

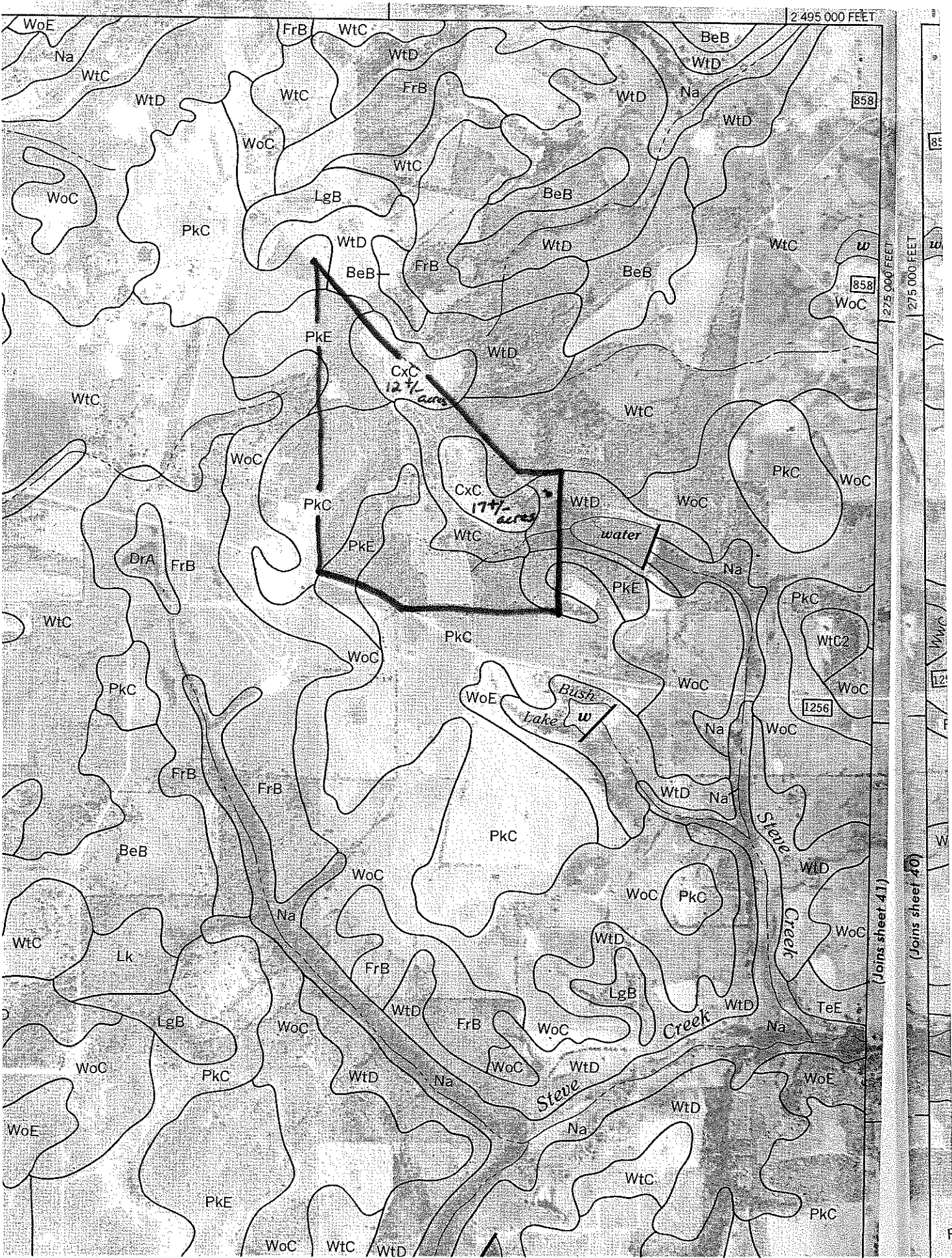


10 000 Feet

5 000

0

1 000



Redsprings and Tenaha soils. Also included are areas of Cuthbert gravelly fine sandy loam. The Redsprings soils are on more gentle, higher-lying slopes. The Tenaha soils have a thick, sandy surface layer and are in positions on the landscape similar to the Cuthbert soil. The gravelly Cuthbert soils are in less steep areas along upper slopes. The included soils make up less than 5 percent of the map unit.

This Cuthbert soil is used mainly for woodland or wildlife habitat.

Loblolly and shortleaf pines are the major commercial trees. Most trees are used for pulpwood in paper production rather than for lumber because of their smaller size. Areas are inaccessible to vehicles because of slope and stone fragments on the surface. Timber stands are better managed with natural reproduction of trees. Areas of this soil are a natural refuge for deer and other wildlife.

This soil is not suited to crops or pasture because of slope, the hazard of erosion, and fragments of ironstone on the surface.

This soil is poorly suited to urban uses; however, some areas do provide homesites with scenic views. Slope, ironstone fragments, and shrink-swell potential are the main limitations.

This soil is in capability subclass VIIc. The woodland ordination symbol is 7X.



CxC—Cuthbert and Redsprings soils, graded, 3 to 8 percent slopes. These gently sloping to moderately sloping soils are on uplands. Areas are mainly on ridges in the highest positions on the landscape. Surfaces are slightly convex. Areas are irregular in shape and range from 10 to 100 acres in size.

This map unit averages about 40 percent Cuthbert soil, 40 percent Redsprings soil, and 20 percent other soils. Some areas are mostly Cuthbert soil, some are mostly Redsprings soil, and some are both soils.

These soils have been surface-mined for ironstone gravel. The removal of topsoil makes soil reclamation and revegetation difficult. Most areas have sparse stands of grasses, weeds, and trees; some areas are barren.

Typically, the surface layer of the Cuthbert soil is very strongly acid, yellowish red gravelly clay loam about 2 inches thick. The upper part of the subsoil, from a depth of 2 to 8 inches, is very strongly acid, red clay with mottles in shades of yellow. The lower part, from a depth of 8 to 20 inches, is very strongly acid, red clay with yellowish brown mottles. The underlying material, from a depth of 20 to 60 inches, is extremely acid, light gray shale with red mottles.

The surface layer of the Redsprings soil is moderately acid, reddish brown very gravelly clay loam about 2 inches thick. The upper part of the subsoil, from a depth of 2 to 40 inches, is strongly acid, red clay with yellowish brown mottles below a depth of 24 inches. The lower part, from a

depth of 40 to 50 inches, is very strongly acid, red clay loam with yellowish brown mottles. The underlying material, from a depth of 50 to 60 inches, is very strongly acid, yellowish brown weathered glauconitic material with red mottles.

These soils are well drained. Surface runoff is medium. Permeability is moderately slow, and the available water capacity is moderate.

Included with these soils in mapping are areas of Elrose and Kirvin soils, as well as Cuthbert and Redsprings soils that have slopes of more than 8 percent. Also included are similar, but thinner soils. The included soils make up about 20 percent of the map unit.

Most areas of these Cuthbert and Redsprings soils are idle. A few areas are used for improved pasture or woodland.

Bahiagrass, common bermudagrass, and coastal bermudagrass are suited to this soil. Because of the removal of topsoil, good management practices, along with proper applications of fertilizer and lime are needed for establishment and maintenance of pasture grasses.

A few areas of Cuthbert and Redsprings soils have been planted to loblolly pine and some areas have reseeded naturally. The timber is of low quality, mainly because of high seedling mortality rates and droughtiness.

These soils are not suited to cultivation because of the severe hazard of erosion.

These soils are suitable for most urban uses. Low strength and moderate shrink-swell potential are limitations that can be overcome by good design and proper installation.

This map unit is in capability subclass VIc. The woodland ordination symbol for the Cuthbert soils is 5C and is 6C for the Redsprings soil.

DrA—Derly-Raino complex, 0 to 1 percent slopes.

These nearly level soils are on high stream terraces that have flats, shallow depressions, and scattered mounds on the surface. Areas are irregular in shape and range from 10 to more than a thousand acres in size.

This map unit consists of Derly soils in the flats and depressional areas, and Raino soils on mounds that are 2 to 4 feet higher than the flats. The mounds are mainly circular and are 50 to 300 feet across. In some areas, Raino soils are on ridges that meander through the flat areas of Derly soils.

This map unit is about 50 percent Derly soil, 40 percent Raino soil, and 10 percent other soils. Areas of these soils are so intricately mixed that separation is not practical at the scale mapped.

Typically, the Derly soil has a surface layer that is moderately acid, dark grayish brown silt loam about 3 inches thick. The subsurface layer is very strongly acid,

and concrete, and low strength is a limitation affecting streets and roads. These limitations can be overcome with good design and installation.

This soil is in capability subclass IVe. The woodland ordination symbol is 9A.



PkC—Pickton fine sand, 1 to 5 percent slopes. This gently sloping soil is on broad upland interstream divides. Surfaces are mainly slightly convex. Soil areas are irregular in shape and range from 10 to 2,500 acres in size.

Typically, the surface layer is slightly acid, brown fine sand about 7 inches thick. The subsurface layer is slightly acid, light yellowish brown fine sand about 53 inches thick. The upper part of the subsoil, from a depth of 60 to 72 inches, is slightly acid, yellowish brown sandy clay loam. The lower part, from a depth of 72 to 80 inches, is strongly acid, mottled light gray, strong brown, and red sandy clay loam.

This soil is well drained. Surface runoff is very low and permeability is moderate. The available water capacity is low. The hazard of water erosion is slight. During wet periods in the winter and spring a water table is at a depth of 4 to 6 feet.

Included with this soil in mapping are areas of Tonkawa and Wolfpen soils. The Tonkawa soils are sandy to a depth of more than 80 inches. The Wolfpen soils have a surface layer 20 to 40 inches thick. The included soils make up less than 20 percent of the map unit.

This Pickton soil is used mainly for pasture. Some areas are in woodland and small areas are in cropland.

Coastal bermudagrass and lovegrass are well suited to this soil. Overseeding a legume, such as vetch, into the grasses provides additional forage and improves soil fertility. Applications of fertilizer and lime are essential to maintain a higher level of production. Low available water capacity is the main limitation.

Woodland areas consist mainly of hardwoods with some loblolly and shortleaf pines. Red oak, post oak, blackjack oak, and hickory are the main hardwood trees. Loblolly and shortleaf pines are the main commercial trees. Plantations of loblolly and slash pines are on some old cropland fields. Droughtiness limits the growth of trees and decreases the survival rate of seedlings.

Watermelons, roses, peas, and sweet potatoes are crops suited to this soil (fig. 4). Low natural fertility and droughtiness are the major limitations. Applications of fertilizer and lime are essential to maintain a high level of production. Growing high residue crops and green manure crops will help to maintain fertility and increase the water holding capacity.

This soil is suited to most urban uses. Seepage is a limitation affecting most sanitary facilities.

This soil is in capability subclass IIIs. The woodland ordination symbol is 8S.



PkE—Pickton fine sand, 5 to 15 percent slopes. This moderately sloping to moderately steep soil is on side slopes along drainageways. Areas are commonly long and narrow and range from 10 to 500 acres in size.

Typically, the surface layer is slightly acid, brown fine sand about 6 inches thick. The subsurface layer is slightly acid, very pale brown fine sand about 36 inches thick. The upper part of the subsoil, from a depth of 42 to 56 inches, is strongly acid, reddish yellow sandy clay loam. The lower part, from a depth of 56 to 80 inches, is strongly acid, mottled light brownish gray and reddish yellow sandy clay loam.

This soil is well drained. Surface runoff is low and permeability is moderate. The available water capacity is low and the hazard of water erosion is moderate. During wet periods in the winter, a water table is at a depth of 4 to 6 feet.

Included with this soil in mapping are areas of Cuthbert, Tenaha, Tonkawa, and Wolfpen soils. The Cuthbert soils have a loamy surface layer. The Tenaha and Wolfpen soils have a surface layer 20 to 40 inches thick. The Tonkawa soils are sandy to a depth of more than 80 inches. The included soils make up less than 20 percent of the map unit.

This Pickton soil is used mainly as woodland. Some areas have been cleared and planted in pasture grasses.

Most woodland areas consist of hardwood trees, mainly red oak, post oak, and hickory. Shortleaf and loblolly pines are in some areas. Droughtiness is the main limitation; however, good management practices can help to increase timber production.

Coastal bermudagrass and weeping lovegrass are well suited to this soil. Applications of lime and fertilizer at frequent intervals are essential to maintain a higher level of production. The low available water capacity is a limitation that also affects production.

Slope is a major limitation and erosion is a hazard when this soil is used as cropland.

This soil has limitations for most urban uses. Seepage and slope are limitations affecting sanitary facilities. Slope is the main limitation for such uses as dwellings, streets, and roads. These limitations can be overcome with good design and careful installation.

This soil is in capability subclass VIe. The woodland ordination symbol is 8S.

Pt—Pits. This map unit consists of areas where soils, and often the underlying strata, have been removed. Pits range from about 5 to 100 acres in size. Most pits in the county are clay, rock, or sand.

is moderate. The hazard of water erosion is severe. A water table is at a depth of 4 to 6 feet during winter and spring.

Included with this soil in mapping are areas of Bernaldo soils. The Bernaldo soils are on toe slopes and have a loamy surface layer. The included soils make up less than 10 percent of the map unit.

This soil is used mainly for pasture or woodland.

Coastal bermudagrass, common bermudagrass, and bahiagrass are the main pasture grasses on this soil. Some areas are overseeded with legumes, such as arrowleaf clover, crimson clover, or vetch, to provide additional forage and soil fertility. Applications of fertilizer and lime are needed to maintain a higher level of production.

Woodland areas are mainly mixed hardwoods and some pine trees. Shortleaf and loblolly pines are the main commercial trees on this soil. A moderate rate of seedling mortality and droughtiness are the main limitations affecting timber production.

A few moderately sloping areas of this soil are used for crops, mainly roses and watermelons. The main limitation is droughtiness, and erosion is a hazard. On moderately sloping areas, good management practices, such as using contour farming, cover crops, high residue crops, and green manure crops, can help to reduce erosion and maintain soil tilth. The hazard of erosion is too severe for crops on slopes of more than 8 percent.

This soil is suited to most urban uses. Slope is a limitation for streets, roads, and dwellings; and slope and seepage limit the use of this soil for sanitary facilities. With careful design and installation, these features can be overcome.

This soil is in capability subclass VIe. The woodland ordination symbol is 9S.



WtC—Woodtell loam, 2 to 5 percent slopes. This gently sloping soil is on uplands. Surfaces are smooth to slightly convex. Areas are irregular in shape and range from 10 to several hundred acres in size.

Typically, the surface layer is strongly acid, very dark grayish brown loam about 5 inches thick. The subsurface layer is strongly acid, grayish brown loam about 3 inches thick. The upper part of the subsoil, from a depth of 8 to 14 inches, is strongly acid, dark red clay that has yellowish red mottles. The next part, from a depth of 14 to 30 inches, is strongly acid, red clay loam that has yellowish red and light gray mottles. The lower part, from a depth of 30 to 54 inches, is strongly acid, dark yellowish brown clay loam that has light gray and red mottles. The underlying material, from a depth of 54 to 80 inches, is slightly acid, stratified light olive gray and gray shale with yellowish brown loamy material.

This soil is well drained. Surface runoff is high. Permeability is very slow and the available water capacity is moderate. The hazard of water erosion is severe.

Included with this soil in mapping are small areas of Freestone and Wolfpen soils. The Freestone soils are loamy and in lower, wetter positions on the landscape. The Wolfpen soils have a sandy surface layer. Also included are small areas of an eroded and stony Woodtell soil. The included soils make up less than 15 percent of the map unit.

This Woodtell soil is used mainly for pasture.

The main pasture grasses are coastal bermudagrass and common bermudagrass. Overseeding legumes, such as crimson clover, arrowleaf clover, or vetch, into the grasses provides additional forage and improves soil fertility. Applications of fertilizer and lime are needed to maintain a higher level of production.

Areas in cropland are planted mainly in small grains and vegetables. The hazard of erosion and droughty nature of the soil are the main limitations for cropland production. Good management practices, such as farming on the contour, terracing, and using cover crops and green manure crops, help to reduce erosion and maintain soil fertility.

This soil has severe limitations for urban uses. Shrinking and swelling are limitations affecting dwellings. Very slow permeability restricts use of this soil for septic tank absorption fields. Low strength affects streets and roads. Special design and careful installation are needed to overcome these limitations.

This soil is in capability subclass IVe. The woodland ordination symbol is 8C.

WtC2—Woodtell loam, 2 to 5 percent slopes, eroded. This gently sloping soil is on convex ridges and side slopes next to drainageways. It has a thin surface layer or has rills and shallow gullies, which are 10 to 75 feet wide and 1 to 3 feet deep. They occur at 75 to 300 feet intervals. Most can be crossed with farm machinery. Areas are oval in shape and range from 10 to 100 acres in size.

Typically the surface layer is moderately acid, dark grayish brown loam about 4 inches thick. The upper part of the subsoil, from a depth of 4 to 20 inches, is very strongly acid, red clay that has brownish yellow mottles. The next part, from a depth of 20 to 32 inches, is very strongly acid, red clay that has brownish yellow, light brownish gray, and pale brown mottles. The lower part, from a depth of 32 to 50 inches, is very strongly acid, light brownish gray clay loam that has red and brownish yellow mottles. The underlying material, from a depth of 50 to 80 inches, is slightly acid, stratified light olive gray and gray shale and yellowish brown clay loam and sandy clay loam.