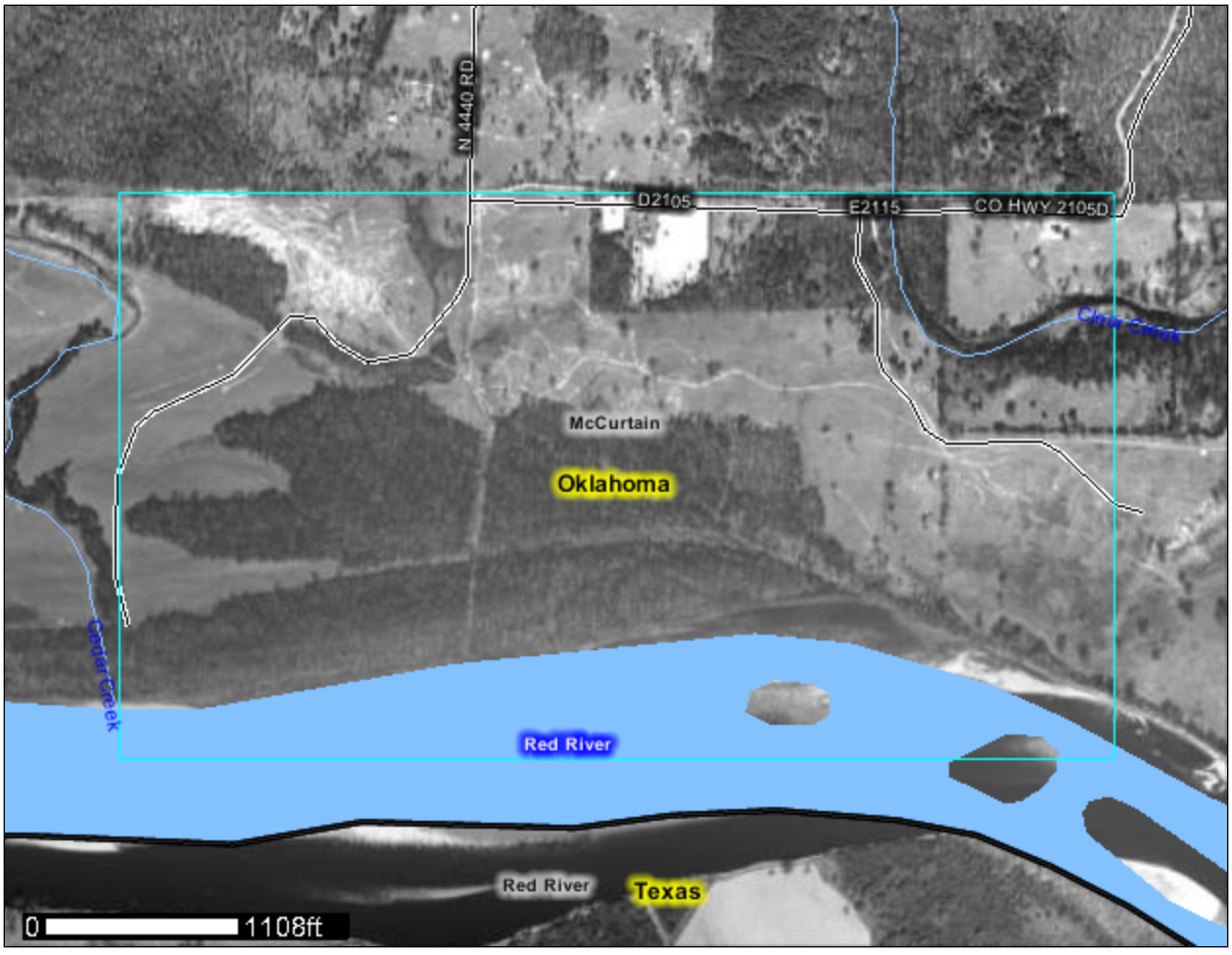
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for McCurtain County, Oklahoma



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

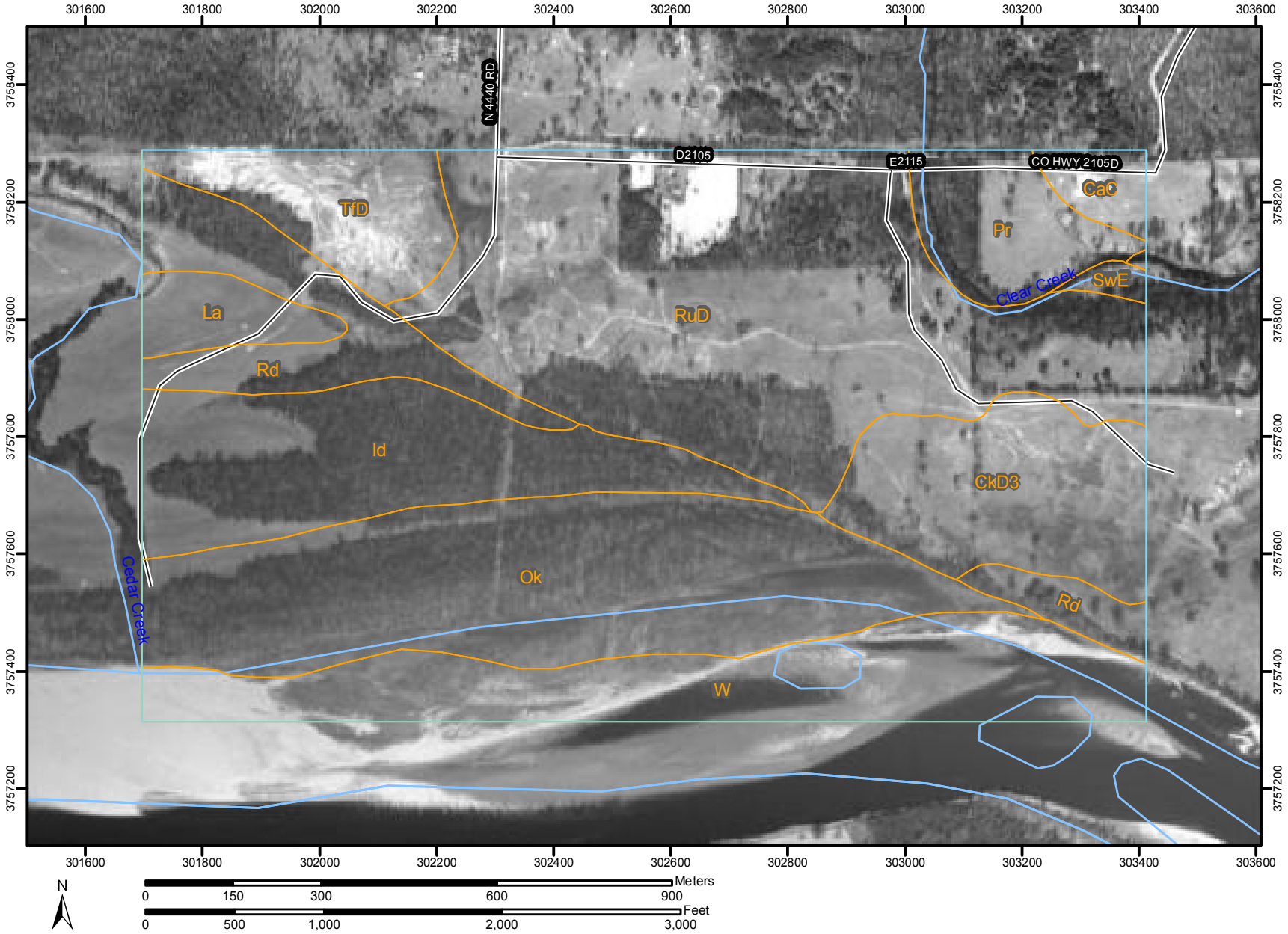
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map (Lindley Clear Creek)



Custom Soil Resource Report
Legend (Lindley Clear Creek)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features

Municipalities
- Cities
- Urban Areas

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails

Roads
- Interstate Highways
- US Routes
- State Highways
- Local Roads
- Other Roads

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 15N

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: McCurtain County, Oklahoma
Survey Area Data: Version 6, Jul 24, 2007

Date(s) aerial images were photographed: 1996

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (Lindley Clear Creek)

McCurtain County, Oklahoma (OK089)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
CaC	Cadeville loam, 3 to 5 percent slopes	5.1	1.2%
CkD3	Cahaba and Tiak soils, 3 to 8 percent slopes, severely eroded	34.2	8.3%
Id	Idabel silt loam, 0 to 1 percent slopes, rarely flooded	46.1	11.1%
La	Latanier clay, 0 to 1 percent slopes, rarely flooded	8.8	2.1%
Ok	Oklared very fine sandy loam, 0 to 1 percent slopes, occasionally flooded	80.1	19.4%
Pr	Tinn-Roebuck complex, 0 to 1 percent slopes, occasionally flooded	16.9	4.1%
Rd	Redlake clay, 0 to 1 percent slopes, occasionally flooded	30.2	7.3%
RuD	Ruston fine sandy loam, 3 to 8 percent slopes	118.4	28.7%
SwE	Swink-Hollywood complex, 5 to 20 percent slopes	1.7	0.4%
TfD	Tiak fine sandy loam, 5 to 8 percent slopes	19.7	4.8%
W	Water	51.9	12.6%
Totals for Area of Interest (AOI)		413.1	100.0%

Map Unit Descriptions (Lindley Clear Creek)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be

made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

McCurtain County, Oklahoma Version date:7/24/2007 1:31:25 PM

CaC—Cadeville loam, 3 to 5 percent slopes

Map Unit Setting

Elevation: 90 to 1,500 feet
Mean annual precipitation: 48 to 57 inches
Mean annual air temperature: 58 to 63 degrees F
Frost-free period: 190 to 230 days

Map Unit Composition

Cadeville and similar soils: 85 percent
Minor components: 15 percent

Description of Cadeville

Setting

Landform: Paleoterraces
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Alluvium and/or clayey fluviomarine deposits

Properties and qualities

Slope: 3 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 11.3 inches)

Interpretive groups

Land capability (nonirrigated): 3e

Typical profile

0 to 7 inches: Loam
7 to 43 inches: Clay
43 to 68 inches: Clay

Minor Components

Alusa

Percent of map unit: 5 percent
Landform: Interfluves
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Convex

Tiak

Percent of map unit: 5 percent
Landform: Hillslopes on hills
Landform position (two-dimensional): Backslope

Down-slope shape: Convex
Across-slope shape: Convex

Muskogee
Percent of map unit: 5 percent
Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Loamy savannah PE 70-80 (R133BY062OK)

CkD3—Cahaba and Tiak soils, 3 to 8 percent slopes, severely eroded

Map Unit Setting
Elevation: 90 to 1,500 feet
Mean annual precipitation: 48 to 57 inches
Mean annual air temperature: 58 to 63 degrees F
Frost-free period: 190 to 230 days

Map Unit Composition
Cahaba, severely eroded, and similar soils: 49 percent
Tiak, severely eroded, and similar soils: 26 percent
Minor components: 25 percent

Description of Cahaba, Severely Eroded

Setting
Landform: Paleoterraces
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy and sandy alluvium

Properties and qualities
Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 7.5 inches)

Interpretive groups
Land capability (nonirrigated): 6e

Typical profile
0 to 8 inches: Fine sandy loam
8 to 12 inches: Loam
12 to 38 inches: Clay loam
38 to 80 inches: Sandy loam

Description of Tiak, Severely Eroded

Setting

Landform: Hillslopes on hills
Landform position (two-dimensional): Backslope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from shale

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 9.4 inches)

Interpretive groups

Land capability (nonirrigated): 6e

Typical profile

0 to 3 inches: Fine sandy loam
3 to 6 inches: Fine sandy loam
6 to 26 inches: Clay
26 to 68 inches: Clay

Minor Components

Gullied land

Percent of map unit: 10 percent
Landform: Hillslopes on hills
Landform position (two-dimensional): Backslope
Microfeatures of landform position: Gullies
Down-slope shape: Linear
Across-slope shape: Concave

Kullit, severely eroded

Percent of map unit: 5 percent
Landform: Hillslopes on hills
Landform position (two-dimensional): Shoulder
Down-slope shape: Convex
Across-slope shape: Convex

Muskogee, severely eroded

Percent of map unit: 5 percent
Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex

Sherwood, severely eroded

Percent of map unit: 5 percent
Landform: Hillslopes on hills
Landform position (two-dimensional): Backslope

Down-slope shape: Convex
Across-slope shape: Convex

Id—Idabel silt loam, 0 to 1 percent slopes, rarely flooded

Map Unit Setting

Elevation: 90 to 1,500 feet
Mean annual precipitation: 48 to 57 inches
Mean annual air temperature: 58 to 63 degrees F
Frost-free period: 190 to 230 days

Map Unit Composition

Idabel and similar soils: 90 percent
Minor components: 10 percent

Description of Idabel

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous coarse-loamy alluvium

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water capacity: High (about 9.6 inches)

Interpretive groups

Land capability (nonirrigated): 1

Typical profile

0 to 6 inches: Silt loam
6 to 20 inches: Silt loam
20 to 52 inches: Very fine sandy loam
52 to 60 inches: Stratified fine sandy loam to silt loam

Minor Components

Severn

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear

Coushatta

Percent of map unit: 5 percent
Landform: Natural levees on flood plains
Down-slope shape: Convex
Across-slope shape: Convex

La—Latanier clay, 0 to 1 percent slopes, rarely flooded

Map Unit Setting

Elevation: 90 to 1,500 feet
Mean annual precipitation: 48 to 57 inches
Mean annual air temperature: 58 to 63 degrees F
Frost-free period: 190 to 230 days

Map Unit Composition

Latanier and similar soils: 90 percent
Minor components: 10 percent

Description of Latanier

Setting

Landform: Plains on paleoterraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous clayey alluvium over calcareous loamy alluvium

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 12 to 36 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 5 percent
Available water capacity: High (about 11.1 inches)

Interpretive groups

Land capability (nonirrigated): 3w

Typical profile

0 to 8 inches: Clay
8 to 28 inches: Clay
28 to 72 inches: Very fine sandy loam

Minor Components

Coushatta

Percent of map unit: 5 percent
Landform: Natural levees on flood plains
Down-slope shape: Convex
Across-slope shape: Convex

Redlake

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Concave

Ok—Oklared very fine sandy loam, 0 to 1 percent slopes, occasionally flooded

Map Unit Setting

Elevation: 90 to 1,500 feet
Mean annual precipitation: 48 to 57 inches
Mean annual air temperature: 58 to 63 degrees F
Frost-free period: 190 to 230 days

Map Unit Composition

Oklared and similar soils: 90 percent
Minor components: 10 percent

Description of Oklared

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous sandy and loamy alluvium

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water capacity: High (about 9.7 inches)

Interpretive groups

Land capability (nonirrigated): 2w

Typical profile

0 to 14 inches: Very fine sandy loam
14 to 44 inches: Very fine sandy loam
44 to 60 inches: Stratified loamy fine sand to silt loam

Minor Components

Severn

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear

Pushmataha

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear

Pr—Tinn-Roebuck complex, 0 to 1 percent slopes, occasionally flooded

Map Unit Setting

Elevation: 90 to 1,500 feet
Mean annual precipitation: 48 to 57 inches
Mean annual air temperature: 58 to 63 degrees F
Frost-free period: 190 to 230 days

Map Unit Composition

Tinn and similar soils: 50 percent
Roebuck and similar soils: 45 percent
Minor components: 5 percent

Description of Tinn

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous clayey alluvium

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Gypsum, maximum content: 2 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 6.0
Available water capacity: High (about 9.9 inches)

Interpretive groups

Land capability (nonirrigated): 4w

Typical profile

0 to 15 inches: Clay
15 to 45 inches: Clay
45 to 90 inches: Stratified fine sandy loam to silty clay loam

Description of Roebuck

Setting

Landform: Flood plains
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Clayey and/or loamy alluvium

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water capacity: High (about 9.5 inches)

Interpretive groups
Land capability (nonirrigated): 4w

Typical profile
0 to 12 inches: Clay
12 to 32 inches: Clay
32 to 66 inches: Clay

Minor Components

Redlake
Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Concave

Rd—Redlake clay, 0 to 1 percent slopes, occasionally flooded

Map Unit Setting
Elevation: 90 to 1,500 feet
Mean annual precipitation: 48 to 57 inches
Mean annual air temperature: 58 to 63 degrees F
Frost-free period: 190 to 230 days

Map Unit Composition
Redlake and similar soils: 90 percent
Minor components: 10 percent

Description of Redlake

Setting
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Calcareous clayey and loamy alluvium

Properties and qualities
Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water capacity: High (about 9.7 inches)

Interpretive groups

Land capability (nonirrigated): 4w

Typical profile

0 to 8 inches: Clay
8 to 42 inches: Clay
42 to 72 inches: Clay loam

Minor Components

Tinn

Percent of map unit: 3 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear

Roebuck

Percent of map unit: 3 percent
Landform: Flood plains
Down-slope shape: Convex
Across-slope shape: Linear

Latanier

Percent of map unit: 2 percent
Landform: Plains on paleoterraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear

Coushatta

Percent of map unit: 2 percent
Landform: Natural levees on flood plains
Down-slope shape: Convex
Across-slope shape: Convex

RuD—Ruston fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

Elevation: 90 to 1,500 feet
Mean annual precipitation: 48 to 57 inches
Mean annual air temperature: 58 to 63 degrees F
Frost-free period: 190 to 230 days

Map Unit Composition

Ruston and similar soils: 90 percent
Minor components: 10 percent

Description of Ruston

Setting

Landform: Hillslopes on hills
Landform position (two-dimensional): Backslope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy alluvium

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 8.8 inches)

Interpretive groups

Land capability (nonirrigated): 4e

Typical profile

0 to 9 inches: Fine sandy loam
9 to 52 inches: Sandy clay loam
52 to 72 inches: Sandy clay loam

Minor Components

Blevins

Percent of map unit: 5 percent
Landform: Paleoterraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex

Tiak

Percent of map unit: 5 percent
Landform: Hillslopes on hills
Landform position (two-dimensional): Backslope
Down-slope shape: Convex
Across-slope shape: Convex

SwE—Swink-Hollywood complex, 5 to 20 percent slopes

Map Unit Setting

Elevation: 90 to 1,500 feet
Mean annual precipitation: 48 to 57 inches
Mean annual air temperature: 58 to 63 degrees F
Frost-free period: 190 to 230 days

Map Unit Composition

Swink and similar soils: 65 percent
Hollywood and similar soils: 30 percent
Minor components: 5 percent

Description of Swink

Setting

Landform: Hillslopes on hills
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Clayey residuum weathered from limestone

Properties and qualities

Slope: 5 to 20 percent
Depth to restrictive feature: 6 to 20 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 1.6 inches)

Interpretive groups

Land capability (nonirrigated): 6e
Ecological site: Shallow prairie PE 56-66 (R085XY083OK)

Typical profile

0 to 7 inches: Very stony clay
7 to 16 inches: Very stony clay
16 to 30 inches: Bedrock

Description of Hollywood

Setting

Landform: Hillslopes on hills
Landform position (two-dimensional): Backslope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey colluvium over limestone

Properties and qualities

Slope: 5 to 8 percent
Depth to restrictive feature: 48 to 96 inches to lithic bedrock
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 9.6 inches)

Interpretive groups

Land capability (nonirrigated): 4e
Ecological site: Clay prairie PE 70-80 (R133BY002OK)

Typical profile

0 to 16 inches: Silty clay
16 to 30 inches: Silty clay
30 to 45 inches: Silty clay
45 to 72 inches: Silty clay
72 to 75 inches: Bedrock

Minor Components

Panola

Percent of map unit: 5 percent
Landform: Hillslopes on hills
Landform position (two-dimensional): Shoulder

Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Loamy prairie PE 70-80 (R133BY060OK)

TfD—Tiak fine sandy loam, 5 to 8 percent slopes

Map Unit Setting

Elevation: 90 to 1,500 feet
Mean annual precipitation: 48 to 57 inches
Mean annual air temperature: 58 to 63 degrees F
Frost-free period: 190 to 230 days

Map Unit Composition

Tiak and similar soils: 85 percent
Minor components: 15 percent

Description of Tiak

Setting

Landform: Hillslopes on hills
Landform position (two-dimensional): Backslope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Clayey residuum weathered from shale

Properties and qualities

Slope: 5 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 24 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 9.3 inches)

Interpretive groups

Land capability (nonirrigated): 4e

Typical profile

0 to 4 inches: Fine sandy loam
4 to 8 inches: Fine sandy loam
8 to 26 inches: Clay
26 to 68 inches: Clay

Minor Components

Ruston

Percent of map unit: 5 percent
Landform: Hillslopes on hills
Landform position (two-dimensional): Backslope
Down-slope shape: Convex
Across-slope shape: Convex

Stapp

Percent of map unit: 5 percent
Landform: Hillslopes on hills

Landform position (two-dimensional): Backslope
Down-slope shape: Convex
Across-slope shape: Convex

Muskogee

Percent of map unit: 5 percent
Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: Loamy savannah PE 70-80 (R133BY062OK)

W—Water

Map Unit Setting

Elevation: 90 to 1,500 feet
Mean annual precipitation: 48 to 57 inches
Mean annual air temperature: 58 to 63 degrees F
Frost-free period: 190 to 230 days

Map Unit Composition

Water: 100 percent

Description of Water

Setting

Landform: Valleys

Interpretive groups

Land capability (nonirrigated): 8

Typical profile

0 to 80 inches: Water

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