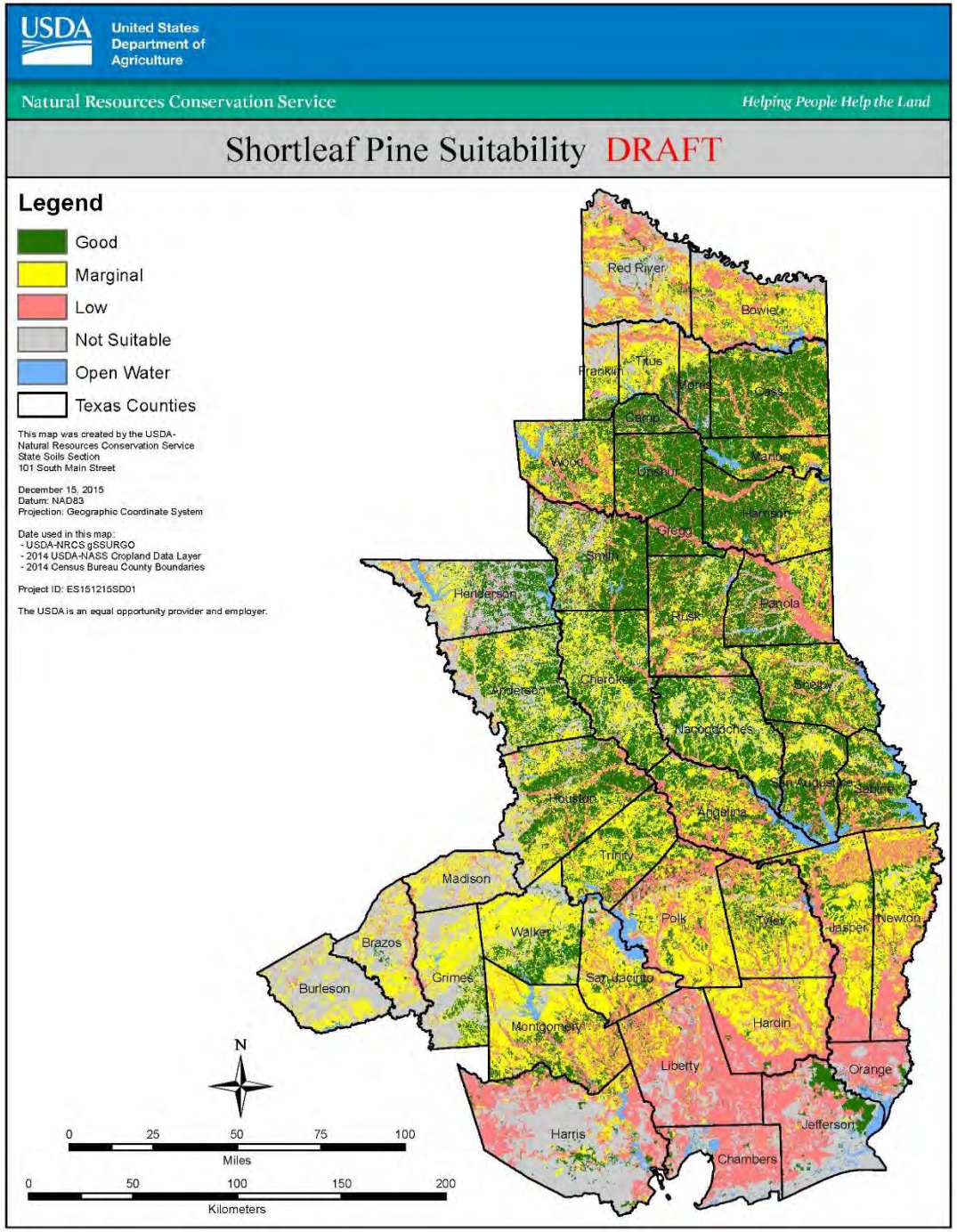
Site Index - Attributes

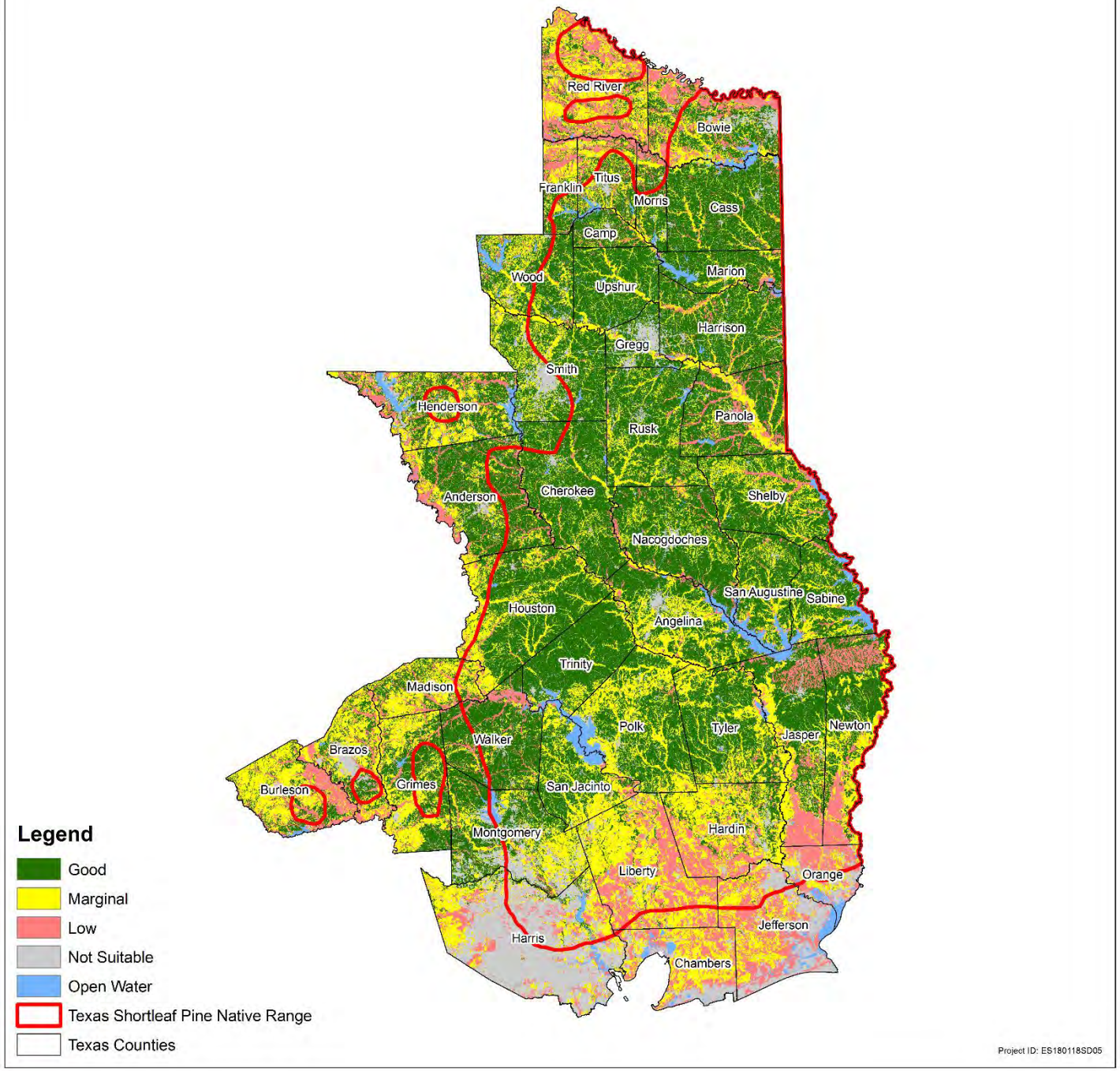
- Good = > 70
- Marginal = 60 – 70
- Low = < 60

USDA United States Department of Agriculture

Natural Resources Conservation Service — *Helping People Help the Land*

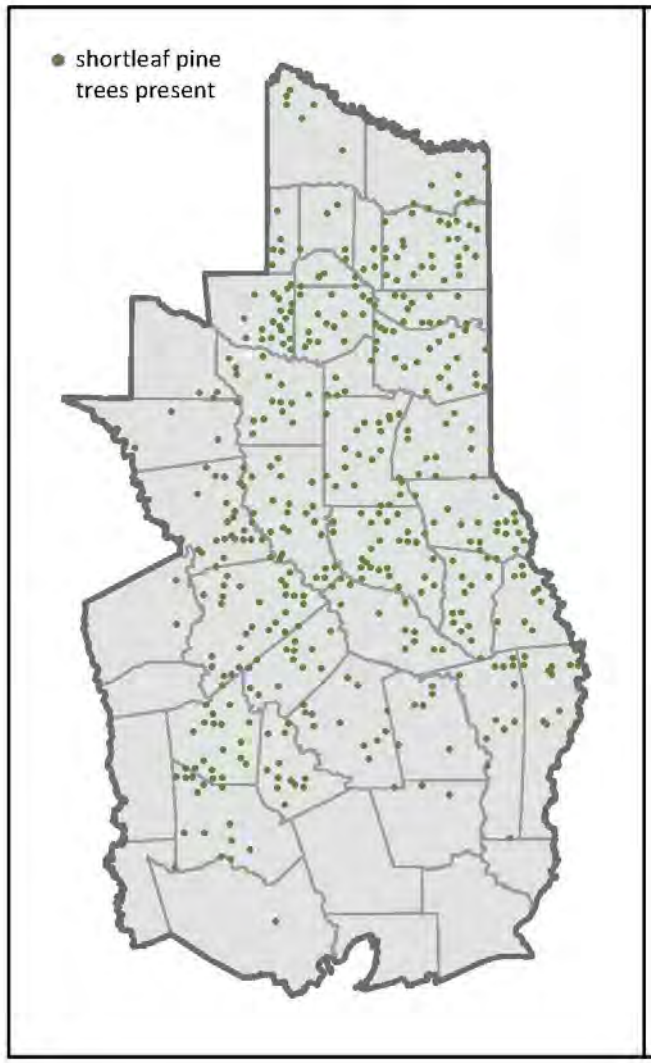
Shortleaf Pine Suitability DRAFT



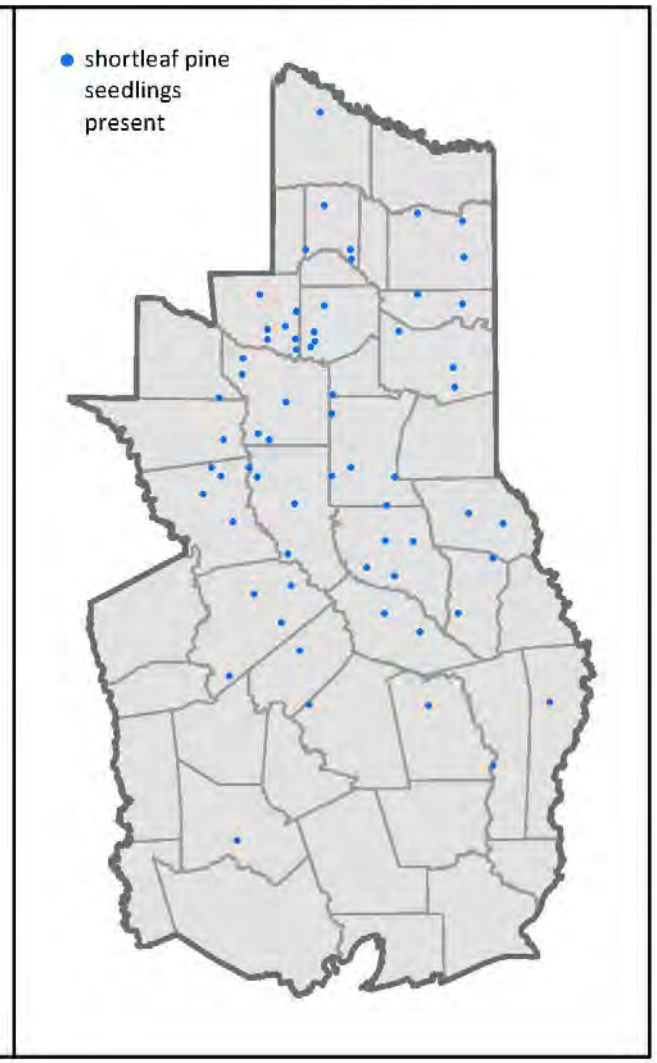


Shortleaf Pine in East Texas, 2013

Trees



Seedlings



FIA plots in East Texas from 2013 inventory (inventory years 2008-2013)

Presence indicates at least one occurrence of shortleaf pine on timberland

Trees are at least 1 inch in diameter; seedlings are less than 1 inch in diameter

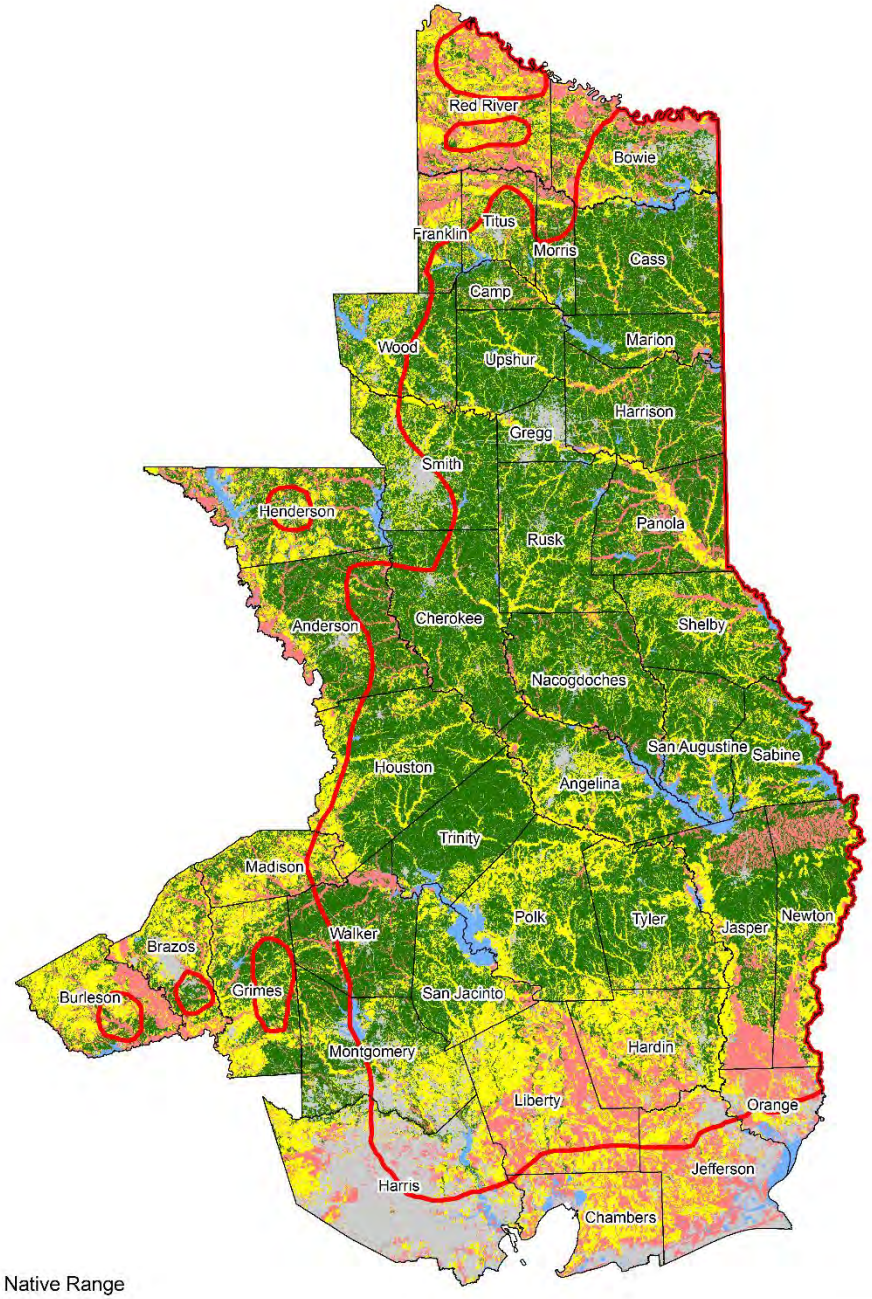
0 25 50 100 Miles

Data downloaded from FIA DataMart (http://www.fia.fs.fed.us/ tools-data)

Map prepared by Rebekah Zehnder, Texas A&M Forest Service (rzehnder@tfs.tamu.edu)

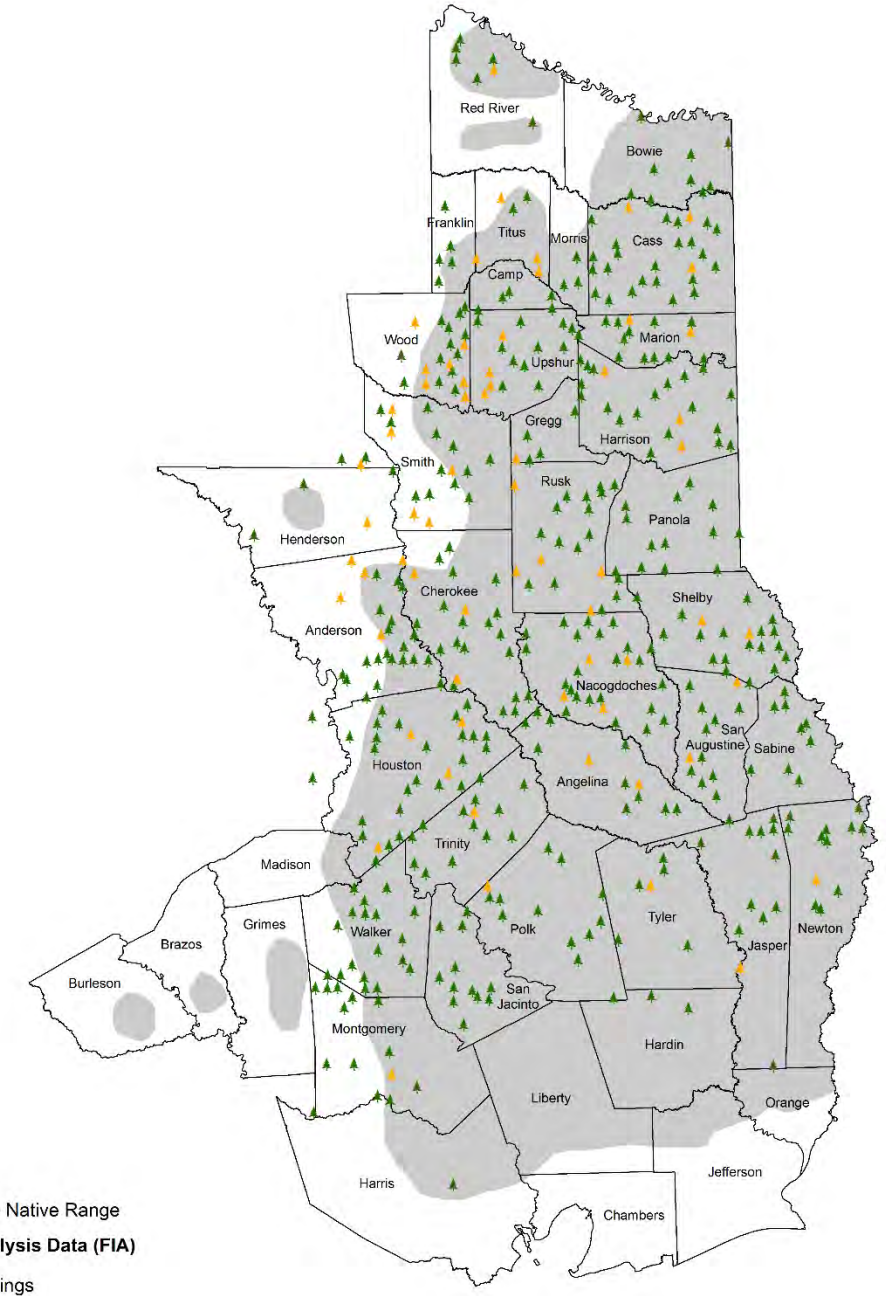
Forest Inventory & Analysis
http://www.fia.fs.fed.us

TEXAS A&M FOREST SERVICE



Legend

- Good
- Marginal
- Low
- Not Suitable
- Open Water
- Texas Shortleaf Pine Native Range
- Texas Counties



Texas Shortleaf Pine Native Range

2013 Forest Inventory Analysis Data (FIA)

- Shortleaf Pine Seedlings
- Shortleaf Pine Trees

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Thanks For Your Interest